

April 29, 2021

By Email

The Honorable Ricardo Lara
Insurance Commissioner
California Department of Insurance
1901 Harrison Street, 4th Floor
Oakland, CA 94612

1221 Broadway, Suite 900
Oakland, CA 94612
Voice 415.777.0777
Fax 415.778.7007
www.wcirb.com
wcirb@wcirb.com
Bill Mudge
President
& Chief Executive Officer

**RE: California Workers' Compensation Insurance
Advisory Pure Premium Rates and Experience Rating Plan Values
Effective January 1, 2021
CDI File No. REG-2021-00003**

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, 2021 for workers' compensation insurance policies with an effective date on or after September 1, 2021.¹ 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 26, 2021 (CDI File No. REG-2021-00001) to take effect on September 1, 2021. If some of these 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, 2021 Regulatory Filing.

¹ At the April 3, 2019 meeting, the WCIRB Governing Committee adopted an annual pure premium rate filing schedule recommended by WCIRB staff after consultation with CDI staff with pure premium rate filings to be made in April with a September 1 effective date. In accordance with that schedule, the initial annual September filing is to be submitted in April 2021 with a proposed September 1, 2021 effective date.

The Honorable Ricardo Lara
California Department of Insurance
April 29, 2021

The advisory pure premium rates for the approximately 500 standard classifications proposed to be effective September 1, 2021 are on average 2.7% greater than the average of the current approved January 1, 2021 advisory pure premium rates. The average of the September 1, 2021 advisory pure premium rates proposed by the WCIRB is \$1.50 per \$100 of payroll.

The proposed September 1, 2021 advisory pure premium rates included in Section A are based on (1) insurer losses incurred during accident year 2020 and prior accident years valued as of December 31, 2020, (2) insurer allocated loss adjustment expenses for 2020 and prior years, (3) insurer unallocated loss adjustment expenses for 2019 and prior years, (4) classification payroll and loss experience reported for policies incepting in 2018 and prior years and (5) the September 1, 2021 experience rating off-balance correction factor. 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, 2021 Regulatory Filing.

The WCIRB's January 1, 2021 Pure Premium Rate Filing submitted on August 26, 2020 was based primarily on experience incurred prior to the COVID-19 pandemic but also included a provision for the expected cost of COVID-19 claims expected to be incurred on 2021 policies. In this filing, the standard experience period underlying the filing includes exposure, premium and loss experience significantly impacted by the pandemic. In consideration of the unique impact of the pandemic on underlying 2020 experience, 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) refined projection methodologies to adjust for distortions caused by the pandemic and (c) largely relied upon pre-pandemic experience to project cost levels for the period the proposed advisory pure premium rates will apply. In addition, in light of the current success of the COVID-19 vaccines, the external models and published research in part relied upon by the WCIRB in the January 1, 2021 Pure Premium Rate Filing are now forecasting that the U.S. population would potentially be near herd immunity by the summer of 2021 as a result of a substantial share of the population being vaccinated coupled with ongoing infections. As a result, the WCIRB is not recommending a provision be included in this filing to reflect the estimated costs of COVID-19 claims to be incurred on September 1, 2021 and later policies. The WCIRB's considerations and analysis related to the COVID-19 pandemic are discussed in detail in Section B and are summarized in the Executive Summary.

Earlier this year, the Division of Workers' Compensation adopted significant changes to the Evaluation and Management Section of the Official Medical Fee Schedule effective March 1, 2021 and to the Medical-Legal Fee Schedule effective April 1, 2021. The WCIRB's cost evaluations of these fee schedule changes are included in Section B, Appendices D and E. In total, the WCIRB estimates an overall cost impact from these two schedule changes of +1.5%, which has been incorporated in the proposed September 1, 2021 advisory pure premium rates.²

As in prior WCIRB pure premium rate filings, a number of alternative pure premium rate projections based on methodologies and assumptions that differ from those used to develop the proposed September 1, 2021 advisory pure premium rates are included in Section B, Appendices A, B and C for informational purposes. The results of these alternative projections are also summarized in the Executive Summary. In addition, the Executive Summary includes information regarding insurer rates, system costs and the insurance market.

² These fee schedule changes also impact the cost of medical and medical-legal services on open claims on policies incepting prior to September 1, 2021. However, the WCIRB has not proposed an adjustment to advisory pure premium rates applicable to the unexpired term of outstanding policies.

The Honorable Ricardo Lara
California Department of Insurance
April 29, 2021

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



Tony Milano
Vice President & Actuary

BM:smd
Enclosures

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

**September 1, 2021 Pure Premium Rate Filing
REG-2021-00003**

Submitted: April 29, 2021

WCIRB California
1221 Broadway, Suite 900
Oakland, CA 94612
Tel 415.777.0777
Fax 415.778.7007
wcirb@wcirb.com
www.wcirb.com

© 2021 Workers' Compensation Insurance Rating Bureau of California. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, without limitation, photocopying and recording, or by any information storage or retrieval system without the prior written permission of the Workers' Compensation Insurance Rating Bureau of California (WCIRB), unless such copying is expressly permitted in this copyright notice or by federal copyright law. No copyright is claimed in the text of statutes and regulations quoted within this work.

Copies of the filing may be made and distributed for the purpose of facilitating the transaction of workers' compensation insurance in California, provided that all copyright and other proprietary notices are kept intact.

To seek permission to use any of the WCIRB Marks or any copyrighted material, please contact the WCIRB at customerservice@wcirb.com.

WCIRB September 1, 2021 Pure Premium Rate Filing

Table of Contents

	Page
Executive Summary	1 – 37
Section A	
Proposed Pure Premium Rates	A-1 – A-4
Section B	
Computation of Indicated Pure Premium Rate for Policies Incepting Between September 1, 2021 and August 31, 2022	B-1 – B-58
Appendix A – Loss Development Methodology	B-59 – B-101
Appendix B – Trending Methodology	B-102 – B-141
Appendix C – Projected Loss Adjustment Expense Ratio	B-142 – B-182
Appendix D – Evaluation of March 1, 2021 Changes to the Official Medical Fee Schedule	B-183 – B-188
Appendix E – Evaluation of April 1, 2021 Changes to Medical-Legal Fee Schedule	B-189 – B-200

Executive Summary

A. Introduction

Continued decreases in loss development, acceleration in the rate of claim settlements, very modest levels of claim severity inflation and continued decline in pharmaceutical costs and lien filings have driven a series of advisory pure premium rate decreases in California over the past six years. In total, since early 2015, there have been ten consecutive advisory pure premium rate decreases reducing average advisory pure premium rates by about one-half.

In early 2020, the COVID-19 pandemic sharply impacted workers' compensation exposure, premiums, claims and loss amounts. For example, while more than 140,000 COVID-19 claims in total have been filed in California¹ by early April 2021, the number of reported non-COVID-19 claims have dropped sharply. Unlike in the January 1, 2021 Pure Premium Rate Filing, the exposure, premium and loss experience that would normally underlie this filing have been significantly impacted by the COVID-19 Pandemic.

In consideration of the COVID-19 pandemic impacts on the 2020 experience underlying this filing, the WCIRB (a) excluded all COVID-19 claims from the experience on which the proposed advisory pure premium rates were based, (b) refined projection methodologies to adjust for distortions caused by the pandemic and (c) largely relied upon pre-pandemic experience rather than 2020 experience to project future cost levels. In addition, in light of the current success of the COVID-19 vaccines and that the external models in part relied upon by the WCIRB in the January 1, 2021 Pure Premium Rate Filing are now forecasting that the U.S. population will potentially be near herd immunity by the summer of 2021, the WCIRB is not recommending a provision be included in this filing to reflect the estimated costs of COVID-19 claims to be incurred on September 1, 2021 and later policies.

Based on the WCIRB's analysis of underlying exposure, premium and claim experience and including the estimated cost impact of two recent medical-related fee schedule changes adopted by the Division of Workers' Compensation (DWC), the WCIRB is proposing September 1, 2021 advisory pure premium rates that average \$1.50 per \$100 of payroll. These proposed advisory pure premium rates are, on average, 2.7% above the current advisory pure premium rates adopted by the Insurance Commissioner to be effective January 1, 2021.²

Actuarial projections of future claim costs on which the WCIRB's pure premium rate filings are predicated regularly involve uncertainty as to the assumptions underlying the projection methodologies. Given the unprecedented nature of the "stay-at-home" orders, the pandemic-related economic slowdown and the emergence of tens of thousands of COVID-19 workers' compensation claims, uncertainty as to the assumptions underlying the projections of future cost levels in this filing is particularly high. The September 1, 2021 advisory pure premium rates proposed by the WCIRB reflect the WCIRB's best actuarial estimates of the factors driving workers' compensation costs for policies incepting between September 1, 2021 and August 31, 2022. With this uncertainty, for informational purposes, the WCIRB has computed a series of alternative loss and loss adjustment expense projections over a range of alternative methodologies and assumptions. These alternatives are discussed in detail in Section B, Appendices A, B and C and are summarized in Exhibits 3 through 5.

¹ Based on first report of injuries reported to the DWC for both insured and self-insured employers as of April 12, 2021.

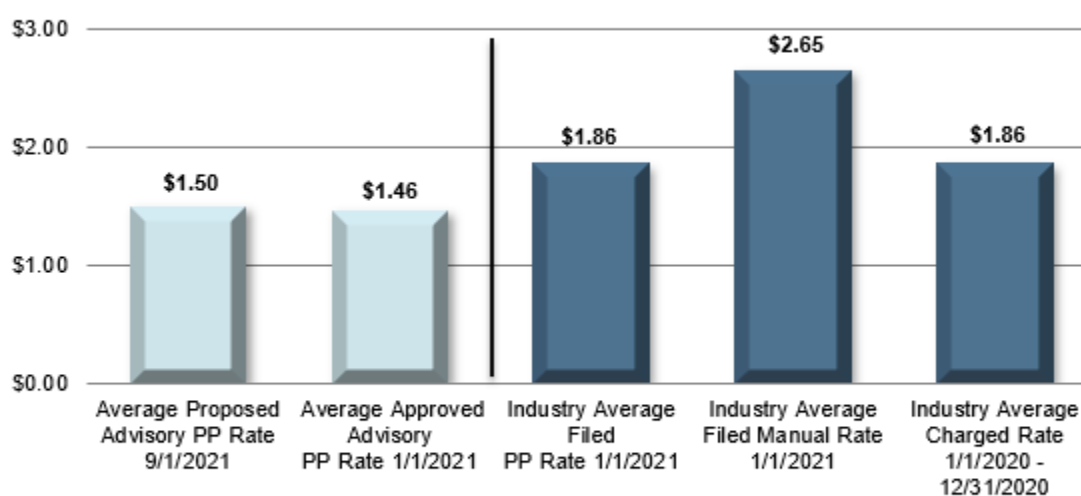
² The pure premium rates approved by the Insurance Commissioner are only advisory in that insurers may, and often do, file and use rates other than those approved by the Insurance Commissioner.

B. Rates

The proposed September 1, 2021 advisory pure premium rates average \$1.50 per \$100 of payroll, which is 2.7% more than the average of the approved January 1, 2021 advisory pure premium rates of \$1.46³ and 19.6% less than the industry average filed pure premium rate of \$1.86 as of January 1, 2021. In the January 1, 2021 Pure Premium Rate Filing, the indicated average pure premium rate was \$1.51⁴ (excluding the COVID-19 claim cost projection) per \$100 of payroll.

Chart 1 shows (1) the average of the proposed September 1, 2021 advisory pure premium rates, (2) the average of the approved January 1, 2021 advisory pure premium rates, (3) the industry average filed pure premium rate as of January 1, 2021, (4) the industry average filed manual rate as of January 1, 2021 and (5) the industry average charged rate for 2020 after the application of most insurer rating plan adjustments.⁵ The methodologies used to compute the industry average filed and charged rates shown in Chart 1 are described in Exhibit 1 of this Executive Summary.

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



All rates include adjustment for new payroll limitations effective in 2020 applicable to five classifications.

Sources: WCIRB pure premium rate filings, insurer rate filings submitted to the CDI, and insurer data submitted in WCIRB data calls.

Exhibit 2 shows the advisory pure premium rate proposed by the WCIRB to be effective September 1, 2021 for each standard classification, the corresponding approved January 1, 2021 advisory pure premium rate and the percentage difference between these two pure premium rates. Exhibit 2 also shows the industry average filed pure premium rate as of January 1, 2021 and the percentage difference between the WCIRB's proposed September 1, 2021 advisory pure premium rate and the industry average filed pure premium rate as of January 1, 2021 for each classification.

³ Restated from the average January 1, 2021 advisory pure premium rate approved by the Commissioner last November of \$1.45 per \$100 of payroll based on updated payroll weights by classification.

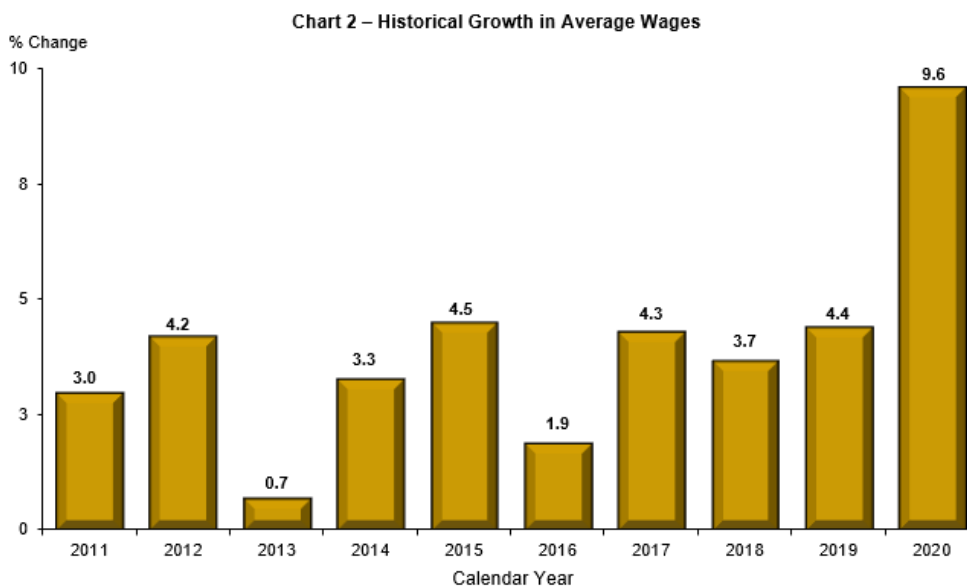
⁴ Restated from the average indicated January 1, 2021 advisory pure premium rate of \$1.50 per \$100 of payroll based on updated payroll weights by classification.

⁵ 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. Impacts of the COVID-19 Pandemic

The indicated average September 1, 2021 pure premium rate of \$1.50 per \$100 of payroll represents an increase of 2.7% from the average of the January 1, 2021 advisory pure premium rates approved by the Insurance Commissioner. Since early 2015, the approved advisory pure premium rates have declined by approximately 50%. In recent pure premium rate filings, the WCIRB has attributed this improvement to a number of factors including loss development, acceleration in claim settlement, modest claim severity trends and reduced pharmaceutical costs and lien filings. Recently, prior to the emergence of the COVID-19 pandemic, these trends showed signs of moderation. In early 2020, the COVID-19 pandemic arose. Since that time over 140,000 COVID-19 workers' compensation claims have been reported in California.⁶ In addition, the pandemic and stay-at-home orders have significantly impacted the California economy as well as many components of the California workers' compensation system. Among the areas impacted by the pandemic include insured payrolls, premiums, COVID-19 claim filings, non-COVID-19 claim filings, medical services and claim settlements.

- Insured Payrolls.** 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, growth in average wage levels 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 and Department of Finance compilation of Bureau of Labor Statistics data. As shown, with the sharp loss of employment at low wage levels during the economic slowdown, the average wages of California workers grew at almost 10% in 2020. The WCIRB has made several adjustments to correct for the anomalous impacts of shifting employment by wage levels in 2020 and beyond as summarized in the next section of this Executive Summary and discussed in detail in Section B, Appendix B.



Source: Derived from information provided by UCLA Anderson School of Business as of March 2021 and the California Department of Finance as of November 2020. (The 2020 change is preliminary and based strictly on the UCLA information.)

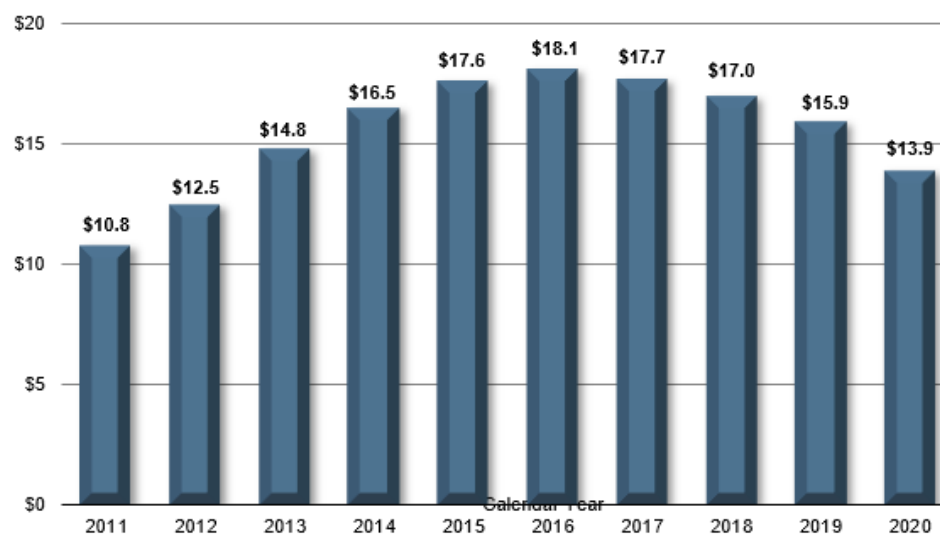
- Premiums.** Chart 3 shows statewide written premiums by calendar year.⁷ As shown, statewide premiums have been declining since 2016 as a result of declining premium rates more than

⁶ Based on DWC data on reported claims as of April 12, 2021.

⁷ Amounts shown are gross of deductible credits.

offsetting continued economic growth. The premium decline accelerated sharply in 2020 as premium rates continued to drop and statewide employment levels also sharply declined due to the COVID-19 pandemic. The 13%, or \$2 billion, decline in statewide written premium in 2020 was the largest drop in many years.

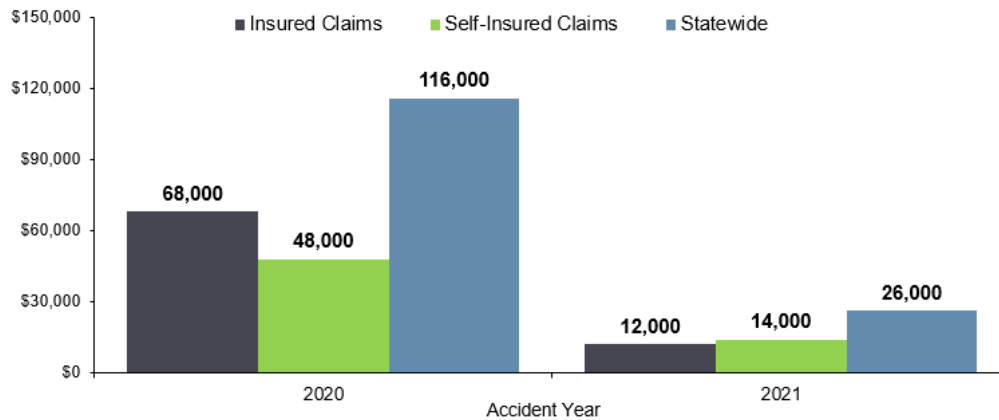
Chart 3 – Insurer Written Premium (in \$Billions)



Source: WCIRB aggregate financial data.

- COVID-19 Claims.** The COVID-19 pandemic began to emerge in California in the early months of 2020. In the initial weeks of the pandemic, even without a legal presumption of compensability in the workers' compensation system for COVID-19-related illnesses, many claims were filed, particularly by first responders and healthcare workers. With subsequent legal presumptions of compensability for COVID-19 claims provided to specified workers by the Governor's Executive Order (N-62-20) and later with the enactment of Senate Bill No. 1159, the filing of COVID-19 claims continued throughout the year and then accelerated in late 2020 and early 2021 with the winter surge of COVID-19 infections. As shown in Chart 4, in total, more than 140,000 COVID-19 workers' compensation claims have been filed in California. Of those, 80,000 have been in the insured market. Given the unique nature of the COVID-19 exposure, the WCIRB's analysis of the experience underlying this filing excludes COVID-19 claims and the projection of COVID-19 claim costs incurred against September 1, 2021 through August 31, 2022 policies is separately considered.

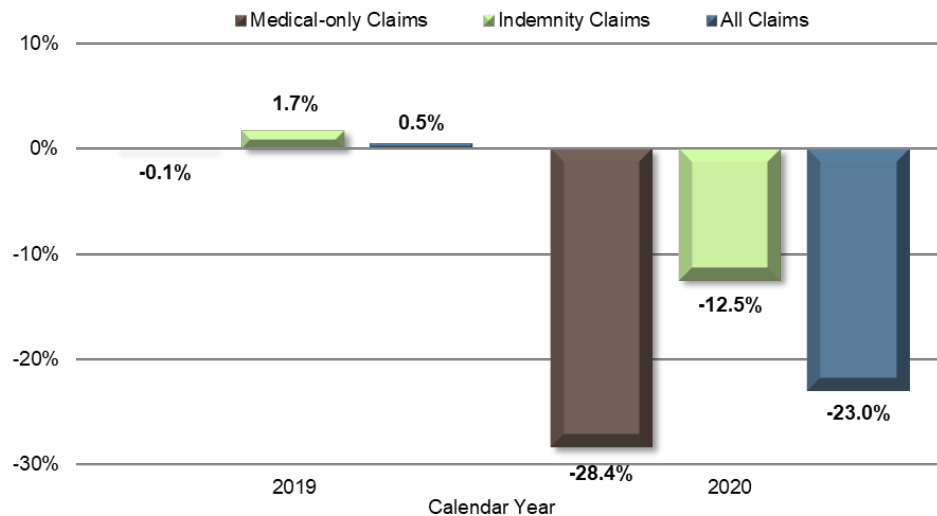
Chart 4 – Reported COVID-19 Workers' Compensation Claims



Source: Division of Workers Compensation First Reports of Injuries (including denied claims) as of April 12, 2021.

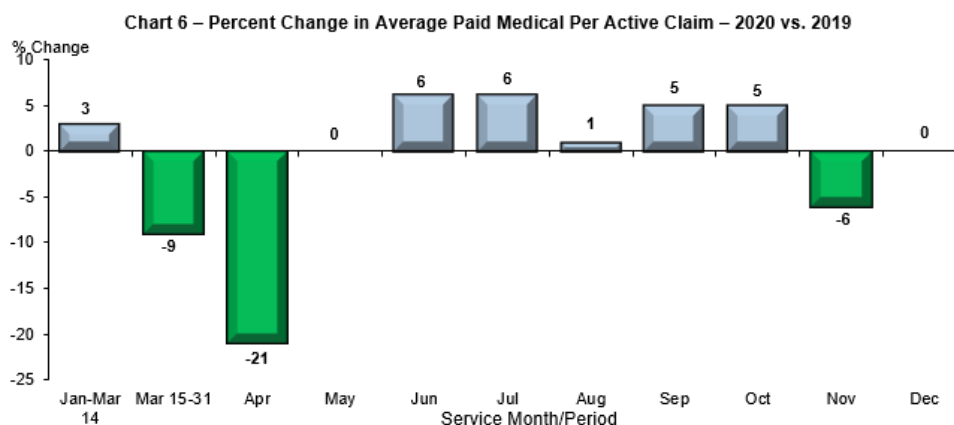
- Non-COVID-19 Claims.** While there was a surge of COVID-19 claims filed in California in 2020, the number of non-COVID claims filed dropped at even a greater rate than drop in underlying employment. Chart 5 shows the change in non-COVID-19 claims filed in the insured system in 2019 and 2020. As shown, while there was a small increase in claims filed in 2019, there was a sharp decline of 23% in 2020. In addition, the decline in smaller medical-only claims was more than twice that of indemnity claims, suggesting that claims for some of the less serious injuries were not being filed during the pandemic.

Chart 5 – Annual Percent Change in Non-COVID-19 Claims Filed



Source: WCIRB aggregate financial data calls

- Medical Services.** During the early weeks of the pandemic, some medical facilities largely limited treatment to COVID-19 patients and urgent or emergency services only and, additionally, some patients were reluctant to visit medical facilities. These factors also impacted the California workers' compensation system. Chart 6 shows the average paid per active claim by month in 2020 relative to the same period in 2019. As shown, medical paid per claim dropped sharply in the early weeks of the pandemic, then began to rebound during the summer as the economy gradually reopened. Medical paid per active claim declined again toward the end of the year during the winter surge of COVID-19 infections. This decline in medical services during periods of the pandemic can impact future loss development. The WCIRB's 2020 research study suggested that claims on which initial medical treatments occurred later than the typical claim resulted in significantly more future loss development.⁸



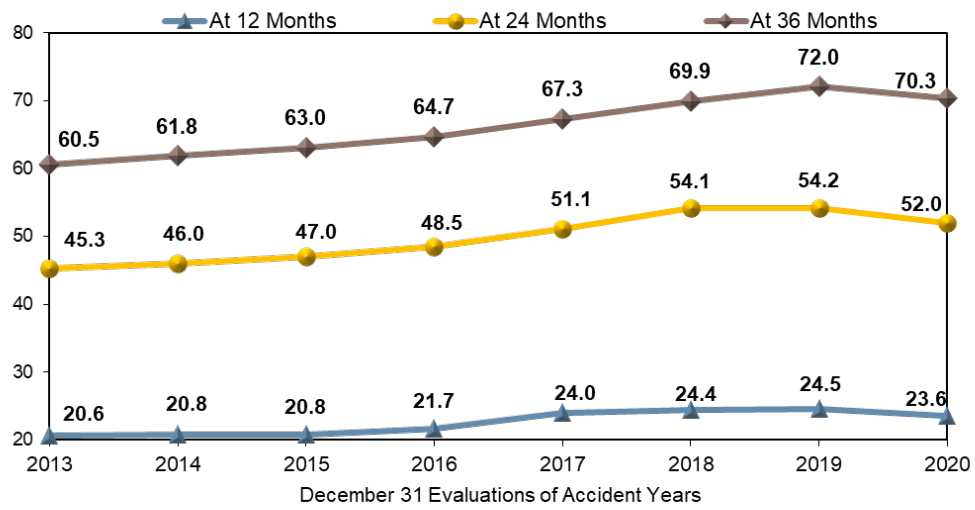
Source: WCIB medical transaction data from insurers who submit monthly data. December data is preliminary.

- Claim Settlement.** Since the implementation of Senate Bill No. 863 (SB 863) beginning in 2013, claim settlement rates have been increasing 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, anti-fraud efforts and further reductions in liens attributable to Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) have also contributed to this acceleration in claim settlement.

Chart 7 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. With the pandemic, there was a significant slowdown during 2020 in how quickly claims were being settled. Changes in the rate that claims are settling can impact both future loss development and loss adjustment expenses.

⁸ *Cost Impacts of Medical Care Delays in the California Workers' Compensation System*, WCIRB, October 2020.

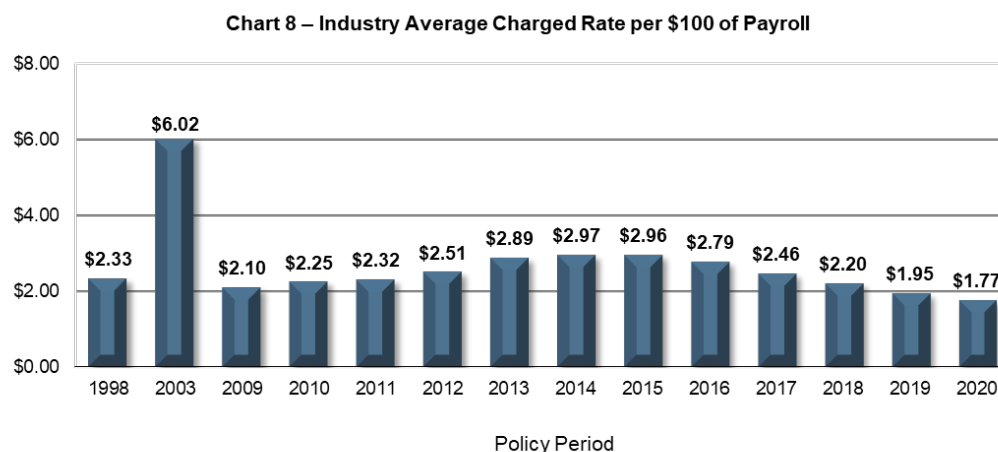
Chart 7 – Indemnity Claim Settlement Ratios



Source: WCIRB projections of ultimate indemnity claim counts and reported claim count information as of December 31, 2020.

D. Supplemental Insurance Market Information

Chart 8 shows industry average charged rates by policy year. Subsequent to the period of decline resulting from Senate Bill No. 899 reforms, as a result of significant reduction in underlying cost drivers, industry average charged rates began to increase in 2010 and continued to grow through 2014. Largely as a result of the reforms of SB 863, favorable medical cost trends emerged and average charged rates began to decline. Average charged rates continued to decline in 2020 even after the onset of the pandemic. As shown in Chart 8, the average rate charged during 2020 is 40% less than the average charged rate in 2014.

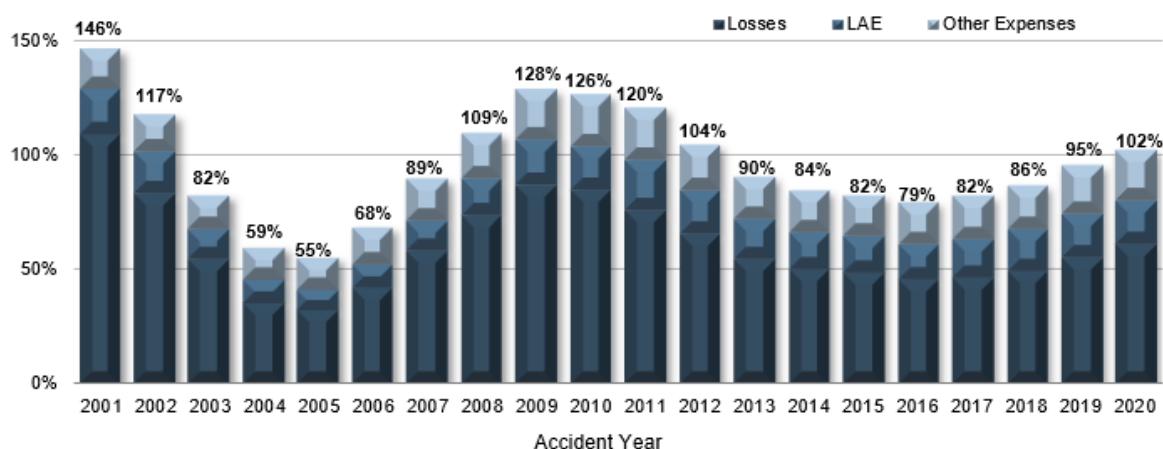


Source: Insurer unit statistical reports and WCIRB data calls. For consistency of comparison, average rates do not reflect the impact of new maximum payroll limitations applicable to five classifications effective in 2020.

Chart 9 shows the WCIRB's projected combined ratios of losses, loss adjustment expenses and other insurer expenses to earned premium by accident year.⁹ 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 further, projected combined ratios have begun to increase. On a preliminary basis, the WCIRB estimates that the accident year 2020 projected combined ratio, including the projected cost of COVID-19 claims, is 102%, which is the highest combined ratio since accident year 2012.

⁹ 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, these are combined underwriting results and, as such, do not reflect overall operating profits, federal income taxes, or investment income returns.

Chart 9 – WCIRB Projected Ultimate Accident Year Combined Loss and Expense Ratios as of December 31, 2020



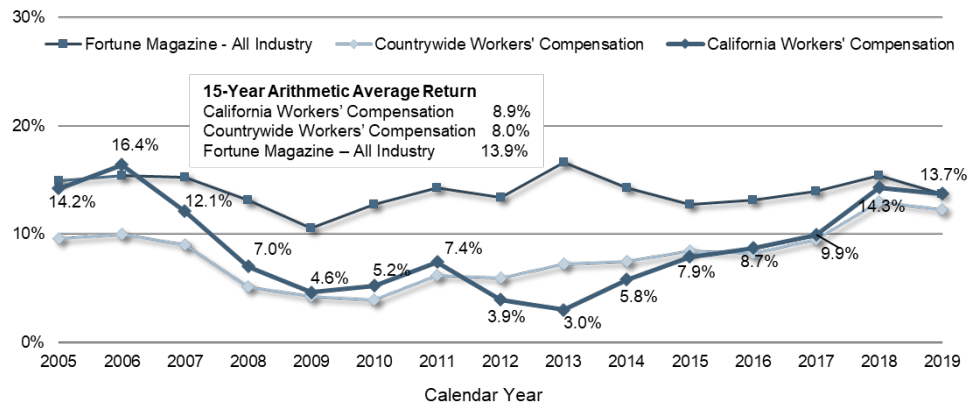
Source: WCIRB projections based on insurer aggregate financial data submissions to the WCIRB. The 2020 ratios are preliminary and include the cost of COVID-19 claims. For accident years 2011-2020, MCCP costs are included in LAE rather than loss. For all other accident years, MCCP costs are included in loss.

The combined ratios shown in Chart 9 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 reflect all these components based on calendar year information reported by each insurer to the NAIC. Chart 10 provides a summary of the information published by the NAIC over the last 15 years.

As shown in Chart 10, relatively high loss and expense ratios as well as relatively low investment returns had led to modest profitability (return on net worth) since 2010, before beginning to rise in the last several years. The estimated calendar year 2019 return on net worth for California workers' compensation insurance, as reflected in the most recent NAIC report on profitability,¹⁰ is 13.7%. This is slightly above the average of the countrywide workers' compensation return of 12.2% and equal to the Fortune Magazine all-industry average return shown in the NAIC report. The long-term 15-year average return on net worth for California workers' compensation as published by the NAIC is 8.9% as compared to 8.0% for countrywide workers' compensation and 13.9% for the Fortune Magazine all-industry average.

¹⁰ Report on Profitability by Line and State in 2019, NAIC, 2020.

Chart 10 – NAIC Estimates of Average Return on Net Worth



Source: NAIC Report on Profitability By Line and State in 2019.

E. Computation of Indicated Average September 1, 2021 Pure Premium Rate and Proposed Pure Premium Rates

The average proposed September 1, 2021 pure premium rate of \$1.50 per \$100 of payroll is based on the losses and loss adjustment expenses (LAE) projected to be incurred on policies incepting between September 1, 2021 and August 31, 2022. This proposed average pure premium rate is 2.7% above the average of the approved January 1, 2021 advisory pure premium rates of \$1.46 per \$100 of payroll.

The proposed advisory pure premium rates for policies incepting between September 1, 2021 and August 31, 2022 are based on an evaluation of the loss, LAE¹¹ and premium experience of calendar and accident years through 2020, valued as of December 31, 2020. For informational purposes, the WCIRB has computed a series of alternative September 1, 2021 projections over a wide range of alternative loss development, loss trending and loss adjustment expenses projection methodologies (see Exhibits 3, 4 and 5). The assumptions underlying these alternative projection methodologies are discussed in detail in Section B, Appendices A, B and C.

The principal methodologies and projections used by the WCIRB in calculating the average proposed pure premium rate as detailed in Section B of this filing are summarized below.

Loss Development

As in prior pure premium rate filings, the methodologies used to develop each year's reported losses as of December 31, 2020 to its final or ultimate cost 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 SB 1160 and AB 1244 reforms related to liens and for the sharp decreases in pharmaceutical costs that have occurred since 2013.

Earlier this year, the WCIRB studied the potential impact of the COVID-19 pandemic on loss development emerging in 2020.¹² The WCIRB's study found that paid loss development in the second quarter of 2020 was significantly distorted by the pandemic while paid development in the third and fourth quarters of 2020 were more consistent with pre-pandemic patterns. The WCIRB's study also found that the adjustment to loss development for changes in claim settlement rates substantially corrected for the impact of the distortion. However, to further mitigate the impact of the volatility in loss development patterns emerging during the pandemic, the WCIRB utilized a two-year average of the claim settlement rate-adjusted age-to-age paid development factors to project future loss development in lieu of the latest year methodology used in recent prior pure premium rate filings.

Wage, Premium and Loss On-Level Adjustments

The proposed pure premium rates reflect the estimated cost of losses and LAE incurred on all accidents that arise on policies incepting between September 1, 2021 and August 31, 2022. As a result, ultimate cost (loss) information on historical accident years is adjusted, or "trended", to reflect the ultimate cost of claims covered by these policies. First, losses are adjusted to a current, or "on-level", basis by adjusting for wage inflation, statutory benefit changes and reforms and fee schedule changes. Then premium is also adjusted to an on-level basis so that each year's historical premium is re-stated at a common wage and rate level.

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, 2021 and August 31, 2022, 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

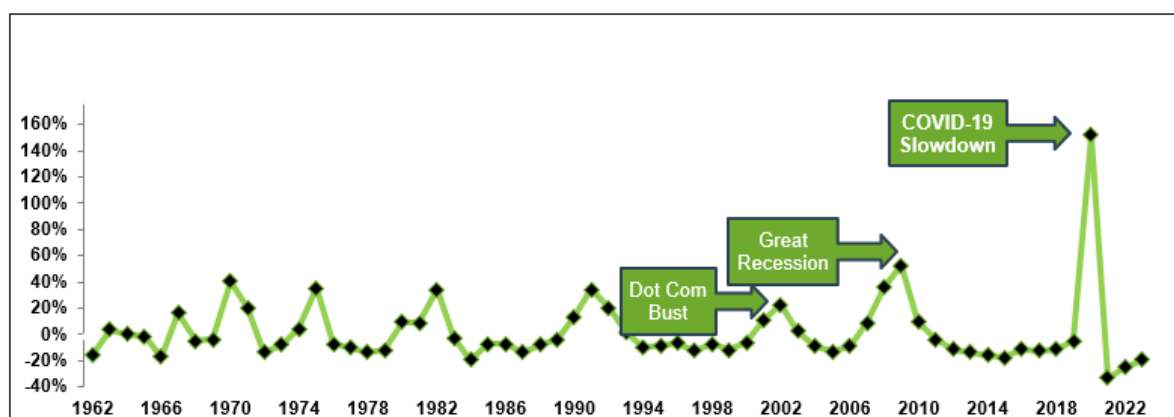
¹¹ The unallocated loss adjustment expense projection is based on experience through calendar year 2019.

¹² See Item AC21-02-02 of the February 16, 2021 and March 16, 2021 WCIRB Actuarial Committee Agendas.

annual California wages are based on those produced by the UCLA Anderson School of Business (as of March 2021) and California Department of Finance (as of November 2020) forecasts.¹³

The pandemic-related drop in employment in California is unprecedented, both in its magnitude and velocity. In the early months of the pandemic, the unemployment level in California quickly spiked from a near full-employment level to close to 15% unemployment. Unemployment in 2020 reached this level in a matter of months rather than the multi-year periods of unemployment increase in prior recessions. Chart 11 shows the annual change in the California unemployment rate since 1962. As shown on Chart 11, the magnitude of the increase in unemployment in 2020 as reported by the UCLA Anderson School of Business is more than twice that of any year in prior recessions.

Chart 11 – Annual Change in California Unemployment Rate



Source: Bureau of Labor Statistics, UCLA Anderson Forecast

During a recession, the mix of industries can shift significantly and impact the aggregated average wage level in California. The loss of lower wage employees within industries can also drive measures of average wages artificially upward. In particular, for the recent economic slowdown, the reductions in employment levels have been greatest in the hospitality and entertainment industries which tend to have lower than average wages. In addition, a review of Current Population Survey (CPS) data for California provided by the Economic Policy Institute (EPI) shows that employment losses were much more significant for lower wage workers even within the same industry.¹⁴ The almost 10% increase in the average wage in California shown for 2020 on Chart 12 is significantly impacted by these shifts and is not indicative of the typical wage increase for a California worker in the same job. Similarly, the modest increases projected for 2021 to 2023 are artificially deflated by the return to the workforce of workers in these lower wage industries and at lower wage levels within industries.

Earlier this year, the WCIRB studied the impact of the economic slowdown on the pure premium rate indications.¹⁵ The WCIRB found that projected shifts in the mix of industries resulted in an estimated 1.8% increase in average wages for 2020 and 0.4% decrease in average wages for 2021. The WCIRB's study also estimated an approximate 4.3% increase in average wages for 2020 resulting from the loss of lower wage employees in the workforce within industries based on the CPS data from the EPI. As shown on Chart 12, wage level projections adjusted to remove the impacts of shifts in industrial mix and the distribution of employment by wage level within industry average about 3% per year, which is generally consistent with the typical pre-pandemic periods of wage growth. These adjusted wage growth estimates

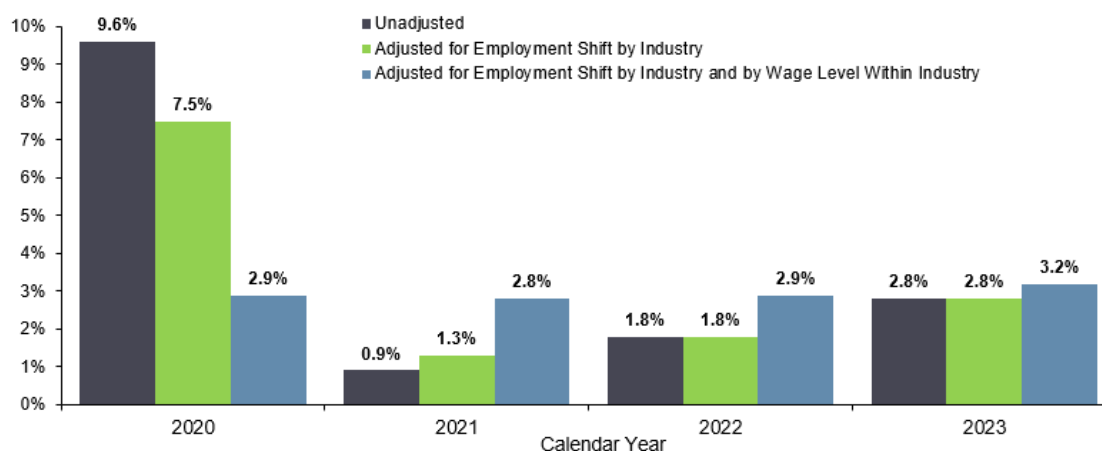
¹³ These average wage changes are typically derived based on aggregate changes in total wages and salaries compared to aggregate changes in total employment.

¹⁴ Current Population Survey Extracts, Version 1.0.15, *Economic Policy Institute*, 2021. <https://microdata.epi.org>

¹⁵ See Item AC20-08-04 of the March 16, 2021 and April 15, 2021 WCIRB Actuarial Committee Agendas.

shown in Chart 12 were used by the WCIRB to project the expected wage level on policies incepting between September 1, 2021 and August 31, 2022.

Chart 12 – Average Annual Wage Level Change Forecast



Source: UCLA Anderson School of Business and California Department of Finance forecasts.

Indemnity Claim Frequency

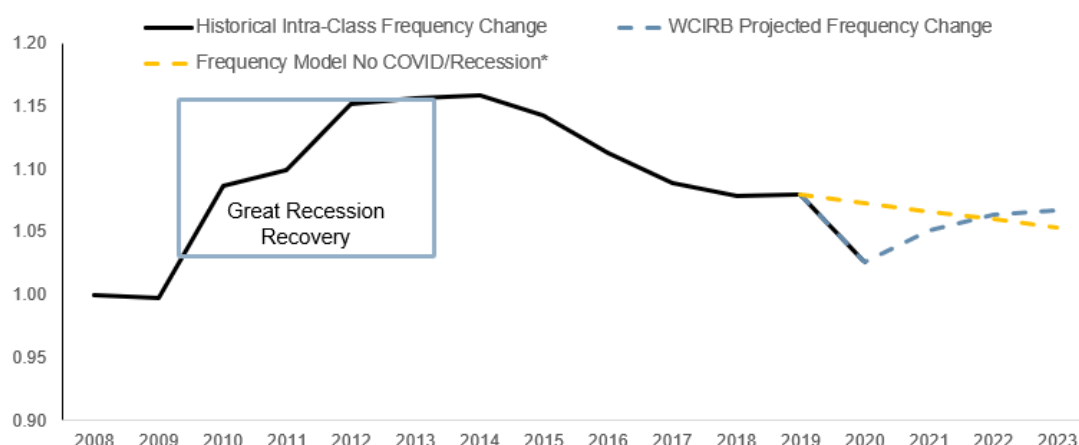
The ratio of losses, adjusted to an ultimate and on-level basis, to premium, also adjusted to an on-level basis, are then trended forward by the WCIRB to project the indicated loss ratio for policies incepting between September 1, 2021 and August 31, 2022. The WCIRB trends these historical adjusted loss ratios forward by applying separate projections of growth in claim frequency and claim severity.

The WCIRB forecasts changes in future claim frequency based on its econometric indemnity claim frequency model. Further, a 2012 WCIRB analysis of trending methodologies, indicated that frequency changes using a full year of preliminary actual frequency information were more predictive of the actual ultimate frequency change for that year than the change forecast by the WCIRB's frequency model.¹⁶ In addition, the COVID-19 pandemic and economic slowdown resulted in significant shifts in exposure levels, industrial mix and the types of injuries occurring. As a result, the projected frequency change for accident year 2020 reflected in this filing is based on the preliminary 2020 "intra-class" frequency change, excluding reported COVID-19 claims of -4.9%.

Projected frequency changes for accident years 2021 through 2023 are based on the WCIRB's econometric indemnity claim frequency model. The model is based on a more than 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. Chart 13 shows indemnity claim frequency indexed to 2008 with the WCIRB's econometric forecasts for 2021 through 2023 shown as well as, for comparison purposes, model forecast values if the COVID-19 pandemic did not happen and economic growth rates remained similar to recent averages. As shown on Chart 13, consistent with the long-term relationship between economic changes and claim frequency as well as the pattern during the early years of recovery from the Great Recession, increases in claim frequency are projected for the 2021 to 2023 period.

¹⁶ See Item AC12-12-02 of the March 20, 2013 WCIRB Actuarial Committee Agenda.

Chart 13 – Indemnity Claim Frequency – Indexed to 2008

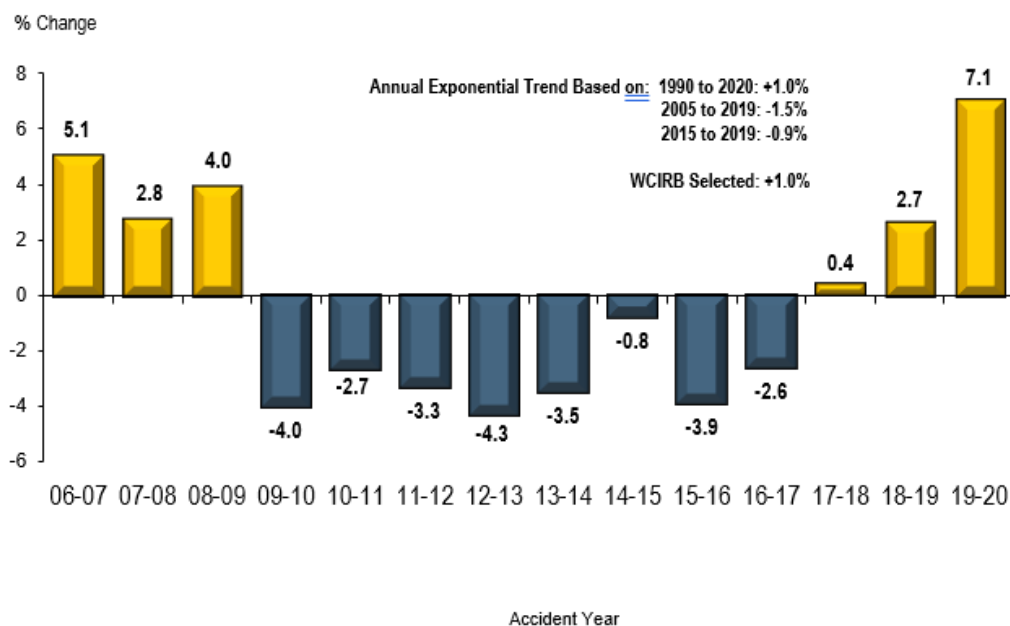


Source: WCIRB unit statistical data and indemnity claim frequency model. Excludes COVID-19 claims.
 * Assumes economic expansion similar to the average over the post-Great Recession period

Indemnity Claim Severity

To project the average annual indemnity severity trend, the WCIRB reviewed historical changes in on-level indemnity severities over both long-term and short-term periods. Chart 14 shows estimated ultimate and on-level indemnity severity growth by accident year.

Chart 14 – WCIRB Estimated Change in Indemnity On-Level Severity Based on Experience as of December 31, 2020

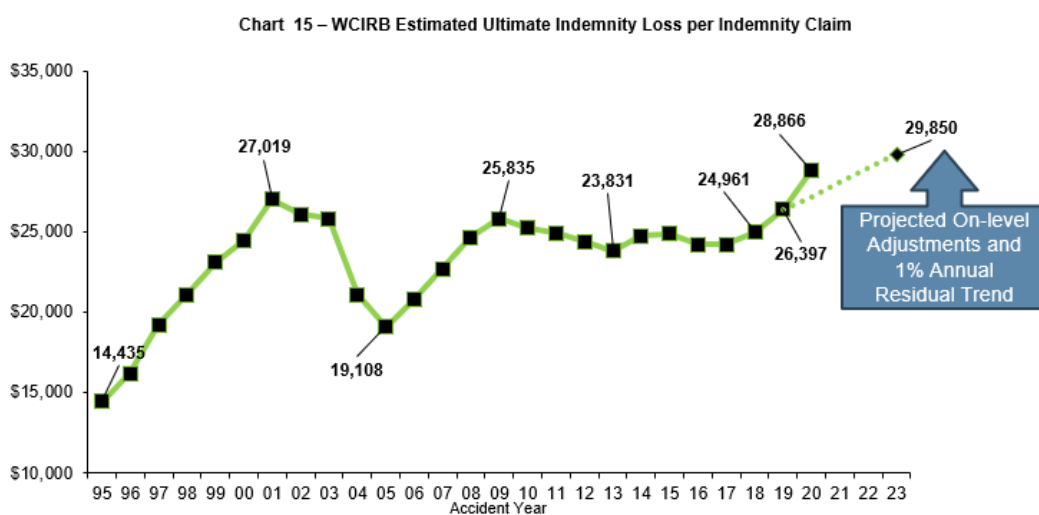


Source: WCIRB projections of ultimate indemnity losses based on reported loss and claim patterns adjusted to an on-level basis.

