

April 28, 2023

By Email

The Honorable Ricardo Lara
Insurance Commissioner
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Bill Mudge
President
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**RE: California Workers' Compensation Insurance
Advisory Pure Premium Rates and Experience Rating Plan Values
Effective September 1, 2023
CDI File No. REG-2023-00006**

Dear Commissioner Lara:

The Workers' Compensation Insurance Rating Bureau of California (WCIRB), a licensed rating organization and the designated statistical agent of the Insurance Commissioner, is submitting the proposed advisory pure premium rates contained in the enclosed filing pursuant to Article 2 of Chapter 2, and Articles 2 and 3 of Chapter 3, Part 3, Division 2, of the Insurance Code of the State of California. The proposed advisory pure premium rates contained in this filing were authorized by the WCIRB's Governing Committee for submission to you for review and approval.

Advisory Pure Premium Rates

The advisory pure premium rates contained in Section A are proposed to become effective September 1, 2023 for workers' compensation insurance policies with an effective date on or after September 1, 2023. The pure premium rates, which reflect loss costs including loss adjustment expenses per unit of exposure, are only advisory in that an insurer is not required to use either the proposed or the approved pure premium rates in establishing the rates it will charge.

The proposed advisory pure premium rates reflect the changes to the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* (USRP) that were proposed in the WCIRB's Regulatory Filing submitted on February 27, 2023 (CDI File No. REG-2023-00005) to take effect on September 1, 2023. If some of these proposed regulatory changes are not approved, the WCIRB may need to amend the pure premium rates proposed in this filing for conformance with the Commissioner's Decision on the September 1, 2023 Regulatory Filing.

The advisory pure premium rates for the approximately 500 standard classifications proposed to be effective September 1, 2023 are on average 0.3% higher than the average of the current approved September 1, 2022 advisory pure premium rates. The average of the September 1, 2023 advisory pure premium rates proposed by the WCIRB is \$1.50 per \$100 of payroll, based on the latest available payroll weights by classification.¹

¹ The average of the approved September 1, 2022 advisory pure premium rates is \$1.50, which has been restated from the average September 1, 2022 advisory pure premium rate approved by the Commissioner of \$1.45 per \$100 of payroll based on updated payroll weights by classification.

The Honorable Ricardo Lara
California Department of Insurance
April 28, 2023

The proposed September 1, 2023 advisory pure premium rates included in Section A are based on (1) insurer losses incurred during accident year 2022 and prior accident years valued as of December 31, 2022, (2) insurer allocated loss adjustment expenses for 2022 and prior years, (3) insurer unallocated loss adjustment expenses for 2021 and prior years, (4) classification payroll and loss experience reported for policies incepting in 2020 and prior years and (5) the September 1, 2023 experience rating off-balance correction factor proposed in the WCIRB's September 1, 2023 Regulatory Filing. The first three of these components are discussed in Section B of this filing while the last two components are discussed in Part A, Section C of the WCIRB's September 1, 2023 Regulatory Filing.

The WCIRB's September 1, 2022 Pure Premium Rate Filing excluded COVID-19 claims from the projection and largely excluded the 2020 accident year experience as the payroll, premium and claim experience of that year was anomalous, due to the sudden and significant impact of the COVID-19 pandemic and resultant stay-at-home orders. In continued consideration of the unique impact of the pandemic, in this filing, the WCIRB (a) excluded all claims directly arising from a COVID-19 diagnosis from the experience on which the proposed advisory pure premium rates were predicated, (b) largely excluded accident year 2020 experience from the projection and (c) refined projection methodologies to adjust for distortions caused by the pandemic.

As in the last three pure premium rate filings, the WCIRB separately analyzed the potential cost of future COVID-19 workers' compensation claims. Due to the declining proportion of indemnity claims caused by COVID-19 and the relatively low severity of COVID-19 indemnity claims relative to all indemnity claims observed in accident year 2022, the WCIRB does not recommend a separate provision for the projected cost of COVID-19 claims to be incurred on policies incepting between September 1, 2023 and August 31, 2024.

As in prior WCIRB pure premium rate filings, alternative pure premium rate projections based on various methodologies and assumptions are included for informational purposes in Section B, Appendices A, B and C.

The Executive Summary provides a high-level summary of the key components of this filing and includes information regarding insurer rates, system costs and the insurance market.

We shall endeavor to provide you with any additional information you may require.

Sincerely,



Bill Mudge
President & Chief Executive Officer



Dave Bellusci
Executive Vice President & Chief Actuary



Sean Cooper
Executive Vice President & Deputy Chief Actuary



Tony Milano
Vice President & Actuary

BM:smd
Enclosures

**Workers' Compensation Insurance
Rating Bureau of California**

**September 1, 2023 Pure Premium Rate Filing
REG-2023-00006**

Submitted: April 28, 2023

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WCIRB September 1, 2023 Pure Premium Rate Filing

Table of Contents

	Page
Executive Summary	1 – 22
Section A	
Proposed Pure Premium Rates	A-1 – A:4
Section B	
Computation of Indicated Change in the Advisory Pure Premium Rate Level	B-1 – B-58
Appendix A – Loss Development Methodology	B-59 – B-108
Appendix B – Trending Methodology	B-109 – B-142
Appendix C – Loss Adjustment Expense Projection	B-143 – B-182

Executive Summary

A. Introduction

Based on the analysis of underlying exposure, premium and claim experience, the WCIRB is proposing September 1, 2023 advisory pure premium rates that are, on average, 0.3% above the advisory pure premium rates adopted by the Insurance Commissioner effective September 1, 2022.¹ These proposed advisory pure premium rates average \$1.50 per \$100 of payroll.

Generally consistent with the September 1, 2022 Pure Premium Rate Filing, the WCIRB's September 1, 2023 filing (a) excluded all COVID-19 claims from the experience on which the proposed advisory pure premium rates are based, (b) refined projection methodologies to adjust for distortions caused by the pandemic, (c) used accident years 2021 and 2022 experience in the projection and (d) largely excluded 2020 experience for the projection of loss adjustment expense.

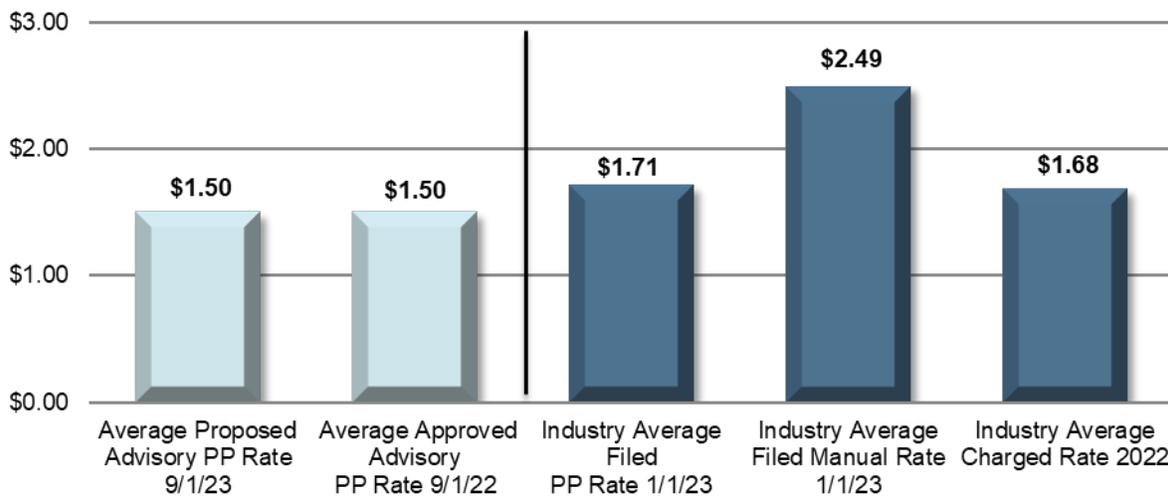
While COVID-19 workers' compensation claims continue to be filed in California, the proportion of COVID-19 claim counts and the average severity of COVID-19 indemnity claims has declined significantly over the last year. As a result, the WCIRB has not included a separate provision for the anticipated cost of COVID-19 claims to be incurred on insurance policies incepting between September 1, 2023 and August 31, 2024.

¹ The pure premium rates approved by the Insurance Commissioner are only advisory in that insurers may, and often do, file and use rates other than those approved by the Insurance Commissioner.

B. Rates

The proposed September 1, 2023 advisory pure premium rate level is 0.3% higher than the approved September 1, 2022 advisory pure premium rate level. The proposed September 1, 2023 advisory pure premium rates average \$1.50 per \$100 of payroll, which is consistent with the average of the approved September 1, 2022 advisory pure premium rates² and 12.2% below the industry average filed pure premium rate as of January 1, 2023. Chart 1 shows (1) the average of the proposed September 1, 2023 advisory pure premium rates, (2) the average of the approved September 1, 2022 advisory pure premium rates, (3) the industry average filed pure premium rate as of January 1, 2023, (4) the industry average filed manual rate as of January 1, 2023 and (5) the industry average charged rate for 2022 after the application of most insurer rating plan adjustments.³

Chart 1 – Advisory Pure Premium Rates and Industry Average Rates per \$100 of Payroll



All rates include adjustment for classification payroll limitations effective January 1, 2020 and September 1, 2022.
 Sources: WCIRB pure premium rate filings, insurer rate filings submitted to the CDI, and insurer data submitted in WCIRB data calls.

Exhibit 1 shows the advisory pure premium rate proposed by the WCIRB to be effective September 1, 2023 for each standard classification, the corresponding approved September 1, 2022 advisory pure premium rate and the percentage difference between these two pure premium rates. Exhibit 1 also shows the industry average filed pure premium rate as of January 1, 2023 and the percentage difference between the WCIRB’s proposed September 1, 2023 advisory pure premium rate and the industry average filed pure premium rate as of January 1, 2023 for each classification.

² Restated from the average September 1, 2022 advisory pure premium rate approved by the Commissioner of \$1.45 per \$100 of payroll based on updated payroll weights by classification.

³ This computation is based on reported premium at the insurer rate level, which includes the impact of all insurer rating plan adjustments except for the application of deductible credits, retrospective rating plan adjustments and terrorism charges.

C. Computation of Proposed September 1, 2023 Pure Premium Rate Level

The proposed September 1, 2023 pure premium rate level is based on the losses and loss adjustment expenses (LAE) projected to be incurred on policies incepting between September 1, 2023 and August 31, 2024 and on an evaluation of the loss, LAE⁴ and premium experience of calendar and accident years through 2022, valued as of December 31, 2022.

Section B of this filing provides analysis and exhibits which describe the assumptions and methodology used to compute the proposed pure premium rate level change with respect to:

- Calendar accident year experience
- Loss development for indemnity and medical including adjustments for changes in claim settlement rates and reforms
- Adjustments to bring indemnity and medical losses to the current level
- Wage and premium level adjustments
- Trending of loss ratios with the analysis and application of the trend projections done separately for claim frequency, indemnity severity and medical severity
- Projected loss adjustment expenses using separate analyses for unallocated loss adjustment expense, allocated loss adjustment expense (excluding medical cost containment) and medical cost containment
- Impact of COVID-19 claim experience
- Experience rating off-balance factor
- Computation of the indicated pure premium rate level change

Additionally, for informational purposes, the WCIRB has computed a series of alternative September 1, 2023 projections over a wide range of loss development, loss trending and loss adjustment expense projection methodologies. The assumptions underlying these alternative projection methodologies are discussed in detail in Section B, Appendices A, B and C.

The proposed September 1, 2023 advisory pure premium rate for each standard classification is shown in Section A of this filing.

⁴ The unallocated loss adjustment expense projection is based on experience through calendar year 2021.

D. System Drivers

Since early 2015, the approved advisory pure premium rates have declined by approximately one-half. In prior advisory pure premium rate filings, the WCIRB has attributed this improvement to several factors, including downward loss development, acceleration in claim settlement, modest claim severity trends and reduced pharmaceutical costs and lien filings.

Beginning in early 2020, the COVID-19 pandemic significantly impacted the workers’ compensation system. The pandemic, the resulting stay-at-home orders, and the subsequent economic recovery significantly impacted the California economy, as well as many components of the California workers’ compensation system. Among the areas impacted by the pandemic are wage levels, premiums, claim frequency and claim settlements.

- Wage Levels.** Advisory pure premium rates are expressed as a percentage of insured payroll. Not only are insured payroll amounts impacted by changes in employment levels but also by changes in the average wages earned by California workers. As a result, wage growth mitigates inflation effects on loss and loss adjustment expense levels and can reduce pure premium rate level indications.

Chart 2 shows the changes in statewide average wages based on UCLA compilations of U.S. Bureau of Labor Statistics data. As shown, with the sharp loss of employment at low wage levels during the economic downturn in 2020 and with continued decline instead of recovery of low-wage employment in 2021, the overall average wage level rose by 11% in 2020 and 8% in 2021. These growth rates were the highest levels experienced in decades, before settling to a 0.5% growth rate in 2022. As discussed in Section B, Appendix B, this atypical growth in average wages in 2020 and 2021 was somewhat artificial and caused by wage distribution shifts as a result of disproportionate loss of low wage employment. Similarly, the 0.5% 2022 change in average wage was artificially deflated by the return of lower wage workers to the workforce. Nevertheless, some of the rise in average wages is real and was a contributor to significant premium growth despite declining average insurer rates.

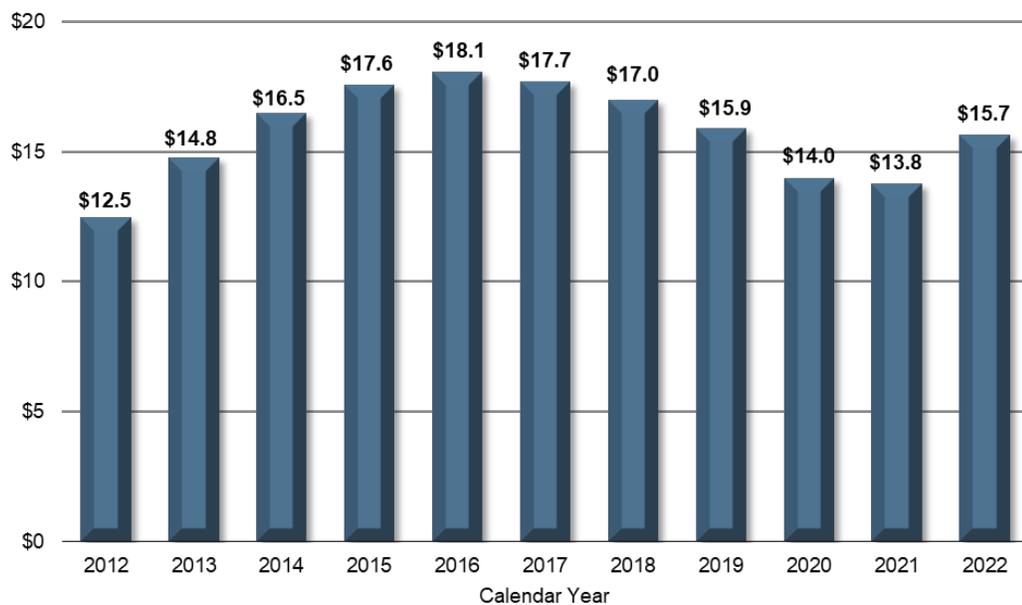
The WCIRB has made several adjustments to correct for the anomalous impacts of shifting employment by industry and wage levels in 2020, 2021 and 2022 to develop an estimate of the average wage increase for a California worker in the same job. These adjustments are discussed in detail in Section B, Appendix B.



- Premiums.** Chart 3 shows statewide written premium by calendar year.⁵ As shown, statewide premiums had been declining since 2016, as decreasing insurer charged premium rates more than offset continued economic growth through 2019. The premium decline accelerated sharply in 2020 as insurer rates continued to drop and statewide employment levels also sharply declined due to the COVID-19 pandemic. After a slight decline in 2021, written premium rebounded in 2022, despite continued insurer rate declines, due to the impact of employment growth as the economy recovers from the pandemic-related downturn.

In addition, 2021 premiums were somewhat deflated by larger than typical return premiums as, for many employers, their actual audited payrolls were less than the pre-pandemic payroll estimates used in initial premium billings. Conversely, atypical amounts of additional audit premiums were collected during 2022 due to the sharp economic recovery. The WCIRB’s on-leveling factors reflected in this filing include adjustments for the distortion in 2020 through 2022 premiums resulting from these atypical audit premiums. These adjustments are described in detail in Section B, Appendix B.

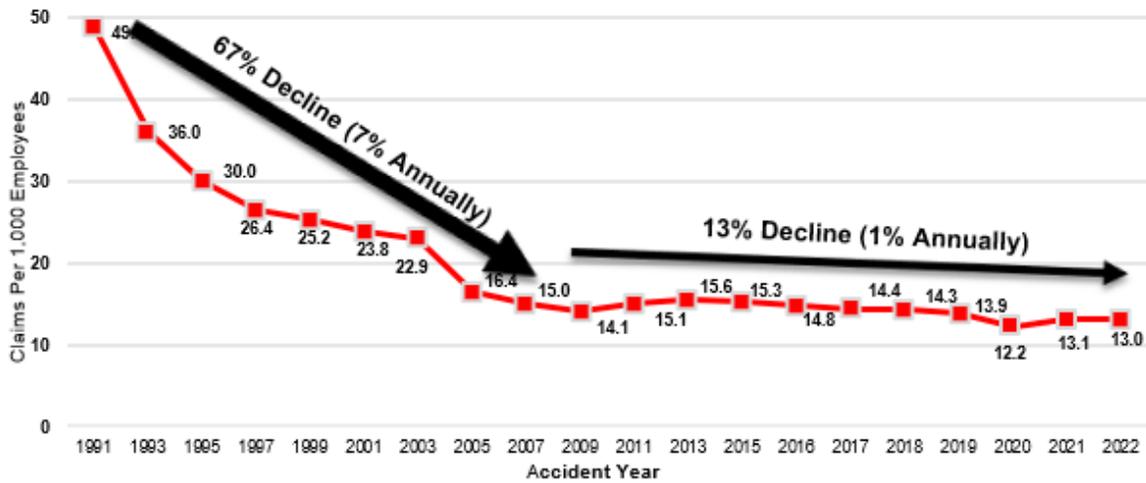
Chart 3 – Insurer Written Premium (in \$Billions)



- Claim Frequency.** As with most other states, claim frequency has declined in California over many decades. This long-term decline has been attributable to a number of factors including a shift to a more service-based economy, increased mechanization and improved employer safety practices. Chart 4 shows the decline in estimated California indemnity claims per 1,000 employees over the last 30 years. As shown, claim frequency declined by 7% per year from 1991 through 2006, while declining by only 1% per year over the last 15 years (excluding COVID-19 claims). This dramatic difference in claim frequency over the 30-year period is to some extent, along with other contributing factors, attributable to a diminishing impact of the previously noted factors that drove much of the significant decline in the early decades.

⁵ Amounts shown are gross of deductible credits.

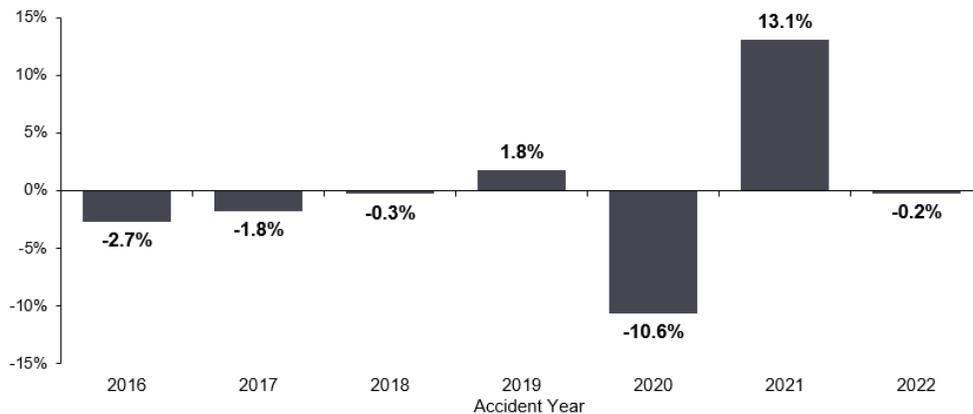
Chart 4 – Indemnity Claims per 1,000 Workers



Source: WCIRB Unit Statistical and Aggregate Financial Data, excluding COVID-19 claims

Since the beginning of the pandemic in early 2020, over 300,000 COVID-19 claims have been filed in California, including those from employees of self-insured employers. While COVID-19 claim filings surged during 2020, the frequency of non-COVID-19 claims dropped sharply, in part due to an increase in telecommuting resulting from the then stay-at-home statewide order. As shown on Chart 5, the overall effect was a significant drop in claim frequency for accident year 2020. In 2021, however, there was a significant bounce-back as the number of indemnity claims grew sharply, with some of this frequency growth likely attributable to an increase in newly hired workers as the economy recovered. In 2022, indemnity claim frequency was flat. As discussed in Section B, Appendix B, the WCIRB’s forecasted frequency decline for the next several years is consistent with the average frequency decline observed over the last 15 years.

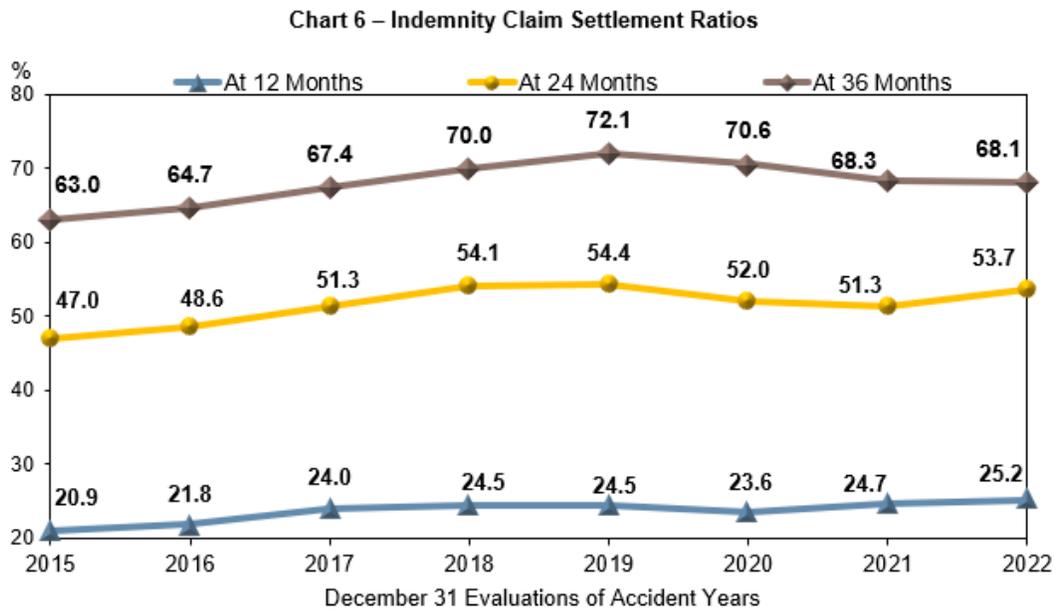
Chart 5 – Indemnity Claim Frequency Change (Class Mix-Adjusted)



Source: WCIRB Unit Statistical and Aggregate Financial Data, excluding COVID-19 claims

- Claim Settlement.** With the implementation of Senate Bill No. 863 (SB 863) beginning in 2013, claim settlement rates increased steadily in California. SB 863 contributed to an accelerated rate at which claims have settled through quicker medical treatment dispute resolution from independent medical review, reduction in the volume of liens and a significant decrease in the number of spinal surgeries. Reduced opioid use, increased anti-fraud efforts and further reductions in liens attributable to Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) also contributed to this acceleration in claim settlement.

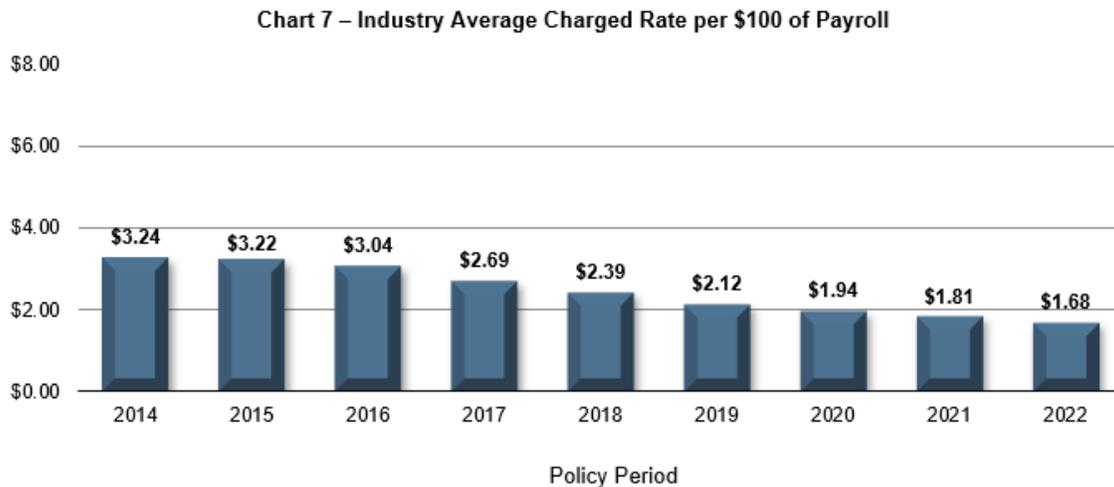
Chart 6 shows accident year indemnity claim settlement rates at successive year-end evaluations. As shown, the claim settlement acceleration was beginning to plateau even before the pandemic arose in early 2020. With the pandemic, there was a significant slowdown in the claim settlement process beginning in the second quarter of 2020. In accident years 2021 and 2022, claim settlement rates have started to increase again to approximately the pre-pandemic level. Changes in the claim settlement rates are generally a leading indicator of changes in paid loss development patterns, and if no adjustment for changes in claim settlement rates is made, paid loss development may be distorted. In addition, the longer-term increase in claim settlement rates in the post-SB 863 environment has likely impacted paid and incurred development at later maturities which can distort projected loss development for this period, if not adjusted. As discussed in Section B, Appendix A, the WCIRB uses a method to project future loss development based on historical paid loss development adjusted for changes in settlement rates.



Source: WCIRB projections of ultimate indemnity claim counts and reported claim count information as of December 31, 2022.

E. Supplemental Insurance Market Information

Chart 7 shows industry average insurer charged rates by policy year. Largely as a result of the SB 863 and subsequent reforms, medical cost levels dropped and average charged rates have declined since 2014. Despite the COVID-19 pandemic, average charged rates continued to decline in 2020, 2021 and 2022, but the rate of decline is moderating. As shown in Chart 7, the average rate charged during 2022 is 48% less than the average charged rate in 2014.

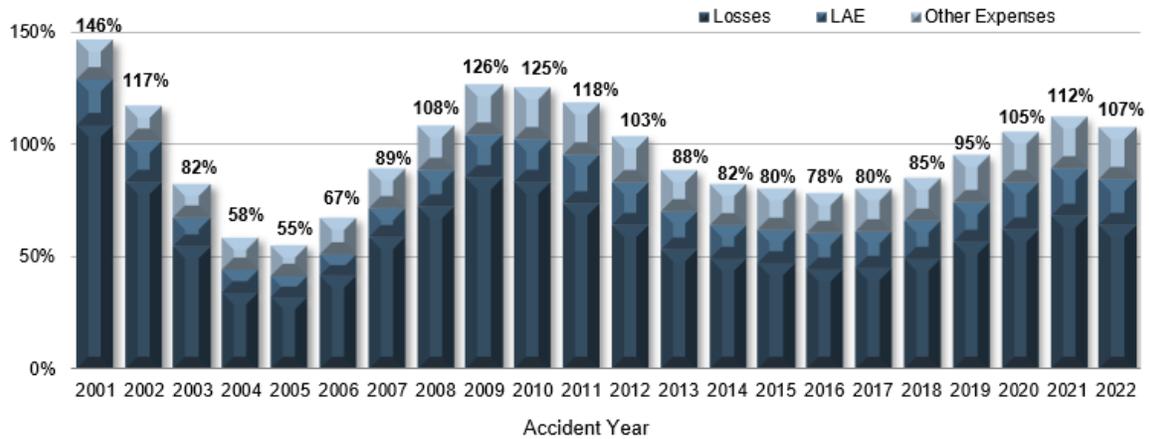


Source: Insurer unit statistical reports and WCIRB data calls. All rates include adjustment for classification payroll limitations effective January 1, 2020 and September 1, 2022.

Chart 8 shows the WCIRB’s projected combined ratios of losses, loss adjustment expenses and other insurer expenses to earned premium by accident year.⁶ Rising claim costs, combined with relatively flat industry average charged rates, led to increasing accident year combined ratios for accident years 2006 through 2009. Since 2010, higher insurer charged rates, modest claim cost trends and lower insurer expense ratios have generally resulted in lower insurer combined loss and expense ratios. More recently, as insurer charged rates decreased, projected combined ratios have begun to increase. After peaking at 112% in 2021, the WCIRB’s preliminary estimate of the accident year 2022 combined ratio, including the projected cost of COVID-19 claims, is 107%. This decline in the WCIRB’s estimated combined ratio for 2022 is attributable to sharp premium growth and very modest claim frequency and severity changes.

⁶ These combined ratios reflect WCIRB estimates of ultimate losses and loss adjustment expenses by accident year relative to calendar year earned premiums. Insurers also report calendar year combined ratios, which reflect their paid losses and loss adjustment expenses and changes in reserves reported during a calendar year relative to calendar year earned premium. These two measures of combined ratios may differ. Also, as these are combined underwriting results, they do not reflect overall operating profits, federal income taxes or investment income returns.

Chart 8 – WCIRB Projected Ultimate Accident Year Combined Loss and Expense Ratios as of December 31, 2022



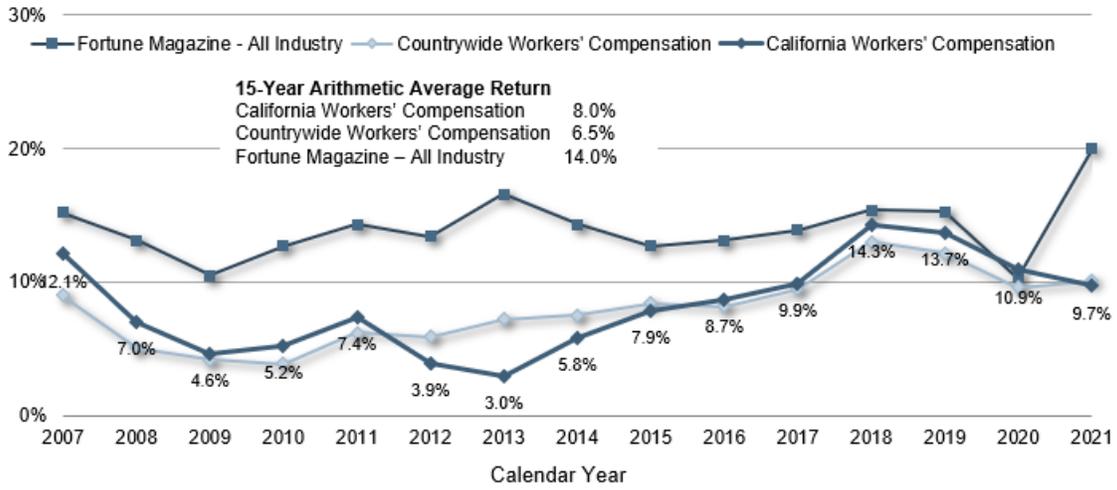
Source: WCIRB projections based on insurer aggregate financial data submissions to the WCIRB. The 2022 ratios are preliminary. For accident years 2010-2022, MCPP costs are included in LAE rather than loss. For all other accident years, MCPP costs are included in loss.

The combined ratios shown in Chart 8 do not include the impact of investment income, federal income taxes or insurer profits. The National Association of Insurance Commissioners (NAIC) annually publishes a summary of total insurer profitability by line of insurance and state that reflects all these components based on calendar year information reported by each insurer to the NAIC. Chart 9 provides a summary of the information published by the NAIC over the last 15 years.

As shown in Chart 9, relatively high loss and expense ratios, as well as relatively low investment returns, led to modest profitability (return on net worth) starting in 2010 before beginning to rise in the last several years. The estimated calendar year 2021 return on net worth for California workers’ compensation insurance, as reflected in the most recent NAIC report on profitability,⁷ is 9.7%. This is slightly below the average of the countrywide workers’ compensation return of 10.1% and well below the Fortune Magazine all-industry average return shown in the NAIC report of 20.0%. The long-term 15-year average return on net worth for California workers’ compensation is 8.0% as compared to 6.5% for countrywide workers’ compensation and 14.0% for the Fortune Magazine all-industry average.

⁷ Report on Profitability by Line and State in 2021, NAIC, 2023.

Chart 9 – NAIC Estimates of Average Return on Net Worth



Source: NAIC Report on Profitability By Line and State in 2020.

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023

NOTE: THE INDUSTRY AVERAGE FILED PURE PREMIUM RATE SHOWN BELOW FOR EACH CLASSIFICATION REFLECTS THE MIX OF INSURERS WRITING BUSINESS IN THAT CLASSIFICATION AS WELL AS THEIR UNDERWRITING AND RATE FILING PRACTICES. THE DIFFERENCES SHOWN BELOW ARE NOT NECESSARILY INDICATIVE OF FUTURE CHANGES IN ANY INDIVIDUAL INSURER'S FILED PURE PREMIUM RATE OR THE RATE IT WILL CHARGE ITS POLICYHOLDERS AS INSURERS MAY, AND OFTEN DO, FILE AND USE RATES OTHER THAN THOSE PROPOSED OR APPROVED BY THE COMMISSIONER.

Class Code	(1) Proposed September 1, 2023 Advisory Pure Premium Rates	(2) Approved September 1, 2022 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2023	(5) Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
0005	4.60	4.50	2%	5.45	-16%
0016	6.27	6.08	3%	7.73	-19%
0034	6.33	5.89	7%	7.77	-19%
0035	4.56	4.45	2%	5.61	-19%
0036	7.02	6.94	1%	8.79	-20%
0038	8.63	8.24	5%	11.01	-22%
0040	3.70	3.76	-2%	4.43	-16%
0041	4.11	4.06	1%	5.20	-21%
0042	5.18	4.99	4%	5.94	-13%
0045	3.90	4.03	-3%	5.02	-22%
0050	5.18	4.48	16%	5.85	-11%
0079	2.60	2.34	11%	2.73	-5%
0096	3.83	3.85	-1%	5.13	-25%
0106	9.64	11.36	-15%	16.98	-43%
0171	5.58	5.23	7%	6.46	-14%
0172	3.88	3.92	-1%	4.71	-18%
0251	3.61	3.71	-3%	4.80	-25%
0400	5.34	4.23	26%	5.43	-2%
0401	8.52	7.99	7%	11.17	-24%
1122	2.07	2.06	0%	2.62	-21%
1320	1.31	1.43	-8%	1.64	-20%
1322	3.93	4.36	-10%	4.69	-16%
1330	1.84	1.94	-5%	3.95	-53%
1438	5.35	5.32	1%	5.77	-7%
1452	2.50	2.63	-5%	2.46	2%
1463	3.18	3.09	3%	3.13	2%
1624	3.03	3.22	-6%	3.30	-8%
1699	1.41	1.28	10%	1.12	26%
1701	2.70	2.77	-3%	2.69	0%
1710	3.34	3.12	7%	4.14	-19%
1741	3.25	3.15	3%	3.95	-18%
1803	7.63	7.58	1%	8.66	-12%
1925	9.95	9.26	7%	9.56	4%
2002	7.12	6.10	17%	7.24	-2%
2003	5.59	5.64	-1%	5.96	-6%
2014	5.00	4.22	18%	5.46	-8%
2030	3.90	3.51	11%	4.47	-13%
2063	3.44	3.26	6%	4.11	-16%
2081	8.50	8.08	5%	9.89	-14%
2095	6.33	6.57	-4%	7.25	-13%

Rates are per \$100 of payroll unless otherwise noted.

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
2102	5.29	5.13	3%	5.71	-7%
2107	4.25	3.99	7%	5.16	-18%
2108	4.76	4.71	1%	6.28	-24%
2109	5.38	4.80	12%	5.25	2%
2111	4.56	4.13	10%	5.04	-10%
2113	8.19	7.84	4%	6.26	31%
2116	4.62	4.49	3%	6.02	-23%
2117	6.82	6.60	3%	8.68	-21%
2121	2.81	2.84	-1%	2.75	2%
2123	5.50	5.62	-2%	6.32	-13%
2142	2.64	2.51	5%	2.71	-3%
2163	6.73	6.57	2%	5.85	15%
2222	4.38	4.00	10%	4.43	-1%
2362	14.82	14.04	6%	15.24	-3%
2402	8.27	9.34	-11%	8.95	-8%
2413	4.36	4.74	-8%	4.92	-11%
2501	6.05	5.80	4%	6.39	-5%
2570	7.89	8.23	-4%	10.36	-24%
2571	7.96	7.98	0%	8.47	-6%
2576	6.37	5.57	14%	6.15	4%
2584	4.98	4.89	2%	6.14	-19%
2585	6.66	7.06	-6%	7.48	-11%
2589	4.58	4.41	4%	4.60	0%
2660	7.97	7.95	0%	8.40	-5%
2683	4.42	4.57	-3%	4.37	1%
2688	5.95	5.84	2%	6.07	-2%
2702	16.96	16.69	2%	25.75	-34%
2710	6.83	6.29	9%	7.42	-8%
2727	16.15	12.86	26%	17.35	-7%
2731	5.04	4.68	8%	5.60	-10%
2757	7.53	6.76	11%	8.40	-10%
2759	6.18	6.15	0%	7.91	-22%
2790	1.77	1.74	2%	2.00	-12%
2797	7.87	7.07	11%	8.12	-3%
2806	5.54	5.28	5%	5.42	2%
2812	5.25	4.88	8%	5.83	-10%
2819	5.97	6.70	-11%	6.78	-12%
2840	3.26	3.40	-4%	3.61	-10%
2842	5.13	5.39	-5%	6.37	-19%
2852	8.01	7.52	7%	7.74	3%
2881	6.86	5.48	25%	7.05	-3%
2883	11.09	11.91	-7%	14.45	-23%
2915	4.51	4.44	2%	5.25	-14%
2923	3.54	3.38	5%	3.66	-3%
3018	2.51	2.76	-9%	3.43	-27%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
3022	5.35	4.92	9%	5.46	-2%
3030	7.07	6.94	2%	8.72	-19%
3039	6.98	6.21	12%	7.09	-2%
3040	6.00	5.77	4%	7.73	-22%
3060	6.84	6.61	3%	7.06	-3%
3066	4.26	4.16	2%	4.88	-13%
3070	0.26	0.28	-7%	0.30	-13%
3076	4.87	4.64	5%	5.67	-14%
3081	10.37	8.85	17%	8.93	16%
3082	9.69	11.66	-17%	14.99	-35%
3085	10.54	8.82	20%	10.28	3%
3099	3.61	3.47	4%	3.97	-9%
3110	6.10	5.70	7%	5.59	9%
3131	4.40	4.45	-1%	4.79	-8%
3146	2.74	2.45	12%	2.80	-2%
3152	3.46	3.12	11%	3.14	10%
3165	3.78	3.67	3%	4.01	-6%
3169	3.73	3.91	-5%	4.04	-8%
3175	3.65	3.37	8%	3.15	16%
3178	1.91	1.88	2%	2.08	-8%
3179	2.16	2.30	-6%	2.96	-27%
3180	4.46	4.74	-6%	5.33	-16%
3220	1.91	2.00	-5%	2.62	-27%
3241	3.64	3.47	5%	4.31	-16%
3257	4.36	4.64	-6%	5.99	-27%
3339	5.44	5.96	-9%	6.72	-19%
3365	4.73	4.69	1%	5.94	-20%
3372	5.33	4.85	10%	5.74	-7%
3383	2.93	2.99	-2%	3.78	-22%
3400	5.50	5.43	1%	6.33	-13%
3401	3.97	4.09	-3%	4.84	-18%
3501	5.59	5.76	-3%	5.18	8%
3507	4.15	4.53	-8%	5.13	-19%
3560	2.59	2.61	-1%	3.13	-17%
3568	2.25	2.56	-12%	3.40	-34%
3569	1.70	1.67	2%	2.06	-17%
3570	3.20	2.99	7%	3.41	-6%
3572	0.80	0.87	-8%	0.92	-13%
3573	1.25	1.19	5%	1.53	-18%
3574	2.77	3.11	-11%	3.36	-18%
3577	0.96	1.03	-7%	1.30	-26%
3612	2.50	2.75	-9%	3.44	-27%
3620	5.63	5.57	1%	6.65	-15%
3632	2.47	2.41	2%	2.69	-8%
3634	2.90	2.87	1%	3.05	-5%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
3643	1.85	2.03	-9%	2.55	-27%
3647	3.92	4.12	-5%	4.85	-19%
3651	2.67	2.60	3%	2.84	-6%
3681	0.47	0.54	-13%	0.66	-29%
3682	1.09	1.15	-5%	1.27	-14%
3683	0.66	0.77	-14%	1.06	-38%
3719	1.78	2.06	-14%	2.32	-23%
3724	3.94	3.70	6%	5.09	-23%
3726	2.19	2.14	2%	2.44	-10%
3805	1.15	0.98	17%	0.71	62%
3808	5.04	4.12	22%	4.01	26%
3815	4.42	4.73	-7%	5.73	-23%
3821	5.67	6.57	-14%	6.43	-12%
3828	3.99	3.88	3%	4.56	-13%
3830	1.88	1.94	-3%	2.19	-14%
3831	2.91	3.05	-5%	2.67	9%
3840	4.32	4.73	-9%	5.40	-20%
4000	2.85	2.79	2%	3.28	-13%
4034	4.71	4.62	2%	5.76	-18%
4036	3.97	3.81	4%	4.21	-6%
4038	6.54	6.34	3%	7.35	-11%
4041	3.13	3.04	3%	3.82	-18%
4049	3.76	3.45	9%	3.57	5%
4111	2.63	2.71	-3%	2.43	8%
4112	0.32	0.37	-14%	0.38	-16%
4114	2.53	2.38	6%	2.68	-6%
4130	6.00	6.69	-10%	6.37	-6%
4150	2.52	2.66	-5%	2.55	-1%
4239	2.98	2.92	2%	3.50	-15%
4240	8.18	8.46	-3%	9.53	-14%
4243	3.29	3.00	10%	3.02	9%
4244	3.70	3.85	-4%	4.64	-20%
4250	3.21	3.30	-3%	3.83	-16%
4251	3.35	3.29	2%	3.13	7%
4279	4.44	4.86	-9%	5.37	-17%
4283	2.55	2.48	3%	3.12	-18%
4286	5.48	5.91	-7%	6.44	-15%
4295	5.51	5.35	3%	6.59	-16%
4297	0.19	0.21	-10%	0.24	-21%
4299	4.18	3.92	7%	4.61	-9%
4304	5.64	7.37	-23%	5.18	9%
4312	7.53	6.04	25%	7.86	-4%
4351	2.72	2.59	5%	2.94	-7%
4354	2.23	2.30	-3%	2.89	-23%
4361	1.25	1.26	-1%	1.74	-28%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1) Proposed September 1, 2023 Advisory Pure Premium Rates	(2) Approved September 1, 2022 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2023	(5) Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
4362	1.22	1.57	-22%	2.39	-49%
4410	5.72	5.79	-1%	6.32	-9%
4420	8.62	8.46	2%	10.21	-16%
4432	3.58	3.09	16%	4.14	-14%
4470	2.30	2.19	5%	2.46	-7%
4478	5.10	5.08	0%	5.55	-8%
4492	5.26	5.28	0%	6.36	-17%
4494	5.33	5.42	-2%	6.05	-12%
4495	3.26	3.01	8%	3.52	-7%
4496	4.91	4.91	0%	5.61	-12%
4497	4.19	3.42	23%	4.26	-2%
4498	4.62	4.64	0%	5.02	-8%
4499	5.89	4.96	19%	4.78	23%
4511	0.47	0.47	0%	0.49	-4%
4512	0.13	0.16	-19%	0.20	-35%
4557	3.49	3.47	1%	3.81	-8%
4558	2.65	2.81	-6%	3.24	-18%
4611	1.44	1.42	1%	1.42	1%
4623	5.84	5.95	-2%	6.58	-11%
4635	2.54	2.52	1%	2.24	13%
4665	7.11	6.99	2%	7.78	-9%
4683	2.91	2.97	-2%	3.89	-25%
4691	1.29	1.19	8%	1.42	-9%
4692	1.49	1.53	-3%	1.58	-6%
4717	4.08	3.88	5%	4.18	-2%
4720	2.98	3.06	-3%	3.37	-12%
4740	0.77	0.83	-7%	0.81	-5%
4771	1.17	1.27	-8%	1.46	-20%
4828	2.52	2.27	11%	2.67	-6%
4829	1.33	1.44	-8%	1.44	-8%
4831	4.55	4.22	8%	4.82	-6%
4983	3.31	2.70	23%	2.84	17%
5020	3.44	3.30	4%	4.02	-14%
5027	7.97	7.49	6%	9.65	-17%
5028	4.05	4.16	-3%	5.33	-24%
5029	4.62	5.06	-9%	7.08	-35%
5040	7.60	7.90	-4%	10.40	-27%
5102	5.16	5.30	-3%	6.91	-25%
5107	5.10	5.28	-3%	6.03	-15%
5108	7.80	7.22	8%	8.69	-10%
5128	1.07	1.21	-12%	1.53	-30%
5129	0.41	0.39	5%	0.43	-5%
5130	1.19	1.08	10%	1.29	-8%
5140	1.77	1.58	12%	1.96	-10%
5146	4.62	4.38	5%	5.15	-10%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
5160	1.53	1.59	-4%	1.53	0%
5183	5.55	5.48	1%	6.50	-15%
5184	1.73	1.77	-2%	2.57	-33%
5185	3.96	4.15	-5%	5.27	-25%
5186	1.76	1.83	-4%	2.26	-22%
5187	2.59	2.41	7%	2.93	-12%
5190	3.62	3.37	7%	4.37	-17%
5191	2.06	1.90	8%	1.92	7%
5192	3.69	3.85	-4%	3.98	-7%
5193	0.90	0.96	-6%	1.16	-22%
5195	2.57	2.59	-1%	3.76	-32%
5201	7.60	7.68	-1%	9.02	-16%
5205	4.30	4.25	1%	5.53	-22%
5212	5.00	4.86	3%	6.72	-26%
5213	4.35	4.42	-2%	5.49	-21%
5214	4.37	4.38	0%	5.33	-18%
5222	4.06	5.10	-20%	6.15	-34%
5225	4.96	5.06	-2%	6.18	-20%
5348	4.63	4.53	2%	5.39	-14%
5403	11.16	11.37	-2%	13.75	-19%
5432	4.37	4.31	1%	5.87	-26%
5436	4.48	4.30	4%	5.25	-15%
5443	4.89	4.91	0%	5.90	-17%
5446	5.68	5.51	3%	7.22	-21%
5447	2.86	2.51	14%	3.27	-13%
5467	6.96	6.86	1%	8.81	-21%
5470	2.74	2.76	-1%	3.74	-27%
5473	9.41	9.58	-2%	12.79	-26%
5474	7.98	7.51	6%	9.87	-19%
5479	4.66	5.21	-11%	6.08	-23%
5482	4.49	4.56	-2%	5.81	-23%
5484	10.62	10.78	-1%	12.28	-14%
5485	5.44	5.40	1%	6.74	-19%
5506	3.73	3.80	-2%	4.67	-20%
5507	3.27	3.22	2%	4.33	-24%
5538	6.04	5.68	6%	7.98	-24%
5542	2.53	2.68	-6%	3.40	-26%
5552	22.74	20.37	12%	35.57	-36%
5553	10.25	9.72	5%	17.90	-43%
5606	0.67	0.68	-1%	0.93	-28%
5610	3.32	3.35	-1%	4.59	-28%
5632	11.16	11.37	-2%	13.00	-14%
5633	4.37	4.31	1%	4.98	-12%
5650	6.08	5.95	2%	6.78	-10%
5951	0.46	0.47	-2%	0.44	5%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
6003	8.13	10.44	-22%	13.48	-40%
6011	3.28	4.38	-25%	5.79	-43%
6204	6.50	5.83	11%	8.00	-19%
6206	2.73	2.86	-5%	3.67	-26%
6213	1.68	1.50	12%	1.72	-2%
6216	3.25	2.87	13%	3.84	-15%
6218	4.81	4.99	-4%	6.78	-29%
6220	2.77	2.47	12%	3.59	-23%
6233	1.71	1.65	4%	2.29	-25%
6235	4.10	4.20	-2%	4.94	-17%
6237	2.23	2.35	-5%	2.52	-12%
6251	2.75	3.38	-19%	3.60	-24%
6258	5.01	5.47	-8%	6.71	-25%
6307	6.39	6.63	-4%	9.83	-35%
6308	3.10	2.98	4%	4.00	-23%
6315	4.01	3.94	2%	5.17	-22%
6316	2.80	2.97	-6%	4.26	-34%
6325	2.85	2.96	-4%	3.72	-23%
6361	2.46	2.54	-3%	3.93	-37%
6364	4.53	4.17	9%	5.49	-17%
6400	4.57	4.28	7%	5.78	-21%
6504	6.26	6.34	-1%	7.16	-13%
6834	5.07	5.15	-2%	6.51	-22%
7133	1.95	2.11	-8%	2.97	-34%
7198	8.90	7.90	13%	5.37	66%
7207	8.29	8.31	0%	13.07	-37%
7219	6.77	6.58	3%	7.11	-5%
7227	6.62	6.05	9%	7.71	-14%
7232	6.99	7.37	-5%	8.03	-13%
7248	1.74	1.53	14%	1.61	8%
7272	8.42	7.74	9%	10.46	-20%
7332	2.96	2.68	10%	2.76	7%
7360	5.55	5.81	-4%	6.51	-15%
7365	6.44	5.55	16%	8.20	-21%
7382	6.67	6.72	-1%	7.04	-5%
7392	6.69	6.19	8%	6.06	10%
7403	5.27	5.37	-2%	4.96	6%
7405	1.50	1.66	-10%	1.43	5%
7409	5.78	6.57	-12%	9.71	-40%
7410	5.62	4.50	25%	6.32	-11%
7421	1.03	1.26	-18%	1.58	-35%
7424	1.56	1.59	-2%	1.67	-7%
7428	2.74	2.74	0%	2.84	-4%
7429	1.77	1.79	-1%	2.00	-12%
7500	2.65	2.62	1%	3.43	-23%

Rates are per \$100 of payroll unless otherwise noted.

**Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)**

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
7515	1.12	1.00	12%	1.13	-1%
7520	2.65	2.62	1%	3.21	-17%
7538	2.20	2.13	3%	2.77	-21%
7539	1.53	1.53	0%	1.91	-20%
7580	2.54	2.82	-10%	3.85	-34%
7600	7.58	7.78	-3%	7.44	2%
7601	2.86	2.71	6%	2.14	34%
7605	2.33	2.15	8%	2.76	-16%
7607	0.14	0.19	-26%	0.29	-52%
7610	0.47	0.50	-6%	0.52	-10%
7706	6.50	6.03	8%	7.83	-17%
7707**	331.30	282.62	17%	458.84	-28%
7720	2.84	2.69	6%	3.17	-10%
7721	3.29	2.94	12%	4.04	-19%
7722 ‡	145.16	128.52	13%	N/A	N/A
7855	2.47	2.80	-12%	3.76	-34%
8001	4.67	4.39	6%	5.12	-9%
8004	3.33	3.41	-2%	3.85	-14%
8006	3.68	3.68	0%	4.02	-8%
8008	2.37	2.50	-5%	2.40	-1%
8010	2.29	2.38	-4%	2.87	-20%
8013	1.10	1.05	5%	1.23	-11%
8015	4.61	4.48	3%	4.54	2%
8017	2.60	2.60	0%	2.58	1%
8018	5.34	5.53	-3%	5.86	-9%
8019	1.56	1.45	8%	1.69	-8%
8021	7.46	6.51	15%	7.19	4%
8028	4.15	3.68	13%	4.60	-10%
8031	4.46	4.45	0%	5.20	-14%
8032	5.26	5.13	3%	5.83	-10%
8039	2.82	2.85	-1%	2.34	21%
8041	5.35	5.95	-10%	6.84	-22%
8042	3.02	3.19	-5%	3.75	-19%
8046	2.77	2.63	5%	2.70	3%
8057	3.16	3.37	-6%	4.43	-29%
8059	2.98	2.88	3%	3.28	-9%
8060	1.71	1.67	2%	1.94	-12%
8061	3.37	2.87	17%	3.50	-4%
8062	1.18	1.15	3%	1.21	-2%
8063	3.65	3.67	-1%	4.06	-10%

Rates are per \$100 of payroll unless otherwise noted.

** The rate for classification 7707 is per capita.

‡ The rate for classification 7722 is per capita; this classification does not have sufficient exposure available to derive an industry average filed pure premium rate.

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
8064	2.97	3.12	-5%	2.65	12%
8065	2.69	2.49	8%	2.69	0%
8066	1.75	1.40	25%	1.46	20%
8071	0.98	0.96	2%	1.08	-9%
8078	1.27	1.24	2%	1.47	-14%
8102	1.84	1.59	16%	1.74	6%
8106	4.88	4.94	-1%	6.25	-22%
8107	2.16	2.04	6%	2.45	-12%
8116	2.30	2.41	-5%	3.06	-25%
8117	3.80	3.63	5%	4.07	-7%
8209	6.15	6.00	3%	7.24	-15%
8215	7.21	7.41	-3%	10.58	-32%
8227	3.38	3.37	0%	4.47	-24%
8232	5.03	4.97	1%	5.73	-12%
8267	5.70	6.29	-9%	8.13	-30%
8278***	274.23	188.36	46%	302.67	-9%
8286	7.89	7.07	12%	9.37	-16%
8290	3.25	3.27	-1%	3.80	-14%
8291	4.58	4.57	0%	4.83	-5%
8292	8.12	8.34	-3%	8.16	0%
8293	11.37	11.11	2%	12.52	-9%
8304	7.12	6.07	17%	7.93	-10%
8324	2.86	3.00	-5%	3.36	-15%
8350	4.59	4.58	0%	5.05	-9%
8370	1.77	1.90	-7%	2.28	-22%
8387	3.43	3.27	5%	3.59	-4%
8388	4.32	4.15	4%	4.70	-8%
8389	2.65	2.70	-2%	2.91	-9%
8390	3.01	2.99	1%	3.32	-9%
8391	2.43	2.53	-4%	2.97	-18%
8392	3.08	2.93	5%	3.15	-2%
8393	2.61	2.43	7%	2.72	-4%
8397	3.74	3.34	12%	3.56	5%
8400	2.32	2.29	1%	2.40	-3%
8500	6.20	6.11	1%	6.54	-5%
8601 †	0.32	0.37	-14%	0.45	-29%
8631***	6.15	5.75	7%	8.17	-25%
8720	1.74	1.53	14%	1.99	-13%
8729	0.70	0.78	-10%	0.97	-28%
8740	0.86	0.88	-2%	1.01	-15%
8741 †	0.13	0.23	-43%	0.23	-43%
8742	0.29	0.32	-9%	0.38	-24%
8743	0.12	0.16	-25%	0.18	-33%
8744	0.29	0.32	-9%	0.41	-29%
8745	7.36	6.71	10%	7.55	-3%

Rates are per \$100 of payroll unless otherwise noted.

*** The rate for classification 8278 is per race. The rate for classification 8631 is per occupied stall day.

† To be comparable to the proposed rates in Column (1), the rates in Columns (2) and (4) for this classification have been adjusted

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
8746	0.29	0.32	-9%	0.36	-19%
8748	0.74	0.92	-20%	1.04	-29%
8749 †	0.17	0.30	-44%	0.32	-46%
8755	0.68	0.71	-4%	1.02	-33%
8800	2.71	2.89	-6%	3.13	-13%
8801 †	0.50	0.79	-37%	0.94	-47%
8803	0.10	0.13	-23%	0.14	-29%
8804	2.42	2.14	13%	3.12	-22%
8806	2.63	2.74	-4%	3.85	-32%
8807	0.19	0.24	-21%	0.35	-46%
8808 †	0.42	0.64	-34%	0.67	-37%
8810	0.21	0.22	-5%	0.24	-13%
8811	0.21	0.22	-5%	0.30	-30%
8812	0.21	0.22	-5%	0.32	-34%
8813	0.48	0.50	-4%	0.61	-21%
8818	0.40	0.52	-23%	0.60	-33%
8820	0.27	0.31	-13%	0.36	-25%
8821	0.63	0.70	-10%	1.12	-44%
8822 †	0.48	0.63	-24%	0.67	-28%
8823	3.29	3.18	3%	4.14	-21%
8827	2.86	2.82	1%	3.42	-16%
8829	2.94	2.75	7%	3.29	-11%
8830	1.38	1.31	5%	1.95	-29%
8831	1.64	1.55	6%	1.80	-9%
8834	0.60	0.61	-2%	0.73	-18%
8838	0.94	0.93	1%	1.26	-25%
8839	0.67	0.66	2%	0.87	-23%
8840	0.30	0.31	-3%	0.31	-3%
8846	1.18	1.19	-1%	1.50	-21%
8847	7.53	7.42	1%	8.81	-15%
8850	1.48	1.61	-8%	2.36	-37%
8851	2.73	3.00	-9%	3.51	-22%
8852	1.48	1.50	-1%	1.69	-12%
8859	0.03	0.03	0%	0.03	0%
8868	0.55	0.62	-11%	0.77	-29%
8870	0.78	0.82	-5%	1.26	-38%
8871*	0.17	0.22	-23%	0.24	-29%
8874*†	0.08	0.14	-42%	0.15	-47%
8875	0.59	0.70	-16%	0.83	-29%
9007	3.67	3.45	6%	4.28	-14%
9008	6.75	6.82	-1%	8.15	-17%
9009	2.91	3.08	-6%	2.94	-1%
9010	4.54	3.99	14%	4.58	-1%
9011	3.68	3.58	3%	4.47	-18%
9015	3.75	3.94	-5%	4.99	-25%

Rates are per \$100 of payroll unless otherwise noted.

* This classification is recently established and there is no reported payroll available yet to derive an industry average filed pure premium rate.

† To be comparable to the proposed rates in Column (1), the rates in Columns (2) and (4) for this classification have been adjusted

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)

Class Code	(1)	(2)	(3)	(4)	(5)
	Proposed September 1, 2023 Advisory Pure Premium Rates	Approved September 1, 2022 Advisory Pure Premium Rates	Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR (1)/(2)-1	Industry Average Filed Pure Premium Rates as of 1/1/2023	Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023 (1)/(4)-1
9016	2.49	2.38	5%	3.00	-17%
9031	4.05	4.05	0%	4.21	-4%
9033	3.56	3.88	-8%	5.36	-34%
9043	1.38	1.31	5%	1.32	5%
9048	2.29	2.90	-21%	3.69	-38%
9050	6.13	5.95	3%	6.84	-10%
9053	1.42	1.30	9%	1.79	-21%
9054	3.58	3.68	-3%	4.67	-23%
9059	1.89	1.84	3%	2.20	-14%
9060	3.22	3.04	6%	3.64	-12%
9061	3.62	3.25	11%	4.09	-11%
9066	2.96	2.99	-1%	3.41	-13%
9067	1.58	1.34	18%	1.75	-10%
9069	4.65	3.71	25%	4.46	4%
9070	4.57	4.31	6%	5.20	-12%
9079	2.66	2.63	1%	2.94	-10%
9085	2.56	2.50	2%	3.18	-19%
9092	1.71	1.71	0%	2.31	-26%
9095	2.81	2.65	6%	4.08	-31%
9096	8.29	8.44	-2%	11.46	-28%
9097	3.07	3.06	0%	3.53	-13%
9101	3.91	3.79	3%	4.82	-19%
9151	0.44	0.51	-14%	0.88	-50%
9154	1.93	1.90	2%	2.84	-32%
9155	0.96	1.06	-9%	0.96	0%
9156	3.37	3.36	0%	4.89	-31%
9180	3.00	2.56	17%	3.46	-13%
9181	10.69	9.26	15%	9.27	15%
9182	1.13	1.11	2%	1.27	-11%
9184	8.09	7.51	8%	10.09	-20%
9185	8.96	9.21	-3%	17.42	-49%
9220	6.61	5.95	11%	7.30	-9%
9402	3.58	3.26	10%	3.65	-2%
9403	6.36	5.92	7%	5.92	7%
9410	0.85	0.89	-4%	1.61	-47%
9420	9.23	8.32	11%	13.09	-29%
9422	1.79	1.81	-1%	2.90	-38%
9424	5.49	5.67	-3%	5.82	-6%
9426	4.75	4.33	10%	6.58	-28%
9501	4.15	4.26	-3%	5.01	-17%
9507	3.11	3.09	1%	3.70	-16%
9516	2.32	2.40	-3%	2.43	-5%
9519	6.30	5.42	16%	6.29	0%
9521	3.66	3.88	-6%	5.17	-29%
9522	6.63	6.65	0%	7.92	-16%

Rates are per \$100 of payroll unless otherwise noted.

Comparison of Proposed September 1, 2023 Advisory Pure Premium Rates with Approved September 1, 2022 Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2023 (continued)

<u>Class Code</u>	(1) <u>Proposed September 1, 2023 Advisory Pure Premium Rates</u>	(2) <u>Approved September 1, 2022 Advisory Pure Premium Rates</u>	(3) <u>Difference Between Proposed 9/1/2023 APPR & Approved 9/1/2022 APPR</u> (1)/(2)-1	(4) <u>Industry Average Filed Pure Premium Rates as of 1/1/2023</u>	(5) <u>Difference Between Proposed 9/1/2023 APPR & Industry Avg Filed PPR as of 1/1/2023</u> (1)/(4)-1
9529	4.81	4.71	2%	6.16	-22%
9531	3.17	2.79	14%	3.85	-18%
9549	8.55	9.83	-13%	8.02	7%
9552	8.58	7.91	8%	11.44	-25%
9586	1.28	1.34	-4%	1.59	-19%
9610	1.45	1.67	-13%	1.44	1%
9620	3.00	2.39	26%	2.90	3%

Rates are per \$100 of payroll unless otherwise noted.

Section A

Proposed Pure Premium Rates

This section sets forth the calculation of the proposed pure premium rates applicable to workers' compensation policies with an effective date on or after September 1, 2023. The pure premium rates included in this section are based on the "Selected (Unlimited) Loss to Payroll Ratio" or, if applicable, the "Selected Loss to Payroll Ratio (Restricted to 25% Change)" for each standard classification as computed in the classification relativities that were included in Part A, Section C, Appendix C of the WCIRB's September 1, 2023 Regulatory Filing submitted on February 27, 2023 (September 1, 2023 Regulatory Filing).

In order to determine the proposed pure premium rate for each classification, the selected loss to payroll ratios in Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing are adjusted to reflect (a) the overall indicated difference in the level of losses projected for policies incepting between September 1, 2023 and August 31, 2024, segregated into its indemnity and medical components, (b) the inclusion of loss adjustment expenses (LAE) and (c) the impact of experience rating on pure premium.

The projected indemnity loss factor of 0.9697 is computed as the projected ratio of indemnity losses to pure premium at the approved advisory pure premium rate level as of September 1, 2022 of 0.368 (see Section B, Exhibit 8, line 1) divided by the implied expected provision for indemnity losses in the September 1, 2022 advisory pure premium rates of 0.3795.¹ The projected medical loss factor of 1.0423 is computed as the projected ratio of medical losses to pure premium at the approved advisory pure premium rate level as of September 1, 2022 of 0.387 (see Section B, Exhibit 8, line 1) divided by the implied expected provision for medical losses in the September 1, 2022 advisory pure premium rates of 0.3713.²

Shown below are the indemnity and medical composite factors, which are the projected indemnity and medical loss factors adjusted for the indicated provision for loss adjustment expenses of 31.7% (see Section B, Appendix C) and the selected experience rating off-balance correction factor of 1.039 (see Part A, Section C, Appendix B of the September 1, 2023 Regulatory Filing).

¹ This factor represents the loss provision in the approved September 1, 2022 advisory pure premium rates (i.e., 1/1.332 or 0.7508) apportioned to indemnity based on the indemnity (0.5054) and medical (0.4946) split reflected in the overall selected loss to payroll ratios included in Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing.

² This factor represents the loss provision in the approved September 1, 2022 advisory pure premium rates (i.e., 1/1.332 or 0.7508) apportioned to medical based on the indemnity (0.5054) and medical (0.4946) split reflected in the overall selected loss to payroll ratios included in Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing.

	<u>Indemnity</u>	<u>Medical</u>
(1) Projected Loss Factors		
(a) Projected Loss to Approved Advisory Pure Premium Rate Level as of September 1, 2022	0.368	0.387
(b) Expected Loss Provision in Approved September 1, 2022 Advisory Pure Premium Rates	0.3795	0.3713
(c) Projected Loss Factors: (a) / (b)	0.9697	1.0423
(2) Loss Adjustment Expense Factor	1.317	1.317
(3) Experience Rating Off-Balance Factor	1.039	1.039
(4) Composite Factors: (1c) x (2) x (3)	1.327	1.426

In summary, the proposed September 1, 2023 pure premium rate for each classification is calculated by (a) multiplying the indemnity component shown in the “Selected (Unlimited) Loss to Payroll Ratio” or, if applicable, the “Selected Loss to Payroll Ratio (Restricted to 25% Change)” line on the classification relativity review sheet for the classification included in Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing by the indemnity composite factor of 1.327 shown above, (b) multiplying the medical component shown in the “Selected (Unlimited) Loss to Payroll Ratio” or, if applicable, the “Selected Loss to Payroll Ratio (Restricted to 25% Change)” line on the classification relativity review sheets included in Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing by the medical composite factor of 1.426 shown above and (c) adding the resulting products.

For example, the proposed September 1, 2023 pure premium rate for Classification 4496, *Plastics – fabricated products mfg.*, of \$4.91 per \$100 of payroll is computed by multiplying the indemnity Selected (Unlimited) Loss to Payroll Ratio of 1.789 (see Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing) by the indemnity composite factor of 1.327 and adding that result to the product of the medical Selected (Unlimited) Loss to Payroll Ratio of 1.775 (see Part A, Section C, Appendix C of the September 1, 2023 Regulatory Filing) and the medical composite factor of 1.426.

Proposed September 1, 2023 Pure Premium Rates
Effective September 1, 2023 on New and Renewal Policies
Effective on or after September 1, 2023

Class Code	P.P. Rate*												
0005	4.60	2113	8.19	3066	4.26	3683	0.66	4478	5.10	5187	2.59	6216	3.25
0016	6.27	2116	4.62	3070	0.26	3719	1.78	4492	5.26	5190	3.62	6218	4.81
0034	6.33	2117	6.82	3076	4.87	3724	3.94	4494	5.33	5191	2.06	6220	2.77
0035	4.56	2121	2.81	3081	10.37	3726	2.19	4495	3.26	5192	3.69	6233	1.71
0036	7.02	2123	5.50	3082	9.69	3805	1.15	4496	4.91	5193	0.90	6235	4.10
0038	8.63	2142	2.64	3085	10.54	3808	5.04	4497	4.19	5195	2.57	6237	2.23
0040	3.70	2163	6.73	3099	3.61	3815	4.42	4498	4.62	5201	7.60	6251	2.75
0041	4.11	2222	4.38	3110	6.10	3821	5.67	4499	5.89	5205	4.30	6258	5.01
0042	5.18	2362	14.82	3131	4.40	3828	3.99	4511	0.47	5212	5.00	6307	6.39
0045	3.90	2402	8.27	3146	2.74	3830	1.88	4512	0.13	5213	4.35	6308	3.10
0050	5.18	2413	4.36	3152	3.46	3831	2.91	4557	3.49	5214	4.37	6315	4.01
0079	2.60	2501	6.05	3165	3.78	3840	4.32	4558	2.65	5222	4.06	6316	2.80
0096	3.83	2570	7.89	3169	3.73	4000	2.85	4611	1.44	5225	4.96	6325	2.85
0106	9.64	2571	7.96	3175	3.65	4034	4.71	4623	5.84	5348	4.63	6361	2.46
0171	5.58	2576	6.37	3178	1.91	4036	3.97	4635	2.54	5403	11.16	6364	4.53
0172	3.88	2584	4.98	3179	2.16	4038	6.54	4665	7.11	5432	4.37	6400	4.57
0251	3.61	2585	6.66	3180	4.46	4041	3.13	4683	2.91	5436	4.48	6504	6.26
0400	5.34	2589	4.58	3220	1.91	4049	3.76	4691	1.29	5443	4.89	6834	5.07
0401	8.52	2660	7.97	3241	3.64	4111	2.63	4692	1.49	5446	5.68	7133	1.95
1122	2.07	2683	4.42	3257	4.36	4112	0.32	4717	4.08	5447	2.86	7198	8.90
1320	1.31	2688	5.95	3339	5.44	4114	2.53	4720	2.98	5467	6.96	7207	8.29
1322	3.93	2702	16.96	3365	4.73	4130	6.00	4740	0.77	5470	2.74	7219	6.77
1330	1.84	2710	6.83	3372	5.33	4150	2.52	4771	1.17	5473	9.41	7227	6.62
1438	5.35	2727	16.15	3383	2.93	4239	2.98	4828	2.52	5474	7.98	7232	6.99
1452	2.50	2731	5.04	3400	5.50	4240	8.18	4829	1.33	5479	4.66	7248	1.74
1463	3.18	2757	7.53	3401	3.97	4243	3.29	4831	4.55	5482	4.49	7272	8.42
1624	3.03	2759	6.18	3501	5.59	4244	3.70	4983	3.31	5484	10.62	7332	2.96
1699	1.41	2790	1.77	3507	4.15	4250	3.21	5020	3.44	5485	5.44	7360	5.55
1701	2.70	2797	7.87	3560	2.59	4251	3.35	5027	7.97	5506	3.73	7365	6.44
1710	3.34	2806	5.54	3568	2.25	4279	4.44	5028	4.05	5507	3.27	7382	6.67
1741	3.25	2812	5.25	3569	1.70	4283	2.55	5029	4.62	5538	6.04	7392	6.69
1803	7.63	2819	5.97	3570	3.20	4286	5.48	5040	7.60	5542	2.53	7403	5.27
1925	9.95	2840	3.26	3572	0.80	4295	5.51	5102	5.16	5552	22.74	7405	1.50
2002	7.12	2842	5.13	3573	1.25	4297	0.19	5107	5.10	5553	10.25	7409	5.78
2003	5.59	2852	8.01	3574	2.77	4299	4.18	5108	7.80	5606	0.67	7410	5.62
2014	5.00	2881	6.86	3577	0.96	4304	5.64	5128	1.07	5610	3.32	7421	1.03
2030	3.90	2883	11.09	3612	2.50	4312	7.53	5129	0.41	5632	11.16	7424	1.56
2063	3.44	2915	4.51	3620	5.63	4351	2.72	5130	1.19	5633	4.37	7428	2.74
2081	8.50	2923	3.54	3632	2.47	4354	2.23	5140	1.77	5650	6.08	7429	1.77
2095	6.33	3018	2.51	3634	2.90	4361	1.25	5146	4.62	5951	0.46	7500	2.65
2102	5.29	3022	5.35	3643	1.85	4362	1.22	5160	1.53	6003	8.13	7515	1.12
2107	4.25	3030	7.07	3647	3.92	4410	5.72	5183	5.55	6011	3.28	7520	2.65
2108	4.76	3039	6.98	3651	2.67	4420	8.62	5184	1.73	6204	6.50	7538	2.20
2109	5.38	3040	6.00	3681	0.47	4432	3.58	5185	3.96	6206	2.73	7539	1.53
2111	4.56	3060	6.84	3682	1.09	4470	2.30	5186	1.76	6213	1.68	7580	2.54

*Pure Premium Rates are per \$100 of payroll unless otherwise noted. Note that payroll limitations apply to Classifications 7607, 7610, 8601, 8741, 8743, 8749, 8801, 8803, 8808, 8820, 8822, 8859, 8874, 9151, 9156, 9181 and 9610. Refer to the classification phraseology in Part 3, Section VII of the California Workers' Compensation Uniform Statistical Reporting Plan – 1995 for more information.
 WCIRB September 1, 2023 Pure Premium Rate Filing

Proposed September 1, 2023 Pure Premium Rates
Effective September 1, 2023 on New and Renewal Policies
Effective on or after September 1, 2023
 (Continued)

Legend:

(A) See below

Class Code	P.P. Rate*												
7600	7.58	8059	2.98	8387	3.43	8808	0.42	9008	6.75	9156	3.37		
7601	2.86	8060	1.71	8388	4.32	8810	0.21	9009	2.91	9180	3.00		
7605	2.33	8061	3.37	8389	2.65	8811	0.21	9010	4.54	9181	10.69		
7607	0.14	8062	1.18	8390	3.01	8812	0.21	9011	3.68	9182	1.13		
7610	0.47	8063	3.65	8391	2.43	8813	0.48	9015	3.75	9184	8.09		
7706	6.50	8064	2.97	8392	3.08	8818	0.40	9016	2.49	9185	8.96		
7707	(A)	8065	2.69	8393	2.61	8820	0.27	9031	4.05	9220	6.61		
7720	2.84	8066	1.75	8397	3.74	8821	0.63	9033	3.56	9402	3.58		
7721	3.29	8071	0.98	8400	2.32	8822	0.48	9043	1.38	9403	6.36		
7722	(A)	8078	1.27	8500	6.20	8823	3.29	9048	2.29	9410	0.85		
7855	2.47	8102	1.84	8601	0.32	8827	2.86	9050	6.13	9420	9.23		
8001	4.67	8106	4.88	8631	(A)	8829	2.94	9053	1.42	9422	1.79		
8004	3.33	8107	2.16	8720	1.74	8830	1.38	9054	3.58	9424	5.49		
8006	3.68	8116	2.30	8729	0.70	8831	1.64	9059	1.89	9426	4.75		
8008	2.37	8117	3.80	8740	0.86	8834	0.60	9060	3.22	9501	4.15		
8010	2.29	8209	6.15	8741	0.13	8838	0.94	9061	3.62	9507	3.11		
8013	1.10	8215	7.21	8742	0.29	8839	0.67	9066	2.96	9516	2.32		
8015	4.61	8227	3.38	8743	0.12	8840	0.30	9067	1.58	9519	6.30		
8017	2.60	8232	5.03	8744	0.29	8846	1.18	9069	4.65	9521	3.66		
8018	5.34	8267	5.70	8745	7.36	8847	7.53	9070	4.57	9522	6.63		
8019	1.56	8278	(A)	8746	0.29	8850	1.48	9079	2.66	9529	4.81		
8021	7.46	8286	7.89	8748	0.74	8851	2.73	9085	2.56	9531	3.17		
8028	4.15	8290	3.25	8749	0.17	8852	1.48	9092	1.71	9549	8.55		
8031	4.46	8291	4.58	8755	0.68	8859	0.03	9095	2.81	9552	8.58		
8032	5.26	8292	8.12	8800	2.71	8868	0.55	9096	8.29	9586	1.28		
8039	2.82	8293	11.37	8801	0.50	8870	0.78	9097	3.07	9610	1.45		
8041	5.35	8304	7.12	8803	0.10	8871	0.17	9101	3.91	9620	3.00		
8042	3.02	8324	2.86	8804	2.42	8874	0.08	9151	0.44				
8046	2.77	8350	4.59	8806	2.63	8875	0.59	9154	1.93				
8057	3.16	8370	1.77	8807	0.19	9007	3.67	9155	0.96				

Per Capita Classifications

Firefighters, Police, Police Deputies, etc.

Class Code	P.P. Rate*
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Firefighting Operations - volunteers	7707	331.30
Police, Sheriffs - volunteers	7722	145.16

Horse Racing Classifications

Horse Racing

Class Code	P.P. Rate*
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Jockeys or Harness Racing Drivers (per race)	8278	274.23
Racing Stables (per occupied stall day)	8631	6.15

*Pure Premium Rates are per \$100 of payroll unless otherwise noted. Note that payroll limitations apply to Classifications 7607, 7610, 8601, 8741, 8743, 8749, 8801, 8803, 8808, 8820, 8822, 8859, 8874, 9151, 9156, 9181 and 9610. Refer to the classification phraseology in Part 3, Section VII of the California Workers' Compensation Uniform Statistical Reporting Plan – 1995 for more information.
 WCIRB September 1, 2023 Pure Premium Rate Filing

Section B

Computation of Indicated Change in the Advisory Pure Premium Rate Level

The projected ratio of losses to premium for policies incepting between September 1, 2023 and August 31, 2024 at the approved September 1, 2022 advisory pure premium rate level based on insurer experience through December 31, 2022 is 75.5%. The projected provision for loss adjustment expenses (LAE) is 31.7% of losses. In total, the projected loss and LAE as a percentage of premium at the approved September 1, 2022 approved advisory pure premium rate level is 99.4%. After reflecting a 0.9% indicated increase in the experience rating off-balance correction factor (see Part A, Section C, Appendix B of the WCIRB's September 1, 2023 Regulatory Filing), the result is an indicated 0.3% increase in the advisory pure premium rate level.¹

The data and actuarial methodologies underlying the computation of the indicated average change in the advisory pure premium rates is summarized below. This actuarial analysis is provided by Tony Milano, who is a Vice President and Actuary at the WCIRB and a Fellow of the Casualty Actuarial Society. The methodologies summarized in this Section have also been reviewed by the WCIRB's Actuarial Committee, whose members are also Fellows of the Casualty Actuarial Society.

Computation of Projected Loss to Pure Premium Ratio

A. Calendar Accident Year Experience

The projected loss to pure premium ratio is based on a review of calendar and accident year experience through 2022, valued as of December 31, 2022. A summary of the 1987 through 2022 calendar year premiums and accident year losses is shown in Exhibit 1. The experience included in this summary reflects the data reported by insurers representing approximately 100% of the California workers' compensation insurance market in 2022. (The December 31, 2022 experience of a number of insurers that were in liquidation by the fourth quarter of 2022 but may have written a significant portion of the market in prior years has not been reported to the WCIRB and is, therefore, not included in this analysis.)

Exhibit 1 shows the earned premium, the indemnity paid losses and case reserves and the medical paid losses and case reserves as of December 31, 2022 for accident years 1987 through 2022.² Exhibit 1 also shows, for informational purposes, the incurred but not reported (IBNR) losses reported by insurers as of December 31, 2022, the total incurred losses including IBNR losses, and the total loss ratio reported for each accident year.

The COVID-19 pandemic has had a significant impact on the workers' compensation insurance system. Thousands of claims arising out of a diagnosis of COVID-19 have been filed for accident years 2020 through 2022 totaling almost \$0.5 billion in insurer reported incurred indemnity and medical losses as of December 31, 2022 (see Appendix B, Exhibit 1). Although the WCIRB believes there will be costs associated with COVID-19 claims on policies incepting between September 1, 2023 and August 31, 2024, the costs from accident years 2020 through 2022 claims reflect earlier and different stages of the pandemic and are likely not indicative of costs incurred during this policy period which will predominantly include exposure in 2024 and 2025. As a result, the WCIRB has excluded COVID-19 claims from

¹ This results in an average indicated pure premium rate of \$1.50 based on the latest available payroll weights by classification. The average of the approved September 1, 2022 advisory pure premium rates is also \$1.50 based on the same payroll weights by classification.

² As in prior pure premium rate filings, due to a change in the required reporting of medical cost containment program (MCCP) costs beginning July 1, 2010, the paid medical losses shown in Exhibit 1 for accident year 2011 have been adjusted to exclude all MCCP paid costs including the portion of MCCP costs reported in medical losses. The paid medical losses shown in Exhibit 1 for accident years 2010 and prior continue to include all MCCP costs including the MCCP costs reported as allocated loss adjustment expenses.

Exhibit 1 and other exhibits in this Section that include accident years 2020 through 2022 based on the data reported on the WCIRB's Quarterly Call for Experience.³

B. Loss Development

The indemnity and medical losses paid and incurred (paid plus case reserves) shown in Exhibit 1 for each accident year are valued as of December 31, 2022. The amount of losses reported for the claims that occur in a particular year will change over time and the final cost of these claims will not be known for many years. In general, the pure premium rates are intended to reflect the estimated final, or ultimate, cost of losses and loss adjustment expenses on all claims that will occur during the period that the rates will be in effect. Consequently, the losses reported for each historical accident year as of December 31, 2022 are adjusted, or developed, to reflect the estimated ultimate cost of all claims that have occurred during that year.

The historical incurred age-to-age development factors for each annual evaluation period are shown in Exhibits 2.1.1 and 2.1.2 for indemnity and in Exhibits 2.2.1 and 2.2.2 for medical. The historical paid age-to-age development factors for each annual evaluation period are shown in Exhibits 2.3.1 and 2.3.2 for indemnity and Exhibits 2.4.1 and 2.4.2 for medical. These factors represent the historical year-to-year growth in the incurred and paid losses reported at consecutive December 31 evaluation periods.⁴

The methodologies used to develop each year's reported losses to its ultimate level in this pure premium rate filing are primarily based on paid loss development with adjustments for changes in claim settlement rates. Medical loss development is also adjusted for the impact of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) reforms related to liens, the sharp decreases in pharmaceutical costs that have occurred since 2013, and the updates to medical fee schedules adopted by the Division of Workers' Compensation (DWC) in 2021. These methodologies, which are discussed in detail in Appendix A, are summarized below.

Indemnity Loss Development

The WCIRB is projecting future indemnity loss development based primarily on latest year historical paid indemnity age-to-age loss development factors through 108 months and a three-year average of historical paid indemnity age-to-age loss development factors after 108 months. Paid indemnity age-to-age loss development factors are also adjusted for the impact of changes in claim settlement rates through 84 months. Exhibits 2.3.1 and 2.3.2 show the historical annual paid indemnity loss development factors. This loss development methodology is consistent with the WCIRB's last several pure premium rate filings. A recent WCIRB retrospective study of loss development showed that the adjusted paid method was among the most accurate methodologies for early period development. The study also showed that paid development was more accurate and more stable than incurred development at later maturities.⁵

Changes in the rate at which claims are settled can affect loss development patterns. Claim settlement rates increased significantly following the Senate Bill No. 863 (SB 863) reforms which has impacted both paid and incurred loss development patterns. As shown in Appendix A, Exhibit 2, claim settlement rates have begun increasing again for more recent accident years after slowing during the pandemic period. If no adjustment to loss development is made during periods of significant claim settlement rate change, projections of future loss development may be distorted. A WCIRB retrospective study of the standard actuarial approach for adjusting paid loss development for changes in claim settlement rates showed that the methodology improved the accuracy of the projection during periods of significant claim settlement rate change.⁶ The WCIRB's most recent retrospective study also showed that the claim settlement rate-

³ COVID-19 premium charges are also excluded from the premium amounts shown in Exhibit 1.

⁴ Incurred and paid medical loss development factors for accident years 2012 and later shown in Exhibits 2.2 and 2.4 do not include MCCP costs while, for consistency of comparison, medical loss development factors for accident years 2011 and prior continue to include all MCCP costs since these costs cannot be completely segregated from other medical costs.

⁵ See Item AC22-12-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

⁶ See Item AC17-03-03 of the March 21, 2017 WCIRB Actuarial Committee Agenda.

adjusted paid method was more accurate than the unadjusted paid methods.⁷ As a result, the WCIRB is adjusting paid indemnity loss development through 84 months for changes in indemnity claim settlement rates, which is consistent with the methodology used in the last several pure premium rate filings. Exhibits 2.5.3 through 2.5.8 show the adjustment for changes in claim settlement rates applied to paid indemnity loss development.

The longer-term acceleration in claim settlement rates since the SB 863 reforms a decade ago also impacts later period loss development. If fewer claims are expected to be open in more mature periods, then fewer payments are expected to be made in the future on those accident years. Although claim settlement rates slowed during the pandemic, they remain significantly above those for the older accident years underlying the loss development tail. In 2020, the WCIRB conducted a study of longer-term loss development which showed that there is a strong correlation between changes in the proportion of ultimate claims open at a point in time and changes in later period loss development.⁸ As a result, the WCIRB has adjusted paid loss development applied after 300 months for the post-SB 863 increases in claim settlement rates impacting later period loss development. Exhibits 2.5.9 through 2.5.12 show this adjustment applied to paid indemnity development, which is consistent with the approach used in the last several pure premium rate filings. (See Appendix A for a more detailed discussion of these adjustments.)

Exhibits 2.5.1 and 2.5.2 show the WCIRB's projected indemnity loss development factors including the adjustments discussed above. Indemnity development is based on the latest paid indemnity age-to-age development factor through 108 months, with adjustments for changes in claim settlement rates applied through 84 months. Prior WCIRB studies have shown that loss development at later maturities can be more volatile than at earlier maturities and a longer-term average of age-to-age development factors reduces this volatility. As a result, the WCIRB has based the projected indemnity development from 108 months through 456 months on the average of the latest three paid indemnity age-to-age development factors, with the factors after 300 months adjusted for the impact of changes in claim settlement rates on later period development as discussed above.

Losses continue to develop even after 456 months of maturity. To reflect this long-term development, an additional factor, or tail development factor, is applied to adjust the losses to an ultimate basis. This tail development factor applied to indemnity losses is based on an approach that fits an inverse power curve to a four-year average of the 108-to-120 through 348-to-360 paid indemnity age-to-age factors, adjusted for the long-term impact of changes in claim settlement rates as discussed above and extrapolating the fitted factors to approximately 80 development years. The WCIRB's most recent study of long-term loss development showed that a tail factor based on the inverse power curve fit to a four-year average of paid loss development was the most stable of the alternative methods reviewed.⁹

Medical Loss Development

The WCIRB is projecting future medical loss development primarily based on latest year historical paid medical age-to-age loss development factors through 108 months and a three-year average of the historical paid medical age-to-age loss development factors after 108 months. The historical paid age-to-age medical loss development factors are shown in Exhibits 2.4.1 and 2.4.2. In addition to the adjustments for changes in settlement rates through 84 months discussed above with respect to indemnity loss development, medical paid development is also adjusted for the impact of SB 1160 and AB 1244 reforms, recent shifts in pharmaceutical cost patterns, and the medical fee schedule changes adopted by the DWC in 2021. The WCIRB's recent retrospective study showed that paid medical loss development adjusted for both reforms and claim settlement rates continued to be among the most accurate of the methods reviewed.¹⁰

⁷ See Item AC22-12-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

⁸ See Item AC19-08-05 of the August 4, 2020 WCIRB Actuarial Committee Agenda.

⁹ See Item AC19-08-05 of the August 1, 2019 WCIRB Actuarial Committee Agenda.

¹⁰ See Item AC22-12-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

SB 1160 and AB 1244, which took effect in 2017, included a number of provisions related to liens which have reduced the number of lien filings by approximately 70%. A 2018 WCIRB study showed that, prior to the reforms, liens represented a significant proportion of paid medical loss development, particularly at mid-maturities.¹¹ The WCIRB believes relying on the historical paid medical development from these periods without adjusting for the reductions in future lien filings will overstate the loss development projection. To project loss development for accident years 2012 and forward on a post-lien reform basis, the WCIRB adjusted the cumulative loss development factors to reflect the estimated impact of the SB 1160 and AB 1244 lien-related provisions. These adjustments, which are reflected in a manner consistent with the approach used in the last several pure premium rate filings, were based on a review of medical development with and without any lien payments using the WCIRB's medical transaction data and assuming 70% weight given to the projected medical development with no lien payments (to represent the 70% estimated reduction in lien filings) and 30% weight given to the projected medical development with lien payments.

Since 2013, pharmaceutical costs have decreased sharply. In 2019 the WCIRB studied the impact of the pharmaceutical cost declines on paid medical loss development. The study showed that pharmaceutical costs represent a much larger proportion of later period development than the development for earlier periods.¹² Similar to other significant one-time shifts in the distribution of medical services, the WCIRB has adjusted medical payments in the age-to-age factor computations made prior to 2018 to be at the estimated 2018 pharmaceutical cost level. This adjustment to paid medical development is consistent with the approach reflected in the last several pure premium rate filings.

Effective March 1, 2021, the DWC adopted significant changes to the Evaluation & Management (E&M) section of the Official Medical Fee Schedule (OMFS) related to office visits. Effective April 1, 2021, the DWC adopted a significant update to the Medical-Legal Fee Schedule (MLFS). These medical fee schedule changes impact medical services on a date-of-service basis rather than an accident date basis. As a result, they impact medical loss development on pre-2021 accident years emerging after the first quarter of 2021. As with other reforms that become effective on a date-of-service basis, these changes may distort paid medical loss development emerging after the first quarter of 2021, which is based on a mix of pre- and post-schedule change payments. The WCIRB is adjusting for this potential distortion by adjusting all medical payments made prior to the first quarter of 2021 to the post-schedule change cost level and computing the medical paid age-to-age factors based on the adjusted amounts. This adjustment, which is also discussed in Appendix A, uses the estimated impact of the medical fee schedule changes based on the WCIRB's most recent retrospective evaluation of these changes (discussed below and in Appendix B).¹³ In the WCIRB's review of the impact of the 2021 fee schedule changes, the WCIRB found that E&M and medical-legal services represent a small and generally declining share of all medical service payments at later maturities. As a result, the WCIRB is only applying this adjustment to medical paid development from accident years 2013 and later.¹⁴

As discussed above, changes in claim settlement rates can distort paid loss development patterns if no adjustment is made. The WCIRB is adjusting paid medical loss development through 84 months for changes in claim settlement rates using an approach similar to that used for paid indemnity loss development. Exhibits 2.6.3 through 2.6.8 show the adjustment for changes in claim settlement rates applied to the paid medical loss development factors through 84 months.

As discussed above, the post-SB 863 acceleration in claim settlement rates in older accident years also impacts later period loss development, particularly for medical losses. The WCIRB is adjusting paid medical loss development applied after 300 months for recent changes in claim settlement rates impacting longer-term loss development using an approach similar to that applied for indemnity. Exhibits 2.5.9 through 2.5.12 show the computation of this adjustment applied to paid medical loss development.

¹¹ See Item AC18-03-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda.

¹² See Item AC19-06-03 of the June 14, 2019 WCIRB Actuarial Committee Agenda.

¹³ See Item AC22-04-04 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

¹⁴ See Item AC21-12-10 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

The WCIRB's recommended age-to-age and cumulative medical loss development factors, which have been adjusted for the SB 1160 and AB 1244 lien reforms, the recent decreases in pharmaceutical costs, the medical fee schedule changes adopted by the DWC in 2021, as well as for changes in indemnity claim settlement rates, are shown in Exhibits 2.6.1 and 2.6.2. As with indemnity, age-to-age paid medical development through 108 months is projected using the latest year's factor and development from 108 months through 456 months is projected using an average of the latest three factors, with the adjustments as discussed above. Paid medical loss development beyond 456 months of maturity is estimated by applying an inverse power curve fit to the average of the latest four historical paid medical development factors with the adjustments for changes in pharmaceutical costs levels and the long-term impact of changes in claim settlement rates as described above with respect to indemnity loss development.

Estimated Ultimate Loss Ratios

The historical accident year loss ratios are developed to their projected ultimate values in Exhibits 3.1 (for indemnity) and 3.2 (for medical). Column 1 of Exhibit 3.1 shows the historical reported (undeveloped) paid indemnity losses as a ratio to calendar year earned premium as of December 31, 2022. Column 2 of Exhibit 3.1 shows the age-to-age paid indemnity development factor selected for each evaluation period from Exhibits 2.5.1 and 2.5.2. Column 3 of Exhibit 3.1 shows the cumulative paid indemnity development factor for each period. Column 4 of Exhibit 3.1 shows the projected ultimate indemnity loss ratio for each accident year based on the cumulative paid indemnity loss development projection factor shown in column 3 and the reported paid indemnity loss ratio shown in column 1.

Column 1 of Exhibit 3.2 shows the historical reported (undeveloped) paid medical losses as a ratio to calendar year earned premium as of December 31, 2022.¹⁵ Column 2 of Exhibit 3.2 shows the historical paid medical loss ratios as of December 31, 2022 estimated at a 2018 pharmaceutical cost level by adjusting the medical payments made prior to 2018 for the estimated decrease in pharmaceutical costs through 2018. These loss ratios for accident years 2013 and later are also adjusted to a 2021 OMFS and MLFS level. These loss ratios form the basis to which the age-to-age and cumulative paid medical loss development factors, which are also adjusted to a 2018 pharmaceutical cost level and 2021 OMFS and MLFS level, are applied. Column 3 of Exhibit 3.2 shows the age-to-age paid medical development factor selected for each evaluation period. Column 4 of Exhibit 3.2 shows the cumulative medical development factor for each period. Column 5 of Exhibit 3.2 shows the developed medical loss ratio for each accident year adjusted to a 2018 pharmaceutical cost level and 2021 OMFS and MLFS level based on the adjusted cumulative medical loss development factor shown in column 4 and the adjusted paid medical loss ratio shown in column 2. These loss ratios are used for the sole purpose of computing the indicated September 1, 2023 pure premium rate level and do not reflect the actual WCIRB estimates of projected ultimate loss ratios for those years. Column 6 of Exhibit 3.2 shows, for informational purposes, the projected ultimate medical loss ratios based on combining the unadjusted paid medical loss ratio from column 1 and the projected medical development derived from columns 2 and 5.

C. Cost Level Adjustments to Losses

Each year's historical losses, once developed to an ultimate basis, are adjusted to reflect various measurable economic or claims-related changes that have occurred since the time that year's claims were incurred or are expected to occur during the period the pure premium rates will be in effect. In this way, each year's adjusted, or on-level, ratios of losses to premium are on a more comparable basis and can be used to project future ratios of losses to premium. Each of these adjustments are described in detail in Appendix B.

Exhibits 4.1 through 4.4 show the adjustments made to losses to reflect the changes in the cost of selected loss components that can be specifically measured. Exhibit 4.1 displays the average impact on indemnity benefits of legislative and regulatory changes as well as wage inflation. Specifically, column 1 of Exhibit 4.1 shows the impact of legislative, regulatory or judicial actions on indemnity claim severities.

¹⁵ Medical loss ratios shown for accident years 2011 and subsequent do not include MCCP costs while those for accident years 2010 and prior include MCCP costs.

These adjustments include the anticipated increase in minimum and maximum temporary disability and permanent total disability benefits made by the DWC each year based on the changes in state average weekly wage levels on which these benefits are statutorily based. Column 2 of Exhibit 4.1 shows the estimated impact of these annual changes on indemnity claim frequencies.

Even without statutory benefit changes, wage inflation will impact the cost of indemnity benefits. Column 3 of Exhibit 4.1 shows the impact of wage inflation on indemnity benefits. These estimated wage inflation effects are generally based on (a) the most current historical and average of the UCLA Anderson School of Business and California Department of Finance forecast changes in California annual wages as shown in Exhibit 5.1, (b) the distribution of the weekly wages of injured workers and (c) the schedule of statutory benefits in effect for each year. The forecast changes in wages impacting indemnity benefits for accident years 2020 through 2022 also include the adjustments to changes in average wage levels for shifts in the industrial mix and shifts in the wage distribution within industries attributable to the pandemic-related economic slowdown and recovery, as discussed in Appendix B and with regards to the wage and premium adjustments below. Column 4 of Exhibit 4.1 shows the total annual cost impact of statutory benefit changes and wage inflation on indemnity losses. Column 5 of Exhibit 4.1 shows the factor to adjust each historical accident year's estimated ultimate indemnity losses to the level expected for policies incepting between September 1, 2023 and August 31, 2024.

Exhibits 4.2 through 4.4 show the adjustment of medical losses to a current, or on-level basis. Exhibit 4.2 shows the impact of non-legislative factors on medical costs. For many years, many medical service components, such as physician services, inpatient and outpatient facility fees, pharmaceuticals, and medical-legal costs have been subject to fee schedules. Column 3 of Exhibit 4.2 shows the average impact of regulatory changes in fee schedules on total medical costs by accident year based on the WCIRB's cost analysis of the fee schedule changes.

In the September 1, 2022 Pure Premium Rate Filing, the WCIRB retrospectively estimated that the March 1, 2021 changes to the E&M section of the OMFS increased E&M office visit service costs by 10% while the April 1, 2021 changes to the MLFS increased medical-legal service costs by 39%.¹⁶ Earlier this year, the WCIRB performed an updated retrospective evaluation of the MLFS changes, which showed that medical-legal costs have increased by 50% since the implementation of the new fee schedule. The sharp increase in medical-legal costs has been primarily driven by a significant increase in the costs for record review and, particularly within the last year, an increase in the utilization of medical-legal services per claim.¹⁷ The WCIRB's retrospective cost estimates for these fee schedule changes based on the latest information available are reflected in the loss development adjustments for accident years 2013 and forward reflected in Exhibits 2.6 and 3.2 and the medical on-level adjustments for accident years 2012 and prior shown in Exhibit 4.2.

Some workers' compensation medical costs are not subject to fee schedules. As a result, the portion of each historical accident year's medical losses that is not subject to fee schedules is adjusted to reflect the anticipated general medical cost level during the period in which the proposed pure premium rates will be in effect. The cost adjustments used in this analysis are shown in column 4 of Exhibit 4.2. The historical values are based on the "Medical Care" component of the Consumer Price Index (CPI) as published by the U.S. Bureau of Labor Statistics and the California Department of Finance. Projected values are based on the average of California Department of Finance forecasts of medical inflation for the Los Angeles and San Francisco regions. Column 6 of Exhibit 4.2 shows the combined impact of fee schedule changes and general medical inflation on non-legislative medical cost components by accident year.

Legislative and regulatory changes and judicial actions also impact the cost of medical benefits. Exhibit 4.3 shows the impact of legislative, regulatory, and judicial activity on medical costs. The factors in column 1 of Exhibit 4.3 reflect the impact on medical costs per claim of statutory reforms, legislative changes, regulatory

¹⁶ See Item AC22-04-04 of the April 14, 2022 WCIRB Actuarial Committee Agenda.

¹⁷ See Item AC22-04-04 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

changes and judicial action not otherwise reflected.¹⁸ The factors in column 2 of Exhibit 4.3 reflect the impact on medical costs of the changes in the frequency of indemnity claims as a result of statutory benefit changes.

The combined impact of both measurable legislative and non-legislative changes on medical costs is shown in Exhibit 4.4. Column 4 of Exhibit 4.4 shows the medical on-level factor used to adjust each historical accident year's estimated ultimate medical losses to the level expected for policies incepting between September 1, 2023 and August 31, 2024.

D. Wage and Premium Adjustments

As with accident year losses, each historical year's earned premium is adjusted to a common, or on-level, basis. The adjustments made to historical premium amounts are also discussed in detail in Appendix B.

Exhibit 5.1 displays the adjustment made to historical premiums to reflect changes in wage levels. Pure premium rates are expressed as a percentage of payroll. Consequently, the reported premium for each year reflects the wages paid during that year. To determine the level of pure premium needed to fund the cost of losses and loss adjustment expenses incurred on policies incepting between September 1, 2023 and August 31, 2024, the premium reported for each year is adjusted to reflect the wages anticipated to be paid during the period these policies will be in effect. The estimated changes in annual California wages shown in column 1 of Exhibit 5.1 are based on historical Bureau of Labor Statistics data through 2022 and the average of wage level forecasts produced by the UCLA Anderson School of Business (as of March 2023) and California Department of Finance (as of November 2022) for 2023 through 2025.

The COVID-19 pandemic resulted in a sudden and significant downturn in the California economy. During a recession, the mix of industries can shift significantly and impact the aggregate average wage level. The loss of lower wage, less experienced employees within industries can also drive measures of average wages artificially upward. In particular for the pandemic-related economic downturn, the reductions in employment levels were greatest in the hospitality and entertainment industries which tend to have lower than average wages. In addition, employment losses were much more significant for lower wage workers within industries. Some of these shifts continued at a more modest rate in 2021, resulting in higher than typical average wage changes in both 2020 and 2021. In 2022, there was some rebound effect as some lower wage workers from these industries were returning to the workforce, resulting in a lower than typical average wage change for 2022. As a result of these shifts, the changes in average wages for 2020 through 2022 shown in column 1 of Exhibit 5.1 do not appropriately reflect the wage increases for the typical California worker performing the same job year to year. Since the September 1, 2021 Pure Premium Rate Filing, the WCIRB has reflected adjustments to the projected average wages to better reflect the average wage increases for the typical worker. The average wage changes adjusted for the impact of these shifts based on the WCIRB's most recent study of average wage information are shown in column 2 of Exhibit 5.1.¹⁹ Given that the indicated impact of these shifts on 2023 and later are estimated to be modest and that many economists are forecasting that some of these shifts may be permanent, the WCIRB only adjusted the average wage changes for 2020 through 2022. These adjustments are discussed in detail in Appendix B.

The amount of premium generated during a particular year is based on the rates in effect during that year. The earned premium amounts shown in Exhibit 1 and reflected in the loss ratios shown in Exhibits 3.1 and 3.2 reflect the actual rates charged by insurers including the impact of most rating plan adjustments such as schedule rating.²⁰ To determine the indicated change in the approved advisory pure premium rate level as of September 1, 2022, the earned premium generated for each year is adjusted to reflect the premium that would have been generated had the approved advisory pure premium rates as of

¹⁸ The factors shown in column 1 of Exhibit 4.3 do not include the impact of SB 1160 lien reforms and reductions in medical utilization resulting from SB 863 related to the recent decreases in pharmaceutical costs, which are reflected in the adjustments to paid medical loss development shown in Exhibits 2.6.1 and 2.6.2.

¹⁹ See Item AC20-08-04 of the March 21, 2023 and April 13, 2023 WCIRB Actuarial Committee Agendas.

²⁰ These premiums do not reflect the impact of deductible credits, retrospective rating plan adjustments, terrorism charges, or insurer COVID-19 premium charges.

September 1, 2022 been charged during that year. This adjustment is shown in columns 2a, 2b and 2c of Exhibit 5.2.

Column 2a of Exhibit 5.2 shows the ratio of the industry average charged rate to the average advisory pure premium rate for each calendar year subsequent to the implementation of competitive rating in 1995. Column 2b of Exhibit 5.2 shows the factors needed to adjust the earned premium for each calendar year to the current (September 1, 2022) approved advisory pure premium rate level. Column 2c of Exhibit 5.2 shows the combined effect of the rate adjustments in columns 2a and 2b, which are the factors needed to adjust each year's earned premium to the premium that would have been earned had the approved advisory pure premium rates as of September 1, 2022 been charged during that year.

In addition to the adjustment to a common wage and pure premium rate level, the premium reported for each year is adjusted for (a) the surcharge premium generated under the Minimum Rate Law through 1995, (b) the average experience modification for each year, (c) the current experience rating off-balance correction factor and (d) the impact of the Great Recession on audit premium for the 2007 through 2010 years and the impact of the pandemic-related economic downturn on audit premium for the 2020 through 2022 years²¹ for which there were very atypical levels of audit premiums collected. These adjustment factors are shown in Exhibit 5.2, columns 3, 4, 5 and 6, respectively.

Column 7 of Exhibit 5.2 shows the combined on-level factor for each year that reflects the impact of all the premium adjustment factors applied by the WCIRB.

E. Trending of On-Level Ratios

The loss ratios shown for historical accident years, once adjusted to an ultimate and on-level basis, are trended forward to project the indicated loss ratio for policies incepting between September 1, 2023 and August 31, 2024. The WCIRB is using a trending methodology based on applying separate projections of growth in claim frequency and claim severity to the latest two accident year on-level loss ratios, which is generally consistent with the methodology used in the last several pure premium rate filings. The WCIRB believes separately analyzing frequency and severity trends is particularly appropriate in the current environment given the uncertainty in projecting costs during the COVID-19 pandemic for which the frequency and severity of claims are likely impacted by different forces. In addition, prior WCIRB retrospective reviews of trending methodologies have found that methods based on separate frequency and severity projections have generally been more accurate than the alternative approaches reviewed, particularly during periods of transition.²²

Exhibits 6.1 through 6.4 show the information upon which the separate frequency and severity projections are based. Exhibits 7.1 through 7.4 summarize the computation of the projected on-level loss to pure premium ratio for policies incepting between September 1, 2023 and August 31, 2024. Separate projections are made for the indemnity and medical components. These trending methodologies are also discussed in detail in Appendix B.

Trended On-Level Indemnity Loss Ratio

Column 1 of Exhibit 7.1 shows the indemnity loss to pure premium ratios developed to an estimated ultimate level. These developed loss ratios are then adjusted for the impact of changes in statutory benefit levels and wage inflation on indemnity benefits from Exhibit 4.1 and the premium level adjustments from Exhibit 5.2 to produce the on-level indemnity ratios shown for 2022 and prior accident years in column 4 of Exhibit 7.1. These on-level loss ratios reflect the ratio of estimated ultimate indemnity losses to premium for each year as though the statutory benefit level and projected wages underlying policies incepting between September 1, 2023 and August 31, 2024 had been in effect for each historical year and the premium for each historical year had been generated at the approved advisory pure premium rate level as of September 1, 2022 and at the average wage level projected for policies

²¹ See Item AC21-03-05 of the March 21, 2023 WCIRB Actuarial Committee Agenda.

²² See Item AC12-12-02 of the August 2, 2017 and March 19, 2018 WCIRB Actuarial Committee Agendas.

incepting between September 1, 2023 and August 31, 2024. These indemnity on-level loss ratios are also shown graphically in Exhibit 7.2.

The WCIRB's projected change in claim frequency for accident year 2022 is based on the preliminary claim frequency change as of 12 months, which is consistent with the approach used in the last several pure premium rate filings. This measure is estimated as a ratio of changes in reported indemnity claim counts (excluding COVID-19 claims) from accident year 2021 to accident year 2022 as of December 31, 2022 adjusted to an "intra-class" level for estimated shifts in industrial mix impacting claim frequency relative to changes in statewide employment adjusted for estimated shifts in industrial mix impacting exposure levels. The WCIRB's 2021 comprehensive review the WCIRB's claim frequency model and projections suggested that this approach of using actual frequency information was more accurate compared to the change forecast based on the WCIRB's frequency model and comparable in accuracy to other approaches reviewed.²³ This results in a projected "intra-class" claim frequency change of -0.2% for accident year 2022, which is shown in Appendix B, Exhibit 3.

Consistent with the last several pure premium rate filings, projected frequency changes for accident years 2023 through 2025 are based on the WCIRB's econometric indemnity claim frequency model. The model is based on a long-term forty-year history of frequency changes in relation to changes in indemnity benefit levels, economic factors and other claims-related factors and excludes the impact of shifts in classification mix (i.e., "intra-class" frequency). The model also includes several refinements to the historical variables based on the WCIRB's 2021 study of claim frequency projections.²⁴ Exhibit 6.1 shows the WCIRB's indemnity claim frequency model forecasts. The forecasts for 2023 through 2025 reflect economic data included in the March 2023 UCLA forecast. This results in modest annual decreases in intra-class indemnity claim frequency forecast for accident years 2023 through 2025, generally corresponding with the longer-term annual frequency decline as measured by the model's constant term partially offset by the gradual economic expansion that is being forecast.²⁵

To project the average annual on-level indemnity severity trend, the WCIRB reviewed historical changes in on-level indemnity severities over both a long-term and short-term period. Exhibit 6.2 shows estimated ultimate and on-level indemnity severities by accident year. Long-term on-level indemnity severity growth since 1990 is 0.8% per year, which includes prior periods of sharp average severity growth as well as more recent periods of declining indemnity severities. On-level indemnity claim severities have fluctuated somewhat during the pandemic period but overall increased at an average rate of 1.3% per year since 2018. In this filing, the WCIRB has selected a 1.0% average annual on-level indemnity severity trend, which gives consideration to both longer-term and shorter-term rates of growth in average on-level indemnity severities. This average annual on-level indemnity severity trend is consistent with that reflected in the WCIRB's September 1, 2022 Pure Premium Rate Filing.

As in prior pure premium rate filings, the WCIRB has based the projected loss ratio on applying separate frequency and severity projections to the average of the two most recent accident years. Column 4 of Exhibit 7.1 shows the projected indemnity loss ratio for policies incepting between September 1, 2023 and August 31, 2024 based on the accident year 2021 and 2022 on-level indemnity ratios adjusted by the WCIRB's selected frequency projections and a 1.0% average annual on-level indemnity severity trend projection. The indemnity loss ratio projected on this basis is 0.368.

²³ See Item AC21-12-07 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

²⁴ See Item AC21-12-07 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

²⁵ Since the January 1, 2014 Pure Premium Rate Filing, there has been a partial offset of the indicated model constant to reflect a diminishing of some of the long-term factors driving the level of the model constant. The model's full-fitted constant term without these offsets is -0.031.

Trended On-Level Medical Loss Ratio

Exhibit 7.3 shows accident year on-level medical loss to pure premium ratios, which have been computed in a manner similar to those for indemnity. These on-level ratios are also displayed graphically in Exhibit 7.4.²⁶

Similar to indemnity, the WCIRB recommends projecting the on-level medical loss ratio for policies incepting between September 1, 2023 and August 31, 2024 based on the latest two accident year on-level medical loss ratios adjusted separately for projected frequency and severity trends. The projected on-level medical loss ratios shown in column 4 of Exhibit 7.3 reflect the same frequency change projections used in the indemnity loss projection.

Exhibit 6.3 shows estimated ultimate medical severities by accident year. As discussed above, medical losses shown for accident years 2011 and subsequent do not include M CCP costs while those for accident years 2010 and prior do include M CCP costs. In order to compare medical severity trends on a consistent basis, Exhibit 6.4 shows estimated ultimate medical severities with M CCP costs included in all years. Additionally, Exhibit 6.4 also shows for accident years 2005 and later estimated ultimate medical severities exclusive of M CCP costs for all years with estimated M CCP costs excluded from accident years 2010 and prior based on calendar year M CCP paid costs from WCIRB aggregate financial data calls.

As shown in Exhibit 6.4, since 1990, long-term on-level medical severity growth in California has averaged 4.6% per year. This long-term average trend includes periods of reforms in which medical severities have been flat to declining and “post-reform” periods of sharp medical severity growth. In the early to mid-2010s, with the enactment of SB 863 and subsequent reforms, on-level medical severities were generally flat to declining. Since 2018, on-level medical severities have been, on average, flat. This includes medical severity growth in the pre-pandemic period offset by modest declines in 2021 and 2022. The decreases in medical severities in the most recent two years are likely driven by declines in the utilization of medical services rather than the average cost per medical service, which has been modestly increasing over the last several years, generally driven by inflationary updates to medical fee schedules adopted by the DWC based on Medicare rates.²⁷ Changes in average medical severities in recent years may also be deflated by a gradual shift towards a smaller share of permanent disability claims.²⁸

Similar to indemnity, the WCIRB is basing projected average on-level medical severity growth on a review of long-term and short-term historical medical severity trends as well as future considerations of average medical costs. For medical in particular, losses occurring on policies incepting between September 1, 2023 and August 31, 2024 will be paid over a very extended period as, for example, over one-half of policy year 2024 losses are expected to be paid in 2027 or later and over one-quarter in 2032 or later. In addition, medical cost levels are impacted by when services are provided rather than by when the injury occurred. As a result, it is particularly important to consider long-term medical severity trends in addition to short-term trends in projecting future growth in medical severities. Also, it is unclear if the recent patterns of reduced utilization of medical services and lower levels of permanent disability claims will continue indefinitely into the future. Finally, the high levels of general inflation experienced in the current economy can impact increases in the Medicare fee values upon which many of the California medical fee schedules are statutorily based. In particular, the WCIRB estimates that updates to medical fee schedules adopted by the DWC in late 2022 and early 2023 will increase the average medical paid per claim by approximately double the typical annual rate. Given these considerations, the WCIRB selected an average annual on-level medical severity trend of 1.5%. This average annual on-level medical severity trend is also consistent with that reflected in the WCIRB’s September 1, 2022 Pure Premium Rate Filing.

Column 4 of Exhibit 7.3 shows the projected medical loss ratio for policies incepting between September 1, 2023 to August 31, 2024 based on the latest two accident year on-level medical loss ratios

²⁶ As discussed above, projections of on-level medical loss ratios for accident years 2011 and subsequent do not include M CCP costs while those for accident years 2010 and prior include M CCP costs. As a result, comparisons between the ratios shown in Exhibits 7.3 and 7.4 for 2010 and prior with those for 2011 and subsequent cannot be made on a consistent basis.

²⁷ See Item AC16-06-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

²⁸ See Item AC23-03-01 of the March 21, 2023 WCIRB Actuarial Committee Agenda.

adjusted by the WCIRB's selected frequency projections and an average annual medical severity trend projection of 1.5% per year. The medical loss ratio projected on this basis is 0.387.

Computation of Projected Loss Adjustment Expenses

The WCIRB's projection of the cost of LAE on policies incepting between September 1, 2023 and August 31, 2024 is discussed in Appendix C. As indicated in Appendix C, the WCIRB estimates that the ratio of total LAE to losses is 31.7%.

Impact of COVID-19 Claim Experience

As discussed above, the COVID-19 pandemic has had a significant impact on the workers' compensation insurance system. However, the WCIRB estimates that the cost of COVID-19 claims in accident year 2022, the majority of which were incurred in January 2022 during the Omicron surge, is well below 1% of overall claim costs. Given the modest level of COVID-19 claim filings since January 2022 and that the average cost of a COVID-19 workers' compensation claim has continued to decline, the WCIRB is not recommending a separate provision for COVID-19 claim costs in this filing.²⁹

Computation of Experience Rating Off-Balance Factor

The WCIRB's projection of the indicated experience rating off-balance factor for policies incepting between September 1, 2023 to August 31, 2024 is discussed in Part A, Section C, Appendix B of the WCIRB's September 1, 2023 Regulatory Filing. As indicated in that filing, the WCIRB projects an experience rating off-balance factor for policies incepting between September 1, 2023 and August 31, 2024 of 1.039, which is 0.9% higher than the current experience rating off-balance factor effective September 1, 2022.

Computation of the Indicated Change in the Pure Premium Rate Level

Line 1 of Exhibit 8 displays the projected ratios of on-level indemnity and medical losses to premium at the approved advisory pure premium rate level as of September 1, 2022 as computed in Exhibits 7.1 and 7.3. The projected ratio of total losses to premium is 0.755. Line 2 of Exhibit 8 shows the estimated ratio of LAE to losses of 31.7% (see Appendix C). Line 3 of Exhibit 8 shows the projected loss and LAE ratio of 0.994. Line 4 of Exhibit 8 shows the 0.9% indicated change in the experience rating off-balance correction factor for policies incepting between September 1, 2023 and August 31, 2024 (see Part A, Section C, Appendix B of the WCIRB's September 1, 2023 Regulatory Filing). Line 5 of Exhibit 8 shows the indicated 0.3% change in the advisory pure premium rate level.

²⁹ See Item AC23-04-03 of the April 13, 2023 WCIRB Actuarial Committee Agenda for more information.

**California Workers' Compensation
Accident Year Experience as of December 31, 2022**

<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	4,373,802,923	1,508,827,724	5,601,158	1,344,446,941	35,846,095	17,550,134	2,912,272,052	0.666
1988	5,172,689,663	1,706,640,415	5,609,859	1,553,355,707	23,784,604	68,224,953	3,357,615,538	0.649
1989	5,675,354,099	1,943,062,835	5,137,690	1,813,252,230	32,297,036	44,842,839	3,838,592,630	0.676
1990	5,704,833,514	2,264,318,028	5,053,958	2,058,068,002	26,197,938	62,124,243	4,415,762,169	0.774
1991	5,866,830,467	2,487,031,503	12,187,582	2,216,991,466	35,616,736	56,528,925	4,808,356,212	0.820
1992	5,685,646,721	1,984,040,967	11,170,804	1,778,181,447	34,647,914	52,395,838	3,860,436,970	0.679
1993	5,935,051,898	1,698,655,360	8,887,480	1,527,171,582	43,828,326	55,802,501	3,334,345,249	0.562
1994	5,031,286,773	1,635,013,894	15,004,929	1,485,877,139	58,840,751	39,377,572	3,234,114,285	0.643
1995	3,789,372,110	1,774,395,589	19,878,818	1,648,561,638	70,611,144	38,493,683	3,551,940,872	0.937
1996	3,746,680,214	1,968,084,824	23,382,303	1,745,119,388	68,013,643	57,200,068	3,861,800,226	1.031
1997	3,926,898,608	2,334,256,494	26,340,958	2,047,344,117	87,213,612	97,255,766	4,592,410,947	1.169
1998	4,332,127,034	2,790,194,894	34,809,837	2,699,110,298	150,543,509	171,844,024	5,846,502,562	1.350
1999	4,550,437,880	3,067,635,112	35,505,743	3,093,844,769	111,049,117	238,716,083	6,546,750,824	1.439
2000	5,920,961,162	3,451,317,921	47,655,943	3,626,756,530	147,852,613	367,561,277	7,641,144,284	1.291
2001	10,108,322,683	4,882,044,908	63,231,538	5,459,760,534	237,567,574	582,626,253	11,225,230,807	1.110
2002	13,309,435,814	4,786,293,215	64,783,785	5,547,596,319	214,238,793	816,057,574	11,428,969,686	0.859
2003	19,280,128,929	4,575,189,097	109,259,600	5,129,636,325	231,128,766	1,192,155,883	11,237,369,671	0.583
2004	23,014,791,568	3,245,368,019	92,171,849	4,129,332,816	188,031,048	1,303,088,743	8,957,992,475	0.389
2005	21,384,360,071	2,576,952,867	79,397,151	3,741,994,011	164,860,218	1,055,508,265	7,618,712,512	0.356
2006	17,221,780,296	2,669,062,931	80,946,922	3,859,761,469	204,190,981	696,547,427	7,510,509,730	0.436
2007	13,260,139,026	2,819,442,190	92,112,879	4,132,405,631	214,598,515	656,352,710	7,914,911,925	0.597
2008	10,744,447,308	2,871,474,273	106,905,192	4,128,247,550	228,212,064	404,741,688	7,739,580,767	0.720
2009	8,873,155,994	2,757,980,459	109,940,257	3,948,800,631	246,675,457	337,067,258	7,400,464,062	0.834
2010	9,374,814,819	2,781,102,966	88,043,494	4,053,036,486	188,247,503	624,956,413	7,735,386,862	0.825
2011	10,120,427,050	2,760,623,452	99,702,996	3,688,009,150	218,166,053	531,382,058	7,297,883,709	0.721
2012	11,699,330,284	2,821,882,299	128,893,629	3,611,169,023	230,723,346	652,872,907	7,445,541,204	0.636
2013	14,161,005,539	2,868,688,200	120,181,089	3,458,200,854	240,565,668	1,195,548,019	7,883,183,830	0.557
2014	15,986,106,452	3,024,510,443	150,638,624	3,426,357,952	273,696,456	1,526,887,464	8,402,090,939	0.526
2015	17,060,021,462	3,098,296,214	185,967,787	3,364,330,466	319,984,575	1,921,249,834	8,889,828,876	0.521
2016	17,949,045,779	3,017,087,433	235,541,818	3,264,598,863	386,464,052	1,932,533,737	8,836,225,903	0.492
2017	17,671,411,530	2,929,478,494	329,064,756	3,171,696,478	526,026,240	2,007,204,836	8,963,470,804	0.507
2018	17,426,671,333	2,883,808,859	460,012,598	3,179,082,604	660,110,167	3,190,424,902	10,373,439,130	0.595
2019	16,116,850,562	2,792,637,073	672,930,719	2,983,949,800	872,839,175	2,369,988,294	9,692,345,061	0.601
2020	14,095,940,927	2,077,886,776	786,180,914	2,235,810,561	1,050,143,000	2,560,780,885	8,710,802,136	0.618
2021	13,597,316,456	1,517,306,179	1,019,580,463	1,704,507,927	1,406,843,300	3,528,280,063	9,176,517,932	0.675
2022	15,299,862,247	578,534,364	870,414,128	709,773,056	1,525,758,428	5,776,887,460	9,461,367,436	0.618

* 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 and COVID-19 premium charges.

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
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2021																
Selected (a)	1.913	1.241	1.101	1.045	1.029	1.017	1.009	1.006	1.009	1.007	1.005	1.007	1.003	1.003	1.003	1.002
Cumulative	3.059	1.599	1.289	1.170	1.120	1.088	1.070	1.061	1.054	1.045	1.038	1.033	1.026	1.023	1.020	1.017

(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	408/396	420/408	432/420	444/432	456/444	ULT/456inc (b)	
1983																							
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Selected (a)	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.001	1.001	1.002
Cumulative	1.015	1.013	1.011	1.011	1.010	1.009	1.009	1.008	1.007	1.007	1.006	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.002

(b) The ULT/456inc 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)															
	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
1997																
1998																
1999																
2000									1.017	1.019	1.020	1.012	1.015	1.012	1.003	1.007
2001								1.034	1.024	1.018	1.018	1.013	1.012	1.013	1.005	0.999
2002								1.029	1.022	1.022	1.017	1.015	1.013	1.006	0.999	0.995
2003								1.037	1.028	1.022	1.014	1.010	1.009	0.997	1.000	0.999
2004								1.042	1.042	1.032	1.011	1.003	0.998	0.999	1.001	1.006
2005					1.060			1.043	1.026	1.012	1.006	1.001	0.996	0.998	1.002	1.000
2006				1.074	1.066			1.045	1.020	1.006	1.006	0.999	1.000	1.000	1.000	0.998
2007			1.103	1.081	1.070			1.048	1.022	1.000	1.001	0.999	1.000	1.003	1.000	1.003
2008		1.204	1.124	1.081	1.061			1.050	1.018	1.008	1.001	0.996	0.999	1.000	1.000	1.000
2009		1.212	1.129	1.092	1.061			1.041	1.010	1.002	1.005	0.999	0.999	1.001	1.000	1.001
2010		1.227	1.140	1.087	1.061			1.030	1.006	1.008	1.001	1.002	1.003	1.001	1.000	1.001
2011		1.245	1.134	1.077	1.045			1.025	1.008	1.005	0.999	1.002	1.003	1.001	1.000	1.003
2012		1.222	1.125	1.069	1.034			1.016	1.010	1.004	1.003	1.002	1.000	1.000	1.000	1.000
2013		1.188	1.092	1.056	1.031			1.015	1.006	1.005	0.999	1.000	0.996	0.999	1.000	1.000
2014		1.150	1.086	1.039	1.022			1.014	1.006	1.001	1.002	1.003	0.996	0.999	1.000	1.000
2015		1.159	1.079	1.035	1.027			1.007	1.006	1.001	1.002	1.003	0.999	0.999	1.000	1.000
2016		1.146	1.064	1.030	1.018			1.008	1.010	1.005	1.002	1.003	0.999	0.999	1.000	1.000
2017		1.124	1.045	1.031	1.017			1.012	1.010	1.004	1.003	1.002	0.999	0.999	1.000	1.000
2018		1.117	1.051	1.027	1.025			1.010	1.002	1.004	1.003	1.002	0.999	0.999	1.000	1.000
2019		1.110	1.054	1.027	1.025			1.015	1.005	1.004	1.003	1.002	0.999	0.999	1.000	1.000
2020		1.124	1.065	1.032	1.032			1.006	1.005	1.004	1.003	1.002	0.999	0.999	1.000	1.000
2021		1.154	1.154	1.032	1.032			1.001	1.006	1.004	1.003	1.002	0.999	0.999	1.000	1.000
Selected (a)	1.463	1.154	1.065	1.032	1.025	1.013	1.005	1.007	1.006	1.004	1.002	1.002	0.999	1.000	1.001	1.000
Cumulative	1.962	1.341	1.162	1.091	1.057	1.032	1.018	1.013	1.006	1.001	0.996	0.995	0.993	0.994	0.994	0.993

(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	444/432	456/444	ULT/456Inc.(c)
1983									1.003	1.002	1.002	1.006	1.003	1.004	1.003	0.997	0.998	1.001	1.001	1.001	1.001	
1984									1.003	1.003	1.003	1.001	1.003	1.001	0.997	1.000	1.001	1.000	1.000	0.998	1.000	
1985								1.003	1.005	1.005	1.002	1.001	1.003	0.998	0.999	1.000	1.001	1.000	0.998	1.000	1.001	
1986								1.005	1.006	1.004	1.005	1.000	1.002	0.998	0.999	1.000	1.001	1.000	1.000	1.000	1.001	
1987						1.011		1.005	1.003	1.004	1.005	1.001	0.997	1.001	1.000	1.005	1.002	1.001	1.002	1.001	1.001	
1988					1.005	1.005		1.005	1.003	1.003	1.002	0.998	0.999	1.000	1.001	1.001	1.000	0.999	1.000	1.000	1.000	
1989					1.005	1.005		1.006	1.000	1.003	0.999	0.999	0.999	1.002	0.999	1.000	0.999	1.000	1.000	1.000	1.000	
1990					1.003	1.003		1.003	0.997	1.002	1.000	0.998	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	
1991					1.002	1.003		1.003	1.001	1.000	0.999	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1992					1.003	1.003		1.003	1.001	1.000	0.999	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1993					1.004	1.004		0.999	0.999	0.998	0.997	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1994					1.006	1.006		1.006	0.995	1.002	1.002	0.999	0.997	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1995					1.006	1.006		1.006	0.999	1.001	0.999	1.001	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1996					1.006	1.006		1.006	0.999	1.001	0.999	1.001	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1997					1.007	1.007		1.007	0.997	1.000	0.997	0.999	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1998					1.007	1.007		1.007	0.998	1.001	0.998	1.000	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1999					0.995	0.995		0.999	0.999	1.002	0.999	1.000	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2000					0.996	0.999		0.999	0.999	1.000	0.998	0.999	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2001					1.001	1.003		0.998	0.998	0.998	0.998	0.998	0.997	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002					1.001	1.001		0.999	0.999	1.000	0.999	1.000	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003					1.001	1.001		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2004					0.999	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2005					0.999	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected (a)	1.000	0.999	0.999	0.999	0.999	0.998	0.998	0.999	1.000	1.000	0.999	0.999	1.000	1.001	1.000	1.002	0.999	1.000	1.000	1.000	1.001	
Cumulative	0.993	0.994	0.994	0.996	0.997	0.997	0.999	1.001	1.002	1.003	1.003	1.004	1.005	1.006	1.005	1.005	1.003	1.004	1.004	1.004	1.004	1.003

(c) The ULT/456Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Paid Indemnity Loss Development Factors

Accident Year	Age-to-Age (in months)															
	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
1997																
1998											1.012	1.008	1.007	1.006	1.006	1.005
1999										1.015	1.011	1.009	1.009	1.007	1.006	1.006
2000									1.016	1.013	1.010	1.009	1.008	1.007	1.006	1.004
2001								1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.005	1.004
2002								1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006	1.005
2003						1.043		1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.007	1.007
2004					1.073	1.049		1.035	1.030	1.020	1.015	1.011	1.009	1.008	1.009	1.006
2005					1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013	1.010	1.010	1.010	1.005
2006			1.229		1.090	1.068	1.050	1.035	1.026	1.018	1.016	1.012	1.011	1.009	1.007	1.006
2007		1.547	1.246		1.092	1.066	1.046	1.033	1.027	1.020	1.016	1.013	1.013	1.007	1.006	
2008	2.927	1.577	1.271		1.092	1.060	1.041	1.027	1.023	1.018	1.015	1.010	1.009	1.007	1.007	
2009	3.069	1.616	1.280		1.092	1.061	1.043	1.031	1.023	1.019	1.011	1.013	1.010	1.009	1.009	
2010	3.157	1.628	1.281		1.091	1.060	1.038	1.027	1.021	1.013	1.012	1.012	1.010	1.009	1.009	
2011	3.208	1.613	1.266		1.087	1.056	1.041	1.026	1.016	1.016	1.010	1.012	1.011	1.009	1.007	1.006
2012	3.137	1.597	1.262		1.087	1.051	1.034	1.023	1.017	1.014	1.016	1.013	1.013	1.007	1.007	
2013	3.169	1.606	1.260		1.072	1.044	1.028	1.020	1.014		1.015	1.010	1.009	1.007	1.007	
2014	3.229	1.635	1.257		1.071	1.039	1.027	1.018			1.011	1.013	1.010	1.009	1.007	
2015	3.278	1.618	1.244		1.058	1.042	1.026				1.012	1.012	1.010	1.009	1.007	
2016	3.235	1.586	1.230		1.060	1.043					1.010	1.012	1.011	1.009	1.007	
2017	3.185	1.569	1.210		1.065						1.011	1.013	1.013	1.013	1.009	
2018	3.110	1.526	1.222								1.011	1.013	1.010	1.009	1.007	
2019	3.063	1.549	1.240								1.012	1.012	1.010	1.009	1.007	
2020	2.959	1.544									1.012	1.012	1.010	1.009	1.007	
2021	2.952										1.010	1.012	1.011	1.009	1.007	
Selected (a)	2.952	1.544	1.240	1.113	1.065	1.043	1.026	1.018	1.016	1.014	1.011	1.012	1.011	1.008	1.008	1.006
Cumulative	8.293	2.809	1.819	1.467	1.318	1.238	1.187	1.157	1.136	1.119	1.103	1.091	1.078	1.067	1.059	1.051

(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	408/396	420/408	432/420	444/432	456/444	ULT/456Pd (b)
1983										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
1984									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
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	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	1.001	1.001	1.001
1987								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	1.001
1988								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	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	1.001
1990								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	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	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	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	1.001
1994								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	1.001
1995								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	1.001
1996								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	1.001
1997								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	1.001
1998								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	1.001
1999								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	1.001
2000								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	1.001
2001								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	1.001
2002								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	1.001
2003								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	1.001
2004								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	1.001
2005								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	1.001
Selected (a)	1.005	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.009
Cumulative	1.045	1.039	1.035	1.032	1.029	1.027	1.025	1.023	1.020	1.018	1.017	1.015	1.014	1.013	1.012	1.011	1.011	1.010	1.010	1.010	1.009	1.009

(b) The ULT/456Pd 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	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
1997																
1998																
1999																
2000																
2001									1.031	1.032	1.030	1.022	1.019	1.016	1.014	1.015
2002								1.038	1.027	1.027	1.023	1.020	1.017	1.013	1.010	1.010
2003								1.034	1.024	1.024	1.023	1.018	1.016	1.012	1.011	1.010
2004								1.046	1.030	1.030	1.026	1.019	1.016	1.013	1.012	1.010
2005								1.048	1.036	1.034	1.024	1.018	1.015	1.012	1.013	1.009
2006								1.054	1.031	1.031	1.021	1.014	1.014	1.013	1.012	1.008
2007								1.056	1.034	1.025	1.020	1.015	1.014	1.011	1.010	1.008
2008								1.068	1.041	1.022	1.020	1.015	1.012	1.009	1.007	
2009								1.075	1.041	1.017	1.017	1.012	1.009	1.008		
2010								1.072	1.035	1.018	1.013	1.014	1.009	1.008		
2011								1.067	1.024	1.019	1.013	1.014	1.009	1.008		
2012								1.066	1.024	1.017	1.013	1.009	1.009	1.008		
2013								1.043	1.024	1.017	1.013	1.009	1.009	1.008		
2014								1.043	1.022	1.015	1.011	1.009	1.009	1.008		
2015								1.044	1.016	1.015	1.011	1.009	1.009	1.008		
2016								1.048	1.014	1.015	1.011	1.009	1.009	1.008		
2017								1.048	1.029	1.015	1.011	1.009	1.009	1.008		
2018								1.071	1.033	1.016	1.012	1.009	1.009	1.008		
2019								1.106	1.030	1.016	1.012	1.009	1.009	1.008		
2020								1.106	1.030	1.016	1.012	1.009	1.009	1.008		
2021								1.106	1.030	1.016	1.012	1.009	1.009	1.008		

Adjusted (b) 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
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2019																
2020																
2021																

Selected (c)	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
2.494	1.440	1.440	1.212	1.102	1.068	1.047	1.029	1.022	1.018	1.017	1.013	1.012	1.011	1.010	1.011	1.009
Cumulative Unadjusted for Impact of SB 1160	7.344	2.945	2.045	1.687	1.531	1.434	1.369	1.331	1.302	1.279	1.258	1.241	1.226	1.212	1.200	1.187
Cumulative Adjusted for Impact of SB 1160(d)	7.261	2.911	2.022	1.668	1.514	1.417	1.352	1.314	1.285	1.262	1.241	1.226	1.212	1.200	1.187	1.174

(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 impact of pharmaceutical cost reductions through 2018 and the 2021 changes to the Official Medical Fee Schedule and Medical-Legal Fee Schedule in order to bring the historical payments to the current pharmaceutical and medical service 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 factor for 72 months is adjusted by -1.1% 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)												456/444 UL/T456Pd (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	444/432		
1983																							
1984																							
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Adjusted (b) Accident Year	Age-to-Age (in months)												456/444 UL/T456Pd (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	444/432			
1983																								
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Selected (c)	1.009	1.008	1.007	1.006	1.005	1.006	1.005	1.006	1.005	1.006	1.004	1.004	1.003	1.002	1.004	1.002	1.003	1.002	1.003	1.002	1.001	1.002	1.001	1.002
Cumulative	1.176	1.166	1.157	1.148	1.142	1.136	1.129	1.123	1.116	1.110	1.104	1.100	1.096	1.093	1.091	1.087	1.085	1.082	1.082	1.078	1.076	1.075	1.075	1.073

(e) The UL/T456Pd 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	Age-to-Age (in months)																					
	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	252/240	264/252	
1996																						
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2021																						
Selected (a)	2.949(b)	1.517(b)	1.242(b)	1.124(b)	1.070(b)	1.042(b)	1.026	1.018	1.016	1.014	1.011	1.012	1.011	1.008	1.008	1.006	1.005	1.004	1.003	1.002	1.002	
Cumulative	8.226	2.789	1.838	1.481	1.318	1.231	1.182	1.152	1.131	1.114	1.098	1.086	1.074	1.062	1.054	1.046	1.040	1.035	1.031	1.027	1.025	

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year averages 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	444/432	456/444	ULT/456Pd (c)
1983					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
1984				1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.000
1985			1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.000	1.000
1986		1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000
1987	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	1.000	1.000	1.000	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
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	1.001	1.001	1.000
1995	1.002	1.002	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	1.000
1996	1.003	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	1.002	1.000
1997	1.003	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	1.002	1.000
1998	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	1.002	1.002	1.000
1999	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	1.002	1.002	1.002	1.000
2000	1.002																1.000
Unadjusted (a)	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.009
Selected (c)	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.006
Cumulative	1.023	1.021	1.018	1.016	1.015	1.013	1.012	1.011	1.010	1.009	1.009	1.008	1.008	1.007	1.007	1.007	1.006

(c) Adjusted for the impact of changes in claim settlement rates on later period development for 300 months and later. See Exhibits 2.5.9 through 2.5.12.

(d) The ULT/456Pd 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 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>
2013							133,993
2014						139,835	139,876
2015					144,656	145,012	145,094
2016				147,699	148,146	148,290	148,304
2017			147,278	148,369	148,769	148,903	
2018		146,888	150,343	151,222	151,539		
2019	122,039	149,149	153,213	154,240			
2020	106,671	130,684	133,906				
2021	117,831	144,410					
2022	123,950						

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>
2014						1.000	
2015					1.002	1.001	
2016				1.003	1.001	1.000	
2017			1.007	1.003	1.001		
2018		1.024	1.006	1.002			
2019	1.222	1.027	1.007				
2020	1.225	1.025					
2021	1.226						
Latest Year	1.226	1.025	1.007	1.002	1.001	1.000	
Cumulative	1.271	1.037	1.012	1.005	1.003	1.002	1.002

Acc. Year	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Ult. Claim Counts	157,545	149,767	135,532	155,073	152,039	149,260	148,646

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>
2013							124,817
2014						126,837	130,742
2015					126,957	132,452	136,112
2016				121,770	130,634	135,941	139,548
2017			107,659	122,454	131,310	136,689	
2018		82,698	107,292	123,010	132,892		
2019	37,930	80,596	105,847	123,713			
2020	31,975	69,531	92,349				
2021	36,982	80,484					
2022	39,762						

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**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	72	84
2013							92.8%
2014						90.4%	93.2%
2015					87.3%	91.1%	93.6%
2016				81.9%	87.9%	91.5%	93.9%
2017			72.1%	82.0%	88.0%	91.6%	
2018		54.4%	70.6%	80.9%	87.4%		
2019	24.5%	52.0%	68.3%	79.8%			
2020	23.6%	51.3%	68.1%				
2021	24.7%	53.7%					
2022	25.2%						

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
2013							126,232
2014						128,421	131,649
2015					127,114	133,180	136,528
2016				118,585	129,926	136,126	139,548
2017			101,703	119,075	130,463	136,689	
2018		81,705	103,597	121,292	132,892		
2019	39,138	83,336	105,664	123,713			
2020	34,206	72,834	92,349				
2021	37,799	80,484					
2022	39,762						

F. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							18,224
2014						17,931	19,003
2015					16,893	18,273	19,267
2016				14,481	16,454	17,824	18,796
2017			11,144	14,345	16,461	17,949	
2018		7,039	11,390	14,634	16,913		
2019	3,160	7,059	11,449	15,521			
2020	3,295	7,663	12,664				
2021	3,158	7,452					
2022	3,458						

(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, excluding COVID-19 claims.