As shown on Chart 14, long-term on-level indemnity severity growth since 1990 is approximately 1% per year, which includes prior periods of sharp growth as well as more recent periods of declining indemnity

severities. In 2018 and 2019, on-level indemnity claim severities increased at a rate of about 1.5% per year after declining at a steady rate over the prior eight years. Some of this increase appears to be driven by recent increases in temporary disability duration,¹⁷ which with a continued sluggish economy and deceleration of the claim settlement process is likely to continue in the short-term. Average on-level indemnity severities show a more significant increase in 2020, but the WCIRB believes this preliminary estimate is impacted by economic factors and shifts in the injury mix caused by the pandemic. In particular, paid indemnity at earlier maturities primarily includes temporary disability benefits which have higher weekly maximums and, as a result, are more significantly impacted by changes in average wages of injured workers in 2020 than permanent disability benefits. However, general growth in on-level indemnity severities over the most recent three years suggests that some positive on-level indemnity severity trend is appropriate. As a result, consistent with the January 1, 2021 Pure Premium Rate Filing, the WCIRB projects a 1.0% average annual on-level indemnity severity trend, which is somewhat lower than the estimated changes for the two most recent accident years and gives some consideration to the prior period of modestly declining on-level indemnity severities.

In prior pure premium rate filings, the WCIRB has applied its selected frequency and average annual on-level severity trends to the average of the most recent two accident years. As discussed, the COVID-19 pandemic has significantly impacted exposure, premium and claim cost levels for accident year 2020. Although COVID-19 claims have been excluded from the accident year 2020 information included in this filing, the economic slowdown has had a significant impact on classification mix, the number of claims filed, medical services delivered and the overall claims process. In particular, the projected development of accident year 2020 losses may be significantly understated as a result of the slowdown of the claims process during the pandemic period. Given these significant and likely temporary impacts in various cost components, the WCIRB does not believe that accident year 2020 evaluated as of 12 months maturity is an appropriate basis to project the loss ratio for future policies. As a result, the WCIRB is basing the projected loss ratio for policies incepting between September 1, 2021 and August 31, 2022 by applying the recommended trending rates discussed above to the accident year 2019 ratio only. Chart 15 shows the projected ultimate indemnity severities on this basis, which include not only the projected 1% annual on-level trend but also the impacts of projected wage inflation and annual cost of living adjustments on indemnity benefits.



Source: WCIRB projections of ultimate indemnity losses and claims as of 12/31/20 based on reported loss and claim patterns.

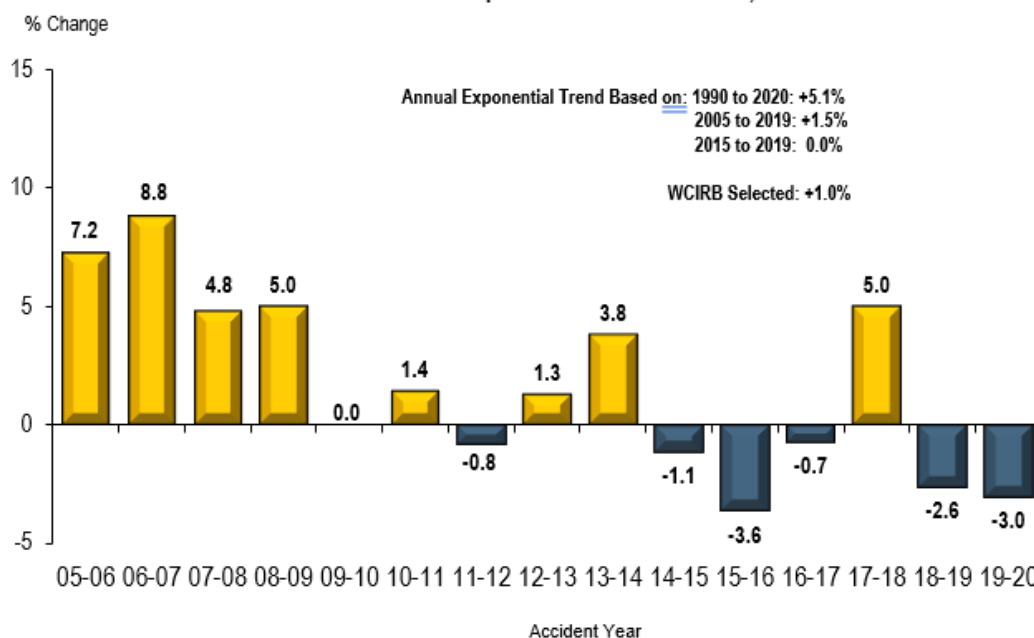
¹⁷ See Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Meeting presentation.

Medical Claim Severity

As with indemnity, the WCIRB is basing projected average medical severity growth on a review of long-term and short-term historical medical severity trends. In particular, medical losses occurring on policies incepting between September 1, 2021 and August 31, 2022 will be paid over a very extended period, with over one-half of policy year 2022 losses likely to be paid in 2025 or later and over one-quarter likely to be paid in 2030 or later. Also, medical cost levels are in accordance with the year 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 accident year medical severities.

Chart 16 shows estimated ultimate and on-level medical severity growth by accident year. As shown, since 1990 long-term on-level medical severity growth in California has averaged approximately 5% per year. This long-term average trend includes both 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 severities have, on average, declined by 1.5%. Although average on-level medical severities grew by 5% in 2018, they decreased by approximately one-half that amount in 2019. Average on-level medical severities show another modest decrease in 2020 but, as with indemnity, the WCIRB believes this estimate to be preliminary and heavily impacted by the COVID-19 pandemic. In particular, the estimated 2020 medical severity may be understated due to deferred treatment during the pandemic or shifts in the mix of injury types as significantly fewer medical-only claims were filed during the pandemic.

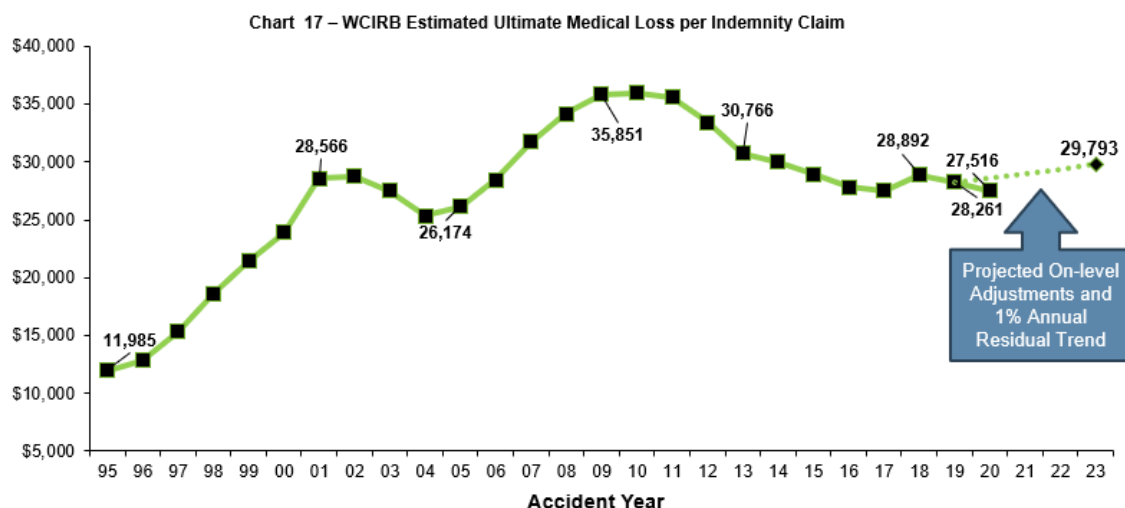
Chart 16 – WCIRB Estimated Change in Medical On-Level Severity
Based on Experience as of December 31, 2020



Source: WCIRB projections of ultimate medical losses based on reported loss and claim patterns adjusted to an on-level basis. Cost amounts exclude the cost of medical cost containment programs.

As discussed, the WCIRB believes both long-term and short-term considerations should be reflected 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 over most of the last decade; these reforms were implemented a number of years ago. Absent reform, average medical costs usually 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. As a result, the WCIRB believes giving some consideration to the longer-term medical severity

trend is appropriate. Given these considerations, the WCIRB selected an average annual medical severity trend of 1.0%, which is modestly higher than the average flat growth over the last several years but corresponds with the approximate average rate of growth in 2018 and 2019 (the most recent two pre-pandemic years) and gives some consideration to the long-term moderate rate of growth. Chart 17 shows the ultimate medical severities by accident year with future medical severities projected by applying an on-level annual trend of 1% to the latest (2019) pre-pandemic accident year.



Source: WCIRB projections of ultimate medical losses and claims as of 12/31/20 based on reported loss and claim patterns. Excludes medical cost containment program costs from all years.

Loss Adjustment Expenses

By California statute, pure premium rates contemplate the cost of LAE. The WCIRB has projected the LAE to be incurred on September 1, 2021 to August 31, 2022 policies using methodologies consistent with those used in prior filings, with the addition of several pandemic-related adjustments similar to those reflected in the loss projection. The WCIRB's projection of the cost of LAE on policies incepting between September 1, 2021 and August 31, 2022 is 33.5% of losses.¹⁸

COVID-19 Claim Cost Projection

In the January 1, 2021 Pure Premium Rate Filing, given that tens of thousands of COVID-19 claims were being filed in the California workers' compensation system and that the effects of the COVID-19 pandemic were expected to continue into 2021, the WCIRB included a provision for the expected cost of future COVID-19 claims in the proposed January 1, 2021 advisory pure premium rates. Specifically, on average the proposed January 1, 2021 advisory pure premium rates reflected a provision of 3.8% or \$0.06 per \$100 of payroll to reflect expected costs arising on COVID-19 claims incurred against policies incepting between January 1, 2021 and August 31, 2021. This provision in the proposed 2021 advisory pure premium rates varied by industry classification depending on the propensity for COVID-19 claims filed by classification.

While many COVID-19 claims continue to be filed in early 2021, the COVID-19 vaccines are beginning to have a positive effect. In light of the current success of the COVID-19 vaccines, the external models and published research in part relied upon by the WCIRB in the January 1, 2021 Pure Premium Rate Filing are now forecasting that the U.S. population could potentially be near herd immunity by the summer of 2021 as a result of a substantial share of the population being vaccinated coupled with ongoing infections. As a result, these models are not projecting a large number of COVID-19 infections and deaths.

¹⁸ The LAE provision in the January 1, 2021 Pure Premium Rate Filing was 34.0% of losses.

to occur beyond that time.¹⁹ Given this, the WCIRB is not reflecting a provision for projected COVID-19 claims on policies incepting between September 1, 2021 and August 31, 2022 in this filing.

Changes to the Evaluation and Management Section of the Official Medical Fee Schedule (OMFS)

Fees for physician services in California are based on the California Official Medical Fee Schedule (OMFS), which since 2014 is predicated on the Resource-Based Relative Value Scale (RBRVS) established by Medicare. The DWC generally adopts the regular updates that are made to the Medicare schedule values, most of which are primarily inflationary adjustments. On February 10, 2021 the DWC posted an order adjusting the OMFS to conform to relevant 2021 changes in the Medicare payment system that included significant changes related to Evaluation and Management (E&M) services that became effective March 1, 2021. These changes included updates to conversion factors and relative value units as well as the billing and payment process related to office/outpatient visits within the E&M Section of the OMFS.

The WCIRB has evaluated the cost impact of the March 1, 2021 changes to the E&M Section of the OMFS based on a review of WCIRB medical transaction data on E&M services provided in 2019.²⁰ The WCIRB's cost evaluation is summarized in Section B, Appendix D of this filing. In total, the WCIRB estimates the March 1, 2021 changes to the OMFS will increase the cost of E&M office/outpatient visits by 15%, resulting in an increase to overall medical costs of 2.4%.

Changes to the Medical-Legal Schedule

Medical-legal services include medical-legal evaluations of an injured worker by a physician to resolve a disputed issue such as those related to permanent disability, cause of injury, part of body injured or temporary disability and expert testimony by independent medical experts. Effective April 1, 2021, the DWC adopted significant changes to California's Medical-Legal Fee Schedule.²¹ The April 1, 2021 Medical-Legal Fee Schedule, which reflects the first significant change to medical-legal reimbursement levels since 2006, is intended to increase the reimbursement rate for medical-legal reports while eliminating the increased hourly billing provisions in the Schedule. Key provisions of the April 1, 2021 Schedule include revised billing codes and fees, new hourly rates for medical-legal testimony and sub rosa recording review, new modifiers with cost multipliers for certain medical-legal evaluations and per-page fees for record review beyond specified levels.

The WCIRB has evaluated the cost impact of the April 1, 2021 changes to the Medical-Legal Fee Schedule based on a review of WCIRB medical transaction data on medical-legal services provided in 2018 and 2019.²² The WCIRB's evaluation is summarized in Section B, Appendix E of this filing. In total, the WCIRB estimates the April 1, 2021 changes to the Medical-Legal Fee Schedule will increase the cost of medical-legal reports by 22%, resulting in an increase to overall medical costs of 1.4%.

Experience Rating Off-Balance Factor

Experience rating is designed to be premium-neutral in that the total statewide pure premium, after application of experience rating, should be the same as if there were no experience rating. However, the collective experience of large employers, to which experience rating assigns greater weight, has been better than average, and the collective experience of small employers, many of which are not rated, has been worse than average. As a result, if no adjustment was made, the statewide average experience modification would be below 100% and pure premium rates would be insufficient to provide for losses and

¹⁹ IHME COVID-19 Projection. COVID-19 projections at: <https://covid19-projections.com/path-to-herd-immunity/>; "When Could the United States Reach Herd Immunity? It's Complicated," *New York Times*, Feb. 20, 2021. <https://www.nytimes.com/interactive/2021/02/20/us/us-herd-immunity-covid.html?action=click&module=Top%20Stories&pgtype=Homepage> <https://jamanetwork.com/journals/jama/fullarticle/2777785>.

²⁰ Services in 2020 were excluded due to the potential impact of the COVID-19 pandemic on medical services provided.

²¹ California Code of Regulations, Title 8, Sections 9793, 9794 & 9795. <https://www.dir.ca.gov/dwc/DWCPPropRegs/2020/Medical-Legal-Fee-Schedule/Med-Legal-Fee-Schedule.htm>

²² Services in 2020 were excluded due to the potential impact of the COVID-19 pandemic on medical services provided.

loss adjustment expenses after application of experience rating. As a result, advisory pure premium rates are adjusted by a factor known as the experience rating off-balance correction factor (off-balance factor).

The WCIRB's projection of the indicated experience rating off-balance factor for policies incepting between September 1, 2021 and August 31, 2022 has been computed using the methodology reflected in prior WCIRB pure premium rate filings and regulatory filings. Based on that methodology, the WCIRB projects an experience rating off-balance factor for policies incepting between September 1, 2021 and August 31, 2022 of 1.015, which is 0.4% lower than the current experience rating off-balance factor effective January 1, 2021.

Proposed Advisory Pure Premium Rates by Classification

The proposed September 1, 2021 advisory pure premium rate for each standard classification is based on the indicated change in the overall pure premium rate level as computed in Section B and the September 1, 2021 classification relativity for each standard classification. The computation of the September 1, 2021 classification relativities is based on the WCIRB's standard methodology and is described in detail in Section C, Appendix C of the WCIRB's September 1, 2021 Regulatory Filing submitted to the California Department of Insurance on February 26, 2021. The proposed advisory pure premium rate for each standard classification is shown in Section A.

Computation of Proposed and Industry Average Rates

A. Computation of Industry Average Filed Manual Rate as of January 1, 2021¹

1. For each of the 120 largest insurers in California,² the WCIRB determined the filed manual rate for each standard classification as of January 1, 2021 based on the insurer's rate filing information submitted to the California Department of Insurance (CDI). In instances when an insurer's filed manual rates reflected a deviation from the standard classification system (e.g., by sub-classification, tier or territory), the WCIRB obtained additional information from the insurer as to the volume of business written for each of the classifications in which there was a deviation from the standard classification. This information was used to compute the insurer's average filed manual rate for the applicable standard classification.
2. For each of the 120 insurers, the payroll reported to the WCIRB on the most recently available unit statistical reports³ (reported payroll) for each standard classification was extended by the insurer's applicable filed manual rate.⁴ For each classification, the resulting premium for all 120 insurers was summed and divided by the total reported payroll for the classification for all 120 insurers to produce an industry average filed manual rate for the classification.
3. The total reported payroll for each classification for all insurers was extended by the industry average filed manual rate as of January 1, 2021 for the classification. The resulting premium for each classification was summed and divided by the total reported payroll for all classifications for all insurers to produce the industry average filed manual rate.

B. Computation of Industry Average Filed Pure Premium Rate as of January 1, 2021⁵

1. For each of the 120 largest insurers in California, the WCIRB determined the filed pure premium rate for each classification as of January 1, 2021 by adjusting each insurer's filed manual rate by classification, derived as described in section A above, to remove the applicable underwriting expense loading factor reflected in the insurer's rate filing information.
2. For each of the 120 insurers, the reported payroll for each classification was extended by the insurer's applicable filed pure premium rate. For each classification, the resulting pure premium for all 120 insurers was summed and divided by the total reported payroll for the classification for all 120 insurers to produce an industry average filed pure premium rate for the classification.
3. The total reported payroll for each classification for all insurers was extended by the industry average filed pure premium rate for the classification. The resulting pure premium for each classification was summed and divided by the total reported payroll for all classifications for all insurers to produce the industry average filed pure premium rate as of January 1, 2021.

¹ The average filed manual rate varies dramatically across insurers for a variety of reasons, including the mix of classifications written, underwriting practices and use of rating plan adjustments. For example, an insurer with relatively high manual rates may, as a matter of underwriting practice, apply bigger schedule rating credits than an insurer with lower manual rates.

² In total, these insurers wrote in excess of 97% of the California workers' compensation insurance market in 2019.

³ The most current unit statistical reports available were for policies incepting July 2018 through June 2019. To facilitate consistency of comparison with the proposed September 1, 2021 advisory pure premium rates, the five classifications with new maximum payroll limitations effective January 1, 2020 had their payroll weights adjusted to a basis to reflect the new payroll limitations.

⁴ If an insurer filed deviations from standard classifications, the average filed manual rate for the applicable standard classification, derived as described in section A above, was used instead.

⁵ An insurer's filed pure premium rates are a function of the set of advisory pure premium rates referenced in its rate filing as well as the manner in which the rate filing was developed. An insurer with an average filed pure premium rate greater than the industry average filed pure premium rate may or may not have higher than average filed manual rates, as the insurer may choose to apply a relatively small expense loading to develop the manual rates filed with the CDI.

C. Computation of Proposed Average Pure Premium Rate

The industry average filed pure premium rate as of January 1, 2021 derived as described in Section B above, is adjusted by the “Indicated Difference from Industry Average Filed Pure Premium Rate Per \$100 of Payroll as of January 1, 2021” (line 8 of Section B, Exhibit 8) to produce the proposed average pure premium rate per \$100 of payroll for policies incepting between September 1, 2021 and August 31, 2022.

D. Computation of Industry Average Charged Rate for 2020

1. The average advisory pure premium rate for 2020 is estimated by extending the January 1, 2020 advisory pure premium rate for each classification by the reported payroll for the classification for all insurers.⁶ The resulting products by classification are summed and then divided by the total reported payroll for all classifications for all insurers.
2. The industry average charged rate for 2020 is estimated by multiplying the average advisory pure premium rate for 2020 by the average policy year 2020 ratio of premium written at the industry average charged rate level to premium written at the advisory pure premium rate level based on the WCIRB’s quarterly calls for experience⁷ through December 31, 2020.

⁶ Similar to the industry average filed manual rates discussed in section A of this exhibit, this average rate includes adjustments to the payroll weights for the five classifications with new maximum payroll limitations effective January 1, 2020.

⁷ Premiums reported on the WCIRB’s quarterly calls for experience exclude the impact of deductible credits, retrospective rating plan adjustments and terrorism charges.

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021**

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, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
0005	4.54	4.74	-4%	6.46	-30%
0016	6.39	6.00	6%	7.71	-17%
0034	5.84	5.80	1%	7.75	-25%
0035	4.76	5.14	-7%	6.43	-26%
0036	7.05	7.07	0%	9.39	-25%
0038	7.97	6.94	15%	9.90	-19%
0040	3.43	3.38	1%	4.62	-26%
0041	4.62	5.03	-8%	6.20	-25%
0042	4.85	4.93	-2%	6.88	-30%
0044	4.77	3.72	28%	4.47	7%
0045	4.02	3.78	6%	4.86	-17%
0050	6.42	5.64	14%	6.92	-7%
0079	2.89	2.99	-3%	3.95	-27%
0096	4.79	5.38	-11%	6.49	-26%
0106	11.03	10.50	5%	13.29	-17%
0171	5.46	5.36	2%	6.96	-22%
0172	3.79	3.82	-1%	4.89	-22%
0251	4.55	4.42	3%	6.70	-32%
0400	3.63	2.84	28%	3.50	4%
0401	6.85	6.55	5%	8.35	-18%
1122	2.41	2.49	-3%	4.17	-42%
1123	14.17	15.73	-10%	29.11	-51%
1124	3.95	4.37	-10%	8.40	-53%
1320	1.61	1.51	7%	1.90	-15%
1322	4.62	3.72	24%	4.22	9%
1330	2.45	2.43	1%	3.21	-24%
1438	5.40	4.36	24%	5.26	3%
1452	2.61	2.36	11%	2.77	-6%
1463	3.26	2.78	17%	3.47	-6%
1624	3.50	4.55	-23%	5.92	-41%
1699	1.60	1.78	-10%	2.11	-24%
1701	2.91	2.99	-3%	3.30	-12%
1710	3.73	3.76	-1%	5.58	-33%
1741	3.41	3.17	8%	4.40	-23%
1803	7.22	7.36	-2%	10.62	-32%
1925	10.41	9.12	14%	9.84	6%
2002	7.42	7.48	-1%	10.61	-30%
2003	6.44	6.10	6%	6.80	-5%
2014	4.60	4.41	4%	5.46	-16%
2030	3.48	3.55	-2%	4.00	-13%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
2063	4.05	4.05	0%	4.52	-10%
2081	10.68	11.81	-10%	12.13	-12%
2095	6.26	5.45	15%	8.13	-23%
2102	5.49	4.97	10%	5.16	6%
2107	3.95	4.00	-1%	5.06	-22%
2108	5.48	5.48	0%	7.11	-23%
2109	4.37	4.27	2%	5.37	-19%
2111	3.98	4.58	-13%	5.65	-30%
2113	7.95	7.06	13%	9.85	-19%
2116	4.79	5.13	-7%	5.99	-20%
2117	6.97	6.35	10%	8.23	-15%
2121	2.68	2.65	1%	3.02	-11%
2123	5.52	5.75	-4%	7.53	-27%
2142	2.36	2.30	3%	2.68	-12%
2163	5.98	6.14	-3%	5.62	6%
2222	4.58	4.65	-2%	6.49	-29%
2362	14.69	14.08	4%	19.68	-25%
2402	9.16	8.03	14%	10.58	-13%
2413	4.99	4.82	4%	5.78	-14%
2501	5.30	5.77	-8%	8.74	-39%
2570	9.73	9.46	3%	12.15	-20%
2571	8.03	7.53	7%	10.13	-21%
2576	5.52	5.10	8%	6.71	-18%
2584	5.68	5.67	0%	7.66	-26%
2585	6.84	6.51	5%	8.45	-19%
2589	4.36	4.05	8%	4.92	-11%
2660	7.48	7.74	-3%	10.63	-30%
2683	4.88	4.89	0%	6.42	-24%
2688	5.35	5.39	-1%	5.90	-9%
2702	16.78	18.01	-7%	27.38	-39%
2710	5.84	5.47	7%	8.43	-31%
2727	10.86	10.14	7%	16.32	-33%
2731	4.89	4.62	6%	6.22	-21%
2757	7.56	7.55	0%	10.04	-25%
2759	7.46	7.32	2%	9.16	-19%
2790	1.76	1.79	-2%	2.60	-32%
2797	7.65	7.67	0%	9.71	-21%
2806	5.11	4.98	3%	8.07	-37%
2812	5.38	4.84	11%	7.15	-25%
2819	7.02	7.41	-5%	8.65	-19%
2840	3.55	3.71	-4%	4.87	-27%
2842	6.51	6.05	8%	8.47	-23%
2852	6.64	5.56	19%	7.16	-7%
2881	5.46	5.57	-2%	8.18	-33%
2883	13.53	12.78	6%	16.51	-18%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
2915	5.11	5.41	-6%	7.46	-32%
2923	3.46	3.52	-2%	5.03	-31%
3018	2.93	2.83	4%	3.45	-15%
3022	4.67	4.95	-6%	5.65	-17%
3030	7.08	6.92	2%	9.46	-25%
3039	5.97	5.31	12%	6.65	-10%
3040	6.50	6.68	-3%	9.69	-33%
3060	5.62	5.70	-1%	7.12	-21%
3066	4.64	4.17	11%	5.11	-9%
3070	0.29	0.29	0%	0.33	-12%
3076	5.27	5.11	3%	6.82	-23%
3081	8.43	7.52	12%	8.33	1%
3082	12.87	13.40	-4%	20.84	-38%
3085	8.27	7.95	4%	9.87	-16%
3099	3.59	3.34	7%	4.56	-21%
3110	5.82	5.53	5%	6.32	-8%
3131	4.38	4.08	7%	5.16	-15%
3146	2.60	2.61	0%	3.80	-32%
3152	3.00	3.03	-1%	3.48	-14%
3165	3.64	3.61	1%	5.05	-28%
3169	3.60	3.49	3%	4.66	-23%
3175	3.07	3.01	2%	4.51	-32%
3178	1.94	1.86	4%	2.76	-30%
3179	3.24	3.08	5%	3.68	-12%
3180	5.35	4.75	13%	7.37	-27%
3220	2.02	2.24	-10%	3.31	-39%
3241	3.63	3.37	8%	4.36	-17%
3257	4.95	4.67	6%	6.47	-23%
3339	6.21	6.21	0%	7.46	-17%
3365	4.52	4.09	11%	6.00	-25%
3372	4.92	4.96	-1%	6.15	-20%
3383	3.25	3.23	1%	3.98	-18%
3400	6.68	6.81	-2%	8.48	-21%
3401	4.35	4.09	6%	5.77	-25%
3501	5.83	5.45	7%	6.45	-10%
3507	4.19	3.97	6%	5.10	-18%
3560	2.85	2.78	3%	4.06	-30%
3568	2.43	2.46	-1%	3.26	-25%
3569	1.69	1.70	-1%	2.45	-31%
3570	3.58	3.54	1%	4.26	-16%
3572	0.90	0.92	-2%	0.96	-6%
3573	1.23	1.17	5%	1.68	-27%
3574	3.35	3.42	-2%	4.80	-30%
3577	1.28	1.25	2%	1.56	-18%
3612	2.83	2.75	3%	3.61	-22%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
3620	6.08	5.84	4%	8.21	-26%
3632	2.63	2.60	1%	3.39	-22%
3634	2.91	2.64	10%	3.51	-17%
3643	2.19	2.26	-3%	3.44	-36%
3647	5.23	4.81	9%	5.92	-12%
3651	2.43	2.38	2%	2.97	-18%
3681	0.73	0.67	9%	0.85	-14%
3682	1.26	1.13	12%	1.45	-13%
3683	1.00	1.50	-33%	2.22	-55%
3719	1.83	1.68	9%	1.99	-8%
3724	3.98	3.76	6%	5.04	-21%
3726	1.89	2.19	-14%	3.31	-43%
3805	1.00	0.90	11%	0.91	10%
3808	3.75	3.75	0%	5.02	-25%
3815	5.02	5.03	0%	5.95	-16%
3821	7.09	6.87	3%	7.86	-10%
3828	3.64	3.20	14%	4.27	-15%
3830	1.64	1.60	2%	2.12	-23%
3831	2.73	2.78	-2%	3.39	-19%
3840	4.12	3.67	12%	4.91	-16%
4000	2.54	2.36	8%	3.27	-22%
4034	4.98	4.85	3%	6.59	-24%
4036	4.44	4.22	5%	5.35	-17%
4038	5.91	5.35	10%	7.06	-16%
4041	3.24	3.16	3%	3.94	-18%
4049	3.33	2.98	12%	4.18	-20%
4111	2.52	2.39	5%	3.03	-17%
4112	0.41	0.41	0%	0.55	-25%
4114	2.73	2.52	8%	3.78	-28%
4130	6.26	5.75	9%	8.50	-26%
4150	2.61	2.54	3%	3.46	-25%
4239	2.81	2.77	1%	4.23	-34%
4240	8.85	8.26	7%	8.78	1%
4243	3.44	3.50	-2%	3.99	-14%
4244	4.38	4.24	3%	5.64	-22%
4250	3.99	3.87	3%	5.31	-25%
4251	3.48	3.62	-4%	4.78	-27%
4279	5.06	4.80	5%	6.73	-25%
4283	2.84	2.75	3%	4.25	-33%
4286	6.07	6.17	-2%	7.95	-24%
4295	6.22	5.94	5%	7.63	-18%
4297	0.21	0.20	5%	0.28	-25%
4299	4.42	3.90	13%	4.85	-9%
4304	7.87	6.34	24%	6.63	19%
4312	5.17	4.04	28%	5.65	-8%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

<u>Class Code</u>	(1) <u>Proposed September 1, 2021 Advisory Pure Premium Rates</u>	(2) <u>Approved January 1, 2021 Advisory Pure Premium Rates</u>	(3) <u>Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR</u> (1)/(2)-1	(4) <u>Industry Average Filed Pure Premium Rates as of 1/1/2021</u>	(5) <u>Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021</u> (1)/(4)-1
4351	2.65	2.64	0%	3.33	-20%
4354	2.33	2.17	7%	2.92	-20%
4361	1.68	1.83	-8%	2.44	-31%
4362	1.93	1.75	10%	1.89	2%
4410	6.19	5.96	4%	8.09	-23%
4420	8.51	8.21	4%	10.19	-16%
4432	3.35	2.84	18%	2.98	12%
4470	2.03	1.85	10%	2.91	-30%
4478	4.97	4.57	9%	6.22	-20%
4492	5.29	5.28	0%	7.45	-29%
4494	5.55	5.49	1%	7.20	-23%
4495	3.32	3.10	7%	5.22	-36%
4496	5.54	5.69	-3%	7.73	-28%
4497	3.97	3.65	9%	5.25	-24%
4498	3.94	3.70	6%	5.65	-30%
4499	5.83	5.56	5%	6.83	-15%
4511	0.48	0.48	0%	0.65	-26%
4512	0.23	0.24	-4%	0.29	-21%
4557	3.13	3.03	3%	3.89	-20%
4558	2.93	2.86	2%	3.76	-22%
4611	1.41	1.23	15%	1.33	6%
4623	5.51	6.09	-10%	8.70	-37%
4635	2.37	2.36	0%	2.44	-3%
4665	6.79	6.33	7%	7.76	-13%
4683	3.56	3.97	-10%	5.46	-35%
4691	1.31	1.52	-14%	2.70	-51%
4692	1.48	1.41	5%	1.65	-10%
4717	4.18	3.69	13%	4.84	-14%
4720	3.24	3.23	0%	3.92	-17%
4740	1.05	0.97	8%	1.00	5%
4771	1.37	1.28	7%	1.52	-10%
4828	2.48	2.16	15%	3.11	-20%
4829	1.54	1.41	9%	2.12	-27%
4831	4.34	4.05	7%	5.93	-27%
4983	2.91	3.07	-5%	3.91	-26%
5020	3.56	3.58	-1%	5.11	-30%
5027	8.68	8.65	0%	13.29	-35%
5028	4.46	4.40	1%	6.23	-28%
5029	5.11	5.05	1%	6.52	-22%
5040	9.26	8.90	4%	11.65	-21%
5102	5.81	5.81	0%	8.71	-33%
5107	4.52	4.32	5%	6.39	-29%
5108	8.18	8.15	0%	11.25	-27%
5128	1.36	1.25	9%	1.81	-25%
5129	0.50	0.59	-15%	1.04	-52%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
5130	1.05	0.96	9%	1.28	-18%
5140	1.53	1.50	2%	2.38	-36%
5146	4.63	4.62	0%	6.37	-27%
5160	1.65	1.72	-4%	2.00	-18%
5183	5.63	5.26	7%	7.26	-22%
5184	2.29	2.25	2%	3.23	-29%
5185	4.85	4.61	5%	6.85	-29%
5186	2.07	2.18	-5%	2.82	-27%
5187	2.50	2.40	4%	3.55	-30%
5190	3.99	3.92	2%	5.51	-28%
5191	2.02	2.23	-9%	2.76	-27%
5192	3.70	3.41	9%	3.93	-6%
5193	1.02	1.13	-10%	1.75	-42%
5195	3.13	3.10	1%	5.07	-38%
5201	7.04	6.65	6%	9.27	-24%
5205	4.49	4.00	12%	6.06	-26%
5212	6.14	5.49	12%	8.39	-27%
5213	4.71	4.33	9%	6.27	-25%
5214	4.69	4.42	6%	6.20	-24%
5222	5.95	5.71	4%	6.26	-5%
5225	5.16	4.93	5%	6.47	-20%
5348	4.81	4.57	5%	6.13	-22%
5403	10.63	10.52	1%	14.86	-28%
5432	4.77	4.26	12%	6.09	-22%
5436	4.20	3.77	11%	5.81	-28%
5443	5.31	4.43	20%	6.42	-17%
5446	5.74	5.11	12%	7.33	-22%
5447	2.81	2.41	17%	3.96	-29%
5467	8.07	7.55	7%	11.26	-28%
5470	3.28	3.67	-11%	4.93	-33%
5473	8.78	9.77	-10%	14.70	-40%
5474	8.59	8.53	1%	11.13	-23%
5479	5.68	5.49	3%	6.03	-6%
5482	4.60	3.81	21%	5.25	-12%
5484	10.59	8.48	25%	12.45	-15%
5485	6.63	6.03	10%	8.51	-22%
5506	4.37	3.90	12%	6.67	-34%
5507	3.66	3.59	2%	5.95	-38%
5538	5.38	5.00	8%	7.07	-24%
5542	2.67	2.87	-7%	4.17	-36%
5552	22.38	22.28	0%	34.24	-35%
5553	8.62	8.27	4%	12.93	-33%
5606	0.85	0.76	12%	0.99	-14%
5610	3.69	3.38	9%	4.71	-22%
5632	10.63	10.52	1%	14.83	-28%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
5633	4.77	4.26	12%	5.96	-20%
5650	5.74	5.51	4%	7.56	-24%
5951	0.54	0.56	-4%	0.65	-17%
6003	11.80	13.41	-12%	18.16	-35%
6011	6.13	5.91	4%	7.33	-16%
6204	6.62	6.55	1%	9.92	-33%
6206	3.21	2.59	24%	2.94	9%
6213	1.60	1.64	-2%	2.42	-34%
6216	2.80	2.59	8%	4.23	-34%
6218	5.41	5.57	-3%	7.54	-28%
6220	3.10	2.54	22%	4.58	-32%
6233	1.86	1.95	-5%	2.64	-30%
6235	3.56	3.01	18%	5.03	-29%
6237	1.99	1.59	25%	2.17	-8%
6251	4.05	4.46	-9%	5.69	-29%
6258	5.64	5.27	7%	7.81	-28%
6307	7.41	7.74	-4%	11.43	-35%
6308	3.02	2.96	2%	6.06	-50%
6315	4.44	4.56	-3%	6.18	-28%
6316	3.92	3.80	3%	6.63	-41%
6325	3.05	2.95	3%	4.45	-31%
6361	3.59	3.80	-6%	5.97	-40%
6364	4.96	4.84	2%	7.08	-30%
6400	5.11	5.13	0%	7.62	-33%
6504	6.46	5.97	8%	8.01	-19%
6834	5.10	4.89	4%	6.51	-22%
7133	2.43	2.67	-9%	3.57	-32%
7198	8.07	7.40	9%	5.23	54%
7207	8.03	7.44	8%	11.25	-29%
7219	6.75	6.77	0%	8.15	-17%
7227	7.44	7.98	-7%	9.11	-18%
7232	8.74	8.64	1%	10.25	-15%
7248	1.50	1.40	7%	1.38	9%
7272	7.21	6.15	17%	8.60	-16%
7332	2.68	2.82	-5%	3.37	-20%
7360	5.24	5.33	-2%	6.92	-24%
7365	5.65	5.76	-2%	6.63	-15%
7382	6.58	6.35	4%	7.43	-11%
7392	5.23	4.85	8%	5.93	-12%
7403	5.66	5.21	9%	5.47	3%
7405	1.77	1.79	-1%	1.59	11%
7409	7.81	7.36	6%	10.53	-26%
7410	4.59	4.60	0%	6.62	-31%
7421	1.56	1.44	8%	1.58	-1%
7424	1.59	1.59	0%	1.93	-18%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
7428	2.99	3.23	-7%	3.87	-23%
7429	2.05	2.31	-11%	3.27	-37%
7500	2.93	2.98	-2%	3.27	-10%
7515	1.06	0.99	7%	1.12	-5%
7520	2.93	2.98	-2%	3.83	-23%
7538	2.44	2.54	-4%	4.12	-41%
7539	1.67	1.48	13%	1.77	-6%
7580	2.91	2.75	6%	3.67	-21%
7600	9.52	7.96	20%	6.98	36%
7601	3.03	3.50	-13%	3.48	-13%
7605	2.52	2.51	0%	3.70	-32%
7607	0.27	0.30	-10%	0.36	-25%
7610	0.56	0.46	22%	0.45	24%
7706	5.12	4.64	10%	7.49	-32%
7707**	280.97	219.86	28%	366.54	-23%
7720	2.78	2.26	23%	2.99	-7%
7721	3.22	3.31	-3%	4.34	-26%
7722 ‡	109.74	105.17	4%	N/A	N/A
7855	3.09	3.09	0%	4.62	-33%
8001	4.34	4.38	-1%	5.79	-25%
8004	3.55	3.46	3%	4.36	-19%
8006	3.83	3.56	8%	3.92	-2%
8008	2.25	2.23	1%	2.63	-14%
8010	2.90	2.98	-3%	3.29	-12%
8013	1.19	1.17	2%	1.60	-26%
8015	3.90	3.57	9%	4.90	-20%
8017	2.65	2.71	-2%	3.09	-14%
8018	5.50	5.24	5%	6.11	-10%
8019	1.74	1.78	-2%	2.08	-16%
8021	6.60	5.98	10%	8.53	-23%
8028	4.30	4.14	4%	4.99	-14%
8031	5.08	5.07	0%	5.70	-11%
8032	5.12	4.62	11%	6.49	-21%
8039	2.53	2.24	13%	2.30	10%
8041	6.70	6.51	3%	8.19	-18%
8042	3.36	3.25	3%	4.03	-17%
8046	3.00	3.35	-10%	3.93	-24%
8057	3.26	3.65	-11%	5.79	-44%
8059	2.94	2.91	1%	3.94	-25%
8060	1.82	1.68	8%	2.17	-16%

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, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
8061	3.22	2.91	11%	3.21	0%
8062	1.25	1.10	14%	1.50	-17%
8063	3.42	3.10	10%	3.70	-8%
8064	2.92	3.41	-14%	3.60	-19%
8065	2.20	2.09	5%	2.59	-15%
8066	1.21	1.11	9%	1.31	-8%
8071	1.09	1.10	-1%	1.44	-24%
8078	1.37	1.28	7%	2.01	-32%
8102	1.46	1.32	11%	1.51	-3%
8106	5.32	4.72	13%	7.44	-28%
8107	2.15	2.18	-1%	2.87	-25%
8116	2.81	2.70	4%	3.52	-20%
8117	3.53	3.53	0%	4.36	-19%
8209	5.39	5.36	1%	7.56	-29%
8215	8.02	7.33	9%	9.78	-18%
8227	3.81	4.01	-5%	6.05	-37%
8232	5.66	5.77	-2%	7.26	-22%
8267	7.16	6.82	5%	9.05	-21%
8278***	185.34	135.40	37%	224.63	-17%
8286	6.69	5.23	28%	7.11	-6%
8290	3.15	2.66	18%	3.51	-10%
8291	4.44	4.22	5%	4.87	-9%
8292	8.05	7.73	4%	9.49	-15%
8293	9.94	9.63	3%	9.57	4%
8304	7.01	7.05	-1%	9.29	-25%
8324	3.25	3.03	7%	3.79	-14%
8350	4.64	4.57	2%	5.56	-17%
8370	2.00	2.02	-1%	2.95	-32%
8387	3.20	3.23	-1%	4.38	-27%
8388	4.56	4.98	-8%	5.71	-20%
8389	3.16	3.19	-1%	3.90	-19%
8390	3.00	2.96	1%	4.50	-33%
8391	2.71	2.75	-1%	3.17	-15%
8392	2.82	2.84	-1%	4.50	-37%
8393	2.69	2.45	10%	2.79	-4%
8397	2.97	2.59	15%	3.73	-20%
8400	2.04	2.06	-1%	2.57	-21%
8500	5.95	5.79	3%	7.61	-22%
8601	0.31	0.31	0%	0.37	-16%
8631***	5.00	4.42	13%	6.32	-21%
8720	1.50	1.40	7%	1.77	-15%
8729	0.82	0.82	0%	1.28	-36%
8740	0.79	0.89	-11%	1.40	-44%
8741	0.11	0.09	22%	0.15	-27%
8742	0.35	0.33	6%	0.43	-19%

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.

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
8743	0.17	0.17	0%	0.23	-26%
8744	0.35	0.33	6%	0.46	-24%
8745	6.42	6.60	-3%	9.64	-33%
8746	0.35	0.33	6%	0.37	-5%
8748	0.91	0.81	12%	1.00	-9%
8749	0.23	0.20	15%	0.27	-15%
8755	0.80	0.78	3%	1.25	-36%
8800	3.09	2.76	12%	3.51	-12%
8801	0.65	0.59	10%	0.82	-21%
8803	0.14	0.13	8%	0.14	0%
8804	2.91	2.73	7%	3.84	-24%
8806	3.12	3.59	-13%	5.18	-40%
8807	0.30	0.31	-3%	0.39	-23%
8808	0.46	0.45	2%	0.46	0%
8810	0.23	0.21	10%	0.29	-21%
8811	0.23	0.21	10%	0.30	-23%
8812	0.23	0.21	10%	0.32	-28%
8813	0.53	0.53	0%	0.67	-21%
8818	0.70	0.69	1%	0.72	-3%
8820	0.36	0.38	-5%	0.43	-16%
8821	0.94	0.93	1%	1.30	-28%
8822	0.52	0.50	4%	0.56	-7%
8823	3.33	3.37	-1%	4.70	-29%
8827	3.18	3.35	-5%	4.59	-31%
8829	3.28	3.25	1%	4.54	-28%
8830	1.33	1.32	1%	1.39	-4%
8831	1.63	1.54	6%	2.23	-27%
8834	0.67	0.70	-4%	0.92	-27%
8838	1.16	1.11	5%	1.41	-18%
8839	0.71	0.72	-1%	1.00	-29%
8840	0.33	0.32	3%	0.38	-13%
8846	1.32	1.38	-4%	2.00	-34%
8847	7.26	7.79	-7%	10.21	-29%
8850	1.95	2.17	-10%	3.62	-46%
8851	3.34	3.07	9%	3.94	-15%
8852	1.71	1.76	-3%	2.56	-33%
8859	0.04	0.04	0%	0.06	-33%
8868	0.70	0.72	-3%	0.87	-20%
8870	0.92	0.95	-3%	1.44	-36%
8871*	0.23	0.21	10%	N/A	N/A
8875	0.77	0.70	10%	0.94	-18%
9007	3.40	3.08	10%	3.87	-12%
9008	8.32	8.43	-1%	10.63	-22%
9009	2.82	2.83	0%	4.08	-31%
9010	4.41	3.93	12%	5.52	-20%

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.

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

Class Code	(1) Proposed September 1, 2021 Advisory Pure Premium Rates	(2) Approved January 1, 2021 Advisory Pure Premium Rates	(3) Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR (1)/(2)-1	(4) Industry Average Filed Pure Premium Rates as of 1/1/2021	(5) Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021 (1)/(4)-1
9011	3.68	3.53	4%	4.76	-23%
9015	4.81	4.45	8%	5.70	-16%
9016	3.08	3.10	-1%	3.66	-16%
9031	4.29	4.10	5%	5.20	-18%
9033	3.88	3.72	4%	5.05	-23%
9043	1.33	1.32	1%	1.45	-8%
9048	2.87	3.07	-7%	3.72	-23%
9050	6.43	6.23	3%	7.60	-15%
9053	1.60	1.54	4%	2.23	-28%
9054	4.03	4.37	-8%	5.42	-26%
9059	2.20	2.21	0%	2.67	-18%
9060	3.32	3.59	-8%	4.49	-26%
9061	3.50	3.05	15%	3.77	-7%
9066	2.88	2.58	12%	3.66	-21%
9067	1.60	1.69	-5%	2.34	-32%
9069	4.01	4.02	0%	5.19	-23%
9070	4.71	4.88	-3%	6.45	-27%
9079	2.72	2.81	-3%	3.39	-20%
9085	3.11	2.97	5%	4.01	-22%
9092	2.21	2.15	3%	2.86	-23%
9095	3.53	3.84	-8%	5.54	-36%
9096	10.52	10.75	-2%	14.38	-27%
9097	3.52	3.38	4%	4.69	-25%
9101	4.27	4.52	-6%	6.15	-31%
9151	0.70	0.76	-8%	1.07	-35%
9154	2.69	2.24	20%	2.78	-3%
9155	1.24	1.27	-2%	1.45	-14%
9156	3.86	4.00	-4%	5.77	-33%
9180	2.91	2.78	5%	3.51	-17%
9181	9.75	9.90	-2%	12.34	-21%
9182	1.26	1.24	2%	1.70	-26%
9184	9.70	9.05	7%	9.01	8%
9185	12.54	14.17	-12%	20.55	-39%
9220	5.38	5.40	0%	7.08	-24%
9402	3.34	3.35	0%	5.16	-35%
9403	6.45	5.86	10%	6.78	-5%
9410	1.07	1.16	-8%	1.90	-44%
9420	8.74	6.84	28%	10.00	-13%
9422	1.78	1.55	15%	1.48	20%
9424	5.67	5.19	9%	6.11	-7%
9426	5.52	5.34	3%	7.21	-23%
9501	4.36	4.00	9%	5.15	-15%
9507	3.03	2.56	18%	3.55	-15%
9516	2.26	1.99	14%	2.74	-18%
9519	6.09	6.50	-6%	7.99	-24%

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

**Comparison of Proposed September 1, 2021 Advisory Pure Premium Rates with Approved January 1, 2021
Advisory Pure Premium Rates and Industry Average Filed Pure Premium Rates as of January 1, 2021 (continued)**

<u>Class Code</u>	(1) <u>Proposed September 1, 2021 Advisory Pure Premium Rates</u>	(2) <u>Approved January 1, 2021 Advisory Pure Premium Rates</u>	(3) <u>Difference Between Proposed 9/1/2021 APPR & Approved 1/1/2021 APPR</u> (1)/(2)-1	(4) <u>Industry Average Filed Pure Premium Rates as of 1/1/2021</u>	(5) <u>Difference Between Proposed 9/1/2021 APPR & Industry Avg Filed PPR as of 1/1/2021</u> (1)/(4)-1
9521	4.90	4.81	2%	6.58	-26%
9522	7.19	5.99	20%	8.28	-13%
9529	4.87	4.50	8%	6.52	-25%
9531	3.20	2.91	10%	3.96	-19%
9549	11.08	9.94	11%	10.44	6%
9552	8.79	7.69	14%	11.84	-26%
9586	1.43	1.45	-1%	1.83	-22%
9610	1.44	1.35	7%	1.43	1%
9620	2.30	2.50	-8%	3.53	-35%

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

**Projected Loss Ratios for September 1, 2021 to August 31, 2022 Policies
Based on Alternative Loss Development Methodologies**

September 1, 2021 Filing Loss Development Methodology	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Two-Year Average Paid Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.285	0.311	0.596

Alternative Loss Development Methodologies¹	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
<u>Incurred Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.288	0.275	0.563
Latest Year (Unadjusted)	0.281	0.269	0.550
<u>Paid Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.293	0.322	0.615
Latest Year (Unadjusted)	0.272	0.303	0.575
Latest Year Adjusted for SB 1160 and Recent Pharmaceutical Cost Declines	—	0.300	—
Three-Year Average Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.289	0.319	0.608
Latest Year Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.282	0.305	0.587

¹ All loss development methodologies reflect a three-year average of paid loss development or a six-year average of incurred loss development applied after 108 months.

**Projected Loss Ratios for September 1, 2021 to August 31, 2022 Policies
Based on Alternative Trending Methodologies**

September 1, 2021 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 1.0% Medical Severity Trends, Applied to 2019	0.285	0.311	0.596

Alternative Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Separate Projections of WCIRB's Selected Frequency and Severity Trends Applied to the Latest Two Years	0.289	0.299	0.588
Separate Projections of WCIRB's Selected Frequency and Long-Term (1990 to 2020) Severity Trends Applied to 2019	0.286	0.353	0.639
Separate Projections of WCIRB's Selected Frequency and Short-Term (2015 to 2019) Severity Trends Applied to 2019	0.268	0.302	0.570
1990 to 2020 On-Level Loss Ratio Exponential Trend Applied to 2019	0.277	0.344	0.621
2015 to 2019 On-Level Loss Ratio Exponential Trend Applied to 2019	0.250	0.286	0.536

ULAE to Loss Ratio Projections for September 1, 2021 to August 31, 2022 Policies

September 1, 2021 Filing ULAE Projection Methodology	Ratio of ULAE to Loss Based on Statewide with Private Insurer Average ULAE
Paid ULAE Per Open Indemnity Claim Applied to the Latest Two Years	13.5%
Latest Two Calendar Year Paid ULAE to Loss Ratios	14.0%
Average of Open Indemnity Claim-Based and Paid Loss-Based Projections	13.7%

Alternative ULAE Projection Methodologies	Ratio of ULAE to Loss Based on Statewide with Private Insurer Average ULAE
Paid ULAE to Paid Loss Projection Applied to the Latest Two Years	12.1%
Paid ULAE Per Open Indemnity Claim Applied to the Latest Year Only	12.7%
Paid ULAE Per Open Indemnity Claim Applied to the Latest Two Years with Open Indemnity Claims Projected Based on Estimated Ultimate Indemnity Claim Settlement Rates	14.4%
Latest Calendar Year Paid ULAE to Loss Ratio	13.1%

ALAE¹ to Loss Ratio Projections for September 1, 2021 to August 31, 2022 Policies

September 1, 2021 Filing ALAE Projection Methodology	Ratio of ALAE to Loss Based on Statewide with Private Insurer Average ALAE
Projected Ultimate ALAE Per Indemnity Claim – 2-Year Average Adjusted Paid ALAE Development – Trend Applied to 2019	15.9%

Alternative ALAE Projection Methodologies	Ratio of ALAE to Loss Based on Statewide with Private Insurer Average ALAE
Projected Ultimate ALAE Per Indemnity Claim – Latest Year Adjusted Paid ALAE Development – Trend Applied to 2019	15.6%
Projected Ultimate ALAE Per Indemnity Claim – 2-Year Average Adjusted Paid ALAE Development – Trend Applied to 2019 and 2020	15.3%

MCCP Cost to Loss Ratio Projections for September 1, 2021 to August 31, 2022 Policies

September 1, 2021 Filing MCCP Cost Projection Methodology	Statewide Ratio of MCCP to Loss
Projected Ultimate MCCP Per Indemnity Claim – 2-Year Average Paid MCCP Development – Trend Applied to 2019	3.9%

Alternative MCCP Cost Projection Methodologies	Statewide Ratio of MCCP to Loss
Projected Ultimate MCCP Per Indemnity Claim – Latest Year Paid MCCP Development – Trend Applied to 2019	3.8%
Projected Ultimate MCCP Per Indemnity Claim – 2-Year Average Paid MCCP Development – Trend Applied to 2019 and 2020	3.8%

¹ Excludes the cost of medical cost containment programs (MCCP).