**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)						
	12	24	36	48	60	72	84
2013							18,655
2014						18,359	19,276
2015					16,931	18,467	19,392
2016				13,793	16,287	17,873	18,796
2017			9,937	13,542	16,246	17,949	
2018		6,903	10,595	14,239	16,913		
2019	3,233	7,439	11,410	15,521			
2020	3,465	8,241	12,664				
2021	3,209	7,452					
2022	3,458						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							2,354,821
2014						2,357,626	2,537,671
2015					2,152,136	2,459,417	2,647,515
2016				1,635,697	2,116,166	2,432,956	2,622,912
2017			1,010,668	1,612,483	2,119,491	2,453,472	
2018		564,006	1,097,654	1,727,029	2,247,554		
2019	126,526	619,970	1,205,584	1,920,122			
2020	118,519	600,261	1,169,480				
2021	121,296	599,753					
2022	137,507						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							382,804
2014						495,537	392,463
2015					593,255	476,467	395,794
2016				711,787	579,678	471,117	394,699
2017			850,312	723,132	589,492	476,344	
2018		807,939	899,196	792,142	636,388		
2019	354,818	884,933	1,040,631	872,542			
2020	349,373	812,870	908,449				
2021	397,204	917,965					
2022	441,027						

(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, excluding COVID-19 claims.

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

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							41,721
2014						38,122	42,967
2015					33,519	37,935	44,065
2016				26,988	34,314	38,150	45,078
2017			18,285	28,616	34,880	39,000	
2018		8,238	18,880	27,849	34,128		
2019	4,219	12,909	19,363	28,583			
2020	4,677	13,292	21,860				
2021	4,913	14,360					
2022	5,239						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							-59,035
2014						-60,386	-38,971
2015					-5,229	-27,617	-18,331
2016				85,956	24,294	-7,058	
2017			108,907	96,695	29,543		
2018		8,180	69,762	47,845			
2019	-5,096	-35,370	3,543				
2020	-10,435	-43,905					
2021	-4,014						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							323,769
2014						435,151	353,491
2015					588,026	448,850	377,462
2016				797,744	603,973	464,059	394,699
2017			959,219	819,826	619,035	476,344	
2018		816,119	968,958	839,986	636,388		
2019	349,722	849,563	1,044,174	872,542			
2020	338,938	768,965	908,449				
2021	393,190	917,965					
2022	441,027						

(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, excluding COVID-19 claims.

**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
2013							2,678,590
2014						2,792,778	2,891,163
2015					2,740,162	2,908,267	3,024,978
2016				2,433,440	2,720,138	2,897,015	3,017,611
2017			1,969,888	2,432,310	2,738,526	2,929,816	
2018		1,380,125	2,066,612	2,567,015	2,883,942		
2019	476,247	1,469,533	2,249,758	2,792,664			
2020	457,457	1,369,226	2,077,929				
2021	514,485	1,517,718					
2022	578,534						

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
2013						
2014						1.035
2015					1.061	1.040
2016				1.118	1.065	1.042
2017			1.235	1.126	1.070	
2018		1.497	1.242	1.123		
2019	3.086	1.531	1.241			
2020	2.993	1.518				
2021	2.950					
Latest Year	2.950	1.518	1.241	1.123	1.070	1.042
3-Year Average	3.010	1.515	1.239	1.122	1.065	1.039

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
2014						1.039
2015					1.058	1.042
2016				1.103	1.060	1.043
2017			1.210	1.109	1.065	
2018		1.526	1.222	1.113		
2019	3.063	1.549	1.240			
2020	2.959	1.544				
2021	2.953					

(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, excluding COVID-19 claims.

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

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

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2014						-0.33%
2015					0.31%	-0.17%
2016				1.38%	0.43%	-0.10%
2017			2.08%	1.49%	0.45%	
2018		-1.87%	1.64%	0.98%		
2019	0.74%	-1.19%	0.12%			
2020	1.14%	-1.72%				
2021	-0.10%					

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

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2014						1.036
2015					1.061	1.040
2016				1.118	1.065	1.042
2017			1.235	1.126	1.070	
2018		1.497	1.242	1.124		
2019	3.086	1.531	1.242			
2020	2.993	1.517				
2021	2.949					
Latest Year	2.949	1.517	1.242	1.124	1.070	1.042
2-Year Average	2.971	1.524	1.242	1.125	1.067	1.041
3-Year Average	3.010	1.515	1.240	1.122	1.065	1.039

- (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, excluding COVID-19 claims.

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

1. Reported Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)									
	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>	<u>396</u>	<u>408</u>
1989							210,926	210,991	211,046	211,039
1990						230,896	230,974	231,050	231,101	
1991					231,322	231,397	231,477	231,518		
1992				182,173	182,246	182,323	182,381			
1993			142,694	142,787	142,863	142,905				
1994		129,959	130,048	130,156	130,206					
1995	120,775	120,898	120,987	121,056						
1996	115,184	115,313	115,381							
1997	121,480	121,580								
1998	131,778									
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>

2. Ult. Claim Counts (a) 132,910 122,444 116,049 121,655 130,686 143,295 182,759 231,929 231,353 211,386

3. Ultimate Indemnity Claim Settlement Ratio (b)

Accident Year	Evaluated as of (in months)									
	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>	<u>396</u>	<u>408</u>
1989							99.8%	99.8%	99.8%	99.8%
1990						99.8%	99.8%	99.9%	99.9%	
1991					99.7%	99.8%	99.8%	99.8%		
1992				99.7%	99.7%	99.8%	99.8%			
1993			99.6%	99.6%	99.7%	99.7%				
1994		99.4%	99.5%	99.6%	99.6%					
1995	99.3%	99.4%	99.5%	99.5%						
1996	99.3%	99.4%	99.4%							
1997	99.2%	99.3%								
1998	99.1%									

(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 Year	Evaluated as of (in months)									
	<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>	<u>384-396</u>	<u>396-408</u>
1989								14.1%	13.9%	---
1990							17.1%	20.0%	16.8%	
1991						12.3%	15.0%	9.1%		
1992					12.4%	15.0%	13.3%			
1993				15.5%	15.0%	9.7%				
1994			12.2%	16.9%	9.4%					
1995		14.0%	11.8%	10.3%						
1996	9.8%	14.9%	9.2%							
1997	9.8%	10.3%								
1998	8.6%									
1999										
3-Year Average	9.4%	13.1%	11.1%	14.3%	12.3%	12.4%	15.1%	14.4%	15.4%	
Share of Open on Prior (d)	90.6%	86.9%	88.9%	85.7%	87.7%	87.6%	84.9%	85.6%	84.6%	

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

Accident Year	Evaluated as of (in months)									
	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>	<u>396</u>	
1989										
1990										252
1991								411	348	
1992							378	324	274	
1993						390	331	283	240	
1994					480	420	357	305	258	
1995				599	525	460	391	334	283	
1996			668	573	503	440	374	320	271	
1997		864	769	659	578	507	430	368	311	
1998	1,132	984	875	751	658	577	490	419	355	
1999	1,112	967	859	737	646	567	481	412	348	
...										
2021	472	410	365	313	274	240	204	175	148	
2022	504	438	390	334	293	257	218	187	158	

- (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 Year	Evaluated as of (in months)								
	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>	<u>396</u>
1989								0.2%	0.2%
1990							0.2%	0.1%	0.1%
1991						0.2%	0.2%	0.2%	0.2%
1992					0.3%	0.2%	0.2%	0.2%	0.1%
1993				0.4%	0.3%	0.3%	0.2%	0.2%	0.2%
1994			0.5%	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%
1995		0.6%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%	0.2%
1996	0.7%	0.6%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.2%
1997	0.8%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%
1998	0.9%	0.7%	0.7%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%
1999	0.8%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%
...									
2021	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
2022	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
3-Year Historical Avg.	0.8%	0.7%	0.5%	0.4%	0.3%	0.2%	0.2%	0.2%	0.1%

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

Accident Year	Evaluated as of (in months)								
	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>	<u>396</u>
1989									
1990									
1991									1.11
1992								1.07	1.11
1993							1.22	1.20	1.24
1994						1.30	1.45	1.42	1.47
1995					1.36	1.53	1.70	1.66	1.72
1996				1.18	1.37	1.54	1.71	1.67	1.73
1997			1.17	1.29	1.49	1.68	1.86	1.82	1.88
1998		1.13	1.23	1.35	1.57	1.76	1.95	1.91	1.98
1999	1.04	1.10	1.19	1.31	1.52	1.71	1.89	1.85	1.92
...									
2021	0.40	0.42	0.45	0.50	0.58	0.65	0.72	0.71	0.73
2022	0.40	0.43	0.46	0.51	0.59	0.66	0.73	0.72	0.74

(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	Age-to-Age Paid Development (in months):								
	<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>	<u>384-396</u>	<u>396-408</u>

8. 3-Year Average (h)

Indemnity	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.001
Medical	1.005	1.006	1.004	1.004	1.003	1.002	1.004	1.002	1.003

9. Adjustment Ratio (i)

Accident Year 2021	0.77	0.78	0.79	0.81	0.84	0.87	0.90	0.90	0.91
Accident Year 2022	0.76	0.77	0.78	0.80	0.84	0.86	0.89	0.89	0.90

10. Adjusted Factors (j)

Indemnity									
Accident Year 2021	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001
Accident Year 2022	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001
Medical									
Accident Year 2021	1.004	1.004	1.003	1.003	1.002	1.002	1.003	1.001	1.002
Accident Year 2022	1.004	1.004	1.003	1.003	1.002	1.002	1.003	1.001	1.002

(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	Age-to-Age (in months)																					
	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	252/240	264/252	
1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						
2006																						
2007																						
2008																						
2009																						
2010																						
2011																						
2012																						
2013																						
2014																						
2015																						
2016																						
2017																						
2018																						
2019																						
2020																						
2021																						
Selected (c)	2.494(d)	1.425(d)	1.214(d)	1.109(d)	1.071(c)	1.046(d)	1.029	1.022	1.018	1.017	1.013	1.012	1.011	1.010	1.011	1.009	1.009	1.008	1.007	1.006	1.005	1.005
Cumulative Unadjusted for Impact of SB 1160	7.137	2.861	2.008	1.654	1.491	1.392	1.330	1.293	1.265	1.242	1.222	1.206	1.191	1.178	1.166	1.154	1.143	1.133	1.124	1.116	1.110	1.110
Cumulative Adjusted for Impact of SB 1160(e)	7.056	2.829	1.985	1.635	1.474	1.376	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

(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 impact of pharmaceutical cost reductions through 2018 and the 2021 changes to the Official Medical Fee Schedule in order to bring the historical payments to the current pharmaceutical and medical service cost level.
 (c) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year averages 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 factor for 72 months is adjusted by -1.1% for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Ultimate (Continued)

Accident Year	Age-to-Age (in months)																ULT/456Pd (g)
	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	432/420	444/432	456/444	
1983									1.003	1.002	1.004	1.003	1.003	1.003	1.002	1.002	1.002
1984								1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001
1985							1.003	1.004	1.006	1.005	1.004	1.003	1.004	1.002	1.001	1.001	1.002
1986						1.004	1.003	1.003	1.003	1.004	1.002	1.003	1.004	1.001	1.001	1.002	
1987					1.004	1.003	1.003	1.003	1.004	1.003	1.002	1.003	1.003	1.003	1.001	1.002	
1988				1.004	1.003	1.003	1.003	1.004	1.003	1.003	1.002	1.002	1.003	1.003	1.001	1.002	
1989			1.004	1.003	1.003	1.003	1.002	1.003	1.002	1.003	1.002	1.002	1.003	1.003	1.001	1.002	
1990		1.006	1.003	1.003	1.003	1.004	1.004	1.003	1.002	1.003	1.002	1.003	1.003	1.003	1.001	1.002	
1991		1.005	1.005	1.006	1.004	1.006	1.003	1.003	1.004	1.004	1.003	1.002	1.003	1.003	1.001	1.002	
1992	1.006	1.005	1.007	1.005	1.006	1.006	1.003	1.003	1.004	1.004	1.003	1.002	1.003	1.003	1.001	1.002	
1993	1.007	1.007	1.007	1.005	1.005	1.005	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1994	1.009	1.008	1.005	1.005	1.005	1.004	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1995	1.014	1.008	1.005	1.005	1.005	1.004	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1996	1.010	1.009	1.007	1.007	1.006	1.004	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1997	1.008	1.006	1.005	1.004	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1998	1.008	1.006	1.005	1.004	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
1999	1.006	1.004	1.006	1.005	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.002
2000	1.004																
Unadjusted (c)	1.006	1.005	1.006	1.005	1.006	1.004	1.004	1.003	1.002	1.004	1.002	1.003	1.003	1.002	1.001	1.002	1.073
Selected (f)	1.006	1.005	1.006	1.004	1.004	1.003	1.003	1.002	1.002	1.003	1.002	1.003	1.003	1.002	1.001	1.001	1.048
Cumulative	1.104	1.097	1.091	1.085	1.080	1.076	1.072	1.069	1.066	1.065	1.061	1.059	1.056	1.053	1.051	1.050	1.048

(f) Adjusted for the impact of changes in claim settlement rates on later period development for 300 months and later. See Exhibits 2.5.9 through 2.5.12.

(g) The ULT/456Pd 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>
2013							133,993
2014						139,835	139,876
2015					144,656	145,012	145,094
2016				147,699	148,146	148,290	148,304
2017			147,278	148,369	148,769	148,903	
2018		146,888	150,343	151,222	151,539		
2019	122,039	149,149	153,213	154,240			
2020	106,671	130,684	133,906				
2021	117,831	144,410					
2022	123,950						

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>
2014						1.000	
2015					1.002	1.001	
2016				1.003	1.001	1.000	
2017			1.007	1.003	1.001		
2018		1.024	1.006	1.002			
2019	1.222	1.027	1.007				
2020	1.225	1.025					
2021	1.226						
Latest Year	1.226	1.025	1.007	1.002	1.001	1.000	
Cumulative	1.271	1.037	1.012	1.005	1.003	1.002	1.002
Acc. Year	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Ult. Claim Counts	157,545	149,767	135,532	155,073	152,039	149,260	148,646

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>
2013							124,817
2014						126,837	130,742
2015					126,957	132,452	136,112
2016				121,770	130,634	135,941	139,548
2017			107,659	122,454	131,310	136,689	
2018		82,698	107,292	123,010	132,892		
2019	37,930	80,596	105,847	123,713			
2020	31,975	69,531	92,349				
2021	36,982	80,484					
2022	39,762						

Source: Accident year experience of insurers with available claim count and paid loss data, excluding COVID-19 claims.

**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
2013							92.8%
2014						90.4%	93.2%
2015					87.3%	91.1%	93.6%
2016				81.9%	87.9%	91.5%	93.9%
2017			72.1%	82.0%	88.0%	91.6%	
2018		54.4%	70.6%	80.9%	87.4%		
2019	24.5%	52.0%	68.3%	79.8%			
2020	23.6%	51.3%	68.1%				
2021	24.7%	53.7%					
2022	25.2%						

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
2013							126,232
2014						128,421	131,649
2015					127,114	133,180	136,528
2016				118,585	129,926	136,126	139,548
2017			101,703	119,075	130,463	136,689	
2018		81,705	103,597	121,292	132,892		
2019	39,138	83,336	105,664	123,713			
2020	34,206	72,834	92,349				
2021	37,799	80,484					
2022	39,762						

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							19,882
2014						18,132	19,282
2015					16,234	17,713	18,709
2016				13,518	15,526	16,817	18,039
2017			10,654	13,478	15,473	16,831	
2018		6,974	11,109	14,019	16,177		
2019	3,426	6,735	10,816	14,200			
2020	2,898	6,944	11,430				
2021	2,857	6,431					
2022	2,880						

- (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, excluding COVID-19 claims.

**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
2013							20,373
2014						18,590	19,578
2015					16,274	17,907	18,856
2016				12,920	15,355	16,878	18,039
2017			9,600	12,773	15,271	16,831	
2018		6,845	10,359	13,668	16,177		
2019	3,493	7,090	10,779	14,200			
2020	3,052	7,464	11,430				
2021	2,901	6,431					
2022	2,880						

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
2013							2,571,768
2014						2,387,394	2,577,394
2015					2,068,680	2,384,800	2,574,370
2016				1,532,064	1,995,001	2,297,558	2,517,286
2017			976,335	1,520,998	1,992,242	2,300,579	
2018		559,303	1,073,150	1,657,776	2,149,750		
2019	136,699	590,843	1,138,971	1,756,689			
2020	104,399	543,607	1,055,509				
2021	109,644	517,613					
2022	114,518						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							463,758
2014						535,684	444,997
2015					622,411	518,187	453,376
2016				742,844	619,062	544,718	460,800
2017			846,491	740,776	632,281	570,106	
2018		876,491	905,518	832,461	708,202		
2019	402,925	881,368	993,530	907,339			
2020	370,139	826,432	928,458				
2021	401,418	922,754					
2022	418,872						

(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, excluding COVID-19 claims.

**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
2013							50,544
2014						41,211	48,719
2015					35,166	41,257	50,476
2016				28,649	35,351	44,110	52,627
2017			21,366	28,585	36,215	46,676	
2018		13,655	21,034	29,507	37,979		
2019	4,791	12,857	20,976	29,723			
2020	4,955	13,514	22,342				
2021	4,965	14,435					
2022	4,975						

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
2013							-71,520
2014						-65,278	-44,188
2015					-5,486	-30,035	-20,998
2016				86,318	25,355	-8,160	
2017			116,930	96,260	30,264		
2018		10,140	75,681	48,181			
2019	-5,787	-35,227	3,529				
2020	-11,055	-44,637					
2021	-4,056						

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
2013							392,238
2014						470,406	400,809
2015					616,926	488,152	432,378
2016				829,162	644,416	536,558	460,800
2017			963,421	837,036	662,546	570,106	
2018		886,631	981,198	880,642	708,202		
2019	397,138	846,141	997,060	907,339			
2020	359,084	781,795	928,458				
2021	397,361	922,754					
2022	418,872						

(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 L)] 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, excluding COVID-19 claims.

**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
2013							233,497
2014						251,798	253,940
2015					261,299	264,444	266,887
2016				274,271	279,101	283,612	287,119
2017			285,339	292,094	297,353	301,126	
2018		289,488	303,957	316,685	321,246		
2019	197,445	289,934	309,273	319,949			
2020	157,023	236,236	251,971				
2021	174,236	264,777					
2022	176,383						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2013							3,197,503
2014						3,109,598	3,232,143
2015					2,946,905	3,137,396	3,273,636
2016				2,635,497	2,918,518	3,117,729	3,265,205
2017			2,225,096	2,650,128	2,952,141	3,171,811	
2018		1,735,422	2,358,305	2,855,103	3,179,197		
2019	731,282	1,726,918	2,445,303	2,983,976			
2020	620,506	1,561,638	2,235,937				
2021	681,242	1,705,144					
2022	709,773						

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
2014						1.039
2015					1.065	1.043
2016				1.107	1.068	1.047
2017			1.191	1.114	1.074	
2018		1.359	1.211	1.114		
2019	2.361	1.416	1.220			
2020	2.517	1.432				
2021	2.503					
Latest Year	2.503	1.432	1.220	1.114	1.074	1.047

(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, excluding COVID-19 claims.

**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
2014						1.043
2015					1.062	1.044
2016				1.099	1.064	1.048
2017			1.177	1.104	1.071	
2018		1.378	1.197	1.106		
2019	2.347	1.428	1.219			
2020	2.493	1.447				
2021	2.503					

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
2014						-0.34%
2015					0.20%	-0.07%
2016				0.78%	0.37%	-0.11%
2017			1.15%	0.93%	0.32%	
2018		-1.39%	1.17%	0.65%		
2019	0.62%	-0.84%	0.10%			
2020	0.93%	-1.03%				
2021	0.01%					

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
2014						1.041
2015					1.066	1.042
2016				1.110	1.067	1.046
2017			1.195	1.111	1.071	
2018		1.368	1.205	1.109		
2019	2.382	1.407	1.214			
2020	2.490	1.425				
2021	2.494					
Latest Year	2.494	1.425	1.214	1.109	1.071	1.046
2-Year Average	2.492	1.416	1.210	1.111	1.070	1.045
3-Year Average	2.453	1.399	1.205	1.110	1.069	1.044

- (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, excluding COVID-19 claims.

**Developed Indemnity Loss Ratios Using Selected Loss Development Factors
Adjusted for Changes in Claim Settlement Rates
Based on Experience as of December 31, 2022**

Accident Year	Development Factors			
	(1) Paid Loss Ratio (a)	(2) Annual (b)	(3) Cumulative	(4) Projected Ultimate Loss Ratio (4) = (1) x (3)
1987	0.345	1.000	1.007	0.347
1988	0.330	1.000	1.007	0.332
1989	0.342	1.001	1.008	0.345
1990	0.397	1.001	1.008	0.400
1991	0.424	1.000	1.009	0.428
1992	0.349	1.001	1.009	0.352
1993	0.286	1.001	1.010	0.289
1994	0.325	1.001	1.011	0.329
1995	0.468	1.001	1.012	0.474
1996	0.525	1.001	1.013	0.532
1997	0.594	1.001	1.015	0.603
1998	0.644	1.002	1.016	0.654
1999	0.674	1.002	1.018	0.686
2000	0.583	1.002	1.021	0.595
2001	0.483	1.002	1.023	0.494
2002	0.360	1.002	1.025	0.369
2003	0.237	1.002	1.027	0.244
2004	0.141	1.003	1.031	0.145
2005	0.121	1.004	1.035	0.125
2006	0.155	1.005	1.040	0.161
2007	0.213	1.006	1.046	0.222
2008	0.267	1.008	1.054	0.282
2009	0.311	1.008	1.062	0.330
2010	0.297	1.011	1.074	0.319
2011	0.273	1.012	1.086	0.296
2012	0.241	1.011	1.098	0.265
2013	0.203	1.014	1.114	0.226
2014	0.189	1.016	1.131	0.214
2015	0.182	1.018	1.152	0.209
2016	0.168	1.026	1.182	0.199
2017	0.166	1.042	1.231	0.204
2018	0.165	1.070	1.318	0.218
2019	0.173	1.124	1.481	0.257
2020	0.147	1.242	1.838	0.271
2021	0.112	1.517	2.789	0.311
2022	0.038	2.949	8.226	0.311

(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, Pharmaceutical Cost Reductions and Reforms
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2)	(3)	(4)	(5)	(6)
	Paid Loss Ratio (a)	Adjusted Paid Loss Ratio (b)	Reform Adjusted Development Factors		Adjusted Developed Loss Ratio (d) (2) x (4)	Projected Ultimate Loss Ratio (1) + ((5) - (2))
			Annual (c)	Cumulative (c)		
1987	0.307	0.272	1.001	1.051	0.286	0.321
1988	0.300	0.266	1.002	1.053	0.280	0.314
1989	0.319	0.283	1.003	1.056	0.299	0.335
1990	0.361	0.320	1.003	1.059	0.339	0.380
1991	0.378	0.335	1.002	1.061	0.356	0.398
1992	0.313	0.278	1.003	1.065	0.296	0.331
1993	0.257	0.228	1.002	1.066	0.244	0.272
1994	0.295	0.263	1.002	1.069	0.281	0.313
1995	0.435	0.387	1.003	1.072	0.415	0.463
1996	0.466	0.415	1.003	1.076	0.446	0.497
1997	0.521	0.464	1.004	1.080	0.501	0.559
1998	0.623	0.556	1.004	1.085	0.603	0.670
1999	0.680	0.607	1.006	1.091	0.663	0.735
2000	0.613	0.548	1.005	1.097	0.601	0.666
2001	0.540	0.485	1.006	1.104	0.535	0.590
2002	0.417	0.375	1.005	1.110	0.416	0.458
2003	0.266	0.240	1.006	1.116	0.268	0.294
2004	0.179	0.162	1.007	1.124	0.183	0.200
2005	0.175	0.159	1.008	1.133	0.180	0.196
2006	0.224	0.204	1.009	1.143	0.233	0.253
2007	0.312	0.285	1.009	1.154	0.329	0.355
2008	0.384	0.353	1.011	1.166	0.411	0.443
2009	0.445	0.412	1.010	1.178	0.485	0.518
2010	0.432	0.402	1.011	1.191	0.479	0.509
2011	0.364	0.342	1.012	1.206	0.413	0.435
2012	0.309	0.293	1.013	1.222	0.358	0.374
2013	0.244	0.244	1.017	1.242	0.303	0.303
2014	0.214	0.218	1.018	1.265	0.276	0.272
2015	0.197	0.203	1.022	1.293	0.263	0.257
2016	0.182	0.189	1.029	1.330	0.251	0.244
2017	0.179	0.187	1.046	1.376	0.257	0.250
2018	0.182	0.189	1.071	1.474	0.279	0.272
2019	0.185	0.190	1.109	1.635	0.310	0.306
2020	0.159	0.160	1.214	1.985	0.318	0.317
2021	0.125	0.126	1.425	2.829	0.355	0.355
2022	0.046	0.046	2.494	7.056	0.327	0.327

- (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, 2022. Reflects adjustments for the pharmaceutical cost reductions through 2018 and 2021 changes to the Official Medical Fee Schedule (OMFS) and Medical-Legal Fee Schedule (MLFS), restating the historical medical paid-to-date ratios at a 2018 pharmaceutical cost level and a 2021 OMFS and MLFS 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 and 2021 medical fee schedule changes. 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	1.721
1988	0.0	0.0	1.5	1.5	1.695
1989	0.0	0.0	1.5	1.5	1.670
1990	2.3	19.9	1.7	24.7	1.339
1991	4.9	14.8	0.8	21.4	1.103
1992	1.8	-8.3	1.6	-5.2	1.163
1993	0.2	-18.1	0.4	-17.6	1.411
1994	-5.1	0.2	0.6	-4.3	1.475
1995	6.3	0.6	1.0	8.0	1.366
1996	5.3	0.4	1.2	7.0	1.277
1997	9.7	0.2	1.6	11.7	1.143
1998	6.5	0.0	1.8	8.4	1.055
1999	5.7	0.0	2.1	7.9	0.977
2000	3.9	0.0	3.1	7.1	0.912
2001	-0.3	0.0	0.2	-0.1	0.913
2002	-0.7	0.0	0.4	-0.3	0.935 (e)
2003	7.3	0.0	1.2	8.6	0.932 (e)
2004	-6.0	-13.7	2.1	-17.2	1.276 (e)
2005	-31.6	-15.3	1.6	-41.2	1.730
2006	5.6	-5.7	2.2	1.8	1.700
2007	1.6	0.0	2.1	3.7	1.639
2008	4.8	0.6	1.0	6.5	1.539
2009	0.4	1.4	0.2	2.0	1.508
2010	0.4	0.0	1.5	1.9	1.480
2011	0.0	0.0	1.4	1.4	1.460
2012	-0.8	0.0	2.1	1.3	1.442
2013	1.4	0.2	0.6	2.3	1.410
2014	5.8	1.5	1.7	9.2	1.291
2015	-0.8	0.0	2.3	1.4	1.273
2016	0.3	0.0	1.0	1.3	1.257
2017	0.5	0.0	2.2	2.7	1.224
2018	0.4	0.0	2.2	2.6	1.192
2019	0.4	0.0	2.4	2.8	1.160
2020	0.4	0.0	2.5	3.0	1.127
2021	0.5	0.0	3.2	3.7	1.086
2022	1.3	0.0	1.6	2.9	1.055
2023	0.4	0.0	2.6	3.0	1.024
2024	0.4	0.0	1.7	2.1	1.003
9/1/2024	0.1 (Annual 0.4)	0.0	0.3 (Annual 1.6)	0.3	

- (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.
- (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 9/1/2024 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%	4.9% (f)
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	0.866	0.134	0.0%	3.0%	0.4%	0.4%
2021	0.864	0.136	4.8%	1.2%	0.2%	0.2% (f)
2022	0.864	0.136	0.0%	5.6%	0.8%	0.8%
2023	0.864	0.136	0.0%	3.4%	0.5%	0.5%
2024	0.864	0.136	0.0%	2.3%	0.3%	0.3%
9/1/2024	0.864	0.136	0.0% (Annual 0.0%)	0.3% (Annual 2.0%)	0.0%	0.0%

- (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. Does not include the impact of the 2021 changes to the Official Medical Fee Schedule and Medical-Legal Fee Schedule, which are reflected in the medical loss development projections for accident years 2013 and later.
- (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).
- (f) The impact of the 2021 changes to the Official Medical Fee Schedule and Medical-Legal Fee Schedule is applied to accident years 2012 and prior, which are not reflected in the medical loss development projections.

Annual Medical Cost Level Change - Legislative

Accident Year	(1) Annual Legislative Cost Impact on Medical Severity (a)	(2) Annual Legislative Cost Impact on Medical Due to Frequency Changes (b)	(3) Annual Total Legislative Cost Impact on Medical (c)
1987	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%
1990	-0.7%	19.9%	19.1%
1991	-1.6%	14.7%	12.9%
1992	0.5%	-8.4%	-7.9%
1993	-0.7%	-18.1%	-18.7%
1994	-2.6%	0.3%	-2.3%
1995	0.0%	0.5%	0.5%
1996	0.0%	0.4%	0.4%
1997	0.0%	0.2%	0.2%
1998	12.6%	0.0%	12.6%
1999	12.6%	0.0%	12.6%
2000	7.0%	0.0%	7.0%
2001	6.6%	0.0%	6.6%
2002	-5.6%	0.0%	-5.6%
2003	-6.0%	0.0%	-6.0%
2004	-24.4%	-12.5%	-33.9%
2005	0.0%	-13.9%	-13.9%
2006	0.1%	-5.2%	-5.1%
2007	0.1%	0.0%	0.1%
2008	0.2%	0.3%	0.5%
2009	0.0%	1.0%	1.0%
2010	0.0%	0.0%	0.0%
2011	-2.0%	0.0%	-2.0%
2012	-4.4%	0.0%	-4.4%
2013	-8.3%	0.2%	-8.1%
2014	-6.0%	1.3%	-4.8%
2015	-2.2%	0.0%	-2.2%
2016	-0.7%	0.0%	-0.7%
2017	-0.5%	0.0%	-0.5%
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%
2023	0.0%	0.0%	0.0%
2024	0.0%	0.0%	0.0%
9/1/2024	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%	0.850
1988	3.8%	0.0%	3.8%	0.819
1989	3.0%	0.0%	3.0%	0.795
1990	3.7%	19.1%	23.5%	0.644
1991	3.6%	12.9%	16.9%	0.551
1992	3.0%	-7.9%	-5.2%	0.581
1993	2.7%	-18.7%	-16.5%	0.696
1994	-2.3%	-2.3%	-4.6%	0.729
1995	0.9%	0.5%	1.4%	0.719
1996	1.0%	0.4%	1.4%	0.709
1997	0.7%	0.2%	0.9%	0.702
1998	0.8%	12.6%	13.5%	0.619
1999	2.5%	12.6%	15.4%	0.536
2000	1.7%	7.0%	8.8%	0.493
2001	2.9%	6.6%	9.7%	0.449
2002	2.0%	-5.6%	-3.7%	0.467
2003	1.4%	-6.0%	-4.7%	0.489
2004	0.0%	-33.9%	-33.9%	0.740
2005	0.0%	-13.9%	-13.9%	0.859
2006	0.3%	-5.1%	-4.8%	0.903
2007	1.8%	0.1%	1.9%	0.886
2008	0.2%	0.5%	0.7%	0.880
2009	0.4%	1.0%	1.4%	0.868
2010	0.3%	0.0%	0.3%	0.865
2011	0.3%	-2.0%	-1.7%	0.880
2012	0.1%	-4.4%	-4.3%	0.920
2013	4.9%	-8.1%	-3.6%	0.954
2014	0.3%	-4.8%	-4.5%	0.999
2015	0.2%	-2.2%	-2.0%	1.019
2016	0.4%	-0.7%	-0.3%	1.022
2017	0.2%	-0.5%	-0.3%	1.025
2018	0.2%	-0.3%	-0.1%	1.026
2019	0.4%	0.0%	0.4%	1.022
2020	0.4%	0.0%	0.4%	1.018
2021	0.2%	0.0%	0.2%	1.016
2022	0.8%	0.0%	0.8%	1.008
2023	0.5%	0.0%	0.5%	1.003
2024	0.3%	0.0%	0.3%	
9/1/2024	0.0%	0.0%	0.0%	

- (a) See Exhibit 4.2, Column (6).
- (b) See Exhibit 4.3, Column (3).
- (c) Column (3) = [1.0 + Column (1)] x [1.0 + Column (2)] - 1.0.
- (d) These factors adjust the annual impact shown in Column (3) to the 9/1/2024 level.

Annual Wage Level Changes

<u>Year</u>	(1) <u>Annual Wage Level Change (a)</u>	(2) <u>Adjusted Annual Wage Level Change (b)</u>	(3) <u>Factor to a 9/1/2024 Wage Level (c)</u>
1987	5.6		3.743
1988	4.4		3.585
1989	4.3		3.437
1990	5.0		3.274
1991	2.3		3.200
1992	4.7		3.056
1993	1.2		3.020
1994	1.8		2.967
1995	2.9		2.883
1996	3.4		2.788
1997	4.7		2.663
1998	5.2		2.532
1999	6.2		2.384
2000	9.0		2.187
2001	0.6		2.174
2002	1.1		2.150
2003	3.6		2.075
2004	5.0		1.977
2005	3.2		1.915
2006	4.6		1.831
2007	4.5		1.752
2008	2.1		1.716
2009	0.5		1.708
2010	3.0		1.658
2011	3.1		1.608
2012	4.2		1.543
2013	0.7		1.533
2014	3.3		1.484
2015	4.5		1.420
2016	1.9		1.393
2017	4.4		1.335
2018	3.7		1.287
2019	4.4		1.233
2020	11.3	4.9	1.175
2021	7.7	6.3	1.106
2022	0.5	2.7	1.077
Projected:			
2023	4.3		
2024	2.9		
9/1/2024	0.5	(Annual = 2.7)	

- (a) Historical wage changes through 2022 are based on Bureau of Labor Statistics (BLS) data. Forecasts for 2023 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of March 2023 and those made by the California Department of Finance as of November 2022.
- (b) Wage level changes for 2020 to 2022 were adjusted for estimated shifts in industrial mix and shifts in the wage level mix within industries impacting average wages in order to more appropriately project changes in average wages for the typical worker. For 2022, the observed estimate based on BLS average wage data was averaged with the BLS Current Employment Statistics hourly wage estimate to account for shifts in the wage level mix within industries.

(c) Based on Column (2) for 2020 through 2022 and Column (1) for all other years.

Premium Adjustment Factors

	(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)	(6)	(7)
	Factor to a	Ratio of Industry Average Charged Rates to Advisory Pure Premium	Factor to Approved Pure Premium Rate Level as of	Factor to Adjust Insurer Premium to Approved Pure Premium Rate Level as of	Adjustment to Remove Surcharge	Average Experience	Off-Balance Correction in Advisory Sept. 1, 2022 Pure Premium	Factor to Adjust for Impact of Premium Resulting from	Composite Premium Adjustment
Calendar Year	9/1/2024	Pure Premium	Sept. 1, 2022 (c)	Sept. 1, 2022 (d)	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
<u>Year</u>	<u>Wage Level (a)</u>	<u>Rates (b)</u>	<u>Sept. 1, 2022 (c)</u>	<u>Sept. 1, 2022 (d)</u>	<u>Premium (e)</u>	<u>Modification (f)</u>	<u>Rates</u>	<u>Audits (g)</u>	<u>Factor (h)</u>
1987	3.743	---	---	0.446	0.992	0.983	1.030	---	1.636
1988	3.585	---	---	0.399	0.993	0.963	1.030	---	1.434
1989	3.437	---	---	0.393	0.993	0.945	1.030	---	1.379
1990	3.274	---	---	0.383	0.991	0.942	1.030	---	1.282
1991	3.200	---	---	0.355	0.987	0.939	1.030	---	1.160
1992	3.056	---	---	0.340	0.982	0.940	1.030	---	1.055
1993	3.020	---	---	0.337	0.981	0.949	1.030	---	1.021
1994	2.967	---	---	0.385	0.986	0.948	1.030	---	1.154
1995	2.883	---	---	0.521	0.995	0.958	1.030	---	1.516
1996	2.788	1.031	0.554	0.537	1.000	0.935	1.030	---	1.555
1997	2.663	0.998	0.553	0.554	1.000	0.949	1.030	---	1.508
1998	2.532	0.965	0.576	0.596	1.000	0.959	1.030	---	1.528
1999	2.384	0.972	0.582	0.599	1.000	0.954	1.030	---	1.452
2000	2.187	1.005	0.528	0.525	1.000	0.970	1.030	---	1.149
2001	2.174	1.031	0.465	0.450	1.000	0.969	1.030	---	0.981
2002	2.150	1.167	0.416	0.356	1.000	0.991	1.030	---	0.751
2003	2.075	1.282	0.340	0.265	1.000	1.005	1.030	---	0.532
2004	1.977	1.400	0.346	0.247	1.000	0.981	1.030	---	0.484
2005	1.915	1.470	0.417	0.283	1.000	0.982	1.030	---	0.536
2006	1.831	1.447	0.537	0.371	1.000	0.956	1.030	---	0.690
2007	1.752	1.493	0.731	0.490	1.000	0.931	1.030	0.985	0.882
2008	1.716	1.426	0.870	0.610	1.000	0.946	1.030	0.991	1.065
2009	1.708	1.366	0.858	0.628	1.000	0.937	1.030	1.034	1.149
2010	1.658	1.383	0.841	0.608	1.000	0.941	1.030	1.005	1.045
2011	1.608	1.401	0.840	0.600	1.000	0.982	1.030	---	0.953
2012	1.543	1.223	0.692	0.566	1.000	1.000	1.030	---	0.848
2013	1.533	1.138	0.557	0.490	1.000	0.983	1.030	---	0.741
2014	1.484	1.127	0.514	0.456	1.000	0.961	1.030	---	0.683
2015	1.420	1.109	0.499	0.450	1.000	0.951	1.030	---	0.652
2016	1.393	1.148	0.543	0.473	1.000	0.949	1.030	---	0.674
2017	1.335	1.156	0.601	0.520	1.000	0.955	1.030	---	0.706
2018	1.287	1.196	0.680	0.568	1.000	0.956	1.030	---	0.743
2019	1.233	1.215	0.790	0.650	1.000	0.945	1.030	---	0.823
2020	1.175	1.207	0.881	0.729	1.000	0.944	1.030	0.990	0.873
2021	1.106	1.223	0.949	0.776	1.000	0.948	1.030	1.033	0.907
2022	1.077	1.187	0.990	0.834	1.000	0.959	1.030	0.993	0.903

- (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 approved advisory pure premium rate level changes to bring premium to the advisory September 1, 2022 pure premium rate level.
- (d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the approved advisory pure premium rate level as of September 1, 2022.
- (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 and 2020 to 2022, during which reported premiums were impacted by recessionary economic forces.
- (h) (1) × (2c) × (3) × (6) ÷ [(4) × (5)] for calendar years 2007 to 2010 and 2020 to 2022. (1) × (2c) × (3) ÷ [(4) × (5)] for all other calendar years.

**Accident Year Indemnity Claim Frequency Model
As of PY 2020 1st Set & March 2023 UCLA**

AY	Annual % Changes Intra- Class Ind Freq	Annual Log Differences					
		Intra-Class Indemnity Frequency per \$M Exposure at PY 2020 Level			AY+1 Indemnity		Economic Variables
		Total	Cumulative	Non-cum.	Benefit Level	Cumulative Injury Index	(1st Prin. Comp.)
1979	0.5%	0.005	0.018	0.078	0.000	-0.060	0.129
1980	-6.5%	-0.068	-0.132	-0.066	0.000	-0.066	-0.079
1981	-3.5%	-0.036	-0.028	-0.036	0.033	0.008	-0.077
1982	-1.6%	-0.016	0.153	-0.022	0.000	0.175	-0.285
1983	6.2%	0.060	0.214	0.054	0.352	0.160	0.028
1984	9.5%	0.091	0.235	0.084	0.081	0.151	0.215
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.077
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.075
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.144
1988	0.7%	0.007	0.104	0.000	0.000	0.104	0.084
1989	2.5%	0.024	0.212	0.009	0.000	0.203	0.042
1990	9.0%	0.087	0.337	0.061	0.046	0.276	-0.116
1991	0.3%	0.003	0.166	-0.018	0.071	0.184	-0.282
1992	-10.3%	-0.108	-0.263	-0.089	0.023	-0.174	-0.181
1993	-9.2%	-0.097	-0.175	-0.088	0.013	-0.088	-0.021
1994	-10.5%	-0.111	-0.167	-0.105	-0.057	-0.061	0.103
1995	-0.3%	-0.003	0.009	-0.004	0.061	0.013	0.089
1996	-6.8%	-0.070	-0.165	-0.061	0.053	-0.104	0.072
1997	-3.3%	-0.033	-0.026	-0.034	0.096	0.008	0.132
1998	-3.7%	-0.038	-0.020	-0.040	0.066	0.019	0.075
1999	1.5%	0.015	0.010	0.015	0.058	-0.005	0.122
2000	4.0%	0.039	0.101	0.033	0.040	0.068	0.062
2001	-6.9%	-0.072	0.106	-0.091	-0.003	0.197	-0.096
2002	-2.3%	-0.023	0.202	-0.055	-0.007	0.257	-0.194
2003	-2.9%	-0.029	0.028	-0.038	0.060	0.067	-0.022
2004	-16.7%	-0.182	-0.318	-0.161	-0.065	-0.158	0.090
2005	-13.6%	-0.146	-0.342	-0.120	-0.398	-0.222	0.135
2006	-5.6%	-0.058	-0.204	-0.042	0.051	-0.163	0.090
2007	-1.7%	-0.017	-0.042	-0.015	0.016	-0.027	-0.081
2008	-2.7%	-0.027	-0.012	-0.029	0.049	0.017	-0.296
2009	-0.2%	-0.002	0.134	-0.016	0.069	0.150	-0.414
2010	8.9%	0.085	0.115	0.081	0.016	0.034	-0.090
2011	1.2%	0.012	0.028	0.010	0.000	0.017	0.047
2012	4.7%	0.046	0.115	0.037	0.003	0.077	0.125
2013	0.4%	0.004	0.131	-0.014	0.019	0.145	0.154
2014	0.2%	0.002	0.046	-0.005	0.070	0.051	0.179
2015	-1.5%	-0.015	0.008	-0.018	0.000	0.026	0.194
2016	-2.7%	-0.027	0.031	-0.037	0.000	0.068	0.127
2017	-1.8%	-0.018	-0.075	-0.009	0.000	-0.066	0.130
2018	-0.3%	-0.003	-0.050	0.004	0.000	-0.054	0.124
2019	1.8%	0.018	0.047	0.013	0.000	0.034	0.041
2020	-10.6%	-0.112	0.056	-0.142	0.000	0.198	-0.932
2021*	13.1%	0.109	-0.212	0.173	0.000	-0.385	0.307
2022	4.1%	0.040	0.040	0.040	0.000	0.000	0.548
2023	-0.7%	-0.007	-0.007	-0.007	0.000	0.000	0.115
2024	-1.7%	-0.017	-0.017	-0.017	0.000	0.000	0.028
2025	-1.2%	-0.012	-0.012	-0.012	0.000	0.000	0.073

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020			
Std Err of Y Est	0.044			
R Squared	0.392			
No. of Observations	41			
Degrees of Freedom	37			
X Coefficient(s)		0.187	0.200	0.110
Std Err of Coef.		0.082	0.067	0.048

Notes:

The Indemnity Benefit Level variable is concurrent. The AY 2004 benefit level change is related to the AY 2004 change in non-cumulative frequency. The Indemnity Benefit Level variable excludes indemnity benefit utilization, cost-of-living adjustments, 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 Actuarial Committee item AC14-03-19. The definition of cumulative claims has been further amended to include claims coded with certain nature of injury codes in USR. See Actuarial Committee item AC21-12-09. Economic variables are historical through 2021; March 2023 UCLA Anderson Forecasts for 2022 on. The indicator variable for Cal-OSHA inspections has been moved into an on-level adjustment. See Actuarial Committee item AC21-12-09. Regression is over AY 1979 through AY 2021, excluding 2020 and 2021. AY 2022 through AY 2025 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. The full fitted constant term is -0.031. Without these offsets, the indemnity benefit level and economic variables would project frequency to increase without bound. *AY 2021 is preliminary and change is based on a comparison of 2021 accidents on 2020 policies to 2020 accidents on 2019 policies.

**Projection of Indemnity Severity Trends by Accident Year
Based on Experience as of December 31, 2022**

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	10,000	---	2.141	21,414	---
1991	10,955	9.5%	2.025	22,185	3.6%
1992	11,045	0.8%	1.958	21,627	-2.5%
1993	12,000	8.7%	1.946	23,357	8.0%
1994	12,972	8.1%	2.039	26,445	13.2%
1995	14,574	12.4%	1.899	27,674	4.6%
1996	16,470	13.0%	1.782	29,348	6.1%
1997	19,301	17.2%	1.599	30,858	5.1%
1998	21,161	9.6%	1.475	31,205	1.1%
1999	23,144	9.4%	1.366	31,625	1.3%
2000	24,811	7.2%	1.276	31,650	0.1%
2001	27,181	9.6%	1.277	34,708	9.7%
2002	26,216	-3.6%	1.308	34,287	-1.2%
2003	25,944	-1.0%	1.304	33,827	-1.3%
2004	21,101	-18.7%	1.540	32,502	-3.9%
2005	19,131	-9.3%	1.768	33,827	4.1%
2006	20,824	8.8%	1.638	34,117	0.9%
2007	22,619	8.6%	1.579	35,724	4.7%
2008	24,633	8.9%	1.492	36,757	2.9%
2009	25,819	4.8%	1.483	38,296	4.2%
2010	25,233	-2.3%	1.456	36,727	-4.1%
2011	24,780	-1.8%	1.435	35,570	-3.2%
2012	24,130	-2.6%	1.418	34,207	-3.8%
2013	23,411	-3.0%	1.389	32,520	-4.9%
2014	24,236	3.5%	1.291	31,293	-3.8%
2015	24,529	1.2%	1.273	31,221	-0.2%
2016	23,989	-2.2%	1.257	30,149	-3.4%
2017	24,168	0.7%	1.224	29,582	-1.9%
2018	24,988	3.4%	1.192	29,796	0.7%
2019	26,659	6.7%	1.160	30,929	3.8%
2020	28,180	5.7%	1.127	31,750	2.7%
2021	28,261	0.3%	1.086	30,695	-3.3%
2022	30,211	6.9%	1.055	31,881	3.9%

(6) Estimated Annual Exponential Trend Based on 1990 to 2022: 0.8%

(7) Estimated Annual Exponential Trend Based on 2005 to 2022: -1.1%

(8) Estimated Annual Exponential Trend Based on 2018 to 2022: 1.3%

Selected Indemnity Severity Trend: 1.0%

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

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

**Projection of Medical Severity Trends by Accident Year
Based on Experience as of December 31, 2022**

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	8,840	---	0.964	8,525	---
1991	9,527	7.8%	0.946	9,013	5.7%
1992	9,596	0.7%	0.914	8,770	-2.7%
1993	10,457	9.0%	0.896	9,372	6.9%
1994	11,495	9.9%	0.942	10,825	15.5%
1995	13,270	15.4%	0.933	12,385	14.4%
1996	14,363	8.2%	0.924	13,273	7.2%
1997	16,855	17.3%	0.918	15,467	16.5%
1998	20,548	21.9%	0.809	16,614	7.4%
1999	23,565	14.7%	0.701	16,508	-0.6%
2000	26,457	12.3%	0.644	17,032	3.2%
2001	31,207	18.0%	0.587	18,315	7.5%
2002	31,301	0.3%	0.610	19,079	4.2%
2003	29,893	-4.5%	0.639	19,116	0.2%
2004	27,416	-8.3%	0.846	23,190	21.3%
2005	28,245	3.0%	0.846	23,891	3.0%
2006	30,726	8.8%	0.842	25,887	8.4%
2007	33,997	10.6%	0.827	28,107	8.6%
2008	36,478	7.3%	0.823	30,038	6.9%
2009	38,305	5.0%	0.820	31,418	4.6%
2010	38,182	-0.3%	0.818	31,223	-0.6%
2011	34,341 (c)	---	0.841	28,864 (c)	---
2012	32,058	-6.6%	0.888	28,454	-1.4%
2013	29,550	-7.8%	0.967	28,573	0.4%
2014	28,825	-2.5%	1.029	29,657	3.8%
2015	28,095	-2.5%	1.053	29,589	-0.2%
2016	27,373	-2.6%	1.054	28,858	-2.5%
2017	27,310	-0.2%	1.055	28,820	-0.1%
2018	28,806	5.5%	1.052	30,308	5.2%
2019	29,417	2.1%	1.041	30,614	1.0%
2020	30,735	4.5%	1.027	31,574	3.1%
2021	30,022	-2.3%	1.017	30,536	-3.3%
2022	29,653	-1.2%	1.008	29,890	-2.1%

Selected Medical Severity Trend:

1.5%

- (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 and 2021 changes to the Official Medical Fee Schedule and Medical-Legal Fee Schedule, 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 quarterly experience calls, excluding COVID-19 claims.

**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, 2022**

(1) Accident Year	MCCP Included				MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
	(2) Estimated Ultimate Severity (a)	(3) Annual % Change	(4) Ultimate On-Level Severity (c)	(5) Annual % Change	(6) Estimated Ultimate Severity (a)	(7) Annual % Change	(8) Ultimate On-Level Severity (c)	(9) Annual % Change
2005	28,245	---	23,891	---	26,802	---	22,671	---
2006	30,726	8.8%	25,887	8.4%	28,850	7.6%	24,306	7.2%
2007	33,997	10.6%	28,107	8.6%	31,785	10.2%	26,279	8.1%
2008	36,478	7.3%	30,038	6.9%	33,340	4.9%	27,454	4.5%
2009	38,305	5.0%	31,418	4.6%	35,163	5.5%	28,840	5.0%
2010	38,182	-0.3%	31,223	-0.6%	35,015	-0.4%	28,633	-0.7%
2011	37,573	-1.6%	31,580	1.1%	34,341	-1.9%	28,864	0.8%
2012	34,976	-6.9%	31,045	-1.7%	32,058	-6.6%	28,454	-1.4%
2013	32,299	-7.7%	31,232	0.6%	29,550	-7.8%	28,573	0.4%
2014	31,448	-2.6%	32,357	3.6%	28,825	-2.5%	29,657	3.8%
2015	30,526	-2.9%	32,149	-0.6%	28,095	-2.5%	29,589	-0.2%
2016	29,629	-2.9%	31,237	-2.8%	27,373	-2.6%	28,858	-2.5%
2017	29,554	-0.3%	31,189	-0.2%	27,310	-0.2%	28,820	-0.1%
2018	31,167	5.5%	32,792	5.1%	28,806	5.5%	30,308	5.2%
2019	31,868	2.2%	33,164	1.1%	29,417	2.1%	30,614	1.0%
2020	33,280	4.4%	34,188	3.1%	30,735	4.5%	31,574	3.1%
2021	32,675	-1.8%	33,233	-2.8%	30,022	-2.3%	30,536	-3.3%
2022	32,338	-1.0%	32,598	-1.9%	29,653	-1.2%	29,890	-2.1%
Estimated Annual Exponential Trend								
Trend Based on 1990 to 2022:				4.6%				N/A
Trend Based on 2005 to 2022:				1.4%				1.3%
Trend Based on 2018 to 2022:				-0.1%				-0.3%
Selected Medical Severity Trend:								1.5%

- (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 quarterly experience calls, excluding COVID-19 claims.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1)×(2)÷(3)
1987	0.347	1.721	1.636	0.365
1988	0.332	1.695	1.434	0.393
1989	0.345	1.670	1.379	0.418
1990	0.400	1.339	1.282	0.418
1991	0.428	1.103	1.160	0.406
1992	0.352	1.163	1.055	0.388
1993	0.289	1.411	1.021	0.400
1994	0.329	1.475	1.154	0.420
1995	0.474	1.366	1.516	0.427
1996	0.532	1.277	1.555	0.437
1997	0.603	1.143	1.508	0.457
1998	0.654	1.055	1.528	0.452
1999	0.686	0.977	1.452	0.462
2000	0.595	0.912	1.149	0.472
2001	0.494	0.913	0.981	0.460
2002	0.369	0.935	0.751	0.459
2003	0.244	0.932	0.532	0.427
2004	0.145	1.276	0.484	0.383
2005	0.125	1.730	0.536	0.402
2006	0.161	1.700	0.690	0.397
2007	0.222	1.639	0.882	0.413
2008	0.282	1.539	1.065	0.407
2009	0.330	1.508	1.149	0.433
2010	0.319	1.480	1.045	0.451
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
2023				Projections (d) 0.371
2024				0.368
9/1/2024				0.368

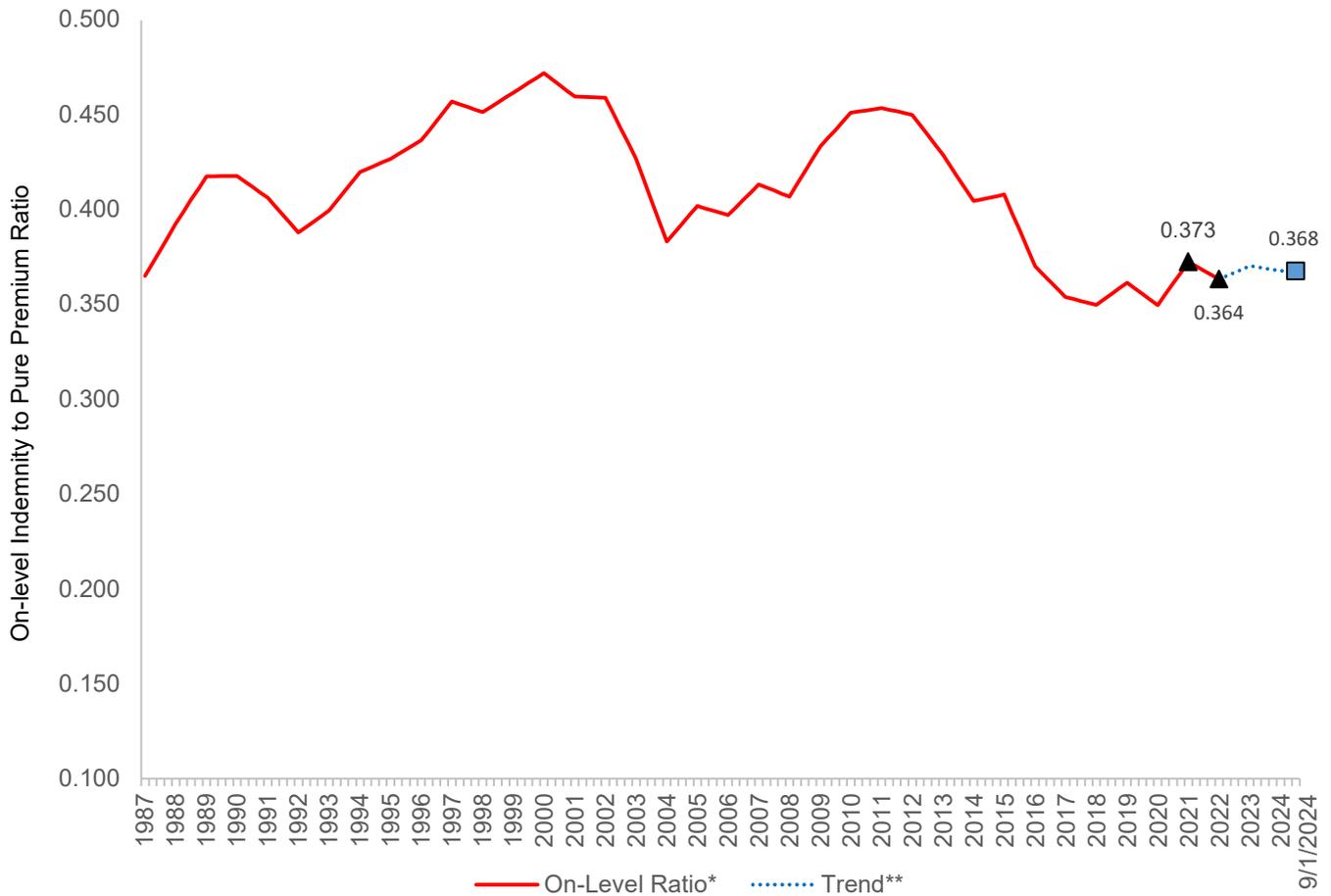
(a) See Exhibit 3.1.

(b) See Exhibit 4.1.

(c) See Exhibit 5.2.

(d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the intra-class frequency changes for accident year 2022 from Appendix B, Exhibit 2 and frequency model projections for accident years 2023 to 2025 from Exhibit 6.1. The annual indemnity severity growth estimates are from Exhibit 6.2.

**On-Level Indemnity Loss to Pure Premium Ratios
Based on Experience as of December 31, 2022**



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

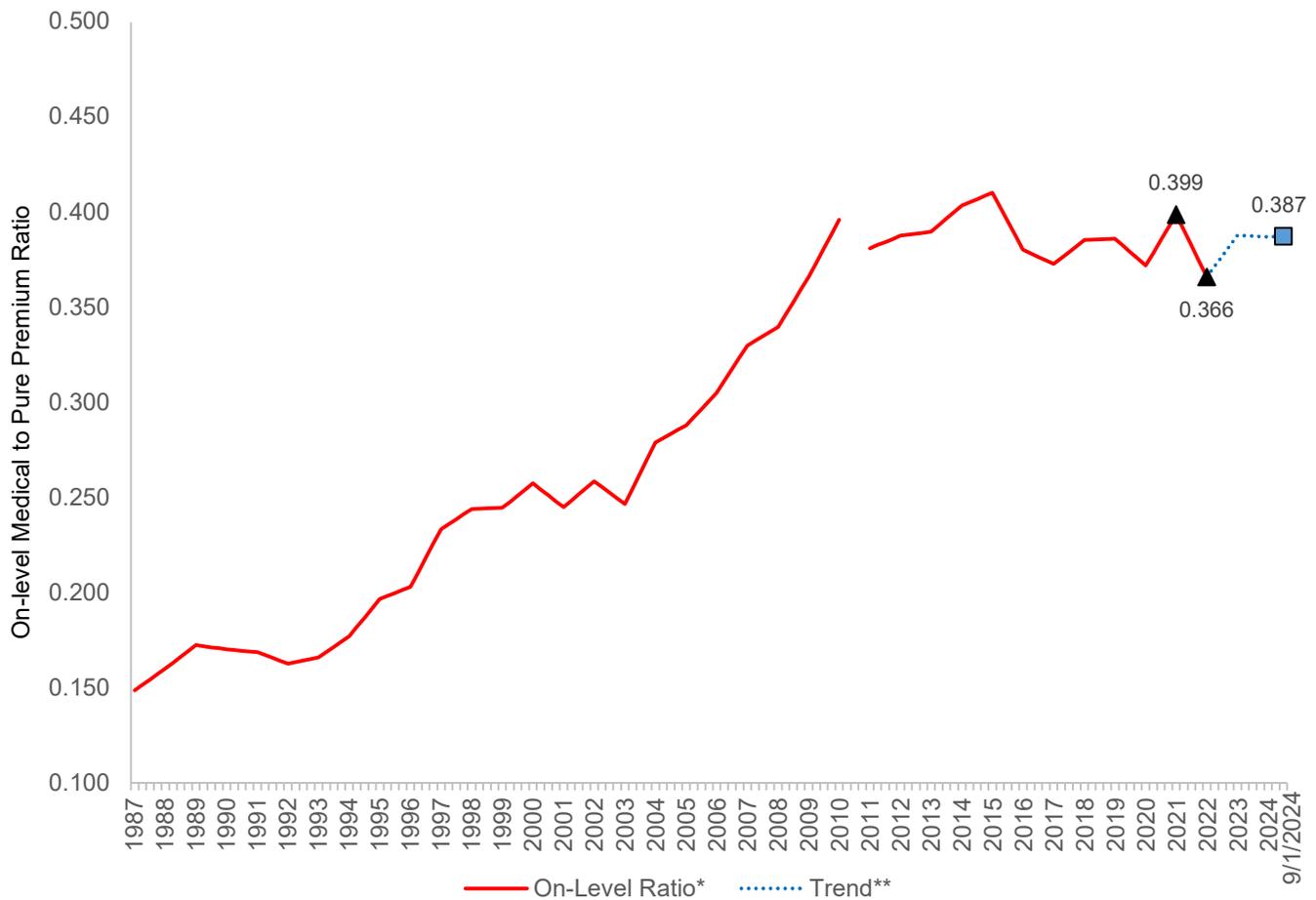
** The 9/1/2024 indemnity to pure premium ratio was calculated based on separate frequency and severity trends applied to the 2021 and 2022 years.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical On-Level Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio (e) $(1) \times (2) \div (3)$
1987	0.286	0.850	1.636	0.149
1988	0.280	0.819	1.434	0.160
1989	0.299	0.795	1.379	0.173
1990	0.339	0.644	1.282	0.170
1991	0.356	0.551	1.160	0.169
1992	0.296	0.581	1.055	0.163
1993	0.244	0.696	1.021	0.166
1994	0.281	0.729	1.154	0.177
1995	0.415	0.719	1.516	0.197
1996	0.446	0.709	1.555	0.203
1997	0.501	0.702	1.508	0.233
1998	0.603	0.619	1.528	0.244
1999	0.663	0.536	1.452	0.245
2000	0.601	0.493	1.149	0.258
2001	0.535	0.449	0.981	0.245
2002	0.416	0.467	0.751	0.259
2003	0.268	0.489	0.532	0.247
2004	0.183	0.740	0.484	0.279
2005	0.180	0.859	0.536	0.288
2006	0.233	0.903	0.690	0.305
2007	0.329	0.886	0.882	0.330
2008	0.411	0.880	1.065	0.340
2009	0.485	0.868	1.149	0.366
2010	0.479	0.865	1.045	0.396
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.279	1.026	0.743	0.385
2019	0.310	1.022	0.823	0.386
2020	0.318	1.018	0.873	0.371
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
2023				Projections (d) 0.387
2024				0.386
9/1/2024				0.387

- (a) See Exhibit 3.2. Medical loss ratios for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Ratios for accident years 2010 and prior do reflect MCCP costs.
- (b) See Exhibit 4.4.
- (c) See Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the intra-class frequency changes for accident year 2022 from Appendix B, Exhibit 2 and frequency model projections for accident years 2023 to 2025 from Exhibit 6.1. The annual medical severity growth estimates are from Exhibit 6.4.
- (e) Accident years 2011 and subsequent do not reflect the paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**On-Level Medical Loss to Pure Premium Ratios
Based on Experience as of December 31, 2022**



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

** The 9/1/2024 medical to pure premium ratio was calculated based on separate frequency and severity trends applied to the 2021 and 2022 years.

Indicated Loss to Pure Premium Ratios
For Policies with Effective Dates between September 1, 2023 and August 31, 2024
Based on Experience as of December 31, 2022

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Projected Loss to Advisory Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.368	0.387	0.755
2. Projected Loss Adjustment Expense Factor (ALAE + MCCP + ULAE, See Appendix C)			1.317
3. Indicated Total Loss and Loss Adjustment Expense to Advisory Pure Premium Ratio (1) x (2)			0.994
4. Difference in Off-Balance Factor (See Part A, Section C, Appendix B of the WCIRB's September 1, 2023 Regulatory Filing)			0.9%
5. Indicated Overall Change in Advisory Pure Premium Rates [(3) x [(4) + 1.0] - 1.0]			0.3%

Section B

Appendix A

Loss Development Methodology

The pure premium rates effective September 1, 2023 are intended to reflect the final or ultimate cost of losses and loss adjustment expenses on all claims that arise on policies incepting during the September 1, 2023 to August 31, 2024 period. The information shown in Section B, Exhibit 1 reflects paid and incurred (paid plus case reserves) loss amounts reported for each accident year as of December 31, 2022. However, since workers' compensation claims incurred in a particular year will be paid out over many years and pure premium rates are intended to reflect the ultimate cost of losses and loss adjustment expenses, the WCIRB develops the reported cost of claims for each accident year that are valued as of December 31, 2022 to a final, or ultimate, cost basis.

The WCIRB generally estimates the development of more recent accident year losses based on the historical development patterns of more mature accident years. The development of both historical paid losses and incurred losses for each accident year is reviewed. The historical incurred loss development in each evaluation period is shown in Section B, Exhibits 2.1.1 and 2.1.2 for indemnity and 2.2.1 and 2.2.2 for medical. The historical paid loss development in each evaluation period is shown in Section B, Exhibits 2.3.1 and 2.3.2 for indemnity and 2.4.1 and 2.4.2 for medical.¹ These factors represent the year-to-year changes, based on successive December 31 evaluations, in the reported aggregate cost of all claims that occurred during a particular year. The changes in reported incurred losses may result from (a) claims that have occurred but had not yet been reported at the time of the prior evaluation, (b) reopening of previously closed claims as further disability payments or the need for further medical treatment arises, or (c) changes in the estimated cost of open claims as additional information becomes available or the claim is settled. Changes in the paid losses reported for each accident year occur as additional payments are made to injured workers for statutory indemnity benefits or for injured workers' medical treatments.

Based on a comprehensive analysis of historical loss development as well as other information relevant to estimating future development, the WCIRB projects the amount of losses reported for each accident year valued as of December 31, 2022 to an ultimate cost basis. The projected ultimate losses are derived based on selected annual loss development, or "age-to-age", factors for each evaluation period. Over the years, the WCIRB has used a number of methodologies to estimate future loss development. Since each methodology is predicated on a different set of underlying assumptions, no single methodology is appropriate for all conditions. As a result, the development methodology upon which the proposed pure premium rates are based is selected following the WCIRB's analysis of the underlying claims environment. This analysis includes a review of incurred and paid loss development and several system diagnostics that may impact incurred or paid loss development patterns.

Loss Development Methodology – Diagnostic Indicators

To assess the validity of the assumptions underlying the various methodologies, the WCIRB reviews a number of diagnostic indicators. Among the key indicators of loss development reviewed are the following:²

¹ Beginning with policies incepting on or after July 1, 2010, the cost of medical cost containment programs (MCCP) is reported as allocated loss adjustment expense (ALAE) rather than as medical loss. The medical loss development factors shown in Section B, Exhibits 2.2, 2.4 and 2.6 for accident years 2009 and prior include MCCP costs reported as medical loss. The medical loss development factors shown in those exhibits for accident years 2012 and subsequent do not include any MCCP costs. For consistency of comparison, the medical loss development factors for accident years 2010 and 2011 shown in those exhibits are computed after moving the portion of MCCP paid costs reported as ALAE into medical loss.

² COVID-19 claims have been removed from accident year 2020 through 2022 information shown in this Appendix given their different cost patterns and relatively higher share of costs during the earlier periods of the pandemic.

1. Ratio of Paid Losses to Incurred Losses. Exhibits 1.1 and 1.2 show the ratios of paid to incurred indemnity and medical losses by accident year at comparable evaluation periods. Changes in ratios of paid to incurred losses can be indicative of changes in the rate at which losses are paid, changes in case reserve levels, shifts in the types of claims, or any combination of these phenomena. After several years of stable ratios of paid to incurred losses, these ratios for both indemnity and medical decreased dramatically starting in the early 1990s, particularly at more mature evaluation periods, suggesting a slowdown in payment patterns. These ratios have generally increased in the post-Senate Bill No. 863 (SB 863) period as claim settlement rates have sped up resulting in payments being made earlier in the claims process. Paid-to-incurred ratios over the most recent calendar year have been generally stable compared to the long-term history.
2. Accident Year Claim Settlement Ratios. The percentage of accident year estimated ultimate indemnity claims closed by evaluation period is shown in Exhibit 2. Following the implementation of SB 863, these ratios increased at a steady rate. The COVID-19 pandemic and resulting stay-at-home orders led to a significant slowdown in the claim settlement process beginning in the second quarter of 2020. For accident years 2021 and 2022, claim settlement rates have begun to increase again. Changes in the claim settlement rates are generally a leading indicator of changes in paid loss development patterns and, if no adjustment for changes in claim settlement rates is made, paid loss development may be distorted. In addition, the longer-term increase in claim settlement rates in the post-SB 863 environment has likely impacted paid and incurred development at later maturities which can distort projected loss development for this period if not adjusted.
3. Mix of Claims by Injury Type. Exhibit 3 shows the mix of claims by type of injury for accident years 2005 through 2021 (which is based on preliminary data). The estimated proportion of claims involving permanent disability has steadily declined over the last several years and has reached a 20-year low in 2021. This shift toward more claims involving temporary disability only, which tend to be less costly and quicker settling than claims involving permanent disability, may impact loss development patterns and measures of ultimate claim severities.
4. Quarterly Loss Development. Exhibits 4.1 through 4.4 show accident year loss development by quarter.³ As shown in Exhibits 4.1 and 4.2, quarterly incurred indemnity and medical loss development has generally increased in the most recent year following a flat to declining period in the prior years. As shown in Exhibits 4.3 and 4.4, quarterly paid indemnity and medical loss development has been generally flat over the most recent year.

Selected Loss Development Methodologies

Based in part on a review of the diagnostic indicators discussed above, the WCIRB has developed ultimate losses for historical accident years to project the loss ratio for policies incepting between September 1, 2023 and August 31, 2024 primarily based on latest year paid loss development adjusted for the impact of reforms and changes in claim settlement rates. The WCIRB has been relying on the adjusted paid loss development approach for many years. Paid and incurred loss development on workers' compensation claims can be significantly impacted by reforms or significant shifts in claim settlement rates. These impacts can be reliably adjusted for in paid loss development patterns using standard actuarial approaches. However, it is more challenging and less intuitive to adjust statewide case reserves for these impacts, which may differ in timing and magnitude by insurer and for which the details underlying the case reserve estimates are less well known.

Earlier this year, the WCIRB conducted a retrospective study of paid and incurred loss development methodologies.⁴ The study showed that, since 2014, both latest year incurred development and adjusted

³ The medical loss development factors shown in Exhibits 4.2 and 4.4 for accident years 2012 and later exclude MCCP costs. The factors shown for accident years 2011 and prior include MCCP costs.

⁴ See Item AC22-12-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

latest year paid development were the most accurate of the loss development methods reviewed in the early development period (through 108 months). However, the study also showed that for loss development after 108 months, projections based on paid loss development were more accurate, more stable, and showed less variability across insurer groups compared to incurred loss development. Later-period incurred medical loss development, in particular, has declined significantly following the reforms of SB 863 and Senate Bill No. 1160 (SB 1160), the acceleration in claim settlement rates, and sharp declines in pharmaceutical costs. Although the WCIRB has developed reasonable adjustments for these changes in payment patterns, these impacts are much more challenging and ambiguous to adjust for in statewide case reserve levels. As a result, the WCIRB continues to believe paid loss development is a more appropriate basis to project ultimate losses.

Specifically, the WCIRB develops indemnity and medical losses by development period as follows:

Indemnity Loss Development from 12 Months to 84 Months

In the last several pure premium rate filings, the WCIRB has based projected indemnity loss development from 12 months through 84 months on the latest year paid indemnity age-to-age loss development factor, adjusted for changes in claim settlement rates. Following a steady period of increasing claim settlement rates in the post-SB 863 period, settlement rates declined during the pandemic period when the overall economy and, in particular, the Workers' Compensation Appeals Board process slowed down with restrictions on in-person activities.

As shown in Exhibit 2, claim settlement rates for accident years 2021 and 2022 are increasing, suggesting a return to the prior environment of generally increasing claim settlement rates. Although the changes in claim settlement rates have moderated from prior periods and are in somewhat offsetting directions by accident year, the WCIRB continues to believe adjusting paid loss development for changes in claim settlement rates improves the overall accuracy of the loss development projections. This method was consistently more accurate than the unadjusted paid method in the WCIRB's recent retrospective review of loss development.

The WCIRB adjusts paid indemnity loss development through 84 months for changing settlement rates based on the Berquist-Sherman approach.⁵ Under this approach, (a) settlement ratios are adjusted to a common level, (b) paid severities on both open and closed claims are adjusted to a level that reflects the adjusted settlement rates for the accident year at the specified evaluation, (c) paid losses on open and closed claims are restated based on the restated closed claims and restated paid severities and (d) adjusted paid development factors are recomputed at a common settlement rate. This methodology is consistent with the approach reflected in the last several pure premium rate filings. Section B, Exhibits 2.5.3 through 2.5.8 show the computation of projected indemnity loss development from 12 months through 84 months adjusted for the impact of changing claim settlement rates.

The WCIRB is projecting indemnity loss development from 12 months through 84 months based on the latest year's paid age-to-age factor adjusted for changes in claim settlement rates. The indemnity loss development projected on this basis is shown in Section B, Exhibit 2.5.1 and column 2 of Section B, Exhibit 3.1.

Indemnity Loss Development from 84 Months to 108 Months

A 2017 WCIRB study of the method to adjust paid loss development for changes in claim settlement rates reviewed the applicability of this adjustment to more mature periods given that indemnity claim settlement rates had also increased during these periods.⁶ The WCIRB found that increases in claim settlement rates for older periods are generally not as significant as increases in less mature periods since

⁵ Berquist, James R. and Sherman, Richard E., "Loss Reserve Adequacy Testing: A Comprehensive, Systematic Approach," *Proceedings of the Casualty Actuarial Society*, PCAS, Volume LXIV, 1977, p.123.

⁶ See Item AC17-03-03 of the March 21, 2017 WCIRB Actuarial Committee Agenda.

significantly fewer claims are open during these periods and the Berquist-Sherman adjustment for changes to claim settlement rates applied to these periods was not significantly improving the accuracy of the projection. As a result, the WCIRB projects future indemnity development from 84 months through 108 months based on the unadjusted latest year paid age-to-age indemnity development factors. The indemnity development factors projected on this basis are shown in Section B, Exhibit 2.5.1 and column 2 of Section B, Exhibit 3.1.

Indemnity Loss Development from 108 Months to 300 Months

A 2012 WCIRB study of longer-term loss development indicated that due to significant random variability in age-to-age development for more mature periods, a longer-term average of paid development factors can increase the stability of the projections.⁷ Therefore, the WCIRB has for a number of years projected paid indemnity development from 108 months to 300 months based on the average of the three most recent years' age-to-age paid indemnity loss development factors. The indemnity development factors projected on this basis are shown in Section B, Exhibits 2.5.1 and 2.5.2 and column 2 of Section B, Exhibit 3.1.

Indemnity Loss Development from 300 Months to 456 Months

Increases in claim settlement rates also likely impact later period loss development as fewer claims being open in more mature periods for a particular accident year compared to prior years at the same maturity should lead to fewer future payments on that accident year being made. A 2020 WCIRB study of longer-term loss development showed that there is a strong correlation between changes in the proportion of ultimate claims open at a point in time and changes in later period paid loss development.⁸ The study also showed that the correlation between these two measures was stronger when the difference between the accident years underlying the historical age-to-age factors and the accident year to be developed is greater. For example, to project accident year 2021 from 300 months to 456 months, age-to-age development data from accident years 1997 and prior are used (an over 20-year difference). If no adjustment to loss development is made, paid loss development utilized from these older accident years with a much larger share of open claims will likely overstate the expected payments to emerge on more recent accident years in which claim settlement rates have increased and relatively fewer claims are open.

Although claim settlement rates for recent accident years have declined, these rates remain well above the levels underlying loss development from accident years aged 300 months and older. As a result, the WCIRB adjusts paid loss development applied after 300 months for the post-SB 863 acceleration in claim settlement rates impacting later period development using an approach consistent with that used in the last several pure premium rate filings and summarized below.

Section B, Exhibits 2.5.9 through 2.5.12 show the adjustment applied to paid indemnity development from 300 months through 408 months for accident years 2021 and 2022. Item 1 of Section B, Exhibit 2.5.9 shows reported closed indemnity claim counts based on WCIRB aggregate financial data. Item 2 of Section B, Exhibit 2.5.9 shows projected ultimate indemnity claim counts based on the latest year indemnity claim count development factors (see Section B, Exhibit 2.5.3). Item 3 of Section B, Exhibit 2.5.9 shows projected ultimate indemnity claim settlement ratios based on Items 1 and 2. Item 4 of Section B, Exhibit 2.5.10 shows incremental indemnity claim disposal rates, which is equal to (a) the difference in the ultimate indemnity claim settlement ratio from the prior evaluation divided by (b) 1.0 minus the indemnity claim settlement ratio from the prior evaluation from Item 3 of Section B, Exhibit 2.5.9. This represents the rate of incremental claim closure compared to the total estimated (reported and not yet reported) number of open indemnity claims at the prior evaluation. A three-year average of this disposal rate is selected to compute the rate of open claims compared to prior open claims (i.e., 1.0 minus the selected disposal rate) to mitigate volatility in this adjustment.

⁷ See Item AC11-12-04 of the March 20, 2012 WCIRB Actuarial Committee Agenda.

⁸ See Item AC19-08-05 of the August 4, 2020 WCIRB Actuarial Committee Agenda.

Item 5 of Section B, Exhibit 2.5.10 shows the projected number of open indemnity claims. The first (italicized) figure shown for each evaluation period is based on reported indemnity claim count information while the remaining figures are based on the latest reported claim counts and the projected open claim rate computed in Item 4. Item 6 of Section B, Exhibit 2.5.11 shows the projected ratio of open indemnity claims to ultimate indemnity claims based on Item 5 of Section B, Exhibit 2.5.10 and Item 2 of Section B, Exhibit 2.5.9. The first three (italicized) figures shown for each evaluation period are based on reported data while the remaining figures are projections. A three-year average of this ratio is selected to form the basis from which more recent accident years will compare.

Item 7 of Section B, Exhibit 2.5.11 shows the comparison of the projected ratio of open claims to the selected historical ratio of open claims based on Item 6. As shown for accident years 2021 and 2022, the ratio of open claims is projected to be significantly lower for these years compared to the historical data from which age-to-age development for each of these maturities is projected. Item 8 of Section B, Exhibit 2.5.12 shows the three-year average paid indemnity and medical age-to-age factors prior to the adjustment, which is based on Section B, Exhibits 2.3.2 and 2.4.2. Item 9 of Section B, Exhibit 2.5.12 shows the selected adjustment to paid loss development for the impact of claim settlement rate changes, which is based on Item 7 of Section B, Exhibit 2.5.11. The selected adjustment factors to loss development are tempered to 40% of the actual change as the WCIRB found that only approximately 40% of the change in the proportion of open claims was predictive of the change in future paid development. Item 10 of Section B, Exhibit 2.5.12 shows the paid indemnity and medical age-to-age development factors for accident years 2021 and 2022 adjusted for the impact of claim settlement rate changes, which is based on Item 9 multiplied by the development portion (i.e., the age-to-age factor minus 1.0) of the factors in Item 8.

Indemnity claim count information needed to compute the adjustment shown in Section B, Exhibits 2.5.9 through 2.5.12 are only available through 408 months. To project indemnity development from 408 months through 456 months, the WCIRB applied this adjustment using the average projected-to-actual ratio of open claims for the 372-, 384- and 396-month periods (Item 7 of Section B, Exhibit 2.5.11) for the later development periods. The age-to-age indemnity development factors projected on this basis from 300 months through 456 months are shown in Section B, Exhibit 2.5.2 and column 2 of Section B, Exhibit 3.1.

Indemnity Loss Development after 456 Months

Workers' compensation losses continue to show significant development beyond 456 months. The WCIRB uses an inverse power curve fitting approach to project the indemnity loss development beyond 456 months. The WCIRB has found that this approach to compute the loss development tail compared to other methods (a) significantly improves the stability of the loss development tail while not significantly impacting its accuracy, (b) utilizes more complete data based on cumulative development from more recent years as opposed to incremental development from much later periods and (c) does not require additional adjustments applied by the WCIRB as in other approaches.⁹

The WCIRB's most recent study of later-period loss development showed that a tail factor based on the inverse power curve fit to a four-year average of paid loss development was the most stable of the alternative methods reviewed.¹⁰ The WCIRB also believes that the tail development factor should be derived based on the indemnity paid age-to-age factors with the adjustments for the impact of changes in claim settlement rates on latter period development as discussed above as tail development is likely also impacted by this phenomenon. Specifically, the WCIRB projected paid indemnity loss development after 456 months based on (a) fitting an inverse power curve to a four-year average of the 108-to-120 through 348-to-360 months paid indemnity age-to-age factors adjusted for changes in claim settlement rates based on the approach discussed above, (b) extrapolating the fitted factors to 80 development years, and

⁹ See Item AC16-03-03 of the April 5, 2016 WCIRB Actuarial Committee Agenda.

¹⁰ See Item AC19-08-05 of the August 1, 2019 WCIRB Actuarial Committee Agenda.

(c) taking the cumulative product of the extrapolated factors after 456 months. The projected indemnity tail development factor computed on this basis is shown in Section B, Exhibit 2.5.2.

Medical Loss Development from 12 Months to 84 Months

SB 1160 and AB 1244, which became effective in 2017, included a number of provisions related to liens and have reduced the number of lien filings by approximately 70%. A 2018 WCIRB study showed that liens historically represented a significant proportion of paid medical loss development, particularly at mid-maturities. As a result, the age-to-age development factors shown in Exhibits 2.6.1 and 2.6.2 for these periods include payments from liens in significantly greater volumes than are expected to emerge for more recent accident year claims. The WCIRB believes relying on the paid medical development from these periods without adjusting for the reductions in future lien filings will overstate the loss development projection.

The WCIRB has adjusted the cumulative loss development factors projected for 2017 and later to reflect the estimated impact of the SB 1160 and AB 1244 lien-related provisions based on the WCIRB's 2018 loss development study.¹¹ This adjustment is based on a review of medical development with and without any lien payments using the WCIRB's medical transaction data and assuming 70% weight given to the projected medical development with no lien payments (to represent the 70% estimated reduction in lien filings) and 30% weight given to the projected medical development with lien payments. This results in a -1.1% adjustment to the projected cumulative medical loss development factor for accident year 2017 at 72 months. For development earlier than 72 months, the projected cumulative loss development factor is based on the adjusted factor projected for 2017 at 72 months and the age-to-age development emerging on a post-SB 1160 and AB 1244 basis for 2017 and later. This approach is consistent with that reflected in the last several pure premium rate filings.

Since 2013, pharmaceutical costs have decreased significantly. The decreases in pharmaceutical costs have been attributed to a number of factors including implementation of independent medical review and independent bill review, reductions in the number of spinal surgeries, dramatic reduction in the use of opioids in reaction to the national opioid epidemic, anti-fraud efforts, changes in pharmaceutical reimbursement rates from the Medi-Cal based fee schedule, and the drug formulary adopted by the DWC effective January 1, 2018. A 2019 WCIRB study of the impact of the pharmaceutical cost declines on paid medical loss development showed that pharmaceutical costs represent a much larger proportion of later period development than that of earlier periods.¹² If no adjustment to loss development is made, more recent paid medical development emerging for older accident years may be distorted as the numerator of the age-to-age paid medical development factor will contain a much smaller volume of pharmaceutical payments than the denominator.

The WCIRB is correcting this potential distortion in the projected medical age-to-age factors using an approach that is detailed on Exhibits 5.1 and 5.2 and is consistent with that reflected in the last several pure premium rate filings. Exhibit 5.1 shows, for calendar years 2013 through 2018, the distribution of pharmaceutical payments by maturity level and calendar year and the difference in those shares by maturity from the calendar year 2018 level based on WCIRB medical transaction data. In adjusting paid medical loss development, the WCIRB assumed 2018 level of pharmaceutical costs as the baseline and adjusted calendar year 2013 through 2017 medical payments based on the difference between (a) the pharmaceutical share of medical service payments for that calendar year and (b) the pharmaceutical share for calendar year 2018 at the same maturity. The WCIRB reviewed this approach in 2021 and found that 2018 continued to be an appropriate baseline level in this adjustment as the sharp declines in pharmaceutical costs plateaued around 2018.¹³ As shown in Exhibit 5.1, the differences in the pharmaceutical share from 2018 increase gradually by maturity up through approximately 96 months. After 96 months, the differences are somewhat volatile in large part due to the relative sparsity of

¹¹ See Item AC18-03-03 of the March 19, 2018 and March 18, 2019 WCIRB Actuarial Committee Agendas.

¹² See Item AC19-06-03 of the June 14, 2019 WCIRB Actuarial Committee Agenda.

¹³ See Item AC21-12-03 of the December 7, 2021 WCIRB Actuarial Committee Agenda.

payments at these maturities. As a result, the WCIRB based the adjustment after 96 months on the cumulative difference for all maturities older than 96 months.

The process shown in Exhibit 5.1 and described above contemplates calendar years 2013 and forward—periods for which the WCIRB has collected medical transaction data. To adjust payments made in calendar years 2012 and prior, the WCIRB assumed the 2013 pharmaceutical payment pattern approximated that for the earlier calendar years. Exhibit 5.2 shows the adjustment for earlier calendar years based on comparing the cumulative proportion of pharmaceutical costs for calendar year 2013 with that for calendar year 2018 at the same maturity.

The adjusted paid medical age-to-age factors are computed by adjusting pre-2018 medical payments to the 2018 pharmaceutical cost level by calendar year and development period based on the information shown in Exhibits 5.1 and 5.2. Once adjusted, the paid medical age-to-age factors are recomputed on an adjusted basis. The paid medical age-to-age factors adjusted on this basis are shown in Section B, Exhibits 2.4.1, 2.4.2 and 2.6.1. The WCIRB's 2021 review of medical loss development adjustments showed that this approach continues to have a significant impact on the medical loss development projection.¹⁴

Effective March 1, 2021, the DWC adopted significant changes to the Evaluation & Management (E&M) section of the Official Medical Fee Schedule (OMFS). Effective April 1, 2021, the DWC adopted a significant update to the Medical-Legal Fee Schedule (MLFS). These medical fee schedule changes impact medical services on a date-of-service basis rather than an accident date basis. As a result, they impact medical loss development on pre-2021 accident years emerging after the first quarter of 2021. As with other reforms that become effective on a date-of-service basis, if no adjustment is made, these changes may distort paid medical loss development emerging after the first quarter of 2021 as it is based on a mix of pre- and post-fee schedule change payments. The WCIRB is adjusting for this potential distortion by adjusting all medical payments made prior to the first quarter of 2021 to the post-fee schedule changes level and computing the medical paid age-to-age factors based on the adjusted amounts.¹⁵ In this way, age-to-age paid medical loss development factors are effectively “on-leveled” to a post-2021 OMFS and MLFS level.

The WCIRB's adjustment for the 2021 medical fee schedule changes uses the estimated impact of the changes based on the WCIRB's most recent retrospective evaluation of these changes (discussed in Appendix B), which estimates that E&M office visit costs increased by 10% and medical-legal service costs increased by 50%.¹⁶ In the WCIRB's review of the impact of these changes on medical loss development, the WCIRB found that these services differ significantly by accident year and maturity. For example, approximately 1% of accident year 2019 medical service costs evaluated at 12 months were for medical-legal services while approximately 11% of accident year 2013 medical service costs evaluated at 96 months were for medical-legal services. As a result, the WCIRB is varying this adjustment based on the estimated proportion of E&M and medical-legal services by accident year and maturity based on WCIRB medical transaction data. In addition, while the WCIRB believes E&M office visit costs are roughly proportionate in medical costs not reflected in medical transaction data (such as settlements for future medical amounts), the WCIRB does not believe medical-legal service costs are similarly proportionate. As a result, the adjustments to loss development for the 2021 MLFS changes reflect medical legal services as a proportion of total medical costs rather than medical service costs reflected in medical transaction data. The paid medical age-to-age factors adjusted on this basis are shown in Section B, Exhibits 2.4.1, 2.4.2 and 2.6.1.

Changes in claim settlement rates can also significantly affect paid medical loss development. As discussed above, indemnity claim settlement rates have increased steadily over the last several years. As

¹⁴ See Item AC21-12-03 of the December 7, 2021 WCIRB Actuarial Committee Agenda.

¹⁵ See Item AC21-12-10 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

¹⁶ See Item AC22-04-04 of the April 14, 2022 and April 13, 2023 WCIRB Actuarial Committee Agendas for more information.

with indemnity loss development, the WCIRB believes an adjustment to paid medical loss development for the recent changes in claim settlement rates is appropriate. Section B, Exhibits 2.6.3 through 2.6.8 show the adjustment to medical paid loss development for changing claim settlement rates. The methodology used for medical paid development is analogous to that for indemnity, which involves adjustments to both open and closed claims and is applied to the age-to-age paid medical loss development factors adjusted as described above.

The WCIRB's selected age-to-age and cumulative paid medical development factors for development through 84 months, which have been adjusted for the impact of SB 1160 and AB 1244 provisions impacting medical losses, the recent decreases in pharmaceutical costs, the 2021 medical fee schedule changes, and changes in claim settlement rates are shown in Section B, Exhibit 2.6.1 and column 3 of Section B, Exhibit 3.2. As with indemnity, the WCIRB projects medical loss development from 12 months to 84 months using the latest year's age-to-age paid medical loss development factor, adjusted as described above.

Medical Loss Development from 84 Months to 108 Months

The WCIRB projects future medical development from 84 months through 108 months based on the latest year's paid age-to-age medical development factor with adjustments for the decreases in pharmaceutical costs and the 2021 medical fee schedule changes as described above. The medical development factors projected on this basis are shown in Section B, Exhibit 2.6.1 and column 3 of Section B, Exhibit 3.2.

Medical Loss Development from 108 Months to 300 Months

As with indemnity, a 2011 WCIRB study indicated that a longer-term average of paid development factors can increase the stability of paid medical loss projections for more mature periods.¹⁷ Therefore, the WCIRB has projected paid medical development from 108 months to 300 months using the average of the three most recent years' age-to-age paid medical loss development factors adjusted for the impact of decreases in pharmaceutical costs described above. In the WCIRB's review of the impact of the 2021 medical fee schedule changes, the WCIRB found that E&M and medical-legal services represent a small and generally declining share of all medical service payments at later maturities. As a result, the WCIRB is only applying this adjustment to medical paid development through 108 months, corresponding to accident years 2013 and later.¹⁸ The medical development factors projected on this basis are shown in Section B, Exhibits 2.6.1 and 2.6.2 and column 3 of Section B, Exhibit 3.2.

Medical Loss Development from 300 Months to 456 Months

As also discussed above for indemnity development, the post-SB 863 acceleration in claim settlement rates also impacts later period loss development, particularly for medical losses which have significantly more payments in later periods compared to indemnity. The WCIRB adjusted paid medical loss development for periods after 300 months for recent changes in claim settlement rates impacting longer-term loss development using an approach similar to that applied for indemnity. Section B, Exhibits 2.5.9 through 2.5.12 show the computation of this adjustment applied to paid medical development (including the adjustment for the decreases in pharmaceutical costs), the results of which are also shown in Section B, Exhibit 2.6.2 and column 3 of Section B, Exhibit 3.2 from 300 months to 456 months.

Medical Loss Development after 456 Months

As with indemnity loss development, the WCIRB recommends using the inverse power curve fitting approach to project the medical loss development tail. Specifically, the WCIRB recommends projecting paid medical loss development after 456 months based on (a) fitting an inverse power curve to a four-year average of the 108-to-120 through 348-to-360 months paid medical age-to-age factors adjusted for the decreases in pharmaceutical costs and the impact of claim settlement rate changes on later period

¹⁷ See Item AC11-12-04 of the December 1, 2011 WCIRB Actuarial Committee Agenda.

¹⁸ See Item AC21-12-10 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

development, (b) extrapolating the fitted factors to 80 development years, and (c) taking the cumulative product of the extrapolated factors after 456 months. The projected medical tail development factor computed on this basis is shown in Section B, Exhibit 2.6.2.

Estimated Ultimate Loss Ratios

The age-to-age development factors selected for each evaluation period are combined in Section B, Exhibits 3.1 (for indemnity) and 3.2 (for medical) to produce a cumulative development factor for each period. These factors reflect the ultimate value of losses anticipated for each accident year relative to the reported paid losses evaluated as of December 31, 2022. These cumulative factors are then applied to the reported (undeveloped) paid indemnity and adjusted paid medical loss ratios as of December 31, 2022 to project an ultimate loss ratio for each accident year. (The adjusted paid and adjusted developed medical loss ratios shown in columns 2 and 5 of Section B, Exhibit 3.2 have been adjusted for the decreases in pharmaceutical costs and the 2021 medical fee schedule changes to be on a comparable basis with the adjusted medical loss development factors described above. These ratios are for the sole purpose of computing the indicated September 1, 2023 pure premium rate level and, as a result, do not reflect the actual WCIRB estimates of ultimate medical loss ratios for those accident years. Column 6 of Section B, Exhibit 3.2 shows, for informational purposes, the estimated ultimate medical loss ratio for each accident year.)

Summary of Alternative Loss Development Projections

As discussed above, the WCIRB is projecting future loss development primarily based on the latest historical year of paid development adjusted for SB 1160 and AB 1244, recent pharmaceutical cost declines, the 2021 medical fee schedule changes, and changes in claim settlement rates. For informational purposes, the WCIRB has computed alternative loss projections based on a number of alternative loss development projection methodologies that reflect underlying assumptions that differ from those reflected in the WCIRB's recommended loss development methodology. These alternative loss development projections are shown in Exhibits 6 through 12 and are discussed below.

Alternative Incurred Loss Development Projections¹⁹

Three-Year Average/Latest Year (Unadjusted) Incurred Loss Development

Exhibits 6.1 through 6.3 (average of the latest 3 years' factors) and 7.1 through 7.3 (latest year's factor) reflect projected future loss development patterns based on historical unadjusted incurred development methodologies. Incurred methodologies are not impacted by changing payment and settlement patterns to the same extent as are paid projections. Also, since the reported incurred amounts far exceed reported paid amounts for relatively immature accident year loss evaluations, incurred loss development is not as highly leveraged for the less mature accident years. However, incurred loss development can be distorted by changes in case reserve levels, can be significantly impacted by legislative or regulatory changes, judicial action, or changes in the definition of losses (e.g., the change in reporting requirements related to MCCP costs), generally shows greater variability across insurers than paid loss development, and can be more volatile and cyclical than paid loss development.

In the WCIRB's most recent retrospective review of loss development, unadjusted latest year incurred loss development was generally as accurate as adjusted paid loss development at earlier maturities. However, unadjusted incurred loss development was less accurate and more volatile than paid loss development at later maturities. In particular, incurred medical loss development after 108 months has been unprecedentedly flat for the last several years.²⁰ The WCIRB believes this is likely the result of a continued reflection of the SB 863 and SB 1160 reforms, the post-SB 863 speed up in claim

¹⁹ All incurred loss development methodologies reflect a six-year average of incurred loss development applied after 108 months.

²⁰ See Item AC22-12-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

settlement rates, and sharp declines in pharmaceutical costs in insurer case reserve levels for claims from older accident years. The WCIRB does not believe these factors are likely to continue indefinitely, and therefore, does not recommend using the recent year incurred development patterns in the loss development projection.

The loss ratios projected under both unadjusted incurred loss development methodologies are below those based on the corresponding paid loss development methodologies. As discussed above, the WCIRB believes paid development to be a more stable and reliable basis to project future development than incurred development particularly for the later periods of development. In addition, given the potential impact of SB 1160 and AB 1244, recent pharmaceutical cost declines, the 2021 medical fee schedule changes, and the recent decreases in claim settlement rates on medical loss development, the WCIRB believes that some adjustment for the impact of these changes is appropriate. Adjustments made to paid development cannot easily be applied to incurred loss development as the specific impact of shifts in development patterns on case reserve estimates and incurred patterns is less well-defined.

Three-Year Average Incurred Loss Development Adjusted for Changes in Average Case Reserve Levels

Incurred loss development projections can be distorted by changes in average case reserve levels. For a number of years, the WCIRB has included an alternative loss development projection which adjusts historical incurred loss development factors to a common case reserve adequacy level in computing future loss development. In 2018, the WCIRB reviewed the assumptions and approach to this methodology and developed several refinements to the traditional actuarial approach.²¹ The WCIRB also found that although the method that adjusts incurred development to a common case reserve level should address shifts in average case reserves, it does not address the inherent volatility that has been observed in incurred loss development patterns. As a result, to mitigate this volatility, the WCIRB based this projection on the average of the three most recent age-to-age factors rather than the latest year's factor.

Exhibits 8.1 through 8.11 reflect projected future incurred loss development with adjustments to an estimated common average case reserve level based on the average of the latest three years' factors. Projections based on this methodology are generally consistent with the unadjusted incurred projections for indemnity and below the unadjusted incurred projections for medical. As discussed above, the WCIRB believes paid development to be a more stable and reliable basis to project future development than incurred development. In addition, due to the nature of the adjustment approach, this method may be particularly volatile during periods of shifting case reserve levels.

Alternative Paid Loss Development Projections²²

Three-Year Average/Latest Year (Unadjusted) Paid Loss Development

Paid projections are not dependent on case reserves and show less variability across insurers than incurred projections. In addition, unadjusted paid projections have generally shown to be more accurate and stable over the entire development period than the corresponding incurred projections in retrospective analyses. However, unadjusted paid projections can be impacted by changing claim settlement and payment patterns and, inasmuch as a relatively small percentage of an accident year's ultimate losses are paid at early maturity levels, paid development projections for immature accident years are more highly leveraged.

²¹ See Item AC18-08-04 of the August 1, 2018 WCIRB Actuarial Committee Agenda.

²² All paid loss development methodologies reflect a three-year average of paid loss development applied after 108 months and adjustments for the impact of changes in claim settlement rates on later period development applied after 300 months.

Exhibits 9.1 through 9.3 (average of the latest three years' factors) and 10.1 through 10.3 (latest year's factor) project future loss development based on historical unadjusted paid loss development. The projections using the WCIRB's selected methodology are in between the projections using these methodologies. As discussed, unadjusted paid projections can be significantly distorted by legislative changes, shifts in the mix of medical services and changes in claim settlement rates. Given the potential impact of SB 1160 and AB 1244, recent declines in pharmaceutical costs, the 2021 medical fee schedule changes, and recent changes in indemnity claim settlement rates on loss development patterns, the WCIRB believes it is appropriate to adjust for these factors. The WCIRB's recent retrospective review also showed that the adjusted paid loss development projections for the period studied were consistently more accurate than the unadjusted projections.

Latest Year Paid Loss Development Adjusted for Reforms

Exhibits 11.1 and 11.2 reflect the latest year paid medical projections after adjustment for the impact of SB 1160 and AB 1244 lien filing related provisions, recent declines in pharmaceutical costs and the 2021 medical fee schedule changes but with no adjustment for changes in claim settlement rates through 84 months. The projection produced by this methodology is consistent with that recommended by the WCIRB. The WCIRB believes the adjustment for changing claim settlement rates is appropriate given the continued shifts in claim settlement rates by accident year. The claim settlement rate-adjusted methodology was also more accurate than the unadjusted method in the WCIRB's recent retrospective review and is consistent with the approach reflected in the last several pure premium rate filings.

Three-Year Average Paid Loss Development Adjusted for Changes in Claim Settlement Rates and Reforms

As discussed above, the recent changes in claim settlement rates can significantly impact paid loss development patterns. However, adjustments for changes in claim settlement rates can be volatile depending on the underlying data and the treatment of partial payments inherent in workers' compensation claims.

Exhibits 12.1 through 12.3 reflect projected future paid loss development using the average of the latest three factors with adjustments to an estimated common claim settlement rate through 84 months as well as the adjustments for SB 1160 and AB 1244, recent pharmaceutical cost declines and the 2021 medical fee schedule changes recommended by the WCIRB for paid medical development. The projection using the WCIRB's selected methodology, which is based on the latest year of age-to-age factors including these adjustments, is slightly higher than the projections using this methodology. The WCIRB recommends utilizing the latest year of development to be responsive to recent loss development patterns.

The projected loss ratios for policies incepting between September 1, 2023 and August 31, 2024 derived based on the loss development methodology selected by the WCIRB as well as each of the alternative loss development methodologies described above are shown in Table 1.

Table 1: Projected Loss Ratios under Alternative Loss Development Methodologies

September 1, 2023 Filing Loss Development Methodology	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Latest Year Paid Adjusted for Reforms and Changes in Claim Settlement Rates	0.368	0.387	0.755

Alternative Loss Development Methodologies²³	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
<u>Incurred Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.340	0.327	0.667
Latest Year (Unadjusted)	0.348	0.341	0.689
Three-Year Average Adjusted for Changes in Case Reserve Levels	0.345	0.314	0.659
<u>Paid Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.363	0.377	0.740
Latest Year (Unadjusted)	0.369	0.400	0.769
Latest Year Adjusted for Reforms	---	0.387	---
Three-Year Average Adjusted for Reforms and Changes in Claim Settlement Rates	0.369	0.373	0.742

²³ All incurred loss development methodologies reflect a six-year average of incurred loss development applied after 108 months. All paid loss development methodologies reflect a three-year average of paid loss development applied after 108 months and adjustments for the impact of longer-term changes in claim settlement rates on later period development applied after 300 months as in the WCIRB's recommended methodology.

Ratios of Paid to Incurred Losses - Indemnity

Accident Year	Evaluated as of (in months):																		
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228
1980										94.9%	95.7%	96.4%	96.8%	97.1%	97.5%	97.5%	97.8%	98.0%	98.2%
1981									94.4%	95.2%	96.1%	96.6%	97.2%	97.6%	97.8%	97.9%	98.2%	98.7%	98.8%
1982								92.6%	94.6%	95.6%	96.2%	96.7%	97.6%	97.8%	98.0%	98.1%	98.2%	98.5%	98.4%
1983							90.9%	93.7%	95.4%	96.4%	97.1%	97.7%	98.1%	98.3%	98.4%	98.5%	98.7%	98.8%	98.9%
1984						88.0%	92.0%	94.5%	95.7%	96.7%	97.5%	97.9%	98.2%	98.5%	98.7%	99.0%	99.0%	99.0%	99.1%
1985					82.1%	88.1%	92.4%	94.4%	96.0%	96.9%	97.4%	97.8%	98.2%	98.5%	98.7%	98.8%	98.9%	99.1%	99.1%
1986				71.7%	81.7%	88.4%	92.3%	94.5%	95.8%	96.8%	97.4%	97.9%	98.1%	98.6%	98.7%	98.9%	98.9%	99.0%	99.0%
1987			54.9%	72.1%	82.9%	88.6%	92.5%	94.7%	96.0%	97.0%	97.3%	98.0%	98.2%	98.4%	98.5%	98.7%	98.8%	98.8%	98.8%
1988		32.3%	55.1%	72.9%	83.0%	89.1%	92.9%	95.0%	96.2%	97.2%	97.9%	98.2%	98.2%	98.4%	98.6%	98.7%	98.9%	99.0%	99.0%
1989	14.9%	31.9%	56.5%	73.4%	83.8%	89.9%	93.2%	95.4%	96.5%	97.3%	97.7%	97.9%	98.1%	98.1%	98.2%	98.3%	98.8%	98.6%	98.8%
1990	17.0%	36.9%	59.8%	76.3%	86.1%	91.2%	94.3%	95.9%	96.9%	97.6%	97.9%	98.0%	98.1%	98.4%	98.6%	98.7%	98.8%	98.9%	99.0%
1991	17.7%	37.7%	60.4%	77.6%	86.7%	91.8%	94.3%	95.9%	96.6%	96.9%	97.1%	97.3%	97.5%	97.8%	98.0%	98.0%	98.3%	98.4%	98.5%
1992	18.3%	38.4%	63.3%	78.6%	87.0%	91.5%	94.1%	95.3%	96.1%	96.3%	96.7%	97.1%	97.2%	97.5%	97.6%	97.6%	98.0%	98.4%	98.5%
1993	18.5%	42.1%	65.3%	79.4%	87.1%	91.3%	93.3%	94.6%	95.1%	95.7%	96.2%	96.4%	96.8%	96.8%	97.0%	97.6%	98.0%	98.2%	98.4%
1994	20.4%	45.5%	68.3%	80.9%	87.3%	90.1%	91.8%	92.7%	93.4%	93.8%	94.4%	95.3%	95.6%	96.1%	97.0%	97.3%	97.5%	97.8%	97.9%
1995	21.9%	48.5%	70.1%	81.3%	86.3%	88.9%	90.2%	91.5%	91.9%	92.6%	93.8%	94.4%	94.9%	95.6%	96.0%	96.3%	96.6%	96.8%	97.1%
1996	24.5%	50.4%	70.5%	80.1%	85.0%	87.4%	88.8%	89.7%	90.9%	92.3%	93.3%	94.1%	95.0%	95.6%	96.1%	96.5%	96.7%	96.9%	97.3%
1997	25.1%	51.4%	69.4%	78.6%	83.1%	86.2%	88.0%	89.7%	91.7%	92.7%	93.6%	94.6%	95.2%	95.5%	96.0%	96.4%	96.8%	97.2%	97.5%
1998	26.5%	50.0%	67.5%	77.1%	81.8%	84.3%	86.9%	89.5%	91.2%	92.7%	93.7%	94.7%	95.3%	95.7%	96.2%	96.7%	97.2%	97.4%	97.7%
1999	27.5%	49.1%	66.1%	76.0%	80.8%	84.9%	88.4%	90.6%	92.3%	93.3%	94.4%	95.2%	95.8%	96.2%	96.6%	97.1%	97.4%	97.8%	98.1%
2000	26.8%	47.1%	65.1%	73.9%	80.9%	86.2%	89.3%	91.4%	92.9%	94.0%	94.8%	95.3%	95.8%	96.5%	96.8%	97.0%	97.4%	97.6%	97.9%
2001	25.6%	47.4%	63.0%	75.0%	82.8%	87.2%	89.8%	91.5%	92.8%	93.8%	94.4%	95.0%	95.5%	96.0%	96.5%	97.0%	97.3%	97.7%	98.0%
2002	25.6%	46.0%	64.6%	77.8%	84.9%	88.4%	90.9%	92.6%	93.5%	94.2%	95.0%	95.8%	96.3%	96.9%	97.2%	97.5%	97.9%	98.2%	98.3%
2003	25.6%	47.6%	67.9%	79.2%	84.7%	87.9%	89.7%	90.8%	91.8%	92.5%	93.6%	94.4%	95.1%	95.6%	96.1%	96.6%	96.9%	97.3%	97.7%
2004	26.1%	51.9%	68.1%	77.8%	83.4%	86.1%	87.9%	89.0%	90.6%	91.9%	93.1%	93.9%	94.6%	95.4%	95.9%	96.3%	96.7%	97.0%	97.2%
2005	31.4%	56.2%	70.1%	78.9%	82.8%	84.8%	86.5%	88.1%	90.4%	91.8%	93.1%	94.0%	94.7%	95.5%	96.0%	96.5%	96.8%	97.0%	
2006	33.2%	56.5%	69.8%	77.2%	81.2%	84.1%	86.7%	89.0%	90.7%	92.2%	93.3%	94.4%	95.1%	95.9%	96.2%	96.8%	97.1%		
2007	34.8%	56.6%	68.8%	76.6%	81.6%	84.9%	87.3%	89.3%	91.2%	92.6%	94.0%	94.8%	95.1%	96.2%	96.6%	96.8%			
2008	36.0%	56.7%	68.7%	76.9%	82.3%	86.1%	88.7%	90.6%	92.0%	93.2%	94.4%	95.1%	95.5%	95.9%	96.4%				
2009	35.5%	54.8%	68.5%	76.8%	82.5%	86.0%	89.1%	91.2%	92.7%	93.9%	94.8%	95.4%	95.9%	96.2%					
2010	35.3%	55.8%	69.1%	78.2%	83.9%	87.6%	90.5%	92.5%	93.9%	94.8%	95.5%	96.2%	96.9%						
2011	34.4%	55.2%	69.7%	77.9%	84.0%	88.1%	91.0%	93.0%	94.4%	95.2%	96.0%	96.5%							
2012	35.8%	56.3%	70.3%	79.7%	85.3%	89.0%	91.5%	93.2%	94.0%	95.0%	95.6%								
2013	34.3%	56.1%	71.7%	81.4%	87.2%	90.6%	92.6%	94.1%	95.2%	96.0%									
2014	34.2%	56.6%	72.5%	81.7%	87.1%	90.6%	92.7%	94.1%	95.3%										
2015	34.0%	56.7%	72.8%	82.2%	87.8%	90.5%	92.7%	94.3%											
2016	34.8%	58.0%	73.9%	83.1%	87.5%	90.5%	92.8%												
2017	34.8%	58.1%	73.5%	81.6%	86.8%	89.9%													
2018	35.3%	57.8%	71.8%	81.0%	86.2%														
2019	35.3%	56.9%	71.5%	80.6%															
2020	35.8%	58.3%	72.5%																
2021	38.8%	59.8%																	
2022	39.9%																		

Ratios of Paid to Incurred Losses - Indemnity

Accident Year	Evaluated as of (in months):																		
	240	252	264	276	288	300	312	324	336	348	360	372	384	396	408	420	432	444	456
1980	98.2%	98.5%	98.6%	98.7%	98.7%	98.8%	98.9%	98.9%	99.2%	99.3%	99.4%								
1981	98.8%	98.9%	99.0%	98.9%	98.8%	98.8%	99.0%	99.1%	99.2%	99.2%	99.3%								
1982	98.6%	98.6%	98.6%	98.6%	98.8%	98.9%	99.1%	99.1%	99.1%	99.2%	99.2%								
1983	99.0%	98.8%	98.9%	99.0%	99.1%	99.2%	99.3%	99.4%	99.4%	99.4%	99.4%	99.4%	99.4%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%
1984	99.1%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	99.4%	99.5%	99.5%	99.5%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%
1985	99.1%	99.2%	99.3%	99.3%	99.4%	99.5%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%
1986	99.0%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	99.3%	99.3%	99.4%	99.5%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	
1987	99.0%	99.1%	99.2%	99.3%	99.4%	99.3%	99.3%	99.4%	99.5%	99.5%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.6%	99.6%	
1988	99.1%	99.1%	99.3%	99.3%	99.3%	99.3%	99.4%	99.4%	99.5%	99.5%	99.6%	99.6%	99.6%	99.6%	99.6%	99.7%			
1989	99.0%	99.0%	99.1%	99.1%	99.3%	99.4%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%				
1990	99.1%	99.2%	99.2%	99.3%	99.4%	99.5%	99.6%	99.6%	99.6%	99.6%	99.7%	99.7%	99.8%	99.8%					
1991	98.6%	98.8%	98.9%	99.0%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	99.4%	99.5%	99.5%						
1992	98.6%	98.7%	98.9%	98.9%	99.1%	99.2%	99.3%	99.3%	99.3%	99.3%	99.4%	99.4%							
1993	98.6%	98.6%	98.8%	98.9%	99.0%	99.1%	99.2%	99.2%	99.4%	99.3%	99.5%								
1994	98.1%	98.3%	98.4%	98.5%	98.7%	98.8%	98.8%	98.8%	99.0%	99.1%									
1995	97.6%	97.8%	98.0%	98.2%	98.4%	98.6%	98.7%	98.8%	98.9%										
1996	97.7%	97.9%	98.0%	98.3%	98.4%	98.6%	98.6%	98.8%											
1997	97.7%	98.0%	98.2%	98.4%	98.6%	98.7%	98.9%												
1998	97.8%	98.0%	98.2%	98.5%	98.5%	98.8%													
1999	98.2%	98.2%	98.5%	98.7%	98.9%														
2000	98.1%	98.2%	98.5%	98.6%															
2001	98.3%	98.5%	98.7%																
2002	98.5%	98.7%																	
2003	97.7%																		

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

Ratios of Paid to Incurred Losses - Medical*

Accident Year	Evaluated as of (in months):																		
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228
1980										93.8%	93.9%	94.0%	93.6%	94.1%	94.3%	94.3%	95.0%	95.1%	95.4%
1981									92.3%	92.8%	94.0%	94.9%	93.9%	94.6%	95.0%	95.6%	96.0%	96.0%	95.9%
1982								90.7%	91.6%	92.9%	93.1%	93.4%	92.5%	93.1%	93.5%	93.0%	94.6%	94.8%	94.1%
1983							91.2%	92.4%	93.6%	94.2%	94.7%	95.1%	95.7%	95.9%	96.1%	96.0%	96.2%	96.3%	96.1%
1984						88.9%	91.0%	92.5%	93.4%	94.2%	94.6%	95.4%	96.0%	96.6%	96.7%	96.8%	96.8%	96.7%	96.7%
1985					86.4%	89.1%	90.9%	92.4%	93.5%	94.1%	94.3%	95.0%	95.8%	96.2%	96.3%	96.3%	96.5%	96.2%	96.4%
1986				80.5%	85.2%	88.9%	91.2%	92.2%	93.1%	93.6%	94.0%	94.8%	95.4%	95.9%	96.1%	96.0%	95.9%	95.3%	95.2%
1987			71.1%	79.9%	85.6%	88.6%	90.8%	91.8%	93.1%	93.4%	93.1%	94.3%	94.7%	95.1%	95.0%	94.9%	93.8%	94.0%	94.8%
1988		59.6%	71.7%	80.4%	85.7%	88.7%	90.8%	92.2%	93.7%	94.2%	95.0%	95.5%	95.3%	95.5%	95.4%	95.0%	95.1%	95.1%	95.3%
1989	34.1%	58.7%	72.4%	81.2%	86.5%	88.8%	91.0%	92.6%	93.4%	94.4%	94.9%	94.9%	94.6%	94.5%	93.4%	93.8%	94.2%	94.8%	94.7%
1990	34.2%	60.5%	73.3%	81.8%	87.3%	90.9%	93.0%	94.3%	94.9%	95.4%	95.4%	95.2%	94.9%	94.7%	94.7%	95.1%	95.3%	95.5%	95.3%
1991	34.3%	58.6%	72.2%	81.7%	87.3%	91.5%	92.9%	94.3%	94.7%	95.0%	94.9%	94.8%	94.6%	94.6%	94.7%	94.4%	94.8%	94.7%	94.8%
1992	34.9%	59.1%	73.3%	82.6%	87.8%	90.7%	92.8%	93.5%	93.9%	93.2%	93.3%	92.4%	92.4%	92.5%	93.2%	93.1%	93.6%	93.8%	94.1%
1993	35.9%	62.8%	75.2%	82.7%	87.2%	89.4%	91.3%	91.7%	91.1%	90.8%	90.1%	90.0%	90.1%	90.4%	90.4%	90.1%	90.4%	90.8%	90.9%
1994	35.7%	62.3%	76.2%	83.5%	87.7%	88.7%	89.5%	88.8%	88.4%	88.0%	87.7%	88.2%	88.3%	89.1%	90.0%	89.3%	89.3%	89.5%	90.1%
1995	37.0%	64.0%	74.5%	81.6%	84.6%	86.5%	85.6%	85.9%	84.6%	84.8%	85.0%	86.2%	86.1%	85.6%	85.8%	86.9%	87.4%	87.4%	89.2%
1996	38.9%	64.8%	76.0%	80.7%	84.2%	84.4%	84.5%	84.0%	84.6%	85.5%	86.0%	87.0%	87.2%	87.4%	87.8%	88.0%	88.9%	88.9%	90.3%
1997	38.1%	65.5%	75.3%	80.4%	82.1%	82.7%	82.1%	82.0%	83.2%	84.7%	85.0%	85.0%	85.9%	86.3%	86.6%	87.6%	88.4%	89.6%	91.1%
1998	39.2%	64.4%	73.4%	77.0%	78.5%	78.2%	79.7%	81.6%	82.8%	82.6%	83.8%	84.6%	85.0%	86.4%	86.9%	87.8%	88.2%	89.3%	90.1%
1999	38.6%	63.7%	71.3%	76.6%	78.1%	80.0%	82.1%	83.5%	83.5%	84.0%	85.1%	85.8%	86.8%	87.4%	87.9%	89.0%	90.5%	91.8%	93.1%
2000	36.9%	60.8%	71.1%	74.7%	78.1%	81.2%	83.4%	83.7%	84.9%	86.0%	86.3%	86.7%	87.0%	88.1%	89.1%	90.3%	91.7%	92.8%	93.7%
2001	36.1%	61.8%	69.7%	75.5%	79.9%	82.4%	83.6%	84.4%	84.7%	84.6%	85.3%	86.1%	87.1%	87.9%	89.4%	90.7%	92.2%	93.0%	93.6%
2002	35.3%	59.8%	69.6%	76.5%	81.9%	83.4%	84.8%	85.6%	86.1%	86.4%	86.9%	88.2%	89.0%	90.5%	91.8%	92.9%	93.8%	94.6%	95.3%
2003	36.0%	59.0%	69.2%	76.5%	80.7%	82.1%	83.4%	83.8%	84.1%	84.8%	86.6%	87.9%	89.2%	90.9%	92.1%	93.1%	93.5%	94.3%	95.4%
2004	33.8%	57.9%	68.3%	74.0%	77.7%	80.1%	80.8%	81.7%	83.2%	84.8%	86.5%	88.1%	89.5%	91.2%	92.5%	93.4%	94.3%	95.1%	95.6%
2005	35.1%	56.7%	66.0%	73.9%	78.3%	79.2%	80.5%	81.8%	83.9%	85.4%	87.5%	88.8%	90.6%	91.9%	93.1%	94.2%	95.0%	95.8%	
2006	35.0%	56.0%	66.0%	72.9%	76.9%	79.3%	81.3%	83.2%	84.8%	86.6%	88.8%	90.5%	91.4%	92.7%	93.5%	94.4%	95.0%		
2007	35.1%	56.8%	66.6%	72.9%	77.0%	79.5%	82.0%	83.9%	85.8%	88.1%	89.3%	90.9%	91.9%	93.4%	94.4%	95.1%			
2008	37.2%	56.6%	66.4%	73.0%	77.3%	80.8%	83.3%	85.3%	87.4%	89.3%	90.8%	91.8%	93.1%	94.1%	94.8%				
2009	37.1%	55.6%	65.6%	72.7%	78.0%	81.3%	84.3%	86.7%	88.8%	90.4%	91.4%	92.5%	93.5%	94.1%					
2010	36.5%	55.8%	66.4%	74.3%	79.5%	83.4%	86.7%	89.2%	91.2%	92.4%	93.6%	94.9%	95.6%						
2011	32.5%	52.1%	64.0%	71.9%	77.6%	82.6%	86.2%	89.1%	90.9%	92.5%	93.6%	94.4%							
2012	32.5%	52.4%	64.7%	73.9%	80.1%	84.3%	87.7%	89.7%	91.2%	92.6%	94.0%								
2013	32.2%	51.5%	65.7%	75.0%	81.4%	85.8%	88.7%	90.7%	92.6%	93.5%									
2014	31.9%	53.1%	67.1%	76.3%	82.6%	86.5%	89.2%	91.2%	92.6%										
2015	31.7%	53.1%	66.7%	76.3%	82.3%	85.9%	89.1%	91.3%											
2016	32.6%	54.0%	67.7%	77.5%	82.5%	86.4%	89.4%												
2017	33.2%	54.7%	68.2%	76.4%	82.1%	85.8%													
2018	33.4%	54.8%	68.0%	77.2%	82.8%														
2019	32.9%	53.2%	67.6%	77.4%															
2020	31.5%	54.3%	68.0%																
2021	32.0%	54.8%																	
2022	31.7%																		

Ratios of Paid to Incurred Losses - Medical*

Accident Year	Evaluated as of (in months):																		
	240	252	264	276	288	300	312	324	336	348	360	372	384	396	408	420	432	444	456
1980	94.7%	95.0%	95.3%	93.9%	93.6%	93.0%	93.3%	93.5%	93.5%	93.1%	93.3%								
1981	95.7%	95.5%	94.9%	94.7%	94.8%	95.2%	95.6%	96.0%	96.2%	96.5%	96.8%								
1982	93.6%	93.5%	93.3%	93.1%	93.7%	94.3%	93.6%	93.6%	94.0%	94.3%	94.1%								
1983	95.8%	94.8%	95.4%	95.7%	95.7%	96.1%	95.9%	96.0%	96.2%	96.0%	96.1%	96.2%	96.3%	96.8%	97.3%	97.8%	98.0%	98.1%	98.2%
1984	96.5%	96.2%	96.4%	96.4%	96.6%	96.6%	96.6%	96.8%	96.9%	97.2%	97.2%	97.4%	97.8%	98.1%	98.2%	98.4%	98.5%	98.8%	98.9%
1985	96.1%	95.8%	95.9%	96.3%	96.6%	96.9%	96.9%	97.0%	96.8%	97.0%	97.0%	97.4%	97.7%	98.0%	98.1%	98.2%	98.4%	98.6%	98.7%
1986	95.3%	95.7%	95.7%	95.8%	95.7%	95.7%	95.6%	95.7%	95.6%	96.0%	96.3%	97.0%	97.3%	97.1%	98.0%	98.1%	98.1%	98.1%	
1987	94.8%	95.4%	95.7%	95.1%	95.7%	95.5%	95.7%	95.9%	95.9%	96.1%	96.6%	96.8%	97.1%	96.8%	96.9%	97.3%	97.5%	97.5%	
1988	95.8%	95.7%	95.7%	95.7%	96.1%	96.1%	96.3%	96.5%	96.5%	96.9%	97.3%	97.7%	97.9%	97.9%	98.3%	98.5%			
1989	94.7%	94.7%	94.7%	94.7%	94.9%	95.5%	95.6%	96.0%	96.4%	96.8%	97.2%	97.3%	97.8%	97.9%	98.3%				
1990	95.1%	95.1%	95.4%	95.7%	95.9%	96.5%	96.6%	96.9%	97.2%	97.6%	98.0%	98.2%	98.5%	98.8%					
1991	94.8%	95.1%	95.3%	95.6%	96.0%	96.2%	96.6%	97.0%	97.5%	97.8%	98.0%	98.2%	98.4%						
1992	94.1%	94.3%	94.7%	94.8%	95.3%	95.8%	96.2%	96.7%	97.1%	97.5%	97.8%	98.1%							
1993	90.5%	91.2%	92.3%	93.0%	93.9%	94.5%	95.1%	96.0%	96.6%	97.0%	97.2%								
1994	90.5%	90.9%	91.6%	92.8%	93.9%	94.2%	94.4%	94.9%	95.5%	96.1%									
1995	89.8%	91.0%	91.2%	93.1%	93.8%	94.5%	95.2%	95.6%	95.9%										
1996	91.2%	92.1%	92.8%	93.9%	94.7%	95.3%	96.1%	96.2%											
1997	91.9%	92.8%	93.6%	94.2%	95.0%	95.6%	95.9%												
1998	91.3%	91.9%	92.5%	93.1%	93.7%	94.7%													
1999	93.8%	94.7%	95.3%	95.9%	96.5%														
2000	94.4%	94.9%	95.7%	96.1%															
2001	94.6%	95.4%	95.8%																
2002	95.9%	96.3%																	
2003	95.7%																		

* 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 calls for experience, excluding COVID-19 claims.

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident Year	Evaluated as of (in months):																	
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	
1997																97.9%	98.2%	
1998																97.6%	97.9%	98.1%
1999														97.2%	97.6%	97.9%	98.1%	
2000													97.1%	97.7%	98.1%	98.3%	98.6%	
2001												95.1%	95.9%	96.4%	96.8%	97.2%	97.6%	
2002											94.5%	95.6%	96.2%	96.7%	97.2%	97.5%	97.9%	
2003										93.6%	95.0%	95.7%	96.2%	96.8%	97.3%	97.7%	98.1%	
2004									92.3%	94.1%	95.1%	95.9%	96.6%	97.1%	97.6%	98.0%	98.3%	
2005								90.6%	92.9%	94.3%	95.3%	96.2%	96.9%	97.4%	97.8%	98.2%	98.4%	
2006							88.0%	90.9%	92.8%	94.2%	95.4%	96.3%	96.9%	97.5%	97.8%	98.1%	98.4%	
2007						84.2%	88.4%	91.1%	92.9%	94.6%	95.7%	96.5%	97.2%	97.7%	98.0%	98.3%		
2008					78.4%	84.4%	88.3%	91.1%	93.4%	94.8%	95.9%	96.7%	97.3%	97.7%	98.0%			
2009				69.6%	78.3%	84.0%	88.2%	91.5%	93.5%	95.0%	96.1%	96.8%	97.3%	97.7%				
2010			59.1%	71.4%	79.9%	85.5%	89.8%	92.6%	94.4%	95.9%	96.7%	97.4%	97.7%					
2011		44.5%	60.5%	72.7%	81.0%	86.6%	90.7%	93.3%	95.2%	96.2%	96.9%	97.5%						
2012	20.9%	45.2%	61.7%	73.9%	82.2%	87.9%	91.6%	94.1%	95.5%	96.5%	97.1%							
2013	20.5%	45.9%	63.0%	75.7%	84.2%	89.3%	92.8%	94.8%	96.1%	96.9%								
2014	20.8%	47.0%	64.7%	77.5%	85.7%	90.4%	93.2%	95.0%	96.2%									
2015	20.9%	48.6%	67.4%	79.8%	87.3%	91.1%	93.6%	95.3%										
2016	21.8%	51.3%	70.0%	81.9%	87.9%	91.5%	93.9%											
2017	24.0%	54.1%	72.1%	82.0%	88.0%	91.6%												
2018	24.5%	54.4%	70.6%	80.9%	87.4%													
2019	24.5%	52.0%	68.3%	79.8%														
2020	23.6%	51.3%	68.1%															
2021	24.7%	53.7%																
2022	25.2%																	

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

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>
2005	46.2%	53.8%	100%
2006	47.3%	52.7%	100%
2007	48.4%	51.6%	100%
2008	50.4%	49.6%	100%
2009	51.8%	48.2%	100%
2010	51.4%	48.6%	100%
2011	51.2%	48.8%	100%
2012	50.4%	49.6%	100%
2013	50.2%	49.8%	100%
2014	50.3%	49.7%	100%
2015	50.5%	49.5%	100%
2016	49.5%	50.5%	100%
2017	47.5%	52.5%	100%
2018	46.4%	53.6%	100%
2019	45.6%	54.4%	100%
2020	43.8%	56.2%	100%
2021*	40.3%	59.7%	100%

II. Distribution of Ultimate Number of All Claims

Accident <u>Year</u>	Permanent <u>Indemnity**</u>	Temporary <u>Indemnity</u>	Medical <u>Only</u>	<u>Total</u>
2005	13.4%	15.7%	70.9%	100%
2006	13.7%	15.2%	71.1%	100%
2007	14.3%	15.3%	70.4%	100%
2008	15.5%	15.2%	69.3%	100%
2009	17.2%	16.0%	66.8%	100%
2010	17.8%	16.8%	65.4%	100%
2011	18.2%	17.4%	64.4%	100%
2012	18.3%	18.0%	63.7%	100%
2013	18.8%	18.7%	62.5%	100%
2014	18.8%	18.6%	62.6%	100%
2015	18.8%	18.4%	62.8%	100%
2016	18.4%	18.8%	62.8%	100%
2017	17.0%	18.8%	64.2%	100%
2018	16.7%	19.2%	64.1%	100%
2019	16.5%	19.7%	63.8%	100%
2020	17.7%	22.7%	59.6%	100%
2021*	15.9%	23.5%	60.6%	100%

* Accident year 2021 experience is partial in that it only reflects experience from policy year 2020.

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

Source: WCIRB unit statistical data

***COVID-19 claims have been excluded

Quarterly Incurred Indemnity Loss Development Factors
Through December 31, 2022

Age in Months	Accident Year																				
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
6/3	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	3.228	--	3.161	3.190
9/6	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	--	1.970	1.915
12/9	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	1.596	--	1.561	1.565
15/12	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	1.261	1.293	
18/15	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	1.169	1.183	
21/18	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	1.122	1.137	
24/21	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	1.094	1.097	1.101	
27/24	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	1.073	1.079		
30/27	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	1.062	1.058		
33/30	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	1.045	1.047		
36/33	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	1.029	1.034	1.038		
39/36	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	1.027	1.029			
42/39	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	1.023	1.027			
45/42	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	1.015	1.023			
48/45	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	1.015	1.018			
51/48	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	1.013	1.014				
54/51	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	1.011	1.011				
57/54	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	1.009	1.009				
60/57	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	1.009	1.010				
63/60	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	1.007	1.008					
66/63	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	1.007	1.008					
69/66	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	1.005	1.006					
72/69	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	1.007	1.007					
75/72	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	1.006	1.005						
78/75	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	1.006	1.003						
81/78	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	1.003	1.004						
84/81	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	1.002	1.005						
87/84	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004	1.006	1.004	1.003	1.002	1.001							
90/87	1.003	1.004	1.008	1.008	1.008	1.008	1.004	1.005	1.005	1.005	1.004	1.004	1.003	1.004							
93/90	1.002	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.004	1.005	1.004	1.003	1.004	1.002							
96/93	1.002	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002							

Source: WCIRB accident year experience calls, excluding COVID-19 claims.

Quarterly Incurred Medical Loss Development Factors *
Through December 31, 2022

Age in Months	Accident Year																				
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
6/3	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	--	2.871	2.930
9/6	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	1.821	1.845	--	1.747	1.766
12/9	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	--	1.429	1.455
15/12	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	1.166	1.172	
18/15	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	1.092	1.103	
21/18	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.069	1.069	1.063	1.060	1.077	1.069	
24/21	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	1.054	1.059	
27/24	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	1.034	1.049		
30/27	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	1.037	1.041		
33/30	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	1.028	1.032		
36/33	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	1.020	1.025		
39/36	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	1.016	1.019			
42/39	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	1.014	1.017			
45/42	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	1.013	1.015			
48/45	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	1.011	1.012			
51/48	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	1.009	1.007				
54/51	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	1.005	1.009				
57/54	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	1.007	1.006				
60/57	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	1.007	1.010				
63/60	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	1.004	1.004					
66/63	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	1.005	1.009					
69/66	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	1.002	1.009					
72/69	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	1.005	1.003					
75/72	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	1.002	1.004						
78/75	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	1.003	1.003						
81/78	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	1.002	1.006						
84/81	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	0.999	1.000						
87/84	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.003	1.001	1.002	1.002	1.001	1.001							
90/87	1.009	1.012	1.009	1.009	1.013	1.008	1.006	1.006	1.003	1.006	1.006	1.001	1.004	1.001							
93/90	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003	1.002	1.004	1.000	1.003	1.002							
96/93	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003	1.002	1.001	1.003	1.002	1.002	1.001							

Source: WCIRB accident year experience calls, excluding COVID-19 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, 2022

Age in Months	Accident Year																				
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
6/3	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	5.083	--	5.102	5.236
9/6	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	--	2.441	2.450
12/9	1.897	1.876	1.841	1.774	1.812	1.834	1.810	1.825	1.861	1.869	1.877	1.866	1.879	1.910	1.882	1.892	1.891	1.902	--	1.847	1.817
15/12	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	1.509	1.505	
18/15	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	1.331	1.333	
21/18	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	1.239	1.241	
24/21	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	1.189	1.186	
27/24	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	1.154	1.148		
30/27	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	1.126	1.126		
33/30	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	1.101	1.104		
36/33	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	1.077	1.083	1.082		
39/36	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	1.066	1.066			
42/39	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	1.057	1.061			
45/42	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	1.045	1.052			
48/45	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	1.037	1.039	1.042			
51/48	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	1.031	1.031				
54/51	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	1.030	1.029				
57/54	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	1.024	1.026				
60/57	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	1.021	1.022				
63/60	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	1.016	1.017					
66/63	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	1.016	1.017					
69/66	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	1.015	1.015					
72/69	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	1.011	1.013					
75/72	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	1.011	1.012						
78/75	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	1.012	1.012						
81/78	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	1.009	1.009						
84/81	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	1.009	1.010						
87/84	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010	1.011	1.010	1.007	1.006	1.008							
90/87	1.008	1.008	1.011	1.012	1.013	1.012	1.011	1.010	1.010	1.010	1.009	1.007	1.007	1.007							
93/90	1.007	1.008	1.012	1.011	1.011	1.012	1.010	1.010	1.009	1.009	1.008	1.007	1.006	1.006							
96/93	1.007	1.007	1.008	1.011	1.011	1.008	1.010	1.010	1.009	1.010	1.007	1.007	1.007	1.007	1.005						

Source: WCIRB accident year experience calls, excluding COVID-19 claims.

Quarterly Paid Medical Loss Development Factors *
Through December 31, 2022

Age in Months	Accident Year																				
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
6/3	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	4.982	--	6.124	6.038
9/6	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	--	2.232	2.369
12/9	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	--	1.719	1.751
15/12	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	1.426	1.433	1.436	1.437	
18/15	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	1.270	1.272	
21/18	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	1.190	1.196	
24/21	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	1.149	1.145	
27/24	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	1.114	1.117		
30/27	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	1.101	1.107		
33/30	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	1.084	1.090		
36/33	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	1.074	1.073		
39/36	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	1.054	1.061			
42/39	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	1.048	1.053			
45/42	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	1.043	1.050			
48/45	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	1.039	1.039			
51/48	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	1.027	1.027				
54/51	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	1.029	1.029				
57/54	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	1.023	1.026				
60/57	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	1.021	1.021				
63/60	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	1.018	1.017					
66/63	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	1.016	1.017					
69/66	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	1.016	1.020					
72/69	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	1.014	1.013	1.014					
75/72	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	1.011	1.012						
78/75	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	1.012	1.015						
81/78	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	1.010	1.010						
84/81	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	1.010	1.010						
87/84	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.011	1.012	1.010	1.008	1.008	1.008							
90/87	1.012	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.011	1.012	1.009	1.008	1.009	1.007							
93/90	1.011	1.013	1.013	1.012	1.014	1.014	1.013	1.011	1.010	1.009	1.010	1.006	1.007	1.007							
96/93	1.010	1.009	1.013	1.015	1.016	1.011	1.012	1.010	1.009	1.009	1.009	1.006	1.007	1.007							

Source: WCIRB accident year experience calls, excluding COVID-19 claims.