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, 2021. 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, 2021 Regulatory Filing submitted on February 26, 2021 (September 1, 2021 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, 2021 Regulatory Filing are adjusted to reflect (a) the overall indicated difference in the level of losses projected for policies incepting between September 1, 2021 and August 31, 2022 (as computed in Section B), segregated into its indemnity and medical components, (b) the inclusion of loss adjustment expenses (LAE), (c) the estimated impact of significant changes to medical fee schedules recently adopted by the Division of Workers' Compensation (DWC) and (d) the impact of experience rating on pure premium.

The projected indemnity loss factor of 1.0574 is computed as the ratio of the projected ratio of indemnity losses to pure premium at the industry average filed pure premium rate level as of January 1, 2021 of 0.285 (see Section B, Exhibit 8, line 1) to the product of (a) the implied expected provision for indemnity losses in the January 1, 2021 advisory pure premium rates of 0.3434¹ and (b) the ratio of the average January 1, 2021 advisory pure premium rate of \$1.46 per \$100 of payroll to the industry average filed pure premium rate as of January 1, 2021 of \$1.86 per \$100 of payroll. The projected medical loss factor (prior to the impact of the recently adopted DWC fee schedule changes) of 0.9966 is computed as the ratio of the projected ratio of medical losses to pure premium at the industry average filed pure premium rate level as of January 1, 2021 of 0.311 (see Section B, Exhibit 8, line 1) to the product of (a) the implied expected provision for medical losses in the January 1, 2021 advisory pure premium rates of 0.3976² and (b) the ratio of the average January 1, 2021 advisory pure premium rate of \$1.46 per \$100 of payroll to the industry average filed pure premium rate as of January 1, 2021 of \$1.86 of \$100 of payroll.

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 33.5% (see Section B, Appendix C), the estimated impact of the recently adopted DWC fee schedule changes of 3.8% of medical losses (see Section B, Appendices D and E) and the selected experience rating off-balance correction factor of 1.015 (see Part A, Section C, Appendix B of the January 1, 2021 Regulatory Filing).

¹ This factor represents the loss provision in the January 1, 2021 advisory pure premium rates (i.e., 1/1.349 or 0.741) apportioned to indemnity based on the indemnity (0.4634) and medical (0.5366) split reflected in the overall selected loss to payroll ratios included in Part A, Section C, Appendix C of the September 1, 2021 Regulatory Filing.

² This factor represents the loss provision in the January 1, 2021 advisory pure premium rates (i.e., 1/1.349 or 0.741) apportioned to medical based on the indemnity (0.4634) and medical (0.5366) split reflected in the overall selected loss to payroll ratios included in Part A, Section C, Appendix C of the September 1, 2021 Regulatory Filing.

	<u>Indemnity</u>	<u>Medical</u>
(1) Projected Loss Factors		
(a) Projected Loss to Industry Average Filed Pure Premium Rate as of January 1, 2021	0.285	0.311
(b) Expected Loss Provision in January 1, 2021 Advisory Pure Premium Rates	0.3434	0.3976
(c) Ratio of Average January 1, 2021 Advisory Pure Premium Rate to Industry Average Filed Pure Premium Rate as of January 1, 2021	0.7849	0.7849
(d) Projected Loss Factors: [(a) / [(b) x (c)]]	1.0574	0.9966
(2) Loss Adjustment Expense Factor	1.335	1.335
(3) Impact of DWC Fee Schedule Changes	N/A	0.038
(4) Experience Rating Off-Balance Factor	1.015	1.015
(5) Composite Factors: [(1d) x (2) + (1d) x (3)] ³ x (4)	1.433	1.389

In summary, the September 1, 2021 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, 2021 Regulatory Filing by the indemnity composite factor of 1.433 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 January 1, 2021 Regulatory Filing by the medical composite factor of 1.389 shown above and (c) adding the resulting products.

For example, the proposed September 1, 2021 pure premium rate for Classification 4496, *Plastics – fabricated products mfg.*, of \$5.54 per \$100 of payroll is computed by multiplying the indemnity Selected (Unlimited) Loss to Payroll Ratio of 1.685 (see Part A, Section C, Appendix C of the September 1, 2021 Regulatory Filing) by the indemnity composite factor of 1.433 and adding that result to the product of the medical Selected (Unlimited) Loss to Payroll Ratio of 2.252 (see Part A, Section C, Appendix C of the September 1, 2021 Regulatory Filing) and the medical composite factor of 1.389.

³ Line 3 only applies to the medical component.

Proposed September 1, 2021 Pure Premium Rates
Effective September 1, 2021 on New and Renewal Policies
Effective on or after September 1, 2021

Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*
0005	4.54	2108	5.48	3039	5.97	3651	2.43	4420	8.51	5184	2.29	6204	6.62
0016	6.39	2109	4.37	3040	6.50	3681	0.73	4432	3.35	5185	4.85	6206	3.21
0034	5.84	2111	3.98	3060	5.62	3682	1.26	4470	2.03	5186	2.07	6213	1.60
0035	4.76	2113	7.95	3066	4.64	3683	1.00	4478	4.97	5187	2.50	6216	2.80
0036	7.05	2116	4.79	3070	0.29	3719	1.83	4492	5.29	5190	3.99	6218	5.41
0038	7.97	2117	6.97	3076	5.27	3724	3.98	4494	5.55	5191	2.02	6220	3.10
0040	3.43	2121	2.68	3081	8.43	3726	1.89	4495	3.32	5192	3.70	6233	1.86
0041	4.62	2123	5.52	3082	12.87	3805	1.00	4496	5.54	5193	1.02	6235	3.56
0042	4.85	2142	2.36	3085	8.27	3808	3.75	4497	3.97	5195	3.13	6237	1.99
0044	4.77	2163	5.98	3099	3.59	3815	5.02	4498	3.94	5201	7.04	6251	4.05
0045	4.02	2222	4.58	3110	5.82	3821	7.09	4499	5.83	5205	4.49	6258	5.64
0050	6.42	2362	14.69	3131	4.38	3828	3.64	4511	0.48	5212	6.14	6307	7.41
0079	2.89	2402	9.16	3146	2.60	3830	1.64	4512	0.23	5213	4.71	6308	3.02
0096	4.79	2413	4.99	3152	3.00	3831	2.73	4557	3.13	5214	4.69	6315	4.44
0106	11.03	2501	5.30	3165	3.64	3840	4.12	4558	2.93	5222	5.95	6316	3.92
0171	5.46	2570	9.73	3169	3.60	4000	2.54	4611	1.41	5225	5.16	6325	3.05
0172	3.79	2571	8.03	3175	3.07	4034	4.98	4623	5.51	5348	4.81	6361	3.59
0251	4.55	2576	5.52	3178	1.94	4036	4.44	4635	2.37	5403	10.63	6364	4.96
0400	3.63	2584	5.68	3179	3.24	4038	5.91	4665	6.79	5432	4.77	6400	5.11
0401	6.85	2585	6.84	3180	5.35	4041	3.24	4683	3.56	5436	4.20	6504	6.46
1122	2.41	2589	4.36	3220	2.02	4049	3.33	4691	1.31	5443	5.31	6834	5.10
1123	14.17	2660	7.48	3241	3.63	4111	2.52	4692	1.48	5446	5.74	7133	2.43
1124	3.95	2683	4.88	3257	4.95	4112	0.41	4717	4.18	5447	2.81	7198	8.07
1320	1.61	2688	5.35	3339	6.21	4114	2.73	4720	3.24	5467	8.07	7207	8.03
1322	4.62	2702	16.78	3365	4.52	4130	6.26	4740	1.05	5470	3.28	7219	6.75
1330	2.45	2710	5.84	3372	4.92	4150	2.61	4771	1.37	5473	8.78	7227	7.44
1438	5.40	2727	10.86	3383	3.25	4239	2.81	4828	2.48	5474	8.59	7232	8.74
1452	2.61	2731	4.89	3400	6.68	4240	8.85	4829	1.54	5479	5.68	7248	1.50
1463	3.26	2757	7.56	3401	4.35	4243	3.44	4831	4.34	5482	4.60	7272	7.21
1624	3.50	2759	7.46	3501	5.83	4244	4.38	4983	2.91	5484	10.59	7332	2.68
1699	1.60	2790	1.76	3507	4.19	4250	3.99	5020	3.56	5485	6.63	7360	5.24
1701	2.91	2797	7.65	3560	2.85	4251	3.48	5027	8.68	5506	4.37	7365	5.65
1710	3.73	2806	5.11	3568	2.43	4279	5.06	5028	4.46	5507	3.66	7382	6.58
1741	3.41	2812	5.38	3569	1.69	4283	2.84	5029	5.11	5538	5.38	7392	5.23
1803	7.22	2819	7.02	3570	3.58	4286	6.07	5040	9.26	5542	2.67	7403	5.66
1925	10.41	2840	3.55	3572	0.90	4295	6.22	5102	5.81	5552	22.38	7405	1.77
2002	7.42	2842	6.51	3573	1.23	4297	0.21	5107	4.52	5553	8.62	7409	7.81
2003	6.44	2852	6.64	3574	3.35	4299	4.42	5108	8.18	5606	0.85	7410	4.59
2014	4.60	2881	5.46	3577	1.28	4304	7.87	5128	1.36	5610	3.69	7421	1.56
2030	3.48	2883	13.53	3612	2.83	4312	5.17	5129	0.50	5632	10.63	7424	1.59
2063	4.05	2915	5.11	3620	6.08	4351	2.65	5130	1.05	5633	4.77	7428	2.99
2081	10.68	2923	3.46	3632	2.63	4354	2.33	5140	1.53	5650	5.74	7429	2.05
2095	6.26	3018	2.93	3634	2.91	4361	1.68	5146	4.63	5951	0.54	7500	2.93
2102	5.49	3022	4.67	3643	2.19	4362	1.93	5160	1.65	6003	11.80	7515	1.06
2107	3.95	3030	7.08	3647	5.23	4410	6.19	5183	5.63	6011	6.13	7520	2.93

*Pure Premium Rates are per \$100 of payroll unless otherwise noted. Note that payroll limitations apply to Classifications 7607, 7610, 8743, 8803, 8820, 8859, 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.

Proposed September 1, 2021 Pure Premium Rates
Effective September 1, 2021 on New and Renewal Policies
Effective on or after September 1, 2021
(Continued)

Legend:

(A) See below

Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*	Class Code	P.P. Rate*
7538	2.44	8042	3.36	8324	3.25	8804	2.91	8875	0.77	9154	2.69		
7539	1.67	8046	3.00	8350	4.64	8806	3.12	9007	3.40	9155	1.24		
7580	2.91	8057	3.26	8370	2.00	8807	0.30	9008	8.32	9156	3.86		
7600	9.52	8059	2.94	8387	3.20	8808	0.46	9009	2.82	9180	2.91		
7601	3.03	8060	1.82	8388	4.56	8810	0.23	9010	4.41	9181	9.75		
7605	2.52	8061	3.22	8389	3.16	8811	0.23	9011	3.68	9182	1.26		
7607	0.27	8062	1.25	8390	3.00	8812	0.23	9015	4.81	9184	9.70		
7610	0.56	8063	3.42	8391	2.71	8813	0.53	9016	3.08	9185	12.54		
7706	5.12	8064	2.92	8392	2.82	8818	0.70	9031	4.29	9220	5.38		
7707	(A)	8065	2.20	8393	2.69	8820	0.36	9033	3.88	9402	3.34		
7720	2.78	8066	1.21	8397	2.97	8821	0.94	9043	1.33	9403	6.45		
7721	3.22	8071	1.09	8400	2.04	8822	0.52	9048	2.87	9410	1.07		
7722	(A)	8078	1.37	8500	5.95	8823	3.33	9050	6.43	9420	8.74		
7855	3.09	8102	1.46	8601	0.31	8827	3.18	9053	1.60	9422	1.78		
8001	4.34	8106	5.32	8631	(A)	8829	3.28	9054	4.03	9424	5.67		
8004	3.55	8107	2.15	8720	1.50	8830	1.33	9059	2.20	9426	5.52		
8006	3.83	8116	2.81	8729	0.82	8831	1.63	9060	3.32	9501	4.36		
8008	2.25	8117	3.53	8740	0.79	8834	0.67	9061	3.50	9507	3.03		
8010	2.90	8209	5.39	8741	0.11	8838	1.16	9066	2.88	9516	2.26		
8013	1.19	8215	8.02	8742	0.35	8839	0.71	9067	1.60	9519	6.09		
8015	3.90	8227	3.81	8743	0.17	8840	0.33	9069	4.01	9521	4.90		
8017	2.65	8232	5.66	8744	0.35	8846	1.32	9070	4.71	9522	7.19		
8018	5.50	8267	7.16	8745	6.42	8847	7.26	9079	2.72	9529	4.87		
8019	1.74	8278	(A)	8746	0.35	8850	1.95	9085	3.11	9531	3.20		
8021	6.60	8286	6.69	8748	0.91	8851	3.34	9092	2.21	9549	11.08		
8028	4.30	8290	3.15	8749	0.23	8852	1.71	9095	3.53	9552	8.79		
8031	5.08	8291	4.44	8755	0.80	8859	0.04	9096	10.52	9586	1.43		
8032	5.12	8292	8.05	8800	3.09	8868	0.70	9097	3.52	9610	1.44		
8039	2.53	8293	9.94	8801	0.65	8870	0.92	9101	4.27	9620	2.30		
8041	6.70	8304	7.01	8803	0.14	8871	0.23	9151	0.70				

Per Capita
Classifications

Firefighters, Police, Police Deputies, etc.

Class Code	P.P. Rate*
------------	------------

Firefighting Operations - volunteers

7707 280.97

Police, Sheriffs - volunteers

7722 109.74

Horse Racing
Classifications

Horse Racing

Class Code	P.P. Rate*
------------	------------

Jockeys or Harness Racing Drivers (per race)

8278 185.34

Racing Stables (per occupied stall day)

8631 5.00

*Pure Premium Rates are per \$100 of payroll unless otherwise noted. Note that payroll limitations apply to Classifications 7607, 7610, 8743, 8803, 8820, 8859, 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.

Section B**Computation of Indicated Average Pure Premium Rate for Policies Incepting between September 1, 2021 and August 31, 2022**

The projected ratio of losses to premium at the industry average filed pure premium rate level as of January 1, 2021 for policies incepting between September 1, 2021 and August 31, 2022 based on experience through December 31, 2020, prior to reflecting the cost impact of the recent updates to the Official Medical Fee Schedule (OMFS) and the new Medical-Legal Fee Schedule (MLFS) adopted by the Division of Workers' Compensation (DWC), is 59.6%. The projected provision for loss adjustment expenses (LAE) is 33.5% of losses. The projected cost impact of the updates to the OMFS is a 2.4% increase in medical losses (see Appendix D). The projected cost impact of the new Medical-Legal Fee Schedule is a 1.4% increase in medical losses (see Appendix E). In total, the projected loss and LAE as a percentage of premium at the industry average filed pure premium rate level as of January 1, 2021, after reflecting the DWC updates to the OMFS and MLFS, is 80.8%. After reflecting a 0.4% indicated decrease in the experience rating off-balance correction factor (see Part A, Section C, Appendix B of the WCIRB's September 1, 2021 Regulatory Filing), the result is an indicated -19.6% difference from the industry average filed pure premium rate as of January 1, 2021 of \$1.86 per \$100 of payroll. The resulting indicated average pure premium rate for policies incepting between September 1, 2021 and August 31, 2022 is \$1.50 per \$100 of payroll.

The data and actuarial methodologies underlying the computation of the indicated average pure premium rate for policies incepting between September 1, 2021 and August 31, 2022 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 2020, valued as of December 31, 2020. A summary of the 1983 through 2020 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 2020. (The December 31, 2020 experience of a number of insurers that were in liquidation by the fourth quarter of 2020 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, 2020 for accident years 1983 through 2020.¹ Exhibit 1 also shows, for informational purposes, the incurred but not reported (IBNR) losses reported by insurers as of December 31, 2020, 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 system. In particular, approximately 68,000 claims arising out of a diagnosis of COVID-19 have been filed in the insured market for accident year 2020.² The WCIRB believes these claims reflect the uniqueness of the COVID-19 pandemic and may not be indicative of claim costs that will incur on policies incepting between

¹ As in prior pure premium rate filings, due to a change in the 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.

² Reported first report of injuries in the insured market as of April 12, 2021 based on DWC data. Many of these claims were filed in 2021 coming out of the winter surge of COVID-19 infections.

September 1, 2021 and August 31, 2022. As a result, the WCIRB has excluded COVID-19 claims from Exhibit 1 and other exhibits that include accident year 2020 based on the data reported on the WCIRB's Special Call for COVID-19 Claim Data Evaluated as of December 31, 2020. (For informational purposes, a summary of COVID-19 claim costs evaluated as of December 31, 2020 is included in Exhibit 1 of Appendix B.) The potential cost of claims arising from a COVID-19 diagnosis on policies incepting between September 1, 2021 and August 31, 2022 is discussed later in this Section.

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, 2020. However, the amount of losses reported for the accidents that occur in a particular year will change over time and the final cost of these accidents 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 accidents 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, 2020 are adjusted, or developed, to reflect the estimated ultimate cost of all accidents 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.³

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 and for the sharp decreases in pharmaceutical costs that have occurred since 2013. These methodologies, which are discussed in detail in Appendix A, are summarized below.

Indemnity Loss Development

The WCIRB is projecting future indemnity loss development primarily based on (a) a two year-average of historical paid indemnity age-to-age loss development factors through 108 months and (b) 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.

Changes in the rate claims are settled can affect paid loss development patterns. As shown in Appendix A, Exhibit 2, since the implementation of Senate Bill No. 863 (SB 863) in 2013, indemnity claim settlement rates increased steadily through the pre-pandemic period. Beginning in the second quarter of 2020, the COVID-19 pandemic and stay-at-home orders have significantly impacted claim activity, particularly the rate that claims are settling. As shown in Appendix A, Exhibit 2, claim settlement rates for accident years 2018 and 2019 at the current evaluation are significantly below the same evaluation of the prior year. If no adjustment to loss development is made, 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.⁴ As a result, the WCIRB is adjusting paid indemnity loss development through 84 months for the sharp changes in indemnity claim settlement rates, which is consistent with the methodology used in the last several pure premium rate

³ 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.

⁴ See Item AC17-03-03 of the March 21, 2017 WCIRB Actuarial Committee Agenda.

filings. Exhibits 2.5.3 through 2.5.8 show the adjustment for changes in claim settlement rates applied to paid indemnity loss development.

Earlier this year, the WCIRB studied the potential impact of the COVID-19 pandemic on loss development emerging in 2020.⁵ The WCIRB's study found that paid loss development in the second quarter of 2020 was significantly distorted by the pandemic while paid development in the third and fourth quarters of 2020 were more consistent with pre-pandemic patterns. The WCIRB's study also found that the adjustment for changes in claim settlement rates substantially corrected for the impact of the distortion in the second quarter. However, given the recent volatility in loss development patterns emerging during the pandemic period, the WCIRB utilized a two-year average of the claim settlement rate-adjusted age-to-age factors to project future indemnity loss development.

Although the WCIRB found in its recent study that the claim settlement rate adjustments significantly mitigated the impact of the pandemic on projected development for 2019 and prior accident years, projected development for accident year 2020 may still be distorted given the unique and significant changes in exposure levels and claim patterns experienced during the pandemic period on newer claims. At this time, it is not clear how to further adjust for these potential pandemic-related impacts on accident year 2020 development. As a result, the WCIRB also based the projected accident year 2020 development through 84 months on the two-year average of the claim settlement rate-adjusted age-to-age factors. (The appropriateness of using accident year 2020 in the loss ratio projection is discussed later in this Section.)

The longer-term acceleration in claim settlement rates since the SB 863 reforms also impacts later period loss development as fewer claims being open in more mature periods lead to fewer future payments being made. Although claim settlement rates have begun to slow recently, 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.⁶ As a result, the WCIRB adjusted paid loss development applied after 276 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 January 1, 2021 Pure Premium Rate Filing. (See Appendix A for a more thorough 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 average of the latest two paid indemnity age-to-age development factors adjusted for changes in claim settlement rates through 84 months. In consideration of the recent volatility in paid development patterns during the pandemic as discussed above, paid indemnity development from 84 months through 108 months is also projected using the average of the latest two paid indemnity age-to-age development factors. 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 432 months on the average of the latest three paid indemnity age-to-age development factors, with the factors after 276 months adjusted for the impact of changes in claim settlement rates on later period development as discussed above.

Losses continue to develop even after 432 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

⁵ See Item AC21-02-02 of the February 16, 2021 and March 16, 2021 WCIRB Actuarial Committee Agendas.

⁶ See Item AC19-08-05 of the August 4, 2020 WCIRB Actuarial Committee Agenda.

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.⁷

Medical Loss Development

The WCIRB is projecting future medical loss development primarily based on (a) a two-year average of the historical paid medical age-to-age loss development factors through 108 months and (b) 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 and recent shifts in pharmaceutical cost patterns.

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% based on the most recent available DWC information on lien filings.⁸ A 2018 WCIRB study showed that, prior to the reforms, liens represented a significant proportion of paid medical loss development, particularly at mid-maturities.⁹ 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.

Some SB 1160 provisions also affected liens that had already been filed prior to the January 1, 2017 effective date of SB 1160. In July 2017, the DWC dismissed approximately 292,000 liens which did not comply with the provisions of SB 1160. In 2018, the WCIRB analyzed the potential impact of the DWC lien dismissals on medical loss development patterns and found that the dismissed liens should have a significant impact on paid medical development emerging after July 2017.¹⁰ As a result, the WCIRB has adjusted medical payments made prior to July 1, 2017 to reflect the impact of the DWC lien dismissals in the age-to-age factor computation on accident years 2011 to 2016. This adjustment is made consistent with the approach reflected in the last several pure premium rate filings.

Since 2013, pharmaceutical costs have decreased sharply. In 2019 the WCIRB studied the impact of the recent 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.¹¹ 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 computation 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 prior two pure premium rate filings.

As discussed above, changes in claim settlement rates can distort paid loss development patterns if no adjustment is made. Given the recent decreases in claim settlement rates for accident years 2018 through 2020, 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 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 also discussed above, given the impact of the COVID-19 pandemic on loss development emerging in 2020, particularly for medical losses, the WCIRB utilized a

⁷ See Item AC19-08-05 of the August 1, 2019 WCIRB Actuarial Committee Agenda.

⁸ This has been updated from 60% which was reflected in the January 1, 2021 Pure Premium Rate Filing. See Exhibit M9.2 of Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Agenda for the most recent DWC information on lien filings.

⁹ See Item AC18-03-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda.

¹⁰ See Item AC18-03-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda.

¹¹ See Item AC19-06-03 of the June 14, 2019 WCIRB Actuarial Committee Agenda.

two-year average of the claim settlement rate-adjusted age-to-age factors to project future medical loss development rather than the latest year's factor.¹²

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 adjusted paid medical loss development applied after 276 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 development.

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, 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 an average of the latest two factors and development from 108 months through 432 months is projected using an average of the latest three factors, with the adjustments as discussed above. Paid medical loss development beyond 432 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.

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, 2020. 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, 2020.¹³ Column 2 of Exhibit 3.2 shows the historical paid medical loss ratios as of December 31, 2020 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 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, are applied. Column 3 of Exhibit 3.2 shows the age-to-age paid medical development factor selected for each evaluation period, which include the adjustments for the impact of the DWC dismissed liens pursuant to SB 1160 and the recent decreases in pharmaceutical costs. Column 4 of Exhibit 3.2 shows the cumulative medical development factor for each period including the adjustment for the impact of SB 1160 and AB 1244 lien reforms on projected cumulative medical loss development. Column 5 of Exhibit 3.2 shows the developed medical loss ratio for each accident year adjusted to a 2018 pharmaceutical cost level based on the adjusted cumulative medical loss development factor shown in column 4 and the adjusted paid or incurred medical loss ratio shown in column 2. These loss ratios are used for the sole purpose of computing the indicated September 1, 2021 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

¹² See Item AC21-02-02 of the February 16, 2021 and March 16, 2021 WCIRB Actuarial Committee Agendas.

¹³ Medical loss ratios shown for accident years 2011 and subsequent do not include MCCC costs while those for accident years 2010 and prior include MCCC costs.

were incurred. 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. 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. 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. (See Appendix B for more information.) Column 2 of Exhibit 4.1 shows the estimated impact of these actions 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 shown in column 3 of Exhibit 4.1 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 recent economic slowdown, 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, 2021 and August 31, 2022.

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, several 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. (The recent significant updates to the OMFS and MLFS recently adopted by the DWC are discussed separately in Appendices D and E, respectively.)

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 (a) statutory reforms and (b) legislative or regulatory changes or judicial action not otherwise reflected. (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.) 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, 2021 and August 31, 2022.

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, 2021 and August 31, 2022, 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 2020 and the average of wage level forecasts produced by the UCLA Anderson School of Business (as of March 2021) and California Department of Finance (as of November 2020). These average wage changes are typically derived based on aggregate changes in total wages and salaries compared to aggregate changes in total employment.

The COVID-19 pandemic has resulted in a sudden and significant slowdown in the California economy. During a recession, the mix of industries can shift significantly and impact the aggregate average wage level and the loss of lower wage, less experienced employees within industries can drive measures of average wages artificially upward. In particular for the recent economic slowdown, the reductions in employment levels have been greatest in the hospitality and entertainment industries which tend to have lower than average wages. In addition, a review of Current Population Survey (CPS) data for California provided by the Economic Policy Institute (EPI) shows that employment losses were much more significant for lower wage workers even within industries.¹⁴ As a result, the almost 10% increase in the average wage measure for 2020 shown in column 1 of Exhibit 5.1 is significantly impacted by these shifts and does not reflect the 2020 wage increase for the typical California worker performing the same job year-to-year. Similarly, the modest increases projected for 2021 to 2023 likely are artificially deflated by the return of workers in these lower wage industries and at lower wage levels within industries.

This year, the WCIRB studied the impact of the economic slowdown on the pure premium rate indications.¹⁵ The WCIRB found that projected shifts in the mix of industries resulted in an estimated 1.8% increase in average wages for 2020 and 0.4% decrease in average wages for 2021 (the estimated impact of this shift on 2022 and 2023 was immaterial). The WCIRB's study also estimated an approximate 4.3% increase in average wages for 2020 resulting from the loss of lower wage employees within industries based on the CPS data from the EPI. To project the expected wage level underlying policies incepting between January 1, 2021 and August 31, 2022, the impact of these shifts in the mix of employments were removed from the average wage changes for the purposes of on-leveling premium for policies incepting between September 1, 2021 and August 31, 2022. In addition, the WCIRB assumed projected average wages for 2021, 2022 and 2023 are artificially lowered by 1.4%, 1.0% and 0.4%, respectively, as a result of a return of lower wage employment within industries for these years.¹⁶ The average wage changes adjusted for the impact of each of these factors are shown in column 2 of Exhibit 5.1. (These adjustments are also reflected in the adjustments to indemnity benefits for the impact of changes in average wages shown in Exhibit 4.1 and 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

¹⁴Current Population Survey Extracts, Version 1.0.15, Economic Policy Institute 2021. <https://microdata.epi.org>.

¹⁵ See Item AC20-08-04 of the March 16, 2021 and April 15, 2021 WCIRB Actuarial Committee Agendas.

¹⁶ This assumed "unwinding" of the impact of shifts in the wage distribution within industries was based on a review of projected shifts in industrial mix for these years as well as judgmental assumptions. See Item AC 20-08-04 of the April 15, 2021 WCIRB Actuarial Committee Agenda and Appendix B for more information.

and 3.2 reflect the actual rates charged by insurers including the impact of most rating plan adjustments such as schedule rating.¹⁷ To determine the indicated difference from the industry average filed pure premium rate as of January 1, 2021, the earned premium generated for each year is adjusted to reflect the premium that would have been generated had the industry average filed pure premium rates as of January 1, 2021 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 industry average filed pure premium rate level as of January 1, 2021. The factors reflect both the historical changes in advisory pure premium rates that are needed to adjust each year's earned premium to the current (January 1, 2021) advisory pure premium rate level and an additional factor to adjust from the January 1, 2021 average advisory pure premium rate level to the industry average filed pure premium rate level as of January 1, 2021. 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 industry average filed pure premium rates as of January 1, 2021 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 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.

The COVID-19 pandemic and resultant economic slowdown significantly impacted exposure levels and premiums in 2020. The WCIRB recently studied the impact on earned premiums in calendar year 2020 to determine if an adjustment to on-level premium similar to that applied during the Great Recession years was appropriate.¹⁸ The WCIRB's study found that (a) the recent slowdown was sudden and sharp coming in early 2020 compared to the gradual changes experienced during the Great Recession that impacted several years, (b) many insurers reflected the impact of the slowdown in their in-force policies or policy renewals in part as a result of directives from the Insurance Commissioner and (c) there was no indication of reduced calendar year 2020 premiums arising from audit adjustments on 2019 policies due to reduced 2019 exposure. As a result, the WCIRB has not applied any adjustment to the 2020 earned premium to reflect the recent economic slowdown.

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, 2021 and August 31, 2022. The WCIRB is using a trending methodology based on applying separate projections of growth in claim frequency and claim severity to the 2019 on-level loss ratio, 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.¹⁹

¹⁷ These premiums do not reflect the impact of deductible credits, retrospective rating plan adjustments, or terrorism charges.

¹⁸ See Item AC21-03-05 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

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

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, 2021 and August 31, 2022. 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 displays the indemnity loss to pure premium ratios developed to an estimated ultimate level from Exhibit 3.1. 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 2020 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, 2021 and August 31, 2022 had been in effect for each historical year and the premium for each historical year had been generated at the industry average filed pure premium rate level as of January 1, 2021 and at the average wage level projected for policies incepting between September 1, 2021 and August 31, 2022. These indemnity on-level loss ratios are also shown graphically in Exhibit 7.2.

The WCIRB's forecast changes in claim frequency are primarily based on its econometric indemnity claim frequency model. However, in a 2012 WCIRB analysis of trending methodologies, it was noted that frequency changes using a full year of preliminary actual frequency information were more predictive of the actual frequency change for that year than the change forecast based on the WCIRB's frequency model.²⁰ In particular, the COVID-19 pandemic and economic slowdown has resulted in significant shifts in exposure levels, industrial mix and the mix of injuries occurring. As a result, the projected frequency change for accident year 2020 is based on the preliminary 2020 "intra-class" frequency change of -4.9%, which is shown in Appendix B, Exhibit 3. This measure is estimated as a ratio of changes in reported indemnity claim counts (excluding COVID-19 claims) from accident year 2019 to accident year 2020 as of December 31, 2020 adjusted 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. Although accident year 2020 claim frequency is significantly impacted by the pandemic, the WCIRB believes the preliminary frequency change based on 12 months continues to be a more reliable predictor of the actual accident year 2020 indemnity claim frequency change than the WCIRB's frequency model projection, which ignore actual reported 2020 indemnity claims. (See Appendix B for more information.)

Consistent with the last several pure premium rate filings, projected frequency changes for accident years 2021 through 2023 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). Exhibit 6.1 shows the WCIRB's indemnity claim frequency model forecasts. The forecasts for 2021 through 2023 reflect economic data included in the March 2021 UCLA forecast. This includes the impact of the recent economic slowdown which in accordance with the WCIRB's model results in modest increases in intra-class indemnity claim frequency forecast for accident years 2021 through 2023 as the economy recovers. Although these modest forecast increases are smaller than the frequency increases experienced shortly after the Great Recession, the WCIRB believes these projections to be reasonable given that the steady growth in the economic variable projected for 2021 through 2023 is well within the range of the model's forty-year history.

To project the average annual indemnity severity trend, the WCIRB reviewed historical changes in on-level indemnity severities in both the long-term and short-term. Exhibit 6.2 shows estimated ultimate and on-level indemnity severities by accident year. Long-term on-level indemnity severity growth since 1990 is approximately 1% per year, which includes prior periods of sharp growth as well as more recent periods of declining indemnity severities. In 2018 and 2019, on-level indemnity claim severities increased at a rate

²⁰ See Item AC12-12-02 of the March 20, 2013 WCIRB Actuarial Committee Agenda.

just above 1% per year after declining at a steady rate over the prior eight years. Some of this increase appears to be driven by recent increases in temporary disability duration,²¹ which with a continued sluggish economy and deceleration of the claim settlement process is likely to continue in the short-term. Average on-level indemnity severities show a more significant increase for 2020, but the WCIRB believes this preliminary estimate to be impacted by economic factors and shifts in the injury mix caused by the pandemic. In particular, paid indemnity at earlier maturities primarily includes temporary disability benefits which have higher weekly maximums and, as a result, are more significantly impacted by changes in average wages of injured workers than are permanent disability benefits. However, general growth in on-level indemnity severities over the most recent three years suggests that some positive on-level indemnity severity trend is appropriate. As a result, the WCIRB has selected a 1.0% average annual on-level indemnity severity trend, which is somewhat lower than the estimated changes for the two most recent accident years but gives some consideration to the prior period of modestly declining on-level indemnity severities. This average annual indemnity severity trend is also consistent with that reflected in the WCIRB's January 1, 2021 Pure Premium Rate Filing.

In prior pure premium rate filings, the WCIRB has applied its selected frequency and average annual on-level severity trends to the average of the most recent two accident years. As discussed above, the COVID-19 pandemic has significantly impacted exposure, premium and claim cost levels for accident year 2020. Although COVID-19 claims have been excluded from the accident year 2020 information included in this projection, the economic slowdown has had a significant impact on classification mix, the number of claims filed, medical services delivered and the overall claim resolution process. In particular, the projected development of accident year 2020 indemnity and medical losses may be significantly understated as a result of the slowdown of the claim resolution process during the pandemic period. Given these significant and likely temporary impacts in various cost components, the WCIRB does not believe accident year 2020 is an appropriate basis to project the loss ratio for policies incepting between September 1, 2021 and August 31, 2022. As a result, the WCIRB is basing the projected loss ratio for policies incepting between September 1, 2021 and August 31, 2022 by applying the recommended trending rates discussed above to the accident year 2019 ratio only.

Column 4 of Exhibit 7.1 shows the projected indemnity loss ratio for policies incepting between September 1, 2021 and August 31, 2022 based on the accident year 2019 on-level indemnity ratio 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 0.285.

Trended On-Level Medical Loss Ratio

Exhibit 7.3 shows accident year on-level medical loss to industry average filed 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 7.4.²²

Similar to indemnity, the WCIRB recommends projecting the on-level medical loss ratio for policies incepting between September 1, 2021 and August 31, 2022 based on the accident year 2019 on-level medical loss ratio 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 MCCP costs while those for accident years 2010 and prior do include MCCP costs. In order to compare medical severity trends on a consistent basis, Exhibit 6.4 shows estimated ultimate medical severities with MCCP costs included in all years. Additionally, Exhibit 6.4 also shows for accident years 2005 and later estimated ultimate medical severities exclusive of MCCP costs for all years with estimated MCCP costs excluded from accident years 2010 and prior based on calendar year MCCP paid costs from WCIRB aggregate financial data calls.

²¹ See Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Meeting presentation.

²² As discussed above, projections of on-level medical loss ratios for accident years 2011 and subsequent do not include MCCP costs while those for accident years 2010 and prior include MCCP 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.

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. For medical in particular, losses occurring on policies incepting between September 1, 2021 and August 31, 2022 will be paid over a very extended period as, for example, over one-half of policy year 2022 losses are expected to be paid in 2025 or later and over one-quarter in 2030 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 appropriate to consider long-term medical severity trends in addition to short-term trends in projecting future growth in medical severities.

Since 1990, long-term on-level medical severity growth in California has averaged approximately 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. Over the last decade, with the enactment of SB 863 and subsequent reform, on-level medical severities have generally been flat to declining. In particular, the average annual on-level medical severity trend from 2015 to 2019 has been essentially flat (as shown in Exhibit 6.4). Although average on-level medical severities grew by 5% in 2018, they decreased by approximately half that amount in 2019. Average on-level medical severities show another modest decrease in 2020 but, as with indemnity, the WCIRB believes this preliminary estimate to be heavily impacted by the COVID-19 pandemic. In particular for medical, the estimate for 2020 may be understated due to deferred treatment during the pandemic or shifts in the mix of injury types as significantly fewer medical-only claims were filed during the pandemic.

As discussed above, the WCIRB believes both long-term and short-term trends should be considered in selecting an average annual medical severity trend. Although the reforms of SB 863 and SB 1160 have resulted in significant decreases to average medical costs; these reforms became effective 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. As a result, the WCIRB believes giving some consideration to the longer-term medical severity trend is appropriate. Given these considerations, the WCIRB selected an average annual medical severity trend of 1.0%, which is modestly higher than the average flat growth over the last several years but corresponds with the approximate average rate of growth in 2018 and 2019 (the two most recent pre-pandemic years) and gives some consideration to the long-term moderate rate of growth.

Column 4 of Exhibit 7.3 shows the projected medical loss ratio for policies incepting between September 1, 2021 to August 31, 2022 based on the accident year 2019 on-level medical loss ratio adjusted by the WCIRB’s selected frequency projections and an average annual medical severity trend projection of 1.0% per year. The medical loss ratio projected on this basis, prior to reflecting the impact of the recent DWC updates to the MLFS and OMFS, is 0.311.

Computation of Projected Loss Adjustment Expenses

The WCIRB’s projection of the cost of LAE on policies incepting between September 1, 2021 and August 31, 2022 is discussed in Appendix C. As indicated in Appendix C, the WCIRB estimates that the ratio of total LAE to losses is 33.5%.

Evaluation of the Impact of COVID-19 Claims

In the January 1, 2021 Pure Premium Rate Filing, given that tens of thousands of COVID-19 claims were being filed in the California workers’ compensation system and that the effects of the COVID-19 pandemic were expected to continue into 2021, the WCIRB included a provision for the expected cost of future COVID-19 claims in the proposed January 1, 2021 advisory pure premium rates.²³ In light of the current success of the COVID-19 vaccines, the external models and published research in part relied upon by the WCIRB in the January 1, 2021 Pure Premium Rate Filing are now forecasting that the U.S. population would potentially be near herd immunity by the summer of 2021 as a results of a substantial

²³ The proposed January 1, 2021 advisory pure premium rates reflected a provision of 3.8% or \$0.06 per \$100 of payroll to reflect expected costs arising on COVID-19 claims incurred against policies incepting between January 1, 2021 and August 31, 2021.

share of population being vaccinated coupled with ongoing infections.²⁴ As a result, the WCIRB is not reflecting a provision for projected COVID-19 claims on policies incepting between September 1, 2021 and August 31, 2022 in this filing.

Evaluation of Updates to Medical Fee Schedules

The WCIRB's projection of the cost impact of the DWC's March 1, 2021 updates to the Evaluation and Management sections of the OMFS on policies incepting between September 1, 2021 and August 31, 2022 is discussed in Appendix D. As indicated in Appendix D, the WCIRB estimates that the fee schedule updates will increase medical costs by 2.4%.

The WCIRB's projection of the cost impact of the DWC's April 1, 2021 Medical-Legal Fee Schedule on policies incepting between September 1, 2021 and August 31, 2022 is discussed in Appendix E. As indicated in Appendix E, the WCIRB estimates that the new fee schedule will increase medical costs by 1.4%.²⁵

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, 2021 to August 31, 2022 is discussed in Part A, Section C, Appendix B of the WCIRB's September 1, 2021 Regulatory Filing submitted on February 26, 2021. As indicated in that filing, the WCIRB projects an experience rating off-balance factor for policies incepting between September 1, 2021 and August 31, 2022 of 1.015, which is 0.4% lower than the current experience rating off-balance factor effective January 1, 2021.

Computation of the Indicated Average Pure Premium Rate

Line 1 of Exhibit 8 displays the projected ratios of on-level indemnity and medical losses to premium at the industry average filed pure premium rate level as of January 1, 2021 as computed in Exhibits 7.1 and 7.3. The projected ratio of total losses to premium, prior to the impact of the DWC updates to the MLFS and OMFS, is 0.596. Line 2 of Exhibit 8 shows the estimated ratio of LAE to losses of 33.5% (see Appendix C). Line 3 of Exhibit 8 shows the projected loss and LAE ratio at the industry average filed pure premium rate level as of January 1, 2021, prior to the impact of the DWC updates to the OMFS and MLFS, of 0.796.

Line 4 of Exhibit 8 shows the estimated impact of the March 1, 2021 updates to the OMFS of 2.4% of medical losses (see Appendix D). Line 5 of Exhibit 8 shows the estimated impact of the April 1, 2021 MLFS of 1.4% of medical losses (see Appendix E). Inasmuch as the WCIRB is not projecting LAE to grow proportionately with the increased medical losses resulting from the fee schedule updates, these increases are applied to the medical loss ratio shown in line 1 of Exhibit 8 rather than the loss and LAE ratio shown in line 3 of Exhibit 8. Line 6 of Exhibit 8 shows the projected loss and LAE ratio at the industry average filed pure premium rate level as of January 1, 2021, after reflecting the impact of the DWC updates to the OMFS and MLFS, of 0.808.

Line 7 of Exhibit 8 shows the -0.4% indicated change in the experience rating off-balance correction factor for policies incepting between September 1, 2021 and August 31, 2022 (see Part A, Section C, Appendix B of the WCIRB's September 1, 2021 Regulatory Filing). Line 8 of Exhibit 8 shows the -19.6% difference in the indicated pure premium rate level from the industry average filed pure premium rate level as of January 1, 2021. Line 9 of Exhibit 8 shows the industry average filed pure premium rate as of January 1, 2021 of \$1.86 per \$100 of payroll, which is computed as described in Exhibit 1 of the Executive Summary. Line 10 of Exhibit 8 shows the indicated average September 1, 2021 pure premium rate of \$1.50 per \$100 of payroll. The indicated average pure premium rate of \$1.50 is 2.7% higher than the average of the approved January 1, 2021 advisory pure premium rates of \$1.46.

²⁴ IHME COVID-19 Projection. COVID-19 projections at: <https://covid19-projections.com/path-to-herd-immunity/>; When Could the United States Reach Herd Immunity? It's Complicated, NYT, Feb. 20, 2021. <https://www.nytimes.com/interactive/2021/02/20/us/us-herd-immunity-covid.html?action=click&module=Top%20Stories&pgtype=Homepage> <https://jamanetwork.com/journals/jama/fullarticle/2777785>.

²⁵ These two fee schedule changes also impact the cost of medical services on claims incurred on earlier policies. However, the WCIRB is not recommending an adjustment to the outstanding advisory pure premium rates to reflect these additional costs.

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

<u>Year</u>	<u>Earned Premium</u>	<u>Paid Indemnity</u>	<u>Indemnity Reserves</u>	<u>Paid Medical**</u>	<u>Medical Reserves</u>	<u>IBNR*</u>	<u>Total Incurred**</u>	<u>Loss Ratio*</u>
1983	2,016,821,999	816,331,089	3,383,347	635,164,194	11,749,857	11,221,665	1,477,850,152	0.733
1984	2,388,795,989	1,068,000,227	2,821,697	796,206,116	9,706,258	19,512,049	1,896,246,347	0.794
1985	2,823,354,059	1,259,597,309	3,513,764	975,578,441	16,210,773	13,360,188	2,268,260,475	0.803
1986	3,506,054,575	1,384,637,384	4,527,032	1,146,908,217	20,199,882	19,183,511	2,575,456,026	0.735
1987	4,373,509,816	1,507,664,683	7,342,594	1,337,649,576	43,787,130	47,596,278	2,944,040,261	0.673
1988	5,172,229,109	1,704,401,135	6,406,940	1,544,833,279	33,614,616	37,641,304	3,326,897,274	0.643
1989	5,675,115,503	1,940,878,987	6,762,863	1,805,759,128	41,477,009	41,835,131	3,836,713,118	0.676
1990	5,704,524,437	2,261,984,157	7,450,278	2,049,444,452	37,340,277	59,420,213	4,415,639,377	0.774
1991	5,866,491,692	2,480,860,317	14,539,699	2,207,458,851	42,832,128	57,578,574	4,803,269,569	0.819
1992	5,685,231,287	1,979,451,384	13,620,885	1,769,477,560	44,554,297	52,324,023	3,859,428,149	0.679
1993	5,934,618,230	1,695,530,148	10,766,238	1,520,177,029	53,375,081	52,796,225	3,332,644,721	0.562
1994	5,030,976,034	1,629,531,748	20,633,505	1,473,384,226	78,424,851	33,737,760	3,235,712,090	0.643
1995	3,789,174,380	1,770,360,235	23,785,006	1,634,237,967	82,012,088	43,777,024	3,554,172,320	0.938
1996	3,746,680,214	1,961,858,797	28,286,828	1,728,437,744	83,793,251	55,222,253	3,857,598,873	1.030
1997	3,926,898,608	2,326,384,512	33,212,666	2,027,055,511	106,847,788	94,312,667	4,587,813,144	1.168
1998	4,332,127,034	2,783,947,187	43,902,705	2,663,743,709	197,800,608	165,770,945	5,855,165,154	1.352
1999	4,550,437,880	3,064,143,243	46,132,679	3,055,921,517	150,398,698	236,983,102	6,553,579,239	1.440
2000	5,921,821,993	3,436,861,930	61,430,717	3,580,337,584	189,851,967	376,650,983	7,645,133,181	1.291
2001	10,118,688,616	4,862,338,565	85,397,071	5,410,747,850	307,233,360	613,721,095	11,279,437,941	1.115
2002	13,432,760,460	4,790,891,371	83,226,333	5,525,276,541	276,032,844	890,219,431	11,565,646,520	0.861
2003	19,472,988,351	4,578,575,851	124,304,328	5,104,559,793	307,066,623	1,255,340,403	11,369,846,998	0.584
2004	23,092,633,294	3,230,246,990	108,251,376	4,087,468,965	245,913,462	1,397,182,529	9,069,063,322	0.393
2005	21,394,600,575	2,552,564,658	92,590,938	3,689,821,040	227,944,444	1,098,575,990	7,661,497,070	0.358
2006	17,233,032,862	2,637,421,999	103,342,847	3,792,973,132	263,356,963	750,235,944	7,547,330,885	0.438
2007	13,276,770,615	2,788,130,805	108,853,561	4,068,527,799	285,660,272	710,792,023	7,961,964,460	0.600
2008	10,765,114,133	2,828,448,677	133,130,756	4,061,699,457	302,269,533	612,878,886	7,938,427,309	0.737
2009	8,901,420,752	2,703,503,460	131,100,606	3,866,027,723	315,628,652	474,632,305	7,490,892,746	0.842
2010	9,408,127,723	2,723,494,461	129,626,954	3,975,506,831	271,027,473	553,978,537	7,653,634,256	0.814
2011	10,141,174,044	2,696,007,354	136,972,770	3,598,685,666	293,766,451	717,537,865	7,442,970,106	0.734
2012	11,718,095,745	2,740,593,692	174,238,728	3,497,603,809	335,851,276	797,701,226	7,545,988,731	0.644
2013	14,186,071,217	2,778,369,303	175,063,225	3,335,383,852	344,074,054	1,396,696,880	8,029,587,314	0.566
2014	16,014,478,353	2,898,817,284	228,391,811	3,250,969,755	393,139,016	1,823,701,179	8,595,019,045	0.537
2015	17,059,790,388	2,897,183,808	304,670,798	3,129,766,912	512,339,228	2,345,880,397	9,189,841,143	0.539
2016	17,949,045,779	2,728,640,909	389,459,234	2,925,489,749	618,467,854	3,180,352,277	9,842,410,023	0.548
2017	17,671,411,530	2,479,476,624	558,365,213	2,682,889,580	829,330,362	2,855,151,594	9,405,213,373	0.532
2018	17,426,895,842	2,121,150,355	834,435,205	2,401,344,344	1,127,823,747	3,253,561,772	9,738,315,423	0.559
2019	16,095,972,721	1,454,666,678	1,103,236,857	1,713,790,043	1,509,468,299	3,875,638,112	9,656,799,989	0.600
2020	14,051,708,388	454,879,533	811,103,620	618,789,324	1,343,809,740	5,188,007,574	8,416,589,791	0.599

* Shown for informational purposes only.

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

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

Incurred Indemnity Loss Development Factors

Accident Year	Age-to-Age (in months)															
	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	<u>108/96</u>	<u>120/108</u>	<u>132/120</u>	<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1995												1.003	1.000	1.002	1.002	1.000
1996											1.004	1.000	1.000	1.000	1.001	1.002
1997										1.005	1.002	1.002	1.003	1.002	1.001	1.001
1998									1.004	1.004	1.002	1.003	1.004	1.001	1.002	1.001
1999								1.006	1.007	1.004	1.002	1.003	1.003	1.002	1.002	1.001
2000							1.011	1.008	1.004	1.004	1.005	1.003	1.001	1.004	1.002	1.000
2001						1.021	1.014	1.009	1.006	1.007	1.006	1.005	1.003	1.002	1.001	1.001
2002					1.033	1.018	1.011	1.010	1.010	1.007	1.005	1.003	1.002	1.002	1.003	1.001
2003				1.056	1.033	1.021	1.018	1.015	1.015	1.009	1.006	1.004	1.003	1.002	1.002	1.004
2004			1.083	1.042	1.041	1.026	1.028	1.018	1.014	1.007	1.007	1.003	1.001	1.002	1.006	1.001
2005		1.218	1.098	1.068	1.053	1.040	1.028	1.016	1.012	1.006	1.005	1.006	1.003	1.004	1.004	
2006	1.690	1.247	1.111	1.080	1.053	1.035	1.023	1.015	1.009	1.007	1.004	1.005	1.002	1.005		
2007	1.784	1.273	1.120	1.070	1.049	1.037	1.022	1.012	1.011	1.005	1.007	1.010	1.001			
2008	1.858	1.302	1.136	1.074	1.045	1.030	1.019	1.012	1.009	1.006	1.007	1.006				
2009	1.983	1.293	1.142	1.076	1.048	1.024	1.019	1.014	1.009	1.010	1.005					
2010	1.994	1.315	1.131	1.069	1.045	1.026	1.016	1.012	1.012	1.006						
2011	1.997	1.277	1.133	1.061	1.037	1.022	1.019	1.011	1.008							
2012	1.992	1.279	1.113	1.063	1.041	1.023	1.016	1.013								
2013	1.931	1.259	1.111	1.055	1.032	1.020	1.013									
2014	1.960	1.278	1.115	1.059	1.029	1.016										
2015	1.969	1.260	1.101	1.047	1.027											
2016	1.941	1.246	1.095	1.046												
2017	1.911	1.241	1.089													
2018	1.901	1.228														
2019	1.900															
Selected (a)	1.900	1.228	1.089	1.046	1.027	1.016	1.013	1.013	1.010	1.007	1.006	1.006	1.002	1.003	1.003	1.002
Cumulative	2.996	1.577	1.284	1.179	1.127	1.098	1.080	1.067	1.053	1.043	1.036	1.030	1.024	1.022	1.019	1.016

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

Incurred Indemnity Loss Development Factors (Continued)

Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	Age-to-Age (in months)										348/336	360/348	372/360	384/372	396/384	408/396	420/408	432/420	ULT/432Inc (b)
1983								1.001	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	
1984							1.000	1.000	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	0.999	1.000	1.000	1.001	1.001	
1985						1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001	1.001	
1986					1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.000	0.999	1.001	1.001	1.000	1.000	1.000	1.000	1.001	1.001	
1987				1.000	0.999	1.000	1.001	1.001	1.001	1.002	1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	
1988			1.000	1.001	1.001	1.001	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	1.000	1.000	1.001	1.001	1.001	1.001	1.001	
1989		1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.001	1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001	
1991	1.000	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	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001	
1992	0.998	1.001	1.001	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001	
1993	0.999	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	
1994	1.001	1.001	1.002	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	
1995	1.003	1.001	0.998	1.001	1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	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	1.003	1.000	1.000	1.000	1.000	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1997	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1998	1.003	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1999	1.000	1.000	1.000	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	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
2000	1.002	1.001	1.001	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	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
2001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
2002	1.001	1.002	1.002	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	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
2003	1.002																										

Selected (a)
Cumulative

(b) The ULT/432Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Incurred Medical Loss Development Factors

Accident Year	Age-to-Age (in months) (b)															
	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	<u>108/96</u>	<u>120/108</u>	<u>132/120</u>	<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1995																
1996											1.014	1.023	1.028	1.016	1.005	1.009
1997										1.023	1.030	1.024	1.018	1.013	1.014	1.005
1998									1.038	1.023	1.020	1.012	1.015	1.012	1.003	1.007
1999								1.038	1.030	1.019	1.018	1.013	1.011	1.013	1.005	0.999
2000							1.044	1.028	1.017	1.024	1.018	1.018	1.012	1.006	0.999	0.995
2001						1.045	1.040	1.034	1.035	1.022	1.017	1.015	1.013	1.001	0.997	0.994
2002					1.056	1.042	1.036	1.029	1.028	1.022	1.014	1.010	0.999	0.997	1.000	0.999
2003				1.059	1.060	1.042	1.042	1.037	1.029	1.018	1.011	1.003	0.998	0.999	1.001	1.006
2004			1.113	1.081	1.060	1.061	1.043	1.032	1.026	1.012	1.006	1.001	0.996	0.998	1.002	1.000
2005		1.172	1.087	1.074	1.084	1.055	1.045	1.032	1.020	1.006	1.006	0.999	1.000	1.000	1.000	
2006	1.460	1.196	1.103	1.081	1.066	1.048	1.040	1.022	1.012	1.000	1.001	1.006	0.999	1.003		
2007	1.518	1.204	1.124	1.081	1.070	1.050	1.032	1.018	1.004	1.008	1.001	1.004	0.996			
2008	1.527	1.212	1.129	1.092	1.061	1.041	1.026	1.010	1.005	1.002	1.005	0.999				
2009	1.604	1.227	1.140	1.087	1.061	1.030	1.016	1.007	1.006	1.008	1.001					
2010	1.620	1.245	1.134	1.077	1.045	1.025	1.012	1.008	1.010	1.005						
2011	1.667	1.222	1.125	1.069	1.034	1.016	1.010	1.010	1.002							
2012	1.592	1.188	1.092	1.056	1.031	1.015	1.015	1.006								
2013	1.559	1.150	1.086	1.039	1.022	1.014	1.006									
2014	1.523	1.159	1.079	1.035	1.027	1.011										
2015	1.511	1.146	1.064	1.030	1.018											
2016	1.498	1.124	1.045	1.031												
2017	1.440	1.117	1.051													
2018	1.449	1.110														
2019	1.452															
Selected (a)	1.452	1.110	1.051	1.031	1.018	1.011	1.006	1.006	1.007	1.005	1.003	1.002	0.998	1.000	1.000	0.999
Cumulative	1.844	1.270	1.144	1.088	1.056	1.037	1.026	1.020	1.013	1.007	1.002	0.999	0.997	0.999	0.999	0.999

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

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

Incurred Medical Loss Development Factors (Continued)

Accident Year	Age-to-Age (in months)															
	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384
1983							1.000	1.001	1.006	1.004	1.002	1.006	1.003	1.004	1.003	0.997
1984							1.002	1.003	1.003	1.002	1.003	1.001	1.003	1.001	0.997	0.998
1985						1.000	1.001	1.003	1.003	1.003	1.005	1.001	1.003	1.001	0.997	1.001
1986					1.005	1.003	1.006	1.005	1.006	1.004	1.005	1.000	1.002	0.998	1.001	1.000
1987				1.000	1.003	1.011	1.009	1.007	1.003	1.004	1.005	1.001	1.002	0.998	1.001	1.002
1988				1.006	1.005	1.005	1.002	1.005	1.003	1.003	1.002	0.998	0.999	1.000	1.001	1.001
1989		1.007	1.006	1.005	1.005	1.008	1.006	1.000	1.003	0.999	0.999	0.999	0.999	1.002	0.999	
1990		1.007	1.007	1.005	1.003	1.003	1.003	0.997	1.002	1.000	1.000	0.998	0.999	1.000		
1991	1.003	1.005	1.006	1.002	1.003	1.002	1.003	1.001	1.000	0.999	0.998	1.000	1.001			
1992	1.008	1.004	1.002	1.005	1.003	1.005	1.000	0.999	1.001	0.999	1.002	0.999	0.999	1.000		
1993	1.007	1.011	1.014	1.004	0.999	1.000	0.996	0.999	0.998	0.998	0.997					
1994	1.011	1.004	1.007	1.006	1.001	0.996	0.995	1.002	0.999	0.998						
1995	1.015	0.996	1.006	0.999	1.006	0.992	0.999	1.001	0.999							
1996	1.008	1.005	1.001	0.998	0.999	0.997	1.000	0.999								
1997	1.001	0.994	0.998	0.997	0.998	1.001	0.997									
1998	1.001	1.001	0.994	1.001	1.003	1.000										
1999	0.999	0.995	1.002	0.999	0.999											
2000	0.996	0.999	0.999	1.000												
2001	1.001	1.003	0.998													
2002	1.001	1.001														
2003	1.001															
Selected (a)	1.000	0.999	0.999	0.999	1.001	0.998	0.998	1.000	1.000	0.999	1.000	0.999	1.000	1.000	1.000	1.000
Cumulative	1.000	1.001	1.002	1.003	1.004	1.003	1.005	1.008	1.007	1.007	1.008	1.008	1.009	1.010	1.010	1.009

(c) The UL T/432Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Paid Indemnity Loss Development Factors

Accident Year	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	Age-to-Age (in months)					<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1995																		
1996													1.012	1.009	1.007	1.005	1.005	1.003
1997													1.012	1.009	1.006	1.006	1.004	1.004
1998													1.012	1.008	1.006	1.006	1.006	1.005
1999													1.011	1.009	1.009	1.007	1.006	1.006
2000													1.010	1.009	1.008	1.007	1.006	1.004
2001													1.012	1.011	1.008	1.007	1.005	1.004
2002													1.014	1.011	1.008	1.007	1.006	1.005
2003													1.015	1.008	1.008	1.006	1.006	1.005
2004													1.015	1.012	1.009	1.008	1.007	1.007
2005													1.020	1.013	1.009	1.008	1.009	1.006
2006													1.018	1.011	1.010	1.009	1.008	1.007
2007													1.021	1.012	1.009	1.008	1.007	1.006
2008													1.023	1.013	1.011	1.010	1.009	1.008
2009													1.026	1.015	1.011	1.010	1.009	1.008
2010													1.030	1.016	1.013	1.011	1.010	1.009
2011													1.035	1.018	1.013	1.011	1.010	1.009
2012													1.042	1.020	1.015	1.013	1.011	1.009
2013													1.035	1.020	1.015	1.013	1.011	1.009
2014													1.046	1.027	1.020	1.016	1.013	1.010
2015													1.041	1.027	1.020	1.015	1.010	1.009
2016													1.041	1.026	1.020	1.015	1.010	1.009
2017													1.038	1.023	1.019	1.015	1.010	1.009
2018													1.043	1.023	1.019	1.015	1.010	1.009
2019													1.034	1.023	1.019	1.015	1.010	1.009
Selected (a)	3.063	1.526	1.210	1.103	1.058	1.039	1.028	1.023	1.020	1.017	1.014	1.012	1.011	1.011	1.011	1.009	1.009	1.006
Cumulative	8.292	2.707	1.774	1.466	1.329	1.256	1.209	1.176	1.150	1.127	1.109	1.093	1.081	1.081	1.069	1.059	1.050	1.050

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

Age-to-Age (in months)

[illegible]

B-19

Paid Medical Loss Development Factors

Unadjusted (a) Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1995																
1996																
1997																
1998																
1999																
2000																
2001																
2002																
2003																
2004																
2005																
2006																
2007																
2008																
2009																
2010																
2011																
2012																
2013																
2014																
2015																
2016																
2017																
2018																
2019																

Adjusted (b) Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
2002																
2003																
2004																
2005																
2006																
2007																
2008																
2009																
2010																
2011																
2012																
2013																
2014																
2015																
2016																
2017																
2018																
2019																

Selected (c)

Cumulative Unadjusted
for Impact of SB 1160Cumulative Adjusted
for Impact of SB 1160(d)

- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.
- (b) These factors are adjusted for the losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
- (c) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors.
- (d) The cumulative factors for 48, 60, and 72 months are adjusted by -3.2%, -2.0%, and -1.1%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Adjusted (b)	Age-to-Age (in months)																				
	Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	432/420	ULT/432Pd (e)
1983																				1.003	
1984																			1.002	1.002	
1985																			1.002	1.002	
1986																		1.002	1.002	1.004	
1987																	1.004	1.003	1.004		
1988																1.004	1.002	1.003			
1989																1.004	1.003	1.002			
1990																1.004	1.003	1.005			
1991													1.002			1.004	1.003	1.002			
1992												1.004	1.004			1.004	1.003	1.002			
1993												1.004	1.006								
1994												1.009	1.004								
1995												1.005	1.009								
1996												1.005	1.005								
1997												1.007	1.007								
1998												1.008	1.009								
1999												1.010	1.006								
2000												1.008	1.008								
2001												1.009	1.006								
2002												1.010	1.009								
2003												1.011	1.007								
												1.009	1.010								
												1.011	1.010								
												1.009	1.009								
												1.010	1.010								
												1.011	1.011								
												1.009	1.009								
												1.010	1.010								
												1.012	1.012								

Workers' Compensation Insurance Rating Bureau of California®

Selected Indemnity Development Factors - Paid to Ultimate

Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	252/240	264/252
1994													1.007	1.006	1.003	1.003	1.004	1.003	1.003	1.003	1.002
1995												1.008	1.007	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.002
1996										1.016	1.012	1.009	1.009	1.006	1.004	1.004	1.005	1.004	1.003	1.003	1.002
1997										1.015	1.012	1.009	1.009	1.007	1.006	1.006	1.004	1.003	1.003	1.002	1.003
1998										1.021	1.015	1.011	1.009	1.008	1.007	1.006	1.006	1.004	1.003	1.003	1.002
1999								1.025	1.018	1.015	1.013	1.010	1.009	1.008	1.007	1.006	1.004	1.004	1.003	1.003	1.002
2000							1.035	1.025	1.016	1.013	1.010	1.009	1.009	1.008	1.007	1.006	1.004	1.004	1.003	1.003	1.002
2001						1.051	1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.006	1.005	1.005	1.005	1.004	1.003	1.002
2002					1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006	1.005	1.005	1.005	1.004	1.003	1.002
2003					1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.007	1.007	1.007	1.007	1.007	1.007	1.007
2004					1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009	1.009	1.008	1.009	1.009	1.009	1.009	1.009	1.009
2005		1.512	1.235	1.116	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013	1.010	1.010	1.010	1.009	1.009	1.009	1.009	1.009	1.009
2006	2.866	1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016	1.012	1.011	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020	1.016	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023	1.018	1.015	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031	1.023	1.019	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038	1.027	1.021	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013
2011	3.208	1.613	1.266	1.144	1.087	1.056	1.041	1.026	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016
2012	3.137	1.597	1.262	1.137	1.087	1.051	1.034	1.023	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016
2013	3.169	1.606	1.260	1.129	1.072	1.044	1.028	1.023	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
2014	3.229	1.635	1.257	1.129	1.071	1.039	1.028	1.023	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
2015	3.278	1.618	1.244	1.119	1.058	1.039	1.028	1.023	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
2016	3.235	1.586	1.230	1.103																	
2017	3.185	1.569	1.210																		
2018	3.110	1.526																			
2019	3.063																				
Selected (a)	3.060(b)	1.568(b)	1.230(b)	1.105(b)	1.058(b)	1.036(b)	1.031	1.025	1.020	1.017	1.014	1.012	1.011	1.009	1.009	1.006	1.006	1.004	1.003	1.003	1.003
Cumulative	8.628	2.820	1.799	1.462	1.324	1.251	1.208	1.171	1.143	1.121	1.103	1.087	1.075	1.063	1.053	1.044	1.038	1.032	1.028	1.024	1.022

(a) Selections are two-year averages 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 two-year average paid indemnity age-to-age factor multiplied by an adjustment for changes in claim settlement rates.

Selected Indemnity Development Factors - Paid to Ultimate (Continued)

Accident Year	Age-to-Age (in months)														
	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	432/420	ULT/432Pd (d)
1983			1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1984		1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.001	
1985	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
1986	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	
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	1.001	
1988	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1989	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	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	
1991	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1992	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1993	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1994	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1995	1.002	1.002	1.003	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1996	1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1997	1.003	1.003	1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
1998	1.003														
Unadjusted (a)	1.003	1.003	1.003	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.007
Selected (c)	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.005
Cumulative	1.019	1.016	1.014	1.013	1.012	1.011	1.010	1.009	1.008	1.008	1.007	1.007	1.006	1.006	1.005

(c) Adjusted for the impact of changes in claim settlement rates on later period development for 276 months and later. See Exhibits 2.5.9 through 2.5.12.

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

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

A. Total Reported Indemnity Claim Counts

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							120,832
2012						127,905	128,040
2013					135,757	136,001	136,198
2014				140,198	140,771	141,073	141,113
2015			143,583	144,411	144,826	145,185	
2016		142,750	146,833	147,842	148,278		
2017	118,037	143,999	147,352	148,427			
2018	119,874	146,953	150,393				
2019	122,243	149,395					
2020	106,971						

B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):						
<u>Year</u>	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-Ult</u>
2012						1.001	
2013					1.002	1.001	
2014				1.004	1.002	1.000	
2015			1.006	1.003	1.002		
2016		1.029	1.007	1.003			
2017	1.220	1.023	1.007				
2018	1.226	1.023					
2019	1.222						
Latest Year	1.222	1.023	1.007	1.003	1.002	1.000	
Cumulative	1.271	1.040	1.016	1.009	1.006	1.003	1.003

Acc. Year	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Ult. Claim Counts	135,923	155,328	152,789	149,700	149,110	145,639	141,514

C. Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							109,859
2012						113,035	117,855
2013					115,075	122,212	126,943
2014				109,607	121,366	128,066	131,979
2015			98,030	116,383	127,179	132,663	
2016		76,266	104,229	121,967	130,811		
2017	35,866	80,944	107,771	122,544			
2018	37,352	82,802	107,381				
2019	38,107	80,822					
2020	32,080						

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
2011							90.6%
2012						88.0%	91.8%
2013					84.3%	89.5%	92.9%
2014				77.5%	85.8%	90.5%	93.3%
2015			67.3%	79.9%	87.3%	91.1%	
2016		51.1%	69.9%	81.8%	87.7%		
2017	24.0%	54.1%	72.0%	81.9%			
2018	24.4%	54.2%	70.3%				
2019	24.5%	52.0%					
2020	23.6%						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2011							113,038
2012						116,948	119,736
2013					119,823	124,416	127,382
2014				115,843	124,147	128,906	131,979
2015			102,355	119,219	127,766	132,663	
2016		77,586	104,795	122,061	130,811		
2017	35,332	77,893	105,210	122,544			
2018	36,061	79,501	107,381				
2019	36,660	80,822					
2020	32,080						

F. Average Paid Indemnity per Closed Claim

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							18,460
2012						17,066	18,362
2013					15,455	17,122	18,253
2014				13,777	16,334	17,929	19,000
2015			10,888	14,485	16,882	18,269	
2016		6,545	11,027	14,466	16,445		
2017	2,591	6,644	11,134	14,346			
2018	2,872	7,022	11,390				
2019	3,152	7,052					
2020	3,289						

- (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
2011							19,555
2012						18,111	18,980
2013					16,545	17,640	18,384
2014				15,079	16,978	18,154	19,000
2015			11,645	15,080	17,025	18,269	
2016		6,708	11,123	14,486	16,445		
2017	2,562	6,233	10,599	14,346			
2018	2,800	6,581	11,390				
2019	3,068	7,052					
2020	3,289						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2011							2,210,435
2012						2,118,079	2,272,611
2013					1,982,468	2,194,667	2,341,809
2014				1,746,756	2,107,780	2,340,144	2,507,594
2015			1,191,974	1,797,800	2,175,265	2,423,660	
2016		520,482	1,165,636	1,768,116	2,151,228		
2017	90,515	485,548	1,115,115	1,758,010			
2018	100,969	523,175	1,223,122				
2019	112,461	569,980					
2020	105,510						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							456,025
2012						536,175	426,743
2013					637,104	497,166	385,964
2014				799,759	624,527	496,265	392,818
2015			900,929	761,793	591,679	473,979	
2016		769,030	862,526	710,797	577,920		
2017	317,153	768,513	850,084	721,695			
2018	339,707	808,531	898,029				
2019	354,759	884,687					
2020	349,370						

(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)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							41,559
2012						36,057	41,897
2013					30,805	36,054	41,703
2014				26,144	32,184	38,154	43,006
2015			19,778	27,180	33,529	37,852	
2016		11,567	20,245	27,470	33,086		
2017	3,860	7,719	18,282	27,883			
2018	4,117	8,233	20,879				
2019	4,216	12,901					
2020	4,665						

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
2011							-132,115
2012						-141,092	-78,809
2013					-146,263	-79,464	-18,308
2014				-163,008	-89,504	-32,049	
2015			-85,558	-77,109	-19,681		
2016		-15,269	-11,459	-2,582			
2017	2,061	23,552	46,820				
2018	5,314	27,178					
2019	6,101						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2011							323,910
2012						395,082	347,934
2013					490,841	417,702	367,656
2014				636,751	535,024	464,216	392,818
2015			815,370	684,684	571,998	473,979	
2016		753,761	851,067	708,214	577,920		
2017	319,214	792,064	896,904	721,695			
2018	345,022	835,708	898,029				
2019	360,860	884,687					
2020	349,370						

(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	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							2,534,345
2012						2,513,161	2,620,545
2013					2,473,309	2,612,369	2,709,465
2014				2,383,507	2,642,804	2,804,359	2,900,412
2015			2,007,344	2,482,484	2,747,263	2,897,638	
2016		1,274,243	2,016,704	2,476,331	2,729,148		
2017	409,729	1,277,612	2,012,019	2,479,705			
2018	445,991	1,358,883	2,121,150				
2019	473,321	1,454,667					
2020	454,880						

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2011						
2012						1.043
2013					1.056	1.037
2014				1.109	1.061	1.034
2015			1.237	1.107	1.055	
2016		1.583	1.228	1.102		
2017	3.118	1.575	1.232			
2018	3.047	1.561				
2019	3.073					
Latest Year	3.073	1.561	1.232	1.102	1.055	1.034
3-Year Average	3.079	1.573	1.232	1.106	1.057	1.038

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						1.051
2013					1.072	1.044
2014				1.129	1.071	1.039
2015			1.244	1.119	1.058	
2016		1.586	1.230	1.103		
2017	3.186	1.569	1.210			
2018	3.110	1.526				
2019	3.063					

- (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)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						-0.78%
2013					-1.47%	-0.64%
2014				-1.76%	-0.94%	-0.43%
2015			-0.55%	-1.10%	-0.31%	
2016		-0.23%	-0.19%	-0.05%		
2017	-2.11%	0.35%	1.89%			
2018	-2.02%	2.29%				
2019	0.33%					

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						1.043
2013					1.056	1.037
2014				1.109	1.061	1.035
2015			1.237	1.107	1.055	
2016		1.582	1.228	1.102		
2017	3.118	1.574	1.233			
2018	3.047	1.561				
2019	3.073					
Latest Year	3.073	1.561	1.233	1.102	1.055	1.035
2-Year Average	3.060	1.568	1.230	1.105	1.058	1.036
3-Year Average	3.079	1.573	1.233	1.106	1.057	1.038

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

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

Source: Accident year experience of insurers with available claim count data, 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	Evaluated as of (in months)									
<u>Year</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>
1989							211,504	211,592	211,649	211,714
1990						231,833	231,942	232,021	232,099	
1991					232,498	232,615	232,708	232,784		
1992				183,177	183,258	183,338	183,410			
1993			143,359	143,453	143,529	143,621				
1994		130,684	130,793	130,873	130,960					
1995	121,810	121,935	122,044	122,168						
1996	117,219	117,340	117,432							
1997	122,023	122,188								
1998	131,924									
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>
---------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

<u>2. Ult. Claim Counts (a)</u>	133,281	123,220	118,272	122,897	131,579	144,121	183,904	233,317	232,496	212,130
---------------------------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

3. Ultimate Indemnity Claim Settlement Ratio (b)

Accident	Evaluated as of (in months)									
<u>Year</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>	<u>384</u>
1989							99.7%	99.7%	99.8%	99.8%
1990						99.7%	99.8%	99.8%	99.8%	
1991					99.6%	99.7%	99.7%	99.8%		
1992				99.6%	99.6%	99.7%	99.7%			
1993			99.5%	99.5%	99.6%	99.7%				
1994		99.3%	99.4%	99.5%	99.5%					
1995	99.1%	99.2%	99.3%	99.4%						
1996	99.1%	99.2%	99.3%							
1997	99.0%	99.2%								
1998	99.0%									

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

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

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

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

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

Accident	Evaluated as of (in months)									
Year	<u>264-276</u>	<u>276-288</u>	<u>288-300</u>	<u>300-312</u>	<u>312-324</u>	<u>324-336</u>	<u>336-348</u>	<u>348-360</u>	<u>360-372</u>	<u>372-384</u>
1989								14.1%	10.6%	13.5%
1990							16.5%	14.3%	16.4%	
1991						14.3%	13.2%	12.5%		
1992					11.1%	12.4%	12.7%			
1993				12.3%	11.4%	15.5%				
1994			12.2%	10.2%	12.3%					
1995		11.5%	11.3%	14.5%						
1996	13.0%	11.5%	9.9%							
1997	12.9%	13.8%								
1998	13.2%									
1999										
3-Year Average	13.1%	12.3%	11.1%	12.4%	11.6%	14.1%	14.1%	13.6%	13.5%	13.5%
Share of Open on Prior (d)	86.9%	87.7%	88.9%	87.6%	88.4%	85.9%	85.9%	86.4%	86.5%	86.5%

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

Accident	Evaluated as of (in months)								
Year	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989									
1990									397
1991								533	461
1992							494	427	369
1993						500	430	371	321
1994					619	532	456	394	341
1995				729	644	554	475	411	355
1996			840	736	651	559	480	415	359
1997		1,032	918	804	711	611	524	453	392
1998	1,357	1,190	1,058	927	820	704	605	522	452
1999	1,281	1,124	999	875	774	665	571	493	427
...									
2019	392	344	306	268	237	203	175	151	131
2020	336	295	262	230	203	175	150	129	112

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

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

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

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

Accident	Evaluated as of (in months)								
<u>Year</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989								0.3%	0.2%
1990							0.2%	0.2%	0.2%
1991						0.3%	0.3%	0.2%	0.2%
1992					0.4%	0.3%	0.3%	0.2%	0.2%
1993				0.5%	0.4%	0.3%	0.3%	0.3%	0.2%
1994			0.6%	0.5%	0.5%	0.4%	0.3%	0.3%	0.3%
1995		0.8%	0.7%	0.6%	0.5%	0.5%	0.4%	0.3%	0.3%
1996	0.9%	0.8%	0.7%	0.6%	0.6%	0.5%	0.4%	0.4%	0.3%
1997	1.0%	0.8%	0.7%	0.7%	0.6%	0.5%	0.4%	0.4%	0.3%
1998	1.0%	0.9%	0.8%	0.7%	0.6%	0.5%	0.5%	0.4%	0.3%
1999	0.9%	0.8%	0.7%	0.6%	0.6%	0.5%	0.4%	0.4%	0.3%
...									
2019	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
2020	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
3-Year Historical Avg.	1.0%	0.8%	0.7%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%

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

Accident	Evaluated as of (in months)								
<u>Year</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989									
1990									
1991									0.99
1992								1.01	1.01
1993							1.16	1.13	1.12
1994						1.27	1.35	1.31	1.30
1995					1.28	1.41	1.51	1.46	1.45
1996				1.17	1.34	1.48	1.59	1.53	1.53
1997			1.12	1.23	1.40	1.56	1.66	1.61	1.60
1998		1.11	1.19	1.31	1.50	1.66	1.77	1.71	1.71
1999	0.99	1.04	1.11	1.22	1.39	1.54	1.65	1.60	1.59
...									
2019	0.26	0.28	0.30	0.32	0.37	0.41	0.44	0.42	0.42
2020	0.26	0.27	0.29	0.32	0.36	0.40	0.43	0.42	0.41

(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>276-288</u>	<u>288-300</u>	<u>300-312</u>	<u>312-324</u>	<u>324-336</u>	<u>336-348</u>	<u>348-360</u>	<u>360-372</u>	<u>372-384</u>

8. 3-Year Average (h)

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

9. Adjustment Ratio (i)

Accident Year 2019	0.71	0.71	0.72	0.73	0.75	0.76	0.78	0.77	0.77
Accident Year 2020	0.70	0.71	0.72	0.73	0.75	0.76	0.77	0.77	0.77

10. Adjusted Factors (j)

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

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

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

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

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

Selected Medical Development Factors - Paid to Ultimate

Adjusted (a)(b) Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	252/240	264/252
1997																					
1998																					
1999																				1.009	1.008
2000																			1.010	1.009	1.010
2001																			1.010	1.009	1.006
2002																		1.009	1.007	1.006	
2003																	1.011	1.011	1.010		
2004																1.011	1.010	1.009			
2005															1.013	1.011	1.012				
2006													1.016	1.015	1.013	1.014	1.010				
2007												1.017	1.016	1.012	1.013	1.013					
2008											1.022	1.018	1.013								
2009										1.026	1.021	1.014									
2010									1.032	1.026	1.019										
2011									1.047	1.031	1.020										
2012									1.063	1.043	1.025										
2013									1.085	1.052	1.031										
2014									1.131	1.080	1.045										
2015									1.226	1.114	1.064										
2016									1.417	1.199	1.100										
2017									2.386	1.393	1.178										
2018									2.378	1.378											
2019									2.347												
Selected (c)	2.348(d)	1.395(d)	1.195(d)	1.102(d)	1.065(d)	1.043(d)	1.037	1.028	1.024	1.020	1.018	1.015	1.015	1.013	1.013	1.011	1.011	1.010	1.009	1.008	1.008
Cumulative Unadjusted for Impact of SB 1160	6.706	2.856	2.047	1.714	1.555	1.460	1.400	1.350	1.313	1.282	1.257	1.235	1.216	1.198	1.182	1.167	1.154	1.142	1.131	1.121	1.112
Cumulative Adjusted for Impact of SB 1160(e)	6.489	2.763	1.981	1.658	1.524	1.444	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

(b) These factors are adjusted for the losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -2.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

(c) Selections are two-year averages 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 two-year average paid medical age-to-age factor multiplied by an adjustment for changes in claim settlement rates.

(e) The cumulative factors for 48, 60, and 72 months are adjusted by -3.2%, -2.0%, and -1.1%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Ultimate (Continued)

Accident Year	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	432/420	ULT/432Pd (g)
1983														1.003	
1984													1.002	1.002	
1985													1.002	1.002	
1986													1.004	1.004	
1987													1.003	1.003	
1988													1.004	1.004	
1989													1.002	1.002	
1990													1.004	1.004	
1991													1.003	1.003	
1992													1.005	1.005	
1993													1.004	1.004	
1994													1.003	1.003	
1995													1.004	1.004	
1996													1.003	1.003	
1997													1.062	1.062	
1998													1.054	1.054	
Unadjusted (c)	1.009	1.008	1.007	1.006	1.006	1.005	1.003	1.003	1.003	1.004	1.003	1.003	1.003	1.002	1.073
Selected (f)	1.009	1.005	1.005	1.004	1.004	1.003	1.002	1.003	1.002	1.003	1.002	1.002	1.002	1.002	1.050
Cumulative	1.103	1.093	1.088	1.082	1.078	1.073	1.069	1.067	1.064	1.062	1.058	1.056	1.054	1.052	1.050

(f) Adjusted for the impact of changes in claim settlement rates on later period development for 276 months and later. See Exhibits 2.5.9 through 2.5.12.

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

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							120,832
2012						127,905	128,040
2013					135,757	136,001	136,198
2014				140,198	140,771	141,073	141,113
2015			143,583	144,411	144,826	145,185	
2016		142,750	146,833	147,842	148,278		
2017	118,037	143,999	147,352	148,427			
2018	119,874	146,953	150,393				
2019	122,243	149,395					
2020	106,971						

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):						
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-Ult</u>
2012						1.001	
2013					1.002	1.001	
2014				1.004	1.002	1.000	
2015			1.006	1.003	1.002		
2016		1.029	1.007	1.003			
2017	1.220	1.023	1.007				
2018	1.226	1.023					
2019	1.222						
Latest Year	1.222	1.023	1.007	1.003	1.002	1.000	
Cumulative	1.271	1.040	1.016	1.009	1.006	1.003	1.003

Acc. Year	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Ult. Claim Counts	135,923	155,328	152,789	149,700	149,110	145,639	141,514

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							109,859
2012						113,035	117,855
2013					115,075	122,212	126,943
2014				109,607	121,366	128,066	131,979
2015			98,030	116,383	127,179	132,663	
2016		76,266	104,229	121,967	130,811		
2017	35,866	80,944	107,771	122,544			
2018	37,352	82,802	107,381				
2019	38,107	80,822					
2020	32,080						

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	84
2011						90.6%
2012						88.0%
2013					84.3%	89.5%
2014				77.5%	85.8%	90.5%
2015			67.3%	79.9%	87.3%	91.1%
2016		51.1%	69.9%	81.8%	87.7%	
2017	24.0%	54.1%	72.0%	81.9%		
2018	24.4%	54.2%	70.3%			
2019	24.5%	52.0%				
2020	23.6%					

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

Accident Year	Evaluated as of (in months)					
	12	24	36	48	60	84
2011						113,038
2012						116,948
2013					119,823	124,416
2014				115,843	124,147	128,906
2015			102,355	119,219	127,766	132,663
2016		77,586	104,795	122,061	130,811	
2017	35,332	77,893	105,210	122,544		
2018	36,061	79,501	107,381			
2019	36,660	80,822				
2020	32,080					

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)					
	12	24	36	48	60	84
2011						22,424
2012						19,413
2013					16,556	18,595
2014				13,669	16,372	18,160
2015			10,431	13,849	16,220	17,717
2016		6,471	10,486	13,496	15,509	
2017	2,835	6,648	10,635	13,467		
2018	2,972	6,954	11,098			
2019	3,405	6,685				
2020	2,861					

- (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	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							24,008
2012						20,788	21,900
2013					17,886	19,232	20,139
2014				15,042	17,092	18,401	19,309
2015			11,152	14,437	16,375	17,717	
2016		6,620	10,571	13,516	15,509		
2017	2,806	6,275	10,169	13,467			
2018	2,901	6,538	11,098				
2019	3,328	6,685					
2020	2,861						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							2,713,781
2012						2,431,063	2,622,263
2013					2,143,161	2,392,749	2,565,304
2014				1,742,461	2,121,896	2,371,998	2,548,351
2015			1,141,476	1,721,136	2,092,104	2,350,347	
2016		513,658	1,107,767	1,649,751	2,028,691		
2017	99,157	488,798	1,069,852	1,650,297			
2018	104,614	519,774	1,191,686				
2019	122,017	540,266					
2020	91,770						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							651,779
2012						695,878	572,636
2013					740,913	588,386	469,568
2014				843,115	661,299	538,829	447,520
2015			905,477	783,841	621,589	514,954	
2016		829,759	866,037	742,368	617,835		
2017	401,230	825,093	846,418	739,729			
2018	420,890	876,397	904,571				
2019	402,573	880,823					
2020	369,577						

(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	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							59,398
2012						46,797	56,221
2013					35,825	42,670	50,737
2014				27,561	34,079	41,426	48,995
2015			19,878	27,966	35,223	41,124	
2016		12,481	20,328	28,691	35,372		
2017	4,883	13,085	21,384	28,580			
2018	5,100	13,661	21,031				
2019	4,785	12,845					
2020	4,935						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							-188,827
2012						-183,118	-105,752
2013					-170,095	-94,044	-22,273
2014				-171,845	-94,774	-34,798	
2015			-85,990	-79,340	-20,676		
2016		-16,474	-11,505	-2,697			
2017	2,607	29,795	50,267				
2018	6,585	33,672					
2019	6,924						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							462,952
2012						512,760	466,884
2013					570,818	494,342	447,295
2014				671,270	566,525	504,032	447,520
2015			819,487	704,500	600,913	514,954	
2016		813,285	854,532	739,671	617,835		
2017	403,837	854,889	896,686	739,729			
2018	427,474	910,069	904,571				
2019	409,497	880,823					
2020	369,577						

(e) Each amount is equal to the product of [the average monthly medical payment per open indemnity claim] and [the number of months for the current evaluation]. For evaluations indicating claim settlement rate decreases, the average monthly medical payment per open indemnity claim at the prior evaluation is used. For evaluations indicating claim settlement rate increases, the average monthly medical payment per open indemnity claim at the same evaluation is used.

(f) Each amount is equal to [the difference between unadjusted and adjusted closed indemnity claim counts (Items C and E)] multiplied by [the corresponding average paid medical per open indemnity claim for indemnity claims in transition (Item J)].

(g) Each amount is the sum of [paid medical on open indemnity claims (Item I)] and the corresponding [incremental changes in paid medical on open indemnity claims resulting from the impact of changes in indemnity claim settlement rates (Item K)].

Source: Accident year experience of insurers with available claim count and paid loss data, 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)					
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u> <u>84</u>
2011						223,576
2012						229,460
2013					231,694	234,588
2014				247,413	251,500	253,886
2015			250,099	256,150	261,570	264,829
2016		255,275	266,631	274,527	279,553	
2017	187,254	274,301	285,930	292,957		
2018	200,860	290,214	305,089			
2019	197,950	292,701				
2020	157,443					

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

Accident Year	Evaluated as of (in months)					
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u> <u>84</u>
2011						3,681,054
2012						3,173,284
2013					2,945,673	3,121,680
2014				2,661,144	2,939,921	3,129,916
2015			2,211,062	2,681,786	2,954,587	3,130,130
2016		1,582,218	2,228,930	2,663,949	2,926,079	
2017	690,248	1,617,988	2,252,467	2,682,983		
2018	732,949	1,720,057	2,401,346			
2019	729,464	1,713,790				
2020	618,789					

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

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2012						1.046
2013					1.060	1.041
2014				1.105	1.065	1.039
2015			1.213	1.102	1.059	
2016		1.409	1.195	1.098		
2017	2.344	1.392	1.191			
2018	2.347	1.396				
2019	2.349					
Latest Year	2.349	1.396	1.191	1.098	1.059	1.039

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

Source: Accident year experience of insurers with available claim count and paid loss data, 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
2012						1.056
2013					1.076	1.048
2014				1.120	1.075	1.043
2015			1.217	1.111	1.062	
2016		1.410	1.196	1.099		
2017	2.373	1.391	1.178			
2018	2.378	1.378				
2019	2.347					

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						-0.87%
2013					-1.48%	-0.67%
2014				-1.37%	-1.00%	-0.37%
2015			-0.38%	-0.83%	-0.29%	
2016		-0.08%	-0.11%	-0.04%		
2017	-1.20%	0.05%	1.16%			
2018	-1.31%	1.30%				
2019	0.11%					

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						1.054
2013					1.069	1.045
2014				1.115	1.069	1.041
2015			1.221	1.105	1.061	
2016		1.416	1.198	1.100		
2017	2.357	1.394	1.192			
2018	2.347	1.396				
2019	2.350					
Latest Year	2.350	1.396	1.192	1.100	1.061	1.041
2-Year Average	2.348	1.395	1.195	1.102	1.065	1.043
3-Year Average	2.351	1.402	1.204	1.107	1.066	1.047

- (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, 2020**

Accident Year	(1) Paid Loss Ratio (a)	Development Factors		(4) Projected Ultimate Loss Ratio (4) = (1) x (3)
		(2) Annual (b)	(3) Cumulative	
1987	0.345	1.001	1.006	0.347
1988	0.330	1.001	1.007	0.332
1989	0.342	1.001	1.007	0.344
1990	0.397	1.001	1.008	0.400
1991	0.423	1.001	1.008	0.426
1992	0.348	1.001	1.009	0.351
1993	0.286	1.001	1.010	0.289
1994	0.324	1.001	1.011	0.327
1995	0.467	1.001	1.012	0.473
1996	0.524	1.001	1.013	0.530
1997	0.592	1.001	1.014	0.601
1998	0.643	1.002	1.016	0.653
1999	0.673	1.003	1.019	0.686
2000	0.580	1.003	1.022	0.593
2001	0.481	1.003	1.024	0.492
2002	0.357	1.003	1.028	0.367
2003	0.235	1.004	1.032	0.243
2004	0.140	1.006	1.038	0.145
2005	0.119	1.006	1.044	0.125
2006	0.153	1.009	1.053	0.161
2007	0.210	1.009	1.063	0.223
2008	0.263	1.011	1.075	0.282
2009	0.304	1.012	1.087	0.330
2010	0.289	1.014	1.103	0.319
2011	0.266	1.017	1.121	0.298
2012	0.234	1.020	1.143	0.267
2013	0.196	1.025	1.171	0.229
2014	0.181	1.031	1.208	0.219
2015	0.170	1.036	1.251	0.212
2016	0.152	1.058	1.324	0.201
2017	0.140	1.105	1.462	0.205
2018	0.122	1.230	1.799	0.219
2019	0.090	1.568	2.820	0.255
2020	0.032	3.060	8.628	0.279

(a) Based on Exhibit 1.

(b) See Exhibits 2.5.1 and 2.5.2.

**Developed Medical Loss Ratios Using Selected Loss Development Factors
Adjusted for Changes in Claim Settlement Rates
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)
			Reform Adjusted			
			<u>Development Factors</u>			
Accident Year	Paid Loss Ratio (a)	Adjusted Paid Loss Ratio (b)	Annual (c)	Cumulative (c)	Adjusted Developed Loss Ratio (d) (2) x (4)	Projected Ultimate Loss Ratio (1) + ((5) - (2))
1987	0.306	0.271	1.002	1.054	0.285	0.320
1988	0.299	0.265	1.002	1.056	0.280	0.314
1989	0.318	0.282	1.002	1.058	0.298	0.335
1990	0.359	0.318	1.003	1.062	0.338	0.379
1991	0.376	0.334	1.002	1.064	0.355	0.398
1992	0.311	0.276	1.003	1.067	0.295	0.330
1993	0.256	0.227	1.002	1.069	0.243	0.272
1994	0.293	0.260	1.003	1.073	0.279	0.312
1995	0.431	0.383	1.004	1.078	0.413	0.461
1996	0.461	0.410	1.004	1.082	0.444	0.495
1997	0.516	0.459	1.005	1.088	0.499	0.556
1998	0.615	0.548	1.005	1.093	0.599	0.666
1999	0.672	0.599	1.009	1.103	0.661	0.733
2000	0.605	0.540	1.008	1.112	0.600	0.665
2001	0.535	0.479	1.008	1.121	0.537	0.593
2002	0.411	0.370	1.009	1.131	0.418	0.460
2003	0.262	0.236	1.010	1.142	0.270	0.296
2004	0.177	0.160	1.011	1.154	0.185	0.202
2005	0.172	0.156	1.011	1.167	0.182	0.198
2006	0.220	0.200	1.013	1.182	0.236	0.257
2007	0.306	0.280	1.013	1.198	0.335	0.362
2008	0.377	0.346	1.015	1.216	0.421	0.452
2009	0.434	0.401	1.015	1.235	0.495	0.529
2010	0.423	0.392	1.018	1.257	0.493	0.523
2011	0.355	0.333	1.020	1.282	0.427	0.449
2012	0.298	0.282	1.024	1.313	0.371	0.387
2013	0.235	0.225	1.028	1.350	0.303	0.314
2014	0.203	0.197	1.037	1.400	0.276	0.282
2015	0.183	0.180	1.043	1.444	0.261	0.264
2016	0.163	0.162	1.065	1.524	0.246	0.248
2017	0.152	0.151	1.102	1.658	0.251	0.252
2018	0.138	0.138	1.195	1.981	0.273	0.273
2019	0.106	0.106	1.395	2.763	0.294	0.294
2020	0.044	0.044	2.348	6.489	0.286	0.286

- (a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent.
- (b) Based on experience evaluated as of December 31, 2020. Reflects an adjustment for the pharmaceutical cost reductions to restate the historical medical paid-to-date ratios at a 2018 pharmaceutical cost level.
- (c) See Exhibits 2.6.1 and 2.6.2.
- (d) The developed medical loss ratios shown were derived based on an adjustment for pharmaceutical cost reductions. They are only for purposes of projecting future medical loss ratios and do not reflect true estimates of ultimate loss ratios for those accident years.

Indemnity Benefit Level Factors

Accident Year	(1) Annual Benefit Change Prior to Frequency Adjustments (a)	(2) Frequency Adjustments (a)	(3) Annual Impact on Indemnity Benefits Due to Wage Inflation (b)	(4) Annual Cost Impact on Indemnity (c)	(5) Composite Indemnity Adjustment Factor (d)	
1987	0.0	0.0	1.9	1.9	1.591	
1988	0.0	0.0	1.5	1.5	1.567	
1989	0.0	0.0	1.5	1.5	1.544	
1990	2.3	19.9	1.7	24.7	1.238	
1991	4.9	14.8	0.8	21.4	1.020	
1992	1.8	-8.3	1.6	-5.2	1.075	
1993	0.2	-18.1	0.4	-17.6	1.305	
1994	-5.1	0.2	0.6	-4.3	1.364	
1995	6.3	0.6	1.0	8.0	1.263	
1996	5.3	0.4	1.2	7.0	1.180	
1997	9.7	0.2	1.6	11.7	1.057	
1998	6.5	0.0	1.8	8.4	0.975	
1999	5.7	0.0	2.1	7.9	0.903	
2000	3.9	0.0	3.1	7.1	0.843	
2001	-0.3	0.0	0.2	-0.1	0.844	
2002	-0.7	0.0	0.4	-0.3	0.865	(e)
2003	7.3	0.0	1.2	8.6	0.862	(e)
2004	-6.0	-13.7	2.1	-17.2	1.180	(e)
2005	-31.6	-15.3	1.6	-41.2	1.599	
2006	5.6	-5.7	2.2	1.8	1.571	
2007	1.6	0.0	2.1	3.7	1.515	
2008	4.8	0.6	1.0	6.5	1.423	
2009	0.4	1.4	0.2	2.0	1.395	
2010	0.4	0.0	1.5	1.9	1.369	
2011	0.0	0.0	1.4	1.4	1.350	
2012	-0.8	0.0	2.1	1.3	1.333	
2013	1.4	0.2	0.6	2.3	1.304	
2014	5.8	1.5	1.7	9.2	1.194	
2015	-0.8	0.0	2.3	1.4	1.177	
2016	0.3	0.0	1.0	1.3	1.162	
2017	0.5	0.0	2.2	2.7	1.132	
2018	0.4	0.0	2.2	2.6	1.102	
2019	0.4	0.0	2.6	3.0	1.071	
2020	0.4	0.0	1.7	2.1	1.048	
2021	0.4	0.0	1.6	2.0	1.027	
2022	0.7	0.0	1.7	2.4	1.003	
9/1/2022	0.0 (Annual 0.0)	0.0	0.3 (Annual 1.9)	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 column 2 of 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 9/1/2022 level.
- (e) On-level factors for accident years 2002, 2003 and 2004 adjust the portion of permanent disability claims that are estimated to not be subject to the January 1, 2005 PDRS (95% for accident year 2002, 75% for accident year 2003 and 40% for accident year 2004) to the January 1, 2005 PDRS level, and adjust for the corresponding utilization impacts on all 2002, 2003 and 2004 indemnity claims.

Annual Medical Cost Level Change - Non-Legislative

Accident	(1) Proportion of Medical Subject to	(2) Proportion of Medical Not Subject to	(3) Impact of Fee Schedule Change on	(4) Change in Medical	(5) Impact of CPI Change on Total	(6) Annual Non-Legislative Cost Impact on
<u>Year</u>	<u>Fee Schedule (a)</u>	<u>Fee Schedule (a)</u>	<u>Total Medical (b)</u>	<u>CPI (c)</u>	<u>Medical (d)</u>	<u>Total Medical (e)</u>
1987	0.610	0.390	0.9%	7.4%	2.9%	3.8%
1988	0.649	0.351	0.8%	7.7%	3.0%	3.8%
1989	0.647	0.353	0.0%	8.6%	3.0%	3.0%
1990	0.661	0.339	0.0%	10.4%	3.7%	3.7%
1991	0.631	0.369	0.0%	10.6%	3.6%	3.6%
1992	0.628	0.372	0.0%	8.1%	3.0%	3.0%
1993	0.565	0.435	0.0%	7.3%	2.7%	2.7%
1994	0.691	0.309	-3.6%	4.3%	1.3% (i)	-2.3%
1995	0.681	0.319	0.0%	3.0%	0.9%	0.9%
1996	0.663	0.337	0.0%	3.0%	1.0%	1.0%
1997	0.643	0.357	0.0%	2.2%	0.7%	0.7%
1998	0.658	0.342	0.0%	2.2%	0.8%	0.8%
1999	0.728	0.272	1.6%	3.3%	0.9% (ii)	2.5%
2000	0.715	0.285	0.5%	4.3%	1.2%	1.7%
2001	0.722	0.278	1.5%	4.8%	1.4%	2.9%
2002	0.635	0.365	0.6%	5.1%	1.4%	2.0%
2003	0.786	0.214	0.0%	4.8%	1.4% (iii)	1.4%
2004	0.952	0.048	0.0%	5.0%	0.0% (iv),(v)	0.0%
2005	0.936	0.064	0.0%	4.8%	0.0% (v)	0.0%
2006	0.926	0.074	0.0%	4.1%	0.3%	0.3%
2007	0.923	0.077	1.4%	5.3%	0.4%	1.8%
2008	0.896	0.104	-0.1%	4.2%	0.3%	0.2%
2009	0.894	0.106	0.0%	3.6%	0.4%	0.4%
2010	0.895	0.105	0.0%	2.8%	0.3%	0.3%
2011	0.969	0.031	0.0%	3.2%	0.3%	0.3%
2012	0.969	0.031	0.0%	2.7%	0.1%	0.1%
2013	0.938	0.062	0.0%	2.6%	0.1%	0.1%
2014	0.928	0.072	0.0%	4.2%	0.3%	0.3%
2015	0.933	0.067	0.0%	3.1%	0.2%	0.2%
2016	0.918	0.082	0.0%	5.4%	0.4%	0.4%
2017	0.906	0.094	0.0%	2.2%	0.2%	0.2%
2018	0.887	0.113	0.0%	2.5%	0.2%	0.2%
2019	0.873	0.127	0.0%	3.8%	0.4%	0.4%
2020	0.873	0.127	0.0%	3.0%	0.4%	0.4%
2021	0.873	0.127	0.0%	2.0%	0.3%	0.3%
2022	0.873	0.127	0.0%	2.6%	0.3%	0.3%
9/1/2022	0.873	0.127	0.0% (Annual 0.0%)	0.5% (Annual 3.1%)	0.1%	0.1%

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

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

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

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

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

Annual Medical Cost Level Change - Legislative

Accident 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	-4.5%	0.0%	-4.5%
2013	-8.2%	0.2%	-8.0%
2014	-6.0%	1.3%	-4.8%
2015	-2.1%	0.0%	-2.1%
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%
9/1/2022	0.0%	0.0%	0.0%

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

Total Medical Cost Level Factors

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical (b)	(3) Total Annual Cost Impact on Medical (c)	(4) Composite Medical On-level Factor (d)
1987	3.8%	0.0%	3.8%	0.803
1988	3.8%	0.0%	3.8%	0.774
1989	3.0%	0.0%	3.0%	0.751
1990	3.7%	19.1%	23.5%	0.608
1991	3.6%	12.9%	16.9%	0.520
1992	3.0%	-7.9%	-5.2%	0.549
1993	2.7%	-18.7%	-16.5%	0.657
1994	-2.3%	-2.3%	-4.6%	0.688
1995	0.9%	0.5%	1.4%	0.679
1996	1.0%	0.4%	1.4%	0.669
1997	0.7%	0.2%	0.9%	0.663
1998	0.8%	12.6%	13.5%	0.584
1999	2.5%	12.6%	15.4%	0.506
2000	1.7%	7.0%	8.8%	0.465
2001	2.9%	6.6%	9.7%	0.424
2002	2.0%	-5.6%	-3.7%	0.441
2003	1.4%	-6.0%	-4.7%	0.462
2004	0.0%	-33.9%	-33.9%	0.699
2005	0.0%	-13.9%	-13.9%	0.812
2006	0.3%	-5.1%	-4.8%	0.853
2007	1.8%	0.1%	1.9%	0.837
2008	0.2%	0.5%	0.7%	0.831
2009	0.4%	1.0%	1.4%	0.819
2010	0.3%	0.0%	0.3%	0.817
2011	0.3%	-2.0%	-1.7%	0.831
2012	0.1%	-4.5%	-4.4%	0.870
2013	0.1%	-8.0%	-7.9%	0.944
2014	0.3%	-4.8%	-4.5%	0.989
2015	0.2%	-2.1%	-1.9%	1.008
2016	0.4%	-0.7%	-0.3%	1.011
2017	0.2%	-0.5%	-0.3%	1.014
2018	0.2%	-0.3%	-0.1%	1.015
2019	0.4%	0.0%	0.4%	1.011
2020	0.4%	0.0%	0.4%	1.007
2021	0.3%	0.0%	0.3%	1.004
2022	0.3%	0.0%	0.3%	
9/1/2022	0.1%	0.0%	0.1%	

(a) See Exhibit 4.2, Column (6).

(b) See Exhibit 4.3, Column (3).

(c) $\text{Column (3)} = [1.0 + \text{Column (1)}] \times [1.0 + \text{Column (2)}] - 1.0$.

(d) These factors adjust the annual impact shown in Column (3) to the 9/1/2022 level.