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

Age	I. Distribution of Pharma Payments by Development Year ⁽¹⁾										II. Difference in Pharma Payment Share Compared to Calendar Year 2018 ⁽²⁾										III. Difference in Pharma Payment Share - Fixed Percentage for 108-Months & Later									
	Calendar Year										Calendar Year										Calendar Year									
	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018						
12	5.8%	5.1%	4.1%	3.0%	2.3%	1.3%	4.5%	3.8%	2.8%	1.7%	1.0%	0.0%	4.5%	3.8%	2.8%	1.7%	1.0%	0.0%	4.5%	3.8%	2.8%	1.7%	1.0%	0.0%						
24	9.0%	8.8%	6.6%	4.1%	3.2%	1.8%	7.2%	7.0%	4.7%	2.3%	1.3%	0.0%	7.2%	7.0%	4.7%	2.3%	1.3%	0.0%	7.2%	7.0%	4.7%	2.3%	1.3%	0.0%						
36	12.3%	11.9%	9.6%	6.2%	5.0%	3.0%	9.3%	8.9%	6.6%	3.2%	2.0%	0.0%	9.3%	8.9%	6.6%	3.2%	2.0%	0.0%	9.3%	8.9%	6.6%	3.2%	2.0%	0.0%						
48	14.7%	12.8%	10.4%	7.4%	5.9%	4.1%	10.6%	8.7%	6.3%	3.3%	1.8%	0.0%	10.6%	8.7%	6.3%	3.3%	1.8%	0.0%	10.6%	8.7%	6.3%	3.3%	1.8%	0.0%						
60	16.4%	14.9%	11.3%	7.9%	6.4%	4.9%	11.4%	10.0%	6.4%	3.0%	1.5%	0.0%	11.4%	10.0%	6.4%	3.0%	1.5%	0.0%	11.4%	10.0%	6.4%	3.0%	1.5%	0.0%						
72	20.0%	16.3%	13.7%	9.2%	7.1%	5.2%	14.8%	11.0%	8.5%	4.0%	1.9%	0.0%	14.8%	11.0%	8.5%	4.0%	1.9%	0.0%	14.8%	11.0%	8.5%	4.0%	1.9%	0.0%						
84	22.7%	19.4%	15.0%	11.3%	8.3%	5.1%	17.5%	14.2%	9.8%	6.2%	3.1%	0.0%	17.5%	14.2%	9.8%	6.2%	3.1%	0.0%	17.5%	14.2%	9.8%	6.2%	3.1%	0.0%						
96	25.8%	21.8%	17.7%	12.8%	11.1%	6.9%	18.8%	14.9%	10.7%	5.9%	4.1%	0.0%	18.8%	14.9%	10.7%	5.9%	4.1%	0.0%	18.8%	14.9%	10.7%	5.9%	4.1%	0.0%						
108	26.9%	24.2%	18.7%	15.0%	10.6%	10.3%	16.6%	13.9%	8.4%	4.7%	0.3%	0.0%	16.6%	13.9%	8.4%	4.7%	0.3%	0.0%	16.6%	13.9%	8.4%	4.7%	0.3%	0.0%						
120	29.7%	26.4%	22.2%	15.4%	14.0%	9.3%	20.4%	17.1%	12.9%	6.1%	4.7%	0.0%	20.4%	17.1%	12.9%	6.1%	4.7%	0.0%	20.4%	17.1%	12.2%	5.9%	2.4%	0.0%						
132	30.5%	27.9%	22.7%	17.5%	12.9%	11.2%	19.3%	16.7%	11.5%	6.3%	1.7%	0.0%	19.3%	16.7%	11.5%	6.3%	1.7%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
144	30.7%	27.7%	24.4%	18.4%	15.7%	11.3%	19.4%	16.5%	13.1%	7.1%	4.4%	0.0%	19.4%	16.5%	13.1%	7.1%	4.4%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
156	35.4%	26.1%	23.7%	19.0%	16.9%	12.8%	22.5%	13.3%	10.8%	6.1%	4.0%	0.0%	22.5%	13.3%	10.8%	6.1%	4.0%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
168	38.5%	33.2%	22.9%	17.1%	15.7%	15.6%	22.9%	17.6%	7.2%	1.5%	-0.6%	0.0%	22.9%	17.6%	7.2%	1.5%	-0.6%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
180	37.5%	37.4%	29.2%	15.6%	13.6%	14.2%	23.3%	23.2%	15.0%	10.9%	0.5%	0.0%	23.3%	23.2%	15.0%	10.9%	0.5%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
192	32.2%	34.2%	31.0%	22.5%	12.1%	11.6%	20.7%	22.7%	19.5%	10.9%	6.7%	0.0%	20.7%	22.7%	19.5%	10.9%	6.7%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
204	37.3%	33.8%	28.2%	22.4%	17.4%	10.7%	26.6%	23.1%	17.5%	11.7%	6.7%	0.0%	26.6%	23.1%	17.5%	11.7%	6.7%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
216	35.7%	34.6%	27.5%	18.1%	16.8%	16.2%	19.5%	18.3%	11.3%	1.8%	0.6%	0.0%	19.5%	18.3%	11.3%	1.8%	0.6%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
228	28.1%	36.2%	31.6%	22.8%	16.0%	15.6%	12.6%	20.7%	16.0%	7.2%	0.5%	0.0%	12.6%	20.7%	16.0%	7.2%	0.5%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
240	38.1%	25.4%	30.1%	27.7%	18.4%	11.8%	26.3%	13.6%	18.3%	15.9%	6.5%	0.0%	26.3%	13.6%	18.3%	15.9%	6.5%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
252	40.4%	36.6%	20.4%	21.3%	24.5%	15.1%	25.3%	21.5%	5.4%	6.2%	9.4%	0.0%	25.3%	21.5%	5.4%	6.2%	9.4%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
264	44.0%	41.0%	33.2%	20.7%	16.2%	16.3%	27.7%	24.7%	17.0%	4.4%	-0.1%	0.0%	27.7%	24.7%	17.0%	4.4%	-0.1%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
276	47.6%	31.4%	28.4%	27.2%	16.7%	14.1%	33.5%	17.2%	14.3%	13.0%	2.6%	0.0%	33.5%	17.2%	14.3%	13.0%	2.6%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
288	38.4%	45.1%	27.1%	14.1%	19.9%	15.0%	23.4%	30.2%	12.1%	-0.9%	4.9%	0.0%	23.4%	30.2%	12.1%	-0.9%	4.9%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
300	26.9%	40.8%	45.0%	20.1%	12.8%	20.3%	6.5%	20.5%	24.6%	-0.3%	-7.5%	0.0%	6.5%	20.5%	24.6%	-0.3%	-7.5%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
312	31.0%	27.4%	34.7%	35.5%	16.5%	11.9%	19.1%	15.4%	22.8%	23.6%	4.6%	0.0%	19.1%	15.4%	22.8%	23.6%	4.6%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
324	29.6%	23.8%	23.9%	32.4%	31.5%	16.2%	13.4%	7.7%	7.7%	16.3%	15.3%	0.0%	13.4%	7.7%	7.7%	16.3%	15.3%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
336	43.4%	27.6%	22.4%	18.7%	24.8%	23.2%	20.2%	4.5%	-0.8%	-4.4%	1.7%	0.0%	20.2%	4.5%	-0.8%	-4.4%	1.7%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
348	37.0%	38.1%	31.1%	16.5%	16.8%	16.7%	20.2%	21.3%	14.3%	-0.2%	0.0%	0.0%	20.2%	21.3%	14.3%	-0.2%	0.0%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
360	31.1%	29.1%	25.8%	18.8%	13.7%	10.8%	20.3%	18.3%	15.0%	8.1%	2.9%	0.0%	20.3%	18.3%	15.0%	8.1%	2.9%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
372	40.7%	30.2%	27.7%	34.3%	23.0%	10.1%	30.5%	20.0%	17.6%	24.1%	12.8%	0.0%	30.5%	20.0%	17.6%	24.1%	12.8%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						
384		23.1%	42.7%	33.3%	29.9%	33.8%			9.0%	-0.5%	-3.8%	0.0%			9.0%	-0.5%	-3.8%	0.0%	17.1%	17.1%	12.2%	5.9%	2.4%	0.0%						
396			5.4%	36.3%	34.8%	45.6%			-40.2%	-9.3%	-10.9%	0.0%			-40.2%	-9.3%	-10.9%	0.0%			12.2%	5.9%	2.4%	0.0%						
408				6.0%	34.6%	35.6%			-29.6%	-1.0%	-20.5%	0.0%			-29.6%	-1.0%	-20.5%	0.0%			12.2%	5.9%	2.4%	0.0%						
420					3.9%	24.4%						0.0%						0.0%			12.2%	5.9%	2.4%	0.0%						
432						2.1%						0.0%						0.0%			12.2%	5.9%	2.4%	0.0%						
Total	15.6%	14.0%	11.1%	7.6%	5.9%	4.1%	11.5%	9.9%	6.9%	3.4%	1.7%	0.0%	11.5%	9.9%	6.9%	3.4%	1.7%	0.0%	11.5%	9.9%	6.9%	3.4%	1.7%	0.0%						
108+	32.7%	29.8%	24.9%	18.6%	15.1%	12.7%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%	20.0%	17.1%	12.2%	5.9%	2.4%	0.0%						

Notes:

⁽¹⁾ Based on WCIRB medical transaction data.

⁽²⁾ For example, the 4.5% for 2013 at 12 months is the difference between the 5.8% for 2013 at 12 months and the 1.3% for 2018 at 12 months from Item I.

Development Age	Difference in Pharma Payment Share for Calendar Years 2012 and Prior Compared to Calendar Year 2018		
	(A) CY2012&Prior ⁽¹⁾	(B) CY2018 ⁽²⁾	(C) Difference
0-12	5.8%	1.3%	4.5%
0-24	7.5%	1.5%	6.0%
0-36	8.7%	1.8%	6.9%
0-48	9.5%	2.1%	7.4%
0-60	10.1%	2.3%	7.8%
0-72	10.7%	2.4%	8.3%
0-84	11.3%	2.5%	8.7%
0-96	11.7%	2.7%	9.1%
0-108	12.2%	2.8%	9.3%
0-120	12.6%	2.9%	9.7%
0-132	13.1%	3.0%	10.0%
0-144	13.5%	3.1%	10.4%
0-156	14.0%	3.2%	10.7%
0-168	14.3%	3.4%	10.9%
0-180	14.5%	3.5%	11.1%
0-192	14.7%	3.5%	11.2%
0-204	14.9%	3.6%	11.3%
0-216	15.0%	3.7%	11.3%
0-228	15.1%	3.8%	11.3%
0-240	15.2%	3.8%	11.3%
0-252	15.3%	3.9%	11.4%
0-264	15.3%	3.9%	11.4%
0-276	15.4%	4.0%	11.4%
0-288	15.5%	4.0%	11.5%
0-300	15.5%	4.0%	11.5%
0-312	15.5%	4.0%	11.5%
0-324	15.5%	4.1%	11.5%
0-336	15.6%	4.1%	11.5%
0-348	15.6%	4.1%	11.5%
0-360	15.6%	4.1%	11.5%
0-372	15.6%	4.1%	11.5%
0-384	15.6%	4.1%	11.5%
0-396	15.6%	4.1%	11.5%
0-408	15.6%	4.1%	11.5%
0-420	15.6%	4.1%	11.5%
0-432	15.6%	4.1%	11.5%

Notes:

⁽¹⁾ Based on calendar year 2013 from Exhibit 5.1, Item I.

⁽²⁾ Based on calendar year 2018 from Exhibit 5.1, Item I.

**Developed Loss Ratio Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2) Indemnity		(3)	(4)	(5)	(6) Medical		(7)	(8)	(9)
	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)		
	2011	0.283	1.007	1.033	0.292	0.386	1.002	0.995	0.384	0.676	
2012	0.252	1.005	1.038	0.262	0.328	1.002	0.996	0.327	0.589		
2013	0.211	1.007	1.045	0.221	0.261	1.004	1.001	0.261	0.482		
2014	0.199	1.009	1.054	0.209	0.231	1.006	1.006	0.233	0.442		
2015	0.193	1.009	1.063	0.205	0.216	1.005	1.011	0.218	0.423		
2016	0.181	1.011	1.075	0.195	0.203	1.007	1.018	0.207	0.402		
2017	0.184	1.017	1.093	0.202	0.209	1.010	1.029	0.215	0.417		
2018	0.192	1.027	1.123	0.215	0.220	1.020	1.049	0.231	0.447		
2019	0.215	1.045	1.173	0.252	0.239	1.030	1.081	0.259	0.511		
2020	0.203	1.091	1.279	0.260	0.233	1.057	1.142	0.266	0.526		
2021	0.187	1.233	1.578	0.294	0.229	1.129	1.289	0.295	0.589		
2022	0.095	1.876	2.960	0.280	0.146	1.453	1.874	0.274	0.554		

- (a) Based on Section B, Exhibit 1.
- (b) Based on Section B, Exhibit 2.1.
- (c) Based on Section B, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.292	1.460	0.953	0.447
2012	0.262	1.442	0.848	0.445
2013	0.221	1.410	0.741	0.420
2014	0.209	1.291	0.683	0.396
2015	0.205	1.273	0.652	0.399
2016	0.195	1.257	0.674	0.363
2017	0.202	1.224	0.706	0.350
2018	0.215	1.192	0.743	0.346
2019	0.252	1.160	0.823	0.356
2020	0.260	1.127	0.873	0.336
2021	0.294	1.086	0.907	0.352
2022	0.280	1.055	0.903	0.328
				Projected (d)
2023				0.342
2024				0.340
9/1/2024				0.340

- (a) See Exhibit 6.1.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.384	0.851	0.953	0.343
2012	0.327	0.892	0.848	0.344
2013	0.261	0.979	0.741	0.345
2014	0.233	1.032	0.683	0.352
2015	0.218	1.058	0.652	0.354
2016	0.207	1.060	0.674	0.326
2017	0.215	1.061	0.706	0.324
2018	0.231	1.073	0.743	0.334
2019	0.259	1.063	0.823	0.334
2020	0.266	1.047	0.873	0.319
2021	0.295	1.047	0.907	0.341
2022	0.274	1.008	0.903	0.306
				Projected (d)
2023				0.328
2024				0.327
9/1/2024				0.327

- (a) See Exhibit 6.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Developed Loss Ratio Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2) Indemnity		(3)	(4)	(5)	(6) Medical		(7)	(8)	(9)
	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)		
2011	0.283	1.007	1.033	0.292	0.386	1.002	0.995	0.384	0.676		
2012	0.252	1.005	1.038	0.262	0.328	1.002	0.996	0.327	0.589		
2013	0.211	1.007	1.045	0.221	0.261	1.004	1.001	0.261	0.482		
2014	0.199	1.009	1.054	0.209	0.231	1.006	1.006	0.233	0.442		
2015	0.193	1.006	1.061	0.204	0.216	1.007	1.013	0.219	0.423		
2016	0.181	1.009	1.070	0.194	0.203	1.005	1.018	0.207	0.401		
2017	0.184	1.017	1.088	0.201	0.209	1.013	1.032	0.216	0.417		
2018	0.192	1.029	1.120	0.215	0.220	1.025	1.057	0.233	0.448		
2019	0.215	1.045	1.170	0.252	0.239	1.032	1.091	0.261	0.513		
2020	0.203	1.101	1.289	0.262	0.233	1.065	1.162	0.271	0.533		
2021	0.187	1.241	1.599	0.298	0.229	1.154	1.341	0.307	0.605		
2022	0.095	1.913	3.059	0.290	0.146	1.463	1.962	0.287	0.576		

- (a) Based on Section B, Exhibit 1.
- (b) Based on Section B, Exhibit 2.1.
- (c) Based on Section B, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Using Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.292	1.460	0.953	0.447
2012	0.262	1.442	0.848	0.445
2013	0.221	1.410	0.741	0.420
2014	0.209	1.291	0.683	0.396
2015	0.204	1.273	0.652	0.398
2016	0.194	1.257	0.674	0.362
2017	0.201	1.224	0.706	0.348
2018	0.215	1.192	0.743	0.345
2019	0.252	1.160	0.823	0.355
2020	0.262	1.127	0.873	0.338
2021	0.298	1.086	0.907	0.357
2022	0.290	1.055	0.903	0.339
				Projected (d)
2023				0.350
2024				0.348
9/1/2024				0.348

- (a) See Exhibit 7.1.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Using Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.384	0.851	0.953	0.343
2012	0.327	0.892	0.848	0.344
2013	0.261	0.979	0.741	0.345
2014	0.233	1.032	0.683	0.352
2015	0.219	1.058	0.652	0.355
2016	0.207	1.060	0.674	0.326
2017	0.216	1.061	0.706	0.325
2018	0.233	1.073	0.743	0.337
2019	0.261	1.063	0.823	0.337
2020	0.271	1.047	0.873	0.325
2021	0.307	1.047	0.907	0.354
2022	0.287	1.008	0.903	0.320
				Projected (d)
2023				0.342
2024				0.341
9/1/2024				0.341

- (a) See Exhibit 7.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

A. Indemnity Case Reserves Per Open Claim

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													33,298
2006												31,748	34,575
2007											32,400	34,776	41,963
2008										32,578	35,161	39,185	44,544
2009									28,696	31,504	35,810	39,960	43,424
2010								24,454	27,223	31,315	35,175	36,944	35,615
2011							22,815	25,446	28,454	32,065	33,116	35,875	
2012						20,642	24,011	27,847	32,521	35,434	37,911		
2013					17,267	19,546	23,238	26,409	28,254	30,712			
2014				16,899	19,852	22,088	24,959	28,010	29,708				
2015			16,147	18,835	21,475	24,271	26,430	28,624					
2016		13,797	16,645	19,482	22,244	24,700	26,901						
2017	9,333	14,947	18,703	21,543	23,864	26,943							
2018	9,931	15,842	19,383	21,555	24,670								
2019	10,359	16,092	18,913	22,044									
2020	10,933	15,736	18,920										
2021	10,043	15,954											
2022	10,339												

B. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													16,374
2006												17,701	18,146
2007											18,722	19,221	19,694
2008										19,976	20,640	21,167	21,640
2009									20,404	21,212	21,897	22,327	22,720
2010								19,630	20,489	21,172	21,645	22,120	22,464
2011							18,413	19,545	20,376	20,933	21,375	21,638	
2012						17,051	18,343	19,357	20,035	20,523	20,838		
2013					15,437	17,104	18,224	19,046	19,587	19,992			
2014				13,775	16,337	17,931	19,003	19,770	20,346				
2015			10,888	14,496	16,893	18,273	19,267	20,015					
2016		6,545	11,038	14,481	16,454	17,824	18,796						
2017	2,591	6,648	11,144	14,345	16,461	17,949							
2018	2,875	7,039	11,390	14,634	16,913								
2019	3,160	7,059	11,449	15,521									
2020	3,295	7,663	12,664										
2021	3,158	7,452											
2022	3,458												

C. Annual Change of Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2005													
2006													10.8%
2007												8.6%	8.5%
2008											10.2%	10.1%	9.9%
2009										6.2%	6.1%	5.5%	5.0%
2010									0.4%	-0.2%	-1.1%	-0.9%	-1.1%
2011								-0.4%	-0.6%	-1.1%	-1.2%	-2.2%	
2012							-0.4%	-1.0%	-1.7%	-2.0%	-2.5%		
2013						0.3%	-0.6%	-1.6%	-2.2%	-2.6%			
2014					5.8%	4.8%	4.3%	3.8%	3.9%				
2015				5.2%	3.4%	1.9%	1.4%	1.2%					
2016			1.4%	-0.1%	-2.6%	-2.5%	-2.4%						
2017		1.6%	1.0%	-0.9%	0.0%	0.7%							
2018	11.0%	5.9%	2.2%	2.0%	2.7%								
2019	9.9%	0.3%	0.5%	6.1%									
2020	4.3%	8.6%	10.6%										
2021	-4.2%	-2.8%											
2022	9.5%												

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

D. Indemnity Case Reserves per Open Claim Adjusted by Paid Indemnity Severity Trend (a)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													25,960
2006												29,348	28,769
2007											34,060	31,868	31,224
2008										30,687	37,551	35,095	34,307
2009									29,794	32,585	39,837	37,018	36,020
2010								28,073	29,918	32,525	39,379	36,675	35,615
2011							26,353	27,952	29,753	32,157	38,888	35,875	
2012						25,595	26,253	27,683	29,255	31,528	37,911		
2013					22,517	25,675	26,082	27,238	28,601	30,712			
2014				19,565	23,829	26,916	27,198	28,274	29,708				
2015			16,267	20,589	24,641	27,430	27,575	28,624					
2016		14,012	16,491	20,568	24,001	26,755	26,901						
2017	7,745	14,233	16,650	20,375	24,011	26,943							
2018	8,596	15,070	17,016	20,785	24,670								
2019	9,447	15,113	17,105	22,044									
2020	9,852	16,406	18,920										
2021	9,440	15,954											
2022	10,339												

E. Indemnity Open Claim Counts

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													4,155
2006												4,778	3,874
2007											5,258	4,243	3,360
2008										6,037	4,695	3,716	2,990
2009									7,053	5,369	4,066	3,270	2,725
2010								8,417	6,240	4,670	3,634	2,908	2,433
2011							10,659	7,539	5,497	4,255	3,426	2,776	
2012						14,548	10,017	7,025	5,304	4,156	3,402		
2013					20,368	13,662	9,175	6,599	4,995	3,915			
2014				30,375	19,377	12,999	9,134	6,618	5,064				
2015			45,536	28,129	17,699	12,560	8,982	6,497					
2016		66,484	42,680	25,929	17,512	12,349	8,756						
2017	82,171	63,082	39,619	25,915	17,459	12,214							
2018	82,505	64,190	43,051	28,212	18,647								
2019	84,109	68,553	47,366	30,527									
2020	74,696	61,153	41,557										
2021	80,849	63,926											
2022	84,188												

F. Total Indemnity Case Reserves Adjusted by Paid Indemnity Severity Trend (in \$000) (b)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													107,865
2006												140,228	111,453
2007											179,090	135,216	104,911
2008										185,261	176,301	130,412	102,579
2009									210,137	174,951	161,975	121,048	98,156
2010								236,277	186,676	151,876	143,103	106,652	86,650
2011							280,896	210,738	163,542	136,827	133,230	99,589	
2012						372,360	262,967	194,463	155,167	131,029	128,972		
2013					458,637	350,768	239,314	179,741	142,862	120,237			
2014				594,293	461,737	349,870	248,425	187,115	150,443				
2015			740,711	579,160	436,114	344,516	247,678	185,968					
2016		931,602	703,838	533,303	420,307	330,399	235,543						
2017	636,414	897,828	659,644	528,014	419,200	329,087							
2018	709,219	967,366	732,562	586,374	460,013								
2019	794,602	1,036,020	810,211	672,952									
2020	735,901	1,003,306	786,238										
2021	763,221	1,019,850											
2022	870,414												

(a) Latest evaluation of each accident year is unadjusted. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average indemnity case reserves by a different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (Item C)

(b) Each amount is derived as the product of the indemnity open claim counts (Item E) and the adjusted average indemnity case reserves per open claim (Item D).

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

J. Indemnity Incurred Loss Development Factors (d)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												1.005
2007											1.007	1.010
2008										1.006	1.007	1.006
2009									1.009	1.010	1.005	1.008
2010								1.012	1.012	1.006	1.004	1.004
2011							1.018	1.011	1.008	1.007	1.005	
2012						1.023	1.015	1.013	1.007	1.007		
2013					1.032	1.021	1.013	1.007	1.006			
2014				1.059	1.029	1.016	1.011	1.006				
2015			1.101	1.047	1.027	1.017	1.009					
2016		1.246	1.095	1.046	1.026	1.017						
2017	1.911	1.241	1.088	1.043	1.029							
2018	1.901	1.228	1.083	1.045								
2019	1.900	1.231	1.101									
2020	1.815	1.241										
2021	1.914											

K. Impact of Adjustments to Common Case Reserve Level (e)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												-0.40%
2007											-0.74%	-0.82%
2008										0.78%	-0.90%	-0.52%
2009									-0.07%	0.37%	-0.92%	-0.37%
2010								-0.50%	-0.40%	0.34%	-0.56%	0.03%
2011							-0.71%	-0.43%	-0.25%	0.70%	-0.70%	
2012						-1.80%	-0.84%	-0.57%	0.04%	0.57%		
2013					-0.91%	-2.01%	-0.71%	-0.13%	-0.06%			
2014				-0.29%	-0.53%	-1.37%	-0.60%	-0.06%				
2015			1.45%	0.14%	-0.55%	-0.91%	-0.31%					
2016		-0.89%	1.19%	0.04%	-0.19%	-0.79%						
2017	10.22%	-0.93%	1.98%	1.09%	-0.08%							
2018	7.27%	-1.42%	2.87%	0.68%								
2019	3.26%	-0.10%	2.80%									
2020	8.68%	-1.75%										
2021	3.82%											

L. Indemnity Incurred Loss Development Factors Adjusted for Changes in Case Reserve Adequacy (f)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												1.001
2007											1.000	1.002
2008										1.014	0.998	1.001
2009									1.008	1.014	0.996	1.004
2010								1.007	1.008	1.009	0.998	1.004
2011							1.012	1.007	1.006	1.014	0.997	
2012						1.005	1.007	1.007	1.007	1.013		
2013					1.023	1.000	1.006	1.006	1.005			
2014				1.056	1.024	1.002	1.005	1.005				
2015			1.117	1.048	1.021	1.008	1.006					
2016		1.235	1.108	1.046	1.024	1.009						
2017	2.106	1.229	1.110	1.054	1.028							
2018	2.039	1.211	1.114	1.052								
2019	1.962	1.230	1.132									
2020	1.973	1.219										
2021	1.986											
3-Year Average	1.973	1.220	1.118	1.051	1.025	1.006	1.006	1.006	1.006	1.012	0.997	1.003

- (d) Development factors are from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item I.
- (e) Each factor represents the change in age-to-age development factors from Item J to those in Item I.
- (f) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item K)] and [the incurred indemnity age-to-age development factors from Section B, Exhibit 2.1.1].

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

A. Medical Case Reserves Per Open Indemnity Claim

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													88,762
2006												79,807	90,133
2007											88,271	92,947	105,261
2008										76,697	85,653	96,408	101,169
2009									65,241	73,783	88,124	96,395	99,478
2010								52,748	58,936	67,958	73,974	73,721	76,782
2011							48,755	55,216	64,237	68,752	72,927	78,363	
2012						39,601	46,012	55,623	62,944	68,635	67,869		
2013					31,792	37,130	44,808	51,834	54,597	61,402			
2014				26,293	31,331	37,317	42,946	48,614	53,983				
2015			23,880	29,272	35,689	40,811	44,409	49,251					
2016		20,261	24,934	29,858	35,333	39,743	44,137						
2017	16,886	21,468	26,870	32,003	37,070	43,068							
2018	17,710	22,377	26,198	30,029	35,400								
2019	17,712	22,024	24,802	28,593									
2020	18,072	21,276	25,271										
2021	17,884	22,011											
2022	18,123												

B. Average Paid Medical Loss Per Closed Indemnity Claim (a)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													20,767
2006												22,291	23,043
2007											24,214	25,138	25,912
2008										25,504	26,591	27,566	28,292
2009									26,154	27,615	28,672	29,254	29,829
2010								25,265	26,628	27,695	28,571	29,290	29,911
2011							22,398	24,047	25,202	25,953	26,638	27,119	
2012						19,368	21,060	22,348	23,327	23,859	24,573		
2013					16,474	18,509	19,882	20,820	21,514	22,097			
2014				13,642	16,347	18,132	19,282	20,114	20,880				
2015			10,431	13,856	16,234	17,713	18,709	19,592					
2016		6,471	10,501	13,518	15,526	16,817	18,039						
2017	2,835	6,662	10,654	13,478	15,473	16,831							
2018	2,982	6,974	11,109	14,019	16,177								
2019	3,426	6,735	10,816	14,200									
2020	2,898	6,944	11,430										
2021	2,857	6,431											
2022	2,880												

C. Annual Change of Average Paid Medical per Closed Claim (b)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2005													
2006													11.0%
2007												12.8%	12.4%
2008											9.8%	9.7%	9.2%
2009										8.3%	7.8%	6.1%	5.4%
2010									4.7%	4.0%	4.0%	4.0%	3.4%
2011									2.7%	1.7%	1.6%	1.4%	
2012									-4.2%	-5.3%	-5.1%	-5.1%	
2013						-4.4%	-5.6%	-6.8%	-7.8%	-7.4%			
2014					-0.8%	-2.0%	-3.0%	-3.4%	-2.9%				
2015				1.6%	-0.7%	-2.3%	-3.0%	-2.6%					
2016			0.7%	-2.4%	-4.4%	-5.1%	-3.6%						
2017		2.9%	1.5%	-0.3%	-0.3%	0.1%							
2018	5.2%	4.7%	4.3%	4.0%	4.5%								
2019	14.9%	-3.4%	-2.6%	1.3%									
2020	-15.4%	3.1%	5.7%										
2021	-1.4%	-7.4%											
2022	0.8%												

(a) Paid medical per closed claim severities for accident year 2010 and 2011 only reflect the paid cost of medical cost containment programs (MCCP) attributable to policies with effective dates prior to July 1, 2010.

(b) The annual changes for accident year 2010, 2011 and 2012 are based on paid medical per total claim for consistency and do not compare to the severities in item B.

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

D. Medical Case Reserves per Open Claim Adjusted by Paid Medical Severity Trend (c)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													51,677
2006												56,638	57,341
2007											57,182	63,873	64,480
2008										60,877	62,797	70,041	70,402
2009									59,682	65,916	67,711	74,331	74,228
2010								57,775	62,496	68,528	70,390	77,296	76,782
2011							53,769	59,352	63,555	69,791	71,509	78,363	
2012						49,562	51,530	56,180	60,309	66,298	67,869		
2013					36,050	47,361	48,646	52,338	55,623	61,402			
2014				27,470	35,774	46,399	47,179	50,564	53,983				
2015			23,063	27,901	35,525	45,324	45,777	49,251					
2016		22,148	23,217	27,220	33,975	43,033	44,137						
2017	17,839	22,801	23,556	27,139	33,861	43,068							
2018	18,768	23,867	24,563	28,230	35,400								
2019	21,561	23,049	23,914	28,593									
2020	18,233	23,766	25,271										
2021	17,977	22,011											
2022	18,123												

E. Total Medical Case Reserves Adjusted by Paid Medical Severity Trend (in \$000) (d)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													214,720
2006												270,621	222,139
2007											300,669	271,013	216,651
2008										367,519	294,831	260,271	210,502
2009									420,942	353,903	275,313	243,061	202,270
2010								486,269	389,945	319,994	255,796	224,776	186,812
2011							573,113	447,467	349,345	296,961	244,990	217,537	
2012						721,028	516,157	394,653	319,878	275,536	230,891		
2013					734,288	647,048	446,348	345,380	277,836	240,389			
2014				834,415	693,190	603,116	430,936	334,631	273,370				
2015			1,050,196	784,837	628,760	569,272	411,169	319,983					
2016		1,472,458	990,912	705,778	594,977	531,411	386,467						
2017	1,465,864	1,438,307	933,264	703,316	591,183	526,032							
2018	1,548,416	1,532,016	1,057,475	796,417	660,110								
2019	1,813,514	1,580,080	1,132,731	872,855									
2020	1,361,942	1,453,356	1,050,189										
2021	1,453,394	1,407,060											
2022	1,525,758												

F. Paid Medical Loss on All Claims

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													3,557,272
2006												3,645,261	3,700,119
2007											3,881,775	3,957,933	4,016,015
2008										3,879,313	3,950,354	4,016,206	4,065,491
2009									3,657,286	3,744,829	3,816,220	3,864,167	3,918,705
2010								3,620,239	3,726,187	3,814,829	3,880,852	3,928,225	3,962,882
2011							3,257,494	3,394,371	3,490,651	3,553,844	3,608,249	3,648,009	
2012						3,050,936	3,221,045	3,344,545	3,421,787	3,488,930	3,538,766		
2013					2,819,797	3,033,160	3,178,831	3,269,786	3,343,064	3,397,765			
2014				2,563,016	2,870,875	3,087,334	3,219,917	3,325,844	3,398,714				
2015			2,177,311	2,650,576	2,944,688	3,128,687	3,266,777	3,363,489					
2016		1,578,568	2,225,857	2,663,169	2,926,324	3,114,452	3,265,205						
2017	690,162	1,637,864	2,278,816	2,683,287	2,961,440	3,171,811							
2018	732,760	1,742,681	2,401,432	2,873,667	3,179,197								
2019	730,337	1,714,086	2,447,644	2,983,976									
2020	619,812	1,545,497	2,235,937										
2021	681,305	1,705,144											
2022	709,773												

- (c) Latest evaluation of each accident year is unadjusted. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average medical case reserves by a different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (Item C)
 - (d) Each amount is derived as the product of the indemnity open claim counts (Exhibit 8.2, Item E) and the adjusted average medical case reserves per open claim (Item D).
- Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

G. Adjusted Total Medical Incurred (in \$000) (e)

Accident Year	Evaluated as of (in months)												
	12	24	36	48	60	72	84	96	108	120	132	144	156
2004													
2005													3,771,992
2006													3,915,882
2007												4,182,444	4,228,945
2008											4,246,832	4,245,185	4,276,477
2009										4,078,229	4,098,732	4,091,532	4,107,228
2010									4,106,508	4,116,132	4,134,822	4,136,648	4,153,001
2011										3,830,607	3,841,838	3,839,996	3,850,805
2012											3,771,963	3,737,202	3,739,197
2013												3,554,085	3,680,208
2014													3,625,178
2015													3,615,166
2016													3,620,900
2017													3,638,154
2018													3,638,472
2019													3,672,084
2020													3,672,084
2021													3,672,084
2022													3,672,084

H. Medical Incurred Loss Development Factors Based on Adjusted Total Medical Incurred

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												1.002
2007											1.011	1.001
2008										1.000	1.007	1.000
2009										1.005	0.998	1.004
2010										1.002	1.005	1.004
2011										1.003	1.003	1.001
2012										1.001	1.006	1.001
2013										0.991	1.001	1.006
2014										1.003	1.000	1.003
2015										1.003	1.003	1.003
2016										1.003	1.003	1.003
2017										1.003	1.003	1.003
2018										1.003	1.003	1.003
2019										1.003	1.003	1.003
2020										1.003	1.003	1.003
2021										1.003	1.003	1.003
Latest Year	1.458	1.096	1.077	1.046	1.041	1.002	1.002	1.003	1.005	1.001	1.003	0.999
3-Yr Average	1.422	1.080	1.064	1.047	1.037	0.995	1.000	1.002	1.005	1.001	1.004	1.001

I. Medical Incurred Loss Development Factors (f)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												1.006
2007												1.001
2008											1.002	1.005
2009											1.006	1.008
2010											1.007	1.009
2011											1.009	1.009
2012											1.009	1.001
2013											1.003	1.003
2014											1.003	1.002
2015											1.005	1.005
2016											0.999	0.999
2017											1.005	1.005
2018											1.005	1.005
2019											1.005	1.005
2020											1.005	1.005
2021											1.005	1.005
2022											1.005	1.005
Latest Year	1.440	1.117	1.051	1.027	1.025						1.007	1.007
3-Yr Average	1.449	1.110	1.054	1.032							1.006	1.006

(e) Each amount is the sum of the adjusted total medical case reserves (Item E) and the total medical paid losses (Item F).
(f) Development factors are from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item H.

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

J. Impact of Adjustments to Common Case Reserve Level (g)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												-0.40%
2007											0.96%	-0.31%
2008										-0.27%	0.23%	0.14%
2009									-0.07%	-0.98%	0.27%	0.09%
2010								-0.49%	-0.48%	-0.38%	0.57%	-0.25%
2011							-0.59%	-0.91%	0.21%	-0.24%	0.13%	
2012						-2.40%	-1.38%	-0.48%	0.12%	0.26%		
2013					1.41%	-2.85%	-0.88%	0.05%	-0.14%			
2014				1.40%	0.81%	-2.16%	-0.71%	-0.35%				
2015			0.03%	1.04%	1.64%	-1.20%	-0.33%					
2016		-6.25%	0.24%	1.35%	1.81%	-1.11%						
2017	-0.93%	-6.55%	0.35%	2.11%	1.58%							
2018	-0.93%	-4.86%	0.64%	1.38%								
2019	-10.83%	-3.27%	1.17%									
2020	4.71%	-5.08%										
2021	-0.35%											

K. Medical Incurred Loss Development Factors Adjusted for Changes in Case Reserve Adequacy (h)

Accident Year	Age-to-Age Development (in months):											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156
2005												
2006												1.002
2007											1.011	1.001
2008										0.999	1.007	1.000
2009									1.005	0.998	1.004	1.003
2010								1.003	1.005	1.001	1.005	0.999
2011							1.004	1.001	1.004	1.002	1.004	
2012						0.991	1.001	1.001	1.006	1.002		
2013					1.036	0.985	0.997	1.001	1.005			
2014				1.049	1.035	0.989	1.003	1.003				
2015			1.064	1.041	1.035	0.995	1.002					
2016		1.054	1.048	1.045	1.035	1.002						
2017	1.427	1.044	1.055	1.049	1.041							
2018	1.436	1.056	1.061	1.046								
2019	1.295	1.087	1.078									
2020	1.513	1.095										
2021	1.458											
3-Year Average	1.422	1.080	1.064	1.047	1.037	0.995	1.001	1.002	1.005	1.001	1.004	1.001

(g) Each factor represents the change in age-to-age development factors from Item I to those in Item H.

(h) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item J)] and [the incurred Medical age-to-age development factors from Section B, Exhibit 2.2.1].

Source: Accident year experience of insurers with available claim count data, excluding COVID-19 claims.

**Developed Loss Ratio 3-Year Average Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2) Indemnity			(4)	(6) Medical			(8)	(9)
	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR (a)	Annual Development Factor (c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)	
2011	0.283	1.003	1.029	0.291	0.386	1.001	0.993	0.383	0.674	
2012	0.252	0.997	1.026	0.259	0.328	1.004	0.998	0.328	0.587	
2013	0.211	1.012	1.039	0.219	0.261	1.001	0.999	0.261	0.480	
2014	0.199	1.006	1.045	0.208	0.231	1.005	1.004	0.232	0.440	
2015	0.193	1.006	1.052	0.202	0.216	1.002	1.006	0.217	0.420	
2016	0.181	1.005	1.057	0.192	0.203	1.001	1.007	0.205	0.396	
2017	0.184	1.006	1.064	0.196	0.209	0.995	1.002	0.210	0.406	
2018	0.192	1.024	1.090	0.209	0.220	1.037	1.039	0.229	0.438	
2019	0.215	1.051	1.145	0.246	0.239	1.047	1.087	0.260	0.506	
2020	0.203	1.118	1.281	0.260	0.233	1.064	1.157	0.270	0.530	
2021	0.187	1.220	1.563	0.292	0.229	1.080	1.250	0.286	0.577	
2022	0.095	1.974	3.084	0.292	0.146	1.422	1.777	0.260	0.552	

- (a) Based on Section B, Exhibit 1.
- (b) Age-to-age factors for developing accident years 2011 to 2022 were adjusted for changes in indemnity case reserve levels based on 3-year average selections (see Exhibit 8.4, Item L).
- (c) Age-to-age factors for developing accident years 2011 to 2022 were adjusted for changes in medical case reserve levels based on 3-year average selections (see Exhibit 8.8, Item K).

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.291	1.460	0.953	0.446
2012	0.259	1.442	0.848	0.440
2013	0.219	1.410	0.741	0.417
2014	0.208	1.291	0.683	0.393
2015	0.202	1.273	0.652	0.395
2016	0.192	1.257	0.674	0.357
2017	0.196	1.224	0.706	0.340
2018	0.209	1.192	0.743	0.336
2019	0.246	1.160	0.823	0.347
2020	0.260	1.127	0.873	0.336
2021	0.292	1.086	0.907	0.349
2022	0.292	1.055	0.903	0.341
				Projected (d)
2023				0.348
2024				0.345
9/1/2024				0.345

- (a) See Exhibit 8.9.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.383	0.851	0.953	0.342
2012	0.328	0.892	0.848	0.344
2013	0.261	0.979	0.741	0.344
2014	0.232	1.032	0.683	0.351
2015	0.217	1.058	0.652	0.352
2016	0.205	1.060	0.674	0.322
2017	0.210	1.061	0.706	0.315
2018	0.229	1.073	0.743	0.331
2019	0.260	1.063	0.823	0.336
2020	0.270	1.047	0.873	0.324
2021	0.286	1.047	0.907	0.330
2022	0.260	1.008	0.903	0.290
				Projected (d)
2023				0.314
2024				0.314
9/1/2024				0.314

- (a) See Exhibit 8.9.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Developed Loss Ratio Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				Total Developed Loss Ratio (4) + (8)
	Reported Paid Loss Ratio (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Paid Loss Ratio (a)	Annual Development Factor (c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	
2011	0.273	1.012	1.086	0.296	0.364	1.012	1.194	0.435	0.732
2012	0.241	1.011	1.098	0.265	0.309	1.012	1.209	0.373	0.638
2013	0.203	1.014	1.114	0.226	0.244	1.015	1.228	0.300	0.525
2014	0.189	1.016	1.131	0.214	0.214	1.018	1.249	0.268	0.482
2015	0.182	1.020	1.154	0.210	0.197	1.022	1.277	0.252	0.462
2016	0.168	1.027	1.186	0.199	0.182	1.031	1.316	0.239	0.439
2017	0.166	1.041	1.235	0.205	0.179	1.045	1.376	0.247	0.452
2018	0.165	1.061	1.310	0.217	0.182	1.066	1.466	0.267	0.484
2019	0.173	1.108	1.452	0.252	0.185	1.103	1.617	0.299	0.551
2020	0.147	1.224	1.777	0.262	0.159	1.198	1.937	0.307	0.569
2021	0.112	1.540	2.736	0.305	0.125	1.418	2.746	0.344	0.649
2022	0.038	2.991	8.184	0.309	0.046	2.447	6.719	0.312	0.621

- (a) Based on Section B, Exhibit 1.
- (b) Age-to-age factors are selected as three-year averages based on Section B, Exhibit 2.5.
- (c) Age-to-age factors are selected as three-year averages based on Section B, Exhibit 2.6. These factors have not been adjusted for any reforms.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.210	1.273	0.652	0.409
2016	0.199	1.257	0.674	0.372
2017	0.205	1.224	0.706	0.355
2018	0.217	1.192	0.743	0.348
2019	0.252	1.160	0.823	0.355
2020	0.262	1.127	0.873	0.338
2021	0.305	1.086	0.907	0.366
2022	0.309	1.055	0.903	0.362
				Projected (d)
2023				0.366
2024				0.363
9/1/2024				0.363

- (a) See Exhibit 9.1.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.435	0.851	0.953	0.389
2012	0.373	0.892	0.848	0.392
2013	0.300	0.979	0.741	0.396
2014	0.268	1.032	0.683	0.405
2015	0.252	1.058	0.652	0.409
2016	0.239	1.060	0.674	0.376
2017	0.247	1.061	0.706	0.371
2018	0.267	1.073	0.743	0.386
2019	0.299	1.063	0.823	0.387
2020	0.307	1.047	0.873	0.368
2021	0.344	1.047	0.907	0.397
2022	0.312	1.008	0.903	0.348
				Projected (d)
2023				0.378
2024				0.377
9/1/2024				0.377

- (a) See Exhibit 9.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Developed Loss Ratio Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				Total Developed Loss Ratio (4) + (8)
	Reported Paid Loss Ratio (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Paid Loss Ratio (a)	Annual Development Factor (c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	
2011	0.273	1.012	1.086	0.296	0.364	1.012	1.194	0.435	0.732
2012	0.241	1.011	1.098	0.265	0.309	1.012	1.209	0.373	0.638
2013	0.203	1.014	1.114	0.226	0.244	1.015	1.228	0.300	0.525
2014	0.189	1.016	1.131	0.214	0.214	1.018	1.249	0.268	0.482
2015	0.182	1.018	1.152	0.209	0.197	1.022	1.277	0.252	0.461
2016	0.168	1.026	1.182	0.199	0.182	1.030	1.315	0.239	0.438
2017	0.166	1.043	1.233	0.204	0.179	1.048	1.378	0.247	0.452
2018	0.165	1.065	1.313	0.217	0.182	1.071	1.476	0.269	0.487
2019	0.173	1.113	1.461	0.253	0.185	1.106	1.633	0.302	0.555
2020	0.147	1.240	1.812	0.267	0.159	1.219	1.990	0.316	0.583
2021	0.112	1.544	2.797	0.312	0.125	1.447	2.880	0.361	0.673
2022	0.038	2.952	8.257	0.312	0.046	2.502	7.205	0.334	0.646

- (a) Based on Section B, Exhibit 1.
- (b) Age-to-age factors are selected as 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 based on Section B, Exhibit 2.5.
- (c) Age-to-age factors are selected as 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 based on Section B, Exhibit 2.6. These factors have not been adjusted for any reforms.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Using Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.217	1.192	0.743	0.349
2019	0.253	1.160	0.823	0.357
2020	0.267	1.127	0.873	0.345
2021	0.312	1.086	0.907	0.374
2022	0.312	1.055	0.903	0.365
				Projected (d)
2023				0.372
2024				0.369
9/1/2024				0.369

- (a) See Exhibit 10.1.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Using Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.435	0.851	0.953	0.389
2012	0.373	0.892	0.848	0.392
2013	0.300	0.979	0.741	0.396
2014	0.268	1.032	0.683	0.405
2015	0.252	1.058	0.652	0.408
2016	0.239	1.060	0.674	0.376
2017	0.247	1.061	0.706	0.372
2018	0.269	1.073	0.743	0.389
2019	0.302	1.063	0.823	0.390
2020	0.316	1.047	0.873	0.379
2021	0.361	1.047	0.907	0.417
2022	0.334	1.008	0.903	0.373
				Projected (d)
2023				0.401
2024				0.400
9/1/2024				0.400

- (a) See Exhibit 10.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Developed Loss Ratios Adjusted for the Impact of Reforms
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2)	(3) Medical	(4)	(5)
			Adjusted		
	<u>Paid Loss Ratio (a)</u>	<u>Paid Loss Ratio (b)</u>	<u>Annual Development Factor (c)</u>	<u>Cumulative Development Factor</u>	<u>Developed Loss Ratio (2) x (4)</u>
2011	0.364	0.342	1.012	1.206	0.413
2012	0.309	0.293	1.013	1.222	0.358
2013	0.244	0.244	1.017	1.242	0.303
2014	0.214	0.218	1.018	1.265	0.276
2015	0.197	0.203	1.022	1.293	0.263
2016	0.182	0.189	1.029	1.330	0.251
2017	0.179	0.187	1.035	1.377	0.257
2018	0.182	0.189	1.068	1.471	0.278
2019	0.185	0.190	1.102	1.621	0.308
2020	0.159	0.160	1.212	1.965	0.315
2021	0.125	0.126	1.440	2.829	0.355
2022	0.046	0.046	2.494	7.056	0.327

- (a) Based on Section B, Exhibit 1.
- (b) See Section B, Exhibit 3.2, Column (2).
- (c) Based on Section B, Exhibit 2.6.1 and includes adjustments for SB 1160 and recent pharmaceutical cost declines.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Adjusted for the Impact of Reforms
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.278	1.026	0.743	0.384
2019	0.308	1.022	0.823	0.382
2020	0.315	1.018	0.873	0.368
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
				Projected (d)
2023				0.387
2024				0.386
9/1/2024				0.387

- (a) See Exhibit 11.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

**Developed Loss Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of December 31, 2022**

Accident Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
	Reported Paid Loss Ratio (a)	Annual Development Factor (b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Paid Loss Ratio (a)	Paid Loss Ratio (c)	Annual Development Factor (d)	Cumulative Development Factor	Developed Loss Ratio (6) x (8)	Total Developed Loss Ratio (4) + (9)
2011	0.273	1.012	1.086	0.296	0.364	0.342	1.012	1.206	0.413	0.709
2012	0.241	1.011	1.098	0.265	0.309	0.293	1.013	1.222	0.358	0.623
2013	0.203	1.014	1.114	0.226	0.244	0.244	1.017	1.242	0.303	0.529
2014	0.189	1.016	1.131	0.214	0.214	0.218	1.018	1.265	0.276	0.490
2015	0.182	1.020	1.154	0.210	0.197	0.203	1.023	1.294	0.263	0.473
2016	0.168	1.027	1.186	0.199	0.182	0.189	1.031	1.334	0.252	0.451
2017	0.166	1.039	1.232	0.204	0.179	0.187	1.032	1.377	0.257	0.461
2018	0.165	1.065	1.313	0.217	0.182	0.189	1.069	1.471	0.278	0.495
2019	0.173	1.122	1.473	0.255	0.185	0.190	1.110	1.633	0.310	0.565
2020	0.147	1.240	1.826	0.269	0.159	0.160	1.205	1.967	0.316	0.585
2021	0.112	1.515	2.767	0.309	0.125	0.126	1.399	2.753	0.346	0.655
2022	0.038	3.010	8.328	0.315	0.046	0.046	2.453	6.752	0.313	0.628

- (a) Based on Section B, Exhibit 1.
- (b) Age-to-age factors for developing accident years 2017 to 2022 were adjusted for changes in claim settlement rates based on 3-year average selections (see Section B, Exhibit 2.5.8, Item Q).
- (c) See Section B, Exhibit 3.2, Column (2).
- (d) Based on Section B, Exhibit 2.6.1 and includes adjustments for SB 1160 and recent pharmaceutical cost declines. Age-to-age factors for developing accident years 2017 to 2022 were adjusted for changes in claim settlement rates based on 3-year average selections (see Section B, Exhibit 2.6.8, Item R).

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.210	1.273	0.652	0.409
2016	0.199	1.257	0.674	0.372
2017	0.204	1.224	0.706	0.354
2018	0.217	1.192	0.743	0.349
2019	0.255	1.160	0.823	0.360
2020	0.269	1.127	0.873	0.348
2021	0.309	1.086	0.907	0.370
2022	0.315	1.055	0.903	0.368
				Projected (d)
2023				0.371
2024				0.369
9/1/2024				0.369

- (a) See Exhibit 12.1.
- (b) Based on Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are from Section B, Exhibit 6.2.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.411
2016	0.252	1.022	0.674	0.381
2017	0.257	1.025	0.706	0.373
2018	0.278	1.026	0.743	0.384
2019	0.310	1.022	0.823	0.385
2020	0.316	1.018	0.873	0.368
2021	0.346	1.016	0.907	0.387
2022	0.313	1.008	0.903	0.350
				Projected (d)
2023				0.374
2024				0.373
9/1/2024				0.373

- (a) See Exhibit 12.1.
- (b) Based on Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual frequency change for accident year 2022 and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are from Section B, Exhibit 6.4.

Section B

Appendix B

Trending Methodology

The pure premium rates effective September 1, 2023 are intended to reflect the final, or ultimate, cost of losses and loss adjustment expenses on all claims that arise on policies incepting between September 1, 2023 and August 31, 2024. Appendix A discusses the process of developing the losses reported for each historical accident year as of December 31, 2022 to an ultimate cost basis. This Appendix discusses the process of adjusting and trending these historical accident year costs to the levels anticipated on claims covered by policies incepting between September 1, 2023 and August 31, 2024.

Trending historical costs to the level underlying policies incepting between September 1, 2023 and August 31, 2024 involves three phases. First, the losses incurred during each historical accident year are adjusted for specific, quantifiable cost level changes that have occurred since that time or are expected to occur during the period the pure premium rates will be in effect. Second, each year's historical earned premium is adjusted to the premium that would have been earned at the approved advisory pure premium rate level as of September 1, 2022 and at the average wages expected to be in effect during the time the premium on policies incepting between September 1, 2023 and August 31, 2024 is earned. Third, future changes in these adjusted cost levels are projected, or trended, from the time of the latest available experience to September 1, 2024, which is the approximate midpoint of the experience period during which the pure premium rates for policies incepting between September 1, 2023 and August 31, 2024 will apply.

The COVID-19 pandemic has had a significant impact on the workers' compensation insurance system. Exhibit 1 shows a summary of COVID-19 claim counts and paid and incurred costs evaluated as of December 31, 2022. As shown in Exhibit 1, almost 50,000 accepted claims arising out of a diagnosis of COVID-19 have been filed for accident years 2020 through 2022 totaling almost \$500 million in incurred costs as of December 31, 2022. The costs from accident year 2020 through 2022 claims reflect earlier and different periods of the pandemic and may not be indicative of costs to be incurred during the September 1, 2023 to August 31, 2024 policy period which will predominantly include exposure in 2024 and 2025. As a result, the WCIRB has excluded COVID-19 claims from the exhibits in this Appendix that include accident years 2020 through 2022 based on the data reported on the WCIRB's Quarterly Call for Experience.

Adjustment of Losses to an On-Level Basis

Section B, Exhibits 4.1 through 4.4 show the adjustment of historical loss amounts to a consistent, or on-level cost basis. Section B, Exhibit 4.1 details the on-leveling adjustments to indemnity losses. Section B, Exhibits 4.2 through 4.4 detail the on-leveling adjustments to medical losses.

On-Level Adjustments to Indemnity Losses

For each historical accident year, losses are adjusted to reflect the cost impact of legislative and regulatory changes and judicial action. These adjustments reflect changes in statutory benefit amounts, measurable structural reforms that have been enacted by the legislature, regulatory changes and the impact of judicial action. The adjustments made to each year's indemnity losses to reflect these changes are shown in Section B, Exhibit 4.1.

Section B, Exhibit 4.1, columns 1 and 2 show the estimated impact of statutory benefit changes, regulatory changes and judicial action on indemnity claim severity (column 1) and claim frequency (column 2). The adjustments for the impact of these changes on claim severity are based on the WCIRB's model used to assess the cost impact of statutory changes on indemnity benefits based on underlying

distributions of claims by injury type, benefit type and injured worker weekly wages.¹ These adjustments reflect WCIRB prospective estimates of the cost impact of each change as well as further refinements from WCIRB reassessments based on more current data emerging subsequent to the occurrence of the legislative, regulatory or judicial action. The estimates of the impact of benefit changes on claim frequency are based on a WCIRB econometric analysis of the effect of a number of economic, demographic and claims-related variables on the frequency of indemnity claims in California.²

Each year, weekly minimum and maximum temporary disability (TD) and permanent total disability (PTD) benefits are increased for inflation by the Division of Workers' Compensation (DWC) per California statute. The increases in these benefits are statutorily based on increases in the state average weekly wage (SAWW) for employees covered by unemployment insurance benefits for the annual period ending March 31 of the prior year. In this regard, the on-leveling adjustments shown in column 1 of Section B, Exhibit 4.1 reflect the impact of historical changes in weekly minimum and maximum TD and PTD benefits and average wage level forecasts based on the WCIRB's legislative evaluation model.

Statutory benefits are expressed as a percentage of an injured worker's weekly wage with specified minimum and maximum amounts. Consequently, as wages increase, the cost of indemnity benefits will also increase even without a statutory benefit change. Column 3 of Section B, Exhibit 4.1 shows the estimated annual impact of wage inflation on indemnity benefits. These estimates have been computed based on the pre-injury weekly wages of injured workers, the legislatively scheduled benefits for each year, and the estimated annual changes in average California wages, as shown in Section B, Exhibit 5.1.³ For accident years with available WCIRB unit statistical data (2021 and prior), these estimates are based on the actual claims and wage inflation data for these years, while the estimates for accident years 2022 and subsequent are based on the WCIRB's legislative evaluation model, updated with the latest available data.⁴

On-Level Adjustments to Medical Losses

Section B, Exhibits 4.2 through 4.4 show the adjustment of medical losses to an on-level basis. Section B, Exhibit 4.2 shows the impact of non-legislative factors on medical costs. For many years, the Official Medical Fee Schedule (OMFS) has regulated the amounts paid to physicians for many workers' compensation medical procedures. As of April 1, 1999, many inpatient hospital procedures became subject to the Inpatient Hospital Fee Schedule. Fees for other medical services, such as pharmaceuticals and outpatient facility fees, later also became subject to fee schedules with the enactment of Senate Bill No. 228 (SB 228) effective January 1, 2004. As shown in Section B, Exhibit 4.2, column 1, almost 90% of medical costs are directly or indirectly⁵ subject to fee schedules. Column 3 of Section B, Exhibit 4.2 shows the average impact of fee schedule changes on total medical costs by accident year.

The impacts shown in column 3 of Section B, Exhibit 4.2 are primarily based on the WCIRB's cost analysis of the fee schedule changes developed at the time the schedule was implemented. A number of California medical fee schedules are updated regularly by the DWC to reflect regular inflationary changes to the underlying Medicare fees on which the fee schedules are based. These updates have generally been modest and relatively consistent over time. As a result, the WCIRB has typically not reflected these updates in the on-leveling of medical losses and instead has considered them a component of the residual "on-level" medical severity trend. However, the WCIRB reviews these updates when they are

¹ See Item AC13-12-02 of the December 4, 2013 WCIRB Actuarial Committee Agenda for a more complete discussion of the WCIRB's legislative evaluation model.

² Brooks, Ward, "California Workers Compensation Benefit Utilization – A Study of Changes in Frequency and Severity in Response to Changes in Statutory Workers Compensation Benefit Levels," *Proceedings of the Casualty Actuarial Society*, Volume LXXXVI, 1999, pp. 80-262.

³ This wage inflation adjustment approach is discussed in greater detail later in this Appendix with respect to premium adjustments.

⁴ See Item AC19-03-03 of the March 18, 2019 WCIRB Actuarial Committee Agenda for more information on these adjustments.

⁵ Payments made directly to injured workers as part of claim settlements are assumed to be indirectly affected by existing medical fee schedules.

adopted to determine if any atypical and significant changes should be explicitly reflected in the medical on-level adjustments.

The WCIRB has reviewed the Medicare-related fee schedule updates adopted by the DWC since the September 1, 2022 Pure Premium Rate Filing. The high levels of economic inflation experienced in 2021 and 2022 have resulted in higher-than-typical increases to the fee schedules adopted by the DWC in late 2022 and early 2023. These fee schedule updates are effective primarily in early 2023 and, as a result, are not reflected in the underlying data used in this filing which is based on experience through December 31, 2022. The WCIRB estimates that, in total, these updates will result in an overall increase in medical service costs of approximately 2.8%, which is approximately double the typical annual increase of the last several years.

It is challenging to apply these fee schedule updates to the medical on-level adjustments given the date-of-service basis of these fee schedule changes and the fact that they differ in timing and impact for each fee schedule. Furthermore, the cost of medical for each accident year reflects a different mix of medical services and, as a result, the overall impact of these updates will differ by year. Given this, the WCIRB did not reflect the 2023 fee schedule updates in the medical on-level adjustments included in Section B, Exhibit 4.2 and has, instead, considered them in the selection of the annual on-level medical severity trend, as discussed below.

Effective March 1, 2021, the DWC adopted significant changes to the Evaluation & Management (E&M) section of the OMFS related to office visits. The WCIRB's retrospective evaluation of the March 1, 2021 OMFS changes based on medical payments made subsequent to implementation of the changes showed that E&M office visit service costs increased by 10%, resulting in an approximate 1.6% increase in total medical costs.⁶ As discussed in Appendix A, given the date-of-service basis of these changes, the WCIRB is reflecting the impact of the changes in adjustments to the medical loss development projection for accident years 2013 and later. For accident years 2012 and prior, the impact of these changes based on the WCIRB's retrospective estimate is reflected in the medical on-level adjustments shown in Section B, Exhibit 4.2.

Effective April 1, 2021, the DWC adopted a significant update to the Medical-Legal Fee Schedule (MLFS). In the September 1, 2022 Pure Premium Rate Filing, the WCIRB retrospectively estimated that the April 1, 2021 changes to the MLFS increased medical-legal service costs by 39% based on payments made during the first nine months the new MLFS was in effect. Earlier this year, the WCIRB performed a retrospective evaluation of the April 1, 2021 MLFS changes based on an additional year of medical-legal payments.⁷ The review showed that the increase in medical-legal costs resulting from the new schedule was 50%, which was higher than earlier estimates. This updated estimate of the impact of the 2021 MLFS changes results in an approximate 3.2% increase in total medical costs. The additional increase in medical-legal costs compared to the WCIRB's earlier estimates was primarily driven by a significantly higher-than-initially-projected increase in the costs for record review and an increased utilization of medical-legal services per claim. As discussed in Appendix A, given that the impact of these changes varied depending on the age of the claim, the WCIRB is reflecting these impacts in adjustments to the medical loss development projection for accident years 2013 and later. For accident years 2012 and prior, the impact of these changes based on the WCIRB's most recent retrospective estimate is reflected in the medical on-level adjustments shown in Section B, Exhibit 4.2.

Some workers' compensation medical costs are not subject to fee schedules. The portion of each historical accident year's medical losses that is not subject to fee schedules is adjusted to reflect the anticipated general medical cost level during the period in which the proposed pure premium rates will be in effect. The cost adjustments used in this analysis are shown in column 4 of Section B, Exhibit 4.2. The historical values are based on the "Medical Care" component of the Consumer Price Index as published

⁶ See Item AC22-04-04 of the April 14, 2022 WCIRB Actuarial Committee Agenda.

⁷ See Item AC22-04-04 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

by the U.S. Bureau of Labor Statistics (BLS) and the California Department of Finance. Projected values are based on the average of California Department of Finance forecasts of medical inflation for the Los Angeles and San Francisco regions. Section B, Exhibit 4.2, column 6 shows the combined impact of fee schedule changes and general medical inflation on non-fee schedule regulated medical cost components by accident year.

Legislative changes and judicial actions also impact the cost of medical benefits. Section B, Exhibit 4.3 shows the impact of these changes or actions on medical costs. The factors in column 1 of Section B, Exhibit 4.3 reflect the impact on the average medical costs per claim of legislative, regulatory, or judicial action not otherwise reflected. These adjustment factors include the WCIRB's estimated impact of Senate Bill No. 863 (SB 863) on overall medical cost levels (-17%),⁸ offset by the estimated impact already reflected in the WCIRB's adjustments to loss development for recent pharmaceutical cost declines (-4%),⁹ and distributed over accident years 2011 to 2015, which is consistent with the adjustment reflected in the last several pure premium rate filings. These adjustment factors also reflect the WCIRB's most recent retrospective evaluations of Senate Bill No. 1160 and Assembly Bill No. 1244 effective in 2017 and the Medical Treatment Utilization Schedule Drug Formulary effective in 2018 consistent with prior pure premium rate filings.

The factors shown in column 2 of Section B, Exhibit 4.3 reflect the impact on medical costs of the changes in the frequency of indemnity claims as a result of statutory benefit changes. The combined impact of legislative changes on overall medical costs is shown in column 3 of Section B, Exhibit 4.3.

Section B, Exhibit 4.4 shows the combined impact of both measurable legislative and non-legislative changes on medical costs. Column 4 of Section B, Exhibit 4.4 shows the medical on-level factor that is used to adjust each historical accident year's estimated ultimate medical losses to an on-level basis.

Adjustments of Premium to an On-Level Basis

Historical earned premium amounts reflect the wage levels, rates and other premium adjustments underlying the workers' compensation policies with exposure during the calendar year. Section B, Exhibits 5.1 and 5.2 show the adjustments used to convert the historical calendar year earned premium amounts to a consistent, on-level basis.

Workers' compensation rates are expressed as a percentage of payroll. Thus, the earned premium for a particular year reflects the wages paid by California employers during that year. In order for the proposed pure premium rates to provide for losses and loss adjustment expenses arising from policies incepting between September 1, 2023 and August 31, 2024, each historical year's earned premium is adjusted to the anticipated average wage level applicable to policies incepting during this period. Since a historical premium level is used as the basis of the trending projection, forecast adjustments in average wages are intended to reflect changes in the average wage of the "typical" California worker performing the same job year-to-year.

Section B, Exhibit 5.1 shows the wage level adjustment factors. The historical values through 2021 shown in column 1 of Section B, Exhibit 5.1 are based on BLS data for California as compiled by the UCLA Anderson School of Business (UCLA). The estimated changes in annual California wages for 2022 and later are initially based on an average of those produced by UCLA¹⁰ (as of March 2023) and the California Department of Finance¹¹ (as of November 2022). A 2018 WCIRB analysis of the wage forecast

⁸ See *Senate Bill No. 863 WCIRB Cost Monitoring Report – 2016 Retrospective Evaluation*, WCIRB, November 17, 2016.

⁹ See Appendix A for the discussion of the adjustment to loss development for recent pharmaceutical cost declines.

¹⁰ The index is based on the ratio of total statewide wages and salaries divided by total civilian employment.

¹¹ The California Department of Finance produces an economic forecast typically in April and November of each year to assist in preparation of the California state budget.

methodology showed that blending these two wage forecasts significantly improves the accuracy and reduces the volatility of the wage level projection.¹²

The COVID-19 pandemic resulted in a sudden and significant downturn in the California economy in 2020. The average wage changes shown in column 1 of Section B, Exhibit 5.1 are generally based on changes in total wages and salaries compared to changes in total employment. During a recession, the mix of industries can shift significantly and impact measures of average wages since a different average wage level underlies each industry. In addition, the loss of lower wage, generally less experienced employees within industries during an economic downturn can drive measures of average wages artificially upward since job losses for these workers disproportionately impact employment levels. For the pandemic-related economic downturn, the reductions in employment levels were greatest in the hospitality and entertainment industries, which tend to have lower-than-average wages. Data from the Economic Policy Institute (EPI) also shows that job losses in 2020 within industries have disproportionately impacted lower wage workers, and this disproportionate impact continued to a lesser degree in 2021.¹³ As a result, the wage level changes shown in column 1 of Section B, Exhibit 5.1 for 2020 and later may not be fully reflective of the wage level change for the “typical” California worker performing the same job year to year.

To reflect the wage level change more accurately for the “typical” California worker, the WCIRB applied two adjustments to the average wage level changes shown in column 1 of Section B, Exhibit 5.1. The first adjustment removes the impact of shifts in the industry mix on average wage levels based on a review of forecast changes in employment by industry and the average wage within industries using UCLA data. This analysis shows that differences in employment losses by industry in California artificially inflated average wages by 1.8% in 2020. Conversely, the average wage levels for 2021 and 2022 were artificially deflated by 0.3% and 0.5%, respectively, as a result of modest recoveries in these industries in these years.¹⁴ The WCIRB estimated average wage growth percentages for 2020 through 2022 shown in column 2 of Section B, Exhibit 5.1 have been adjusted to correct for these impacts of shifting industrial mix. Given the relatively modest impact of this adjustment estimated for 2023 through 2025 as well as the relative uncertainty in forecasting these shifts in future years, the WCIRB did not apply this adjustment for these years.

To adjust for shifts in wage levels within industries in 2020 and 2021, the WCIRB reviewed estimated changes in the wage level distribution within industry based on American Community Survey (ACS) data as well as Current Population Survey (CPS) data provided by the EPI.¹⁵ This adjustment is computed by holding both industrial mix and average wage levels by industry and wage quartile constant while allowing the distribution of workers by wage level within industries to vary year to year.¹⁶ This approach is consistent with the September 1, 2022 Pure Premium Rate Filing and results in adjustments for the estimated impact of the changing wage distributions within industries on 2020 and 2021 average wages of -3.9% and -1.8%, respectively.

While the 2020 and 2021 changes in the statewide average wage is inflated by the loss of lower wage employees within industries, changes in future years would likely be deflated by the return to the workforce of at least some of these lower wage employees. As shown in column 1 of Section B, Exhibit 5.1, the observed average wage change for 2022 of 0.5% is significantly below recent prior years and the longer-term average wage change. Some of this change is related to the impact of shifts in the classification mix, which the WCIRB estimates deflated the 2022 average wage by approximately 0.5%. It is likely that some of this change is also impacted by a return of the lower wage employees to the economy.

¹² See Item AC17-12-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda.

¹³ Current Population Survey Extracts, Version 1.0.15, Economic Policy Institute, 2021. <https://microdata.epi.org>

¹⁴ See Item AC20-08-04 of the March 21, 2022 and April 14, 2022 WCIRB Actuarial Committee Agendas.

¹⁵ This data set is updated monthly by the Census Bureau and underlies the headline monthly jobs report.

¹⁶ See Item AC20-08-04 of the March 21, 2022 and April 14, 2022 WCIRB Actuarial Committee Agendas.

To estimate the impact of the return of lower wage employees impacting the 2022 average wage change, the WCIRB reviewed hourly wage data from the BLS Current Employment Statistics (CES). This hourly wage CES data series is derived from establishment surveys in which an employer provides detailed payroll information once a month and remains in the survey for between two and four years. Changes in the hourly CES data series have typically been close to the aggregate change that is typically used by the WCIRB. Furthermore, this data series appears to be less impacted by changes in the wage level distribution as it has been very similar to adjusted changes in the aggregate wage for 2020 and 2021.¹⁷ As a result, the WCIRB recommends averaging the 0.5% observed aggregate wage change for 2022 with the 3.8% change from the CES hourly wage series, as not to completely rely on either value. This results in an average 2.2% wage change for 2022 that is further adjusted for the estimated 0.5% change in industry mix and shown in column 2 of Section B, Exhibit 5.1. Given that many economists believe some portion of these shifts to be permanent and the relative uncertainty in forecasting these adjustments in future years, the WCIRB did not apply this adjustment for the 2023 to 2025 years.

Column 2 of Section B, Exhibit 5.1 shows the 2020 through 2022 projected average wage changes adjusted as described above. Column 3 of Section B, Exhibit 5.1 shows the factor to on-level each year's historical premium for the impact of changes in wage levels based on columns 1 and 2 of Section B, Exhibit 5.1. (These adjusted wage level changes are also reflected in the adjustment to indemnity benefits for the impact of changes in average wages shown in column 3 of Section B, Exhibit 4.1.)

The amount of premium generated during a particular year is based on the rates charged by insurers during that year. Section B, Exhibit 5.2, columns 2a, 2b and 2c show the adjustment of each year's historical premium to the level reflected in the approved advisory pure premium rates as of September 1, 2022. The earned premium amounts shown in Section B, Exhibit 1 and reflected in the loss ratios shown in Section B, Exhibits 3.1 and 3.2 are based on the final rates charged by insurers—including the impact of most rating plan adjustments such as schedule rating.¹⁸ To compute the indicated change in the approved advisory pure premium rate level, the premium generated for each year at the industry average charged rates is adjusted to reflect the premium that would have been generated had the approved advisory pure premium rates as of September 1, 2022 been charged during that year.

Column 2a of Section B, Exhibit 5.2 shows the ratio of the industry average charged rate to the advisory pure premium rate for each calendar year subsequent to the implementation of competitive rating in 1995. Column 2b of Section B, Exhibit 5.2 shows the factors needed to adjust the earned premium for each calendar year to the September 1, 2022 advisory pure premium rate level. Column 2c of Section B, Exhibit 5.2 shows the combined effect of all these rate adjustments, which are the factors needed to adjust each year's earned premium to the premium that would have been earned had the approved advisory pure premium rates as of September 1, 2022 been charged during that year.