Annual Wage Level Changes

<u>Year</u>	(1) <u>Annual Wage Level Change (a)</u>	(2) <u>Adjusted Annual Wage Level Change (b)</u>	(3) <u>Factor to a 9/1/2022 Wage Level (c)</u>
1987	5.6		3.315
1988	4.4		3.175
1989	4.3		3.045
1990	5.0		2.900
1991	2.3		2.834
1992	4.7		2.707
1993	1.2		2.675
1994	1.8		2.628
1995	2.9		2.554
1996	3.4		2.470
1997	4.7		2.359
1998	5.2		2.242
1999	6.2		2.111
2000	9.0		1.937
2001	0.6		1.925
2002	1.1		1.905
2003	3.6		1.838
2004	5.0		1.751
2005	3.2		1.697
2006	4.6		1.622
2007	4.5		1.552
2008	2.1		1.520
2009	0.5		1.513
2010	3.0		1.469
2011	3.0		1.426
2012	4.2		1.368
2013	0.7		1.359
2014	3.3		1.315
2015	4.5		1.259
2016	1.9		1.235
2017	4.3		1.184
2018	3.7		1.142
2019	4.4		1.094
2020	9.6	2.9	1.063
Projected:			
2021	0.9	2.8	
2022	1.8	2.9	
9/1/2022	0.5 (Annual = 2.8)	0.5 (Annual = 3.2)	

- (a) Historical wage changes through 2020 are based on Bureau of Labor Statistics data. Forecasts for 2021 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of March 2021 and those made by the California Department of Finance as of November 2020.
- (b) Wage level changes for 2020 to 2023 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. See Appendix B, Exhibit 2 for more information.
- (c) Based on Column (1) for 2019 and prior and Column (2) for 2020 and subsequent.

Premium Adjustment Factors

	(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)	(6)	(7)
		Ratio of Industry Average Charged Rates to Advisory Pure Premium	Factor to Industry Average Filed Pure Premium Rate Level as of	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of	Adjustment to Remove Surcharge	Average Experience	Off-Balance Correction in Advisory January 1, 2021 Pure Premium	Factor to Adjust for Impact of Premium Resulting from	Composite Premium Adjustment
Calendar Year	Wage Level (a)	Rates (b)	January 1, 2021 (c)	January 1, 2021 (d)	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
1987	3.315	---	---	0.589	0.992	0.983	1.019	---	1.932
1988	3.175	---	---	0.527	0.993	0.963	1.019	---	1.693
1989	3.045	---	---	0.519	0.993	0.945	1.019	---	1.629
1990	2.900	---	---	0.506	0.991	0.942	1.019	---	1.514
1991	2.834	---	---	0.469	0.987	0.939	1.019	---	1.370
1992	2.707	---	---	0.449	0.982	0.940	1.019	---	1.246
1993	2.675	---	---	0.444	0.981	0.949	1.019	---	1.205
1994	2.628	---	---	0.508	0.986	0.948	1.019	---	1.363
1995	2.554	---	---	0.688	0.995	0.958	1.019	---	1.790
1996	2.470	1.023	0.731	0.714	1.000	0.935	1.019	---	1.851
1997	2.359	0.989	0.729	0.737	1.000	0.949	1.019	---	1.798
1998	2.242	0.965	0.759	0.787	1.000	0.959	1.019	---	1.805
1999	2.111	0.972	0.767	0.790	1.000	0.954	1.019	---	1.715
2000	1.937	1.005	0.696	0.692	1.000	0.970	1.019	---	1.357
2001	1.925	1.030	0.613	0.595	1.000	0.969	1.019	---	1.160
2002	1.905	1.157	0.549	0.474	1.000	0.991	1.019	---	0.894
2003	1.838	1.266	0.449	0.355	1.000	1.005	1.019	---	0.637
2004	1.751	1.397	0.457	0.327	1.000	0.981	1.019	---	0.572
2005	1.697	1.470	0.549	0.374	1.000	0.982	1.019	---	0.634
2006	1.622	1.446	0.708	0.489	1.000	0.956	1.019	---	0.815
2007	1.552	1.492	0.965	0.646	1.000	0.931	1.019	0.985	1.042
2008	1.520	1.426	1.148	0.805	1.000	0.946	1.019	0.991	1.258
2009	1.513	1.365	1.131	0.829	1.000	0.937	1.019	1.034	1.357
2010	1.469	1.383	1.109	0.802	1.000	0.941	1.019	1.005	1.234
2011	1.426	1.400	1.108	0.791	1.000	0.982	1.019	---	1.127
2012	1.368	1.222	0.913	0.747	1.000	1.000	1.019	---	1.004
2013	1.359	1.138	0.735	0.646	1.000	0.983	1.019	---	0.877
2014	1.315	1.126	0.678	0.602	1.000	0.961	1.019	---	0.808
2015	1.259	1.109	0.658	0.594	1.000	0.951	1.019	---	0.771
2016	1.235	1.148	0.716	0.624	1.000	0.949	1.019	---	0.797
2017	1.184	1.156	0.793	0.686	1.000	0.955	1.019	---	0.835
2018	1.142	1.196	0.897	0.750	1.000	0.956	1.019	---	0.879
2019	1.094	1.214	1.042	0.858	1.000	0.947	1.019	---	0.973
2020	1.063	1.205	1.162	0.964	1.000	0.947	1.019	---	1.062

- (a) See Exhibit 5.1.
- (b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.
- (c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory January 1, 2021 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2021 pure premium rate (\$1.46) to the industry average filed pure premium rate as of January 1, 2021 (\$1.86).
- (d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of January 1, 2021.
- (e) Based on unit statistical data.
- (f) Based on average promulgated experience modifications. Calendar years 1996 through 2000 include adjustments for the impacts of AB 1913 and SB 1217 (1998).
- (g) Based on a comparison of premium reported on a calendar year basis to premium reported on an estimated ultimate policy year basis over the course of two accident years. The factor is applied only for calendar years 2007 to 2010, during which reported premiums were impacted by recessionary economic forces.
- (h) (1) × (2c) × (3) × (6) ÷ [(4) × (5)] for calendar years 2007 to 2010. (1) × (2c) × (3) ÷ [(4) × (5)] for all other calendar years.

Accident Year Indemnity Claim Frequency Model
As of PY 2018 Preliminary 1st Set & March 2021 UCLA

AY	Annual %	Annual Log Differences						
	Changes Intra- Class Ind Freq	Intra-Class Indemnity Frequency per \$M Exposure at PY 2019 Level			AY+1	Cumulative Injury Index	Economic Variables	CalOSHA
	Total	Cumulative	Non-cum.	Indemnity Benefit Level	(1st Prin. Comp.)		Dummy Variable	
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.081	0.000
1981	-3.5%	-0.036	-0.028	-0.036	0.000	0.008	-0.079	0.000
1982	-1.6%	-0.016	0.153	-0.022	0.352	0.175	-0.294	0.000
1983	6.2%	0.060	0.214	0.054	0.081	0.160	0.029	0.000
1984	9.5%	0.091	0.235	0.084	0.000	0.151	0.222	0.000
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.080	0.000
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.078	0.000
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.151	0.000
1988	0.7%	0.007	0.104	0.000	0.000	0.104	0.088	0.000
1989	2.5%	0.024	0.212	0.009	0.046	0.203	0.045	0.000
1990	9.0%	0.087	0.337	0.061	0.071	0.276	-0.121	0.000
1991	0.3%	0.003	0.166	-0.018	0.023	0.184	-0.293	0.000
1992	-11.1%	-0.118	-0.272	-0.098	0.013	-0.174	-0.186	0.068
1993	-14.9%	-0.162	-0.240	-0.153	-0.057	-0.088	-0.022	0.464
1994	-12.8%	-0.136	-0.462	-0.107	0.061	-0.355	0.106	0.173
1995	-4.6%	-0.048	-0.016	-0.050	0.053	0.034	0.092	0.295
1996	-6.8%	-0.070	-0.136	-0.065	0.096	-0.071	0.074	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.137	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.078	0.000
1999	1.5%	0.014	0.100	0.008	0.040	0.092	0.128	0.000
2000	4.0%	0.039	0.071	0.037	-0.003	0.034	0.066	0.000
2001	-6.9%	-0.072	-0.018	-0.076	-0.007	0.059	-0.101	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.202	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.023	0.000
2004	-16.6%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.019	0.049	0.040	-0.085	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.309	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.2%	0.012	0.032	0.010	0.003	0.022	0.043	0.000
2012	4.7%	0.046	0.127	0.036	0.025	0.091	0.123	0.000
2013	0.4%	0.004	0.126	-0.013	0.071	0.139	0.151	0.000
2014	0.2%	0.002	0.041	-0.004	0.003	0.046	0.178	0.000
2015	-1.4%	-0.014	0.006	-0.017	0.002	0.023	0.193	0.000
2016	-2.6%	-0.026	0.054	-0.039	0.004	0.093	0.124	0.000
2017	-2.1%	-0.021	-0.083	-0.011	0.004	-0.072	0.136	0.000
2018	-1.0%	-0.010	-0.053	-0.004	0.003	-0.049	0.119	0.000
2019*	0.1%	0.001	0.076	-0.012	0.004	0.088	0.053	0.000
2020	-11.1%	-0.118	-0.118	-0.118	0.004	0.000	-0.925	0.000
2021	2.4%	0.024	0.024	0.024	0.004	0.000	0.407	0.000
2022	1.2%	0.012	0.012	0.012	0.004	0.000	0.290	0.000
2023	0.3%	0.003	0.003	0.003	0.004	0.000	0.214	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020
Std Err of Y Est	0.039
R Squared	0.574
No. of Observations	41
Degrees of Freedom	36

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

Notes:

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

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

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

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

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

Economic variables are historical through 2020; March 2021 UCLA Anderson Forecasts for 2021 on.

Regression is over AY 1979 through AY 2019. AY 2020 through AY 2023 are projections.

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

*AY 2019 is preliminary and change is based on a comparison of 2019 accidents on 2018 policies to 2018 accidents on 2017 policies.

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

Accident Year	(1) Estimated Ultimate Severity	(2) Annual % Change	(3) Indemnity Adjustment Factor (a)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	9,973	---	1.980	19,744	---
1991	10,902	9.3%	1.872	20,413	3.4%
1992	11,000	0.9%	1.810	19,913	-2.4%
1993	11,958	8.7%	1.800	21,519	8.1%
1994	12,881	7.7%	1.885	24,280	12.8%
1995	14,435	12.1%	1.756	25,343	4.4%
1996	16,188	12.1%	1.648	26,670	5.2%
1997	19,224	18.8%	1.478	28,417	6.6%
1998	21,081	9.7%	1.363	28,743	1.1%
1999	23,087	9.5%	1.263	29,167	1.5%
2000	24,509	6.2%	1.179	28,905	-0.9%
2001	27,019	10.2%	1.181	31,898	10.4%
2002	26,097	-3.4%	1.209	31,557	-1.1%
2003	25,840	-1.0%	1.206	31,150	-1.3%
2004	21,084	-18.4%	1.424	30,026	-3.6%
2005	19,108	-9.4%	1.635	31,238	4.0%
2006	20,804	8.9%	1.515	31,514	0.9%
2007	22,691	9.1%	1.460	33,135	5.1%
2008	24,689	8.8%	1.380	34,061	2.8%
2009	25,835	4.6%	1.371	35,430	4.0%
2010	25,271	-2.2%	1.346	34,008	-4.0%
2011	24,934	-1.3%	1.327	33,090	-2.7%
2012	24,409	-2.1%	1.311	31,992	-3.3%
2013	23,831	-2.4%	1.284	30,607	-4.3%
2014	24,740	3.8%	1.194	29,533	-3.5%
2015	24,886	0.6%	1.177	29,285	-0.8%
2016	24,219	-2.7%	1.162	28,143	-3.9%
2017	24,209	0.0%	1.132	27,397	-2.6%
2018	24,961	3.1%	1.102	27,518	0.4%
2019	26,397	5.8%	1.071	28,259	2.7%
2020	28,866	9.4%	1.048	30,259	7.1%
(6) Estimated Annual Exponential Trend Based on 1990 to 2020:					1.0%
(7) Estimated Annual Exponential Trend Based on 2005 to 2019:					-1.5%
(8) Estimated Annual Exponential Trend Based on 2015 to 2019:					-0.9%
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, 2020**

Accident Year	(1) Estimated Ultimate Severity (a)	(2) Annual % Change	(3) Medical Adjustment Factor (b)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	8,811	---	0.911	8,028	---
1991	9,491	7.7%	0.894	8,483	5.7%
1992	9,550	0.6%	0.863	8,245	-2.8%
1993	10,416	9.1%	0.847	8,818	6.9%
1994	11,390	9.4%	0.890	10,133	14.9%
1995	13,118	15.2%	0.882	11,567	14.2%
1996	14,104	7.5%	0.873	12,313	6.4%
1997	16,789	19.0%	0.867	14,555	18.2%
1998	20,395	21.5%	0.764	15,578	7.0%
1999	23,453	15.0%	0.662	15,521	-0.4%
2000	26,193	11.7%	0.608	15,930	2.6%
2001	31,268	19.4%	0.554	17,336	8.8%
2002	31,470	0.6%	0.576	18,120	4.5%
2003	30,110	-4.3%	0.604	18,190	0.4%
2004	27,762	-7.8%	0.799	22,184	22.0%
2005	28,649	3.2%	0.799	22,893	3.2%
2006	31,177	8.8%	0.796	24,813	8.4%
2007	34,723	11.4%	0.781	27,120	9.3%
2008	37,388	7.7%	0.778	29,085	7.2%
2009	39,241	5.0%	0.775	30,405	4.5%
2010	39,397	0.4%	0.773	30,435	0.1%
2011	35,615 (c)	---	0.794	28,279 (c)	---
2012	33,423	-6.2%	0.839	28,055	-0.8%
2013	30,766	-8.0%	0.924	28,412	1.3%
2014	29,994	-2.5%	0.984	29,505	3.8%
2015	28,938	-3.5%	1.008	29,168	-1.1%
2016	27,814	-3.9%	1.011	28,121	-3.6%
2017	27,547	-1.0%	1.014	27,935	-0.7%
2018	28,892	4.9%	1.015	29,328	5.0%
2019	28,261	-2.2%	1.011	28,573	-2.6%
2020	27,516	-2.6%	1.007	27,709	-3.0%

Selected Medical Severity Trend: 1.0%

(a) Estimated ultimate severities for all accident years are derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts. The estimated ultimate medical severities were derived from the projected ultimate loss ratios shown in Exhibit 3.2, column (6).

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

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

Source: WCIRB 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, 2020

(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	28,649	---	22,893	---	27,175	---	21,715	---
2006	31,177	8.8%	24,813	8.4%	29,261	7.7%	23,289	7.2%
2007	34,723	11.4%	27,120	9.3%	32,451	10.9%	25,345	8.8%
2008	37,388	7.7%	29,085	7.2%	34,158	5.3%	26,572	4.8%
2009	39,241	5.0%	30,405	4.5%	36,007	5.4%	27,899	5.0%
2010	39,397	0.4%	30,435	0.1%	36,115	0.3%	27,899	0.0%
2011	38,983	-1.1%	30,953	1.7%	35,615	-1.4%	28,279	1.4%
2012	36,508	-6.3%	30,645	-1.0%	33,423	-6.2%	28,055	-0.8%
2013	33,692	-7.7%	31,115	1.5%	30,766	-8.0%	28,412	1.3%
2014	32,810	-2.6%	32,276	3.7%	29,994	-2.5%	29,505	3.8%
2015	31,550	-3.8%	31,801	-1.5%	28,938	-3.5%	29,168	-1.1%
2016	30,246	-4.1%	30,579	-3.8%	27,814	-3.9%	28,121	-3.6%
2017	29,986	-0.9%	30,408	-0.6%	27,547	-1.0%	27,935	-0.7%
2018	31,532	5.2%	32,008	5.3%	28,892	4.9%	29,328	5.0%
2019	31,070	-1.5%	31,413	-1.9%	28,261	-2.2%	28,573	-2.6%
2020	30,267	-2.6%	30,479	-3.0%	27,516	-2.6%	27,709	-3.0%
Estimated Annual Exponential Trend								
Trend Based on 1990 to 2020:				5.1%	N/A			
Trend Based on 2005 to 2019:				1.7%	1.5%			
Trend Based on 2015 to 2019:				0.2%	0.0%			
Selected Medical Severity Trend:								1.0%

(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 Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1)×(2)÷(3)
1987	0.347	1.591	1.932	0.286
1988	0.332	1.567	1.693	0.307
1989	0.344	1.544	1.629	0.327
1990	0.400	1.238	1.514	0.327
1991	0.426	1.020	1.370	0.317
1992	0.351	1.075	1.246	0.303
1993	0.289	1.305	1.205	0.312
1994	0.327	1.364	1.363	0.328
1995	0.473	1.263	1.790	0.333
1996	0.530	1.180	1.851	0.338
1997	0.601	1.057	1.798	0.353
1998	0.653	0.975	1.805	0.353
1999	0.686	0.903	1.715	0.361
2000	0.593	0.843	1.357	0.369
2001	0.492	0.844	1.160	0.358
2002	0.367	0.865	0.894	0.355
2003	0.243	0.862	0.637	0.329
2004	0.145	1.180	0.572	0.299
2005	0.125	1.599	0.634	0.314
2006	0.161	1.571	0.815	0.311
2007	0.223	1.515	1.042	0.325
2008	0.282	1.423	1.258	0.319
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projections (d)
2021				0.279
2022				0.285
9/1/2022				0.285

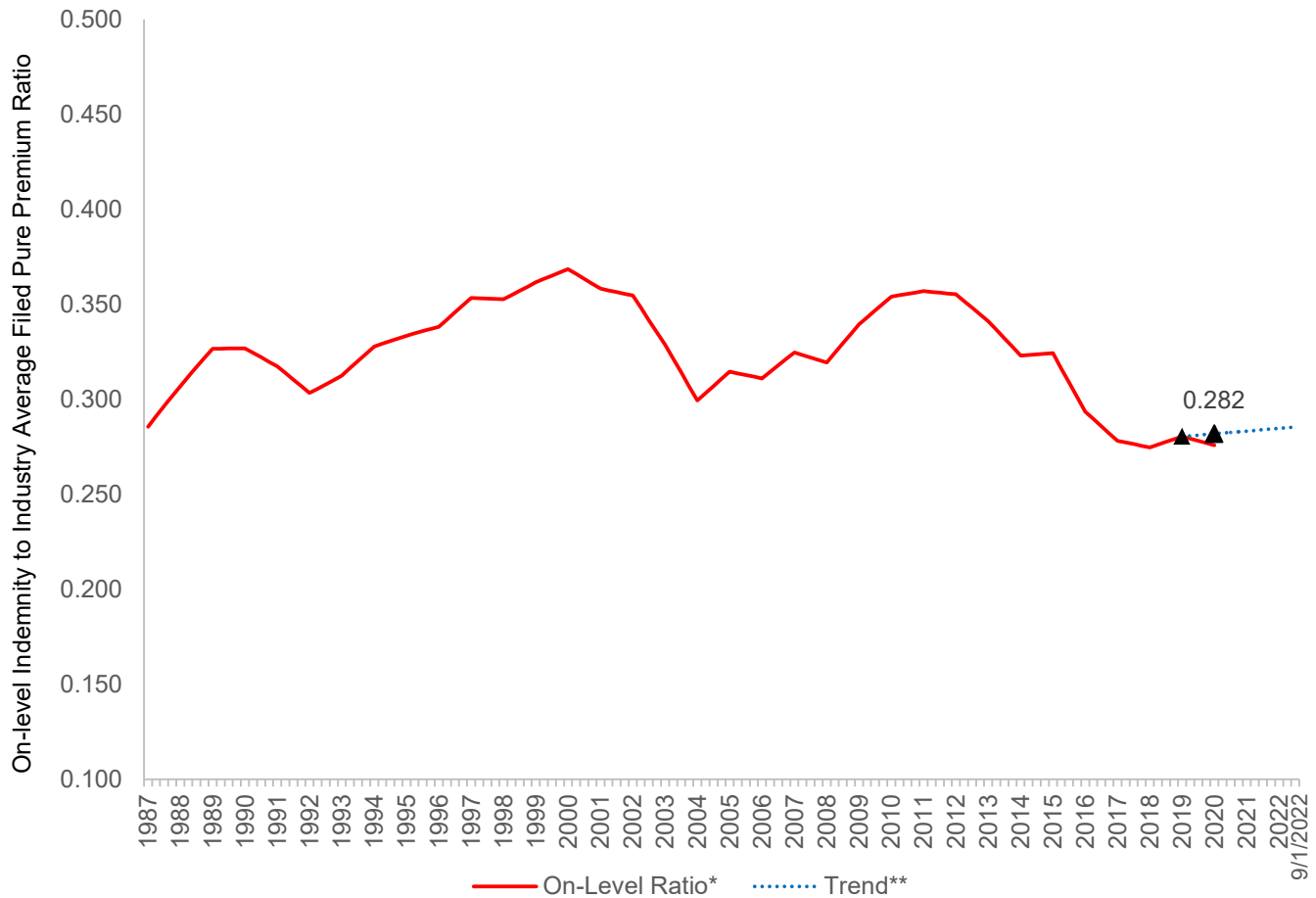
(a) See Exhibit 3.1.

(b) See Exhibit 4.1.

(c) See Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from Exhibit 6.2, the actual intra-class frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2020**



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

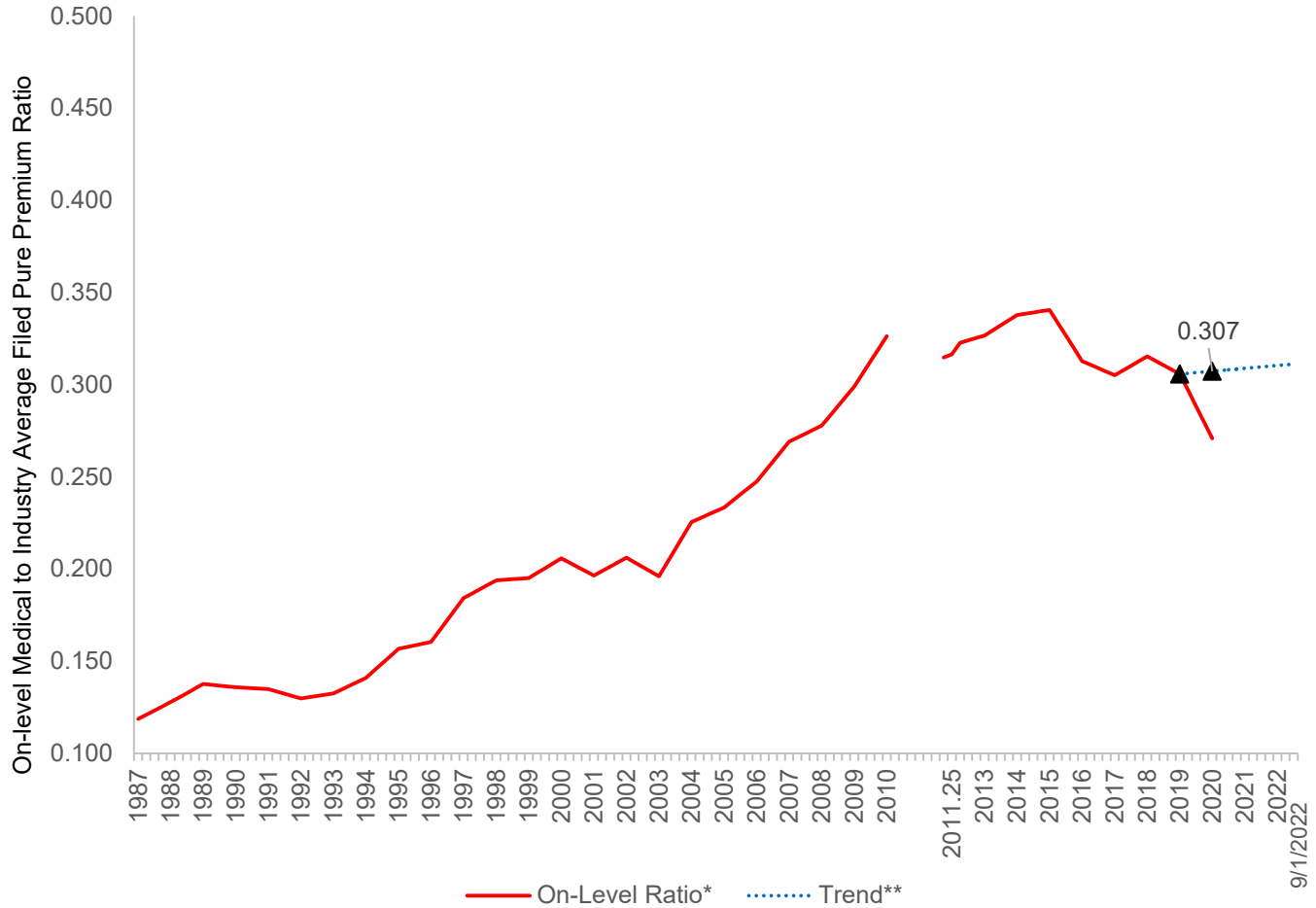
** The 9/1/2022 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2019 year.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical On-Level Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio (e) (1)×(2)÷(3)
1987	0.285	0.803	1.932	0.119
1988	0.280	0.774	1.693	0.128
1989	0.298	0.751	1.629	0.138
1990	0.338	0.608	1.514	0.136
1991	0.355	0.520	1.370	0.135
1992	0.295	0.549	1.246	0.130
1993	0.243	0.657	1.205	0.132
1994	0.279	0.688	1.363	0.141
1995	0.413	0.679	1.790	0.157
1996	0.444	0.669	1.851	0.160
1997	0.499	0.663	1.798	0.184
1998	0.599	0.584	1.805	0.194
1999	0.661	0.506	1.715	0.195
2000	0.600	0.465	1.357	0.206
2001	0.537	0.424	1.160	0.196
2002	0.418	0.441	0.894	0.206
2003	0.270	0.462	0.637	0.196
2004	0.185	0.699	0.572	0.225
2005	0.182	0.812	0.634	0.233
2006	0.236	0.853	0.815	0.247
2007	0.335	0.837	1.042	0.269
2008	0.421	0.831	1.258	0.278
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.303	0.944	0.877	0.327
2014	0.276	0.989	0.808	0.338
2015	0.261	1.008	0.771	0.340
2016	0.246	1.011	0.797	0.313
2017	0.251	1.014	0.835	0.305
2018	0.273	1.015	0.879	0.315
2019	0.294	1.011	0.973	0.306
2020	0.286	1.007	1.062	0.271
				Projections (d)
2021				0.304
2022				0.310
9/1/2022				0.311

- (a) See Exhibit 3.2. Medical loss ratios for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Ratios for accident years 2010 and prior do reflect MCCP costs.
- (b) See Exhibit 4.4.
- (c) See Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from Exhibit 6.4, the actual intra-class frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.
- (e) Accident years 2011 and subsequent do not reflect the paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**On-Level Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2020**



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

** The 9/1/2022 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2019 year.

**Indicated Loss to Industry Average Filed Pure Premium Ratios and Average Pure Premium Rate
For Policies with Effective Dates between September 1, 2021 and August 31, 2022
Based on Experience as of December 31, 2020**

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.285	0.311	0.596
2. Projected Loss Adjustment Expense Factor (ALAE + MCCP + ULAE, See Appendix C)			1.335
3. Indicated Total Loss and Loss Adjustment Expense to Industry Average Filed Pure Premium Ratio Before Updates to Medical Fee Schedule (1) x (2)			0.796
4. Impact of Updates to Official Medical Fee Schedule (See Appendix D)		2.4%	
5. Impact of New Medical-Legal Fee Schedule (See Appendix E)		1.4%	
6. Indicated Total Loss and Loss Adjustment Expense to Industry Average Filed Pure Premium Ratio After Updates to Medical Fee Schedule (3) + (1) x [(4) + (5)]			0.808
7. Difference in Off-Balance Factor (See Section C, Appendix B of the WCIRB's September 1, 2021 Regulatory Filing)			-0.4%
8. Indicated Difference from Industry Average Filed Pure Premium Rate per \$100 of Payroll as of January 1, 2021 [(6) x [(7) + 1.0] - 1.0]			-19.6%
9. Industry Average Filed Pure Premium Rate per \$100 of Payroll as of January 1, 2021			\$1.86
10. Indicated Average Pure Premium Rate per \$100 of Payroll for Policies with Effective Dates between September 1, 2021 and August 31, 2022 (9) x [1.0 + (8)]			\$1.50

Section B
Appendix A
Loss Development Methodology

The pure premium rates effective September 1, 2021 are intended to reflect the final or ultimate cost of losses and loss adjustment expenses on all accidents that arise on policies incepting during the September 1, 2021 to August 31, 2022 period. The information shown in Section B, Exhibit 1 reflects paid and incurred (paid plus case reserves) loss amounts reported for each completed accident year as of December 31, 2020. 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, 2020 to a final, or ultimate, cost basis.

The WCIRB generally estimates the development of more current 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.

In addition to reported paid losses and case reserves, a bulk reserve for incurred but not reported (IBNR) losses is also reported to the WCIRB. This amount represents insurers' estimates of anticipated future losses that are in excess of the incurred losses reported to the WCIRB as of December 31, 2020. The WCIRB does not use reported IBNR to estimate the ultimate cost of each accident year's losses. Instead, the development of reported incurred losses (excluding IBNR reserves) and paid losses is reviewed and future loss development is projected based on these historical development patterns. This approach produces more accurate estimates of the ultimate cost of losses arising from a given accident year than estimates based solely on the IBNR amounts reported by insurers. The WCIRB has been using this method of projecting loss development based on the reported paid and incurred losses, excluding the IBNR reserves reported by insurers, for many years.

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, 2020 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.

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.

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.

Methodologies basing estimates of future loss development primarily on historical incurred age-to-age loss development factors may work well during periods of relatively consistent levels of case reserves. However, they are not appropriate when (a) there is a change in the average level of insurer case reserves, (b) incurred loss development is volatile, or (c) there are significant legislative or regulatory changes.

Several prior WCIRB analyses of loss development methodologies have shown that (a) there is significantly more variability in incurred loss development patterns across insurer groups than in paid loss development patterns, (b) incurred loss development has historically been more volatile and cyclical than paid loss development, (c) retrospectively over the long term, projections based on incurred loss development are generally less accurate and less stable than those based on paid loss development, (d) while the impact of statutory reform measures on payment patterns can be estimated and paid development factors adjusted accordingly, reform impacts on case reserves and incurred development factors are much more difficult to estimate and (e) while the change in reporting requirements for MCCP costs effective on policies incepting on or after July 1, 2010 can reliably be adjusted for in paid medical losses, the impact of the change on insurer case reserves is uncertain. As a result, the WCIRB has, for many years, been estimating future loss development primarily based on historical paid age-to-age development factors.

Following the implementation of Senate Bill No. 863 (SB 863), both paid and incurred loss development have been decreasing. These decreases have also been related to an acceleration in the rate claims are settling over the last several years following SB 863. For many years, the WCIRB has adjusted for a number of the factors related to the recent loss development decreases, including accelerating claim settlement rates, reforms to lien filings from Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) and recent pharmaceutical cost declines in its selected loss development methodology. While the WCIRB has a reasonable basis to reflect the impact of these factors on paid loss development, the WCIRB is not able to determine their impact on incurred loss development given that their impact on case reserve levels is difficult to measure and may differ significantly by insurer.

In the second quarter of 2020, the COVID-19 pandemic and resulting stay-at-home orders had a significant impact on the workers' compensation system including the loss development on active claims. In particular, paid loss development in the second quarter of 2020 was significantly lower than projected at the pre-pandemic level and indemnity claim settlement rates for more recent accident years decreased sharply following a period of steady increases. Conversely, case reserve levels increased during this period. The WCIRB's selected loss development methodology also addresses this recent volatility in paid loss development through utilizing a multi-year average of loss development factors rather than the most recent factor and adjustments for changes in claim settlement rates including the post-pandemic slowdown in claim settlement. As with other adjustments to loss development, the impact of the pandemic on case reserve levels is much more difficult to measure and properly adjust for and, as a result, the WCIRB continues to rely on paid loss development in its projections of future loss development.

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

² Given that COVID-19 claims are different from typical workers' compensation claims and are likely temporary, they have been removed from the accident year 2020 information shown in this Appendix.

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. Paid-to-incurred ratios over the most recent calendar year declined modestly for more recent accident years and were generally stable for older accident years. Declines for more recent accident years are likely in part a result of a slowdown in the claim settlement process in 2020 as a result of the pandemic.
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. As a result, the indemnity claim settlement rate for accident years 2018 through 2020 at the most recent evaluation decreased over that for the prior year and the growth in indemnity claim settlement rates for older accident years has moderated. Changes in the rates that claims settle 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.
3. Mix of Claims by Injury Type. Exhibit 3 shows the mix of claims by type of injury for accident years 2003 through 2019 (which is based on preliminary data). The shares of medical-only claims increased in 2017 which may be related to efforts to improve employer reporting of smaller first-aid claims. The distribution of indemnity claims among those involving permanent disability and those involving only temporary disability has been relatively stable over the last several years. This suggests that recent loss development patterns are not being significantly impacted by shifts in the mix of indemnity injury types.³
4. Quarterly Loss Development. Exhibits 4.1 through 4.4 show accident year loss development by quarter.⁴ As shown in Exhibits 4.1 and 4.2, quarterly incurred factors generally increased in the second quarter of 2020 after the pandemic began. As shown in Exhibits 4.3 and 4.4, quarterly paid indemnity and medical loss development declined during the same period. In the third and fourth quarters of 2020, the paid and incurred indemnity and medical factors generally showed modest declines comparable to the recent pre-pandemic period. Declines in loss development over the last several years are largely attributable to provisions of SB 863 impacting medical costs, the lien reforms of SB 1160 and AB 1244, increased efforts to fight workers' compensation provider fraud, reductions in pharmaceutical costs and increases in indemnity claim settlement rates. As discussed in detail below, the WCIRB recommends several adjustments to paid loss development for these factors which significantly reduces the impact of these phenomena on projected payment patterns and mitigates the volatility emerging during the pandemic period.

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, 2021 and August 31, 2022 as follows:

³ Although not shown on Exhibit 3, which is based on unit statistical data, the share of indemnity claims for accident year 2020 will increase significantly as there was a much greater post-pandemic reduction in the filing of non-COVID-19 medical-only claims than indemnity claims. See Item AC20-03-01 of the April 15, 2021 WCIRB Actuarial Committee Meeting presentation.

⁴ The medical loss development factors shown in Exhibits 4.2 and 4.4 for accident years 2012 and later exclude MCCC costs. The factors shown for accident years 2011 and prior include MCCC costs. Accident year 2020 information shown in Exhibits 4.1 through 4.4 include COVID-19 claims inasmuch as the WCIRB does not have information on COVID-19 claim costs at pre-December 31, 2021 evaluations.

Indemnity Loss Development from 12 Months to 84 Months

As discussed above, the WCIRB continues to believe that historical paid development is a more appropriate basis for projecting future indemnity loss development for these development periods than historical incurred loss development. Section B, Exhibits 2.4.1 and 2.4.2 show the historical annual accident year paid indemnity loss development factors evaluated at successive December 31 evaluations.

As discussed above, since the implementation of SB 863 and up until the start of the COVID-19 pandemic, there had been a steady increase in the rate at which indemnity claims are settling. Some of the factors contributing to this increase are (a) a greater focus on settling of older, larger claims, (b) reduction in the number of claims remaining open to resolve outstanding liens as a result of SB 863, SB 1160 and AB 1244 provisions impacting lien filings, (c) anti-fraud efforts directed at provider fraud, (d) reduced opioid usage and (e) other provisions of SB 863 such as independent medical review (IMR) and independent bill review (IBR) speeding up the medical treatment of injured workers. Other system diagnostics suggest the speed-up in claim settlement rates has been greatest on permanent disability claims and is generally being experienced throughout the entire state.⁵

After the COVID-19 pandemic and stay-at-home orders began in California in March 2020, the overall claim settlement process slowed and indemnity claim settlement rates began to reverse following the steady growth in the post-SB 863 period. As shown in Exhibit 2, claim settlement rates for the most recent three accident years (2018 through 2020) at the latest evaluation show decreases from the prior year while the increases for older years have moderated. The WCIRB believes this sharp and sudden slowdown in the claims resolution and settlement process is in large part contributing to the decreases in paid loss development and shifts in case reserve levels experienced since the second quarter of 2020.

In 2017, the WCIRB studied the impact of changes in claim settlement rates on paid loss development patterns.⁶ The WCIRB's study found that, during periods of significant claim settlement rate change, an adjustment to paid loss development based on the Berquist-Sherman approach⁷ generally increased the accuracy of the projection. The WCIRB's 2017 study also included a test of the primary assumptions of the Berquist-Sherman method applied to workers' compensation data and found that the assumptions applied in the WCIRB's approach were reasonable.

Given the recent sharp turnaround in the rate of claim settlement, the WCIRB recommends basing indemnity loss development through 84 months on paid indemnity development adjusted for changing settlement rates based on the Berquist-Sherman approach. 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.

Earlier this year, the WCIRB studied the potential impact of the COVID-19 pandemic on loss development emerging in 2020.⁸ The WCIRB's study found that paid loss development in the second quarter of 2020 was significantly distorted by the pandemic while paid development in the third and fourth quarters of 2020 were more consistent with pre-pandemic patterns. The WCIRB's study also found that the adjustment for changes in claim settlement rates substantially corrected for the impact of the distortion. However, given the recent volatility in loss development patterns emerging during the pandemic period,

⁵ See Exhibit M5 of Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

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

⁷ 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.

⁸ See Item AC21-02-02 of the February 16, 2021 and March 16, 2021 WCIRB Actuarial Committee Agendas.

the WCIRB utilized a two-year average of the claim settlement rate-adjusted age-to-age factors to project future indemnity loss development through 84 months rather than the latest year's factor approach used in recent pure premium rate filings.

Although the WCIRB found in its recent study that the claim settlement rate adjustments significantly mitigated the impact of the pandemic on projected development for 2019 and prior accident years, projected development for accident year 2020, even with COVID-19 claims excluded, may still be distorted given the unique and significant changes in exposure levels and claims patterns experienced during the pandemic period on newer claims. At this time, it is not clear how to further adjust for these potential pandemic-related impacts on accident year 2020 development. As a result, the WCIRB also based the projected accident year 2020 development through 84 months on the two-year average of the claim settlement rate-adjusted age-to-age factors.⁹

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 projected indemnity loss development based on the average of the latest two years' paid age-to-age indemnity development factors adjusted 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 84 Months to 108 Months

In the WCIRB's 2017 study of the method to adjust paid loss development for changes in claim settlement rates, the WCIRB reviewed the applicability of this adjustment to more mature periods given that indemnity claim settlement rates have also increased during these periods. The WCIRB found that increases in claim settlement rates for older periods are generally not as significant as increases in less mature periods since 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 paid age-to-age indemnity development factors.

As with paid indemnity loss development projected through 84 months, the WCIRB believes utilizing a two-year average of historical paid indemnity age-to-age factors from 84 months through 108 months mitigates some of the volatility emerging during the pandemic period. The age-to-age 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 276 Months

A 2012 study of longer-term loss development performed by the WCIRB 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.¹⁰ Therefore, the WCIRB has for a number of years projected paid indemnity development from 108 months to 276 months based on the average of the three most recent years' age-to-age paid indemnity loss development factors. The age-to-age 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 276 Months to 432 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

⁹ As discussed in Appendix B, the WCIRB based the projection of losses on policies incepting between September 1, 2021 and August 31, 2022 on a basis that largely excluded the experience of the 2020 accident year.

¹⁰ See Item AC11-12-04 of the March 20, 2012 WCIRB Actuarial Committee Agenda.

ultimate claims open at a point in time and changes in later period paid loss development.¹¹ 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 2019 from 276 to 276 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 where claim settlement rates have increased and relatively fewer claims are open.

Although claim settlement rates for recent accident years have begun to decline, they remain well above the levels underlying loss development from accident years aged 276 months and older. As a result, the WCIRB recommends adjusting paid loss development applied after 276 months for the recent changes in claim settlement rates impacting later period development using an approach consistent with that used in the January 1, 2021 Pure Premium Rate Filing.

Section B, Exhibits 2.5.9 through 2.5.12 show the adjustment applied to paid indemnity development from 276 months through 384 months for accident years 2019 and 2020. 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.

Item 5 of Section B, Exhibit 2.5.10 shows the projected number of open indemnity claims. The first (italicized) figure shown for each historical accident year 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 three (italicized) figures shown for each historical accident year 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 2019 and 2020, 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 in the WCIRB's 2020 loss development study. Item 10 of Section B, Exhibit 2.5.12 shows the paid indemnity and medical age-to-age development factors for accident years 2019 and 2020 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.

¹¹ See Item AC19-08-05 of the August 4, 2020 WCIRB Actuarial Committee Agenda.

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 384 months. To project indemnity development from 384 months through 432 months, the WCIRB applied this adjustment using the average projected-to-actual ratio of open claims for the 348-, 360- and 372-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 276 months through 432 months are shown in Section B, Exhibit 2.5.2 and column 2 of Section B, Exhibit 3.1.

Indemnity Loss Development after 432 Months

Workers' compensation losses continue to show significant development beyond 432 months. The WCIRB uses an inverse power curve fitting approach to project the indemnity loss development beyond 432 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.¹²

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.¹³ 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 432 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 (c) taking the cumulative product of the extrapolated factors after 432 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

As with indemnity losses, for many years, the WCIRB has been relying on historical paid medical loss development to project ultimate medical losses for these evaluation periods. Section B, Exhibits 2.4.1 and 2.4.2 show the historical annual accident year paid medical loss development factors evaluated at successive December 31 evaluations.

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 significantly. The most recent information on lien filings provided by the DWC suggests a 70% reduction in liens from the pre-reform level.¹⁴ 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 2014 and later to reflect the estimated impact of the SB 1160 and AB 1244 lien-related provisions based on the WCIRB's loss development study.¹⁵ These adjustments, which are shown by accident year in Table 1, were based on a review of medical development with and without any lien payments using the WCIRB's medical

¹² See Item AC16-03-03 of the April 5, 2016 WCIRB Actuarial Committee Agenda.

¹³ See Item AC19-08-05 of the August 1, 2019 WCIRB Actuarial Committee Agenda.

¹⁴ See Exhibit M9.2 of Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

¹⁵ See Item AC18-03-03 of the March 19, 2018 and March 18, 2019 WCIRB Actuarial Committee Agendas.

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. For development prior to 48 months, the projected cumulative loss development factor is based on the adjusted factor projected for 2017 at 48 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.

Table 1: Adjustment to Cumulative Paid Medical Development for SB 1160 & AB 1244 Lien Reforms

Accident Year	Age at 12/31/2020	Adjustment to Reflect 70% Reduction in Lien Filings
2015	72	-1.1%
2016	60	-2.0%
2017	48	-3.2%

Many of the provisions of SB 1160 and AB 1244 also affected liens that had already been filed prior to the effective date of SB 1160 and AB 1244. In particular, SB 1160 provided that all outstanding liens filed after January 1, 2013 must have a declaration under penalty of perjury filed with the DWC by July 1, 2017 stating that the lien is not subject to IMR or IBR and that it satisfies one of a number of other criteria. In July 2017, the DWC dismissed approximately 292,000 liens for which no declarations had been filed. The WCIRB's 2018 study also analyzed the potential impact of the DWC lien dismissals on medical loss development patterns and found that the dismissed liens will likely have a significant impact on paid medical development emerging after July 2017. If no adjustment to loss development is made, paid medical development emerging in the third quarter of 2017 and later may be distorted as the numerator of the age-to-age paid medical development factor will contain a different volume of lien payments than the denominator. In order to correct for this potential distortion, the WCIRB adjusted medical payments prior to July 1, 2017 to reflect the impact of the DWC lien dismissals. Table 2 shows the adjustments made by accident year based on the WCIRB's study of their potential impact using lien information provided by the DWC. Given that the lien dismissals are only expected to significantly impact paid medical development through mid-term development periods for which lien payments are most significant, the WCIRB is applying these adjustments only to development emerging on accident years 2011 to 2016.¹⁶ This approach is consistent with that reflected in the last several pure premium rate filings.

Table 2: Adjustment for DWC Lien Dismissals to Paid Medical Development

Accident Year	Age-to-Age Factor for 3/31/2019	Adjustment to Pre-July 1, 2017 Payments
2011	87-to-99	-3.6%
2012	75-to-87	-3.8%
2013	63-to-75	-3.4%
2014	51-to-63	-2.4%
2015	39-to-51	-0.9%
2016	27-to-39	-0.1%

Since 2013, pharmaceutical costs have decreased significantly. The recent decreases in pharmaceutical costs have been attributed to a number of factors including implementation of IMR and IBR as a result of SB 863, reductions in the number of spinal surgeries, reaction to the national opioid epidemic, anti-fraud efforts, changes in pharmaceutical reimbursement rates from the Medi-Cal based fee schedule and the new drug formulary adopted by the DWC effective January 1, 2018. A 2019 WCIRB study of the impact of

¹⁶ See Item AC18-03-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda for more information on this adjustment.

the recent pharmaceutical cost declines on paid medical loss development showed that pharmaceutical costs represent a much larger proportion of later period development compared to earlier periods.¹⁷ 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 as the baseline level 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. 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 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.

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 with indemnity loss development, the WCIRB believes an adjustment to paid medical loss development for the recent increase 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 and changes in claim settlement rates are shown in Section B, Exhibit 2.6.1 and column 3 of Section B, Exhibit 3.2. To mitigate the impact of volatility emerging during the pandemic period as discussed for indemnity above, the WCIRB projects medical loss development from 12 months to 84 months using the average of the latest two years' age-to-age paid medical loss development factors adjusted for the factors described above rather than the latest year's factor.

Medical Loss Development from 84 Months to 108 Months

¹⁷ See Item AC19-06-03 of the June 14, 2019 WCIRB Actuarial Committee Agenda.

The WCIRB projects future medical development from 84 months through 108 months based on the average of the latest two years' paid age-to-age medical development factors with adjustments for the impact of SB 1160 and AB 1244 and decreases in pharmaceutical costs described above. As with indemnity, the WCIRB believes a two-year average selection for this maturity period also mitigates potential distortions in paid medical development emerging during the pandemic period. The age-to-age 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 276 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.¹⁸ Therefore, the WCIRB has projected paid medical development from 108 months to 276 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. The age-to-age 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 276 Months to 432 Months

As also discussed above for indemnity development, the post-SB 863 acceleration in claim settlement rates also likely impacts later period loss development and, in particular, for medical losses which have significantly more payments in later periods compared to indemnity. The WCIRB adjusted paid medical loss development applied after 276 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 276 months to 432 months.

Medical Loss Development after 432 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 432 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 development, (b) extrapolating the fitted factors to 80 development years and (c) taking the cumulative product of the extrapolated factors after 432 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 amount of losses anticipated for each accident year relative to the reported paid losses evaluated as of December 31, 2020. These cumulative factors are then applied to the reported (undeveloped) paid indemnity and adjusted paid medical loss ratios as of December 31, 2020 to project an ultimate loss ratio for each accident year.¹⁹ (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 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, 2021 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.)

¹⁸ See Item AC11-12-04 of the December 1, 2011 WCIRB Actuarial Committee Agenda.

¹⁹ Medical loss ratios shown in Section B, Exhibit 3.2 for accident years 2011 and subsequent do not reflect MCCP costs. Ratios shown for accident years 2010 and prior do reflect MCCP costs.

Summary of Alternative Loss Development Projections

As discussed above, the WCIRB is projecting future loss development primarily based on the latest two historical years of paid development adjusted for SB 1160 and AB 1244, recent pharmaceutical cost declines 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 Projections²⁰Three-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), shows greater variability across insurers than paid loss development and can be significantly more volatile and cyclical than paid loss development. Furthermore, in retrospective analyses, unadjusted incurred loss development projections have generally been less accurate and less stable than the corresponding adjusted paid loss development projections.

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. In addition, given the potential impact of SB 1160 and AB 1244, recent pharmaceutical cost declines and the COVID-19 pandemic including sharp decreases in claim settlement rates on medical loss development, the WCIRB believes that some adjustment for the impact of these changes is appropriate. However, 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.

Alternative Paid Loss Development Projections²¹Three-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 do. In addition, unadjusted paid projections have generally over the long term shown to be more accurate and stable than the corresponding incurred projections in retrospective analyses. However, 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 highly leveraged.

Exhibits 8.1 through 8.3 (average of the latest three years' factors) and 9.1 through 9.3 (latest year's factor) project future loss development based on historical unadjusted paid loss development. The

²⁰ All incurred loss development methodologies reflect a six-year average of incurred loss development applied after 108 months.

²¹ 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 276 months.

projections using the WCIRB's selected methodology are approximately at the midpoint of 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 COVID-19 pandemic and recent changes in indemnity claim settlement rates on medical loss development patterns, the WCIRB believes it is appropriate to adjust for these factors.

Latest Year Paid Loss Development Adjusted for Reforms

Exhibits 10.1 and 10.2 reflect the latest year paid medical projections after adjustment for the impact of SB 1160 and AB 1244 lien filing related provisions and recent declines in pharmaceutical costs but with no adjustment for changes in claim settlement rates through 84 months. The projection produced by this methodology is somewhat lower than that recommended by the WCIRB. However, as discussed above, paid loss development can be significantly distorted when claim settlement rates are changing and the WCIRB believes the adjustment for the recent sharp decline in claim settlement rates based on the Berquist-Sherman approach is appropriate. In particular, the WCIRB believes the claim settlement rate adjustment substantially corrects for distortions in paid loss development emerging during the pandemic period.

Three-Year Average/Latest Year 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 11.1 through 11.3 (average of the latest three years' factors) and 12.1 through 12.3 (latest year's factor) reflect projected future paid loss development with adjustments to an estimated common claim settlement rate through 84 months as well as the adjustments for SB 1160 and AB 1244 and recent pharmaceutical cost declines recommended by the WCIRB for paid medical development. The projections using the WCIRB's selected methodology, which is based on a two-year average of age-to-age factors including these adjustments, are approximately at the midpoint of the projections using these methodologies. As discussed above, the WCIRB believes utilizing a two-year average substantially mitigates the volatility emerging during the pandemic period while also being responsive to recent loss development patterns.

The projected loss ratios for policies incepting between September 1, 2021 and August 31, 2022 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 3.

Table 3: Projected Loss Ratios under Alternative Loss Development Methodologies

September 1, 2021 Filing Loss Development Methodology	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Two-Year Average Paid Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.285	0.311	0.596

Alternative Loss Development Methodologies²²	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
<u>Incurred Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.288	0.275	0.563
Latest Year (Unadjusted)	0.281	0.269	0.550
<u>Paid Loss Development Methodologies</u>			
Three-Year Average (Unadjusted)	0.293	0.322	0.615
Latest Year (Unadjusted)	0.272	0.303	0.575
Latest Year Adjusted for SB 1160 and Recent Pharmaceutical Cost Declines	—	0.300	—
Three-Year Average Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.289	0.319	0.608
Latest Year Adjusted for SB 1160, Recent Pharmaceutical Cost Declines and Changes in Claim Settlement Rates	0.282	0.305	0.587

²² 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 changes in claim settlement rates on later period development applied after 276 months as in the WCIRB's recommended methodology.

Ratios of Paid to Incurred Losses - Indemnity

Accident	Evaluated as of (in months):																			
Year	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%	97.5%	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%		
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%			
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%				
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%					
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%						
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%							
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%								
2010	35.3%	55.8%	69.1%	78.2%	83.9%	87.6%	90.5%	92.5%	93.9%	94.8%	95.5%									
2011	34.4%	55.2%	69.7%	77.9%	84.0%	88.1%	91.0%	93.0%	94.4%	95.2%										
2012	35.8%	56.3%	70.3%	79.7%	85.3%	89.0%	91.5%	93.2%	94.0%											
2013	34.3%	56.1%	71.7%	81.4%	87.2%	90.6%	92.6%	94.1%												
2014	34.2%	56.6%	72.5%	81.7%	87.1%	90.6%	92.7%													
2015	34.0%	56.7%	72.8%	82.2%	87.8%	90.5%														
2016	34.8%	58.0%	73.9%	83.1%	87.5%															
2017	34.8%	58.1%	73.5%	81.6%																
2018	35.3%	57.8%	71.8%																	
2019	35.3%	56.9%																		
2020	35.9%																			

Ratios of Paid to Incurred Losses - Indemnity

Accident	Evaluated as of (in months):																			
Year	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%		
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%			
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%				
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%	99.5%					
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%						
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%						
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%								
1991	98.6%	98.8%	98.9%	99.0%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	99.4%									
1992	98.6%	98.7%	98.9%	98.9%	99.1%	99.2%	99.3%	99.3%	99.3%	99.3%										
1993	98.6%	98.6%	98.8%	98.9%	99.0%	99.1%	99.2%	99.2%	99.4%											
1994	98.1%	98.3%	98.4%	98.5%	98.7%	98.8%	98.8%	98.8%												
1995	97.6%	97.8%	98.0%	98.2%	98.4%	98.6%	98.7%													
1996	97.7%	97.9%	98.0%	98.3%	98.4%	98.6%														
1997	97.7%	98.0%	98.2%	98.4%	98.6%															
1998	97.8%	98.0%	98.2%	98.5%																
1999	98.2%	98.2%	98.5%																	
2000	98.1%	98.2%																		
2001	98.3%																			

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

Ratios of Paid to Incurred Losses - Medical*

Accident	Evaluated as of (in months):																		
Year	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%	87.5%	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%	89.5%	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%	
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%		
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%			
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%				
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%					
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%						
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%							
2010	36.5%	55.8%	66.4%	74.3%	79.5%	83.4%	86.7%	89.2%	91.2%	92.4%	93.6%								
2011	32.5%	52.1%	64.0%	71.9%	77.6%	82.6%	86.2%	89.1%	90.9%	92.5%									
2012	32.5%	52.4%	64.7%	73.9%	80.1%	84.3%	87.7%	89.7%	91.2%										
2013	32.2%	51.5%	65.7%	75.0%	81.4%	85.8%	88.7%	90.7%											
2014	31.9%	53.1%	67.1%	76.3%	82.6%	86.5%	89.2%												
2015	31.7%	53.1%	66.7%	76.3%	82.3%	85.9%													
2016	32.6%	54.0%	67.7%	77.5%	82.6%														
2017	33.2%	54.7%	68.2%	76.4%															
2018	33.4%	54.8%	68.0%																
2019	32.9%	53.2%																	
2020	31.5%																		

Ratios of Paid to Incurred Losses - Medical*

Accident	Evaluated as of (in months):																			
Year	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%	98.3%	98.5%	98.8%		
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%			
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%				
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%					
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%						
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%							
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%								
1991	94.8%	95.1%	95.3%	95.6%	96.0%	96.2%	96.6%	97.0%	97.5%	97.8%	98.0%									
1992	94.1%	94.3%	94.7%	94.8%	95.3%	95.8%	96.2%	96.7%	97.1%	97.5%										
1993	90.5%	91.2%	92.3%	93.0%	93.9%	94.5%	95.1%	96.0%	96.6%											
1994	90.5%	90.9%	91.6%	92.8%	93.9%	94.2%	94.4%	94.9%												
1995	89.8%	91.0%	91.2%	93.1%	93.8%	94.5%	95.2%													
1996	91.2%	92.1%	92.8%	93.9%	94.7%	95.3%														
1997	91.9%	92.8%	93.6%	94.2%	95.0%															
1998	91.3%	91.9%	92.5%	93.1%																
1999	93.8%	94.7%	95.3%																	
2000	94.4%	95.0%																		
2001	94.6%																			

* 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.

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
1995																98.2%	98.4%
1996																97.9%	98.2%
1997														97.4%	97.7%	97.9%	98.2%
1998													96.8%	97.2%	97.5%	97.8%	98.0%
1999												96.3%	96.7%	97.1%	97.5%	97.7%	97.9%
2000										95.2%	95.9%	96.4%	96.9%	97.3%	97.6%	97.8%	
2001										93.2%	94.2%	95.0%	95.8%	96.3%	96.7%	97.1%	97.5%
2002									92.3%	93.5%	94.5%	95.6%	96.2%	96.7%	97.1%	97.5%	97.9%
2003								90.6%	92.3%	93.6%	95.0%	95.7%	96.2%	96.8%	97.3%	97.7%	98.1%
2004							88.3%	90.6%	92.3%	94.1%	95.1%	95.9%	96.6%	97.1%	97.6%	98.0%	98.3%
2005					80.5%	84.8%	87.9%	90.6%	92.9%	94.3%	95.3%	96.2%	96.8%	97.4%	97.8%	98.2%	
2006																	
2007				72.8%	79.7%	84.2%	88.4%	91.1%	92.9%	94.6%	95.7%	96.6%	97.3%	97.7%			
2008			60.3%	71.0%	78.4%	84.4%	88.3%	91.1%	93.4%	94.8%	96.0%	96.8%	97.4%				
2009		43.9%	58.5%	69.6%	78.3%	84.0%	88.2%	91.5%	93.6%	95.1%	96.3%	96.9%					
2010	20.9%	44.3%	59.1%	71.4%	79.8%	85.4%	89.7%	92.6%	94.5%	95.9%	96.7%						
2011	21.2%	44.5%	60.5%	72.7%	81.0%	86.6%	90.6%	93.4%	95.1%	96.2%							
2012	20.9%	45.3%	61.8%	74.0%	82.4%	88.0%	91.8%	94.2%	95.6%								
2013	20.6%	46.0%	63.0%	75.8%	84.3%	89.5%	92.9%	94.9%									
2014	20.8%	47.0%	64.7%	77.5%	85.8%	90.5%	93.3%										
2015	20.8%	48.5%	67.3%	79.9%	87.3%	91.1%											
2016	21.7%	51.1%	69.9%	81.8%	87.7%												
2017	24.0%	54.1%	72.0%	81.9%													
2018	24.4%	54.2%	70.3%														
2019	24.5%	52.0%															
2020	23.6%																

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**

<u>Accident Year</u>	<u>Permanent Indemnity</u>	<u>Temporary Indemnity</u>	<u>Total</u>
2003	53.8%	46.2%	100%
2004	49.8%	50.2%	100%
2005	46.2%	53.8%	100%
2006	47.3%	52.7%	100%
2007	48.3%	51.7%	100%
2008	50.4%	49.6%	100%
2009	51.8%	48.2%	100%
2010	51.2%	48.8%	100%
2011	51.0%	49.0%	100%
2012	50.2%	49.8%	100%
2013	50.0%	50.0%	100%
2014	50.3%	49.7%	100%
2015	50.8%	49.2%	100%
2016	50.0%	50.0%	100%
2017	48.7%	51.3%	100%
2018	48.2%	51.8%	100%
2019*	48.7%	51.3%	100%

II. Distribution of Ultimate Number of All Claims

<u>Accident Year</u>	<u>Permanent Indemnity**</u>	<u>Temporary Indemnity</u>	<u>Medical Only</u>	<u>Total</u>
2003	18.7%	16.1%	65.2%	100%
2004	15.6%	15.8%	68.6%	100%
2005	13.4%	15.6%	71.0%	100%
2006	13.6%	15.2%	71.2%	100%
2007	14.3%	15.3%	70.4%	100%
2008	15.5%	15.2%	69.3%	100%
2009	17.1%	16.0%	66.9%	100%
2010	17.7%	16.9%	65.4%	100%
2011	18.1%	17.4%	64.5%	100%
2012	18.3%	18.1%	63.6%	100%
2013	18.7%	18.7%	62.6%	100%
2014	18.8%	18.6%	62.6%	100%
2015	18.9%	18.3%	62.8%	100%
2016	18.6%	18.6%	62.8%	100%
2017	17.4%	18.3%	64.3%	100%
2018	17.1%	18.4%	64.5%	100%
2019*	17.6%	18.5%	63.9%	100%

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

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

Source: WCIRB unit statistical data

Quarterly Incurred Indemnity Loss Development Factors
Through December 31, 2020

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	2.715	2.755	2.740	2.841	2.834	2.736	2.463	2.417	2.724	2.785	3.031	3.116	3.052	3.238	3.344	3.303	3.209	3.201	3.372	3.200	3.227	3.001
9/6	1.808	1.780	1.784	1.790	1.808	1.776	1.618	1.656	1.776	1.820	1.848	1.904	2.001	1.966	1.940	1.960	1.948	1.945	1.874	1.998	2.017	1.953
12/9	1.530	1.518	1.500	1.520	1.473	1.460	1.355	1.448	1.511	1.510	1.530	1.564	1.632	1.587	1.585	1.570	1.578	1.578	1.580	1.578	1.597	1.580
15/12	1.260	1.268	1.250	1.257	1.238	1.180	1.149	1.189	1.234	1.248	1.293	1.306	1.306	1.303	1.301	1.301	1.313	1.309	1.298	1.298	1.295	
18/15	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	1.189	1.177	1.183	1.189	
21/18	1.140	1.150	1.148	1.153	1.127	1.066	1.096	1.117	1.128	1.139	1.153	1.140	1.146	1.141	1.141	1.132	1.137	1.134	1.138	1.123	1.128	
24/21	1.112	1.121	1.111	1.117	1.094	1.045	1.082	1.098	1.106	1.106	1.114	1.119	1.117	1.111	1.104	1.114	1.111	1.104	1.100	1.102	1.094	
27/24	1.096	1.093	1.100	1.094	1.073	1.045	1.070	1.082	1.081	1.088	1.089	1.091	1.085	1.087	1.081	1.082	1.087	1.079	1.078	1.071		
30/27	1.069	1.074	1.082	1.064	1.051	1.040	1.054	1.057	1.072	1.075	1.075	1.080	1.071	1.068	1.067	1.074	1.066	1.064	1.059	1.066		
33/30	1.058	1.048	1.062	1.047	1.032	1.036	1.042	1.049	1.053	1.059	1.052	1.064	1.053	1.060	1.047	1.055	1.050	1.047	1.047	1.045		
36/33	1.046	1.039	1.046	1.035	1.020	1.029	1.033	1.039	1.043	1.051	1.049	1.049	1.043	1.041	1.043	1.042	1.036	1.037	1.038	1.029		
39/36	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036	1.030	1.028	1.028			
42/39	1.028	1.034	1.030	1.023	1.018	1.020	1.020	1.031	1.033	1.036	1.038	1.035	1.032	1.028	1.031	1.030	1.027	1.026	1.028			
45/42	1.026	1.026	1.020	1.009	1.019	1.018	1.024	1.026	1.028	1.030	1.035	1.027	1.033	1.022	1.024	1.024	1.024	1.021	1.016			
48/45	1.020	1.022	1.013	1.008	1.013	1.013	1.021	1.019	1.021	1.024	1.024	1.026	1.023	1.024	1.020	1.020	1.016	1.017	1.014			
51/48	1.017	1.018	1.015	1.010	1.016	1.010	1.018	1.021	1.018	1.022	1.023	1.021	1.018	1.017	1.015	1.019	1.015	1.014				
54/51	1.018	1.013	1.009	1.007	1.017	1.009	1.017	1.021	1.020	1.021	1.020	1.020	1.016	1.019	1.015	1.014	1.013	1.015				
57/54	1.017	1.012	1.006	1.008	1.011	1.011	1.018	1.017	1.014	1.018	1.017	1.015	1.014	1.013	1.011	1.014	1.011	1.009				
60/57	1.014	1.007	1.005	1.008	1.009	1.011	1.013	1.019	1.016	1.013	1.015	1.012	1.014	1.012	1.012	1.011	1.007	1.007				
63/60	1.012	1.007	1.007	1.008	1.008	1.010	1.014	1.013	1.015	1.011	1.014	1.014	1.009	1.012	1.008	1.010	1.007					
66/63	1.009	1.005	1.006	1.011	1.008	1.010	1.013	1.016	1.014	1.015	1.013	1.013	1.009	1.010	1.009	1.008	1.007					
69/66	1.007	1.003	1.005	1.008	1.007	1.011	1.012	1.011	1.010	1.009	1.012	1.007	1.010	1.010	1.007	1.006	1.007					
72/69	1.006	1.005	1.005	1.005	1.009	1.009	1.013	1.011	1.009	1.009	1.009	1.010	1.008	1.007	1.007	1.005	1.005					
75/72	1.004	1.004	1.005	1.003	1.005	1.007	1.010	1.011	1.010	1.010	1.008	1.007	1.004	1.006	1.007	1.004						
78/75	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.007	1.005	1.006	1.005						
81/78	1.002	1.003	1.004	1.004	1.005	1.006	1.010	1.009	1.007	1.007	1.006	1.006	1.007	1.005	1.005	1.003						
84/81	1.003	1.005	1.003	1.006	1.006	1.007	1.008	1.005	1.009	1.006	1.004	1.007	1.004	1.007	1.003	1.004						
87/84	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004	1.006	1.004	1.003							
90/87	1.003	1.003	1.003	1.003	1.004	1.008	1.008	1.008	1.008	1.004	1.005	1.005	1.005	1.004	1.004							
93/90	1.002	1.004	1.003	1.002	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.004	1.005	1.004	1.003							
96/93	1.003	1.001	1.004	1.002	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.003	1.003	1.003							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

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

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	2.661	2.536	2.624	2.797	2.805	2.671	2.530	2.584	2.662	2.782	2.892	2.992	2.757	2.853	2.843	2.921	2.863	3.019	3.209	2.891	2.830	2.515
9/6	1.733	1.713	1.725	1.768	1.762	1.703	1.670	1.650	1.744	1.717	1.807	1.800	1.827	1.833	1.819	1.840	1.884	1.755	1.740	1.820	1.845	1.782
12/9	1.461	1.463	1.447	1.570	1.425	1.400	1.375	1.453	1.443	1.466	1.454	1.488	1.521	1.484	1.500	1.482	1.451	1.487	1.448	1.459	1.470	1.496
15/12	1.168	1.201	1.207	1.203	1.197	1.132	1.145	1.138	1.182	1.167	1.199	1.206	1.228	1.211	1.207	1.199	1.206	1.215	1.184	1.191	1.183	
18/15	1.116	1.123	1.144	1.151	1.126	1.086	1.087	1.103	1.106	1.126	1.135	1.129	1.141	1.136	1.117	1.114	1.094	1.095	1.087	1.096	1.100	
21/18	1.086	1.101	1.122	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.069	1.069	1.064	1.060	
24/21	1.072	1.080	1.083	1.082	1.060	1.040	1.052	1.070	1.074	1.067	1.074	1.080	1.080	1.067	1.064	1.055	1.059	1.057	1.046	1.044	1.052	
27/24	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.048	1.040	1.036	1.030		
30/27	1.052	1.058	1.070	1.051	1.038	1.039	1.049	1.046	1.054	1.057	1.048	1.063	1.052	1.046	1.037	1.044	1.037	1.032	1.028	1.036		
33/30	1.047	1.051	1.059	1.035	1.018	1.032	1.030	1.041	1.045	1.045	1.051	1.055	1.045	1.046	1.031	1.033	1.033	1.026	1.029	1.024		
36/33	1.042	1.035	1.040	1.029	1.016	1.024	1.034	1.042	1.033	1.042	1.040	1.041	1.037	1.028	1.026	1.027	1.021	1.021	1.020	1.016		
39/36	1.032	1.034	1.037	1.018	1.012	1.028	1.025	1.027	1.029	1.033	1.031	1.040	1.039	1.027	1.021	1.023	1.022	1.011	1.018			
42/39	1.031	1.036	1.026	1.019	1.013	1.017	1.020	1.025	1.035	1.036	1.037	1.037	1.031	1.022	1.026	1.022	1.017	1.010	1.015			
45/42	1.033	1.032	1.023	1.012	1.019	1.033	1.021	1.025	1.029	1.026	1.030	1.028	1.027	1.021	1.018	1.017	1.015	1.011	1.009			
48/45	1.023	1.026	1.017	1.008	1.013	1.025	1.018	1.022	1.025	1.029	1.034	1.022	1.023	1.020	1.018	1.014	1.008	1.012	1.008			
51/48	1.020	1.024	1.014	1.009	1.013	1.018	1.015	1.020	1.021	1.021	1.026	1.024	1.019	1.014	1.013	1.010	1.008	1.008				
54/51	1.027	1.017	1.016	1.010	1.012	1.021	1.019	1.022	1.022	1.027	1.023	1.019	1.018	1.015	1.011	1.009	1.009	1.012				
57/54	1.024	1.014	1.007	1.011	1.017	1.020	1.018	1.019	1.019	1.023	1.020	1.017	1.018	1.013	1.007	1.009	1.007	1.006				
60/57	1.021	1.015	1.009	1.008	1.014	1.020	1.019	1.018	1.017	1.019	1.016	1.015	1.014	1.012	1.007	1.007	1.005	1.005				
63/60	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.009	1.009	1.005	1.008	1.005					
66/63	1.016	1.010	1.012	1.015	1.013	1.015	1.022	1.019	1.018	1.017	1.015	1.010	1.008	1.008	1.006	1.010	1.006					
69/66	1.013	1.006	1.008	1.016	1.018	1.015	1.023	1.017	1.017	1.015	1.014	1.010	1.008	1.008	1.005	1.008	1.003					
72/69	1.009	1.007	1.009	1.015	1.010	1.014	1.015	1.013	1.014	1.012	1.011	1.010	1.007	1.005	1.005	1.002	1.003					
75/72	1.008	1.006	1.008	1.010	1.009	1.012	1.012	1.011	1.018	1.013	1.008	1.006	1.001	1.003	1.006	1.003						
78/75	1.012	1.008	1.012	1.010	1.011	1.018	1.013	1.012	1.012	1.010	1.008	1.008	1.006	1.005	1.003	1.005						
81/78	1.006	1.006	1.009	1.010	1.014	1.018	1.017	1.016	1.009	1.009	1.005	1.006	1.006	1.005	1.004	1.002						
84/81	1.006	1.009	1.014	1.009	1.007	1.012	1.011	1.008	1.010	1.008	1.007	1.005	1.001	1.003	1.002	1.002						
87/84	1.008	1.008	1.010	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.003	1.001	1.002	1.002							
90/87	1.005	1.008	1.008	1.009	1.012	1.009	1.009	1.013	1.008	1.006	1.006	1.003	1.006	1.006	1.001							
93/90	1.007	1.015	1.009	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003	1.002	1.004	1.000							
96/93	1.007	1.010	1.012	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003	1.002	1.001	1.003	1.002							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

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

Quarterly Paid Indemnity Loss Development Factors
Through December 31, 2020

Age in Months	Accident Year																					
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	4.024	4.170	4.461	4.720	4.908	4.745	4.512	4.376	4.495	4.553	4.807	4.911	4.722	4.854	5.099	5.076	5.056	5.087	5.272	4.987	5.081	5.060
9/6	2.367	2.283	2.369	2.443	2.424	2.399	2.303	2.259	2.375	2.377	2.398	2.452	2.432	2.484	2.462	2.462	2.484	2.456	2.446	2.538	2.505	2.482
12/9	1.806	1.839	1.855	1.897	1.876	1.841	1.774	1.812	1.834	1.810	1.825	1.861	1.869	1.877	1.866	1.879	1.910	1.882	1.892	1.891	1.903	1.837
15/12	1.536	1.538	1.552	1.550	1.516	1.491	1.456	1.482	1.488	1.481	1.507	1.532	1.539	1.506	1.539	1.540	1.559	1.571	1.544	1.527	1.522	
18/15	1.399	1.395	1.401	1.403	1.379	1.331	1.306	1.306	1.327	1.332	1.343	1.355	1.361	1.361	1.353	1.364	1.372	1.366	1.358	1.353	1.341	
21/18	1.298	1.303	1.303	1.311	1.297	1.241	1.217	1.233	1.235	1.243	1.259	1.257	1.261	1.261	1.263	1.267	1.264	1.256	1.260	1.248	1.258	
24/21	1.257	1.256	1.258	1.260	1.244	1.183	1.181	1.195	1.191	1.194	1.206	1.209	1.215	1.213	1.204	1.216	1.211	1.206	1.205	1.206	1.193	
27/24	1.199	1.203	1.200	1.205	1.186	1.140	1.142	1.151	1.149	1.153	1.162	1.165	1.168	1.164	1.159	1.170	1.176	1.161	1.159	1.152		
30/27	1.161	1.165	1.175	1.172	1.161	1.122	1.117	1.126	1.129	1.130	1.141	1.141	1.137	1.134	1.141	1.147	1.142	1.137	1.131	1.116		
33/30	1.125	1.130	1.142	1.136	1.123	1.097	1.096	1.100	1.101	1.108	1.114	1.116	1.112	1.111	1.111	1.115	1.107	1.104	1.105	1.103		
36/33	1.103	1.103	1.115	1.111	1.097	1.085	1.081	1.080	1.084	1.092	1.094	1.098	1.091	1.091	1.096	1.092	1.089	1.088	1.083	1.077		
39/36	1.081	1.081	1.092	1.087	1.072	1.070	1.066	1.064	1.067	1.074	1.078	1.077	1.073	1.075	1.074	1.075	1.071	1.068	1.064			
42/39	1.071	1.077	1.080	1.073	1.063	1.059	1.058	1.058	1.062	1.067	1.067	1.071	1.070	1.065	1.064	1.066	1.062	1.059	1.050			
45/42	1.054	1.063	1.064	1.056	1.049	1.047	1.049	1.047	1.051	1.058	1.059	1.057	1.055	1.054	1.052	1.050	1.050	1.045	1.044			
48/45	1.050	1.055	1.053	1.046	1.044	1.041	1.044	1.043	1.047	1.049	1.051	1.050	1.048	1.048	1.048	1.045	1.041	1.040	1.037			
51/48	1.038	1.043	1.044	1.036	1.035	1.033	1.036	1.036	1.037	1.042	1.042	1.043	1.039	1.038	1.038	1.039	1.035	1.031				
54/51	1.038	1.036	1.037	1.034	1.035	1.030	1.028	1.035	1.036	1.038	1.041	1.038	1.036	1.036	1.033	1.032	1.031	1.024				
57/54	1.033	1.037	1.030	1.028	1.026	1.025	1.028	1.030	1.032	1.033	1.033	1.032	1.033	1.028	1.027	1.028	1.025	1.024				
60/57	1.030	1.027	1.026	1.024	1.024	1.024	1.024	1.028	1.029	1.029	1.032	1.027	1.030	1.028	1.025	1.025	1.023	1.020				
63/60	1.026	1.024	1.021	1.022	1.019	1.019	1.021	1.023	1.025	1.025	1.024	1.026	1.025	1.025	1.021	1.021	1.018					
66/63	1.023	1.023	1.021	1.019	1.019	1.019	1.020	1.025	1.025	1.025	1.025	1.023	1.022	1.022	1.018	1.018	1.014					
69/66	1.021	1.020	1.017	1.016	1.017	1.016	1.021	1.020	1.020	1.020	1.022	1.020	1.019	1.022	1.017	1.014	1.013					
72/69	1.016	1.018	1.016	1.016	1.015	1.017	1.015	1.020	1.019	1.019	1.019	1.019	1.019	1.016	1.014	1.016	1.012					
75/72	1.016	1.015	1.014	1.012	1.012	1.013	1.015	1.019	1.018	1.016	1.016	1.017	1.015	1.014	1.012	1.012						
78/75	1.014	1.012	1.013	1.012	1.011	1.012	1.015	1.017	1.016	1.015	1.016	1.016	1.015	1.013	1.011	1.009						
81/78	1.013	1.011	1.012	1.011	1.010	1.012	1.015	1.015	1.016	1.015	1.015	1.013	1.012	1.011	1.010	1.008						
84/81	1.011	1.013	1.010	1.010	1.009	1.011	1.013	1.015	1.014	1.013	1.012	1.013	1.013	1.011	1.010	1.009						
87/84	1.010	1.008	1.010	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010	1.011	1.010	1.007							
90/87	1.009	1.010	1.009	1.008	1.008	1.011	1.012	1.013	1.012	1.011	1.010	1.010	1.010	1.009	1.007							
93/90	1.009	1.008	1.008	1.007	1.008	1.012	1.011	1.011	1.012	1.010	1.010	1.009	1.009	1.008	1.007							
96/93	1.009	1.006	1.007	1.007	1.007	1.008	1.011	1.011	1.008	1.010	1.010	1.009	1.010	1.007	1.007							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

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

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	5.955	5.518	6.168	7.221	7.127	7.617	5.563	5.308	5.615	6.579	6.101	6.048	5.854	5.989	6.284	5.604	5.720	5.897	5.433	5.460	4.984	4.496
9/6	2.406	2.356	2.432	2.694	2.577	2.483	2.236	2.348	2.381	2.348	2.375	2.361	2.327	2.398	2.498	2.428	2.287	2.326	2.248	2.351	2.287	2.240
12/9	1.739	1.749	1.857	1.882	1.825	1.759	1.666	1.716	1.765	1.731	1.723	1.756	1.746	1.763	1.736	1.750	1.705	1.752	1.737	1.719	1.796	1.767
15/12	1.490	1.514	1.547	1.554	1.510	1.437	1.423	1.429	1.444	1.413	1.429	1.445	1.472	1.446	1.443	1.460	1.454	1.479	1.434	1.425	1.432	
18/15	1.267	1.286	1.310	1.330	1.295	1.243	1.230	1.227	1.259	1.243	1.259	1.268	1.282	1.284	1.263	1.265	1.278	1.263	1.250	1.245	1.231	
21/18	1.168	1.192	1.219	1.211	1.179	1.153	1.151	1.163	1.173	1.170	1.178	1.182	1.187	1.192	1.193	1.192	1.189	1.173	1.170	1.173	1.170	
24/21	1.124	1.149	1.159	1.154	1.125	1.115	1.118	1.127	1.133	1.132	1.137	1.144	1.153	1.154	1.148	1.146	1.146	1.141	1.131	1.143	1.138	
27/24	1.108	1.121	1.128	1.123	1.093	1.090	1.093	1.106	1.107	1.110	1.112	1.119	1.120	1.123	1.122	1.122	1.124	1.111	1.111	1.108		
30/27	1.088	1.101	1.108	1.103	1.077	1.084	1.087	1.097	1.100	1.100	1.106	1.107	1.111	1.109	1.111	1.111	1.105	1.100	1.092	1.083		
33/30	1.072	1.086	1.089	1.077	1.063	1.071	1.065	1.081	1.083	1.086	1.092	1.094	1.093	1.094	1.090	1.089	1.082	1.082	1.077	1.078		
36/33	1.066	1.069	1.076	1.061	1.055	1.062	1.062	1.071	1.072	1.072	1.077	1.083	1.082	1.078	1.080	1.076	1.071	1.067	1.065	1.066		
39/36	1.059	1.060	1.061	1.049	1.044	1.053	1.056	1.057	1.059	1.061	1.066	1.071	1.066	1.069	1.065	1.064	1.061	1.055	1.054			
42/39	1.049	1.055	1.054	1.041	1.044	1.049	1.054	1.055	1.058	1.059	1.061	1.068	1.063	1.062	1.057	1.059	1.057	1.048	1.040			
45/42	1.045	1.047	1.044	1.036	1.037	1.040	1.047	1.048	1.049	1.054	1.053	1.056	1.056	1.053	1.051	1.045	1.044	1.042	1.039			
48/45	1.039	1.044	1.037	1.032	1.035	1.037	1.043	1.043	1.046	1.047	1.050	1.051	1.046	1.045	1.046	1.041	1.040	1.038	1.033			
51/48	1.035	1.037	1.034	1.031	1.030	1.033	1.037	1.036	1.036	1.039	1.041	1.043	1.040	1.039	1.038	1.037	1.032	1.031				
54/51	1.036	1.032	1.027	1.030	1.029	1.034	1.034	1.035	1.035	1.036	1.042	1.038	1.035	1.035	1.034	1.032	1.029	1.023				
57/54	1.030	1.027	1.024	1.024	1.024	1.029	1.031	1.034	1.031	1.033	1.038	1.034	1.034	1.031	1.028	1.026	1.025	1.023				
60/57	1.028	1.026	1.021	1.023	1.026	1.028	1.029	1.028	1.032	1.032	1.035	1.030	1.030	1.030	1.023	1.022	1.021	1.019				
63/60	1.025	1.022	1.019	1.019	1.020	1.024	1.024	1.024	1.024	1.027	1.027	1.026	1.027	1.025	1.021	1.022	1.019					
66/63	1.021	1.020	1.020	1.018	1.021	1.023	1.024	1.026	1.026	1.029	1.029	1.024	1.028	1.023	1.021	1.018	1.015					
69/66	1.022	1.019	1.018	1.016	1.019	1.021	1.023	1.023	1.021	1.024	1.024	1.022	1.020	1.020	1.017	1.016	1.014					
72/69	1.018	1.016	1.017	1.018	1.016	1.021	1.021	1.022	1.022	1.023	1.021	1.020	1.019	1.016	1.015	1.017	1.014					
75/72	1.016	1.014	1.015	1.015	1.014	1.018	1.020	1.019	1.019	1.018	1.018	1.018	1.015	1.015	1.013	1.014						
78/75	1.015	1.014	1.015	1.016	1.015	1.016	1.018	1.017	1.022	1.019	1.018	1.017	1.017	1.015	1.013	1.011						
81/78	1.014	1.013	1.014	1.013	1.014	1.018	1.018	1.015	1.019	1.018	1.015	1.015	1.013	1.012	1.011	1.009						
84/81	1.012	1.013	1.012	1.012	1.013	1.016	1.016	1.015	1.018	1.015	1.015	1.015	1.013	1.013	1.010	1.009						
87/84	1.011	1.010	1.012	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.011	1.012	1.010	1.008							
90/87	1.012	1.011	1.013	1.012	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.011	1.012	1.009	1.008							
93/90	1.010	1.011	1.012	1.011	1.013	1.013	1.012	1.014	1.014	1.013	1.011	1.010	1.009	1.010	1.006							
96/93	1.010	1.008	1.010	1.010	1.009	1.013	1.015	1.016	1.011	1.012	1.010	1.009	1.009	1.009	1.006							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

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

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	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%	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%	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%	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%	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%	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%	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%	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%	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%	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%	12.9%	6.1%	4.7%	0.0%	20.4%	17.1%	12.9%	6.1%	4.7%	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%	19.3%	16.7%	11.5%	6.3%	1.7%	0.0%	19.3%	16.7%	11.5%	6.3%	1.7%	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%	19.4%	16.5%	13.1%	7.1%	4.4%	0.0%	19.4%	16.5%	13.1%	7.1%	4.4%	0.0%
156	35.4%	26.1%	23.7%	19.0%	16.9%	12.8%	22.5%	17.6%	10.8%	6.1%	4.0%	0.0%	22.5%	17.6%	10.8%	6.1%	4.0%	0.0%	22.5%	17.6%	10.8%	6.1%	4.0%	0.0%	22.5%	17.6%	10.8%	6.1%	4.0%	0.0%
168	38.5%	33.2%	22.9%	17.1%	15.7%	15.6%	22.9%	17.6%	7.2%	1.5%	0.1%	0.0%	22.9%	17.6%	7.2%	1.5%	0.1%	0.0%	22.9%	17.6%	7.2%	1.5%	0.1%	0.0%	22.9%	17.6%	7.2%	1.5%	0.1%	0.0%
180	37.5%	37.4%	29.2%	15.6%	13.6%	14.2%	23.3%	23.2%	15.0%	1.5%	-0.6%	0.0%	23.3%	23.2%	15.0%	1.5%	-0.6%	0.0%	23.3%	23.2%	15.0%	1.5%	-0.6%	0.0%	23.3%	23.2%	15.0%	1.5%	-0.6%	0.0%
192	32.2%	34.2%	31.0%	22.5%	12.1%	11.6%	20.7%	22.7%	19.5%	10.9%	0.5%	0.0%	20.7%	22.7%	19.5%	10.9%	0.5%	0.0%	20.7%	22.7%	19.5%	10.9%	0.5%	0.0%	20.7%	22.7%	19.5%	10.9%	0.5%	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%	26.6%	23.1%	17.5%	11.7%	6.7%	0.0%	26.6%	23.1%	17.5%	11.7%	6.7%	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%	19.5%	18.3%	11.3%	1.8%	0.6%	0.0%	19.5%	18.3%	11.3%	1.8%	0.6%	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%	12.6%	20.7%	16.0%	7.2%	0.5%	0.0%	12.6%	20.7%	16.0%	7.2%	0.5%	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%	26.3%	13.6%	18.3%	15.9%	6.5%	0.0%	26.3%	13.6%	18.3%	15.9%	6.5%	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%	25.3%	21.5%	5.4%	6.2%	9.4%	0.0%	25.3%	21.5%	5.4%	6.2%	9.4%	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%	27.7%	24.7%	17.0%	4.4%	-0.1%	0.0%	27.7%	24.7%	17.0%	4.4%	-0.1%	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%	33.5%	17.2%	14.3%	13.0%	2.6%	0.0%	33.5%	17.2%	14.3%	13.0%	2.6%	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%	23.4%	30.2%	12.1%	-0.9%	4.9%	0.0%	23.4%	30.2%	12.1%	-0.9%	4.9%	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%	6.5%	20.5%	24.6%	-0.3%	-7.5%	0.0%	6.5%	20.5%	24.6%	-0.3%	-7.5%	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%	19.1%	15.4%	22.8%	23.6%	4.6%	0.0%	19.1%	15.4%	22.8%	23.6%	4.6%	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%	13.4%	7.7%	7.7%	16.3%	15.3%	0.0%	13.4%	7.7%	7.7%	16.3%	15.3%	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%	20.2%	4.5%	-0.8%	-4.4%	1.7%	0.0%	20.2%	4.5%	-0.8%	-4.4%	1.7%	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%	20.2%	21.3%	14.3%	-0.2%	0.0%	0.0%	20.2%	21.3%	14.3%	-0.2%	0.0%	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%	20.3%	18.3%	15.0%	8.1%	2.9%	0.0%	20.3%	18.3%	15.0%	8.1%	2.9%	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%	30.5%	20.0%	17.6%	24.1%	12.8%	0.0%	30.5%	20.0%	17.6%	24.1%	12.8%	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%			9.0%	-0.5%	-3.8%	0.0%			9.0%	-0.5%	-3.8%	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%			-40.2%	-9.3%	-10.9%	0.0%			-40.2%	-9.3%	-10.9%	0.0%
408				6.0%	34.6%	35.6%				-29.6%	-1.0%	0.0%				-29.6%	-1.0%	0.0%				-29.6%	-1.0%	0.0%				-29.6%	-1.0%	0.0%
420					3.9%	24.4%					-20.5%	0.0%					-20.5%	0.0%					0.0%						0.0%	0.0%
432						2.1%						0.0%												0.0%						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%	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%	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.

Difference in Pharma Payment Share for Calendar Years 2012 and Prior Compared to Calendar Year 2018			
Development Age	(A)	(B)	(C)
	CY2012&Prior ^[1]	CY2018 ^[2]	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 6.1, Item I.^[2] Based on calendar year 2018 from Exhibit 6.1, Item I.

**Developed Loss Ratio Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	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)
2009	0.318	1.006	1.030	0.328	0.470	1.002	0.999	0.469	0.797
2010	0.303	1.006	1.036	0.314	0.451	1.003	1.002	0.452	0.766
2011	0.279	1.007	1.043	0.291	0.384	1.005	1.007	0.386	0.678
2012	0.249	1.010	1.053	0.262	0.327	1.007	1.013	0.332	0.593
2013	0.208	1.012	1.066	0.222	0.259	1.008	1.022	0.265	0.487
2014	0.195	1.016	1.083	0.211	0.228	1.010	1.032	0.235	0.446
2015	0.188	1.020	1.104	0.207	0.213	1.013	1.046	0.223	0.430
2016	0.174	1.029	1.136	0.197	0.197	1.022	1.069	0.211	0.409
2017	0.172	1.051	1.194	0.205	0.199	1.032	1.103	0.219	0.425
2018	0.170	1.095	1.307	0.222	0.203	1.053	1.162	0.235	0.457
2019	0.159	1.238	1.619	0.257	0.200	1.117	1.298	0.260	0.517
2020	0.090	1.904	3.082	0.278	0.140	1.447	1.879	0.262	0.540

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Based on Section B, Exhibit 2.1.
- (c) Based on Section B, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.328	1.395	1.357	0.337
2010	0.314	1.369	1.234	0.348
2011	0.291	1.350	1.127	0.349
2012	0.262	1.333	1.004	0.348
2013	0.222	1.304	0.877	0.330
2014	0.211	1.194	0.808	0.312
2015	0.207	1.177	0.771	0.316
2016	0.197	1.162	0.797	0.288
2017	0.205	1.132	0.835	0.278
2018	0.222	1.102	0.879	0.278
2019	0.257	1.071	0.973	0.283
2020	0.278	1.048	1.062	0.274
				Projected (d)
2021				0.281
2022				0.287
9/1/2022				0.288

(a) See Exhibit 6.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.469	0.786	1.357	0.272
2010	0.452	0.784	1.234	0.287
2011	0.386	0.806	1.127	0.276
2012	0.332	0.843	1.004	0.279
2013	0.265	0.925	0.877	0.279
2014	0.235	0.972	0.808	0.282
2015	0.223	0.995	0.771	0.288
2016	0.211	0.996	0.797	0.264
2017	0.219	0.997	0.835	0.262
2018	0.235	1.015	0.879	0.272
2019	0.260	1.011	0.973	0.270
2020	0.262	1.007	1.062	0.249
				Projected (d)
2021				0.268
2022				0.274
9/1/2022				0.275

(a) See Exhibit 6.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

**Developed Loss Ratio Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	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)
2009	0.318	1.006	1.030	0.328	0.470	1.002	0.999	0.469	0.797
2010	0.303	1.006	1.036	0.314	0.451	1.003	1.002	0.452	0.766
2011	0.279	1.007	1.043	0.291	0.384	1.005	1.007	0.386	0.678
2012	0.249	1.010	1.053	0.262	0.327	1.007	1.013	0.332	0.593
2013	0.208	1.013	1.067	0.222	0.259	1.006	1.020	0.264	0.486
2014	0.195	1.013	1.080	0.211	0.228	1.006	1.026	0.233	0.444
2015	0.188	1.016	1.098	0.206	0.213	1.011	1.037	0.221	0.427
2016	0.174	1.027	1.127	0.196	0.197	1.018	1.056	0.208	0.404
2017	0.172	1.046	1.179	0.203	0.199	1.031	1.088	0.216	0.419
2018	0.170	1.089	1.284	0.218	0.203	1.051	1.144	0.232	0.449
2019	0.159	1.228	1.577	0.251	0.200	1.110	1.270	0.254	0.505
2020	0.090	1.900	2.996	0.270	0.140	1.452	1.844	0.257	0.527

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Based on Section B, Exhibit 2.1.
- (c) Based on Section B, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.328	1.395	1.357	0.337
2010	0.314	1.369	1.234	0.348
2011	0.291	1.350	1.127	0.349
2012	0.262	1.333	1.004	0.348
2013	0.222	1.304	0.877	0.330
2014	0.211	1.194	0.808	0.312
2015	0.206	1.177	0.771	0.314
2016	0.196	1.162	0.797	0.286
2017	0.203	1.132	0.835	0.275
2018	0.218	1.102	0.879	0.273
2019	0.251	1.071	0.973	0.276
2020	0.270	1.048	1.062	0.266
				Projected (d)
2021				0.274
2022				0.280
9/1/2022				0.281

(a) See Exhibit 7.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Latest Year Incurred Development Factors
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.469	0.786	1.357	0.272
2010	0.452	0.784	1.234	0.287
2011	0.386	0.806	1.127	0.276
2012	0.332	0.843	1.004	0.279
2013	0.264	0.925	0.877	0.279
2014	0.233	0.972	0.808	0.281
2015	0.221	0.995	0.771	0.286
2016	0.208	0.996	0.797	0.261
2017	0.216	0.997	0.835	0.258
2018	0.232	1.015	0.879	0.268
2019	0.254	1.011	0.973	0.264
2020	0.257	1.007	1.062	0.244
				Projected (d)
2021				0.263
2022				0.268
9/1/2022				0.269

(a) See Exhibit 7.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

**Developed Loss Ratio Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	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)	Total Developed Loss Ratio (4) + (8)
2009	0.304	1.012	1.087	0.330	0.434	1.014	1.222	0.531	0.861
2010	0.289	1.014	1.103	0.319	0.423	1.017	1.242	0.525	0.844
2011	0.266	1.017	1.121	0.298	0.355	1.018	1.264	0.449	0.747
2012	0.234	1.020	1.143	0.267	0.298	1.022	1.292	0.386	0.653
2013	0.196	1.025	1.172	0.230	0.235	1.027	1.327	0.312	0.542
2014	0.181	1.034	1.213	0.220	0.203	1.036	1.375	0.279	0.499
2015	0.170	1.045	1.267	0.215	0.183	1.049	1.443	0.265	0.480
2016	0.152	1.067	1.352	0.205	0.163	1.072	1.546	0.252	0.457
2017	0.140	1.117	1.510	0.212	0.152	1.110	1.717	0.261	0.472
2018	0.122	1.228	1.854	0.226	0.138	1.197	2.055	0.283	0.509
2019	0.090	1.560	2.893	0.261	0.106	1.393	2.863	0.305	0.566
2020	0.032	3.119	9.024	0.292	0.044	2.366	6.774	0.298	0.590

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.
- (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 Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.230	1.304	0.877	0.341
2014	0.220	1.194	0.808	0.324
2015	0.215	1.177	0.771	0.328
2016	0.205	1.162	0.797	0.300
2017	0.212	1.132	0.835	0.287
2018	0.226	1.102	0.879	0.283
2019	0.261	1.071	0.973	0.288
2020	0.292	1.048	1.062	0.288
				Projected (d)
2021				0.286
2022				0.292
9/1/2022				0.293

(a) See Exhibit 8.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.531	0.786	1.357	0.307
2010	0.525	0.784	1.234	0.333
2011	0.449	0.806	1.127	0.321
2012	0.386	0.843	1.004	0.324
2013	0.312	0.925	0.877	0.329
2014	0.279	0.972	0.808	0.336
2015	0.265	0.995	0.771	0.341
2016	0.252	0.996	0.797	0.315
2017	0.261	0.997	0.835	0.311
2018	0.283	1.015	0.879	0.327
2019	0.305	1.011	0.973	0.317
2020	0.298	1.007	1.062	0.283
				Projected (d)
2021				0.315
2022				0.322
9/1/2022				0.322

(a) See Exhibit 8.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratio Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	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)	Total Developed Loss Ratio (4) + (8)
2009	0.304	1.012	1.087	0.330	0.434	1.014	1.222	0.531	0.861
2010	0.289	1.014	1.103	0.319	0.423	1.017	1.242	0.525	0.844
2011	0.266	1.017	1.121	0.298	0.355	1.018	1.264	0.449	0.747
2012	0.234	1.020	1.143	0.267	0.298	1.022	1.292	0.386	0.653
2013	0.196	1.023	1.170	0.229	0.235	1.023	1.322	0.311	0.540
2014	0.181	1.028	1.202	0.218	0.203	1.029	1.360	0.276	0.494
2015	0.170	1.039	1.249	0.212	0.183	1.043	1.419	0.260	0.472
2016	0.152	1.058	1.322	0.201	0.163	1.062	1.507	0.246	0.447
2017	0.140	1.103	1.458	0.205	0.152	1.099	1.656	0.251	0.456
2018	0.122	1.210	1.764	0.215	0.138	1.178	1.950	0.269	0.483
2019	0.090	1.526	2.692	0.243	0.106	1.378	2.688	0.286	0.529
2020	0.032	3.063	8.246	0.267	0.044	2.347	6.308	0.278	0.545

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.
- (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 Industry Average Filed Pure Premium Ratios
Using Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.218	1.194	0.808	0.322
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.277
2018	0.215	1.102	0.879	0.269
2019	0.243	1.071	0.973	0.268
2020	0.267	1.048	1.062	0.263
				Projected (d)
2021				0.266
2022				0.272
9/1/2022				0.272

(a) See Exhibit 9.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Latest Year Paid Development Factors
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.531	0.786	1.357	0.307
2010	0.525	0.784	1.234	0.333
2011	0.449	0.806	1.127	0.321
2012	0.386	0.843	1.004	0.324
2013	0.311	0.925	0.877	0.328
2014	0.276	0.972	0.808	0.332
2015	0.260	0.995	0.771	0.336
2016	0.246	0.996	0.797	0.307
2017	0.251	0.997	0.835	0.300
2018	0.269	1.015	0.879	0.310
2019	0.286	1.011	0.973	0.297
2020	0.278	1.007	1.062	0.263
				Projected (d)
2021				0.295
2022				0.302
9/1/2022				0.303

(a) See Exhibit 9.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratios Adjusted for the Impact of Reforms
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)
			Medical		
			Adjusted		
Accident Year	<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>
2009	0.434	0.401	1.015	1.235	0.495
2010	0.423	0.392	1.018	1.257	0.493
2011	0.355	0.333	1.020	1.282	0.427
2012	0.298	0.282	1.024	1.313	0.371
2013	0.235	0.225	1.025	1.346	0.302
2014	0.203	0.197	1.031	1.388	0.274
2015	0.183	0.180	1.033	1.434	0.259
2016	0.163	0.162	1.055	1.512	0.245
2017	0.152	0.151	1.086	1.642	0.249
2018	0.138	0.138	1.178	1.934	0.267
2019	0.106	0.106	1.378	2.666	0.284
2020	0.044	0.044	2.347	6.256	0.276

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.
- (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 Industry Average Filed Pure Premium Ratios
Adjusted for the Impact of Reforms
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.302	0.944	0.877	0.326
2014	0.274	0.989	0.808	0.335
2015	0.259	1.008	0.771	0.338
2016	0.245	1.011	0.797	0.310
2017	0.249	1.014	0.835	0.302
2018	0.267	1.015	0.879	0.308
2019	0.284	1.011	0.973	0.295
2020	0.276	1.007	1.062	0.261
				Projected (d)
2021				0.293
2022				0.299
9/1/2022				0.300

(a) See Exhibit 10.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**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, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
					Adjusted					
Accident	Reported	Annual	Cumulative	Developed	Paid	Paid	Annual	Cumulative	Developed	Total
Year	Loss Ratio (a)	Factor (b)	Factor	Loss Ratio	Loss Ratio (a)	Loss Ratio (c)	Factor (d)	Factor	Loss Ratio	Loss Ratio
				(1) x (3)					(6) x (8)	(4) + (9)
2009	0.304	1.012	1.087	0.330	0.434	0.401	1.015	1.235	0.495	0.825
2010	0.289	1.014	1.103	0.319	0.423	0.392	1.018	1.257	0.493	0.812
2011	0.266	1.017	1.121	0.298	0.355	0.333	1.020	1.282	0.427	0.725
2012	0.234	1.020	1.143	0.267	0.298	0.282	1.024	1.313	0.371	0.638
2013	0.196	1.025	1.172	0.230	0.235	0.225	1.029	1.352	0.304	0.533
2014	0.181	1.034	1.213	0.220	0.203	0.197	1.040	1.406	0.277	0.497
2015	0.170	1.038	1.259	0.214	0.183	0.180	1.035	1.455	0.263	0.476
2016	0.152	1.057	1.331	0.202	0.163	0.162	1.057	1.538	0.249	0.451
2017	0.140	1.106	1.472	0.207	0.152	0.151	1.092	1.680	0.254	0.461
2018	0.122	1.233	1.815	0.221	0.138	0.138	1.204	2.022	0.279	0.500
2019	0.090	1.573	2.854	0.258	0.106	0.106	1.402	2.835	0.302	0.560
2020	0.032	3.079	8.788	0.284	0.044	0.044	2.351	6.666	0.294	0.578

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.
- (b) Age-to-age factors for developing accident years 2015 to 2020 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 2015 to 2020 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 Industry Average Filed 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, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.230	1.304	0.877	0.341
2014	0.220	1.194	0.808	0.324
2015	0.214	1.177	0.771	0.326
2016	0.202	1.162	0.797	0.295
2017	0.207	1.132	0.835	0.280
2018	0.221	1.102	0.879	0.277
2019	0.258	1.071	0.973	0.284
2020	0.284	1.048	1.062	0.281
				Projected (d)
2021				0.282
2022				0.288
9/1/2022				0.289

(a) See Exhibit 11.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed 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, 2020

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.304	0.944	0.877	0.327
2014	0.277	0.989	0.808	0.339
2015	0.263	1.008	0.771	0.343
2016	0.249	1.011	0.797	0.316
2017	0.254	1.014	0.835	0.309
2018	0.279	1.015	0.879	0.322
2019	0.302	1.011	0.973	0.314
2020	0.294	1.007	1.062	0.278
				Projected (d)
2021				0.312
2022				0.318
9/1/2022				0.319

(a) See Exhibit 11.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
					Adjusted					
Accident	Reported	Annual	Cumulative	Developed	Paid	Paid	Annual	Cumulative	Developed	Total
Year	Loss Ratio (a)	Factor (b)	Factor	Loss Ratio	Loss Ratio (a)	Loss Ratio (c)	Factor (d)	Factor	Loss Ratio	Developed
				(1) x (3)					(6) x (8)	(4) + (9)
2009	0.304	1.012	1.087	0.330	0.434	0.401	1.015	1.235	0.495	0.825
2010	0.289	1.014	1.103	0.319	0.423	0.392	1.018	1.257	0.493	0.812
2011	0.266	1.017	1.121	0.298	0.355	0.333	1.020	1.282	0.427	0.725
2012	0.234	1.020	1.143	0.267	0.298	0.282	1.024	1.313	0.371	0.638
2013	0.196	1.023	1.170	0.229	0.235	0.225	1.025	1.346	0.302	0.532
2014	0.181	1.028	1.202	0.218	0.203	0.197	1.031	1.388	0.274	0.491
2015	0.170	1.035	1.244	0.211	0.183	0.180	1.029	1.428	0.258	0.469
2016	0.152	1.055	1.312	0.199	0.163	0.162	1.052	1.503	0.243	0.442
2017	0.140	1.102	1.447	0.203	0.152	0.151	1.085	1.631	0.247	0.450
2018	0.122	1.233	1.783	0.217	0.138	0.138	1.192	1.943	0.268	0.485
2019	0.090	1.561	2.784	0.252	0.106	0.106	1.396	2.713	0.289	0.540
2020	0.032	3.073	8.555	0.277	0.044	0.044	2.350	6.374	0.281	0.558

- (a) Based on Section B, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.
- (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. Age-to-age factors for developing accident years 2015 to 2020 were adjusted for changes in claim settlement rates based on latest year selections (see Section B, Exhibit 2.5.8, Item Q).
- (c) See Section B, Exhibit 3.2, Column (2).
- (d) Based on Section B, Exhibits 2.6.1 and includes adjustments for SB 1160 and recent pharmaceutical cost declines. Age-to-age factors for developing accident years 2015 to 2020 were adjusted for changes in claim settlement rates based on latest year selections (see Section B, Exhibit 2.6.8, Item R).