In addition to adjustments for changes in wage and rate levels, historical premiums are also adjusted to remove the impact of surcharge premium generated under the Minimum Rate Law through 1995, reflect changes in the average experience modification and reflect the current experience rating off-balance correction factor. These adjustments, which are shown in columns 3, 4 and 5 of Section B, Exhibit 5.2, are based on the WCIRB's unit statistical and experience rating data.

Premium is reported to the WCIRB on a calendar year basis, reflecting all premiums earned during that calendar year on policies from any year, while losses are reported on an accident year basis, reflecting the cost of claims on policies in force during that year. Generally, these two bases overlap to a considerable degree. However, when audits on older policy years have a highly atypical effect on premiums booked during the current year, the use of unadjusted calendar year earned premium can

¹⁷ See Item AC20-08-04 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

¹⁸ These premiums do not reflect the impact of deductible credits, retrospective rating plan adjustments, terrorism charges or COVID-19 premium charges.

distort accident year loss ratios. The Great Recession of 2008-2009 significantly impacted audit premiums on 2007 and 2008 policies that were booked in 2009 and 2010. To adjust for the distortions created by the Great Recession, premiums earned in calendar years 2007 through 2010 are adjusted to an estimated “accident year” basis. These adjustments, which are shown in column 6 of Section B, Exhibit 5.2, are computed 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.¹⁹

The COVID-19 pandemic and resultant economic downturn significantly impacted exposure levels in 2020. The WCIRB recently studied the impact of this economic slowdown on calendar year 2020 through 2022 earned premiums to determine if an adjustment to on-level premium similar to that applied during the Great Recession years was appropriate.²⁰ The WCIRB’s study found that, similar to the Great Recession, there were atypical amounts of return premiums on 2019 policies that were earned in calendar year 2021. Conversely, given the equally sharp economic recovery in 2021 and 2022, there were atypical amounts of audit premiums collected on 2020 policies in 2022. To adjust for the distortions created by the pandemic, premiums earned in calendar years 2020 through 2022 are adjusted to an estimated “accident year” basis using a process similar to that used for the Great Recession years. These adjustments are shown in column 6 of Section B, Exhibit 5.2.

Section B, Exhibit 5.2, column 7 shows the combined on-level factor for each year that reflects the impact of all the premium adjustments applied by the WCIRB.

Trending Methodology – Diagnostic Indicators

To assess the validity of the assumptions underlying the various trending methodologies, the WCIRB reviews a number of diagnostic indicators. Among the key indicators of the trending methodology reviewed are the following:

1. Indemnity Claim Frequency Changes. Exhibit 2 shows the WCIRB’s estimated changes in indemnity claim frequency.²¹ Frequency changes for accident year 2022 are based on changes in reported indemnity claim counts evaluated at 12 months compared to changes in statewide employment levels. Frequency changes for accident years 2021 and prior are based on the ratio of reported indemnity claim counts to reported exposure adjusted to a common wage level based on WCIRB unit statistical data. From 2013 to 2019, indemnity claim frequency was, on average, flat to modestly declining. Indemnity claim frequency decreased significantly in 2020, in large part related to the COVID-19 pandemic and stay-at-home orders and the sharp and sudden downturn in the economy. However, claim frequency rebounded in 2021 during the economic recovery. In 2022, indemnity claim frequency is fairly flat, suggesting a possible return to the pre-pandemic trend of modest annual changes in claim frequency.
2. Impact of Shifts in Industrial Mix on Claim Frequency. Changes in industrial mix can significantly impact measures of indemnity claim frequency. The lower section of Exhibit 2 shows historical changes in indemnity claim frequency adjusted for changes in industrial mix (“intra-class”). Shifts in industrial mix, influenced by the Great Recession recovery in construction employment and long-term shifts in the California economy to a lower relative frequency, service-based economy, generally contributed to annual declines from 1% to 2% in indemnity claim frequency through 2019. After adjusting for these impacts, “intra-class” indemnity claim frequency changes are generally 1% to 2% higher than the actual observed changes. During the recent pandemic period, shifts in industrial mix impacting indemnity claim frequency have been, on average, modest.

¹⁹ See Item AC11-06-02 of the June 3, 2011 and August 3, 2011 WCIRB Actuarial Committee Agendas for a more complete discussion of this computation.

²⁰ See Item AC21-03-05 of the March 21, 2022 and March 21, 2023 WCIRB Actuarial Committee Agendas.

²¹ COVID-19 claims are excluded.

3. Changes in Reported Claim Severities. Exhibits 3.1 and 3.2 show changes in average incurred indemnity and average incurred medical per indemnity claim, respectively. Exhibits 3.3, 3.4 and 3.5 show changes in average paid indemnity and average paid medical per indemnity claim and average paid medical per claim, respectively. Exhibits 3.6 and 3.7 show changes in average outstanding indemnity case reserves and average outstanding medical case reserves per open indemnity claim, respectively. Exhibits 3.8 and 3.9 show changes in average paid indemnity and paid medical per closed indemnity claim, respectively.²² The information shown in Exhibits 3.1 through 3.9 are based on December 31 evaluations of claim experience.

Other than in 2020, which was heavily impacted by the pandemic, changes in average indemnity severities at the latest evaluation show generally moderate increases. As shown in Exhibits 3.3 and 3.8, changes in paid indemnity severities at the latest evaluation of more mature accident years have tended to be more modest than at the 12-month evaluation for that accident year. At 12 months, the majority of paid indemnity benefits are for temporary disability benefits, which have higher weekly maximums than permanent disability benefits and are more directly impacted by annual wage inflation since many more workers are at wages below the level corresponding to the maximum benefit. Over time, as more permanent disability benefits are paid, these severity changes have tended to moderate.

Changes in average medical severities have also generally been modest at the latest evaluation of each accident year with the exception of 2020. Accident year 2020 severities are heavily impacted by the pandemic and economic downturn which resulted in a temporary slowdown in the medical and claims processes. In addition, a number of smaller indemnity claims were not filed during the stay-at-home period which pushes accident year 2020 severities artificially upward. A return of these smaller indemnity claims in 2021 has artificially deflated accident year 2021 severities. Accident year 2022 medical severities are generally flat across these measures. The WCIRB's review of medical transaction data suggests that the recent flat to declining medical costs are driven by reduced utilization of medical services per claim offset by increases in the average cost per medical service.²³

Selected Trending Methodologies

In order for the proposed pure premium rates to reflect the cost of benefits incurred on policies incepting between September 1, 2023 and August 31, 2024, the historical estimated ultimate loss ratios, adjusted to an on-level basis, are trended to a level underlying this policy period. Specifically, the on-level ratios are trended to September 1, 2024—the approximate average date of experience on policies incepting between September 1, 2023 and August 31, 2024.

For many years, the WCIRB has separately analyzed changes in claim frequency and the average cost, or severity, of claims when considering the appropriate future loss trends. Claim frequency and claim severity are affected by differing underlying forces. Trending methods that separately trend for frequency and severity allow for separate assumptions on each component and are particularly appropriate in environments in which historical loss ratios have been volatile or during periods of transition in which some judgment about future trends may be appropriate. These methods rely on accurate projections of frequency and severity and assume that frequency and severity changes are not highly correlated.

In 2012, the WCIRB conducted a retrospective evaluation of trending methodologies with an emphasis on the appropriateness of trending frequency and severity separately relative to applying a combined loss ratio trend during varying claims environments.²⁴ The study noted that during the 2002 through 2004 reform transition period, trending methods based on separate projections of claim frequency and claim

²² COVID-19 claims are excluded from these exhibits. Also, the amounts shown in Exhibits 3.7 and 3.9 for accident years 2010 and 2011 reflect only the amount of medical cost containment program (MCCP) costs that were reported as medical losses for these years and as a result are not comparable to each other or the amounts reported for other years.

²³ See Item AC16-06-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

²⁴ See Item AC12-12-02 of the December 5, 2012 WCIRB Actuarial Committee Agenda.

severity were more accurate than those based on trending historical on-level loss ratios. Updated studies conducted in 2017 and 2018 to include additional periods showed that methods based on separate frequency and severity trends continued to be more accurate than those based on a combined loss ratio trend in these periods as well.²⁵

Based in part on a review of the diagnostic information above and prior WCIRB retrospective studies of trending methodologies, the WCIRB continues to believe a trending approach based on separate projections of growth in claim frequency and growth in the average severity of claims is appropriate. Although the correlation between claim frequency changes and claim severity changes may be stronger in the current pandemic environment compared to the pre-pandemic period, given the recent volatility in projected on-level loss ratios, the WCIRB believes it is important to review claim frequency and severity trends separately as each trend is likely impacted by different forces.

Indemnity Claim Frequency Projections

The WCIRB's projected change in claim frequency for accident year 2022 is based on the preliminary claim frequency change as of 12 months, which is consistent with the approach used in the last several pure premium rate filings. This measure is estimated as the ratio of changes in reported indemnity claim counts (excluding COVID-19 claims) from accident year 2021 to accident year 2022 as of December 31, 2022 adjusted to an "intra-class" level for estimated shifts in industrial mix impacting claim frequency relative to changes in statewide employment adjusted for estimated shifts in industrial mix impacting exposure levels. The WCIRB's 2021 analysis of claim frequency projections suggested that this approach of using actual frequency information for the most current year was more accurate compared to the change forecast based on the WCIRB's indemnity claim frequency model and comparable in accuracy to other approaches reviewed.²⁶ This results in a projected "intra-class" claim frequency change of -0.2% for accident year 2022, as shown in Exhibit 3.

Section B, Exhibit 6.1 shows projected changes in indemnity claim frequency for accident years 2023 through 2025 based on the WCIRB's econometric frequency model used for a number of years in WCIRB pure premium rate filings.²⁷ This model projects indemnity frequency changes as a function of changes in indemnity benefit levels, economic variables and other factors, but excludes the impact of projected future changes in the mix of industry classifications.²⁸ The model also reflects a number of refinements to the underlying parameters based on a comprehensive review of claim frequency projections performed by the WCIRB in 2021.²⁹ The frequency changes shown in Section B, Exhibit 6.1 are based on the ratio of indemnity claim counts to unit statistical reported exposure. Frequency changes for accident years 2020 and prior are based on the full accident year, while the frequency change for accident year 2021 is partial in that it reflects accident year 2021 claims arising on 2020 policies compared to accident year 2020 claims arising on 2019 policies. Given the impact of the pandemic on accident years 2020 and 2021, particularly the sharp and sudden changes in the economic variables and the intra-class claim frequency changes for these years, the frequency forecasts shown in Section B, Exhibit 6.1 are based on the WCIRB's model fit to the 2019 and prior years.

The frequency model forecasts for 2023 through 2025 reflect projected changes in economic data based on the March 2023 UCLA forecast. As shown in Section B, Exhibit 6.1, the WCIRB's indemnity claim frequency model projects modest annual decreases in 2022 through 2024. These changes are reflective

²⁵ See Item AC12-12-02 of the August 2, 2017 WCIRB Actuarial Committee Agenda.

²⁶ See Item AC21-12-07 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

²⁷ Brooks, Ward, "California Workers Compensation Benefit Utilization – A Study of Changes in Frequency and Severity in Response to Changes in Statutory Workers Compensation Benefit Levels," *Proceedings of the Casualty Actuarial Society*, Volume LXXXVI, 1999, pp. 80-262.

²⁸ By modeling industrial mix-adjusted ("intra-class") frequency, the WCIRB's model in effect controls for historical shifts in classification mix.

²⁹ See Item AC21-12-07 of the December 9, 2021 WCIRB Actuarial Committee Agenda.

of the longer-term rate of frequency decline as measured by the model's constant term³⁰, partially offset by post-pandemic economic expansion. These changes are also generally consistent with the pre-pandemic rate of frequency decline.

Indemnity Severity Projection and Trended Loss Ratio

The WCIRB projects average future indemnity severity growth based on a review of longer-term and shorter-term indemnity severity trends as well as changes in the underlying claims environment. Longer-term trends are less volatile and include both reform periods and post-reform periods as well as more developed accident years but include older accident year cost levels that may not be highly indicative of the current claims environment. Shorter-term trends examine the most recent period which may be more indicative of the current claims environment but include less developed accident years and may be skewed by recent transitional effects, such as reforms or the shift in claim types, that may not be appropriate to project into the future.

Over the long-term, on-level indemnity severities have grown at a modest rate of approximately 1% per year since 1990. However, as shown in Section B, Exhibit 6.2, on-level indemnity severities declined from 2010 through 2017. Some of the decline is likely related to the Great Recession and the economic recovery while some of the decline is likely the result of reductions in temporary disability duration and average permanent disability rating partly driven by acceleration in the rate that claims were settling.

Since 2017, on-level indemnity severities increased by an average rate of approximately 1% per year, which is generally consistent with the long-term rate of growth. On-level indemnity severities declined modestly in 2021, but this may be in part related to shifts in the proportion of smaller indemnity claims caused by the pandemic. On-level indemnity severities increased at a higher rate in 2022, but this projection is based on 12 months and is highly leveraged. General growth in on-level indemnity severities since 2017 suggests that indemnity severities will continue to grow over the next few years. As a result, the WCIRB has selected a 1.0% average annual on-level indemnity severity trend, which is generally consistent with the short- and long-term rates of growth. This average annual indemnity severity trend is also consistent with that reflected in the WCIRB's September 1, 2022 Pure Premium Rate Filing.

In the September 1, 2022 Pure Premium Rate Filing, the WCIRB based the trended loss ratio on applying its selected frequency and average annual on-level severity trends to accident years 2019 and 2021. This approach was intended to use a pre-pandemic and post-pandemic year in the projection as the WCIRB believes accident year 2020 is significantly distorted by the pandemic. In this filing, as the latest two accident years (2021 and 2022) are much less impacted by the pandemic than 2020, the WCIRB believes basing the projection on the latest two accident years is appropriate. This approach is also consistent with the approach used in pure premium rate filings prior to the pandemic.

Section B, Exhibit 7.1 shows the projected indemnity loss ratio for policies incepting between September 1, 2023 and August 31, 2024 based on the accident year 2021 and 2022 on-level indemnity ratios adjusted by the WCIRB's selected frequency projections and the average annual on-level indemnity severity trend projection of 1% per year. The indemnity loss ratio projected using the WCIRB's recommended trending methodology is 0.368.

Medical Severity Projection and Trended Loss Ratio

As with indemnity severities, the WCIRB has, for a number of years, based projected on-level medical severity growth on a review of longer-term and more recent medical severity trends. For medical, losses will be paid over a very extended period as, for example, over one-half of policy year 2024 losses are estimated to be paid in 2027 or later and over one-quarter are estimated to be paid in 2032 or later. Medical cost levels are generally impacted by service date rather than accident date. As a result, it is

³⁰ Since the January 1, 2014 Pure Premium Rate Filing, there has been a partial offset of the indicated model constant to reflect a diminishing of some of the long-term factors driving the level of the model constant. The model's full fitted constant term without these offsets is -0.031.

particularly important to consider both long-term and short-term medical severity trends in the projection of medical severity growth.

Since 1990, on-level medical severity growth in California has averaged nearly 5% per year. This long-term average trend includes periods of reforms in which medical severities have been flat to declining and “post-reform” periods of sharp medical severity growth. Since 2005, on-level medical (excluding MCCP cost) severity growth has been at a more modest rate of 1.4% per year, as shown in Section B, Exhibit 6.4. This includes a period of very significant medical severity growth leading up to the SB 863 reforms followed by a flat-to-declining period following those reforms. Over the last five years, on-level medical severities have been, on average, flat. This period includes a modest increase in 2020 and a modest decrease in 2021, which the WCIRB believes is, in part, driven by pandemic-related shifts in the mix of smaller indemnity claims being filed. On-level medical severities declined modestly in 2022. A review of WCIRB medical transaction data suggests that this is driven by reduced utilization of medical services per claim partially offset by increases in the average cost per medical service.³¹ The longer-term trend of generally flat medical severities is likely also related to a gradual shift to a lower share of indemnity claims involving permanent disability benefits, which tend to be less costly compared to claims involving only temporary disability benefits.³²

The WCIRB believes consideration of both long-term and short-term trends should be given in selecting an average annual medical severity trend. Although the reforms of SB 863, SB 1160 and AB 1124 have resulted in significant decreases to average medical costs; these reforms were implemented a number of years ago. Absent reform, average medical costs have grown sharply in California in the past. In addition, the workers’ compensation system is currently in a period of transition to the post-pandemic environment and the impact of that transition on medical costs is uncertain. Furthermore, the high levels of economic inflation experienced in 2021 and 2022 have yet to be fully reflected in workers’ compensation medical costs due to the lag in reflecting these cost impacts in the Medicare-based fee schedules. As discussed above, the WCIRB estimates that the regular updates to medical fee schedules adopted by the DWC to be effective in late 2022 and early 2023 will increase medical service costs by double the typical annual rate. Finally, it is unclear whether the reductions in medical utilization observed in the past and the shift toward fewer permanent disability indemnity claims will continue to offset increases in the average cost per medical service in the future. Given these considerations, the WCIRB selected an average annual medical severity trend of 1.5%. This average annual medical severity trend is also consistent with that reflected in the WCIRB’s September 1, 2022 Pure Premium Rate Filing.

Section B, Exhibit 7.3 shows the medical loss ratio for policies incepting between September 1, 2023 and August 31, 2024 based on the accident year 2021 and 2022 on-level medical ratios adjusted by the WCIRB’s selected frequency projections and the average annual medical severity trend projection of 1.5% per year. As shown in Section B, Exhibit 7.3 the medical loss ratio projected using the WCIRB’s selected methodology is 0.387.

Summary of Alternative Trending Projections

The WCIRB’s selected loss trending methodology is based on an average of projections of the latest two years’ on-level ratios adjusted for the selected forecasts of changes in indemnity claim frequency and indemnity and medical claim severities. For informational purposes, the WCIRB has computed alternative loss projections based on a number of alternative loss trending methodologies reflecting underlying assumptions that differ from those reflected in the WCIRB’s selected trending methodology. These alternative trending projections are shown in Exhibits 4 through 8 and are discussed below.

Separate Frequency and Severity Projections Applied to the Latest Year

Exhibits 4.1 and 4.2 show an alternative trend projection based on applying the WCIRB’s selected frequency changes and the average annual on-level severity trend assumptions of 1.0% for indemnity

³¹ See Item AC16-06-05 of the April 13, 2023 WCIRB Actuarial Committee Agenda.

³² See Item AC23-03-01 of the March 21, 2023 WCIRB Actuarial Committee Agenda.

and 1.5% for medical to the on-level loss ratio for the latest accident year (2022). Projections from the latest available accident year can be more responsive to recent trends. This methodology produces a projection somewhat lower than the WCIRB's recommended methodology of trending from the latest two accident years (2021 and 2022). As discussed above, given that accident year 2022 is based on information evaluated as of 12 months, the WCIRB believes averaging the projection based on the latest year with that based on a more mature year is appropriate.

Separate Frequency and Severity Projections Using Severity Trends Based on Long-Term Rates of Growth

Exhibits 5.1 and 5.2 show a trend projection based on applying the WCIRB's selected frequency changes and annual severity trend assumptions of 0.8% for indemnity and 4.6% for medical, based on the approximate average long-term (1990 to 2022) annual rates of growth in on-level indemnity and medical claim severities, to the on-level loss ratios for 2021 and 2022. This methodology produces a medical projection higher than that produced by the WCIRB's selected methodology, which gives consideration to both the longer-term and more recent severity trends. To be responsive to recent severity trends, the WCIRB believes its selected severity trends, which give consideration to several factors including short-term and long-term severity trends, are appropriate.

Separate Frequency and Severity Projections Using Severity Trends Based on Short-Term Rates of Growth

Exhibits 6.1 and 6.2 show a trend projection based on applying the WCIRB's selected frequency changes and average annual severity trend assumptions of 1.3% for indemnity and -0.3% for medical, based on the approximate average short-term (2018 to 2022) annual rates of growth in on-level indemnity and medical claim severities, to the on-level loss ratios for 2021 and 2022. This methodology produces a medical projection lower than that produced by the WCIRB's selected methodology, which gives consideration to both the longer-term and more recent severity trends. Given the uncertainty surrounding severity trends in the post-pandemic inflationary period, the WCIRB believes its selected severity trends, which give consideration to several factors including short-term and long-term severity trends, are appropriate.

Trend Projections Based on On-Level Loss Ratios

Methods projecting future trends based on the historical on-level loss ratios may be appropriate when the historical ratios show a fairly stable trend or there is reason to believe that recent frequency and severity trends are highly correlated. They do not require knowledge or projection of separate frequency and severity components but rely more heavily on the accuracy of loss development and on-leveling adjustments. In the WCIRB's studies of trending methodologies, these methods performed well during the 2008 to 2011 recession period when historical on-level ratios were fairly stable and frequency and severity changes differed from projections but did not perform well during transition periods when loss ratios were more volatile.

Exhibits 7.1 and 7.2 provide projections based on applying an exponential trend based on the 1990 through 2022 on-level indemnity and medical loss ratios shown in Section B, Exhibits 7.1 and 7.3 to the on-level loss ratios for 2021 and 2022. This alternative trending methodology produces projections above those based on the WCIRB's selected methodology. Exhibits 8.1 and 8.2 provide projections based on applying an exponential trend based on the 2018 through 2022 on-level indemnity and medical loss ratios shown in Section B, Exhibits 7.1 and 7.3 to the on-level loss ratios for 2021 and 2022. This alternative trending methodology produces projections generally consistent with those based on the WCIRB's selected methodology. As discussed above, the WCIRB believes the approach of separately analyzing frequency and severity is appropriate in the current environment given the uncertainty in projecting costs post-pandemic for which the frequency and severity of claims are likely impacted by different forces. In addition, recent on-level loss ratios have been volatile and do not show the steady exponential growth consistent with the assumptions of this methodology.

The loss ratio projections for policies incepting between September 1, 2023 and August 31, 2024 derived based on the trending methodology recommended by the WCIRB as well as each of the alternative trending methodologies described above are shown in Table 1.

Table 1: Projected Loss Ratios Under Alternative Trending Methodologies

September 1, 2023 Filing Trending Methodology	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Separate Projections of Frequency and Severity, Using WCIRB’s Selected Frequency Changes and 1.0% Indemnity and 1.5% Medical Severity Trends, Applied to 2021 and 2022	0.368	0.387	0.755

Alternative Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Separate Projections of WCIRB’s Selected Frequency and Severity Trends Applied to 2022	0.362	0.368	0.730
Separate Projections of WCIRB’s Selected Frequency and Long-Term (1990 to 2022) Severity Trends Applied to 2021 and 2022	0.366	0.420	0.786
Separate Projections of WCIRB’s Selected Frequency and Short-Term (2018 to 2022) Severity Trends Applied to 2021 and 2022	0.371	0.368	0.739
1990 to 2022 On-Level Loss Ratio Exponential Trend Applied to 2021 and 2022	0.363	0.418	0.781
2018 to 2022 On-Level Loss Ratio Exponential Trend Applied to 2021 and 2022	0.379	0.375	0.754

Summary of COVID-19 Claim Information as of December 31, 2022

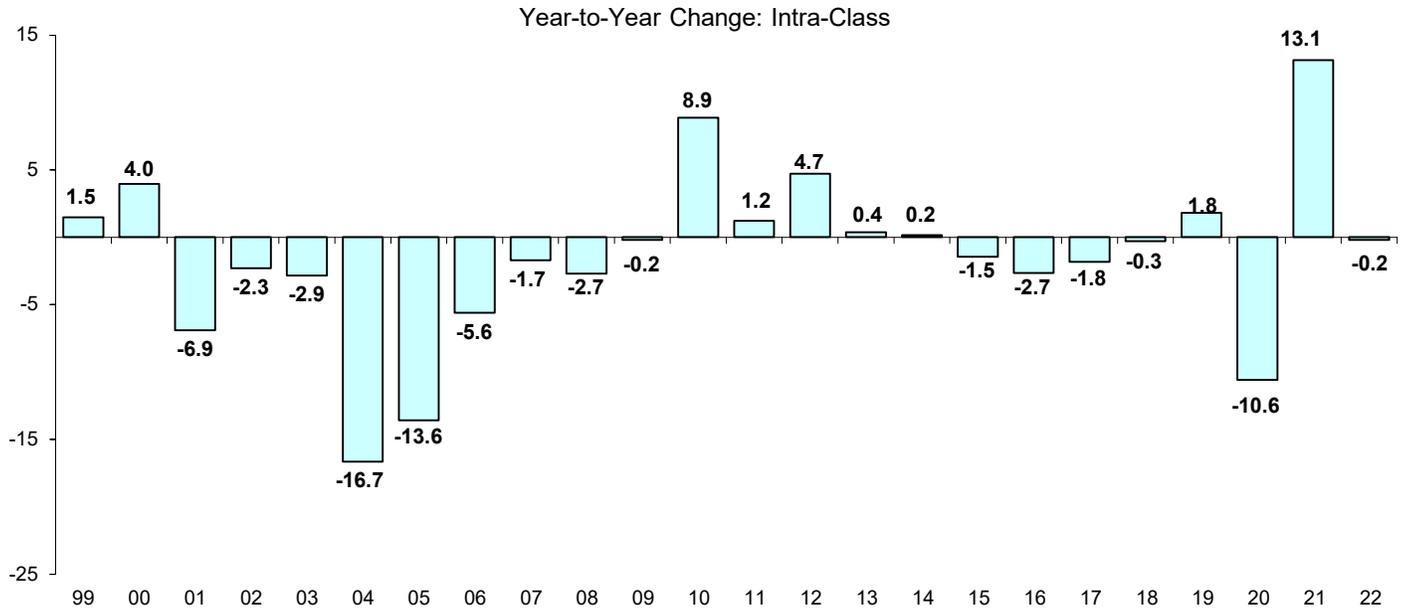
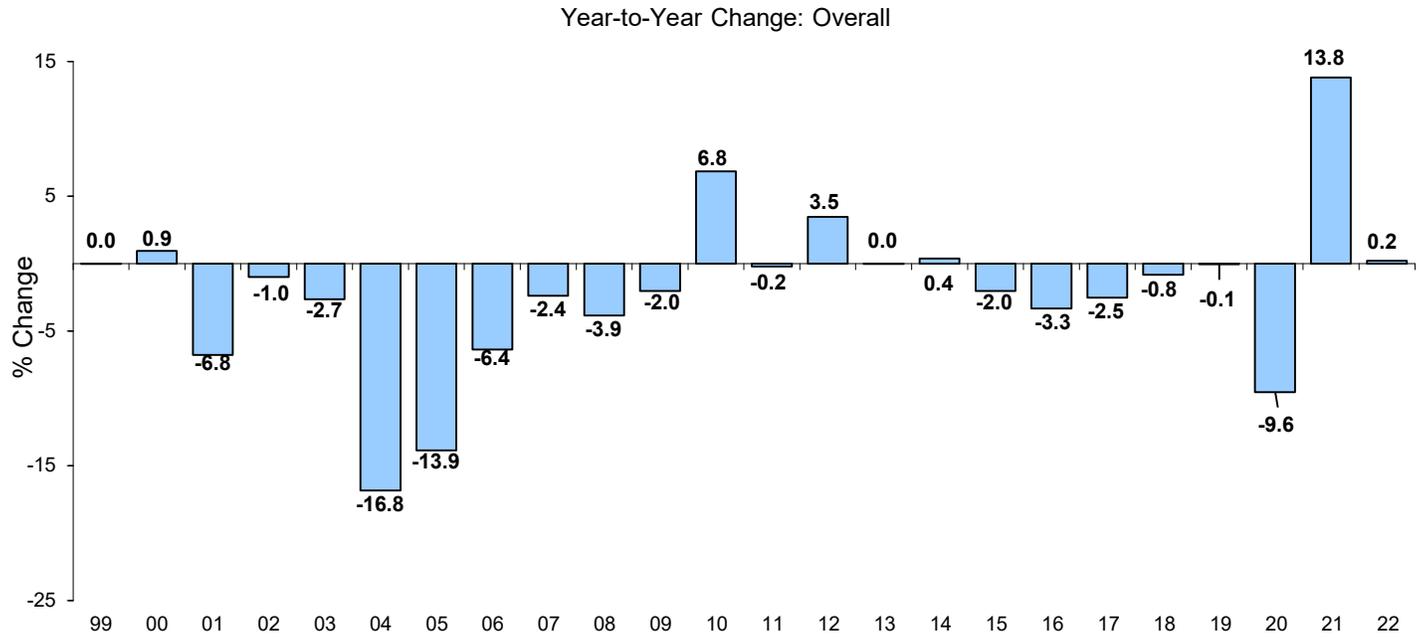
AY2020 @12/31/2022	Average per Indemnity Claim					Average per Total Claim			
	COVID-19 Claims	4Q-2022 Data Call	COVID-19 Percentage	COVID-19 Claims	All WC Claims	Without COVID-19 Claims	COVID-19 Claims	All WC Claims	Without COVID-19 Claims
Ind. Paid	\$126,042,532	\$2,203,971,853	5.7%	\$6,926	\$14,490	\$15,518	\$4,644	\$6,159	\$6,284
<u>Ind. Reserves</u>	<u>67,897,709</u>	<u>854,136,014</u>	<u>7.9%</u>	<u>3,731</u>	<u>5,615</u>	<u>5,872</u>	<u>2,501</u>	<u>2,387</u>	<u>2,378</u>
Ind. Incurred	\$193,940,241	\$3,058,107,867	6.3%	\$10,657	\$20,105	\$21,389	\$7,145	\$8,547	\$8,662
Med. Paid	\$92,362,302	\$2,328,299,691	4.0%	\$5,075	\$15,307	\$16,698	\$3,403	\$6,507	\$6,762
<u>Med. Reserves</u>	<u>74,950,459</u>	<u>1,125,139,119</u>	<u>6.7%</u>	<u>4,119</u>	<u>7,397</u>	<u>7,843</u>	<u>2,761</u>	<u>3,144</u>	<u>3,176</u>
Med. Incurred	\$167,312,761	\$3,453,438,810	4.8%	\$9,194	\$22,704	\$24,541	\$6,164	\$9,651	\$9,938
ALAE Paid	\$33,970,349	\$924,782,354	3.7%	\$1,867	\$6,080	\$6,653	\$1,252	\$2,585	\$2,694
MCCP	5,633,683	190,751,973	3.0%	310	1,254	1,382	208	533	560
Paid on Med-Only Claims	\$6,795,072	\$258,765,629	2.6%						
Ind. Paid on Open Ind. Claims	126,042,532	2,203,971,853	5.7%						
Med. Paid on Open Ind. Claims	67,897,709	854,136,014	7.9%						
AY2020 Claim Counts									
# of Open Indemnity Claims	1,465	43,022	3.4%						
# of Med-Only Claims	8,945	205,713	4.3%						
# of Indemnity Claims	18,198	152,104	12.0%						
Total Number of Claims	27,143	357,817	7.6%						

AY2021 @12/31/2022	Average per Indemnity Claim					Average per Total Claim			
	COVID-19 Claims	4Q-2022 Data Call	COVID-19 Percentage	COVID-19 Claims	All WC Claims	Without COVID-19 Claims	COVID-19 Claims	All WC Claims	Without COVID-19 Claims
Ind. Paid	\$28,045,940	\$1,545,764,123	1.8%	\$3,916	\$10,198	\$10,510	\$2,676	\$4,065	\$4,104
<u>Ind. Reserves</u>	<u>24,035,069</u>	<u>1,043,884,757</u>	<u>2.3%</u>	<u>3,356</u>	<u>6,887</u>	<u>7,062</u>	<u>2,294</u>	<u>2,745</u>	<u>2,758</u>
Ind. Incurred	\$52,081,009	\$2,589,648,880	2.0%	\$7,273	\$17,085	\$17,572	\$4,970	\$6,810	\$6,862
Med. Paid	\$20,809,457	\$1,725,953,451	1.2%	\$2,906	\$11,387	\$11,808	\$1,986	\$4,539	\$4,611
<u>Med. Reserves</u>	<u>28,143,248</u>	<u>1,435,203,323</u>	<u>2.0%</u>	<u>3,930</u>	<u>9,469</u>	<u>9,744</u>	<u>2,686</u>	<u>3,774</u>	<u>3,805</u>
Med. Incurred	\$48,952,705	\$3,161,156,774	1.5%	\$6,836	\$20,856	\$21,551	\$4,672	\$8,313	\$8,416
ALAE Paid	\$8,724,443	\$633,955,381	1.4%	\$1,218	\$4,183	\$4,330	\$833	\$1,667	\$1,691
MCCP	1,455,376	152,059,182	1.0%	203	1,003	1,043	139	400	407
Paid on Med-Only Claims	\$1,896,407	\$266,673,142	0.7%						
Ind. Paid on Open Ind. Claims	28,045,940	1,545,764,123	1.8%						
Med. Paid on Open Ind. Claims	24,035,069	1,043,884,757	2.3%						
AY2021 Claim Counts									
# of Open Indemnity Claims	695	64,621	1.1%						
# of Med-Only Claims	3,318	228,716	1.5%						
# of Indemnity Claims	7,161	151,571	4.7%						
Total Number of Claims	10,479	380,287	2.8%						

AY2022 @12/31/2022	Average per Indemnity Claim					Average per Total Claim			
	COVID-19 Claims	4Q-2022 Data Call	COVID-19 Percentage	COVID-19 Claims	All WC Claims	Without COVID-19 Claims	COVID-19 Claims	All WC Claims	Without COVID-19 Claims
Ind. Paid	\$7,120,146	\$585,654,510	1.2%	\$1,136	\$4,498	\$4,667	\$748	\$1,727	\$1,755
<u>Ind. Reserves</u>	<u>4,769,552</u>	<u>875,183,680</u>	<u>0.5%</u>	<u>761</u>	<u>6,721</u>	<u>7,022</u>	<u>501</u>	<u>2,580</u>	<u>2,641</u>
Ind. Incurred	\$11,889,698	\$1,460,838,190	0.8%	\$1,897	\$11,218	\$11,690	\$1,248	\$4,307	\$4,396
Med. Paid	\$2,680,874	\$712,453,930	0.4%	\$428	\$5,471	\$5,726	\$281	\$2,101	\$2,153
<u>Med. Reserves</u>	<u>6,400,455</u>	<u>1,532,158,883</u>	<u>0.4%</u>	<u>1,021</u>	<u>11,766</u>	<u>12,309</u>	<u>672</u>	<u>4,518</u>	<u>4,629</u>
Med. Incurred	\$9,081,329	\$2,244,612,813	0.4%	\$1,449	\$17,237	\$18,036	\$953	\$6,618	\$6,782
ALAE Paid	\$1,719,689	\$202,539,416	0.8%	\$274	\$1,555	\$1,620	\$181	\$597	\$609
MCCP	268,334	64,555,127	0.4%	43	496	519	28	190	195
Paid on Med-Only Claims	\$467,263	\$176,849,900	0.3%						
Ind. Paid on Open Ind. Claims	7,120,146	585,654,510	1.2%						
Med. Paid on Open Ind. Claims	4,769,552	875,183,680	0.5%						
AY2022 Claim Counts									
# of Open Indemnity Claims	726	84,914	0.9%						
# of Med-Only Claims	3,258	208,939	1.6%						
# of Indemnity Claims	6,267	130,217	4.8%						
Total Number of Claims	9,525	339,156	2.8%						

Source: WCIRB accident year experience calls.

California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year



Note:

The 2022 estimate is based on a comparison of claim counts based on WCIRB accident year experience as of December 31, 2022 relative to the estimated change in statewide employment. Prior years are based on unit statistical data. Experience excludes COVID-19 claims.

Average Incurred Indemnity Loss per Reported Indemnity Claim
As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
1997										19,004
1998									20,962	21,043
1999								22,496	22,644	22,783
2000							23,273	23,531	23,716	23,831
2001						24,779	25,311	25,672	25,931	26,104
2002					22,779	23,524	23,957	24,248	24,502	24,758
2003				21,360	22,549	23,312	23,849	24,297	24,696	25,072
2004			16,019	17,317	18,025	18,798	19,301	19,850	20,212	20,520
2005		11,356	13,674	14,978	16,000	16,834	17,482	17,986	18,268	18,493
2006	8,032	12,054	14,847	16,422	17,700	18,608	19,249	19,652	19,928	20,104
2007	8,156	12,900	16,192	18,033	19,217	20,118	20,855	21,287	21,525	21,757
2008	8,575	13,914	17,737	19,938	21,324	22,212	22,810	23,220	23,472	23,688
2009	8,732	14,560	18,317	20,698	22,154	23,092	23,597	24,032	24,373	24,607
2010	8,746	14,277	18,213	20,368	21,603	22,484	23,016	23,377	23,674	23,926
2011	9,141	14,781	18,230	20,310	21,346	22,085	22,536	22,938	23,163	23,352
2012	9,181	14,689	17,990	19,697	20,856	21,649	22,137	22,440	22,730	22,878
2013	9,382	14,527	17,692	19,449	20,415	21,036	21,424	21,678	21,825	21,958
2014	9,282	14,673	18,277	20,169	21,294	21,861	22,198	22,449	22,572	
2015	9,634	15,349	18,832	20,641	21,555	22,078	22,438	22,637		
2016	9,816	15,310	18,559	20,178	21,052	21,573	21,936			
2017	9,971	15,630	18,951	20,476	21,292	21,886				
2018	10,573	16,387	19,659	21,163	22,067					
2019	11,029	17,144	20,549	22,469						
2020	11,919	17,661	21,389							
2021	11,253	17,572								
2022	11,690									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
1998										10.7%
1999									8.0%	8.3%
2000								4.6%	4.7%	4.6%
2001							8.8%	9.1%	9.3%	9.5%
2002						-5.1%	-5.4%	-5.5%	-5.5%	-5.2%
2003					-1.0%	-0.9%	-0.4%	0.2%	0.8%	1.3%
2004				-18.9%	-20.1%	-19.4%	-19.1%	-18.3%	-18.2%	-18.2%
2005			-14.6%	-13.5%	-11.2%	-10.4%	-9.4%	-9.4%	-9.6%	-9.9%
2006		6.1%	8.6%	9.6%	10.6%	10.5%	10.1%	9.3%	9.1%	8.7%
2007	1.6%	7.0%	9.1%	9.8%	8.6%	8.1%	8.3%	8.3%	8.0%	8.2%
2008	5.1%	7.9%	9.5%	10.6%	11.0%	10.4%	9.4%	9.1%	9.0%	8.9%
2009	1.8%	4.6%	3.3%	3.8%	3.9%	4.0%	3.4%	3.5%	3.8%	3.9%
2010	0.2%	-1.9%	-0.6%	-1.6%	-2.5%	-2.6%	-2.5%	-2.7%	-2.9%	-2.8%
2011	4.5%	3.5%	0.1%	-0.3%	-1.2%	-1.8%	-2.1%	-1.9%	-2.2%	-2.4%
2012	0.4%	-0.6%	-1.3%	-3.0%	-2.3%	-2.0%	-1.8%	-2.2%	-1.9%	-2.0%
2013	2.2%	-1.1%	-1.7%	-1.3%	-2.1%	-2.8%	-3.2%	-3.4%	-4.0%	-4.0%
2014	-1.1%	1.0%	3.3%	3.7%	4.3%	3.9%	3.6%	3.6%	3.4%	
2015	3.8%	4.6%	3.0%	2.3%	1.2%	1.0%	1.1%	0.8%		
2016	1.9%	-0.3%	-1.4%	-2.2%	-2.3%	-2.3%	-2.2%			
2017	1.6%	2.1%	2.1%	1.5%	1.1%	1.4%				
2018	6.0%	4.8%	3.7%	3.4%	3.6%					
2019	4.3%	4.6%	4.5%	6.2%						
2020	8.1%	3.0%	4.1%							
2021	-5.6%	-0.5%								
2022	3.9%									

Annual Trend*										
All-Year	2.4%	2.3%	1.9%	1.3%	0.6%	0.1%	-0.1%	-0.2%	0.0%	0.3%
R ²	0.954	0.894	0.767	0.380	0.113	0.002	0.005	0.009	0.001	0.024
5-Year	2.2%	3.1%	3.7%	2.2%	0.6%	0.7%	0.3%	-0.3%	-1.5%	-2.7%
R ²	0.542	0.894	0.986	0.661	0.271	0.306	0.064	0.039	0.651	0.986

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

Average Incurred Medical Loss per Reported Claim
As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
2001										9,943
2002									9,972	10,249
2003								9,518	9,860	10,133
2004							7,729	8,055	8,308	8,524
2005						7,007	7,393	7,722	7,971	8,124
2006					7,303	7,781	8,146	8,463	8,638	8,733
2007				7,727	8,340	8,904	9,346	9,628	9,791	9,831
2008			7,801	8,783	9,568	10,129	10,512	10,775	10,879	10,925
2009		7,320	8,864	10,041	10,874	11,465	11,776	11,952	12,032	12,093
2010	5,446	7,620	9,298	10,462	11,178	11,634	11,902	12,029	12,116	12,133
2011	5,575	7,854	9,342	10,348	10,988	11,313	11,460	11,562	11,575	11,579
2012	5,719	7,798	9,046	9,774	10,274	10,570	10,719	10,794	10,849	10,898
2013	5,826	7,741	8,721	9,389	9,722	9,910	9,982	10,034	10,039	10,098
2014	5,683	7,337	8,370	8,964	9,245	9,440	9,537	9,626	9,686	
2015	5,801	7,445	8,407	8,901	9,107	9,254	9,310	9,351		
2016	5,910	7,498	8,306	8,604	8,847	8,988	9,097			
2017	5,890	7,307	8,045	8,415	8,629	8,830				
2018	6,111	7,636	8,399	8,828	9,087					
2019	6,129	7,715	8,569	9,086						
2020	6,961	8,719	9,938							
2021	6,732	8,416								
2022	6,782									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
2002										3.1%
2003										-1.1%
2004									-15.4%	-15.9%
2005							-4.3%	-4.1%	-4.1%	-4.7%
2006						11.0%	10.2%	9.6%	8.4%	7.5%
2007					14.2%	14.4%	14.7%	13.8%	13.4%	12.6%
2008				13.7%	14.7%	13.7%	12.5%	11.9%	11.1%	11.1%
2009			13.6%	14.3%	13.7%	13.2%	12.0%	10.9%	10.6%	10.7%
2010		4.1%	4.9%	4.2%	2.8%	1.5%	1.1%	0.6%	0.7%	0.3%
2011	2.4%	3.1%	0.5%	-1.1%	-1.7%	-2.8%	-3.7%	-3.9%	-4.5%	-4.6%
2012	2.6%	-0.7%	-3.2%	-5.5%	-6.5%	-6.6%	-6.5%	-6.6%	-6.3%	-5.9%
2013	1.9%	-0.7%	-3.6%	-3.9%	-5.4%	-6.2%	-6.9%	-7.0%	-7.5%	-7.3%
2014	-2.4%	-5.2%	-4.0%	-4.5%	-4.9%	-4.7%	-4.5%	-4.1%	-3.5%	
2015	2.1%	1.5%	0.4%	-0.7%	-1.5%	-2.0%	-2.4%	-2.9%		
2016	1.9%	0.7%	-1.2%	-3.3%	-2.9%	-2.9%	-2.3%			
2017	-0.3%	-2.5%	-3.1%	-2.2%	-2.5%	-1.8%				
2018	3.8%	4.5%	4.4%	4.9%	5.3%					
2019	0.3%	1.0%	2.0%	2.9%						
2020	13.6%	13.0%	16.0%							
2021	-3.3%	-3.5%								
2022	0.7%									

Annual Trend*										
All-Year	1.9%	0.7%	0.1%	-0.4%	0.1%	0.9%	1.6%	1.7%	1.7%	1.7%
R ²	0.843	0.269	0.005	0.028	0.001	0.056	0.169	0.205	0.228	0.256
5-Year	3.1%	4.2%	4.3%	0.7%	-0.9%	-2.8%	-3.9%	-5.2%	-5.7%	-4.6%
R ²	0.614	0.805	0.657	0.124	0.261	0.966	0.938	0.968	0.988	0.906

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

Average Paid Indemnity Loss per Reported Indemnity Claim
As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
1997										17,598
1998									19,122	19,493
1999								20,388	20,877	21,249
2000							20,775	21,480	22,032	22,396
2001						21,646	22,736	23,513	24,079	24,493
2002					19,336	20,790	21,758	22,448	22,899	23,318
2003				16,910	19,073	20,468	21,390	22,057	22,657	23,191
2004			10,909	13,469	15,031	16,159	16,954	17,656	18,292	18,846
2005		6,398	9,584	11,799	13,227	14,260	15,098	15,816	16,484	16,965
2006	2,672	6,814	10,351	12,656	14,333	15,607	16,654	17,466	18,071	18,543
2007	2,836	7,324	11,160	13,801	15,678	17,081	18,201	19,012	19,625	20,151
2008	3,106	7,914	12,190	15,319	17,549	19,114	20,229	21,042	21,594	22,086
2009	3,109	7,997	12,535	15,862	18,236	19,854	21,027	21,922	22,590	23,116
2010	3,069	7,965	12,568	15,915	18,136	19,708	20,849	21,625	22,227	22,681
2011	3,117	8,111	12,662	15,817	17,921	19,422	20,481	21,317	21,843	22,200
2012	3,243	8,203	12,618	15,701	17,755	19,252	20,219	20,883	21,357	21,706
2013	3,186	8,128	12,695	15,826	17,782	19,039	19,833	20,379	20,773	21,061
2014	3,150	8,315	13,249	16,478	18,536	19,808	20,568	21,123	21,497	
2015	3,279	8,701	13,709	16,967	18,927	19,976	20,802	21,356		
2016	3,417	8,884	13,716	16,758	18,422	19,517	20,347			
2017	3,474	9,078	13,920	16,713	18,492	19,676				
2018	3,732	9,463	14,109	17,142	19,031					
2019	3,890	9,748	14,702	18,106						
2020	4,263	10,297	15,518							
2021	4,362	10,510								
2022	4,667									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
1998										10.8%
1999									9.2%	9.0%
2000								5.4%	5.5%	5.4%
2001							9.4%	9.5%	9.3%	9.4%
2002						-4.0%	-4.3%	-4.5%	-4.9%	-4.8%
2003					-1.4%	-1.5%	-1.7%	-1.7%	-1.1%	-0.5%
2004				-20.4%	-21.2%	-21.1%	-20.7%	-20.0%	-19.3%	-18.7%
2005			-12.2%	-12.4%	-12.0%	-11.8%	-10.9%	-10.4%	-9.9%	-10.0%
2006		6.5%	8.0%	7.3%	8.4%	9.4%	10.3%	10.4%	9.6%	9.3%
2007	6.1%	7.5%	7.8%	9.0%	9.4%	9.4%	9.3%	8.9%	8.6%	8.7%
2008	9.5%	8.1%	9.2%	11.0%	11.9%	11.9%	11.1%	10.7%	10.0%	9.6%
2009	0.1%	1.0%	2.8%	3.5%	3.9%	3.9%	3.9%	4.2%	4.6%	4.7%
2010	-1.3%	-0.4%	0.3%	0.3%	-0.5%	-0.7%	-0.8%	-1.4%	-1.6%	-1.9%
2011	1.6%	1.8%	0.8%	-0.6%	-1.2%	-1.5%	-1.8%	-1.4%	-1.7%	-2.1%
2012	4.0%	1.1%	-0.3%	-0.7%	-0.9%	-0.9%	-1.3%	-2.0%	-2.2%	-2.2%
2013	-1.7%	-0.9%	0.6%	0.8%	0.2%	-1.1%	-1.9%	-2.4%	-2.7%	-3.0%
2014	-1.1%	2.3%	4.4%	4.1%	4.2%	4.0%	3.7%	3.7%	3.5%	
2015	4.1%	4.7%	3.5%	3.0%	2.1%	0.8%	1.1%	1.1%		
2016	4.2%	2.1%	0.1%	-1.2%	-2.7%	-2.3%	-2.2%			
2017	1.7%	2.2%	1.5%	-0.3%	0.4%	0.8%				
2018	7.4%	4.3%	1.4%	2.6%	2.9%					
2019	4.2%	3.0%	4.2%	5.6%						
2020	9.6%	5.6%	5.6%							
2021	2.3%	2.1%								
2022	7.0%									

		Annual Trend*									
All-Year	R ²	2.9%	2.6%	2.4%	1.7%	1.0%	0.4%	0.2%	0.1%	0.1%	0.4%
5-Year	R ²	5.8%	3.8%	3.1%	1.5%	0.3%	0.5%	0.6%	0.2%	-1.2%	-2.3%

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

Average Paid Medical Loss per Indemnity Claim
As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
2004										21,318
2005									21,103	21,986
2006								22,403	23,412	24,259
2007							23,766	25,211	26,299	27,159
2008						24,428	26,286	27,689	28,689	29,507
2009					23,507	26,043	27,861	29,187	30,171	30,945
2010				20,321	23,540	25,892	27,667	28,857	29,760	30,477
2011			15,075	19,066	21,965	24,194	25,678	26,812	27,577	28,095
2012		9,654	14,377	18,061	20,709	22,556	23,875	24,799	25,403	25,906
2013	4,050	9,176	13,744	17,121	19,404	20,956	21,981	22,624	23,142	23,532
2014	3,808	8,994	13,472	16,666	18,791	20,278	21,204	21,940	22,446	
2015	3,886	9,116	13,428	16,605	18,550	19,752	20,675	21,336		
2016	4,072	9,270	13,360	16,174	17,869	19,090	20,081			
2017	4,261	9,479	13,535	16,117	17,908	19,279				
2018	4,445	9,893	13,951	16,909	18,860					
2019	4,367	9,549	13,957	17,272						
2020	4,338	10,019	14,816							
2021	4,303	9,974								
2022	4,303									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
2005										3.1%
2006									10.9%	10.3%
2007								12.5%	12.3%	12.0%
2008							10.6%	9.8%	9.1%	8.6%
2009						6.6%	6.0%	5.4%	5.2%	4.9%
2010**					0.1%	-0.6%	-0.7%	-1.1%	-1.4%	-1.5%
2011**				-6.2%	-6.7%	-6.6%	-7.2%	-7.1%	-7.3%	-7.8%
2012			-4.6%	-5.3%	-5.7%	-6.8%	-7.0%	-7.5%	-7.9%	-7.8%
2013		-5.0%	-4.4%	-5.2%	-6.3%	-7.1%	-7.9%	-8.8%	-8.9%	-9.2%
2014	-6.0%	-2.0%	-2.0%	-2.7%	-3.2%	-3.2%	-3.5%	-3.0%	-3.0%	
2015	2.0%	1.3%	-0.3%	-0.4%	-1.3%	-2.6%	-2.5%	-2.8%		
2016	4.8%	1.7%	-0.5%	-2.6%	-3.7%	-3.4%	-2.9%			
2017	4.6%	2.3%	1.3%	-0.4%	0.2%	1.0%				
2018	4.3%	4.4%	3.1%	4.9%	5.3%					
2019	-1.8%	-3.5%	0.0%	2.1%						
2020	-0.6%	4.9%	6.2%							
2021	-0.8%	-0.4%								
2022	0.0%									

Annual Trend*										
All-Year	1.3%	0.9%	-0.2%	-1.8%	-3.2%	-3.7%	-3.2%	-1.8%	0.1%	1.9%
R ²	0.593	0.484	0.015	0.560	0.836	0.889	0.654	0.217	0.001	0.188
5-Year	-0.8%	1.2%	2.4%	1.2%	-0.3%	-2.2%	-4.0%	-5.6%	-7.1%	-6.9%
R ²	0.875	0.494	0.885	0.438	0.029	0.891	0.930	0.940	0.982	0.958

*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, excluding COVID-19 claims.

Average Paid Medical Loss per Claim**
As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
2001										8,414
2002									8,572	8,839
2003								7,959	8,277	8,586
2004							6,225	6,564	6,900	7,206
2005						5,542	5,939	6,298	6,674	6,931
2006					5,609	6,152	6,606	7,026	7,320	7,567
2007				5,635	6,414	7,068	7,647	8,078	8,402	8,659
2008			5,201	6,401	7,388	8,174	8,752	9,189	9,506	9,760
2009		4,076	5,792	7,263	8,445	9,304	9,913	10,359	10,687	10,936
2010	1,986	4,201	6,099	7,703	8,847	9,669	10,295	10,715	11,028	11,202
2011	1,824	4,090	5,997	7,469	8,528	9,340	9,884	10,299	10,511	10,699
2012	1,846	4,046	5,834	7,211	8,201	8,891	9,377	9,665	9,885	10,074
2013	1,865	3,972	5,726	7,026	7,906	8,490	8,839	9,084	9,282	9,431
2014	1,820	3,900	5,617	6,834	7,631	8,158	8,502	8,777	8,965	
2015	1,839	3,956	5,607	6,791	7,498	7,952	8,297	8,539		
2016	1,926	4,046	5,619	6,666	7,303	7,764	8,135			
2017	1,957	4,000	5,483	6,428	7,081	7,574				
2018	2,041	4,186	5,715	6,818	7,525					
2019	2,016	4,102	5,790	7,030						
2020	2,190	4,734	6,762							
2021	2,156	4,611								
2022	2,153									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
2002										5.0%
2003									-3.4%	-2.9%
2004								-17.5%	-16.6%	-16.1%
2005							-4.6%	-4.0%	-3.3%	-3.8%
2006						11.0%	11.2%	11.6%	9.7%	9.2%
2007					14.4%	14.9%	15.8%	15.0%	14.8%	14.4%
2008				13.6%	15.2%	15.6%	14.4%	13.8%	13.1%	12.7%
2009			11.4%	13.5%	14.3%	13.8%	13.3%	12.7%	12.4%	12.1%
2010		3.1%	5.3%	6.1%	4.8%	3.9%	3.9%	3.4%	3.2%	2.4%
2011	-8.1%	-2.6%	-1.7%	-3.0%	-3.6%	-3.4%	-4.0%	-3.9%	-4.7%	-4.5%
2012	1.2%	-1.1%	-2.7%	-3.5%	-3.8%	-4.8%	-5.1%	-6.2%	-6.0%	-5.8%
2013	1.1%	-1.8%	-1.9%	-2.6%	-3.6%	-4.5%	-5.7%	-6.0%	-6.1%	-6.4%
2014	-2.4%	-1.8%	-1.9%	-2.7%	-3.5%	-3.9%	-3.8%	-3.4%	-3.4%	
2015	1.1%	1.4%	-0.2%	-0.6%	-1.7%	-2.5%	-2.4%	-2.7%		
2016	4.7%	2.3%	0.2%	-1.8%	-2.6%	-2.4%	-2.0%			
2017	1.6%	-1.1%	-2.4%	-3.6%	-3.0%	-2.5%				
2018	4.3%	4.6%	4.2%	6.1%	6.3%					
2019	-1.2%	-2.0%	1.3%	3.1%						
2020	8.6%	15.4%	16.8%							
2021	-1.6%	-2.6%								
2022	-0.1%									

Annual Trend*										
All-Year	1.4%	0.8%	0.5%	0.3%	0.8%	1.8%	2.7%	2.7%	2.6%	2.6%
R ²	0.654	0.310	0.108	0.016	0.066	0.180	0.338	0.375	0.381	0.415
5-Year	1.8%	4.2%	4.3%	0.9%	-0.8%	-2.7%	-3.4%	-4.6%	-5.2%	-3.9%
R ²	0.556	0.747	0.657	0.193	0.207	0.988	0.949	0.968	0.992	0.838

*Trend is based on an exponential distribution.

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

Source: WCIRB quarterly calls for experience, excluding COVID-19 claims.

Average Indemnity Case Outstanding per Open Indemnity Claim

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
1999										
2000										
2001										
2002										
2003										29,730
2004									25,183	29,193
2005								23,410	25,547	27,311
2006							22,066	24,699	26,491	27,397
2007						19,717	23,642	26,271	27,917	30,969
2008					18,031	20,570	22,937	25,584	29,573	32,578
2009				16,463	18,639	20,855	22,402	25,561	28,696	31,504
2010			14,319	16,125	17,732	19,664	21,840	24,454	27,223	31,315
2011		12,609	14,672	16,999	18,592	20,571	22,815	25,446	28,454	32,065
2012	8,188	12,444	14,592	15,929	18,157	20,642	24,011	27,847	32,521	35,434
2013	8,470	12,337	14,013	15,474	17,267	19,546	23,238	26,409	28,254	30,712
2014	8,337	12,517	14,748	16,899	19,852	22,088	24,959	28,010	29,708	
2015	8,686	13,446	16,147	18,835	21,475	24,271	26,430	28,624		
2016	8,918	13,797	16,645	19,482	22,244	24,700	26,901			
2017	9,333	14,947	18,703	21,543	23,864	26,943				
2018	9,931	15,842	19,383	21,555	24,670					
2019	10,359	16,092	18,913	22,044						
2020	10,933	15,736	18,920							
2021	10,043	15,954								
2022	10,339									

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>	<u>108</u>	<u>120</u>
2000										
2001										
2002										
2003										
2004										-1.8%
2005									1.4%	-6.4%
2006								5.5%	3.7%	0.3%
2007							7.1%	6.4%	5.4%	13.0%
2008						4.3%	-3.0%	-2.6%	5.9%	5.2%
2009					3.4%	1.4%	-2.3%	-0.1%	-3.0%	-3.3%
2010				-2.1%	-4.9%	-5.7%	-2.5%	-4.3%	-5.1%	-0.6%
2011			2.5%	5.4%	4.9%	4.6%	4.5%	4.1%	4.5%	2.4%
2012		-1.3%	-0.5%	-6.3%	-2.3%	0.3%	5.2%	9.4%	14.3%	10.5%
2013	3.4%	-0.9%	-4.0%	-2.9%	-4.9%	-5.3%	-3.2%	-5.2%	-13.1%	-13.3%
2014	-1.6%	1.5%	5.2%	9.2%	15.0%	13.0%	7.4%	6.1%	5.1%	
2015	4.2%	7.4%	9.5%	11.5%	8.2%	9.9%	5.9%	2.2%		
2016	2.7%	2.6%	3.1%	3.4%	3.6%	1.8%	1.8%			
2017	4.7%	8.3%	12.4%	10.6%	7.3%	9.1%				
2018	6.4%	6.0%	3.6%	0.1%	3.4%					
2019	4.3%	1.6%	-2.4%	2.3%						
2020	5.5%	-2.2%	0.0%							
2021	-8.1%	1.4%								
2022	2.9%									

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

Average Medical Case Outstanding per Open Indemnity Claim

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
1999										
2000										
2001										
2002										
2003										69,421
2004									58,410	72,769
2005								52,570	63,596	73,017
2006							45,267	56,155	64,957	70,785
2007						40,133	50,963	60,304	68,774	76,158
2008					33,739	42,044	50,655	60,345	70,025	76,697
2009				28,590	34,880	41,929	48,953	58,163	65,241	73,783
2010			23,496	28,817	34,295	40,054	46,600	52,748	58,936	67,958
2011		20,255	24,732	30,386	37,204	42,440	48,755	55,216	64,237	68,752
2012	15,934	20,173	24,048	28,050	33,260	39,601	46,012	55,623	62,944	68,635
2013	15,580	19,673	22,549	27,005	31,792	37,130	44,808	51,834	54,597	61,402
2014	14,976	18,539	21,854	26,293	31,331	37,317	42,946	48,614	53,983	
2015	15,563	19,316	23,880	29,272	35,689	40,811	44,409	49,251		
2016	15,998	20,261	24,934	29,858	35,333	39,743	44,137			
2017	16,886	21,468	26,870	32,003	37,070	43,068				
2018	17,710	22,377	26,198	30,029	35,400					
2019	17,712	22,024	24,802	28,593						
2020	18,072	21,276	25,271							
2021	17,884	22,011								
2022	18,123									

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>	<u>108</u>	<u>120</u>
2000										
2001										
2002										
2003										
2004										4.8%
2005									8.9%	0.3%
2006								6.8%	2.1%	-3.1%
2007							12.6%	7.4%	5.9%	7.6%
2008						4.8%	-0.6%	0.1%	1.8%	0.7%
2009					3.4%	-0.3%	-3.4%	-3.6%	-6.8%	-3.8%
2010				0.8%	-1.7%	-4.5%	-4.8%	-9.3%	-9.7%	-7.9%
2011			5.3%	5.4%	8.5%	6.0%	4.6%	4.7%	9.0%	1.2%
2012		-0.4%	-2.8%	-7.7%	-10.6%	-6.7%	-5.6%	0.7%	-2.0%	-0.2%
2013	-2.2%	-2.5%	-6.2%	-3.7%	-4.4%	-6.2%	-2.6%	-6.8%	-13.3%	-10.5%
2014	-3.9%	-5.8%	-3.1%	-2.6%	-1.5%	0.5%	-4.2%	-6.2%	-1.1%	
2015	3.9%	4.2%	9.3%	11.3%	13.9%	9.4%	3.4%	1.3%		
2016	2.8%	4.9%	4.4%	2.0%	-1.0%	-2.6%	-0.6%			
2017	5.5%	6.0%	7.8%	7.2%	4.9%	8.4%				
2018	4.9%	4.2%	-2.5%	-6.2%	-4.5%					
2019	0.0%	-1.6%	-5.3%	-4.8%						
2020	2.0%	-3.4%	1.9%							
2021	-1.0%	3.5%								
2022	1.3%									

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

Average Paid Indemnity Loss per Closed Indemnity Claim

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
1999										
2000										
2001										
2002										
2003										20,053
2004									15,618	16,488
2005								13,180	14,225	14,916
2006							13,647	14,894	15,777	16,535
2007						13,480	15,068	16,251	17,195	18,063
2008					13,227	15,526	17,003	18,259	19,239	19,976
2009				11,258	14,274	16,389	18,101	19,443	20,404	21,212
2010			8,065	11,819	14,658	16,704	18,408	19,630	20,489	21,172
2011		4,478	8,611	12,229	14,928	16,890	18,413	19,545	20,376	20,933
2012	1,832	5,035	9,143	12,590	15,150	17,051	18,343	19,357	20,035	20,523
2013	2,112	5,357	9,540	12,975	15,437	17,104	18,224	19,046	19,587	19,992
2014	2,128	5,627	10,174	13,775	16,337	17,931	19,003	19,770	20,346	
2015	2,340	6,177	10,888	14,496	16,893	18,273	19,267	20,015		
2016	2,493	6,545	11,038	14,481	16,454	17,824	18,796			
2017	2,591	6,648	11,144	14,345	16,461	17,949				
2018	2,875	7,039	11,390	14,634	16,913					
2019	3,160	7,059	11,449	15,521						
2020	3,295	7,663	12,664							
2021	3,158	7,452								
2022	3,458									

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>	<u>108</u>	<u>120</u>
2000										
2001										
2002										
2003										
2004										-17.8%
2005									-8.9%	-9.5%
2006								13.0%	10.9%	10.9%
2007							10.4%	9.1%	9.0%	9.2%
2008						15.2%	12.8%	12.4%	11.9%	10.6%
2009					7.9%	5.6%	6.5%	6.5%	6.1%	6.2%
2010				5.0%	2.7%	1.9%	1.7%	1.0%	0.4%	-0.2%
2011			6.8%	3.5%	1.8%	1.1%	0.0%	-0.4%	-0.6%	-1.1%
2012		12.4%	6.2%	3.0%	1.5%	1.0%	-0.4%	-1.0%	-1.7%	-2.0%
2013	15.3%	6.4%	4.3%	3.1%	1.9%	0.3%	-0.6%	-1.6%	-2.2%	-2.6%
2014	0.7%	5.1%	6.6%	6.2%	5.8%	4.8%	4.3%	3.8%	3.9%	
2015	10.0%	9.8%	7.0%	5.2%	3.4%	1.9%	1.4%	1.2%		
2016	6.5%	6.0%	1.4%	-0.1%	-2.6%	-2.5%	-2.4%			
2017	3.9%	1.6%	1.0%	-0.9%	0.0%	0.7%				
2018	11.0%	5.9%	2.2%	2.0%	2.7%					
2019	9.9%	0.3%	0.5%	6.1%						
2020	4.3%	8.6%	10.6%							
2021	-4.2%	-2.8%								
2022	9.5%									

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

Average Medical Paid per Closed Indemnity Claim*

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
1999										
2000										
2001										
2002										
2003										18,776
2004									15,913	17,217
2005								14,990	16,655	17,965
2006							15,702	17,479	18,871	20,192
2007						15,690	18,080	19,994	21,648	23,144
2008					15,333	18,576	20,756	22,694	24,315	25,504
2009				13,298	17,215	20,202	22,704	24,762	26,154	27,615
2010			9,765	14,243	17,902	20,769	23,412	25,265	26,628	27,695
2011		5,225	9,674	13,864	17,235	20,202	22,398	24,047	25,202	25,953
2012	2,331	5,612	9,966	13,764	17,019	19,368	21,060	22,348	23,327	23,859
2013	2,398	5,721	9,970	13,584	16,474	18,509	19,882	20,820	21,514	22,097
2014	2,376	5,794	10,040	13,642	16,347	18,132	19,282	20,114	20,880	
2015	2,503	6,243	10,431	13,856	16,234	17,713	18,709	19,592		
2016	2,709	6,471	10,501	13,518	15,526	16,817	18,039			
2017	2,835	6,662	10,654	13,478	15,473	16,831				
2018	2,982	6,974	11,109	14,019	16,177					
2019	3,426	6,735	10,816	14,200						
2020	2,898	6,944	11,430							
2021	2,857	6,431								
2022	2,880									

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>	<u>108</u>	<u>120</u>
2000										
2001										
2002										
2003										
2004										-8.3%
2005									4.7%	4.3%
2006								16.6%	13.3%	12.4%
2007							15.1%	14.4%	14.7%	14.6%
2008						18.4%	14.8%	13.5%	12.3%	10.2%
2009					12.3%	8.8%	9.4%	9.1%	7.6%	8.3%
2010*				--	--	--	--	--	--	--
2011*			--	--	--	--	--	--	--	--
2012*		--	--	--	--	--	--	--	--	--
2013	2.9%	2.0%	0.0%	-1.3%	-3.2%	-4.4%	-5.6%	-6.8%	-7.8%	-7.4%
2014	-0.9%	1.3%	0.7%	0.4%	-0.8%	-2.0%	-3.0%	-3.4%	-2.9%	
2015	5.3%	7.7%	3.9%	1.6%	-0.7%	-2.3%	-3.0%	-2.6%		
2016	8.2%	3.7%	0.7%	-2.4%	-4.4%	-5.1%	-3.6%			
2017	4.6%	2.9%	1.5%	-0.3%	-0.3%	0.1%				
2018	5.2%	4.7%	4.3%	4.0%	4.5%					
2019	14.9%	-3.4%	-2.6%	1.3%						
2020	-15.4%	3.1%	5.7%							
2021	-1.4%	-7.4%								
2022	0.8%									

* 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 quarterly calls for experience, excluding COVID-19 claims.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Year 2022
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
				Projected (d)
2023				0.364
2024				0.362
9/1/2024				0.362

- (a) See Section B, Exhibit 3.1.
- (b) See Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from Section B, Exhibit 6.2, and projected frequency trends for accident years 2023 to 2025 from Section B, Exhibit 6.1; these trends were then separately applied to the 2022 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Year 2022
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.279	1.026	0.743	0.385
2019	0.310	1.022	0.823	0.386
2020	0.318	1.018	0.873	0.371
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
				Projected (d)
2023				0.368
2024				0.367
9/1/2024				0.368

- (a) See Section B, Exhibit 3.2.
- (b) See Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from Section B, Exhibit 6.4, and projected frequency trends for accident years 2023 to 2025 from Section B, Exhibit 6.1; these trends were then separately applied to the 2022 on-level ratio.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
				Projected (d)
2023				0.370
2024				0.366
9/1/2024				0.366

(a) See Section B, Exhibit 3.1.

(b) See Section B, Exhibit 4.1.

(c) See Section B, Exhibit 5.2.

(d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual 12-month frequency change for accident year 2022 from Appendix B, Exhibit 2, and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are based on the 1990-2022 annual indemnity severity trend of 0.8%.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.279	1.026	0.743	0.385
2019	0.310	1.022	0.823	0.386
2020	0.318	1.018	0.873	0.371
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
				Projected (d)
2023				0.406
2024				0.417
9/1/2024				0.420

(a) See Section B, Exhibit 3.2.

(b) See Section B, Exhibit 4.4.

(c) See Section B, Exhibit 5.2.