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.218	1.194	0.808	0.322
2015	0.211	1.177	0.771	0.322
2016	0.199	1.162	0.797	0.291
2017	0.203	1.132	0.835	0.275
2018	0.217	1.102	0.879	0.272
2019	0.252	1.071	0.973	0.277
2020	0.277	1.048	1.062	0.273
				Projected (d)
2021				0.275
2022				0.281
9/1/2022				0.282

(a) See Exhibit 12.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on Paid Latest Year Selections
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.302	0.944	0.877	0.326
2014	0.274	0.989	0.808	0.335
2015	0.258	1.008	0.771	0.337
2016	0.243	1.011	0.797	0.308
2017	0.247	1.014	0.835	0.300
2018	0.268	1.015	0.879	0.309
2019	0.289	1.011	0.973	0.300
2020	0.281	1.007	1.062	0.266
				Projected (d)
2021				0.298
2022				0.305
9/1/2022				0.305

(a) See Exhibit 12.1.

(b) Based on 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, the actual frequency trend for accident year 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

Section B

Appendix B

Trending Methodology

The pure premium rates effective September 1, 2021 are intended to reflect the final, or ultimate, cost of losses and loss adjustment expenses on all accidents that arise on policies incepting between September 1, 2021 and August 31, 2022. Appendix A discusses the process of developing the losses reported for each historical accident year as of December 31, 2020 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, 2021 and August 31, 2022.

Trending historical costs to the level underlying policies incepting between September 1, 2021 and August 31, 2022 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. Second, each year's historical earned premium is adjusted to the premium that would have been earned at the industry average filed pure premium rate level as of January 1, 2021 and at the average wages expected to be in effect during the time the premium on policies incepting between September 1, 2021 and August 31, 2022 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, 2022, which is the approximate midpoint of the experience period during which the pure premium rates for policies incepting between September 1, 2021 and August 31, 2022 will apply.

The COVID-19 pandemic has had a significant impact on the workers' compensation system. In particular, approximately 68,000 claims arising out of a diagnosis of COVID-19 have been filed for accident year 2020.¹ The WCIRB believes these claims reflect the uniqueness of the COVID-19 pandemic and may not be indicative of claim costs that will incur on policies incepting between September 1, 2021 and August 31, 2022. As a result, the WCIRB has excluded COVID-19 claims from the accident year 2020 information included in this filing based on the data reported on the WCIRB's Special Call for COVID-19 Claim Data Evaluated as of December 31, 2020. For informational purposes, a summary of COVID-19 claim counts and paid and incurred costs evaluated as of December 31, 2020 is shown in Exhibit 1.

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

¹ Reported first report of injuries in the insured market as of April 12, 2021 based on Division of Workers' Compensation data. Many of these claims were filed in 2021 arising from the winter surge of COVID-19 infections.

distributions of claims by injury type, benefit type and injured worker weekly wages.² 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.³

Senate Bill No. 863 (SB 863) increased permanent disability benefits effective January 1, 2013 and January 1, 2014 and provided for a number of structural reforms to the California workers' compensation benefit delivery system. The on-leveling adjustments shown in Section B, Exhibit 4.1 reflect the estimated impact of the measurable components of SB 863 related to indemnity benefits based on the WCIRB's most recent cost evaluations of SB 863.⁴ In addition to the measurable components of SB 863 related to permanent disability benefits, provisions of SB 863 related to independent medical review, independent bill review, medical provider network strengthening and others have reduced the duration of claims which also affects indemnity cost levels. Based on the WCIRB's latest retrospective evaluation of SB 863, the WCIRB estimates a total 4.5% decrease in indemnity costs from these factors, which is distributed uniformly over accident years 2012 through 2015 (i.e., 1.25% per year), as shown in column 1 of Section B, Exhibit 4.1.

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. 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 forecasts based on forecast changes in average wage levels and the WCIRB's legislative evaluation model. This includes the estimated increase in the SAWW of almost 8% based on data as of September 30, 2020, which the WCIRB used to estimate the corresponding increase in weekly minimum and maximum TD and PTD benefits effective January 1, 2022. Conversely, projected wage level changes are relatively flat for 2021 which corresponds to generally flat weekly minimum and maximum TD and PTD benefits estimated effective January 1, 2023.

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 5.1.⁵ For accident years with available WCIRB unit statistical data (2018 and prior), these estimates are based on the actual claims and wage inflation data for these years while the estimates for accident years 2019 and subsequent are based on the WCIRB's legislative evaluation model updated with the latest available data.⁶

² 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.

³ 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.

⁴ See *Senate Bill No. 863 WCIRB Cost Monitoring Report – 2016 Retrospective Evaluation*, WCIRB, November 2016 and *Research Brief – SB 863 Cost Monitoring Update*, WCIRB, October 2019 for the WCIRB's most recent retrospective cost evaluations of SB 863.

⁵ This wage inflation adjustment approach is discussed in greater detail later in this Appendix with respect to premium adjustments.

⁶ See Item AC19-03-03 of the March 18, 2019 WCIRB Actuarial Committee Agenda for more information on these adjustments.

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 now directly or indirectly⁷ 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 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 adopted to determine if any atypical and significant changes should be explicitly reflected in the medical on-level adjustments. In 2021, the DWC adopted significant updates to the OMFS effective March 1, 2021 and the Medical-Legal Fee Schedule effective April 1, 2021. The WCIRB's evaluation of these fee schedule updates are included in Appendices D and E, respectively, and the estimated cost impact of these fee schedule updates on policies incepting between September 1, 2021 and August 31, 2022 are included as separate adjustments to the projected loss ratio as shown in Section B, Exhibit 8. A WCIRB review of other fee schedule updates adopted by the DWC since the January 1, 2021 Pure Premium Rate Filing found that these changes should not significantly and atypically impact overall medical cost levels and, as a result, did not reflect them in the medical on-level adjustments included 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 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. 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 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.

⁷ Payments made directly to injured workers as part of claim settlements are assumed to be indirectly affected by existing medical fee schedules.

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.

Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244), which took effect in 2017, included a number of provisions related to lien filings. The WCIRB's most recent review of lien filing information provided by the DWC suggests that lien filings decreased by approximately 70% compared to the level experienced shortly before the enactment of SB 1160 and AB 1244, resulting in an approximate 4.2% reduction in medical costs.¹⁰ Given that the impact of SB 1160 and AB 1244 for more recent accident years is substantially reflected in the adjustments to loss development discussed in Appendix A, only the portion of the reform impact not reflected in projected loss development is adjusted for in the factors shown in column 1 of Section B, Exhibit 4.3. These adjustment factors are based on the estimated proportion of ultimate medical losses paid prior to January 1, 2017 for each accident year.

SB 1160 also included provisions restricting the use of utilization review for medical services provided within the first 30 days from the date of injury beginning January 1, 2018, with some exceptions. The WCIRB's most recent retrospective evaluation of SB 1160 shows some evidence of additional medical treatment being provided within the first 30 days of an injury for 2018 injuries, particularly for physical therapy services.¹¹ As a result and given that the reforms are substantially reflected in the emerging experience for accident year 2018, the WCIRB has reflected the estimated impact of 0.3% on medical costs in column 1 of Section B, Exhibit 4.3 to on-level 2017 and prior accident years.

The Medical Treatment Utilization Schedule Drug Formulary (Formulary) was adopted by the DWC effective in 2018 pursuant to Assembly Bill No. 1124. The WCIRB's most recent retrospective evaluation of the Formulary shows that pharmaceutical costs declined in 2018 at an approximate 10% greater rate than the rate of decline experienced shortly before the effective date of the Formulary.¹² As a result and given that the reforms are substantially reflected in the emerging experience, the WCIRB has reflected the estimated impact of -0.6% on medical costs in column 1 of Section B, Exhibit 4.3 to on-level 2017 and prior accident years.

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 these 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, 2021 and August 31, 2022, 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.

¹⁰ See Exhibit M9.2 of Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

¹¹ See Item AC17-12-02 of the August 1, 2019 WCIRB Actuarial Committee Agenda.

¹² See Item AC17-12-02 of the August 1, 2019 WCIRB Actuarial Committee Agenda and *Cost Impact of California's Drug Formulary – Two-Year Checkup*, WCIRB, February 2021.

Section B, Exhibit 5.1 shows the wage level adjustment factors. Historical values through 2020 shown in column 1 of Section B, Exhibit 5.1 are based on Bureau of Labor Statistics data for California as compiled by the UCLA Anderson School of Business (UCLA). The estimated changes in annual California wages shown in column 1 of Section B, Exhibit 5.1 for 2021 and later are based on an average of those produced by UCLA¹³ (as of March 2021) and the California Department of Finance¹⁴ (as of November 2020). A 2018 WCIRB analysis of the wage forecast methodology showed that blending these two wage forecasts significantly improves the accuracy and reduces the volatility of the wage level projection.¹⁵

The COVID-19 pandemic has resulted in a sudden and significant slowdown in the California economy. 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 slowdown can drive measures of average wages artificially upward since job losses for these workers disproportionately impact employment levels compared to the amount of wages and salaries. In particular for the pandemic-related economic slowdown, the reductions in employment levels have been 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.¹⁶ 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 more accurately reflect the wage level change 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 is to remove the impact of shifts in the industry mix on average wage levels. This adjustment is based on a review of forecast changes in employment by industry and the average wage within industries based on UCLA data on employment levels and wages by industry. This analysis shows that differences in employment losses by industry in California artificially inflated average wages by 1.8% in 2020. Conversely, the UCLA average wage level forecast for 2021 is artificially deflated by 0.5% as a result of anticipated recoveries in these industries in 2021.¹⁷ WCIRB estimated average wage growth percentages for 2020 and 2021 have been adjusted to correct for these impacts of shifting industrial mix. Forecast employment level shifts by industry was also reviewed for 2022 and 2023 and the impact on average wages was found to be immaterial.

To adjust for shifts in wage levels within industries, the WCIRB reviewed estimated changes in the wage level distribution within industry based on Current Population Survey (CPS) data provided by the EPI.¹⁸ The computation of this adjustment is shown in Exhibits 2.1 to 2.4.¹⁹ Exhibit 2.1 shows the estimated changes in employment by industry based on UCLA Anderson School of Business data. Exhibit 2.2 shows the computation of the statewide average wage using observed 2019 levels of industry mix, wage distribution within industry and average wage by industry and wage quartile based on CPS data. The CPS data is used to calculate industry-level employment changes by wage quartile. Due to differences in the underlying data sets, the overall industry-level employment changes in the CPS data will not equal the changes from the UCLA forecast. For the purpose of selecting the 2020 distribution of employment by industry and wage level, an off-balance factor by industry is applied so that the employment changes from the two data sets reconcile at the industry level. The computation of the industry off-balance factors is shown in Exhibit 2.3.

¹³ The index is based on the ratio of total statewide wages and salaries divided by total civilian employment.

¹⁴ 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.

¹⁵ See Item AC17-12-03 of the March 19, 2018 WCIRB Actuarial Committee Agenda.

¹⁶ Current Population Survey Extracts, Version 1.0.15, Economic Policy Institute, 2021. <https://microdata.epi.org>

¹⁷ See Item AC20-08-04 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

¹⁸ This data set is updated monthly by the Census Bureau and underlies the headline monthly jobs report.

¹⁹ Also see Item AC20-08-04 of the April 15, 2021 WCIRB Actuarial Committee Agenda.

Exhibit 2.4 shows the computation of the impact of shifts in the wage distribution within industry impacting 2020 based on the information computed in Exhibits 2.1 to 2.3. To isolate the impact of intra-industry wage distribution changes, the statewide average wage is calculated using observed 2019 industry mix and average wages by industry and quartile. These values are combined with the balanced 2020 wage distribution by industry derived in Exhibit 2.3. The resulting average wage reflects only changes in the wage distribution within industries, as the only difference between this value and the observed 2019 value is the distribution of employees by wage level within industries. As shown in Exhibit 2.4, the estimated impact of the changing wage distributions within industries on 2020 average wages is 4.3%.

While the 2020 change 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 of at least some of these lower wage employees. While there is general consensus among economists that many of these workers will return to the workforce, detailed forecasts of this type are not available at this time. A prevailing thought among economists is that much of the low wage employment will return, but due to acceleration in automation trends and other factors, some of the change in the wage distribution is likely permanent.²⁰ As a result, the WCIRB believes that not all of the 4.3% impact of shifts in wage levels within industries will unwind by 2023. Instead, the WCIRB judgmentally assumed that the impact will unwind based on the midpoint of (a) a full unwinding approach and (b) an unwinding approach that is proportionate with the projected unwinding of shifts in the industrial mix in 2021 through 2023. The WCIRB also judgmentally distributed the unwinding impact by year with 50% in 2021, 35% in 2022 and 15% in 2023. The impact of this adjustment by year along with the impact of the adjustment for shifting industrial mix is shown in Table 1.

Table 1: Adjustment for Shifts in Average Wage Levels within Industries

Year	Unadjusted Average Wage Change	Average Wage Change Adjusted for Industry Mix	Adjustment for Shifts in Average Wage Levels	Average Wage Change Adjusted for Industry and Wage Level Mix
2020	9.6%	7.5%	-4.3%	2.9%
2021	0.9%	1.3%	1.4%	2.8%
2022	1.8%	1.8%	1.0%	2.9%
2023	2.8%	2.8%	0.4%	3.2%

Column 2 of Section B, Exhibit 5.1 shows the 2020 and later year 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 industry average filed pure premium rates as of January 1, 2021. 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.²¹ To compute the indicated difference from the industry average filed pure premium rate as of January 1, 2021, 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 industry average filed pure premium rates as of January 1, 2021 been charged during that year.

²⁰ <https://www.brookings.edu/blog/up-front/2020/11/16/new-but-narrow-job-pathways-for-americas-unemployed-and-low-wage-workers/>
<https://www.kornferry.com/insights/articles/the-jobs-that-arent-coming-back>
<https://www.cnbc.com/2021/03/22/how-low-wage-work-could-get-even-worse-in-post-pandemic-future.html>

²¹ These premiums do not reflect the impact of deductible credits, retrospective rating plan adjustments or terrorism charges.

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 industry average filed pure premium rate level as of January 1, 2021. The factors reflect both the historical changes in advisory pure premium rates that are needed to adjust each year's earned premium to the January 1, 2021 advisory pure premium rate level and an additional factor to adjust from the January 1, 2021 advisory pure premium rate level to the industry average filed pure premium rate level as of January 1, 2021. 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 industry average filed pure premium rates as of January 1, 2021 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 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.²²

The COVID-19 pandemic and resultant economic slowdown significantly impacted exposure levels in 2020. The WCIRB recently studied the impact of this economic slowdown on calendar year 2020 earned premiums to determine if an adjustment to on-level premium similar to that applied during the Great Recession years was appropriate.²³ The WCIRB's study found that (a) the recent slowdown was sudden and sharp coming in early 2020 compared to the gradual changes experienced during the Great Recession that impacted several years, (b) many insurers reflected the impact of the slowdown in their in-force policies or policy renewals in part as a result of directives from the Insurance Commissioner and (c) there was no indication of reduced calendar year 2020 premiums arising from audit adjustments on 2019 policies due to reduced 2019 exposure. As a result, the WCIRB has not applied any adjustment to the 2020 earned premium to reflect the recent economic slowdown.

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:

²² 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.

²³ See Item AC21-03-05 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

1. Indemnity Claim Frequency Changes. Exhibit 3 shows changes in indemnity claim frequency as of December 31, 2020 based on the ratio of indemnity claim counts to unit statistical reported exposure adjusted to a common wage level through accident year 2019 and to annual statewide employment for accident year 2020. After a period of steady decline driven in large part by reforms and the Great Recession, indemnity claim frequency increased sharply during the immediate post-recession recovery period from 2010 through 2012. The WCIRB has published several studies of the frequency changes during this period which have also been discussed in prior pure premium rate filings.²⁴ From 2013 to 2019, indemnity claim frequency was on average flat to modestly declining. Indemnity claim frequency based on the preliminary measure of changes in reported claim counts compared to changes in statewide employment levels shows a larger decrease for 2020. The WCIRB's econometric indemnity claim frequency model indicates that significant downturns in the economy such as what was experienced in 2020 correspond with significant decreases in claim frequency. Shifts in industrial mix in 2020 are also dampening accident year 2020 indemnity claim frequency as many of the industries that suffered more significant job losses during the 2020 economic slowdown, such as hospitality and entertainment, have higher-than-average indemnity 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 3 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. The WCIRB estimates that shifts in industrial mix caused by the recent COVID-19-related economic downturn contributed to an approximate 1% decline in the preliminary indemnity claim frequency measure for 2020. This shift also impacts measures of indemnity and medical severities for accident year 2020 as the average claim costs within the industries that suffered greater job losses, driven by differences in wage levels and the mix of injuries within those industries, are somewhat lower than average.²⁵
3. Changes in Reported Claim Severities. Exhibits 4.1 and 4.2 show changes in average incurred indemnity and average incurred medical per indemnity claim, respectively. Exhibits 4.3, 4.4 and 4.5 show changes in average paid indemnity and average paid medical per indemnity claim and average paid medical per claim, respectively. Exhibits 4.6 and 4.7 show changes in average outstanding indemnity case reserves and average outstanding medical case reserves per open indemnity claim, respectively. Exhibits 4.8 and 4.9 show changes in average paid indemnity and paid medical per closed indemnity claim, respectively.²⁶ The information shown in Exhibits 4.1 through 4.9 are based on December 31 evaluations.

As shown in Exhibits 4.1, 4.3, 4.6 and 4.8, changes in average indemnity severities have been generally modest in the pre-pandemic period despite the increases to permanent disability benefits enacted pursuant to SB 863 and growth in average wages impacting indemnity benefits. As shown in Exhibits 4.2, 4.4, 4.5, 4.7 and 4.9, average medical severities have been generally flat to declining prior to the pandemic, which is in part attributable to SB 863, SB 1160 and AB 1244, the dramatic reductions in pharmaceutical costs and efforts to fight medical provider fraud. Modest changes in

²⁴ See *Analysis of Changes in Indemnity Claim Frequency*, WCIRB, August 2012 and updates to this report published in 2013, 2015 and 2016.

²⁵ See Item AC20-08-04 of the March 16, 2021 WCIRB Actuarial Committee Agenda. The WCIRB estimates that average indemnity severities are approximately 1.4% higher and average medical severities are approximately 1.0% higher for accident year 2020 due to shifts in industry mix during the pandemic.

²⁶ COVID-19 claims have been excluded from accident year 2020 in these exhibits. Also, the amounts shown in Exhibits 4.7 and 4.9 for accident years 2010 and 2011 reflect only the amount of 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.

average paid and incurred severities for both indemnity and medical are also likely attributable to simplifications of the claims process and accelerations in the rate claims have been settling following the SB 863 and subsequent reforms.

The COVID-19 pandemic has had a dramatic impact on average claim costs for accident year 2020, even after excluding COVID-19 claims. As shown in Exhibits 4.1 and 4.3, incurred and paid indemnity severities increased significantly for accident year 2020 at 12 months. Some of this increase is related to shifts in average wage levels of injured workers during the economic slowdown, as job losses were largest for lower wage industries and lower wage workers within industries. The majority of indemnity benefits paid and incurred through 12 months are for temporary disability, which are subject to higher weekly maximums compared to permanent disability benefits and much more significantly impacted by shifts in wage levels. As shown in Exhibit 4.6, changes in average indemnity case reserves per open indemnity claim, which include contemplation of future permanent disability benefits, shows a somewhat more moderate increase for accident year 2020.

As shown in Exhibit 4.4, average paid medical per indemnity claim declined modestly for accident year 2020. Some of this decline may be related to deferral or delay in more costly noncritical medical services during the pandemic or shifts in the mix of indemnity and medical-only claims. As shown in Exhibits 4.2 and 4.5, average incurred and paid medical per reported claim (which includes medical-only claims) show significant increases in 2020 as decreases in the number of medical-only claims filed in 2020 were disproportionately larger than the decline in the number of indemnity claims. As shown in Exhibit 4.7, changes in average medical case reserves per open indemnity claim, which reflect consideration of future medical services, shows a modest increase for accident year 2020.

4. Changes in Projected Ultimate and On-level Claim Severities. Section B, Exhibit 6.2 shows accident year indemnity severities on an estimated ultimate and on-level basis. Section B, Exhibit 6.4 shows accident year medical severities on an estimated ultimate and on-level basis.²⁷ As shown in Section B, Exhibits 6.2 and 6.4, after several years of significant increases in indemnity and medical claim severities following the 2002 through 2004 reforms, changes in ultimate claim severities significantly moderated during the Great Recession and leading into the transition to SB 863. As shown in Section B, Exhibit 6.2, on-level indemnity severities declined in 2010 through 2017 but increased modestly for 2018 and 2019. As discussed above, the sharp increase in the average on-level indemnity severity for 2020 is likely temporary and related to pandemic and economic slowdown.

As shown in Section B, Exhibit 6.4, average medical severities declined in 2012 through 2016, in large part related to the SB 863 provisions affecting medical costs. The medical severities adjusted to an on-level basis that include adjustments to reflect the estimated impact of SB 863 for this period show more modest changes. Although average on-level medical severities grew by 5% in 2018, the average severity decreased by approximately half that amount in 2019. A review of WCIRB unit statistical data and medical transaction data suggested that some of the factors driving the 2018 and 2019 changes include a greater than typical number of large claims incurred in 2018 and reductions in the utilization of physician services paid on 2019 claims through 12 months. As discussed above, the decrease in the average on-level medical severity for 2020 is likely temporary and related to shifts in treatment levels and the mix of medical-only and indemnity claims during the pandemic.

Selected Trending Methodologies

In order for the proposed pure premium rates to reflect the cost of benefits incurred on policies incepting between September 1, 2021 and August 31, 2022, 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

²⁷ As discussed in Section B, for consistency of comparison, Section B, Exhibit 6.4 shows estimated ultimate medical severities for accident years 2005 and later both including all medical cost containment program (MCCP) costs and excluding all MCCP costs.

are trended to September 1, 2022—the approximate average date of experience on policies incepting between September 1, 2021 and August 31, 2022.

For many years, the WCIRB has separately analyzed changes in claim frequency and the average cost, or severity, of claims when considering the appropriate 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.²⁸ The study noted that during the 2002 through 2004 reform transition period, trending methods based on separate projections of claim frequency and claim 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.²⁹

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. The WCIRB believes this approach of separately analyzing frequency and severity 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.

Indemnity Claim Frequency Projections

Section B, Exhibit 6.1 shows projected changes in indemnity claim frequency rates based on the WCIRB's econometric frequency model used for a number of years in WCIRB pure premium rate filings.³⁰ 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.³¹ The frequency changes shown in Section B, Exhibit 6.1 are based on the ratio of indemnity claim counts to unit statistical reported exposure. Since 2019 is the most currently available accident year for which unit statistical data has been reported, the frequency changes shown in Section B, Exhibit 6.1 for accident years 2020 and beyond are model forecasts.

The WCIRB's forecast frequency changes are generally based on the WCIRB's econometric frequency model. However, in the WCIRB's 2012 analysis of trending methodologies, it was noted that frequency changes using a full year of preliminary actual frequency information was more predictive of the actual frequency change for that year than the forecast change produced on the WCIRB's frequency model.³² Indemnity claim counts develop much quicker than indemnity or medical losses and changes in reported claim counts at 12 months have been very predictive of actual changes in frequency for the year evaluated at later maturities. Although the accident year 2020 claim frequency is significantly impacted by the pandemic, the WCIRB believes the preliminary frequency change based on 12 months continues to be a more reliable predictor of the actual accident year 2020 indemnity claim frequency change than the WCIRB's frequency model projection which does not reflect any actual 2020 claims information. In

²⁸ See Item AC12-12-02 of the December 5, 2012 WCIRB Actuarial Committee Agenda.

²⁹ See Item AC12-12-02 of the August 2, 2017 WCIRB Actuarial Committee Agenda.

³⁰ 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.

³¹ By modeling industrial mix-adjusted, or "intra-class" frequency, the WCIRB's model in effect controls for historical shifts in classification mix.

³² See Item AC12-12-02 of the March 20, 2013 WCIRB Actuarial Committee Agenda.

particular, the sharp unprecedented decrease in the economic variable for 2020 in the WCIRB's frequency model is well below that of any of the 40 years of economic information used to fit the model and results in a decrease significantly lower than any change experienced in the last 15 years as well as the preliminary actual 2020 change.

Consistent with the last several pure premium rate filings, the projected frequency change for accident year 2020 is based on the preliminary actual 2020 frequency change estimated as a ratio of changes in reported indemnity claim counts from accident year 2019 to accident year 2020 as of December 31, 2020 relative to changes in statewide employment. As shown in Exhibit 3, the preliminary actual claim frequency change for 2020 is -5.9%. However, the COVID-19 pandemic and economic slowdown has resulted in significant shifts in exposure levels, industrial mix and the mix of injuries occurring which may distort the reported indemnity claim counts and employment levels used in the preliminary measure of accident year 2020 claim frequency. As a result, the projected frequency change for accident year 2020 was adjusted to an estimated "intra-class" level for the purposes of projecting claim frequency for policies incepting between September 1, 2021 and August 31, 2022. Reported indemnity claim counts were adjusted by 2.7% to reflect the estimated shifts in industrial mix impacting claim frequency as industries with higher than average claim frequency suffered more job losses in the downturn. Similarly, statewide employment was adjusted by 1.9% to reflect the estimated shifts in industrial mix impacting exposure levels as these same industries had lower-than-average wages resulting in greater declines in employment compared to the declines in employer payroll.³³ As shown in Exhibit 3, the preliminary 2020 "intra-class" frequency change adjusted on this basis is -4.9%.

Projected frequency changes for accident years 2021 through 2023 are based on the WCIRB's econometric indemnity claim frequency model, which is shown in Section B, Exhibit 6.1. The frequency model forecasts for 2021 through 2023 reflect economic data as of the March 2021 UCLA forecast. In the January 1, 2021 Pure Premium Rate Filing, the WCIRB reflected a projected increase in the proportion of cumulative trauma claims in the indemnity claim frequency model forecast based on a review of similar increases during prior recessions. Preliminary information for accident year 2020 suggests an increase in the proportion of cumulative trauma claims has not occurred.³⁴ As a result, the WCIRB did not reflect any increase in the proportion of cumulative trauma claims in the model frequency change forecasts shown in Section B, Exhibit 6.1.

As shown in Section B, Exhibit 6.1, the WCIRB's indemnity claim frequency model projects modest increases for 2021 through 2023 which are reflective of a steady forecast recovery in the economy. During the recovery following the Great Recession, indemnity claim frequency increased at a more significant rate compared to that projected for the recovery from this pandemic-related downturn. However, the WCIRB believes these projections to be reasonable given the steady relatively modest growth in the model's economic variable projected for 2021 through 2023 is well within the parameters of the model's fit. Combined with the 4.9% decrease projected for 2020, these projections result in a modest overall decrease in claim frequency through 2023 that is generally consistent with recent prior years.

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 years that may not be highly indicative of the current claim 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 that may not be appropriate to project into the future.

³³ See Item AC20-08-04 of the March 16, 2021 WCIRB Actuarial Committee Agenda.

³⁴ See Item AC21-03-01 of the April 15, 2021 WCIRB Actuarial Committee Meeting presentation.

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 severity growth is below 0% 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 accelerations in the rate that claims are settling. On-level indemnity severity changes for 2018 and 2019 are estimated to increase modestly at a rate of approximately 1.5% per year following the multiple years of on-level indemnity severity declines. Some of this increase appears to be driven by recent increases in temporary disability duration,³⁵ which with a continued sluggish economy and deceleration of the claim settlement process is likely to continue in the short-term. Average on-level indemnity severities show a more significant increase in 2020 but, as discussed above, the WCIRB believes this preliminary estimate based on only 12 months of experience is impacted by economic factors and shifts in the injury mix caused by the pandemic.

General growth in on-level indemnity severities over the most recent three years suggests that indemnity severities will continue to grow over the next few years. In addition, the gradual economic recovery and general recovery from the pandemic is likely to result in increased temporary disability duration and a slower claim settlement process in the short-term. As a result, the WCIRB has selected a 1.0% average annual on-level indemnity severity trend, which is somewhat lower than the estimated changes for the two most recent accident years but gives some consideration to the prior period of modestly declining on-level indemnity severities. This average annual indemnity severity trend is also consistent with that reflected in the WCIRB's January 1, 2021 Pure Premium Rate Filing.

In prior pure premium rate filings, the WCIRB has applied its selected frequency and average annual on-level severity trends to the average of the most recent two accident years. As discussed above, the COVID-19 pandemic has significantly impacted exposure, premium and claim cost levels for accident year 2020. Although COVID-19 claims have been excluded from the accident year 2020 information included in this filing, the economic slowdown has significantly impacted classification mix, the number of claims filed, medical services delivered and the overall claims process. In particular, the projected development of accident year 2020 indemnity and medical losses may be significantly understated as a result of the slowdown of the claims process during the pandemic period. Given these significant and likely temporary impacts in various cost components, the WCIRB does not believe that accident year 2020 is an appropriate basis to project the loss ratio for policies incepting between September 1, 2021 and August 31, 2022. As a result, the WCIRB is basing the projected loss ratio for policies incepting between September 1, 2021 and August 31, 2022 by applying the recommended trending rates discussed above to the accident year 2019 on-level loss ratio only.

Section B, Exhibit 7.1 shows the projected indemnity loss ratio for policies incepting between September 1, 2021 and August 31, 2022 based on the accident year 2019 on-level indemnity ratio 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 selected trending methodology is 0.285.

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 in particular, policy year 2022 losses will be paid over a very extended period with over one-half of policy year 2022 losses estimated to be paid in 2025 or later and over one-quarter estimated to be paid in 2030 or later) and 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 both long-term and short-term medical severity trends in the projection of medical severity growth.

³⁵ See Item AC21-03-01 of the March 16, 2021 WCIRB Actuarial Committee Meeting presentation.

Since 1990, on-level medical severity growth in California has averaged approximately 5% per year. This long-term average trend includes periods of reforms where medical severities have been flat to declining and “post-reform” periods of sharp medical severity growth. Over the last several years, on-level medical severity growth has been modest. In particular, average medical severity changes over the last five years has been essentially flat at 0% per year (as shown in Section B, Exhibit 6.4). Although average on-level medical severities grew by 5% in 2018, they decreased by half that amount in 2019. Average on-level medical severities show another modest decrease in 2020 but, as with indemnity, the WCIRB believes this preliminary estimate to be heavily impacted by the COVID-19 pandemic. In particular for medical, the estimate for 2020 may be understated due to deferred treatment during the pandemic or shifts in the mix of injury types as significantly fewer medical-only claims were filed during the pandemic. As shown in Exhibit 4.5, average paid medical per total claim for accident year 2020 at 12 months increased significantly over 2019.

As discussed above, 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. As a result, the WCIRB believes giving some consideration to the longer-term medical severity trend is appropriate. Given these considerations, the WCIRB selected an average annual medical severity trend of 1.0%, which is modestly higher than the average flat growth over the last several years but corresponds with the approximate average rate of growth in 2018 and 2019 (the most recent two pre-pandemic years) and gives some consideration to the long-term moderate rate of growth.

Section B, Exhibit 7.3 shows the medical loss ratio for policies incepting between September 1, 2021 and August 31, 2022 based on the accident year 2019 on-level medical ratio adjusted by the WCIRB’s selected frequency projections and the average annual medical severity trend projection of 1.0% per year. As shown in Section B, Exhibit 7.3 the medical loss ratio projected using the WCIRB’s selected methodology is 0.311.

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 5 through 9 and are discussed below.

Separate Frequency and Severity Projections Applied to the Latest Two Years

In prior pure premium rate filings, the WCIRB applied selected trending projections to the average of the latest two years. Applying trending projections to the latest two years can mitigate volatility in the trend projection while also being responsive to the latest two accident years of experience.

Exhibits 5.1 and 5.2 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 and 1.0% for medical to the on-level loss ratios for the latest two years (2019 and 2020). This methodology produces a projection somewhat higher for indemnity and somewhat lower for medical compared to the WCIRB’s recommended methodology of trending from accident year 2019 only. As discussed above, due to the unique and likely temporary distortions caused by the pandemic on the 2020 accident year, the WCIRB believes the 2020 loss ratios are not an appropriate basis to project the loss ratio for policies incepting between September 1, 2021 and August 31, 2022.

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

Exhibits 6.1 and 6.2 show a trend projection based on applying the WCIRB's selected frequency changes and annual severity trend assumptions of 1.0% for indemnity and 5.1% for medical, based on the approximate average long-term (1990 to 2020) annual rates of growth in on-level indemnity and medical claim severities, to the on-level loss ratios for 2019. This methodology produces a projection significantly higher than that produced by the WCIRB's selected methodology, which gives consideration to both the longer-term and more recent severity trends as well as changes in the underlying claims environment due to COVID-19. Given the impact of the pandemic and to be also 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 7.1 and 7.2 show a trend projection based on applying the WCIRB's selected frequency changes and average annual severity trend assumptions of -0.9% for indemnity and 0.0% for medical, based on the approximate average short-term (2015 to 2019) annual rates of growth in on-level indemnity and medical claim severities, to the on-level loss ratios for the latest two years. (Due to the concerns with accident year 2020 severities discussed above, 2020 was not included in the short-term average severity trends.) This methodology produces a projection significantly lower than that produced by the WCIRB's selected methodology, which gives consideration to both the longer-term and more recent severity trends as well as changes in the underlying claims environment due to COVID-19. Given the impact of the pandemic and the uncertainty surrounding severity trends in the post-pandemic 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 8.1 and 8.2 provide projections based on applying an exponential trend based on the 1990 through 2020 on-level indemnity and medical loss ratios shown in Section B, Exhibits 7.1 and 7.3 to the on-level loss ratios for 2019. This alternative trending methodology produces projections above those based on the WCIRB's selected methodology. Exhibits 9.1 and 9.2 provide projections based on applying an exponential trend based on the 2015 through 2019 on-level indemnity and medical loss ratios shown in Section B, Exhibits 7.1 and 7.3 to the on-level loss ratios for 2019. (Due to the concerns with accident year 2020 discussed above, 2020 was not included in the short-term loss ratio trends.) This alternative trending methodology produces projections below those based on the WCIRB's selected methodology. As discussed above, the WCIRB believes the approach of separately analyzing frequency and severity 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.

The loss ratio projections for policies incepting between September 1, 2021 and August 31, 2022 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 2.

Table 2: Projected Loss Ratios Under Alternative Trending Methodologies

September 1, 2021 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 1.0% Medical Severity Trends, Applied to 2019	0.285	0.311	0.596

Alternative Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Separate Projections of WCIRB's Selected Frequency and Severity Trends Applied to the Latest Two Years	0.289	0.299	0.588
Separate Projections of WCIRB's Selected Frequency and Long-Term (1990 to 2020) Severity Trends Applied to 2019	0.285	0.353	0.638
Separate Projections of WCIRB's Selected Frequency and Short-Term (2015 to 2019) Severity Trends Applied to 2019	0.268	0.302	0.570
1990 to 2020 On-Level Loss Ratio Exponential Trend Applied to 2019	0.277	0.344	0.621
2015 to 2019 On-Level Loss Ratio Exponential Trend Applied to 2019	0.250	0.286	0.536

Summary of Special Call for COVID-19 Claim Information as of December 31, 2020

Based on 100% of the Market				Average per Indemnity Claim			Average per Total Claim		
AY2020 Loss & ALAE	COVID-19 Data Call	4Q-2020 Data Call	COVID-19 Percentage	COVID-19 Claims	All WC Claims	Without COVID-19 Claims	COVID-19 Claims	All WC Claims	Without COVID-19 Claims
Indemnity Paid	25,548,386	480,429,443	5.3%	\$1,573	\$3,899	\$4,252	\$895	\$1,566	\$1,635
<u>Indemnity Reserves</u>	<u>57,189,805</u>	<u>868,293,425</u>	<u>6.6%</u>	<u>\$3,521</u>	<u>\$7,047</u>	<u>\$7,582</u>	<u>\$2,004</u>	<u>\$2,830</u>	<u>\$2,915</u>
Indemnity Incurred	82,738,191	1,348,722,868	6.1%	\$5,094	\$10,946	\$11,835	\$2,899	\$4,396	\$4,549
Medical Paid	20,979,157	639,768,481	3.3%	\$1,292	\$5,192	\$5,785	\$735	\$2,085	\$2,224
<u>Medical Reserves</u>	<u>92,635,565</u>	<u>1,436,445,305</u>	<u>6.4%</u>	<u>\$5,703</u>	<u>\$11,658</u>	<u>\$12,562</u>	<u>\$3,246</u>	<u>\$4,682</u>	<u>\$4,829</u>
Medical Incurred	113,614,722	2,076,213,786	5.5%	\$6,995	\$16,850	\$18,347	\$3,981	\$6,767	\$7,053
ALAE Paid	5,272,410	178,614,924	3.0%	\$325	\$1,450	\$1,620	\$185	\$582	\$623
MCCP Paid	1,203,307	63,064,304	1.9%	\$74	\$512	\$578	\$42	\$206	\$222
<u>AY2020 Claim Counts</u>									
Open Indemnity Claims	7,029	81,920	8.6%						
Med-Only Claims	12,299	183,606	6.7%						
Indemnity Claims	16,243	123,215	13.2%						
Total Number of Claims	28,542	306,821	9.3%						

Note: Medical per indemnity claim severities also include paid medical on medical-only claims.

Source: WCIRB aggregate financial data

Exhibit 2.1: Employment Changes and Distribution by Industry - March 2021 UCLA Forecast

Industry	Employment		A	B	
	2019	2020	Employment Change	Distribution	
	2019	2020		2019	2020
Agriculture & Mining	446,467	382,083	-14.4%	2.5%	2.3%
Utilities & Construction	943,920	910,585	-3.5%	5.3%	5.5%
Manufacturing	1,323,017	1,238,533	-6.4%	7.4%	7.5%
Wholesale	694,467	658,958	-5.1%	3.9%	4.0%
Retail	1,656,692	1,530,783	-7.6%	9.3%	9.2%
Transportation & Warehousing	640,505	631,790	-1.4%	3.6%	3.8%
Information	562,517	533,758	-5.1%	3.2%	3.2%
Finance & Insurance	546,986	547,273	0.1%	3.1%	3.3%
Real Estate	294,422	294,577	0.1%	1.6%	1.8%
Prof. Services & Mgmt. of Companies	1,569,370	1,507,947	-3.9%	8.8%	9.1%
Administrative	1,154,505	1,109,319	-3.9%	6.5%	6.7%
Education	386,208	372,035	-3.7%	2.2%	2.2%
Health	2,418,792	2,330,024	-3.7%	13.5%	14.1%
Arts & Entertainment	321,672	243,628	-24.3%	1.8%	1.5%
Hospitality	1,711,012	1,295,888	-24.3%	9.6%	7.8%
Other	576,442	480,450	-16.7%	3.2%	2.9%
Public Administration	2,607,350	2,502,500	-4.0%	14.6%	15.1%
All Industries	17,854,342	16,570,133	-7.2%	100%	100%

Source: March 2021 UCLA Forecast

**Exhibit 2.2: Derivation of Baseline Average Wage
2019 UCLA Industry Distribution, 2019 CPS Wages by Quartile, and 2019 CPS Wage Distribution**

B		C					D					E
Industry	2019 Industry Distribution	2019 CPS Quartile Distribution				2019 CPS Average Wage by Quartile				Total		
		[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)	[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)			
Agriculture & Mining	2.5%	56.1%	25.7%	10.4%	7.8%	12.15	17.22	28.19	69.48	19.59		
Utilities & Construction	5.3%	14.5%	29.8%	33.7%	22.0%	11.60	17.90	28.31	58.29	29.38		
Manufacturing	7.4%	16.7%	24.0%	26.9%	32.3%	12.31	17.86	28.19	72.35	37.34		
Wholesale	3.9%	22.4%	30.6%	23.6%	23.4%	11.95	18.00	28.09	66.82	30.44		
Retail	9.3%	41.3%	30.5%	17.7%	10.5%	12.07	17.44	27.08	62.65	21.66		
Transportation & Warehousing	3.6%	24.5%	35.4%	26.4%	13.7%	11.76	17.70	27.63	60.23	24.70		
Information	3.2%	12.9%	13.6%	29.3%	44.2%	10.93	18.39	28.29	72.68	44.33		
Finance & Insurance	3.1%	10.9%	19.3%	32.3%	37.5%	11.64	18.25	28.53	68.63	39.77		
Real Estate	1.6%	18.6%	29.5%	28.7%	23.2%	11.49	18.52	27.84	65.14	30.69		
Prof. Services & Mgmt. of Companies	8.8%	6.1%	12.8%	24.5%	56.5%	11.53	17.95	28.95	72.07	50.85		
Administrative	6.5%	33.6%	35.9%	15.4%	15.0%	11.46	17.78	27.05	54.56	22.60		
Education	2.2%	14.5%	26.3%	30.3%	28.8%	11.73	17.90	28.71	59.33	32.21		
Health	13.5%	19.9%	26.3%	26.6%	27.2%	11.79	17.79	28.54	64.38	32.12		
Arts & Entertainment	1.8%	30.8%	33.0%	23.0%	13.1%	11.77	17.32	27.87	76.43	25.80		
Hospitality	9.6%	49.8%	29.9%	14.6%	5.7%	11.81	17.20	27.33	57.58	18.30		
Other	3.2%	41.6%	26.1%	21.0%	11.3%	11.01	17.57	27.27	61.45	21.85		
Public Administration	14.6%	16.5%	17.7%	29.1%	36.7%	11.53	18.49	28.09	59.58	35.22		
All Industries	100%	24.8%	25.3%	24.1%	25.8%	11.76	17.78	28.10	65.39	31.06		
Column E Calculation		18.30 = ∑(C x D) = 49.8% x 11.81 + 29.9% x 17.20 + 14.6% x 27.33 + 5.7% x 57.58										
All Industries		31.06 = ∑(B x E)										

Column E Calculation Hospitality $18.30 = \sum(C \times D) = 49.8\% \times 11.81 + 29.9\% \times 17.20 + 14.6\% \times 27.33 + 5.7\% \times 57.58$

All Industries $31.06 = \sum(B \times E)$

Source: March 2021 UCLA Forecast (Column B)
2019 EPI CPS Data Set as of 2021.04.02 (Columns C and D)

Exhibit 2.3: Derivation of Off-Balance Factor to Reconcile UCLA and CPS 2020 Employment Changes

Industry	A		F				G		H	
	2020 UCLA Employment Change	Observed 2020 CPS Employment Change by Quartile	[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)	2020 CPS Employment Change	Off Balance	2020 CPS Employment Change	Off Balance
Agriculture & Mining	-14.4%	-27.5%	2.1%	-12.2%	9.0%	27.4%	-11.8%	0.971	-11.8%	0.971
Utilities & Construction	-3.5%	-24.3%	-12.2%	-13.8%	3.3%	23.8%	-0.8%	0.972	-0.8%	0.972
Manufacturing	-6.4%	-9.7%	-13.8%	-13.5%	-6.1%	0.1%	-6.6%	1.002	-6.6%	1.002
Wholesale	-5.1%	-11.1%	-13.5%	5.7%	3.2%	-1.4%	-6.2%	1.012	-6.2%	1.012
Retail	-7.6%	-39.8%	5.7%	-3.6%	0.0%	-7.1%	-15.4%	1.093	-15.4%	1.093
Transportation & Warehousing	-1.4%	-26.8%	-3.6%	15.7%	3.6%	14.2%	-5.0%	1.038	-5.0%	1.038
Information	-5.1%	-41.4%	15.7%	-27.4%	-16.8%	10.6%	-3.4%	0.983	-3.4%	0.983
Finance & Insurance	0.1%	-38.5%	-27.4%	-14.9%	-5.8%	14.0%	-6.1%	1.065	-6.1%	1.065
Real Estate	0.1%	-29.2%	-14.9%	-11.0%	-21.2%	22.4%	-10.7%	1.121	-10.7%	1.121
Prof. Services & Mgmt. of Companies	-3.9%	-28.3%	-11.0%	-1.8%	1.1%	-6.3%	-6.4%	1.027	-6.4%	1.027
Administrative	-3.9%	-35.0%	-1.8%	-26.1%	0.3%	-39.6%	-11.1%	1.080	-11.1%	1.080
Education	-3.7%	-25.7%	-26.1%	-10.1%	-13.6%	2.2%	-9.9%	1.069	-9.9%	1.069
Health	-3.7%	-22.4%	-10.1%	-33.7%	-20.7%	8.1%	-8.5%	1.053	-8.5%	1.053
Arts & Entertainment	-24.3%	-34.8%	-33.7%	-7.4%	-18.0%	10.1%	-25.3%	1.014	-25.3%	1.014
Hospitality	-24.3%	-25.4%	-7.4%	4.0%	-4.1%	19.6%	-18.9%	0.934	-18.9%	0.934
Other	-16.7%	-34.4%	4.0%	21.8%	21.9%	4.9%	9.9%	0.946	9.9%	0.946
Public Administration	-4.0%	-12.7%	21.8%	-3.4%	1.4%	0.0%	-7.0%	0.998	-7.0%	0.998
All Industries	-7.2%	-25.1%	-3.4%	1.4%	0.0%	0.0%	-7.0%	0.998	-7.0%	0.998

Hospitality Calculations

Column G

$$-18.9\% = \sum (C \times F) = 49.8\% \times -25.4\% + 29.9\% \times -7.4\% + 14.6\% \times -18.0\% + 5.7\% \times -25.0\%$$

Column H

$$0.934 = (1 + A) / (1 + G) = (1 - 24.3\%) / (1 - 18.9\%)$$

Source:

March 2021 UCLA Forecast (Column A)
2019 and 2020 EPI CPS Data Sets as of 2021.04.02 (Column F)

Exhibit 2.4: Derivation of Wage Level Adjusted Average Wage
2019 UCLA Industry Distribution, 2019 CPS Wages by Quartile, and Balanced 2020 CPS Wage Distribution

Industry	2019 Industry Distribution	B			I			D			J		
		Balanced 2020 CPS Quartile Distribution			2019 CPS Average Wage by Quartile			2019 CPS Average Wage by Quartile			2019 CPS Average Wage by Quartile		
		[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)	[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)	[\$0, \$15)	[\$15, \$22)	[\$22, \$37.5)	[\$37.5+)
Agriculture & Mining	2.5%	46.2%	29.7%	12.9%	11.2%	12.15	17.22	28.19	69.48	12.15	17.22	28.19	69.48
Utilities & Construction	5.3%	11.1%	26.4%	35.1%	27.5%	11.60	17.90	28.31	58.29	11.60	17.90	28.31	58.29
Manufacturing	7.4%	16.1%	22.2%	27.1%	34.6%	12.31	17.86	28.19	72.35	12.31	17.86	28.19	72.35
Wholesale	3.9%	21.2%	28.2%	26.0%	24.6%	11.95	18.00	28.09	66.82	11.95	18.00	28.09	66.82
Retail	9.3%	29.4%	38.1%	21.0%	11.5%	12.07	17.44	27.08	62.65	12.07	17.44	27.08	62.65
Transportation & Warehousing	3.6%	18.9%	35.9%	28.7%	16.5%	11.76	17.70	27.63	60.23	11.76	17.70	27.63	60.23
Information	3.2%	7.9%	16.3%	25.2%	50.7%	10.93	18.39	28.29	72.68	10.93	18.39	28.29	72.68
Finance & Insurance	3.1%	7.1%	14.9%	32.4%	45.6%	11.64	18.25	28.53	68.63	11.64	18.25	28.53	68.63
Real Estate	1.6%	14.8%	28.1%	25.4%	31.8%	11.49	18.52	27.84	65.14	11.49	18.52	27.84	65.14
Prof. Services & Mgmt. of Companies	8.8%	4.7%	12.2%	26.5%	56.6%	11.53	17.95	28.95	72.07	11.53	17.95	28.95	72.07
Administrative	6.5%	24.6%	39.7%	25.5%	10.2%	11.46	17.78	27.05	54.56	11.46	17.78	27.05	54.56
Education	2.2%	12.0%	21.6%	33.8%	32.7%	11.73	17.90	28.71	59.33	11.73	17.90	28.71	59.33
Health	13.5%	16.9%	25.9%	25.1%	32.1%	11.79	17.79	28.54	64.38	11.79	17.79	28.54	64.38
Arts & Entertainment	1.8%	26.9%	29.3%	24.4%	19.4%	11.77	17.32	27.87	76.43	11.77	17.32	27.87	76.43
Hospitality	9.6%	45.8%	34.2%	14.8%	5.3%	11.81	17.20	27.33	57.58	11.81	17.20	27.33	57.58
Other	3.2%	30.9%	30.9%	22.9%	15.4%	11.01	17.57	27.27	61.45	11.01	17.57	27.27	61.45
Public Administration	14.6%	13.1%	19.6%	32.3%	35.0%	11.53	18.49	28.09	59.58	11.53	18.49	28.09	59.58
All Industries	100%	20.2%	26.4%	25.8%	27.6%	11.77	17.77	28.06	65.60	11.77	17.77	28.06	65.60

Column I [\$0, \$15) Calculation $45.8\% = C \times H \times (1 + F) / (1 + A) = 49.8\% \times 0.934 \times (1 - 25.4\%) / (1 - 24.3\%)$