(d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual 12-month frequency change for accident year 2022 from Appendix B, Exhibit 2, and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are based on the 1990-2022 annual medical severity trend of 4.6%.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
				Projected (d)
2023				0.372
2024				0.371
9/1/2024				0.371

(a) See Section B, Exhibit 3.1.

(b) See Section B, Exhibit 4.1.

(c) See Section B, Exhibit 5.2.

(d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual 12-month frequency change for accident year 2022 from Appendix B, Exhibit 2, and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual indemnity severity growth estimates are based on the 2018-2022 annual indemnity severity trend of 1.3%.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.279	1.026	0.743	0.385
2019	0.310	1.022	0.823	0.386
2020	0.318	1.018	0.873	0.371
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
				Projected (d)
2023				0.377
2024				0.369
9/1/2024				0.368

(a) See Section B, Exhibit 3.2.

(b) See Section B, Exhibit 4.4.

(c) See Section B, Exhibit 5.2.

(d) The trending projection is based on frequency and severity growth separately applied to the 2021 and 2022 on-level ratios. The frequency growth estimates are based on the actual 12-month frequency change for accident year 2022 from Appendix B, Exhibit 2, and frequency model projections for accident years 2023 through 2025 from Section B, Exhibit 6.1. The annual medical severity growth estimates are based on the 2018-2022 annual medical severity trend of -0.3%.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Long-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
1991	0.428	1.103	1.160	0.406
1992	0.352	1.163	1.055	0.388
1993	0.289	1.411	1.021	0.400
1994	0.329	1.475	1.154	0.420
1995	0.474	1.366	1.516	0.427
1996	0.532	1.277	1.555	0.437
1997	0.603	1.143	1.508	0.457
1998	0.654	1.055	1.528	0.452
1999	0.686	0.977	1.452	0.462
2000	0.595	0.912	1.149	0.472
2001	0.494	0.913	0.981	0.460
2002	0.369	0.935	0.751	0.459
2003	0.244	0.932	0.532	0.427
2004	0.145	1.276	0.484	0.383
2005	0.125	1.730	0.536	0.402
2006	0.161	1.700	0.690	0.397
2007	0.222	1.639	0.882	0.413
2008	0.282	1.539	1.065	0.407
2009	0.330	1.508	1.149	0.433
2010	0.319	1.480	1.045	0.451
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
				Projected (d)
2023				0.365
2024				0.364
9/1/2024				0.363

- (a) See Section B, Exhibit 3.1.
- (b) See Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately -0.5% based on the 1990 to 2022 on-level indemnity to pure premium ratios to the 2021 and 2022 on-level indemnity to pure premium ratios.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Long-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)	(5) On-Level Medical to Pure Premium Ratio (f)
1991	0.356	0.551	1.160	0.169	0.169
1992	0.296	0.581	1.055	0.163	0.163
1993	0.244	0.696	1.021	0.166	0.166
1994	0.281	0.729	1.154	0.177	0.177
1995	0.415	0.719	1.516	0.197	0.197
1996	0.446	0.709	1.555	0.203	0.203
1997	0.501	0.702	1.508	0.233	0.233
1998	0.603	0.619	1.528	0.244	0.244
1999	0.663	0.536	1.452	0.245	0.245
2000	0.601	0.493	1.149	0.258	0.258
2001	0.535	0.449	0.981	0.245	0.245
2002	0.416	0.467	0.751	0.259	0.259
2003	0.268	0.489	0.532	0.247	0.247
2004	0.183	0.740	0.484	0.279	0.279
2005	0.180	0.859	0.536	0.288	0.288
2006	0.233	0.903	0.690	0.305	0.305
2007	0.329	0.886	0.882	0.330	0.330
2008	0.411	0.880	1.065	0.340	0.340
2009	0.485	0.868	1.149	0.366	0.366
2010	0.479	0.865	1.045	0.396	0.396
2011	0.413	0.880	0.953	0.381	0.381
2012	0.358	0.920	0.848	0.388	0.388
2013	0.303	0.954	0.741	0.390	0.426
2014	0.276	0.999	0.683	0.404	0.440
2015	0.263	1.019	0.652	0.410	0.446
2016	0.251	1.022	0.674	0.380	0.412
2017	0.257	1.025	0.706	0.373	0.404
2018	0.279	1.026	0.743	0.385	0.417
2019	0.310	1.022	0.823	0.386	0.418
2020	0.318	1.018	0.873	0.371	0.402
2021	0.355	1.016	0.907	0.398	0.433
2022	0.327	1.008	0.903	0.365	0.399
Projected (d)					
2023				0.402	
2024				0.415	
9/1/2024				0.418	

- (a) See Section B, Exhibit 3.2.
- (b) See Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately 3.4% based on the 1990 to 2022 on-level medical to pure premium ratios (including M CCP costs) to the 2021 and 2022 on-level medical to pure premium ratios.
- (e) Accident years 2011 and subsequent do not reflect paid M CCP costs. Accident years 2010 and prior do reflect paid M CCP costs.
- (f) Medical costs include the M CCP cost for all accident years for selecting the loss ratio trend.

**Projected On-Level Accident Year
Indemnity Loss to Pure Premium Ratios
Short-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Pure Premium Ratio (1) x (2) ÷ (3)
2011	0.296	1.460	0.953	0.454
2012	0.265	1.442	0.848	0.450
2013	0.226	1.410	0.741	0.429
2014	0.214	1.291	0.683	0.405
2015	0.209	1.273	0.652	0.408
2016	0.199	1.257	0.674	0.370
2017	0.204	1.224	0.706	0.354
2018	0.218	1.192	0.743	0.350
2019	0.257	1.160	0.823	0.362
2020	0.271	1.127	0.873	0.350
2021	0.311	1.086	0.907	0.373
2022	0.311	1.055	0.903	0.364
				Projected (d)
2023				0.374
2024				0.378
9/1/2024				0.379

- (a) See Section B, Exhibit 3.1.
- (b) See Section B, Exhibit 4.1.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately 1.1% based on the 2018 to 2022 on-level indemnity to pure premium ratios to the 2021 and 2022 on-level indemnity to pure premium ratios.

**Projected On-Level Accident Year
Medical Loss to Pure Premium Ratios
Short-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2022**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Pure Premium Ratio(e) (1) x (2) ÷ (3)
2011	0.413	0.880	0.953	0.381
2012	0.358	0.920	0.848	0.388
2013	0.303	0.954	0.741	0.390
2014	0.276	0.999	0.683	0.404
2015	0.263	1.019	0.652	0.410
2016	0.251	1.022	0.674	0.380
2017	0.257	1.025	0.706	0.373
2018	0.279	1.026	0.743	0.385
2019	0.310	1.022	0.823	0.386
2020	0.318	1.018	0.873	0.371
2021	0.355	1.016	0.907	0.398
2022	0.327	1.008	0.903	0.365
				Projected (d)
2023				0.378
2024				0.375
9/1/2024				0.375

- (a) See Section B, Exhibit 3.2.
- (b) See Section B, Exhibit 4.4.
- (c) See Section B, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately -0.7% based on the 2018 to 2022 on-level medical to pure premium ratios to the 2021 and 2022 on-level medical to pure premium ratios.

Section B

Appendix C

Projected Loss Adjustment Expense Ratio

Section 11730 of the California Insurance Code provides that the advisory pure premium rates include a provision for loss adjustment expenses (LAE). As detailed in this Appendix, the WCIRB projects LAE on policies incepting between September 1, 2023 and August 31, 2024 at 31.7% of losses.

LAE is incurred by insurers in investigating, administering and settling workers' compensation claims. These expenses include the costs associated with handling claims that can be directly allocated to a particular claim (allocated loss adjustment expenses or ALAE), as well as costs associated with handling claims that cannot be directly allocated to a particular claim (unallocated loss adjustment expenses or ULAE).

Beginning with policies incepting on or after July 1, 2010, the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* (USRP) requires that the cost of medical cost containment programs (MCCP) be reported as ALAE rather than as medical loss. As a result, projections of MCCP costs are included in the projection of ALAE rather than in the projected on-level medical loss ratio. The projections of MCCP costs as well as the cost of ULAE and ALAE excluding MCCP costs for policies incepting between September 1, 2023 and August 31, 2024 are discussed separately below.

Review of Historical LAE Ratios

Exhibit 1 shows ratios of calendar year paid ALAE¹ and paid ULAE to paid losses on a statewide basis and by type of insurer through calendar year 2021.² There are significant differences in LAE ratios by type of insurer. In particular, ratios of paid ULAE to paid losses for the State Compensation Insurance Fund (State Fund) have historically been much higher than those for the private insurers. Additionally, prior to calendar year 2013, the paid ULAE ratios of private insurers with workers' compensation business written primarily in California had been more than double the ratios of insurers with significant writings in other states (national insurers), while ratios of paid ALAE to paid losses for California-focused private insurers had been much more comparable to those for national insurers.

As noted in prior pure premium rate filings, reported ULAE amounts for national insurers are typically based on apportioning countrywide ULAE amounts to California. In addition, national insurers more frequently write policies on a large deductible basis or make use of third-party administrators (TPA) to handle claims. As a result, the amount of ULAE costs apportioned to California by national insurers in prior years were not fully reflective of the complexity of the claims process in California and did not include all ULAE related to claims-handling costs on a first-dollar basis. However, national insurers tend to be larger in size and a 2014 WCIRB study showed that economies of scale is also a contributor to the lower ULAE ratios reported for national insurers.³

In 2015, the WCIRB studied the ULAE costs reported for California to better understand differences in ULAE ratios between insurers and to more appropriately project future ULAE cost levels in advisory pure

¹ Ratios of paid ALAE to losses for calendar years 2010 through 2012 are affected by changes in the definition of MCCP costs to be reported as ALAE instead of medical losses for policies incepting on or after July 1, 2010. No adjustment for MCCP costs was made to the ratios shown in Exhibit 1.

² Calendar year 2022 LAE information is not yet available. Calendar year 2020 and 2021 paid ULAE to paid loss ratios include COVID-19 claims inasmuch as ULAE on COVID-19 claims cannot be separated from other ULAE amounts.

³ See Item AC14-08-08 of the August 5, 2014 WCIRB Actuarial Committee Agenda.

premium rates.⁴ As a result of this analysis, the WCIRB modified its Data Call for Direct California Workers' Compensation Experience Expense Information (Expense Call) to collect additional information from insurers to more accurately reflect ULAE costs related to large deductible policies and claims handled by a TPA. Countrywide information on this basis has been reported by insurers to the WCIRB beginning with the 2015 Expense Call. The additional information reported on the WCIRB's Expense Call related to ULAE costs includes (a) negative "service fee" type adjustments that are sometimes reflected in reported countrywide ULAE but may not be appropriate to reflect when projecting advisory pure premium rates, (b) losses on claims on large deductible policies and/or handled by a TPA for which the associated claims handling costs are not reported in countrywide ULAE amounts, and (c) various countrywide loss and ULAE amounts consistent with what is reported by insurers on the Insurance Expense Exhibit.

The approach used by the WCIRB to derive the ratios of California paid ULAE to paid losses for calendar years 2015 and subsequent⁵ shown in Exhibit 1 and the paid ULAE amounts used to project the ratio of ULAE to loss involves several components. First, the reported negative "service fee" type adjustments to ULAE were added back into the reported countrywide paid ULAE amount. Second, countrywide paid losses on large deductible policies and/or claims handled by a TPA for which the associated claims handling costs were not reported in countrywide paid ULAE were subtracted from the countrywide paid losses. This adjustment was applied to losses gross or net of deductible amounts depending on whether the insurer reported ULAE costs on a gross or net basis. Third, the adjusted countrywide paid ULAE ratio was derived based on the ratio of adjusted countrywide paid ULAE previously computed as described above to the computed adjusted countrywide paid losses. Fourth, the adjusted countrywide paid ULAE was derived by multiplying the adjusted countrywide paid ULAE ratio by the reported countrywide paid losses.

In 2017, the WCIRB reviewed a number of alternative bases of apportioning countrywide ULAE to California and determined that open indemnity claim counts were more highly correlated with paid ULAE and more responsive to the longer duration of claims in California than the alternative bases reviewed.⁶ As a result, beginning with the WCIRB's 2017 Expense Call, the WCIRB collects information on countrywide indemnity claim counts open at the end of the previous calendar year. In addition, for a number of the larger national insurers, the WCIRB collected similar information in order to apportion calendar year 2016 adjusted countywide paid ULAE to California based on open indemnity claim counts. The ULAE amounts for calendar years 2016 and subsequent reflected in the ULAE ratios shown in Exhibit 1 and in the projected ULAE ratio were determined using open indemnity claim counts to apportion insurers' countrywide ULAE to California.

For a number of insurers, the negative "service fee" type adjustments to ULAE do not apply and the reported countrywide ULAE reflects all claims handling costs on large deductible policies or related to claims handled by a TPA. In these instances, the approach described above simplifies to apportioning the reported countrywide ULAE to California based on California's share of the insurer's countrywide open indemnity claim counts. Although the WCIRB believes open indemnity claim counts is a reasonable basis to apportion countrywide ULAE to California, some insurers may have a more comprehensive method to derive the California ULAE. As a result, for these insurers, the California paid ULAE as reported on the WCIRB's Expense Call was used in deriving the ratios of California paid ULAE to paid losses for calendar years 2015 and subsequent shown in Exhibit 1 and the paid ULAE amounts used to project the ratio of ULAE to loss in lieu of the formulaic approach discussed above.

ULAE Projection

⁴ See Item AC15-03-07 of the March 30, 2015, June 12, 2015 and August 6, 2015 WCIRB Actuarial Committee Agendas for more information.

⁵ In addition, ULAE ratios for calendar years 2013 and 2014 have been partially adjusted for these issues based on information provided by several large national insurers for these calendar years.

⁶ See Item AC17-09-02 of the September 5, 2017 WCIRB Actuarial Committee Agenda.

Since the January 1, 2013 Pure Premium Rate Filing, the WCIRB has based its ULAE projection on reported calendar year paid ULAE amounts rather than incurred ULAE amounts. ULAE projections based on incurred ULAE amounts can be significantly distorted by changes in reserves related to older accident years and paid ULAE ratios have been relatively more stable than incurred ULAE ratios. In addition, it is unclear to what extent the adjustments to reported countrywide paid ULAE amounts discussed above affect ULAE reserves.

As shown in Exhibit 1, there are significant differences in the historical LAE experience of State Fund compared to that of private insurers. Unlike many other insurers, State Fund makes extensive use of in-house defense counsel. Consistent with the requirements of the USRP, State Fund attempts to reassign the cost of in-house defense counsel to accident year and calendar year ALAE amounts. However, given State Fund's somewhat atypical ALAE and ULAE ratios, it is not clear if the reassigned in-house defense counsel costs are consistent with the reported defense costs of insurers that rely primarily on outside defense counsel. For several years, the WCIRB has based the projected ratio of ULAE to loss primarily on statewide experience but using average ULAE costs based only on private insurer experience to address these concerns. Although State Fund's paid ULAE ratios are much closer to those for private insurers in calendar years 2020 and 2021 than in prior years, this period may be impacted by the pandemic. State Fund's paid ALAE ratios continue to be much lower than those for private insurers.

Exhibit 2 shows the average calendar year paid ULAE per open indemnity claim for private insurers. Average paid ULAE per open indemnity claim for calendar years 2016 and subsequent have been adjusted as described above and, as a result, are not comparable to the ULAE severities for prior years. (Average paid ULAE per open indemnity claim for calendar years 2013 through 2015 reflect partial adjustments for the issues discussed above and are also not comparable to other periods.) Adjusted ratios of ULAE paid per open indemnity claim for 2017 through 2021 show some volatility but are generally increasing.

As in the last several pure premium rate filings, the WCIRB is basing the projected ratio of ULAE to loss on a method that relates ULAE to the number of open indemnity claims averaged with a method that relates ULAE to paid losses. In 2020, the WCIRB conducted a study of these approaches and found that paid ULAE amounts continue to be well correlated with both open indemnity claim counts and paid loss amounts.⁷

Exhibits 3.1 through 3.5 show the projection of the ratio of ULAE to loss based on the relationship of calendar year paid ULAE to the number of indemnity claims open at the beginning of the calendar year using a methodology consistent with that used in the September 1, 2022 Pure Premium Rate Filing. Average calendar year paid ULAE is based on private insurer experience, while all other information was computed on a statewide basis. This methodology assumes that ULAE paid for a year is a function of the volume of claims handled by claims adjusters during that year and that the timing of the payment of ULAE costs on policies incepting between September 1, 2023 and August 31, 2024 will be consistent with the timing of loss payments on those policies.

Projected changes in open indemnity claim counts, as shown in Exhibits 3.1 through 3.4, are based on recent claim settlement patterns and the WCIRB's selected indemnity claim frequency changes (see Appendix B for a discussion of selected indemnity claim frequency changes). The projections of open indemnity claim counts shown in Exhibit 3.3 are based on the prior number of open indemnity claims for the accident year multiplied by 1.0 minus the incremental claim settlement rate based on the latest year claim settlement pattern as shown in column 7 of Exhibit 3.3. In the WCIRB's 2020 study of ULAE projection methodologies, the WCIRB found that this method was more accurate than the alternative methods

⁷ See Item AC20-12-02 of the December 11, 2020 WCIRB Actuarial Committee Agenda.

reviewed.⁸ The projected number of ultimate indemnity claims for accident years 2023 and 2024 as shown in column 10 of Exhibit 3.3 are based on applying the WCIRB's projected frequency changes to the ultimate indemnity claim counts for accident years 2021 and 2022. This trending approach is consistent with that utilized for losses as discussed in Appendix B.⁹

The WCIRB is projecting growth in paid ULAE per open indemnity claim to the period underlying policies incepting between September 1, 2023 and August 31, 2024 based on the annual changes in average California wages. This trending approach assumes average ULAE costs, which are primarily for claims adjuster salaries, grow at a rate comparable to that of statewide average wages. The wage projections used are based on the average of those produced by the UCLA Anderson School of Business and California Department of Finance forecasts (see Section B, Exhibit 5.1), as adjusted for the impact of the pandemic-related economic downturn on the mix of industries and mix of wage levels within industries as discussed in Appendix B. Consistent with the last several pure premium rate filings, these projected growth rates are then applied to each of the paid ULAE severities for two calendar years and averaged to project average ULAE costs for calendar years 2023 through 2025. Given the potential impact of the pandemic on calendar year 2020, calendar years 2019 and 2021 average paid ULAE per open indemnity claim were used in this approach to project future average ULAE severities.

The projected number of open indemnity claims is multiplied by the projected average ULAE per open indemnity claim to produce the projected ULAE for calendar years 2023 through 2025. The projected ULAE for policies incepting between September 1, 2023 and August 31, 2024 is based on a weighted average of calendar years 2023 through 2025, trended an additional 2.9 years to reflect the approximate average loss payment date on policies incepting between September 1, 2023 and August 31, 2024.¹⁰ The projected ratio of ULAE to loss for policies incepting between September 1, 2023 and August 31, 2024 computed on this basis, as shown in Exhibit 3.5, is 14.4%.

The methodology presented in Exhibits 3.1 through 3.5 reflects only the relationship between ULAE paid amounts and the number of indemnity claims that were open in the beginning of the year and does not reflect potential differences in the cost of handling a serious claim relative to a less costly claim. Prior WCIRB studies have shown that paid ULAE is also correlated with paid loss amounts, which are reflective of differences in claim values. As in the September 1, 2022 Pure Premium Rate Filing, the WCIRB is using a paid loss-based methodology to project the ULAE to loss ratio for policies incepting between September 1, 2023 and August 31, 2024 based on the average of two calendar year paid ULAE to paid loss ratios. Given the pandemic-related issues with the calendar year 2020 ULAE as discussed above, the private insurer paid ULAE to paid loss ratios for calendar years 2019 and 2021 were selected in this approach. These ratios are shown in Exhibit 1. The projected ratio of ULAE to loss for policies incepting between September 1, 2023 and August 31, 2024 based on this approach is 14.3%.

The WCIRB's ULAE projection is based on an average of the projections based on (a) the relationship between calendar year paid ULAE (for private insurers) and the number of open indemnity claims (see Exhibit 3.5) and (b) the average of the calendar year 2019 and 2021 paid ULAE to paid loss ratios for private insurers (see Exhibit 1). The WCIRB's projected ratio of ULAE to loss for policies incepting between September 1, 2023 and August 31, 2024 using this methodology is 14.4%.

⁸ See Item AC20-12-02 of the December 11, 2020 WCIRB Actuarial Committee Agenda.

⁹ Given that calendar years 2021 and 2022 were used to project the future number of indemnity claims, the premium used to determine the projected losses shown in line 5 of Exhibit 3.5 is based on the average of the premium from calendar years 2021 and 2022.

¹⁰ The average loss payment date is estimated based on the projected loss development factors shown in Section B, Exhibits 2.5.1 and 2.6.1 at the point at which an estimated 50% of indemnity and medical losses have been paid.

Summary of Alternative ULAE Projections

For informational purposes, the WCIRB has computed alternative projections of ratios of ULAE to loss based on methodologies reflecting underlying assumptions that differ from those reflected in the WCIRB’s selected methodology. These alternative projections of ratios of ULAE to loss are shown in Exhibits 1 and 4 and are discussed below.

Calendar Year Paid ULAE Projection Trended a Single Year

Exhibit 4 shows a projection based on the relationship of ULAE paid to the number of open indemnity claims in which the projected ULAE is based on the WCIRB’s projected trends applied to calendar year 2021 only. The projection based on this methodology is modestly higher than that based on the analogous methodology recommended by the WCIRB which applies the trend to the average of two calendar years (2019 and 2021). In order to reduce volatility in year-to-year changes in average ULAE costs, the WCIRB recommends basing the ULAE projection on the average of two calendar years.

Calendar Year Ratios of ULAE to Loss

In addition to the WCIRB’s recommended methodology that bases the ULAE projection in part on the average of the calendar year 2019 and 2021 paid ULAE to paid loss ratios, Table 1 shows alternative ULAE projections based on the paid ULAE to paid loss ratio for calendar year 2021 only and for the average of the latest two calendar years (2020 and 2021). As discussed above, the WCIRB believes basing the ULAE projection on the average of two calendar years is a more stable approach. Furthermore, the WCIRB does not recommend using the calendar year 2020 ULAE to loss ratio in the projection given that year is significantly impacted by the pandemic.

The ULAE to loss ratio projections for policies incepting between September 1, 2023 and August 31, 2024 derived using each of these alternative ULAE projection methodologies, as well as the WCIRB’s selected methodology are shown in Table 1.

Table 1: ULAE to Loss Ratio Projections

ULAE Projection Methodologies	Statewide with Private Insurer Average ULAE
September 1, 2023 Filing Methodology	
Paid ULAE Per Open Indemnity Claim Applied to 2019 and 2021	14.4%
Calendar Year 2019 and 2021 Paid ULAE to Loss Ratios	14.3%
Average of Open Indemnity Claim-Based and Paid Loss-Based Projections	14.4%
Alternative Methodologies	
Paid ULAE Per Open Indemnity Claim Applied to 2021 Only	14.7%
Calendar Year 2021 Paid ULAE to Loss Ratio	15.6%
Latest Two Calendar Year Paid ULAE to Loss Ratios	15.7%

ALAE Projection – Excluding MCCP Costs

The WCIRB is projecting the ALAE to loss ratio for policies incepting between September 1, 2023 and August 31, 2024 using a methodology that projects future ALAE as a function of the anticipated future statewide number of indemnity claims and average private insurer ALAE per indemnity claim, which is

consistent with the methodology reflected in the last several pure premium rate filings. The projections of ALAE discussed in this section are exclusive of MCCP costs, which are discussed separately below.¹¹

The COVID-19 pandemic has had a significant impact on the workers' compensation system including the filing of thousands of claims arising out of a diagnosis of COVID-19 for accident years 2020 through 2022. The WCIRB believes these claims reflect the uniqueness of the COVID-19 pandemic and may not be indicative of ALAE, MCCP, or other claim costs that will incur on policies incepting between September 1, 2023 and August 31, 2024. As a result, as with the loss projections, the WCIRB has excluded COVID-19 claims from the ALAE and MCCP cost information for accident years 2020 through 2022 included in this Appendix.

Exhibit 5.1 shows average paid ALAE per reported indemnity claim by accident year for private insurers. The change in average ALAE costs at the latest evaluation for each accident year are generally modest. The change for accident year 2022 at 12 months is a larger increase compared to the prior three years, but paid ALAE data at 12 months is relatively immature. In prior years with large increases at 12 months, the changes have tended to moderate over time. Exhibit 5.2 shows ratios of paid ALAE to paid losses for private insurers. These ratios have been generally consistent for the pre-pandemic years. The accident year 2020 and 2021 ratios shown in Exhibit 5.2 are lower than the pre-pandemic period. This may be related to a slowdown in the claims resolution process during the pandemic. The accident year 2022 ratio is closer to the pre-pandemic level.

Exhibit 6 shows estimated ultimate ALAE per indemnity claim for private insurers based on private insurers' reported ALAE amounts and indemnity claim counts by accident year as of December 31, 2022, the selected paid ALAE development for private insurers from Exhibit 8.1, and projected indemnity claim count development analogous to that shown in Exhibit 8.3 for private insurers. Exhibit 7 shows the ratio of accident year incremental paid ALAE to indemnity claims inventory by payment year for private insurers. Recent changes in average ALAE costs on both an ultimate accident year and calendar year basis have been, on average, modest.

Exhibits 8.1 through 8.4 show the projected ratio of ALAE to loss for policies incepting between September 1, 2023 and August 31, 2024 based on the projected changes in the frequency of indemnity claims and projected average ALAE cost per indemnity claim. Given State Fund's LAE characteristics discussed with respect to the projection of ULAE above, the WCIRB is projecting the ALAE provision based on a combination of statewide claim and loss experience and private insurer average ALAE costs.

As discussed in Appendix A, indemnity claim settlement rates have changed significantly over the last several years and, if not adjusted, paid loss development patterns can be distorted. In 2019 and 2020, the WCIRB studied the potential impact of claim settlement rate changes on paid ALAE development and found that significant negative correlation exists between changes in claim settlement rates in earlier periods and the ALAE development that emerges for the accident year in later periods.¹² As a result, the WCIRB is reflecting an adjustment to paid ALAE development for the impact of claim settlement rate changes consistent with the approach used in the last several pure premium rate filings. The adjustment is based on a linear regression model applied to periods with significant claim settlement rate changes (1.5 points or greater) compared to the change in future cumulative paid ALAE development. To ensure this adjustment is reflected in a manner responsive to claim settlement rate changes for each accident year and maturity, the linear regression results from the cumulative approach are adjusted to an incremental age-to-age basis based on the incremental difference from the cumulative adjustment at the

¹¹ Beginning January 1, 2016, the USRP requires that the cost of independent medical review (IMR) and independent bill review (IBR) reports no longer be included in reported MCCP costs although such costs continue to be required to be reported as ALAE. For consistency of comparison, as in the last several pure premium rate filings, the WCIRB adjusted all pre-2016 payments of ALAE excluding MCCP costs to include the cost of IMR and IBR for all periods. A similar offsetting adjustment is made to MCCP costs.

¹² See Item AC19-08-04 of the August 1, 2019 and August 4, 2020 WCIRB Actuarial Committee Agendas.

prior age. Table 2 shows the adjustments to paid ALAE development based on this regression model through 72 months.

Table 2 – Adjustment to ALAE Development based on 1 Point of Settlement Rate Change

Age	Indicated Cumulative Adjustment from Regression Model ¹³	Selected Age-to-Age Adjustment
72	-1.1%	-1.1%
60	-1.6%	-0.5%
48	-2.0%	-0.4%
36	-2.7%	-0.6%
24	-3.6%	-0.9%
12	-7.0%	-3.4%

The WCIRB recommends that the adjustment factors shown in Table 2 only be applied to the projected age-to-age ALAE development if the claim settlement rate for the accident year at that evaluation changed by 1.5 points or greater in absolute value.¹⁴ As shown in Appendix A, Exhibit 2, claim settlement rates for accident year 2021 increased by more than 1.5 points at the latest evaluation while other recent accident years did not change by more than 1.5 points at the latest evaluation. The paid ALAE age-to-age development adjusted on this basis is shown in Exhibit 8.1.

Consistent with prior pure premium rate filings, the WCIRB is projecting ALAE development through 360 months based on the latest year’s age-to-age paid ALAE development, adjusted for changes in claim settlement rates as discussed above. The long-term ALAE “tail” development factor applied after 360 months is based on fitting an inverse power curve to the historical paid ALAE development factors. Specifically, the inverse power curve was fit to the average of the latest three years’ paid ALAE development factors for the 108-to-120-month through 372-to-384-month periods, with the ALAE tail development factor based on the fitted curve values through 65 development years. The ALAE development factors selected by the WCIRB are shown in Exhibit 8.1 based on private insurer experience. (Exhibit 8.2 shows, for informational purposes, private insurer paid ALAE age-to-age factors on a quarterly basis.)

The estimated ultimate number of indemnity claims shown in Exhibit 8.4 is projected based on the number of indemnity claims reported as of December 31, 2022, the latest year historical claim reporting pattern (see Exhibit 8.3), and the projected growth in indemnity claims based on the WCIRB’s projected growth in intra-class indemnity claim frequency (see Appendix B for a discussion of projected indemnity claim frequency changes). These projected claim frequency changes are applied to the ultimate indemnity claims projected for the latest two accident years (2021 and 2022), which is consistent with the approach used in prior pure premium rate filings.¹⁵

The estimated ultimate ALAE per indemnity claim shown in Exhibit 8.4 is based on private insurers’ experience (see Exhibit 6). As in the last several pure premium rate filings, the WCIRB has based the projected ALAE severity trend on the approximate average of the longer-term (since 2008) and shorter-term (2018 to 2022) average rates of growth in (a) estimated ultimate ALAE per indemnity claim for

¹³ Each figure was computed based on the regression model results applied to March 31 evaluations and interpolated for December 31 evaluations.

¹⁴ The 1.5-point threshold is based on a 2017 WCIRB review of historical claim settlement rate changes compared to changes in loss development patterns. See Item AC17-03-03 of the March 21, 2017 WCIRB Actuarial Committee Agenda.

¹⁵ Given that accident years 2021 and 2022 were used to project the future number of indemnity claims, the premium used to determine the projected losses shown in line (b) of Exhibit 8.4 is based on the average of the premium from calendar years 2021 and 2022.

private insurers (Exhibit 6) and (b) incremental paid ALAE per open indemnity claim for private insurers (Exhibit 7). This approach results in an annual average ALAE severity growth projection of 0.5%. The projected ALAE per indemnity claim for policies incepting between September 1, 2023 and August 31, 2024 is based on the selected 0.5% ALAE severity trend applied to the latest two accident year (2021 and 2022) ultimate ALAE per indemnity claim.

The WCIRB believes the ALAE projections based on projected indemnity claim counts and estimated growth in ALAE per indemnity claim are reasonable bases upon which to project future ALAE inasmuch as (a) changes in ALAE have shown to be reasonably well-correlated with changes in indemnity claim counts, (b) the method is responsive to changes in ALAE costs per indemnity claim, and (c) the method is responsive to anticipated future changes in claim frequency. In addition, during a study of ALAE projection methodologies, the WCIRB found that ALAE projections based on this methodology continued to be more accurate than those based on other alternative methods tested.¹⁶ Exhibit 8.4 shows the projected ratio of ALAE (excluding MCCP costs) to loss on this basis, prior to the impact of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244), of 14.3%.

SB 1160 and AB 1244 included a number of provisions related to lien filings that became effective in 2017. Liens incur significant ALAE costs in addition to the settlement costs paid to the lien claimant. The WCIRB estimates a 70% reduction in lien filings resulting from SB 1160 and AB 1244, which corresponds to an approximate 11.2% reduction in ALAE (excluding MCCP) costs. Given that liens are generally filed relatively late in the life of claims, accident year 2017 and forward paid ALAE costs as of December 31, 2022 are only partially affected by the SB 1160 and AB 1224 lien reform provisions. In order to only reflect the impact of the reforms that is not yet reflected in the emerging ALAE data, the WCIRB is reflecting a 1.8% reduction in ALAE costs in the projections of the ALAE ratio. This adjustment, which is consistent with the approach reflected in the last several pure premium rate filings and is shown on line (g) of Exhibit 8.4, is based on judgmentally tempering the full estimated impact of -11.2% by the estimated average proportion of ultimate ALAE costs for accident years 2017 and 2018 that have emerged as of December 31, 2022 (84%). As shown on line (h) of Exhibit 8.4, the projected ratio of ALAE (excluding MCCP costs) to loss after reflecting the impact of SB 1160 and AB 1244, is 14.0%.

Summary of Alternative ALAE (excluding MCCP Costs) Projections

For informational purposes, the WCIRB has computed alternative ALAE to loss ratio projections based on a number of methodologies reflecting underlying assumptions that differ from those reflected in the WCIRB's recommended methodology. These alternative ALAE to loss ratio projections are shown in Exhibits 9 to 11 and are discussed below.

Projected Ultimate ALAE Per Indemnity Claim and Future Number of Indemnity Claims Based on Three-Year Average Unadjusted Paid ALAE Development

Exhibits 9.1 and 9.2 show a method that projects the ALAE to loss ratio based on changes in indemnity claim frequency and ALAE severities in which the paid ALAE is developed using the average of the latest three years' paid ALAE age-to-age factors. A three-year average development approach can mitigate volatility in the paid ALAE development factors. The WCIRB recommends using the latest year adjusted paid ALAE development to be responsive to the latest paid ALAE development patterns in the current environment.

Projected Ultimate ALAE Per Indemnity Claim and Future Number of Indemnity Claims Based on Latest Year Unadjusted Paid ALAE Development

Exhibits 10.1 and 10.2 show a method that projects the ALAE to loss ratio based on changes in indemnity claim frequency and ALAE severities in which the paid ALAE is developed using the latest year's paid ALAE age-to-age factors without adjustment for changes in claim settlement rates. This methodology

¹⁶ See Item AC14-12-02 of the December 3, 2014 WCIRB Actuarial Committee Agenda.

produces a paid ALAE to loss ratio somewhat above that based on the WCIRB’s recommended approach. Given the potential impact of changes in claim settlement rates on projected paid ALAE development based on the WCIRB’s 2019 study, the WCIRB believes the adjustment for changes in claim settlement rates to paid ALAE development is appropriate.

Projected Ultimate ALAE Per Indemnity Claim and Future Number of Indemnity Claims with Trend Applied to the Latest Year

Exhibit 11 shows a method that projects the ALAE to loss ratio based on changes in indemnity claim frequency and ALAE severities which applies the WCIRB’s projected frequency and ALAE severity trends to the projected ultimate ALAE per indemnity claim and ultimate indemnity claim counts for the latest accident year (2022) only. This projection is slightly lower than the projection based on the WCIRB’s selected ALAE projection methodology, which bases the projection on accident years 2021 and 2022. Given the relative immaturity of the latest accident year, which is based on 12-month experience, the WCIRB believes it is appropriate to incorporate a second, more mature year into the projection.

The projected ALAE-to-loss ratios for policies incepting between September 1, 2023 and August 31, 2024 derived from each of these alternative ALAE projection methodologies (after reflecting the impact of SB 1160 and AB 1244), as well as the WCIRB’s selected methodology, are shown in Table 3, below.

Table 3: ALAE (Excluding MCCP Costs) to Loss Ratio Projections

ALAE Projection Methodologies	Statewide with Private Insurer Average ALAE
September 1, 2023 Filing Methodology Projected Ultimate ALAE Per Indemnity Claim – Latest Year Adjusted Paid ALAE Development – Trend Applied to 2021 and 2022	14.0%
Alternative Methodologies	
Projected Ultimate ALAE Per Indemnity Claim – Three-Year Average Unadjusted Paid ALAE Development – Trend Applied to 2021 and 2022	14.2%
Projected Ultimate ALAE Per Indemnity Claim – Unadjusted Latest Year Paid ALAE Development – Trend Applied to 2021 and 2022	14.4%
Projected Ultimate ALAE Per Indemnity Claim – Latest Year Adjusted Paid ALAE Development – Trend Applied to 2022	14.0%

Projection of MCCP Costs

As discussed above, beginning with policies incepting on or after July 1, 2010, MCCP costs are reported as ALAE rather than as medical loss. In that MCCP costs are fundamentally different than other ALAE costs, which are to a large extent, litigation related, the WCIRB continues to project the provision for MCCP costs separately from other ALAE costs. As with ALAE excluding MCCP costs, COVID-19 claims have been excluded from the summary of MCCP costs for accident years 2020 through 2022.

Exhibit 12 shows average paid MCCP per reported indemnity claim by accident year. Exhibit 13 shows estimated ultimate accident year MCCP per indemnity claim. Exhibit 14 shows calendar year paid MCCP costs per indemnity claims inventory (measured as the sum of indemnity claims open at the beginning of the calendar year and indemnity claims opened during the calendar year). As shown on these exhibits, MCCP cost levels have generally been declining over the last several years.

Exhibits 15.1 through 15.3 show the projection of MCCP costs on a statewide basis based on reported MCCP paid costs through December 31, 2022. The methodology used to project MCCP costs is very similar to the WCIRB’s methodology used to project ALAE excluding MCCP costs by applying selected frequency and severity trends to the latest two accident year (2021 and 2022) projected ultimate

indemnity claim counts and ultimate MCCP per indemnity claim. Reported accident year MCCP paid costs were developed to an ultimate basis using (a) latest-year paid MCCP age-to-age development factors through 132 months and (b) the cumulative medical loss development factors based on December 31, 2022 experience after 132 months.¹⁷

The projected MCCP cost severity trend was based on the approximate average of the annual rates of growth in (a) ultimate accident year MCCP costs per indemnity claim from 2012 through 2022, shown in Exhibit 13 and (b) calendar year MCCP costs per open indemnity claim from 2010 through 2021, shown in Exhibit 14, which is consistent with the approach used in the last several pure premium rate filings. This approach results in an annual MCCP severity growth projection of -1.0%, which is consistent with the MCCP severity trend reflected in the September 1, 2022 Pure Premium Rate Filing.

Inasmuch as the previously discussed factors impacting State Fund's ULAE and ALAE excluding MCCP cost experience do not impact State Fund's MCCP cost experience, the WCIRB's MCCP cost projection reflects statewide MCCP experience. As shown in Exhibit 15.3, the WCIRB's projected ratio of MCCP costs to loss for policies incepting between September 1, 2023 and August 31, 2024 based on this approach is 3.3%.

Summary of Alternative MCCP Cost Projections

For informational purposes, the WCIRB has computed alternative MCCP cost to loss ratio projections based on methodologies that reflect different assumptions than those reflected in the WCIRB's recommended methodology. These alternative MCCP cost to loss ratio projections are shown in Exhibits 16 and 17 and are discussed below.

Projected Ultimate MCCP Cost Per Indemnity Claim and Future Number of Indemnity Claims Based on Three-Year Average Paid MCCP Cost Development

Exhibit 16 shows a method that projects the MCCP cost to loss ratio based on changes in indemnity claim frequency and MCCP cost severities in which the paid MCCP costs are developed using the latest three-year average age-to-age factors. This projection is generally consistent with the projection based on the WCIRB's selected methodology which projects paid MCCP cost development based on the latest year. The WCIRB recommends using the latest year paid MCCP cost development to be responsive to the latest MCCP cost patterns.

Projected Ultimate MCCP Cost Per Indemnity Claim and Future Number of Indemnity Claims with Trend Applied to the Latest Year

Exhibit 17 shows a method that projects the MCCP cost to loss ratio based on changes in indemnity claim frequency and MCCP cost severities which applies the WCIRB's projected frequency and MCCP cost severity trends to the projected ultimate indemnity claim counts and ultimate MCCP costs per indemnity claim for the latest accident year (2022) only. This projection is generally consistent with that based on the WCIRB's selected MCCP cost projection methodology which is based on projecting from accident years 2021 and 2022. As discussed with respect to the projection of ALAE excluding MCCP costs above, the WCIRB believes it is appropriate to incorporate a second, more mature year into the projection given the relative immaturity of the latest year.

The projections of the ratios of MCCP costs to loss derived from each of these alternative MCCP cost projection methodologies, as well as the WCIRB's selected methodology, are shown in Table 4, below.

¹⁷ As discussed in prior pure premium rate filings, paid MCCP costs reported in medical losses cannot be completely separated from other paid medical costs prior to accident year 2012.

Table 4: MCCP Cost to Loss Ratio Projections

MCCP Cost Projection Method	Statewide
September 1, 2023 Filing Methodology Projected Ultimate MCCP Per Indemnity Claim – Latest Year Paid MCCP Development – Trend Applied to 2021 and 2022	3.3%
Alternative Methodologies	
Projected Ultimate MCCP Per Indemnity Claim – Three-Year Average Paid MCCP Development – Trend Applied to 2021 and 2022	3.2%
Projected Ultimate MCCP Per Indemnity Claim – Latest Year Paid MCCP Development – Trend Applied to 2022	3.2%

Based on the methodologies discussed above, the WCIRB projects a total provision of LAE to loss of 31.7% for policies incepting between September 1, 2023 and August 31, 2024.

Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2011	5.9%	15.9%	17.3%	14.9%	17.2%
2012	6.3%	15.2%	19.1%	16.2%	18.6%
2013	5.9%	15.4%	20.0%	17.0%	19.5%
2014	8.4%	17.8%	21.3%	19.0%	20.8%
2015	10.1%	18.0%	22.6%	20.5%	22.0%
2016	11.0%	17.9%	22.4%	20.4%	21.6%
2017	10.8%	19.8%	22.7%	20.9%	22.3%
2018	11.4%	19.5%	22.9%	21.1%	22.4%
2019	12.9%	18.0%	22.8%	21.0%	22.2%
2020	11.5%	17.9%	23.4%	21.0%	22.5%
2021	11.7%	17.3%	21.1%	20.4%	21.1%
Excluded COVID-19					
2020	11.5%	17.9%	23.5%	21.0%	22.6%
2021	11.7%	17.3%	22.7%	20.4%	21.8%

Paid ULAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2011	28.9%	15.9%	6.5%	11.9%	7.7%
2012	45.0% ^[1]	15.0%	6.4%	14.8% ^[1]	7.5%
2013	^[2] 21.8%	16.3%	8.5%	11.7%	9.4%
2014	^[2] 28.8%	14.7%	7.7%	11.6%	8.6%
2015	^[3] 35.1%	14.8%	10.2%	13.9%	10.9%
2016	^[3] 37.6%	14.2%	12.8%	15.9%	13.0%
2017	^[3] 25.6%	16.1%	14.1%	15.8%	14.4%
2018	^[3] 24.8%	14.9%	14.8%	16.1%	14.8%
2019	^[3] 21.3%	14.4%	12.8%	14.1%	13.0%
2020	^[3] 17.6%	15.3%	15.8%	16.0%	15.8%
2021	^[3] 17.6%	14.1%	15.9%	15.9%	15.6%

Paid LAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2011	34.8%	31.8%	23.8%	26.8%	24.8%
2012	51.3% ^[1]	30.3%	25.5%	31.0% ^[1]	26.1%
2013	^[2] 27.7%	31.7%	28.5%	28.6%	28.9%
2014	^[2] 37.2%	32.5%	29.0%	30.6%	29.4%
2015	^[4] 45.2%	32.8%	32.8%	34.4%	32.8%
2016	^[3] 48.6%	32.1%	35.2%	36.3%	34.7%
2017	^[3] 36.4%	36.0%	36.9%	36.7%	36.7%
2018	^[3] 36.2%	34.4%	37.7%	37.1%	37.2%
2019	^[3] 34.2%	32.4%	35.5%	35.0%	35.2%
2020	^[3] 29.1%	33.2%	39.2%	37.0%	38.3%
2021	^[3] 29.4%	31.4%	37.1%	36.3%	36.7%

Notes: ^[1] 2012 figure includes a one-time adjustment made by State Compensation Insurance Fund to reallocate liabilities related to pension benefits.
^[2] 2013 and 2014 ratios included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.
^[3] Reflects adjustments based on the Expense Call for ULAE costs related to deductible policies and third-party administrators. 2015 adjusted ratio is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 to 2021 adjusted ratios are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Source: WCIRB expense calls and quarterly calls for experience.

Calendar Year ULAE Paid per Open Indemnity Claim - Private Insurers

Calendar Year	ULAE Paid ^[1] (in Millions) (1)	Number of Open Indemnity Claims at Beginning of the Year ^[2] (2)	Number of Indemnity Claims Reported During Year ^[3] (3)	ULAE Paid per Open Indemnity Claim ^[4] (4)	Annual Change (5)
2010	432	257,439	107,734	1,676	---
2011	450	267,152	116,356	1,684	0.5%
2012	474	279,015	122,080	1,698	0.8%
2013 ^[5]	644	294,011	131,749	2,192	---
2014 ^[5]	598	307,227	133,061	1,947	-11.2%
2015 ^[6]	774	311,158	140,302	2,486	---
2016 ^[6]	948	314,808	139,941	3,010	---
2017 ^[6]	1,045	311,196	145,909	3,359	11.6%
2018 ^[6]	1,076	304,634	146,120	3,531	5.1%
2019 ^[6]	950	294,351	149,143	3,228	-8.6%
2020 ^[6]	1,060	289,298	148,364	3,666	13.5%
2021 ^[6]	1,096	293,628	146,911	3,734	1.9%

Notes:

^[1] Calendar year ULAE paid is based on WCIRB expense calls. All figures in each calendar year contain information from the same combination of private insurers that submitted both the ULAE and claim count data for that calendar year. Therefore, each calendar year may contain a different mix of private insurers.

^{[2],[3]} Based on WCIRB accident year experience calls. Column (3) is for information only.

^[4] Column (1) / Column (2) x 1,000,000.

^[5] 2013 and 2014 paid ULAE included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.

^[6] Reflects adjustments for ULAE costs related to deductible policies and third-party administrators based on the Expense Call. 2015 paid ULAE is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 to 2021 paid ULAE are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Source: WCIRB expense calls and quarterly calls for experience. COVID-19 claims are included given that ULAE on COVID-19 claims cannot be separated from other ULAE.

Reported Indemnity Claim Count Development - Statewide

Accident Year	Age-to-Age Development (in months):																
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216
1994															1.000	1.000	1.000
1995															1.001	1.000	1.000
1996													1.001	1.000	1.000	1.000	1.000
1997												1.000	1.000	1.000	1.000	1.000	1.000
1998											1.000	1.000	1.001	1.000	1.000	1.000	1.000
1999										1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000
2000										1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001										1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003						0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004					0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005				1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006			1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007		1.015	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.153	1.023	1.011	1.005	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	1.220	1.030	1.011	1.006	1.004	1.002	1.001	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000
2011	1.230	1.033	1.014	1.007	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.241	1.035	1.013	1.005	1.003	1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	1.240	1.031	1.010	1.004	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.239	1.027	1.010	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.236	1.027	1.006	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.244	1.029	1.007	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.220	1.023	1.007	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	1.226	1.024	1.006	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.222	1.027	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.225	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	1.225	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Age Development Factors																	
@12/31/21	1.225	1.027	1.006	1.003	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
@12/31/22	1.225	1.025	1.007	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate																	
@12/31/21	1.277	1.043	1.015	1.009	1.006	1.005	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003
@12/31/22	1.271	1.037	1.012	1.006	1.003	1.003	1.002	1.003	1.002	1.002	1.002	1.002	1.003	1.003	1.002	1.002	1.002
Estimated Percent of Ultimate Indemnity Claims Reported																	
@12/31/21	78.3%	95.9%	98.5%	99.1%	99.4%	99.5%	99.5%	99.5%	99.6%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%
@12/31/22	78.7%	96.4%	98.8%	99.4%	99.7%	99.7%	99.8%	99.7%	99.8%	99.8%	99.8%	99.8%	99.7%	99.7%	99.8%	99.8%	99.8%

Accident Year	Age-to-Age Development (in months):																
	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	
1989			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990		1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Age Development Factors																	
@12/31/21	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
@12/31/22	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate																	
@12/31/21	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
@12/31/22	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Estimated Percent of Ultimate Indemnity Claims Reported																	
@12/31/21	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
@12/31/22	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: WCIRB quarterly calls for experience excluded COVID-19 claims.

Reported Indemnity Claim Closing Rate - Statewide

Accident Year	Evaluated as of (in months):																
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
1994														97.8%	98.0%	98.2%	98.3%
1995													96.9%	97.2%	97.5%	97.6%	97.8%
1996												95.9%	96.3%	96.7%	96.9%	97.1%	97.3%
1997										95.6%			96.0%	96.5%	96.8%	97.0%	97.2%
1998									95.0%	95.6%	96.3%		96.7%	97.0%	97.3%	97.6%	97.7%
1999										93.9%	94.8%	95.7%	96.3%	96.7%	97.1%	97.5%	97.7%
2000									91.7%	93.1%	94.4%	95.3%	96.0%	96.4%	97.0%	97.3%	97.6%
2001							87.9%	90.4%	92.3%	93.6%	94.6%	95.4%	96.1%	96.6%	97.0%	97.4%	97.7%
2002						84.6%	88.3%	90.9%	92.5%	93.8%	94.8%	95.9%	96.4%	96.9%	97.4%	97.7%	98.1%
2003					79.4%	84.8%	88.4%	90.7%	92.5%	93.8%	95.2%	95.9%	96.4%	97.0%	97.5%	97.9%	98.3%
2004				73.0%	80.7%	85.4%	88.3%	90.7%	92.5%	94.4%	95.4%	96.1%	96.8%	97.3%	97.8%	98.2%	98.4%
2005			63.5%	74.7%	81.3%	85.5%	88.5%	90.9%	93.2%	94.5%	95.5%	96.4%	97.0%	97.6%	98.1%	98.4%	98.6%
2006		50.3%	64.5%	74.7%	81.5%	85.7%	88.8%	91.3%	93.0%	94.3%	95.5%	96.4%	97.1%	97.7%	98.0%	98.3%	98.5%
2007	27.1%	49.8%	63.6%	73.6%	80.3%	84.7%	88.9%	91.4%	93.2%	94.8%	96.0%	96.8%	97.5%	97.9%	98.2%	98.5%	
2008	27.6%	48.1%	61.8%	72.2%	79.3%	85.1%	88.9%	91.5%	93.7%	95.1%	96.2%	97.0%	97.6%	97.9%	98.2%		
2009	26.7%	46.3%	60.1%	70.8%	79.2%	84.6%	88.6%	91.8%	93.8%	95.3%	96.4%	97.1%	97.6%	97.9%			
2010	27.0%	46.9%	60.7%	72.5%	80.5%	85.8%	90.1%	92.8%	94.7%	96.1%	96.9%	97.5%	97.9%				
2011	27.5%	47.2%	62.0%	73.4%	81.4%	86.9%	90.9%	93.6%	95.3%	96.4%	97.1%	97.7%					
2012	27.7%	48.1%	63.3%	74.8%	82.8%	88.3%	92.1%	94.4%	95.8%	96.7%	97.3%						
2013	26.9%	48.4%	64.4%	76.4%	84.7%	89.9%	93.2%	95.1%	96.3%	97.1%							
2014	26.9%	49.5%	65.8%	78.1%	86.2%	90.8%	93.5%	95.3%	96.4%								
2015	27.3%	50.5%	68.3%	80.6%	87.8%	91.3%	93.8%	95.5%									
2016	28.2%	53.4%	71.0%	82.5%	88.2%	91.7%	94.1%										
2017	30.4%	56.2%	73.1%	82.5%	88.3%	91.8%											
2018	31.2%	56.3%	71.4%	81.3%	87.7%												
2019	31.2%	54.0%	69.1%	80.2%													
2020	26.1%	53.2%	69.0%														
2021	31.4%	55.7%															
2022	32.1%																

Reported Closing Rate

@12/31/21	31.4%	53.2%	69.1%	81.3%	88.3%	91.7%	93.8%	95.3%	96.3%	96.7%	97.1%	97.5%	97.6%	97.9%	98.2%	98.3%	98.6%
@12/31/22	32.1%	55.7%	69.0%	80.2%	87.7%	91.8%	94.1%	95.5%	96.4%	97.1%	97.3%	97.7%	97.9%	97.9%	98.2%	98.5%	98.5%
Estimated Percent Closed^[1]																	
@12/31/21	24.6%	51.0%	68.1%	80.6%	87.7%	91.2%	93.4%	94.8%	95.9%	96.4%	96.8%	97.2%	97.3%	97.6%	98.0%	98.1%	98.3%
@12/31/22	25.2%	53.7%	68.1%	79.8%	87.4%	91.6%	93.9%	95.3%	96.2%	96.9%	97.1%	97.5%	97.7%	97.7%	98.0%	98.3%	98.3%

Accident Year	Evaluated as of (in months):																
	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396	408
1989				99.3%	99.4%	99.4%	99.4%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.7%
1990			99.2%	99.2%	99.3%	99.3%	99.3%	99.3%	99.4%	99.4%	99.4%	99.4%	99.4%	99.5%	99.5%	99.5%	99.5%
1991		98.9%	99.0%	99.0%	99.1%	99.1%	99.1%	99.2%	99.2%	99.2%	99.3%	99.3%	99.3%	99.4%	99.4%		
1992	98.8%	98.9%	98.9%	99.0%	99.0%	99.0%	99.1%	99.1%	99.2%	99.2%	99.2%	99.3%	99.3%	99.3%			
1993	98.6%	98.8%	98.8%	98.9%	98.9%	99.0%	99.0%	99.1%	99.1%	99.2%	99.2%	99.3%	99.3%				
1994	98.4%	98.5%	98.6%	98.6%	98.7%	98.8%	98.8%	98.9%	98.9%	99.0%	99.1%	99.1%					
1995	97.9%	98.0%	98.1%	98.2%	98.3%	98.4%	98.4%	98.5%	98.6%	98.6%	98.7%						
1996	97.4%	97.6%	97.7%	97.8%	97.8%	98.0%	98.1%	98.1%	98.2%	98.2%							
1997	97.6%	97.7%	97.9%	98.0%	98.1%	98.3%	98.3%	98.4%	98.5%								
1998	97.9%	98.0%	98.2%	98.3%	98.5%	98.6%	98.7%	98.7%									
1999	98.1%	98.4%	98.5%	98.7%	98.8%	98.8%	98.9%	99.0%									
2000	98.1%	98.3%	98.6%	98.7%	98.8%	98.9%											
2001	98.0%	98.3%	98.5%	98.7%	98.8%												
2002	98.4%	98.6%	98.8%	98.9%													
2003	98.5%	98.8%	98.9%														
2004	98.7%	98.9%															
2005	98.8%																

Reported Closing Rate

@12/31/21	98.7%	98.8%	98.8%	98.7%	98.8%	98.9%	98.7%	98.4%	98.2%	98.6%	99.1%	99.3%	99.3%	99.4%	99.5%	99.7%	
@12/31/22	98.8%	98.9%	98.9%	98.9%	98.8%	98.9%	99.0%	98.7%	98.5%	98.2%	98.7%	99.1%	99.3%	99.3%	99.4%	99.5%	99.7%
Estimated Percent Closed^[1]																	
@12/31/21	98.4%	98.5%	98.5%	98.4%	98.6%	98.7%	98.5%	98.3%	98.0%	98.5%	99.0%	99.2%	99.3%	99.4%	99.5%	99.7%	
@12/31/22	98.6%	98.7%	98.7%	98.7%	98.6%	98.8%	98.9%	98.6%	98.4%	98.1%	98.6%	99.1%	99.3%	99.3%	99.4%	99.5%	99.7%

Note:^[1] Estimated percent closed is the product of (a) the Estimated Percent of Ultimate Indemnity Claims Reported (Exhibit 3.1) and (b) the Reported Closing Rate.

Source: WCIRB quarterly calls for experience excluded COVID-19 claims.

Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide

Year	Selected Indemnity Claim Reporting and Closure Patterns as of						Incremental Closing Rate ^[4]	Cumulative Indemnity Claim Counts as of December 31, 2022				
	December 31 of		December 31 of		December 31 of			AY	Reported	Open	Estimated Ultimate ^[5]	Annual Change
	2021 Percent Reported ^[1]	2022	2021 Percent Closed ^[2]	2022	2021 Opening Rate ^[3]	2022						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)			
1	78.3%	78.7%	24.6%	25.2%	53.7%	53.4%	46.6%	1989	222,066	649	222,066	
2	95.9%	96.4%	51.0%	53.7%	44.9%	42.7%	20.5%	1990	248,039	1,166	248,016	
3	98.5%	98.8%	68.1%	68.1%	30.5%	30.7%	31.7%	1991	248,345	1,562	248,360	
4	99.1%	99.4%	80.6%	79.8%	18.5%	19.7%	35.4%	1992	197,237	1,341	197,268	
5	99.4%	99.7%	87.7%	87.4%	11.7%	12.3%	33.7%	1993	155,304	1,115	155,348	
6	99.5%	99.7%	91.2%	91.6%	8.3%	8.2%	29.8%	1994	142,793	1,298	142,849	
7	99.5%	99.8%	93.4%	93.9%	6.2%	5.9%	28.9%	1995	134,024	1,787	134,088	
8	99.5%	99.7%	94.8%	95.3%	4.7%	4.5%	27.5%	1996	131,185	2,363	131,260	
9	99.6%	99.8%	95.9%	96.2%	3.7%	3.6%	23.3%	1997	136,987	2,114	137,097	
10	99.6%	99.8%	96.4%	96.9%	3.2%	2.9%	21.5%	1998	147,166	1,870	147,316	
11	99.7%	99.8%	96.8%	97.1%	2.8%	2.7%	18.1%	1999	148,239	1,479	148,418	
12	99.7%	99.8%	97.2%	97.5%	2.5%	2.3%	18.9%	2000	160,344	1,700	160,589	
13	99.7%	99.7%	97.3%	97.7%	2.4%	2.1%	16.3%	2001	184,890	2,233	185,208	
14	99.7%	99.7%	97.6%	97.7%	2.1%	2.1%	12.8%	2002	192,403	2,040	192,776	
15	99.7%	99.8%	98.0%	98.0%	1.7%	1.8%	13.6%	2003	182,539	1,975	182,910	
16	99.7%	99.8%	98.1%	98.3%	1.7%	1.5%	14.4%	2004	158,530	1,776	158,860	
17	99.7%	99.8%	98.3%	98.3%	1.4%	1.5%	13.2%	2005	139,539	1,675	139,824	
18	99.7%	99.8%	98.4%	98.6%	1.3%	1.2%	14.3%	2006	133,179	1,939	133,454	
19	99.7%	99.8%	98.5%	98.7%	1.2%	1.1%	14.3%	2007	130,194	1,954	130,483	
20	99.7%	99.8%	98.5%	98.7%	1.2%	1.1%	11.8%	2008	122,808	2,223	123,103	
21	99.8%	99.8%	98.4%	98.7%	1.3%	1.1%	12.7%	2009	113,533	2,375	113,829	
22	99.8%	99.8%	98.6%	98.6%	1.2%	1.2%	8.4%	2010	118,193	2,436	118,530	
23	99.8%	99.8%	98.7%	98.8%	1.1%	1.1%	9.5%	2011	120,851	2,795	121,052	
24	99.8%	99.9%	98.5%	98.9%	1.3%	1.0%	7.1%	2012	128,247	3,411	128,500	
25	99.9%	99.9%	98.3%	98.6%	1.6%	1.3%	4.7%	2013	136,364	3,927	136,683	
26	99.9%	99.9%	98.0%	98.4%	1.8%	1.5%	3.6%	2014	141,067	5,074	141,417	
27	99.9%	99.9%	98.5%	98.1%	1.4%	1.8%	2.0%	2015	145,117	6,497	145,510	
28	99.9%	100.0%	99.0%	98.6%	0.9%	1.3%	3.7%	2016	148,304	8,756	148,674	
29	100.0%	100.0%	99.2%	99.1%	0.7%	0.9%	3.6%	2017	148,903	12,214	149,289	
30	100.0%	100.0%	99.3%	99.3%	0.7%	0.7%	3.8%	2018	151,539	18,647	152,069	
31	100.0%	100.0%	99.4%	99.3%	0.6%	0.7%	3.2%	2019	154,240	30,527	155,103	
32	100.0%	100.0%	99.5%	99.4%	0.5%	0.6%	1.4%	2020	133,906	41,557	135,557	
33	100.0%	100.0%	99.7%	99.5%	0.3%	0.5%	2.1%	2021	144,410	63,926	149,792	
34		100.0%		99.7%		0.3%	3.0%	2022	123,950	84,188	157,532	-0.2%
											<u>Projected^[6]</u>	
								2023			152,386	-0.7%
								2024			149,836	-1.7%
								Total	5,224,435	320,589		

Notes:

- ^[1] See Exhibit 3.1.
- ^[2] See Exhibit 3.2.
- ^[3] Column (1) - Column (3) for 12/31/2021 and Column (2) - Column (4) for 12/31/2022.
- ^[4] 1.0 minus ratio of Column (6) claim opening rate for accident year YYYY at 12/31/2022 to Column (5) claim opening rate for accident year YYYY at 12/31/2021.
- ^[5] Estimated based on number of reported indemnity claims (excluding COVID-19 claims) as of December 31, 2022 (Column (8)) and selected reporting pattern on Column (2).
- ^[6] Estimated based on applying projected frequency trends to accident years 2021 and 2022 estimated ultimate indemnity claim counts. Frequency trend for 2022 is the actual trends adjusted for class mix and wage level, accident years 2023 and 2024 projected frequency trends are based on the projected growth in intra-class indemnity claim frequency from Section B, Exhibit 6.1.

Estimated Number of Open Indemnity Claims - Statewide
Based on Selected Reporting and Incremental Closing Rates

AY	Estimated Number of Reported Indemnity Claims ^[1]		Estimated Number of Open Indemnity Claims ^[2]	
	@12/31/23 (1)	@12/31/24 (2)	@12/31/23 (3)	@12/31/24 (4)
1989	222,066	222,066	630	611
1990	248,016	248,016	1,131	1,098
1991	248,383	248,360	1,529	1,484
1992	197,257	197,287	1,322	1,295
1993	155,324	155,339	1,080	1,064
1994	142,809	142,827	1,249	1,209
1995	134,035	134,050	1,722	1,657
1996	131,197	131,208	2,275	2,192
1997	137,019	137,032	2,072	1,994
1998	147,197	147,232	1,803	1,767
1999	148,267	148,299	1,410	1,359
2000	160,395	160,425	1,580	1,506
2001	184,926	184,984	2,021	1,878
2002	192,445	192,482	1,870	1,692
2003	182,557	182,597	1,725	1,581
2004	158,537	158,553	1,566	1,368
2005	139,534	139,540	1,435	1,266
2006	133,182	133,177	1,662	1,424
2007	130,215	130,217	1,695	1,453
2008	122,831	122,850	1,903	1,651
2009	113,556	113,577	2,053	1,757
2010	118,221	118,245	2,123	1,835
2011	120,708	120,737	2,341	2,040
2012	128,287	128,136	2,766	2,317
2013	136,413	136,456	3,217	2,609
2014	141,088	141,138	3,982	3,262
2015	145,150	145,171	4,984	3,911
2016	148,272	148,306	6,349	4,870
2017	148,917	148,885	8,685	6,297
2018	151,675	151,690	13,083	9,303
2019	154,563	154,703	20,248	14,207
2020	134,803	135,085	26,854	17,812
2021	147,967	148,958	43,667	28,217
2022	151,872	155,613	66,890	45,691
<u>Projected</u>				
2023	119,901	146,911	81,438	64,704
2024		117,894		80,075
Total	5,377,584	5,528,044	320,359	318,458

Notes:

^{[1], [2]} Estimated based on the projected number of indemnity claims as of 12/31/2022 (Columns 9 and 10 of Exhibit 3.3) and selected reporting and incremental closing rate (Column (2) and Column (7) of Exhibit 3.3).

Projected Ratio of ULAE to Loss - Statewide
Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Trend Average ULAE from 2019 and 2021
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Calendar Year	Number of Open Indemnity Claims at Beginning of the Year (1)	ULAE Paid per Open Indemnity Claim (2)	ULAE Paid (\$000) (3)
2010	360,624	1,676	604,510
2011	360,339	1,684	606,894
2012	360,391	1,698	612,112
2013	365,706	2,192	801,569
2014	366,420	1,947	713,493
2015	367,925	2,486	914,731
2016	370,782	3,010	1,116,097
2017	362,328	3,359	1,217,236
2018	350,417	3,531	1,237,191
2019	334,060	3,228	1,078,484
2020	322,708	3,666	1,182,952
2021	316,313	3,734	1,181,015
Projected			
2022	318,619	3,766	1,199,817
2023	320,589	3,928	1,259,147
2024	320,359	4,042	1,294,731
2025	318,458	4,151	1,321,798
(4) Projected ULAE Paid (\$000):			1,422,970
(5) Average of Calendar Years 2021 and 2022 Earned Premium (\$000):			14,448,594
(6) Projected Loss to Advisory Pure Premium Ratio:			0.755
(7) Weighted Premium Adjustment Factor for Earned Premium on Line (5):			0.905
(8) Projected Losses (\$000): (5) x (6) x (7)			9,871,757
(9) Projected Ratio of ULAE to Losses: (4)/(8)			14.4%

Notes:

- (1) Calendar years 2010 to 2023 are based on WCIRB accident year experience calls. 2024 to 2025 open claim counts are based on incremental indemnity claim closing rates (see Total of Columns (3) to (4) of Exhibit 3.4).
- (2) Calendar years 2010 to 2021 are from column (4) of Exhibit 2. Calendar years 2022 to 2025 are projected based on applying the California average annual wage level changes selected by the WCIRB, to the ULAE paid per open indemnity claim from averaging 2019 and 2021.
- (3) Column (1) x Column (2).
- (4) Weighted average of calendar years 2023 with 5.6%, 2024 with 72.2% and 2025 with 22.2%, projected 2.9 years to the approximate average midpoint of ultimate ULAE payments on September 1, 2023 to August 31, 2024 policies, based on applying the average annual change of 3.2% from 2024 to 2026 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (5) Based on the reported calendar years 2021 and 2022 earned premium excluding COVID-19 premium charges from the same group of insurers that reported the number of open indemnity claims at beginning of calendar years 2022 and 2023.
- (6) See Exhibit 8 of Section B.
- (7) See Exhibit 5.2 of Section B. Based on a weighting of calendar years 2021 and 2022.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Trend Applied to 2021
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Calendar Year	Number of Open Indemnity Claims at Beginning of the Year (1)	ULAE Paid per Open Indemnity Claim (2)	ULAE Paid (\$000) (3)
2010	360,624	1,676	604,510
2011	360,339	1,684	606,894
2012	360,391	1,698	612,112
2013	365,706	2,192	801,569
2014	366,420	1,947	713,493
2015	367,925	2,486	914,731
2016	370,782	3,010	1,116,097
2017	362,328	3,359	1,217,236
2018	350,417	3,531	1,237,191
2019	334,060	3,228	1,078,484
2020	322,708	3,666	1,182,952
2021	316,313	3,734	1,181,015
Projected			
2022	318,619	3,835	1,221,745
2023	320,589	3,999	1,282,159
2024	320,359	4,115	1,318,393
2025	318,458	4,226	1,345,955
(4) Projected ULAE Paid (\$000):			1,448,976
(5) Average of Calendar Years 2021 and 2022 Earned Premium (\$000):			14,448,594
(6) Projected Loss to Advisory Pure Premium Ratio:			0.755
(7) Weighted Premium Adjustment Factor for Earned Premium on Line (5):			0.905
(8) Projected Losses (\$000): (5) x (6) x (7)			9,871,757
(9) Projected Ratio of ULAE to Losses: (4)/(8)			14.7%

Notes:

- (1) Calendar years 2010 to 2023 are based on WCIRB accident year experience calls. 2024 to 2025 open claim counts are based on incremental indemnity claim closing rates (see Total of Columns (3) to (4) of Exhibit 3.4).
- (2) Calendar years 2010 to 2021 are from column (4) of Exhibit 2. Calendar years 2022 to 2025 are projected based on applying the California average annual wage level changes selected by the WCIRB to the 2021 ULAE paid per open indemnity claim.
- (3) Column (1) x Column (2).
- (4) Weighted average of calendar years 2023 with 5.6%, 2024 with 72.2% and 2025 with 22.2%, projected 2.9 years to the approximate average midpoint of ultimate ULAE payments on September 1, 2023 to August 31, 2024 policies, based on applying the average annual change of 3.2% from 2024 to 2026 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (5) Based on the reported calendar years 2021 and 2022 earned premium excluding COVID-19 premium charges from the same group of insurers that reported the number of open indemnity claims at beginning of calendar years 2022 and 2023.
- (6) See Exhibit 8 of Section B.
- (7) See Exhibit 5.2 of Section B. Based on a weighting of calendar years 2021 and 2022.

Average Paid ALAE per Reported Indemnity Claim - Private Insurers

As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
2001								5,704	5,977	6,144
2002							5,944	6,260	6,454	6,614
2003						5,917	6,315	6,597	6,809	7,003
2004					5,062	5,577	5,955	6,223	6,437	6,645
2005				3,987	4,698	5,219	5,591	5,899	6,162	6,342
2006			3,126	4,127	4,876	5,436	5,865	6,184	6,410	6,622
2007		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	8,718
2010	745	2,541	4,279	5,593	6,547	7,290	7,870	8,243	8,515	8,700
2011	753	2,563	4,188	5,522	6,537	7,325	7,837	8,186	8,435	8,592
2012	758	2,555	4,332	5,728	6,766	7,451	7,887	8,226	8,441	8,581
2013	777	2,790	4,582	5,936	6,851	7,418	7,853	8,096	8,265	8,381
2014	879	2,992	4,769	6,056	6,864	7,432	7,781	8,005	8,160	
2015	951	3,067	4,846	6,032	6,817	7,273	7,587	7,792		
2016	933	3,157	4,901	6,072	6,751	7,200	7,512			
2017	1,016	3,281	4,984	6,011	6,669	7,112				
2018	1,111	3,421	5,100	6,209	6,950					
2019	1,144	3,364	5,124	6,315						
2020	1,098	3,478	5,279							
2021	1,049	3,297								
2022	1,117									

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>	<u>108</u>	<u>120</u>
2002								9.7%	8.0%	7.6%
2003							6.2%	5.4%	5.5%	5.9%
2004						-5.7%	-5.7%	-5.7%	-5.5%	-5.1%
2005					-7.2%	-6.4%	-6.1%	-5.2%	-4.3%	-4.6%
2006				3.5%	3.8%	4.2%	4.9%	4.8%	4.0%	4.4%
2007			6.3%	7.1%	7.3%	7.9%	8.7%	8.3%	8.8%	8.6%
2008		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%	10.6%
2010	10.4%	5.6%	4.8%	2.4%	1.0%	1.2%	1.1%	0.6%	0.3%	-0.2%
2011	1.1%	0.9%	-2.1%	-1.3%	-0.1%	0.5%	-0.4%	-0.7%	-0.9%	-1.2%
2012	0.7%	-0.3%	3.4%	3.7%	3.5%	1.7%	0.6%	0.5%	0.1%	-0.1%
2013	2.5%	9.2%	5.8%	3.6%	1.3%	-0.4%	-0.4%	-1.6%	-2.1%	-2.3%
2014	13.2%	7.2%	4.1%	2.0%	0.2%	0.2%	-0.9%	-1.1%	-1.3%	
2015	8.1%	2.5%	1.6%	-0.4%	-0.7%	-2.1%	-2.5%	-2.7%		
2016	-1.8%	2.9%	1.1%	0.7%	-1.0%	-1.0%	-1.0%			
2017	8.9%	3.9%	1.7%	-1.0%	-1.2%	-1.2%				
2018	9.3%	4.3%	2.3%	3.3%	4.2%					
2019	3.0%	-1.7%	0.5%	1.7%						
2020	-4.1%	3.4%	3.0%							
2021	-4.4%	-5.2%								
2022	6.5%									

Source: WCIRB accident year experience calls excluding COVID-19 claims.

Ratio of Paid ALAE to Paid Loss - Private Insurers

As of December 31, 2022

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
2001								0.121	0.122	0.123
2002							0.136	0.137	0.138	0.139
2003						0.144	0.146	0.147	0.148	0.149
2004					0.154	0.157	0.159	0.160	0.160	0.160
2005				0.142	0.148	0.152	0.154	0.155	0.155	0.155
2006			0.125	0.136	0.142	0.146	0.148	0.149	0.150	0.150
2007		0.106	0.123	0.134	0.140	0.145	0.147	0.147	0.148	0.149
2008	0.066	0.104	0.123	0.134	0.140	0.144	0.145	0.147	0.148	0.149
2009	0.072	0.117	0.135	0.145	0.150	0.152	0.155	0.156	0.157	0.158
2010	0.080	0.125	0.142	0.148	0.151	0.155	0.158	0.159	0.160	0.160
2011	0.087	0.131	0.144	0.153	0.159	0.164	0.166	0.167	0.168	0.168
2012	0.086	0.131	0.151	0.163	0.170	0.173	0.174	0.175	0.176	0.176
2013	0.091	0.147	0.164	0.173	0.178	0.180	0.183	0.184	0.184	0.184
2014	0.104	0.159	0.170	0.176	0.179	0.182	0.184	0.184	0.184	
2015	0.112	0.158	0.170	0.174	0.178	0.180	0.181	0.181		
2016	0.106	0.160	0.172	0.179	0.182	0.183	0.183			
2017	0.111	0.163	0.174	0.178	0.180	0.180				
2018	0.115	0.164	0.175	0.178	0.180					
2019	0.118	0.163	0.173	0.175						
2020	0.107	0.155	0.163							
2021	0.103	0.149								
2022	0.109									

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>	<u>108</u>	<u>120</u>
2002								13.8%	13.4%	13.1%
2003							7.2%	7.3%	6.9%	7.1%
2004						9.5%	9.3%	8.7%	8.1%	7.9%
2005					-4.0%	-3.2%	-3.4%	-3.2%	-2.8%	-3.0%
2006				-4.1%	-4.3%	-4.3%	-4.0%	-3.6%	-3.7%	-3.3%
2007			-1.5%	-1.6%	-1.0%	-0.7%	-0.5%	-1.2%	-0.9%	-1.1%
2008		-1.2%	0.1%	0.3%	-0.1%	-0.4%	-1.3%	-0.4%	-0.1%	0.2%
2009	7.8%	12.1%	9.5%	8.2%	7.1%	5.7%	6.8%	6.4%	6.2%	6.1%
2010	12.1%	6.4%	5.0%	2.0%	0.9%	1.9%	1.7%	1.8%	1.6%	1.4%
2011	8.0%	4.8%	1.6%	3.0%	5.0%	5.6%	5.6%	5.1%	5.1%	5.0%
2012	-0.5%	0.7%	5.2%	6.7%	6.7%	5.4%	4.5%	5.0%	4.9%	4.9%
2013	5.6%	12.2%	8.6%	6.2%	4.8%	4.5%	5.2%	4.9%	4.6%	4.4%
2014	14.1%	7.8%	3.1%	1.9%	0.6%	0.9%	0.4%	0.0%	0.0%	
2015	8.3%	-0.5%	0.1%	-1.2%	-0.5%	-0.9%	-1.4%	-1.6%		
2016	-5.7%	1.2%	1.6%	2.7%	2.1%	1.6%	1.2%			
2017	4.8%	1.9%	0.7%	-0.1%	-0.9%	-1.7%				
2018	3.7%	0.7%	0.7%	0.7%	-0.4%	-0.2%				
2019	2.6%	-0.7%	-0.7%	-1.3%						
2020	-9.5%	-5.3%	-6.0%							
2021	-3.8%	-3.3%								
2022	5.4%									

Note: All paid ALAE exclude the paid cost of medical cost containment programs. Accident years 2011 and prior paid loss include the paid cost of medical cost containment programs.

Source: WCIRB accident year experience calls excluding COVID-19 claims.

Estimated Ultimate ALAE per Indemnity Claim - Private Insurers

Based on Latest Year Paid ALAE Development Adjusted for Changes in Claim Settlement Rates

Acc. Year	Paid ALAE ^[1] @12/31/22 (in \$000) (1)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate ALAE per Indemnity Claim (7)=(3)/(6)x1000	Annual Change (8)
1995	245,512	1.036	254,234	100,167	1.001	100,220	2,537	---
1996	292,687	1.038	303,853	101,204	1.001	101,275	3,000	18.3%
1997	368,549	1.041	383,687	104,393	1.001	104,490	3,672	22.4%
1998	504,870	1.044	527,173	112,146	1.001	112,266	4,696	27.9%
1999	555,022	1.047	581,318	115,947	1.001	116,094	5,007	6.6%
2000	668,199	1.051	701,994	116,809	1.002	116,997	6,000	19.8%
2001	788,578	1.054	831,094	113,213	1.002	113,423	7,327	22.1%
2002	818,564	1.057	865,546	110,757	1.002	110,993	7,798	6.4%
2003	832,429	1.061	883,165	106,786	1.002	107,038	8,251	5.8%
2004	723,376	1.065	770,187	99,088	1.003	99,340	7,753	-6.0%
2005	686,142	1.069	733,683	97,361	1.003	97,613	7,516	-3.1%
2006	750,429	1.075	806,438	104,269	1.003	104,549	7,714	2.6%
2007	831,524	1.080	898,143	107,366	1.003	107,678	8,341	8.1%
2008	886,643	1.087	963,419	105,469	1.003	105,803	9,106	9.2%
2009	923,904	1.094	1,011,115	100,769	1.004	101,125	9,999	9.8%
2010	980,292	1.103	1,081,669	108,545	1.004	108,961	9,927	-0.7%
2011	998,350	1.113	1,110,998	113,230	1.003	113,519	9,787	-1.4%
2012	1,059,842	1.125	1,192,095	121,921	1.003	122,280	9,749	-0.4%
2013	1,078,526	1.139	1,228,692	128,581	1.003	129,017	9,523	-2.3%
2014	1,069,525	1.156	1,236,533	131,041	1.004	131,537	9,401	-1.3%
2015	1,054,277	1.179	1,243,440	135,329	1.004	135,898	9,150	-2.7%
2016	1,054,374	1.214	1,279,708	140,411	1.005	141,045	9,073	-0.8%
2017	1,007,275	1.267	1,276,056	141,670	1.005	142,408	8,961	-1.2%
2018	1,005,070	1.352	1,359,313	144,669	1.007	145,639	9,333	4.2%
2019	929,062	1.518	1,410,189	147,205	1.010	148,631	9,488	1.7%
2020	667,534	1.884	1,257,739	126,088	1.018	128,326	9,801	3.3%
2021	445,535	2.873	1,280,110	135,178	1.047	141,576	9,042	-7.7%
2022	129,834	11.173	1,450,577	116,416	1.301	151,424	9,580	5.9%

Estimated Annual Exponential Trend Based on:		R ²
2008 to 2022	-0.3%	0.102
2018 to 2022	0.0%	0.000
Average:	-0.1%	

Notes:

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

[2] Based on the latest year paid ALAE age-to-age development from Exhibit 8.1 adjusted for change in claim settlement ratios.

[3] Based on analogous Exhibit 8.3, applicable to private insurers only.

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

**Ratio of Accident Year Incremental Paid ALAE^[1] to Indemnity Claims Inventory^[2]
By Payment Year - Private Insurers**

Accident Year	Payment Year Ending December 31														
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1989	1,167	1,027	1,221	1,236	1,525	1,530	1,368	1,669	1,784	1,517	1,655	3,290	1,703	1,520	1,390
1990	1,406	1,138	1,341	1,386	1,584	1,777	1,496	1,551	1,906	1,680	1,736	1,932	1,733	1,799	1,661
1991	1,481	1,384	1,577	1,308	1,678	1,541	1,714	1,431	2,136	2,035	1,944	1,997	1,739	2,058	1,279
1992	1,647	1,477	1,718	1,434	1,579	1,633	1,501	1,925	1,596	1,738	1,977	1,997	1,914	1,526	1,876
1993	1,945	1,450	1,732	1,788	1,932	1,934	1,802	2,095	2,240	2,053	2,206	2,157	1,890	1,665	1,508
1994	1,864	1,389	1,514	1,774	1,830	1,812	1,804	1,775	1,862	1,587	1,781	1,518	1,624	1,437	1,407
1995	1,866	1,682	2,022	1,602	1,996	2,144	1,998	2,179	2,434	1,956	2,105	2,076	1,867	1,541	1,402
1996	2,040	1,938	1,755	1,868	2,035	2,244	2,008	2,174	2,144	1,921	2,174	2,188	1,688	1,471	1,663
1997	2,343	2,268	2,196	2,281	2,489	2,350	1,951	2,303	2,173	2,355	2,420	2,244	1,807	2,143	1,738
1998	2,426	2,374	2,398	2,338	2,401	2,362	2,306	2,324	2,453	2,509	2,536	1,976	2,008	1,903	1,778
1999	2,468	2,806	2,659	2,600	2,662	2,452	2,130	2,322	2,433	2,199	2,138	2,037	1,689	1,500	1,645
2000	2,699	2,806	2,773	2,781	2,841	2,670	2,530	2,798	2,669	2,449	2,382	2,074	2,144	1,834	1,769
2001	2,644	2,756	2,707	2,730	2,841	3,113	3,290	3,044	2,801	2,592	2,591	2,588	2,248	1,928	1,702
2002	2,881	2,976	2,949	3,029	2,959	3,285	3,428	3,193	3,171	3,024	2,962	2,974	2,704	2,241	2,165
2003	3,014	3,007	3,226	3,208	3,518	3,604	3,687	3,582	3,229	2,942	2,858	2,871	3,100	2,365	2,332
2004	3,062	3,170	3,256	3,156	3,084	3,462	3,556	3,487	3,113	2,948	2,971	2,852	2,507	2,457	2,407
2005	2,877	3,084	3,227	3,286	3,267	3,580	3,568	3,562	3,669	3,387	3,501	3,187	3,165	3,033	2,496
2006	2,675	2,969	3,220	3,478	3,468	3,489	3,511	3,566	3,193	3,184	3,068	2,765	2,509	2,346	2,111
2007	1,987	2,752	3,155	3,398	3,572	3,756	3,671	3,745	3,518	3,478	3,545	3,240	2,968	2,750	2,616
2008	620	2,095	2,976	3,480	3,559	3,716	3,840	3,952	3,698	3,708	3,654	3,761	3,314	3,093	2,868
2009		674	2,380	3,307	3,620	3,797	3,964	4,048	3,871	3,843	3,809	3,627	3,555	3,385	3,099
2010			746	2,542	3,411	3,684	3,888	4,137	4,351	4,029	3,934	3,800	3,870	2,952	3,328
2011				766	2,569	3,342	3,825	4,120	4,428	4,150	4,008	3,844	3,561	3,427	3,238
2012					773	2,593	3,610	4,036	4,260	4,181	3,924	4,171	4,009	3,583	3,373
2013						791	2,844	3,691	3,931	4,092	3,917	4,103	3,787	3,658	3,362
2014							909	3,031	3,631	3,964	3,935	4,111	4,012	3,609	3,464
2015								923	2,969	3,754	3,932	4,045	3,996	3,786	3,596
2016									933	3,137	3,887	4,029	4,051	3,954	3,838
2017										1,016	3,276	3,909	3,953	3,885	3,847
2018											1,111	3,334	3,944	3,945	4,017
2019												1,121	3,269	3,908	3,911
2020													1,104	3,405	3,944
2021														1,041	3,280
2022															1,114
ALAE per Claim	2,047	2,160	2,318	2,480	2,563	2,639	2,797	2,906	2,918	2,946	2,974	2,992	3,005	2,937	2,899
Annual Change	3.4%	5.5%	7.3%	7.0%	3.4%	3.0%	6.0%	3.9%	0.4%	1.0%	0.9%	0.6%	0.4%	-2.3%	-1.3%

<u>Estimated Annual Exponential Trend Based on Payment Year:</u>		<u>R²</u>
2008-2022	2.5%	0.791
<u>2018-2022</u>	<u>-0.7%</u>	0.564
Average:	0.9%	

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

[2] Indemnity claims inventory is the sum of indemnity claims open as of January 1 of Year N-1 and newly-reported indemnity claims between January 1 of year N-1 and December 31 of year N.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Paid Allocated Loss Adjustment Expense Development - Private Insurers
As of December 31, 2022

Accident Year	Age-to-Age Development (in months):															
	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
1996	3.147	1.569	1.330	1.132	1.081	1.061	1.049	1.036	1.033	1.028	1.022	1.018	1.014	1.010	1.009	1.010
1997	2.994	1.675	1.231	1.132	1.092	1.067	1.052	1.042	1.035	1.027	1.021	1.017	1.013	1.012	1.012	1.010
1998	3.591	1.608	1.248	1.163	1.105	1.076	1.071	1.045	1.032	1.024	1.021	1.017	1.014	1.014	1.012	1.012
1999	3.351	1.720	1.319	1.158	1.116	1.086	1.064	1.042	1.034	1.029	1.021	1.018	1.016	1.013	1.013	1.010
2000	4.051	1.752	1.315	1.183	1.121	1.090	1.053	1.042	1.033	1.025	1.021	1.019	1.015	1.014	1.012	1.011
2001	3.939	1.768	1.357	1.182	1.118	1.078	1.054	1.039	1.028	1.024	1.020	1.017	1.017	1.014	1.011	1.009
2002	3.927	1.784	1.315	1.171	1.101	1.074	1.046	1.032	1.026	1.021	1.018	1.017	1.013	1.012	1.009	1.007
2003	4.109	1.707	1.324	1.159	1.107	1.062	1.045	1.034	1.029	1.023	1.020	1.017	1.013	1.010	1.008	1.007
2004	4.040	1.713	1.319	1.169	1.101	1.069	1.048	1.036	1.030	1.025	1.020	1.015	1.012	1.010	1.008	1.006
2005	3.840	1.698	1.336	1.181	1.113	1.079	1.056	1.044	1.035	1.027	1.022	1.016	1.014	1.010	1.009	1.007
2006	3.750	1.736	1.330	1.186	1.120	1.081	1.060	1.046	1.035	1.025	1.019	1.014	1.011	1.008	1.006	1.005
2007	4.027	1.716	1.340	1.194	1.126	1.088	1.060	1.044	1.032	1.023	1.018	1.013	1.010	1.007	1.006	
2008	4.015	1.758	1.367	1.199	1.126	1.085	1.060	1.040	1.029	1.021	1.017	1.012	1.009	1.007		
2009	4.322	1.775	1.354	1.199	1.126	1.083	1.054	1.037	1.027	1.019	1.014	1.011	1.008			
2010	4.300	1.737	1.342	1.190	1.120	1.076	1.049	1.033	1.023	1.017	1.010	1.009				
2011	4.225	1.729	1.351	1.196	1.109	1.072	1.045	1.030	1.019	1.014	1.011					
2012	4.338	1.773	1.344	1.174	1.105	1.060	1.042	1.027	1.018	1.013						
2013	4.542	1.706	1.297	1.161	1.085	1.056	1.032	1.022	1.015							
2014	4.322	1.635	1.285	1.139	1.081	1.049	1.029	1.020								
2015	4.041	1.630	1.255	1.128	1.071	1.044	1.029									
2016	4.254	1.603	1.240	1.117	1.068	1.044										
2017	3.979	1.546	1.217	1.114	1.068											
2018	3.767	1.530	1.226	1.122												
2019	3.627	1.569	1.241													
2020	3.902	1.561														
2021	3.889															

	Latest Year															
Age-to-Age	3.889	1.561	1.241	1.122	1.068	1.044	1.029	1.020	1.015	1.013	1.011	1.009	1.008	1.007	1.006	1.005
Cumulative	11.434	2.940	1.884	1.518	1.352	1.267	1.214	1.179	1.156	1.139	1.125	1.113	1.103	1.094	1.087	1.080
Adjusted ⁽¹⁾	11.173	2.873	1.884	1.518	1.352	1.267	---	---	---	---	---	---	---	---	---	---

	3-Year Arithmetic Average															
Age-to-Age	3.806	1.553	1.228	1.118	1.069	1.045	1.030	1.023	1.017	1.015	1.012	1.010	1.009	1.008	1.007	1.006
Cumulative	11.207	2.945	1.896	1.544	1.381	1.292	1.236	1.200	1.173	1.153	1.137	1.124	1.112	1.102	1.094	1.086

Accident Year	Age-to-Age Development (in months):															
	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396
1990	1.005	1.004	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.002	1.002	1.002	1.002	1.001	1.001
1991	1.004	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.003	1.002	1.002	1.002	1.001	1.001	
1992	1.002	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002		
1993	1.007	1.006	1.006	1.006	1.005	1.005	1.005	1.004	1.004	1.003	1.003	1.002	1.002			
1994	1.008	1.007	1.006	1.006	1.005	1.005	1.004	1.005	1.003	1.003	1.003	1.002				
1995	1.009	1.009	1.008	1.008	1.008	1.006	1.008	1.005	1.004	1.003	1.003					
1996	1.009	1.008	1.007	1.007	1.006	1.007	1.005	1.004	1.003	1.003						
1997	1.008	1.008	1.007	1.007	1.006	1.005	1.004	1.004	1.003							
1998	1.010	1.010	1.008	1.006	1.005	1.004	1.003	1.003								
1999	1.010	1.008	1.006	1.005	1.004	1.003	1.003									
2000	1.009	1.007	1.006	1.004	1.004	1.003										
2001	1.008	1.007	1.005	1.004	1.003											
2002	1.007	1.005	1.004	1.003												
2003	1.006	1.004	1.004													
2004	1.005	1.004														
2005	1.005															

	Latest Year															
Age-to-Age	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.001
Cumulative ⁽²⁾	1.075	1.069	1.065	1.061	1.057	1.054	1.051	1.047	1.044	1.041	1.038	1.036	1.033	1.032	1.030	1.029

	3-Year Arithmetic Average															
Age-to-Age	1.005	1.005	1.004	1.004	1.004	1.004	1.003	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.002
Cumulative ⁽²⁾	1.080	1.074	1.069	1.065	1.060	1.057	1.053	1.049	1.045	1.042	1.039	1.036	1.034	1.032	1.031	1.029

Note:

⁽¹⁾ The paid ALAE factors are adjusted for significant changes in claim settlement rates based on Appendix A, Exhibit 2 for age-to-age development through 84 months. See Item AC19-08-04 of the August 4, 2020 WCIRB Actuarial Committee Agenda.

⁽²⁾ Factors in italics are based on powerfit to the "3-Year Arithmetic Average" factors.

Source: WCIRB quarterly experience calls, excluding MCCP costs and COVID-19 claims.

Quarterly Paid ALAE Loss Development Factors^[1] - Private Insurers

Age in Months	Accident Year															
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
3 - 6	7.570	5.434	9.136	8.769	8.693	8.584	6.234	9.857	8.970	8.932	8.255	7.884	---	9.341	8.804	
6 - 9	2.765	2.630	3.023	3.176	3.213	3.058	3.163	3.169	3.155	3.050	3.134	3.137	---	3.191	3.084	
9 - 12	2.021	2.034	2.077	2.165	2.115	2.133	2.158	2.103	2.100	2.130	2.076	2.133	---	2.057	2.125	
12 - 15	1.687	1.724	1.737	1.701	1.713	1.784	1.744	1.730	1.771	1.699	1.672	1.662	1.639	1.667		
15 - 18	1.494	1.509	1.482	1.486	1.510	1.494	1.486	1.480	1.488	1.450	1.442	1.432	1.461	1.469		
18 - 21	1.289	1.326	1.334	1.343	1.338	1.349	1.328	1.309	1.307	1.309	1.289	1.261	1.311	1.320		
21 - 24	1.237	1.255	1.253	1.248	1.249	1.237	1.237	1.225	1.226	1.226	1.213	1.218	1.209	1.207		
24 - 27	1.190	1.197	1.189	1.186	1.205	1.187	1.176	1.183	1.167	1.150	1.150	1.157	1.152			
27 - 30	1.172	1.170	1.158	1.163	1.160	1.156	1.149	1.141	1.132	1.129	1.123	1.131	1.131			
30 - 33	1.135	1.138	1.133	1.131	1.130	1.122	1.116	1.110	1.109	1.099	1.101	1.109	1.108			
33 - 36	1.111	1.114	1.113	1.108	1.104	1.101	1.095	1.088	1.092	1.084	1.078	1.084	1.082			
36 - 39	1.097	1.094	1.091	1.095	1.093	1.085	1.085	1.073	1.068	1.061	1.063	1.068				
39 - 42	1.096	1.082	1.083	1.081	1.081	1.076	1.072	1.062	1.062	1.055	1.057	1.061				
42 - 45	1.069	1.074	1.069	1.068	1.070	1.061	1.057	1.054	1.049	1.047	1.050	1.052				
45 - 48	1.063	1.064	1.062	1.059	1.057	1.055	1.050	1.046	1.043	1.039	1.040	1.041				
48 - 51	1.052	1.053	1.053	1.051	1.049	1.047	1.041	1.036	1.034	1.031	1.035					
51 - 54	1.049	1.050	1.048	1.048	1.045	1.042	1.036	1.034	1.031	1.030	1.032					
54 - 57	1.045	1.043	1.040	1.043	1.038	1.035	1.031	1.027	1.025	1.027	1.027					
57 - 60	1.039	1.039	1.037	1.036	1.035	1.031	1.028	1.026	1.023	1.022	1.023					
60 - 63	1.034	1.034	1.032	1.031	1.031	1.025	1.023	1.021	1.018	1.018						
63 - 66	1.033	1.031	1.032	1.029	1.028	1.023	1.021	1.019	1.018	1.018						
66 - 69	1.028	1.028	1.028	1.024	1.024	1.021	1.017	1.015	1.017	1.016						
69 - 72	1.026	1.026	1.023	1.023	1.021	1.018	1.018	1.014	1.014	1.014						
72 - 75	1.023	1.022	1.021	1.020	1.019	1.017	1.015	1.012	1.012							
75 - 78	1.022	1.022	1.020	1.019	1.016	1.015	1.013	1.012	1.012							
78 - 81	1.020	1.020	1.017	1.017	1.015	1.011	1.010	1.011	1.010							
81 - 84	1.018	1.017	1.016	1.014	1.014	1.012	1.009	1.009	1.009							
84 - 87	1.016	1.015	1.014	1.014	1.013	1.011	1.008	1.008								
87 - 90	1.016	1.014	1.012	1.012	1.011	1.008	1.008	1.008								
90 - 93	1.014	1.012	1.012	1.011	1.009	1.005	1.007	1.007								
93 - 96	1.013	1.012	1.010	1.011	1.009	1.007	1.006	1.007								
96 - 99	1.011	1.010	1.010	1.008	1.010	1.006	1.006									
99 - 102	1.011	1.009	1.009	1.008	1.007	1.006	1.006									
102 - 105	1.009	1.009	1.008	1.007	1.004	1.005	1.005									
105 - 108	1.008	1.008	1.007	1.007	1.005	1.005	1.004									
108 - 111	1.008	1.008	1.006	1.005	1.005	1.004										
111 - 114	1.007	1.007	1.006	1.005	1.004	1.004										
114 - 117	1.007	1.007	1.006	1.004	1.005	1.004										
117 - 120	1.006	1.006	1.005	1.004	1.004	1.003										
120 - 123	1.006	1.005	1.005	1.004	1.003											

[1] All paid allocated loss adjustment expense exclude the paid cost of medical cost containment programs.

Source: WCIRB quarterly experience calls, excluding MCCP costs and COVID-19 claims.

Reported Indemnity Claim Count Development - Statewide

Accident Year	Age-to-Age Development (in months):															
	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
1994															1.000	1.000
1995														1.004	1.001	1.000
1996													1.001	1.000	1.000	1.000
1997												1.000	1.000	1.000	1.000	1.000
1998											1.000	1.000	1.001	1.000	1.000	1.000
1999										1.000	1.000	1.000	1.000	1.000	1.001	1.000
2000									1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002							1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003						0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2004					0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005				1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006			1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007		1.015	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.153	1.023	1.011	1.005	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000		
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2010	1.220	1.030	1.011	1.006	1.004	1.002	1.001	1.000	1.000	1.000	1.000	0.999				
2011	1.230	1.033	1.014	1.007	1.002	1.001	1.001	1.000	1.000	1.000	1.000					
2012	1.241	1.035	1.013	1.005	1.003	1.001	1.001	1.000	1.001	1.000						
2013	1.240	1.031	1.010	1.004	1.002	1.001	1.001	1.000	1.000							
2014	1.239	1.027	1.010	1.004	1.002	1.000	1.000	1.000								
2015	1.236	1.027	1.006	1.003	1.002	1.001	1.000									
2016	1.244	1.029	1.007	1.003	1.001	1.000										
2017	1.220	1.023	1.007	1.003	1.001											
2018	1.226	1.024	1.006	1.002												
2019	1.222	1.027	1.007													
2020	1.225	1.025														
2021	1.225															
<u>I. Age-to-Age (Latest Year)</u>																
	1.225	1.025	1.007	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000
<u>II. Age-to-Ultimate</u>																
	1.271	1.037	1.012	1.006	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.003	1.003	1.003	1.002

Accident Year	Age-to-Age Development (in months):															
	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	
1990				1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1991			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1992		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
1998	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
1999	1.000	1.000	1.000	1.000	1.000	1.000										
2000	1.000	1.000	1.000	1.000	1.000											
2001	1.000	1.000	1.000	1.000												
2002	1.000	0.996	1.000													
2003	1.000	1.000														
2004	1.000															
<u>I. Age-to-Age (Latest Year)</u>																
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<u>II. Age-to-Ultimate</u>																
	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Private Insurers ALAE Severity using Latest Year Paid ALAE Development
Adjusted for Changes in Claim Settlement Rates
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Acc. Year	Indemnity Claim Counts @12/31/22	Cumulative Count Development Factors ^[2]	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE per Indemnity Claim ^[3]	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
1995	134,024	1.001	134,101	2,537	340,183
1996	131,185	1.001	131,272	3,000	393,854
1997	136,987	1.001	137,110	3,672	503,471
1998	147,166	1.001	147,330	4,696	691,824
1999	148,239	1.001	148,432	5,007	743,247
2000	160,344	1.002	160,604	6,000	963,638
2001	184,890	1.002	185,225	7,327	1,357,223
2002	192,403	1.002	192,794	7,798	1,503,439
2003	182,539	1.002	182,928	8,251	1,509,326
2004	158,530	1.002	158,875	7,753	1,231,767
2005	139,539	1.002	139,837	7,516	1,051,048
2006	133,179	1.002	133,466	7,714	1,029,495
2007	130,194	1.002	130,495	8,341	1,088,467
2008	122,808	1.003	123,115	9,106	1,121,061
2009	113,533	1.003	113,840	9,999	1,138,244
2010	118,193	1.003	118,541	9,927	1,176,766
2011	120,851	1.002	121,063	9,787	1,184,834
2012	128,247	1.002	128,513	9,749	1,252,861
2013	136,364	1.002	136,695	9,523	1,301,815
2014	141,067	1.003	141,431	9,401	1,329,541
2015	145,117	1.003	145,524	9,150	1,331,516
2016	148,304	1.003	148,688	9,073	1,349,054
2017	148,903	1.003	149,303	8,961	1,337,835
2018	151,539	1.004	152,083	9,333	1,419,458
2019	154,240	1.006	155,118	9,488	1,471,742
2020	133,906	1.012	135,570	9,801	1,328,735
2021	144,410	1.037	149,806	9,042	1,354,525
2022 ^[4]	123,950	1.271	157,547	9,580	1,509,231

Projected Based on 2021 and 2022:

	Ult. Ind. Counts ^[6]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2023	152,400	9,380	1,429,511
2024	149,850	9,427	1,412,618
9/1/2024	149,551	9,435	1,410,969

- (a) Projected ALAE Incurred (\$000): 1,410,969
- (b) Average of Calendar Year 2021 and 2022 Earned Premium^[8] (\$000): 14,448,594
- (c) Projected Loss to Advisory Pure Premium Ratio^[9]: 0.755
- (d) Weighted Premium Adjustment Factor for Earned Premium on Line (b) ^[10]: 0.905
- (e) Projected Losses (\$000): (b) x (c) x (d) 9,871,757
- (f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e) 14.3%
- (g) Impact of SB 1160 and AB 1244^[11] -1.8%
- (h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)] 14.0%

Notes:

- ^[1] All paid ALAE exclude the paid cost of medical cost containment programs.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- ^[3] Based on estimated ultimate ALAE per indemnity claim for private insurers from Exhibit 6.
- ^[4] AY2020 to AY2022 data excludes COVID-19 claims.
- ^[5] Estimated based on projected frequency trends for accident years 2022 to 2025. The 2022 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 2), and 2023 to 2025 estimated frequency trends are based on the projected growth in intra-class indemnity claim frequency (see Section B, Exhibit 6.1). These frequency trends were then applied to the accident year 2021 and 2022 ultimate indemnity claim counts.
- ^[6] Severities are projected by applying an annual growth rate of 0.5%, which is based on the approximate average of the private insurers' rates of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 6 and (ii) paid ALAE per open indemnity claim from Exhibit 7, to the average of 2021 and 2022 ultimate ALAE severity.
- ^[7] Column(3) x Column(4) / 1,000.
- ^[8] Based on the reported earned premium for calendar year 2021 and 2022 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (3) by accident year as of December 31, 2022.
- ^[9] See Exhibit 8 of Section B.
- ^[10] See Exhibit 5.2 of Section B.
- ^[11] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 70% reduction in lien filings, offset by 84% to reflect the impact of the reforms in the emerging ALAE data.

Estimated Ultimate ALAE per Indemnity Claim - Private Insurers
Based on 3-Year Average Unadjusted Paid ALAE Development

Acc. Year	Paid ALAE ^[1] @12/31/22 (in \$000)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate ALAE per Indemnity Claim (7)=(3)/(6)x1000	Annual Change (8)
1995	245,512	1.036	254,345	100,167	1.001	100,220	2,538	---
1996	292,687	1.039	304,024	101,204	1.001	101,275	3,002	18.3%
1997	368,549	1.042	384,005	104,393	1.001	104,490	3,675	22.4%
1998	504,870	1.045	527,790	112,146	1.001	112,266	4,701	27.9%
1999	555,022	1.049	582,277	115,947	1.001	116,094	5,016	6.7%
2000	668,199	1.053	703,407	116,809	1.002	116,997	6,012	19.9%
2001	788,578	1.057	833,191	113,213	1.002	113,423	7,346	22.2%
2002	818,564	1.060	868,072	110,757	1.002	110,993	7,821	6.5%
2003	832,429	1.065	886,190	106,786	1.002	107,038	8,279	5.9%
2004	723,376	1.069	773,382	99,088	1.003	99,340	7,785	-6.0%
2005	686,142	1.074	736,938	97,361	1.003	97,613	7,550	-3.0%
2006	750,429	1.080	810,333	104,269	1.003	104,549	7,751	2.7%
2007	831,524	1.086	903,297	107,366	1.003	107,678	8,389	8.2%
2008	886,643	1.094	969,919	105,469	1.003	105,803	9,167	9.3%
2009	923,904	1.102	1,018,293	100,769	1.004	101,125	10,070	9.8%
2010	980,292	1.112	1,090,140	108,545	1.004	108,961	10,005	-0.6%
2011	998,350	1.124	1,121,759	113,230	1.003	113,519	9,882	-1.2%
2012	1,059,842	1.137	1,204,628	121,921	1.003	122,280	9,851	-0.3%
2013	1,078,526	1.153	1,243,767	128,581	1.003	129,017	9,640	-2.1%
2014	1,069,525	1.173	1,254,614	131,041	1.004	131,537	9,538	-1.1%
2015	1,054,277	1.200	1,264,992	135,329	1.004	135,898	9,308	-2.4%
2016	1,054,374	1.236	1,303,381	140,411	1.005	141,045	9,241	-0.7%
2017	1,007,275	1.292	1,301,735	141,670	1.005	142,408	9,141	-1.1%
2018	1,005,070	1.381	1,388,502	144,669	1.007	145,639	9,534	4.3%
2019	929,062	1.544	1,434,318	147,205	1.010	148,631	9,650	1.2%
2020	667,534	1.896	1,265,583	126,088	1.018	128,326	9,862	2.2%
2021	445,535	2.945	1,312,067	135,178	1.047	141,576	9,268	-6.0%
2022	129,834	11.207	1,455,105	116,416	1.301	151,424	9,609	3.7%

Estimated Annual Exponential Trend Based on:		R ²
2008 to 2022	-0.2%	0.081
2018 to 2022	-0.2%	0.030
Average:	-0.2%	

Notes:

- ^[1] All paid ALAE exclude the paid cost of medical cost containment programs.
- ^[2] Based on the 3-year average paid ALAE age-to-age development from Exhibit 8.1.
- ^[3] Based on analogous Exhibit 8.3, applicable to private insurers only.

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Private Insurers ALAE Severity using 3-Year Average Unadjusted Paid ALAE Development for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Acc. Year	Indemnity Claim Counts @12/31/22	Cumulative Count Development Factors ^[2]	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE per Indemnity Claim ^[3]	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
1995	134,024	1.001	134,101	2,538	340,331
1996	131,185	1.001	131,272	3,002	394,075
1997	136,987	1.001	137,110	3,675	503,888
1998	147,166	1.001	147,330	4,701	692,634
1999	148,239	1.001	148,432	5,016	744,473
2000	160,344	1.002	160,604	6,012	965,578
2001	184,890	1.002	185,225	7,346	1,360,648
2002	192,403	1.002	192,794	7,821	1,507,827
2003	182,539	1.002	182,928	8,279	1,514,496
2004	158,530	1.002	158,875	7,785	1,236,876
2005	139,539	1.002	139,837	7,550	1,055,711
2006	133,179	1.002	133,466	7,751	1,034,467
2007	130,194	1.002	130,495	8,389	1,094,713
2008	122,808	1.003	123,115	9,167	1,128,625
2009	113,533	1.003	113,840	10,070	1,146,325
2010	118,193	1.003	118,541	10,005	1,185,982
2011	120,851	1.002	121,063	9,882	1,196,310
2012	128,247	1.002	128,513	9,851	1,266,033
2013	136,364	1.002	136,695	9,640	1,317,787
2014	141,067	1.003	141,431	9,538	1,348,983
2015	145,117	1.003	145,524	9,308	1,354,595
2016	148,304	1.003	148,688	9,241	1,374,009
2017	148,903	1.003	149,303	9,141	1,364,757
2018	151,539	1.004	152,083	9,534	1,449,939
2019	154,240	1.006	155,118	9,650	1,496,924
2020	133,906	1.012	135,570	9,862	1,337,023
2021	144,410	1.037	149,806	9,268	1,388,339
2022 ^[4]	123,950	1.271	157,547	9,609	1,513,943

Projected Based on 2021 and 2022:

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2023	152,400	9,509	1,449,174
2024	149,850	9,557	1,432,048
9/1/2024	149,551	9,564	1,430,377
(a) Projected ALAE Incurred (\$000):			1,430,377
(b) Average of Calendar Year 2021 and 2022 Earned Premium ^[8] (\$000):			14,448,594
(c) Projected Loss to Advisory Pure Premium Ratio ^[9] :			0.755
(d) Premium Adjustment Factor for Calendar Year 2021 and 2022 ^[10] :			0.905
(e) Projected Losses (\$000): (b) x (c) x (d)			9,871,757
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e)			14.5%
(g) Impact of SB 1160 and AB 1244 ^[11]			-1.8%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]			14.2%

Notes:

- (i) All paid ALAE exclude the paid cost of medical cost containment programs.
- (j) Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- (k) Based on estimated ultimate ALAE per indemnity claim for private insurers from Exhibit 9.1.
- (l) AY2020 to AY2022 data excludes COVID-19 claims.
- ^[5] Estimated based on projected frequency trends for accident years 2022 to 2025. The 2022 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 2), and 2023 to 2025 estimated frequency trends are based on the projected growth in intra-class indemnity claim frequency (see Section B, Exhibit 6.1). These frequency trends were then applied to the accident year 2021 and 2022 ultimate indemnity claim counts.
- ^[6] Severities are projected by applying an annual growth rate of 0.5%, which is based on the approximate average of the private insurers' rates of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 6 and (ii) paid ALAE per open indemnity claim from Exhibit 7, to the average of 2021 and 2022 ultimate ALAE severity.

^[7] Column(3) x Column(4) / 1,000.

^[8] Based on the reported earned premium for calendar year 2021 and 2022 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (3) by accident year as of December 31, 2022.

^[9] See Exhibit 8 of Section B.

^[10] See Exhibit 5.2 of Section B.

^[11] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 70% reduction in lien filings, offset by 84% to reflect the impact of the reforms in the emerging ALAE data.

Estimated Ultimate ALAE per Indemnity Claim - Private Insurers

Based on Latest Year Unadjusted Paid ALAE Development

Acc. Year	Paid ALAE ^[1] @12/31/22 (in \$000) (1)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate ALAE per Indemnity Claim (7)=(3)/(6)x1000	Annual Change (8)
1995	245,512	1.036	254,234	100,167	1.001	100,220	2,537	---
1996	292,687	1.038	303,853	101,204	1.001	101,275	3,000	18.3%
1997	368,549	1.041	383,687	104,393	1.001	104,490	3,672	22.4%
1998	504,870	1.044	527,173	112,146	1.001	112,266	4,696	27.9%
1999	555,022	1.047	581,318	115,947	1.001	116,094	5,007	6.6%
2000	668,199	1.051	701,994	116,809	1.002	116,997	6,000	19.8%
2001	788,578	1.054	831,094	113,213	1.002	113,423	7,327	22.1%
2002	818,564	1.057	865,546	110,757	1.002	110,993	7,798	6.4%
2003	832,429	1.061	883,165	106,786	1.002	107,038	8,251	5.8%
2004	723,376	1.065	770,187	99,088	1.003	99,340	7,753	-6.0%
2005	686,142	1.069	733,683	97,361	1.003	97,613	7,516	-3.1%
2006	750,429	1.075	806,438	104,269	1.003	104,549	7,714	2.6%
2007	831,524	1.080	898,143	107,366	1.003	107,678	8,341	8.1%
2008	886,643	1.087	963,419	105,469	1.003	105,803	9,106	9.2%
2009	923,904	1.094	1,011,115	100,769	1.004	101,125	9,999	9.8%
2010	980,292	1.103	1,081,669	108,545	1.004	108,961	9,927	-0.7%
2011	998,350	1.113	1,110,998	113,230	1.003	113,519	9,787	-1.4%
2012	1,059,842	1.125	1,192,095	121,921	1.003	122,280	9,749	-0.4%
2013	1,078,526	1.139	1,228,692	128,581	1.003	129,017	9,523	-2.3%
2014	1,069,525	1.156	1,236,533	131,041	1.004	131,537	9,401	-1.3%
2015	1,054,277	1.179	1,243,440	135,329	1.004	135,898	9,150	-2.7%
2016	1,054,374	1.214	1,279,708	140,411	1.005	141,045	9,073	-0.8%
2017	1,007,275	1.267	1,276,056	141,670	1.005	142,408	8,961	-1.2%
2018	1,005,070	1.352	1,359,313	144,669	1.007	145,639	9,333	4.2%
2019	929,062	1.518	1,410,189	147,205	1.010	148,631	9,488	1.7%
2020	667,534	1.884	1,257,739	126,088	1.018	128,326	9,801	3.3%
2021	445,535	2.940	1,310,042	135,178	1.047	141,576	9,253	-5.6%
2022	129,834	11.434	1,484,494	116,416	1.301	151,424	9,804	5.9%

Estimated Annual Exponential Trend Based on:		R ²
2008 to 2022	-0.2%	0.036
2018 to 2022	0.7%	0.184
Average:	0.3%	

Notes:

- [1] All paid ALAE exclude the paid cost of medical cost containment programs.
- [2] Based on the unadjusted latest year paid ALAE age-to-age development from Exhibit 8.1.
- [3] Based on analogous Exhibit 8.3, applicable to private insurers only.

Source: WCIRB quarterly experience calls, excluding COVID-19 claims.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Private Insurers ALAE Severity using Unadjusted Latest Year Paid ALAE Development for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Acc. Year	Indemnity Claim Counts @12/31/22 (1)	Cumulative Count Development Factors ^[2] (2)	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE per Indemnity Claim ^[3] (4)	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
1995	134,024	1.001	134,101	2,537	340,183
1996	131,185	1.001	131,272	3,000	393,854
1997	136,987	1.001	137,110	3,672	503,471
1998	147,166	1.001	147,330	4,696	691,824
1999	148,239	1.001	148,432	5,007	743,247
2000	160,344	1.002	160,604	6,000	963,638
2001	184,890	1.002	185,225	7,327	1,357,223
2002	192,403	1.002	192,794	7,798	1,503,439
2003	182,539	1.002	182,928	8,251	1,509,326
2004	158,530	1.002	158,875	7,753	1,231,767
2005	139,539	1.002	139,837	7,516	1,051,048
2006	133,179	1.002	133,466	7,714	1,029,495
2007	130,194	1.002	130,495	8,341	1,088,467
2008	122,808	1.003	123,115	9,106	1,121,061
2009	113,533	1.003	113,840	9,999	1,138,244
2010	118,193	1.003	118,541	9,927	1,176,766
2011	120,851	1.002	121,063	9,787	1,184,834
2012	128,247	1.002	128,513	9,749	1,252,861
2013	136,364	1.002	136,695	9,523	1,301,815
2014	141,067	1.003	141,431	9,401	1,329,541
2015	145,117	1.003	145,524	9,150	1,331,516
2016	148,304	1.003	148,688	9,073	1,349,054
2017	148,903	1.003	149,303	8,961	1,337,835
2018	151,539	1.004	152,083	9,333	1,419,458
2019	154,240	1.006	155,118	9,488	1,471,742
2020	133,906	1.012	135,570	9,801	1,328,735
2021	144,410	1.037	149,806	9,253	1,386,197
2022 ^[4]	123,950	1.271	157,547	9,804	1,544,520

Projected Based on 2022:

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2023	152,400	9,599	1,462,936
2024	149,850	9,647	1,445,648
9/1/2024	149,551	9,655	1,443,961
(a) Projected ALAE Incurred (\$000):			1,443,961
(b) Average of Calendar Year 2021 and 2022 Earned Premium ^[8] (\$000):			14,448,594
(c) Projected Loss to Advisory Pure Premium Ratio ^[9] :			0.755
(d) Premium Adjustment Factor for Calendar Year 2021 and 2022 ^[10] :			0.905
(e) Projected Losses (\$000): (b) x (c) x (d)			9,871,757
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e)			14.6%
(g) Impact of SB 1160 and AB 1244 ^[11]			-1.8%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]			14.4%

Notes:

- ^[1] All paid ALAE exclude the paid cost of medical cost containment programs.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- ^[3] Based on estimated ultimate ALAE per indemnity claim for private insurers from Exhibit 10.1.
- ^[4] AY2020 to AY2022 data excludes COVID-19 claims.
- ^[5] Estimated based on projected frequency trends for accident years 2022 to 2025. The 2022 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 2), and 2023 to 2025 estimated frequency trends are based on the projected growth in intra-class indemnity claim frequency (see Section B, Exhibit 6.1). These frequency trends were then applied to the accident year 2021 and 2022 ultimate indemnity claim counts.
- ^[6] Severities are projected by applying an annual growth rate of 0.5%, which is based on the approximate average of the private insurers' rates of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 6 and (ii) paid ALAE per open indemnity claim from Exhibit 7, to the average of 2021 and 2022 ultimate ALAE severity.
- ^[7] Column(3) x Column(4) / 1,000.
- ^[8] Based on the reported earned premium for calendar year 2021 and 2022 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (3) by accident year as of December 31, 2022.
- ^[9] See Exhibit 8 of Section B.
- ^[10] See Exhibit 5.2 of Section B.
- ^[11] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 70% reduction in lien filings, offset by 84% to reflect the impact of the reforms in the emerging ALAE data.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Private Insurers ALAE Severity using Latest Year Paid ALAE Development
Adjusted for Changes in Claim Settlement Rates - Trend Applied to 2022
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Acc. Year	Indemnity Claim Counts @12/31/22 (1)	Cumulative Count Development Factors ^[2] (2)	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE per Indemnity Claim ^[3] (4)	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
1995	134,024	1.001	134,101	2,537	340,183
1996	131,185	1.001	131,272	3,000	393,854
1997	136,987	1.001	137,110	3,672	503,471
1998	147,166	1.001	147,330	4,696	691,824
1999	148,239	1.001	148,432	5,007	743,247
2000	160,344	1.002	160,604	6,000	963,638
2001	184,890	1.002	185,225	7,327	1,357,223
2002	192,403	1.002	192,794	7,798	1,503,439
2003	182,539	1.002	182,928	8,251	1,509,326
2004	158,530	1.002	158,875	7,753	1,231,767
2005	139,539	1.002	139,837	7,516	1,051,048
2006	133,179	1.002	133,466	7,714	1,029,495
2007	130,194	1.002	130,495	8,341	1,088,467
2008	122,808	1.003	123,115	9,106	1,121,061
2009	113,533	1.003	113,840	9,999	1,138,244
2010	118,193	1.003	118,541	9,927	1,176,766
2011	120,851	1.002	121,063	9,787	1,184,834
2012	128,247	1.002	128,513	9,749	1,252,861
2013	136,364	1.002	136,695	9,523	1,301,815
2014	141,067	1.003	141,431	9,401	1,329,541
2015	145,117	1.003	145,524	9,150	1,331,516
2016	148,304	1.003	148,688	9,073	1,349,054
2017	148,903	1.003	149,303	8,961	1,337,835
2018	151,539	1.004	152,083	9,333	1,419,458
2019	154,240	1.006	155,118	9,488	1,471,742
2020	133,906	1.012	135,570	9,801	1,328,735
2021	144,410	1.037	149,806	9,042	1,354,525
2022 ^[4]	123,950	1.271	157,547	9,580	1,509,231

Projected Based on 2022:

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2023	156,391	9,627	1,505,648
2024	153,774	9,676	1,487,855
9/1/2024	153,467	9,684	1,486,119

- (a) Projected ALAE Incurred (\$000): 1,486,119
- (b) Calendar Year 2022 Earned Premium^[8] (\$000): 15,299,872
- (c) Projected Loss to Advisory Pure Premium Ratio^[9]: 0.755
- (d) Premium Adjustment Factor for Calendar Year 2022^[10]: 0.903
- (e) Projected Losses (\$000): (b) x (c) x (d) 10,430,265
- (f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e) 14.2%
- (g) Impact of SB 1160 and AB 1244^[11] -1.8%
- (h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)] 14.0%

Notes:

- [1] All paid ALAE exclude the paid cost of medical cost containment programs.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- [3] Based on estimated ultimate ALAE per indemnity claim for private insurers from Exhibit 6.
- [4] AY2020 to AY2022 data excludes COVID-19 claims.
- [5] Estimated based on projected frequency trends for accident years 2023 to 2025. The 2023 to 2025 estimated frequency trends are based on the projected growth in intra-class indemnity claim frequency (see Section B, Exhibit 6.1). These frequency trends were then applied to the accident year 2022 ultimate indemnity claim counts.
- [6] Severities are projected by applying an annual growth rate of 0.5%, which is based on the approximate average of the private insurers' rates of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 6 and (ii) paid ALAE per open indemnity claim from Exhibit 7, to the 2022 ultimate ALAE severity.
- [7] Column(3) x Column(4) / 1,000.
- [8] Based on the reported earned premium for calendar year 2022 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (3) by accident year as of December 31, 2022.
- [9] See Exhibit 8 of Section B.
- [10] See Exhibit 5.2 of Section B.
- [11] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 70% reduction in lien filings, offset by 84% to reflect the impact of the reforms in the emerging ALAE data.

Average Paid MCCP per Reported Indemnity Claim - Statewide
As of December 31, 2022

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>
2013	657	1,282	1,638	1,821	1,962	2,080	2,103	2,143
2014	631	1,223	1,576	1,786	1,938	1,979	2,040	2,080
2015	617	1,209	1,538	1,751	1,823	1,888	1,942	1,990
2016	592	1,152	1,454	1,583	1,679	1,758	1,816	
2017	585	1,126	1,390	1,558	1,671	1,752		
2018	639	1,141	1,414	1,599	1,720			
2019	588	1,104	1,416	1,612				
2020	558	1,084	1,383					
2021	544	1,043						
2022	518							

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>
2014	-4.0%	-4.6%	-3.8%	-1.9%	-1.2%	-4.9%	-3.0%	-2.9%
2015	-2.3%	-1.2%	-2.4%	-2.0%	-5.9%	-4.6%	-4.8%	-4.3%
2016	-4.1%	-4.7%	-5.4%	-9.6%	-7.9%	-6.9%	-6.5%	
2017	-1.1%	-2.3%	-4.4%	-1.6%	-0.5%	-0.4%		
2018	9.2%	1.4%	1.8%	2.6%	3.0%			
2019	-8.0%	-3.3%	0.1%	0.8%				
2020	-5.1%	-1.8%	-2.3%					
2021	-2.5%	-3.8%						
2022	-4.7%							

Source: WCIRB accident year experience calls excluding COVID-19 claims.

Estimated Ultimate MCCP per Indemnity Claim - Statewide
Based on Latest Year Paid MCCP Development

Accident Year	Paid MCCP @12/31/22 (in \$000)	Cumulative Development Factors ^[1]	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP per Indemnity Claim (7)=(3)/(6) x 1000	Annual change
2012	309,276	1.222	377,931	128,247	1.002	128,500	2,941	---
2013	300,672	1.237	371,905	136,364	1.002	136,683	2,721	-7.5%
2014	299,573	1.253	375,411	141,052	1.002	141,402	2,655	-2.4%
2015	288,717	1.279	369,195	145,005	1.003	145,398	2,539	-4.4%
2016	269,281	1.310	352,738	148,114	1.002	148,484	2,376	-6.4%
2017	260,742	1.353	352,874	148,751	1.003	149,136	2,366	-0.4%
2018	260,608	1.420	369,977	151,345	1.003	151,874	2,436	3.0%
2019	248,564	1.530	380,380	154,005	1.006	154,867	2,456	0.8%
2020	185,118	1.754	324,612	133,766	1.012	135,416	2,397	-2.4%
2021	150,604	2.292	345,241	144,205	1.037	149,579	2,308	-3.7%
2022	64,287	5.393	346,685	123,889	1.271	157,455	2,202	-4.6%

Estimated Annual Exponential Trend Based on:

2012 to 2022	-2.2%
2018 to 2022	-2.6%

Notes:

^[1] Based on latest year paid MCCP development through 132 months from Exhibit 15.2. 132-to-ultimate is based on selected paid medical development factors from Exhibit 3.2 of Section B.

^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Paid MCCP per Indemnity Claims Inventory^[1] by Calendar Year - Statewide

Calendar Year	Paid MCCP per Indemnity Claim Adjusted to Remove IMR/IBR Fees	Year-to-Year Change
2008	\$848	---
2009	\$808	-4.7%
2010	\$872	7.9%
2011	\$914	4.8%
2012	\$942	3.0%
2013	\$984	4.5%
2014	\$964	-2.1%
2015	\$1,034	7.3%
2016	\$1,032	-0.2%
2017	\$944	-8.6%
2018	\$949	0.6%
2019	\$933	-1.7%
2020	\$881	-5.6%
2021	\$864	-1.8%

Estimated Annual Exponential Trend Based on:

2010-2021	-0.3%
R ²	0.025

^[1] Indemnity claims inventory is the sum of indemnity claims open as of January 1 of Year N and newly-reported indemnity claims between January 1 of year N and December 31 of year N.

Source: WCIRB expense calls, aggregate indemnity and medical cost calls, and quarterly calls for experience excluding COVID-19 claims.

Paid M CCP Development Factors - Statewide
Quarterly Development

Age in Months	Accident Year										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
3 - 6	5.599	5.796	6.047	5.652	6.118	5.561	5.864	5.288	---	5.867	6.090
6 - 9	2.356	2.432	2.402	2.457	2.407	2.395	2.335	2.354	---	2.169	2.384
9 - 12	1.763	1.773	1.771	1.742	1.725	1.776	1.825	1.775	---	1.755	1.746
12 - 15	1.476	1.412	1.456	1.468	1.480	1.444	1.420	1.423	1.447	1.414	
15 - 18	1.277	1.253	1.299	1.282	1.244	1.254	1.242	1.241	1.301	1.261	
18 - 21	1.171	1.157	1.194	1.177	1.170	1.155	1.148	1.165	1.188	1.173	
21 - 24	1.128	1.121	1.128	1.120	1.125	1.122	1.117	1.117	1.156	1.124	
24 - 27	1.083	1.099	1.096	1.096	1.086	1.091	1.084	1.101	1.123		
27 - 30	1.077	1.081	1.073	1.073	1.076	1.071	1.065	1.082	1.109		
30 - 33	1.051	1.068	1.045	1.062	1.054	1.057	1.055	1.058	1.096		
33 - 36	1.045	1.054	1.036	1.047	1.053	1.052	1.042	1.047	1.080		
36 - 39	1.047	1.053	1.033	1.040	1.036	1.045	1.043	1.043			
39 - 42	1.036	1.043	1.026	1.039	1.032	1.030	1.034	1.038			
42 - 45	1.036	1.035	1.025	1.029	1.028	1.025	1.027	1.034			
45 - 48	1.031	1.027	1.019	1.028	1.026	1.023	1.026	1.024			
48 - 51	1.031	1.023	1.025	1.019	1.020	1.025	1.021				
51 - 54	1.025	1.023	1.025	1.020	1.016	1.019	1.019				
54 - 57	1.022	1.019	1.018	1.015	1.014	1.015	1.022				
57 - 60	1.017	1.016	1.016	1.014	1.013	1.014	1.014				
60 - 63	1.015	1.015	1.012	1.011	1.014	1.013					
63 - 66	1.016	1.016	1.013	1.010	1.012	1.013					
66 - 69	1.014	1.012	1.011	1.009	1.010	1.013					
69 - 72	1.011	1.012	1.009	1.007	1.013	1.009					
72 - 75	1.009	1.010	1.009	1.007	1.008						
75 - 78	1.010	1.009	1.007	1.009	1.008						
78 - 81	1.007	1.006	1.010	1.007	1.011						
81 - 84	1.009	1.006	1.005	1.005	1.006						
84 - 87	1.008	1.006	1.006	1.007							
87 - 90	1.006	0.992	1.005	1.006							
90 - 93	1.004	0.992	1.005	1.007							
93 - 96	1.005	0.991	1.004	1.005							

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Paid MCCP Development Factors - Statewide
Annual Development

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>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	
2012	2.491	1.281	1.160	1.097	1.055	1.036	1.023	1.015	1.012	1.012	
2013	2.292	1.341	1.168	1.082	1.055	1.031	1.020	1.015	1.013		
2014	2.446	1.364	1.144	1.084	1.043	1.031	1.020	1.020			
2015	2.476	1.306	1.143	1.069	1.038	1.029	1.024				
2016	2.423	1.294	1.128	1.064	1.048	1.033					
2017	2.336	1.300	1.129	1.076	1.049						
2018	2.262	1.268	1.137	1.078							
2019	2.295	1.317	1.146								
2020	2.366	1.307									
2021	2.352										
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-Ult^[1]</u>
Latest Year	2.352	1.307	1.146	1.078	1.049	1.033	1.024	1.020	1.013	1.012	
Age-to-Ult	5.393	2.292	1.754	1.530	1.420	1.353	1.310	1.279	1.253	1.237	1.222
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-Ult^[1]</u>
3-Yr Average	2.338	1.298	1.137	1.072	1.045	1.031	1.021	1.017	1.013	1.012	
Age-to-Ult	5.185	2.218	1.709	1.503	1.401	1.341	1.301	1.274	1.253	1.237	1.222

Note: ^[1] 132-to-Ult. is based on selected paid medical 132-to-ultimate development factor on Exhibit 3.2 of Section B.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Projected Ratio of MCCP to Losses - Statewide

Projected Ultimate MCCP per Inemnity Claim based on Latest Year Paid MCCP Development
Trend Applied to 2021 and 2022
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Year	Paid MCCP @12/31/22 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP per Indemnity Claim (7)=(3)/(6) x 1000
2012	309,276	1.222	377,931	128,247	1.002	128,513	2,941
2013	300,672	1.237	371,905	136,364	1.002	136,695	2,721
2014	299,573	1.253	375,411	141,067	1.003	141,431	2,654
2015	288,717	1.279	369,195	145,117	1.003	145,524	2,537
2016	269,281	1.310	352,738	148,304	1.003	148,688	2,372
2017	260,742	1.353	352,874	148,903	1.003	149,303	2,363
2018	260,608	1.420	369,977	151,539	1.004	152,083	2,433
2019	248,564	1.530	380,380	154,240	1.006	155,118	2,452
2020	185,118	1.754	324,612	133,906	1.012	135,570	2,394
2021	150,604	2.292	345,215	144,410	1.037	149,806	2,304
2022	64,287	5.390	346,482	123,950	1.271	157,547	2,199

Projected Based on 2-Year Average of 2021 and 2022:

	Ultimate MCCP ^[5]	Ult. Ind. Counts ^[3]	Ult.MCCP per Ind. Counts ^[4]
2023	338,008	152,400	2,218
2024	329,028	149,850	2,196
9/1/2024	327,821	149,551	2,192

(a) Projected MCCP (\$000):	327,821
(b) Calendar Year 2021 and 2022 Earned Premium ^[6] (\$000):	14,448,594
(c) Projected Loss to Advisory Pure Premium Ratio ^[7] :	0.755
(d) Premium Adjustment Factor for Calendar Year 2021 and 2022 ^[8] :	0.905
(e) Projected Losses (\$000): (b) x (c) x (d)	9,871,757
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.3%

Notes:

- ^[1] Based on latest year paid MCCP development through 132 months from Exhibit 15.2. 132-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Section B.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- ^[3] Estimated based on projected frequency trends for accident years 2022 to 2025. Frequency trends for 2022 is the actual "intra-class" changes from Section B, Appendix B, Exhibit 2. Frequency trends for accident years 2023 through 2025 are based on the projected growth in intra-class indemnity claim frequency from Exhibit 6.1 of Section B. These frequency trends were then applied to the accident year 2021 and 2022 ultimate indemnity claim counts.
- ^[4] Severity is projected by applying an annual growth rate of -1.0% based on the average of the longer-term average rates of growth in ultimate MCCP per indemnity claim from Exhibit 13 and calendar year MCCP paid per open claim from Exhibit 14 to the ultimate MCCP severity estimated from averaging 2021 and 2022.
- ^[5] Column(6) x Column(7) / 1,000.
- ^[6] Based on the reported earned premium for calendar year 2021 and 2022 excluding COVID-19 premium charges from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2022.
- ^[7] See Exhibit 8 of Section B.
- ^[8] See Exhibit 5.2 of Section B. Based on a weighting of calendar years 2021 and 2022.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Projected Ratio of MCCP to Losses - Statewide

Projected Ultimate MCCP per Indemnity Claim based on 3-Year Average Year Paid MCCP Development
Trend Applied to 2021 and 2022
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Year	Paid MCCP @12/31/22 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2) (3)	Indemnity Claim Counts @12/31/22 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5) (6)	Estimated Ultimate MCCP per Indemnity Claim (7)=(3)/(6) x 1000 (7)
2012	309,276	1.222	377,931	128,247	1.002	128,513	2,941
2013	300,672	1.237	371,905	136,364	1.002	136,695	2,721
2014	299,573	1.253	375,249	141,067	1.003	141,431	2,653
2015	288,717	1.274	367,729	145,117	1.003	145,524	2,527
2016	269,281	1.301	350,247	148,304	1.003	148,688	2,356
2017	260,742	1.341	349,652	148,903	1.003	149,303	2,342
2018	260,608	1.401	365,220	151,539	1.004	152,083	2,401
2019	248,564	1.503	373,580	154,240	1.006	155,118	2,408
2020	185,118	1.709	316,431	133,906	1.012	135,570	2,334
2021	150,604	2.218	334,036	144,410	1.037	149,806	2,230
2022	64,287	5.203	334,459	123,950	1.271	157,547	2,123

Projected Based on 2-Year Average of 2021 and 2022:

	Ultimate MCCP ^[5]	Ult. Ind. Counts ^[3]	Ult. MCCP per Ind. Counts ^[4]
2023	326,678	152,400	2,144
2024	317,999	149,850	2,122
9/1/2024	316,833	149,551	2,119

(a) Projected MCCP (\$000):	316,833
(b) Average of Calendar Years 2021 and 2022 Earned Premium ^[6] (\$000):	14,448,594
(c) Projected Loss to Advisory Pure Premium Ratio ^[7] :	0.755
(d) Premium Adjustment Factor ^[8] :	0.905
(e) Projected Losses (\$000): (b) x (c) x (d)	9,871,757
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.2%

Notes:

- ^[1] Based on 3-year average paid MCCP development through 132 months from Exhibit 15.2. 132-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC23-03-02.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- ^[3] Estimated based on projected frequency trends for accident years 2022 to 2025. Frequency trends for 2022 is the actual "intra-class" changes from Section B, Appendix B, Exhibit 2. Frequency trends for accident years 2023 through 2025 are based on the projected growth in intra-class indemnity claim frequency from Exhibit 6.1 of Section B. These frequency trends were then applied to the accident year 2021 and 2022 ultimate indemnity claim counts.
- ^[4] Severity is projected by applying an annual growth rate of -1.0% based on the average of the longer-term average rates of growth in ultimate MCCP per indemnity claim from Exhibit 13 and calendar year MCCP paid per open claim from Exhibit 14 to the ultimate MCCP severity estimated from averaging 2021 and 2022.
- ^[5] Column(6) x Column(7) / 1,000.
- ^[6] Based on the reported earned premium for calendar year 2021 and 2022 excluding COVID-19 premium charges from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2022.
- ^[7] See Exhibit 8 of Section B.
- ^[8] See Exhibit 5.2 of Section B. Based on a weighting of calendar years 2021 and 2022.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.

Projected Ratio of MCCP to Losses - Statewide

Projected Ultimate MCCP per Indemnity Claim based on Latest Year Paid MCCP Development
Trend Applied to 2022
for Policies with Effective Dates between September 1, 2023 and August 31, 2024

Accident Year	Paid MCCP @12/31/22 (in \$000)	Cumulative Development Factors ^[1]	Estimated Ultimate MCCP	Indemnity Claim Counts @12/31/22	Cumulative Development Factors ^[2]	Estimated Ultimate Ind. Counts	Estimated Ultimate MCCP per Indemnity Claim
	(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	(7)=(3)/(6) x 1000
2012	309,276	1.222	377,931	128,247	1.002	128,513	2,941
2013	300,672	1.237	371,905	136,364	1.002	136,695	2,721
2014	299,573	1.253	375,411	141,067	1.003	141,431	2,654
2015	288,717	1.279	369,195	145,117	1.003	145,524	2,537
2016	269,281	1.310	352,738	148,304	1.003	148,688	2,372
2017	260,742	1.353	352,874	148,903	1.003	149,303	2,363
2018	260,608	1.420	369,977	151,539	1.004	152,083	2,433
2019	248,564	1.530	380,380	154,240	1.006	155,118	2,452
2020	185,118	1.754	324,612	133,906	1.012	135,570	2,394
2021	150,604	2.292	345,215	144,410	1.037	149,806	2,304
2022	64,287	5.390	346,482	123,950	1.271	157,547	2,199

Projected Based on 2022:

	Ultimate MCCP ^[5]	Ult. Ind. Counts ^[3]	Ult. MCCP per Ind. Counts ^[4]
2023	340,500	156,391	2,177
2024	331,454	153,774	2,155
9/1/2024	330,239	153,467	2,152

(a) Projected MCCP (\$000):	330,239
(b) Calendar Year 2022 Earned Premium ^[6] (\$000):	15,299,872
(c) Projected Loss to Advisory Pure Premium Ratio ^[7] :	0.755
(d) Premium Adjustment Factor for Calendar Year 2022 ^[8] :	0.903
(e) Projected Losses (\$000): (b) x (c) x (d)	10,430,265
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.2%

Notes:

- ^[1] Based on latest year paid MCCP development through 132 months from Exhibit 15.2. 132-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Section B.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 8.3.
- ^[3] Estimated based on projected frequency trends for accident years 2023 to 2025. Frequency trends for accident years 2023 through 2025 are based on the projected growth in intra-class indemnity claim frequency from Exhibit 6.1 of Section B. These frequency trends were then applied to the accident year 2022 ultimate indemnity claim counts.
- ^[4] Severity is projected by applying an annual growth rate of -1.0% based on the average of the longer-term average rates of growth in ultimate MCCP per indemnity claim from Exhibit 13 and calendar year MCCP paid per open claim from Exhibit 14 to the 2022 ultimate MCCP severity.
- ^[5] Column(6) x Column(7) / 1,000.
- ^[6] Based on the reported earned premium for calendar year 2022 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2022.
- ^[7] See Exhibit 8 of Section B.
- ^[8] See Exhibit 5.2 of Section B.

Source: WCIRB quarterly calls for experience excluding COVID-19 claims.