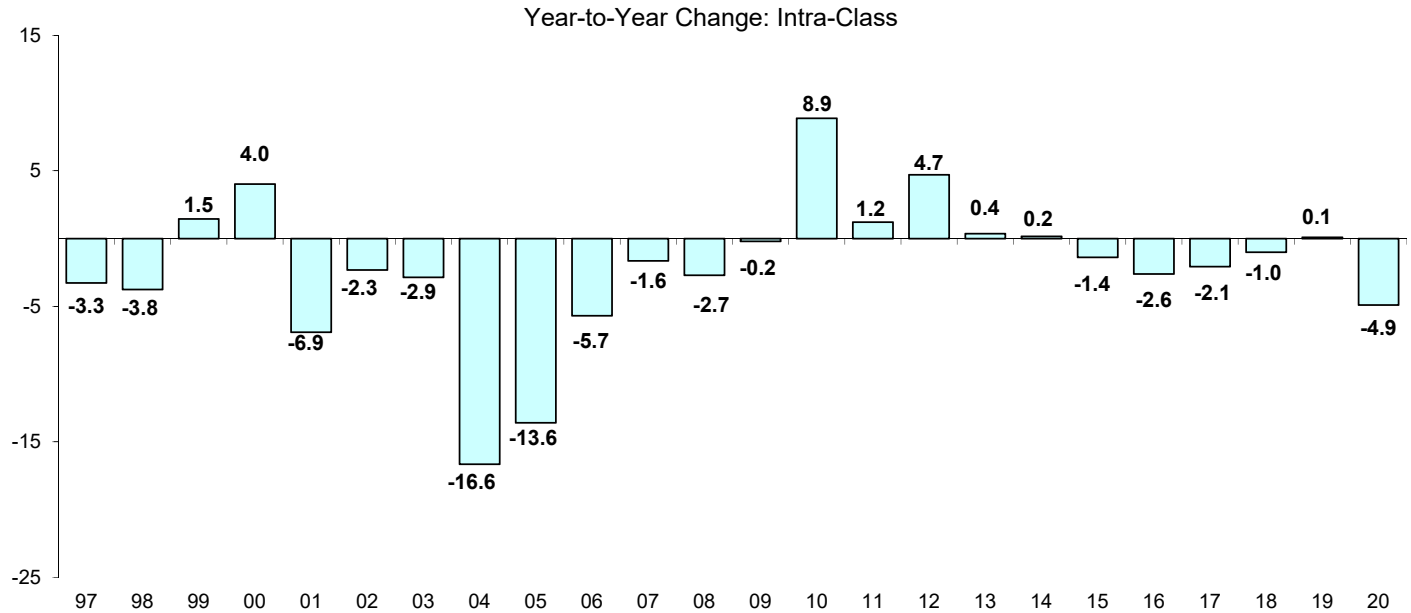
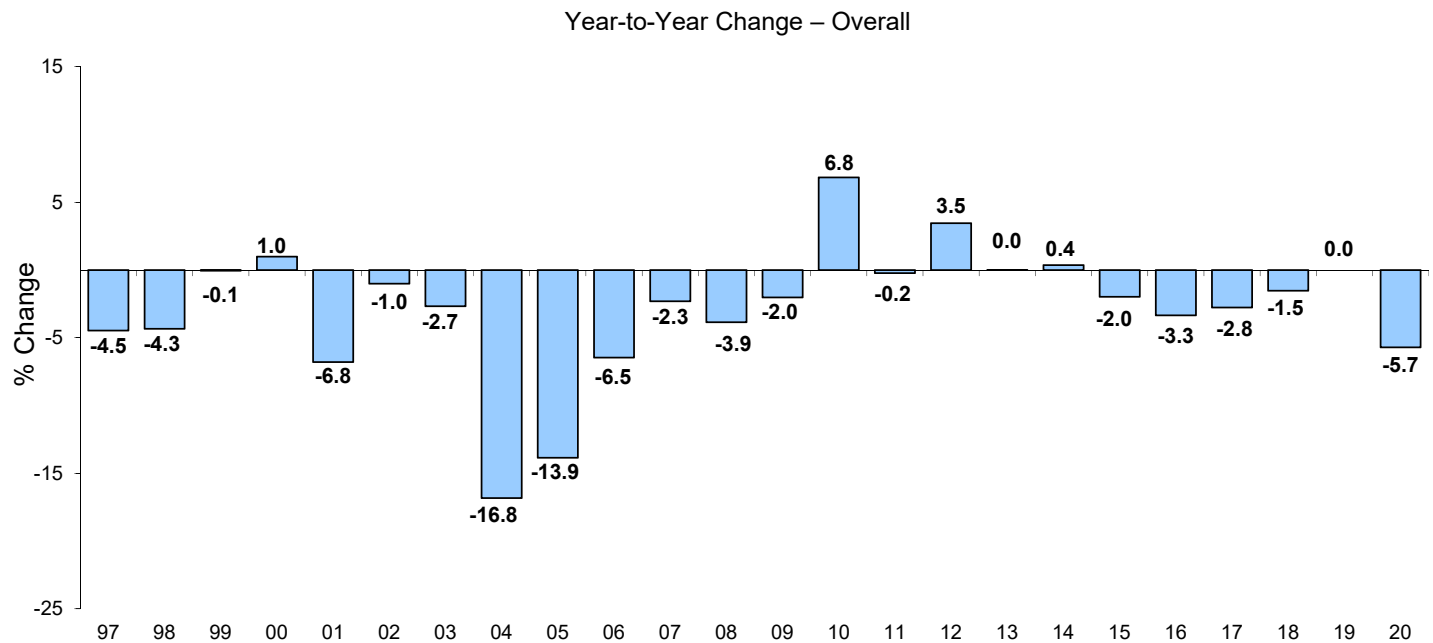
Column J Calculation $18.36 = \sum(I \times D) = 45.8\% \times 11.81 + 34.2\% \times 17.20 + 14.8\% \times 27.33 + 5.3\% \times 57.58$

All Industries $32.41 = \sum(B \times J)$

Impact of Changes in Intra-Industry Wage Level $4.3\% = J / E - 1 = 32.41 / 31.06 - 1$

Source: March 2021 UCLA Forecast (Column B)
 Rebalanced 2020 EPI CPS Data Set as of 2021.04.02 (Column I)
 2019 EPI CPS Data Set as of 2021.04.02 (Column D)

California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year



Note:

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

Average Incurred Indemnity Loss per Reported Indemnity Claim
As of December 31, 2020

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
1995										14,497
1996									16,773	16,810
1997								19,176	19,183	19,240
1998							21,047	21,137	21,201	21,279
1999						22,919	23,166	23,289	23,439	23,583
2000					23,115	23,478	23,639	23,902	24,087	24,203
2001				23,649	24,359	24,772	25,301	25,662	25,922	26,094
2002			20,682	22,004	22,673	23,412	23,838	24,127	24,380	24,636
2003		16,899	19,913	21,335	22,520	23,282	23,819	24,265	24,663	25,053
2004	10,717	13,799	16,014	17,311	18,017	18,789	19,293	19,842	20,205	20,515
2005	8,000	11,356	13,674	14,978	16,000	16,834	17,482	17,987	18,268	18,494
2006	8,033	12,057	14,849	16,424	17,701	18,610	19,252	19,654	19,930	20,106
2007	8,157	12,903	16,196	18,036	19,218	20,119	20,856	21,287	21,526	21,758
2008	8,573	13,914	17,738	19,935	21,321	22,208	22,807	23,215	23,467	23,682
2009	8,737	14,578	18,330	20,706	22,162	23,101	23,602	24,037	24,376	24,589
2010	8,756	14,284	18,213	20,371	21,603	22,480	23,019	23,370	23,643	23,906
2011	9,171	14,825	18,283	20,367	21,405	22,145	22,597	22,994	23,236	23,423
2012	9,181	14,686	17,984	19,696	20,849	21,646	22,127	22,460	22,758	
2013	9,386	14,528	17,690	19,446	20,412	21,023	21,423	21,676		
2014	9,279	14,665	18,266	20,157	21,264	21,836	22,172			
2015	9,633	15,347	18,830	20,617	21,534	22,057				
2016	9,816	15,310	18,539	20,158	21,032					
2017	9,971	15,619	18,941	20,469						
2018	10,564	16,378	19,652							
2019	11,013	17,122								
2020	11,835									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
1996										16.0%
1997									14.4%	14.5%
1998								10.2%	10.5%	10.6%
1999							10.1%	10.2%	10.6%	10.8%
2000						2.4%	2.0%	2.6%	2.8%	2.6%
2001					5.4%	5.5%	7.0%	7.4%	7.6%	7.8%
2002				-7.0%	-6.9%	-5.5%	-5.8%	-6.0%	-5.9%	-5.6%
2003			-3.7%	-3.0%	-0.7%	-0.6%	-0.1%	0.6%	1.2%	1.7%
2004		-18.3%	-19.6%	-18.9%	-20.0%	-19.3%	-19.0%	-18.2%	-18.1%	-18.1%
2005	-25.3%	-17.7%	-14.6%	-13.5%	-11.2%	-10.4%	-9.4%	-9.3%	-9.6%	-9.9%
2006	0.4%	6.2%	8.6%	9.7%	10.6%	10.6%	10.1%	9.3%	9.1%	8.7%
2007	1.5%	7.0%	9.1%	9.8%	8.6%	8.1%	8.3%	8.3%	8.0%	8.2%
2008	5.1%	7.8%	9.5%	10.5%	10.9%	10.4%	9.4%	9.1%	9.0%	8.8%
2009	1.9%	4.8%	3.3%	3.9%	3.9%	4.0%	3.5%	3.5%	3.9%	3.8%
2010	0.2%	-2.0%	-0.6%	-1.6%	-2.5%	-2.7%	-2.5%	-2.8%	-3.0%	-2.8%
2011	4.7%	3.8%	0.4%	0.0%	-0.9%	-1.5%	-1.8%	-1.6%	-1.7%	-2.0%
2012	0.1%	-0.9%	-1.6%	-3.3%	-2.6%	-2.3%	-2.1%	-2.3%	-2.1%	
2013	2.2%	-1.1%	-1.6%	-1.3%	-2.1%	-2.9%	-3.2%	-3.5%		
2014	-1.1%	0.9%	3.3%	3.7%	4.2%	3.9%	3.5%			
2015	3.8%	4.7%	3.1%	2.3%	1.3%	1.0%				
2016	1.9%	-0.2%	-1.5%	-2.2%	-2.3%					
2017	1.6%	2.0%	2.2%	1.5%						
2018	5.9%	4.9%	3.8%							
2019	4.3%	4.5%								
2020	7.5%									

Annual Trend*										
All-Year	1.6%	1.3%	0.7%	0.2%	-0.1%	-0.3%	-0.2%	0.1%	0.8%	1.6%
R ²	0.527	0.360	0.110	0.005	0.003	0.017	0.010	0.005	0.113	0.260
5-Year	4.8%	2.9%	1.5%	1.0%	0.7%	0.0%	-1.3%	-2.4%	-1.1%	1.6%
R ²	0.964	0.879	0.765	0.517	0.307	0.000	0.573	0.985	0.471	0.296

*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, 2020

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
1999										7,548
2000									8,099	8,231
2001								9,270	9,595	9,935
2002							9,339	9,692	9,982	10,259
2003						8,751	9,119	9,514	9,856	10,136
2004					6,870	7,280	7,727	8,054	8,310	8,525
2005				6,022	6,461	6,995	7,380	7,709	7,957	8,110
2006			6,150	6,747	7,279	7,755	8,120	8,436	8,609	8,704
2007		5,822	6,894	7,713	8,324	8,887	9,327	9,608	9,771	9,811
2008	4,801	6,513	7,800	8,780	9,565	10,126	10,508	10,770	10,873	10,918
2009	5,224	7,323	8,866	10,039	10,870	11,456	11,766	11,941	12,021	12,083
2010	5,452	7,626	9,301	10,470	11,183	11,636	11,903	12,029	12,107	12,214
2011	5,606	7,888	9,380	10,388	11,028	11,354	11,502	11,594	11,686	11,691
2012	5,736	7,820	9,072	9,801	10,300	10,597	10,745	10,893	10,953	
2013	5,868	7,793	8,771	9,443	9,777	9,966	10,093	10,146		
2014	5,699	7,361	8,397	8,993	9,276	9,508	9,604			
2015	5,802	7,446	8,408	8,903	9,137	9,285				
2016	5,910	7,498	8,304	8,628	8,871					
2017	5,890	7,306	8,066	8,436						
2018	6,111	7,655	8,419							
2019	6,140	7,721								
2020	7,053									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
2000										9.1%
2001									18.5%	20.7%
2002								4.6%	4.0%	3.3%
2003							-2.4%	-1.8%	-1.3%	-1.2%
2004						-16.8%	-15.3%	-15.3%	-15.7%	-15.9%
2005					-6.0%	-3.9%	-4.5%	-4.3%	-4.2%	-4.9%
2006				12.0%	12.7%	10.9%	10.0%	9.4%	8.2%	7.3%
2007			12.1%	14.3%	14.4%	14.6%	14.9%	13.9%	13.5%	12.7%
2008		11.9%	13.1%	13.8%	14.9%	13.9%	12.7%	12.1%	11.3%	11.3%
2009	8.8%	12.4%	13.7%	14.3%	13.6%	13.1%	12.0%	10.9%	10.6%	10.7%
2010	4.4%	4.1%	4.9%	4.3%	2.9%	1.6%	1.2%	0.7%	0.7%	1.1%
2011	2.8%	3.4%	0.9%	-0.8%	-1.4%	-2.4%	-3.4%	-3.6%	-3.5%	-4.3%
2012	2.3%	-0.9%	-3.3%	-5.6%	-6.6%	-6.7%	-6.6%	-6.0%	-6.3%	
2013	2.3%	-0.4%	-3.3%	-3.7%	-5.1%	-6.0%	-6.1%	-6.9%		
2014	-2.9%	-5.5%	-4.3%	-4.8%	-5.1%	-4.6%	-4.8%			
2015	1.8%	1.2%	0.1%	-1.0%	-1.5%	-2.4%				
2016	1.9%	0.7%	-1.2%	-3.1%	-2.9%					
2017	-0.3%	-2.6%	-2.9%	-2.2%						
2018	3.8%	4.8%	4.4%							
2019	0.5%	0.9%								
2020	14.9%									

Annual Trend*										
All-Year	2.1%	1.3%	1.4%	2.1%	2.7%	2.6%	2.4%	2.4%	2.7%	3.1%
R ²	0.807	0.323	0.198	0.233	0.337	0.351	0.352	0.391	0.501	0.548
5-Year	4.0%	0.9%	-0.4%	-2.6%	-3.6%	-5.0%	-5.4%	-4.2%	-0.1%	4.7%
R ²	0.715	0.446	0.102	0.963	0.956	0.970	0.991	0.879	0.002	0.652

*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, 2020

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
1995										13,528
1996									15,180	15,441
1997								16,995	17,380	17,572
1998							18,119	18,747	19,129	19,501
1999						18,791	19,778	20,385	20,875	21,247
2000					18,374	19,890	20,753	21,458	22,008	22,372
2001				17,685	20,096	21,638	22,728	23,504	24,069	24,482
2002			13,264	16,990	19,241	20,687	21,653	22,339	22,786	23,203
2003		7,958	13,335	16,894	19,052	20,447	21,367	22,032	22,631	23,162
2004	2,723	6,996	10,910	13,467	15,027	16,155	16,950	17,653	18,288	18,844
2005	2,501	6,398	9,584	11,799	13,227	14,260	15,098	15,816	16,485	16,966
2006	2,672	6,814	10,351	12,656	14,332	15,606	16,654	17,466	18,071	18,541
2007	2,836	7,323	11,163	13,803	15,679	17,082	18,202	19,012	19,625	20,151
2008	3,105	7,911	12,187	15,320	17,549	19,114	20,228	21,041	21,594	22,084
2009	3,109	7,997	12,541	15,869	18,242	19,861	21,032	21,926	22,595	23,100
2010	3,071	7,966	12,567	15,916	18,135	19,701	20,842	21,615	22,192	22,658
2011	3,129	8,143	12,713	15,880	17,989	19,496	20,558	21,390	21,934	22,291
2012	3,246	8,212	12,629	15,715	17,771	19,274	20,234	20,924	21,398	
2013	3,189	8,134	12,704	15,837	17,794	19,041	19,846	20,392		
2014	3,152	8,314	13,247	16,475	18,519	19,794	20,554			
2015	3,279	8,701	13,708	16,949	18,910	19,958				
2016	3,417	8,884	13,702	16,742	18,406					
2017	3,474	9,071	13,913	16,707						
2018	3,729	9,459	14,104							
2019	3,885	9,737								
2020	4,252									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
1996										14.1%
1997									14.5%	13.8%
1998								10.3%	10.1%	11.0%
1999							9.2%	8.7%	9.1%	9.0%
2000						5.8%	4.9%	5.3%	5.4%	5.3%
2001					9.4%	8.8%	9.5%	9.5%	9.4%	9.4%
2002				-3.9%	-4.3%	-4.4%	-4.7%	-5.0%	-5.3%	-5.2%
2003			0.5%	-0.6%	-1.0%	-1.2%	-1.3%	-1.4%	-0.7%	-0.2%
2004		-12.1%	-18.2%	-20.3%	-21.1%	-21.0%	-20.7%	-19.9%	-19.2%	-18.6%
2005	-8.2%	-8.6%	-12.2%	-12.4%	-12.0%	-11.7%	-10.9%	-10.4%	-9.9%	-10.0%
2006	6.8%	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%	9.1%	9.4%	9.5%	9.3%	8.9%	8.6%	8.7%
2008	9.5%	8.0%	9.2%	11.0%	11.9%	11.9%	11.1%	10.7%	10.0%	9.6%
2009	0.1%	1.1%	2.9%	3.6%	3.9%	3.9%	4.0%	4.2%	4.6%	4.6%
2010	-1.2%	-0.4%	0.2%	0.3%	-0.6%	-0.8%	-0.9%	-1.4%	-1.8%	-1.9%
2011	1.9%	2.2%	1.2%	-0.2%	-0.8%	-1.0%	-1.4%	-1.0%	-1.2%	-1.6%
2012	3.7%	0.8%	-0.7%	-1.0%	-1.2%	-1.1%	-1.6%	-2.2%	-2.4%	
2013	-1.8%	-0.9%	0.6%	0.8%	0.1%	-1.2%	-1.9%	-2.5%		
2014	-1.2%	2.2%	4.3%	4.0%	4.1%	4.0%	3.6%			
2015	4.0%	4.7%	3.5%	2.9%	2.1%	0.8%				
2016	4.2%	2.1%	0.0%	-1.2%	-2.7%					
2017	1.7%	2.1%	1.5%	-0.2%						
2018	7.3%	4.3%	1.4%							
2019	4.2%	2.9%								
2020	9.5%									

Annual Trend*										
All-Year	2.6%	2.0%	1.3%	0.6%	0.3%	0.1%	0.2%	0.4%	1.0%	1.8%
R ²	0.887	0.780	0.372	0.081	0.018	0.004	0.007	0.039	0.157	0.296
5-Year	5.6%	2.9%	1.4%	1.2%	1.3%	0.7%	-0.6%	-1.8%	-0.5%	2.3%
R ²	0.956	0.981	0.899	0.551	0.595	0.369	0.284	0.970	0.122	0.465

*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, 2020

Accident Year	Evaluated as of (in months):									
	12	24	36	48	60	72	84	96	108	120
2002										23,713
2003									22,146	23,034
2004								19,255	20,331	21,312
2005							18,578	19,818	21,102	21,984
2006						19,383	20,951	22,400	23,409	24,257
2007					19,635	21,815	23,766	25,208	26,297	27,157
2008				18,765	21,910	24,418	26,276	27,678	28,678	29,495
2009			15,656	19,995	23,501	26,036	27,851	29,176	30,158	30,908
2010		10,505	15,810	20,334	23,552	25,895	27,668	28,857	29,726	30,456
2011	4,095	9,981	15,148	19,153	22,057	24,293	25,782	26,907	27,694	28,212
2012	4,102	9,681	14,411	18,097	20,747	22,597	23,911	24,864	25,471	
2013	4,091	9,238	13,809	17,199	19,492	21,036	22,078	22,724		
2014	3,822	9,015	13,501	16,700	18,812	20,305	21,230			
2015	3,886	9,115	13,428	16,589	18,536	19,736				
2016	4,072	9,270	13,341	16,155	17,848					
2017	4,261	9,467	13,523	16,102						
2018	4,437	9,882	13,939							
2019	4,355	9,512								
2020	4,313									

Accident Year	Annual Change									
	12	24	36	48	60	72	84	96	108	120
2003										-2.9%
2004									-8.2%	-7.5%
2005								2.9%	3.8%	3.2%
2006							12.8%	13.0%	10.9%	10.3%
2007						12.5%	13.4%	12.5%	12.3%	12.0%
2008					11.6%	11.9%	10.6%	9.8%	9.1%	8.6%
2009				6.6%	7.3%	6.6%	6.0%	5.4%	5.2%	4.8%
2010**			1.0%	1.7%	0.2%	-0.5%	-0.7%	-1.1%	-1.4%	-1.5%
2011**		-5.0%	-4.2%	-5.8%	-6.3%	-6.2%	-6.8%	-6.8%	-6.8%	-7.4%
2012	0.2%	-3.0%	-4.9%	-5.5%	-5.9%	-7.0%	-7.3%	-7.6%	-8.0%	
2013	-0.3%	-4.6%	-4.2%	-5.0%	-6.1%	-6.9%	-7.7%	-8.6%		
2014	-6.6%	-2.4%	-2.2%	-2.9%	-3.5%	-3.5%	-3.8%			
2015	1.7%	1.1%	-0.5%	-0.7%	-1.5%	-2.8%				
2016	4.8%	1.7%	-0.6%	-2.6%	-3.7%					
2017	4.6%	2.1%	1.4%	-0.3%						
2018	4.1%	4.4%	3.1%							
2019	-1.9%	-3.7%								
2020	-1.0%									

Annual Trend*										
All-Year	1.0%	-0.6%	-1.8%	-2.6%	-2.3%	-0.9%	0.9%	2.7%	3.7%	3.9%
R ²	0.402	0.169	0.713	0.828	0.484	0.069	0.045	0.303	0.581	0.705
5-Year	1.4%	1.5%	0.7%	-1.6%	-3.5%	-5.1%	-6.6%	-6.3%	-3.2%	1.1%
R ²	0.451	0.599	0.441	0.938	0.952	0.959	0.990	0.949	0.571	0.102

*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, 2020

Accident Year	Evaluated as of (in months):									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>
1999										6,266
2000									6,916	7,132
2001								7,822	8,126	8,409
2002							7,921	8,289	8,586	8,853
2003						7,175	7,587	7,962	8,280	8,588
2004					5,331	5,816	6,227	6,566	6,902	7,208
2005				4,457	5,063	5,541	5,938	6,297	6,673	6,930
2006			4,067	4,932	5,608	6,151	6,606	7,025	7,320	7,566
2007		3,306	4,607	5,636	6,415	7,068	7,647	8,078	8,402	8,659
2008	1,808	3,710	5,199	6,399	7,386	8,171	8,749	9,186	9,503	9,756
2009	1,944	4,072	5,788	7,258	8,439	9,297	9,905	10,351	10,679	10,927
2010	1,987	4,204	6,102	7,708	8,853	9,672	10,297	10,718	11,021	11,278
2011	1,837	4,115	6,032	7,511	8,574	9,390	9,936	10,344	10,630	10,819
2012	1,855	4,066	5,862	7,244	8,238	8,931	9,417	9,770	9,993	
2013	1,884	4,006	5,767	7,076	7,963	8,550	8,950	9,198		
2014	1,827	3,916	5,640	6,862	7,663	8,224	8,568			
2015	1,839	3,957	5,608	6,794	7,524	7,979				
2016	1,926	4,046	5,618	6,685	7,323					
2017	1,957	3,999	5,498	6,444						
2018	2,041	4,196	5,729							
2019	2,020	4,105								
2020	2,224									

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										13.8%
2001									17.5%	17.9%
2002								6.0%	5.7%	5.3%
2003							-4.2%	-3.9%	-3.6%	-3.0%
2004						-18.9%	-17.9%	-17.5%	-16.6%	-16.1%
2005					-5.0%	-4.7%	-4.7%	-4.1%	-3.3%	-3.9%
2006				10.7%	10.8%	11.0%	11.3%	11.6%	9.7%	9.2%
2007			13.3%	14.3%	14.4%	14.9%	15.8%	15.0%	14.8%	14.5%
2008		12.2%	12.9%	13.5%	15.1%	15.6%	14.4%	13.7%	13.1%	12.7%
2009	7.5%	9.8%	11.3%	13.4%	14.2%	13.8%	13.2%	12.7%	12.4%	12.0%
2010	2.2%	3.2%	5.4%	6.2%	4.9%	4.0%	4.0%	3.5%	3.2%	3.2%
2011	-7.6%	-2.1%	-1.2%	-2.6%	-3.1%	-2.9%	-3.5%	-3.5%	-3.6%	-4.1%
2012	1.0%	-1.2%	-2.8%	-3.6%	-3.9%	-4.9%	-5.2%	-5.5%	-6.0%	
2013	1.6%	-1.5%	-1.6%	-2.3%	-3.3%	-4.3%	-5.0%	-5.9%		
2014	-3.0%	-2.3%	-2.2%	-3.0%	-3.8%	-3.8%	-4.3%			
2015	0.7%	1.0%	-0.6%	-1.0%	-1.8%	-3.0%				
2016	4.7%	2.3%	0.2%	-1.6%	-2.7%					
2017	1.6%	-1.2%	-2.1%	-3.6%						
2018	4.3%	4.9%	4.2%							
2019	-1.0%	-2.2%								
2020	10.1%									

Annual Trend*										
All-Year	1.0%	0.9%	1.6%	2.5%	3.4%	3.3%	3.1%	3.1%	3.5%	3.9%
R ²	0.430	0.292	0.306	0.354	0.471	0.466	0.442	0.461	0.557	0.623
5-Year	3.2%	1.1%	0.1%	-2.1%	-2.9%	-4.0%	-4.6%	-3.2%	1.0%	6.1%
R ²	0.817	0.573	0.014	0.959	0.986	0.992	0.996	0.746	0.065	0.741

*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	Evaluated as of (in months):													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1997														38,156
1998													34,819	36,135
1999												32,020	32,214	33,329
2000											27,783	29,968	30,820	30,766
2001										25,029	26,758	28,080	30,144	30,677
2002									21,021	22,824	23,796	25,147	25,713	25,294
2003								23,704	26,698	30,003	33,598	34,675	34,748	37,574
2004							19,921	23,263	25,185	29,199	30,320	31,935	34,766	35,873
2005						17,666	20,645	23,422	25,546	27,308	28,034	30,565	33,298	35,536
2006					17,684	20,210	22,063	24,692	26,487	27,398	30,606	31,755	34,821	36,066
2007				15,989	17,880	19,707	23,632	26,258	27,907	30,961	32,396	35,050	42,486	40,421
2008			14,518	16,502	18,023	20,561	22,933	25,559	29,536	32,539	35,372	39,546	44,935	
2009		12,238	14,449	16,463	18,656	20,874	22,416	25,586	28,687	31,787	36,116	40,346		
2010	7,769	11,861	14,316	16,129	17,735	19,666	21,941	24,461	27,509	31,637	35,709			
2011	8,334	12,622	14,659	16,944	18,476	20,359	22,454	25,113	27,845	31,130				
2012	8,180	12,415	14,538	15,855	18,009	20,402	23,788	27,542	32,260					
2013	8,470	12,330	13,988	15,428	17,187	19,545	23,196	26,333						
2014	8,331	12,507	14,731	16,874	19,915	22,146	25,005							
2015	8,686	13,444	16,144	18,902	21,533	24,336								
2016	8,918	13,797	16,673	19,520	22,298									
2017	9,333	14,953	18,721	21,574										
2018	9,929	15,851	19,400											
2019	10,357	16,089												
2020	10,830													

Accident	Annual Change													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1998														-5.3%
1999													-7.5%	-7.8%
2000												-6.4%	-4.3%	-7.7%
2001											-3.7%	-6.3%	-2.2%	-0.3%
2002										-8.8%	-11.1%	-10.4%	-14.7%	-17.5%
2003									27.0%	31.5%	41.2%	37.9%	35.1%	48.5%
2004								-1.9%	-5.7%	-2.7%	-9.8%	-7.9%	0.1%	-4.5%
2005							3.6%	0.7%	1.4%	-6.5%	-7.5%	-4.3%	-4.2%	-0.9%
2006						14.4%	6.9%	5.4%	3.7%	0.3%	9.2%	3.9%	4.6%	1.5%
2007					1.1%	-2.5%	7.1%	6.3%	5.4%	13.0%	5.9%	10.4%	22.0%	12.1%
2008				3.2%	0.8%	4.3%	-3.0%	-2.7%	5.8%	5.1%	9.2%	12.8%	5.8%	
2009			-0.5%	-0.2%	3.5%	1.5%	-2.3%	0.1%	-2.9%	-2.3%	2.1%	2.0%		
2010		-3.1%	-0.9%	-2.0%	-4.9%	-5.8%	-2.1%	-4.4%	-4.1%	-0.5%	-1.1%			
2011	7.3%	6.4%	2.4%	5.1%	4.2%	3.5%	2.3%	2.7%	1.2%	-1.6%				
2012	-1.8%	-1.6%	-0.8%	-6.4%	-2.5%	0.2%	5.9%	9.7%	15.9%					
2013	3.5%	-0.7%	-3.8%	-2.7%	-4.6%	-4.2%	-2.5%	-4.4%						
2014	-1.6%	1.4%	5.3%	9.4%	15.9%	13.3%	7.8%							
2015	4.3%	7.5%	9.6%	12.0%	8.1%	9.9%								
2016	2.7%	2.6%	3.3%	3.3%	3.5%									
2017	4.7%	8.4%	12.3%	10.5%										
2018	6.4%	6.0%	3.6%											
2019	4.3%	1.5%												
2020	4.6%													

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

Average Medical Case Outstanding per Open Indemnity Claim

Accident	Evaluated as of (in months):													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1997														105,066
1998													109,624	114,198
1999												96,127	102,992	113,137
2000											77,668	89,839	102,694	112,732
2001										69,725	80,584	89,603	100,652	109,149
2002									51,807	63,089	73,651	84,540	93,007	91,660
2003								46,644	58,737	69,746	81,721	87,079	88,391	90,722
2004							40,239	49,953	58,526	72,874	78,355	81,944	88,664	88,992
2005						34,363	43,057	52,579	63,595	73,011	76,325	86,320	88,762	94,292
2006					30,725	37,897	45,275	56,175	64,987	70,813	76,092	79,868	90,837	94,135
2007				26,642	32,788	40,143	50,977	60,307	68,781	76,147	88,275	93,699	106,002	106,075
2008			22,158	27,641	33,756	42,079	50,689	60,359	70,006	76,647	86,222	97,368	102,146	
2009		18,590	23,338	28,634	34,946	41,949	48,959	58,157	65,239	74,426	88,558	97,123		
2010	14,632	18,857	23,482	28,827	34,291	39,998	46,538	52,569	59,232	68,269	74,643			
2011	15,677	20,254	24,684	30,264	36,928	41,973	47,951	54,431	62,885	66,745				
2012	15,922	20,117	23,949	27,880	32,976	39,148	45,585	55,002	62,197					
2013	15,622	19,701	22,548	26,968	31,695	37,168	44,756	51,756						
2014	14,990	18,545	21,851	26,278	31,450	37,440	43,046							
2015	15,562	19,315	23,877	29,375	35,785	40,917								
2016	15,998	20,261	24,972	29,910	35,409									
2017	16,886	21,477	26,895	32,042										
2018	17,705	22,389	26,221											
2019	17,704	22,013												
2020	17,944													

Accident	Annual Change													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1998														8.7%
1999													-6.0%	-0.9%
2000												-6.5%	-0.3%	-0.4%
2001											3.8%	-0.3%	-2.0%	-3.2%
2002										-9.5%	-8.6%	-5.6%	-7.6%	-16.0%
2003									13.4%	10.6%	11.0%	3.0%	-5.0%	-1.0%
2004								7.1%	-0.4%	4.5%	-4.1%	-5.9%	0.3%	-1.9%
2005							7.0%	5.3%	8.7%	0.2%	-2.6%	5.3%	0.1%	6.0%
2006						10.3%	5.2%	6.8%	2.2%	-3.0%	-0.3%	-7.5%	2.3%	-0.2%
2007					6.7%	5.9%	12.6%	7.4%	5.8%	7.5%	16.0%	17.3%	16.7%	12.7%
2008				3.7%	3.0%	4.8%	-0.6%	0.1%	1.8%	0.7%	-2.3%	3.9%	-3.6%	
2009			5.3%	3.6%	3.5%	-0.3%	-3.4%	-3.6%	-6.8%	-2.9%	2.7%	-0.3%		
2010		1.4%	0.6%	0.7%	-1.9%	-4.7%	-4.9%	-9.6%	-9.2%	-8.3%	-15.7%			
2011	7.1%	7.4%	5.1%	5.0%	7.7%	4.9%	3.0%	3.5%	6.2%	-2.2%				
2012	1.6%	-0.7%	-3.0%	-7.9%	-10.7%	-6.7%	-4.9%	1.1%	-1.1%					
2013	-1.9%	-2.1%	-5.8%	-3.3%	-3.9%	-5.1%	-1.8%	-5.9%						
2014	-4.0%	-5.9%	-3.1%	-2.6%	-0.8%	0.7%	-3.8%							
2015	3.8%	4.1%	9.3%	11.8%	13.8%	9.3%								
2016	2.8%	4.9%	4.6%	1.8%	-1.0%									
2017	5.5%	6.0%	7.7%	7.1%										
2018	4.9%	4.2%	-2.5%											
2019	0.0%	-1.7%												
2020	1.4%													

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

Average Paid Indemnity Loss per Closed Indemnity Claim

Accident	Evaluated as of (in months):													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1997														16,795
1998													18,462	18,682
1999												19,795	20,131	20,414
2000											20,432	20,753	21,080	21,498
2001										21,282	21,742	22,140	22,665	23,047
2002									19,840	20,329	20,828	21,469	21,843	22,173
2003								18,772	19,417	20,037	20,856	21,352	21,804	22,329
2004							14,110	14,815	15,618	16,490	17,042	17,525	17,965	18,353
2005						11,432	12,323	13,182	14,226	14,917	15,488	15,994	16,375	16,695
2006					11,005	12,428	13,647	14,894	15,777	16,534	17,217	17,699	18,155	18,522
2007				9,651	11,762	13,485	15,071	16,254	17,196	18,064	18,722	19,226	19,707	20,160
2008			7,483	10,676	13,231	15,527	17,003	18,259	19,241	19,977	20,638	21,163	21,633	
2009		4,087	7,858	11,268	14,286	16,398	18,105	19,452	20,410	21,220	21,920	22,326		
2010	1,537	4,150	8,065	11,823	14,662	16,697	18,401	19,620	20,465	21,159	21,643			
2011	1,660	4,491	8,635	12,264	14,964	16,935	18,460	19,605	20,450	21,008				
2012	1,834	5,041	9,156	12,602	15,159	17,066	18,362	19,397	20,079					
2013	2,115	5,362	9,552	12,990	15,455	17,122	18,253	19,076						
2014	2,131	5,628	10,176	13,777	16,334	17,929	19,000							
2015	2,340	6,177	10,888	14,485	16,882	18,269								
2016	2,493	6,545	11,027	14,466	16,445									
2017	2,591	6,644	11,134	14,346										
2018	2,872	7,022	11,390											
2019	3,152	7,052												
2020	3,289													

Accident	Annual Change													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1998														11.2%
1999													9.0%	9.3%
2000												4.8%	4.7%	5.3%
2001											6.4%	6.7%	7.5%	7.2%
2002										-4.5%	-4.2%	-3.0%	-3.6%	-3.8%
2003									-2.1%	-1.4%	0.1%	-0.5%	-0.2%	0.7%
2004								-21.1%	-19.6%	-17.7%	-18.3%	-17.9%	-17.6%	-17.8%
2005							-12.7%	-11.0%	-8.9%	-9.5%	-9.1%	-8.7%	-8.8%	-9.0%
2006						8.7%	10.7%	13.0%	10.9%	10.8%	11.2%	10.7%	10.9%	10.9%
2007					6.9%	8.5%	10.4%	9.1%	9.0%	9.3%	8.7%	8.6%	8.5%	8.8%
2008				10.6%	12.5%	15.1%	12.8%	12.3%	11.9%	10.6%	10.2%	10.1%	9.8%	
2009			5.0%	5.5%	8.0%	5.6%	6.5%	6.5%	6.1%	6.2%	6.2%	5.5%		
2010		1.5%	2.6%	4.9%	2.6%	1.8%	1.6%	0.9%	0.3%	-0.3%	-1.3%			
2011	8.0%	8.2%	7.1%	3.7%	2.1%	1.4%	0.3%	-0.1%	-0.1%	-0.7%				
2012	10.5%	12.2%	6.0%	2.8%	1.3%	0.8%	-0.5%	-1.1%	-1.8%					
2013	15.3%	6.4%	4.3%	3.1%	2.0%	0.3%	-0.6%	-1.7%						
2014	0.8%	5.0%	6.5%	6.1%	5.7%	4.7%	4.1%							
2015	9.8%	9.7%	7.0%	5.1%	3.4%	1.9%								
2016	6.5%	6.0%	1.3%	-0.1%	-2.6%									
2017	3.9%	1.5%	1.0%	-0.8%										
2018	10.9%	5.7%	2.3%											
2019	9.8%	0.4%												
2020	4.3%													

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

Average Medical Paid per Closed Indemnity Claim*

Accident	Evaluated as of (in months):													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1997														11,625
1998													14,013	14,408
1999												15,483	16,176	16,687
2000											17,185	17,820	18,306	19,124
2001										19,293	19,954	20,680	21,671	22,364
2002									18,956	19,712	20,476	21,563	22,170	22,770
2003								17,089	17,946	18,776	20,016	20,864	21,599	22,415
2004							13,763	14,784	15,912	17,216	18,292	19,159	19,937	20,660
2005						12,537	13,722	14,990	16,654	17,965	19,078	20,057	20,765	21,411
2006					12,192	13,972	15,702	17,478	18,869	20,189	21,376	22,287	23,058	23,782
2007				11,121	13,537	15,692	18,080	19,992	21,645	23,145	24,213	25,147	25,937	26,767
2008			9,065	12,321	15,330	18,569	20,749	22,685	24,307	25,493	26,579	27,550	28,276	
2009		5,561	9,367	13,297	17,213	20,201	22,694	24,759	26,147	27,614	28,672	29,255		
2010	2,762	5,623	9,765	14,252	17,913	20,768	23,407	25,262	26,608	27,694	28,599			
2011	2,105	5,233	9,687	13,891	17,258	20,228	22,424	24,081	25,253	26,008				
2012	2,341	5,631	9,999	13,802	17,059	19,413	21,119	22,429	23,412					
2013	2,414	5,751	10,021	13,652	16,556	18,595	19,989	20,929						
2014	2,387	5,805	10,060	13,669	16,372	18,160	19,309							
2015	2,503	6,243	10,431	13,849	16,220	17,717								
2016	2,709	6,471	10,486	13,496	15,509									
2017	2,835	6,648	10,635	13,467										
2018	2,972	6,954	11,098											
2019	3,405	6,685												
2020	2,861													

Accident	Annual Change													
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
1998														23.9%
1999													15.4%	15.8%
2000												15.1%	13.2%	14.6%
2001											16.1%	16.1%	18.4%	16.9%
2002										2.2%	2.6%	4.3%	2.3%	1.8%
2003									-5.3%	-4.7%	-2.2%	-3.2%	-2.6%	-1.6%
2004								-13.5%	-11.3%	-8.3%	-8.6%	-8.2%	-7.7%	-7.8%
2005							-0.3%	1.4%	4.7%	4.3%	4.3%	4.7%	4.2%	3.6%
2006						11.4%	14.4%	16.6%	13.3%	12.4%	12.0%	11.1%	11.0%	11.1%
2007					11.0%	12.3%	15.1%	14.4%	14.7%	14.6%	13.3%	12.8%	12.5%	12.6%
2008				10.8%	13.2%	18.3%	14.8%	13.5%	12.3%	10.1%	9.8%	9.6%	9.0%	
2009			3.3%	7.9%	12.3%	8.8%	9.4%	9.1%	7.6%	8.3%	7.9%	6.2%		
2010*		--	--	--	--	--	--	--	--	--	--			
2011*	--	--	--	--	--	--	--	--	--	--				
2012*	--	--	--	--	--	--	--	--	--					
2013	3.1%	2.1%	0.2%	-1.1%	-2.9%	-4.2%	-5.4%	-6.7%						
2014	-1.1%	0.9%	0.4%	0.1%	-1.1%	-2.3%	-3.4%							
2015	4.9%	7.5%	3.7%	1.3%	-0.9%	-2.4%								
2016	8.2%	3.7%	0.5%	-2.6%	-4.4%									
2017	4.6%	2.7%	1.4%	-0.2%										
2018	4.8%	4.6%	4.3%											
2019	14.6%	-3.9%												
2020	-16.0%													

* 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 experience calls, excluding COVID-19 claims.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Years 2019 and 2020
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projected (d)
2021				0.282
2022				0.288
9/1/2022				0.289

(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, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 and 2020 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Years 2019 and 2020
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.303	0.944	0.877	0.327
2014	0.276	0.989	0.808	0.338
2015	0.261	1.008	0.771	0.340
2016	0.246	1.011	0.797	0.313
2017	0.251	1.014	0.835	0.305
2018	0.273	1.015	0.879	0.315
2019	0.294	1.011	0.973	0.306
2020	0.286	1.007	1.062	0.271
				Projected (d)
2021				0.292
2022				0.298
9/1/2022				0.299

(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, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then separately applied to the 2019 and 2020 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projected (d)
2021				0.279
2022				0.285
9/1/2022				0.285

(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 the 1990-2020 annual indemnity severity trend of 1.0%, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.303	0.944	0.877	0.327
2014	0.276	0.989	0.808	0.338
2015	0.261	1.008	0.771	0.340
2016	0.246	1.011	0.797	0.313
2017	0.251	1.014	0.835	0.305
2018	0.273	1.015	0.879	0.315
2019	0.294	1.011	0.973	0.306
2020	0.286	1.007	1.062	0.271
				Projected (d)
2021				0.329
2022				0.350
9/1/2022				0.353

(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 the 1990-2020 annual medical severity trend of 5.1%, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projected (d)
2021				0.268
2022				0.269
9/1/2022				0.268

(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 the 2015-2019 annual indemnity severity trend of -0.9%, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then applied to the 2019 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.303	0.944	0.877	0.327
2014	0.276	0.989	0.808	0.338
2015	0.261	1.008	0.771	0.340
2016	0.246	1.011	0.797	0.313
2017	0.251	1.014	0.835	0.305
2018	0.273	1.015	0.879	0.315
2019	0.294	1.011	0.973	0.306
2020	0.286	1.007	1.062	0.271
				Projected (d)
2021				0.298
2022				0.301
9/1/2022				0.302

(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 the 2015-2019 annual medical severity trend of 0.0%, the actual frequency change for 2020 from Appendix B, Exhibit 3, and projected frequency trends for accident years 2021 to 2023 from Section B, Exhibit 6.1; these trends were then applied to the 2019 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Long-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
1991	0.426	1.020	1.370	0.317
1992	0.351	1.075	1.246	0.303
1993	0.289	1.305	1.205	0.312
1994	0.327	1.364	1.363	0.328
1995	0.473	1.263	1.790	0.333
1996	0.530	1.180	1.851	0.338
1997	0.601	1.057	1.798	0.353
1998	0.653	0.975	1.805	0.353
1999	0.686	0.903	1.715	0.361
2000	0.593	0.843	1.357	0.369
2001	0.492	0.844	1.160	0.358
2002	0.367	0.865	0.894	0.355
2003	0.243	0.862	0.637	0.329
2004	0.145	1.180	0.572	0.299
2005	0.125	1.599	0.634	0.314
2006	0.161	1.571	0.815	0.311
2007	0.223	1.515	1.042	0.325
2008	0.282	1.423	1.258	0.319
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projected (d)
2021				0.278
2022				0.277
9/1/2022				0.277

(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 -0.4% based on the 1990 to 2020 on-level indemnity to industry average filed pure premium ratios to the 2019 on-level indemnity to industry average filed pure premium ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Long-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)	(5) On-Level Medical to Industry Average Filed Pure Premium Ratio (f)
1991	0.355	0.520	1.370	0.135	0.135
1992	0.295	0.549	1.246	0.130	0.130
1993	0.243	0.657	1.205	0.132	0.132
1994	0.279	0.688	1.363	0.141	0.141
1995	0.413	0.679	1.790	0.157	0.157
1996	0.444	0.669	1.851	0.160	0.160
1997	0.499	0.663	1.798	0.184	0.184
1998	0.599	0.584	1.805	0.194	0.194
1999	0.661	0.506	1.715	0.195	0.195
2000	0.600	0.465	1.357	0.206	0.206
2001	0.537	0.424	1.160	0.196	0.196
2002	0.418	0.441	0.894	0.206	0.206
2003	0.270	0.462	0.637	0.196	0.196
2004	0.185	0.699	0.572	0.225	0.225
2005	0.182	0.812	0.634	0.233	0.233
2006	0.236	0.853	0.815	0.247	0.247
2007	0.335	0.837	1.042	0.269	0.269
2008	0.421	0.831	1.258	0.278	0.278
2009	0.495	0.819	1.357	0.299	0.299
2010	0.493	0.817	1.234	0.326	0.326
2011	0.427	0.831	1.127	0.315	0.344
2012	0.371	0.870	1.004	0.321	0.351
2013	0.303	0.944	0.877	0.327	0.358
2014	0.276	0.989	0.808	0.338	0.369
2015	0.261	1.008	0.771	0.340	0.371
2016	0.246	1.011	0.797	0.313	0.340
2017	0.251	1.014	0.835	0.305	0.332
2018	0.273	1.015	0.879	0.315	0.344
2019	0.294	1.011	0.973	0.306	0.336
2020	0.286	1.007	1.062	0.271	0.298
Projected (d)					
2021				0.329	
2022				0.342	
9/1/2022				0.344	

(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 3.8% based on the 1990 to 2020 on-level medical to industry average filed pure premium ratios (including MCCP costs) to the 2019 on-level medical to industry average filed pure premium ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

(f) Medical costs include the MCCP cost for all accident years for selecting the loss ratio trend.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Short-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2020**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2009	0.330	1.395	1.357	0.339
2010	0.319	1.369	1.234	0.354
2011	0.298	1.350	1.127	0.357
2012	0.267	1.333	1.004	0.355
2013	0.229	1.304	0.877	0.341
2014	0.219	1.194	0.808	0.323
2015	0.212	1.177	0.771	0.324
2016	0.201	1.162	0.797	0.293
2017	0.205	1.132	0.835	0.278
2018	0.219	1.102	0.879	0.275
2019	0.255	1.071	0.973	0.280
2020	0.279	1.048	1.062	0.276
				Projected (d)
2021				0.261
2022				0.252
9/1/2022				0.250

(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 -3.5% based on the 2015 to 2019 on-level indemnity to industry average filed pure premium ratios to the 2019 on-level indemnity to industry average filed pure premium ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Short-Term Exponential Loss Ratio Trend
Based on Experience as of December 31, 2020**

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 Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2009	0.495	0.819	1.357	0.299
2010	0.493	0.817	1.234	0.326
2011	0.427	0.831	1.127	0.315
2012	0.371	0.870	1.004	0.321
2013	0.303	0.944	0.877	0.327
2014	0.276	0.989	0.808	0.338
2015	0.261	1.008	0.771	0.340
2016	0.246	1.011	0.797	0.313
2017	0.251	1.014	0.835	0.305
2018	0.273	1.015	0.879	0.315
2019	0.294	1.011	0.973	0.306
2020	0.286	1.007	1.062	0.271
				Projected (d)
2021				0.293
2022				0.287
9/1/2022				0.286

(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 -2.1% based on the 2015 to 2019 on-level medical to industry average filed pure premium ratios to the 2019 on-level medical to industry average filed pure premium ratio.

(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

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, 2021 and August 31, 2022 at 33.5% 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, 2021 and August 31, 2022 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 2019.² 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 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 focused 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 costs in pure 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

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 2020 LAE information is not yet available.

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

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.

insurers to more accurately reflect ULAE costs related to large deductible policies or claims handled by 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 future advisory pure premium rates, (b) losses on claims on large deductible policies and/or handled by 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 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 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

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

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.

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.

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 for 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.) ULAE paid per open indemnity claim for 2019 is 8% lower than that for 2018. This decrease could be partly related to efforts from insurers to settle larger, more complex claims faster over the last several years but could also be related to year-to-year variation in average paid ULAE.⁷

As in the last several pure premium rate filings, the WCIRB is basing the projected ratio of ULAE to loss based on a method that relates ULAE to the number of open indemnity claims and 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.⁸

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 generally consistent with that used in the last several pure premium rate filings. 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, 2021 and August 31, 2022 will be consistent with the timing of loss payments.

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). In prior pure premium rate filings, the future number of open indemnity claims was projected based on estimated ultimate indemnity claim settlement rates. In the WCIRB's 2020 study of ULAE projection methodologies, the WCIRB found that a method that projects future open indemnity claim counts based on incremental claim settlement rates were more accurate than the alternative methods reviewed.⁹ As a result, 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 selected incremental claim settlement rate. Given the impact of the COVID-19 pandemic on the claim settlement process in 2020, the incremental claim settlement rate from calendar year 2019 was selected.

⁷ ULAE for calendar year 2020 is not yet available but is expected to be significantly impacted by the COVID-19 pandemic similar to other 2020 information.

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

⁹ See Item AC20-12-02 of the December 11, 2020 WCIRB Actuarial Committee Agenda.

The WCIRB is projecting future growth in paid ULAE per open indemnity claim to the period underlying policies incepting between September 1, 2021 and August 31, 2022 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 for 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 slowdown on the mix of industries and mix of wage levels within industries as discussed in Appendix B. These projected growth rates are then applied to each of the paid ULAE severities for latest two available calendar years (2018 and 2019) and averaged to project average ULAE costs for calendar years 2021 through 2023.

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 2021 through 2023. The projected ULAE for policies incepting between September 1, 2021 and August 31, 2022 is based on a weighted average of calendar years 2021 through 2023, trended an additional 3.0 years to reflect the approximate average loss payment date on policies incepting between September 1, 2021 and August 31, 2022.¹⁰ The projected ratio of ULAE to loss for policies incepting between September 1, 2021 and August 31, 2022 computed on this basis, as shown in Exhibit 3.5, is 13.5%.

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. In prior pure premium rate filings, the WCIRB used a paid loss-based methodology to project the ULAE ratio that in part relied on projected calendar year paid loss ratios. The WCIRB's 2020 study of ULAE methodologies found that this approach was significantly more complex and less stable than the alternative paid loss-based methods reviewed, including methods based on calendar year paid ULAE to paid loss ratios (with "national insurer" ULAE ratios adjusted as described above).¹¹ As a result, the WCIRB is using a paid loss-based methodology to project the ULAE to loss ratio for policies incepting between September 1, 2021 and August 31, 2022 based on the average of the two most recent available calendar year (2018 and 2019) paid ULAE to paid loss ratios for private insurers shown in Exhibit 1. The projected ratio of ULAE to loss for policies incepting between September 1, 2021 and August 31, 2022 based on this approach is 14.0%.

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 most recent two available calendar year 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, 2021 and August 31, 2022 using this methodology is 13.7%.

Summary of Alternative ULAE Projections

For informational purposes, the WCIRB has computed alternative projections of ratios of ULAE to loss based on alternative 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 4 through 6 and are discussed below.

Calendar Year Paid ULAE to Projected Calendar Year Paid Loss-Based Projections

Exhibit 4 shows a projection based on the relationship of paid ULAE to paid losses in which the ULAE is projected based on the average of the latest two calendar year (2018 and 2019) paid ULAE to paid loss ratios and the calendar loss to premium ratios are projected based on the selected loss development and

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 where an estimated 50% of indemnity and medical losses have been paid.

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

trending patterns included in Section B. This methodology, which was the basis of the WCIRB's paid loss-based ULAE projection in prior pure premium rate filings, produces a ULAE projection that is lower than the WCIRB's recommended methodology. The WCIRB's recent study of ULAE projection methodologies showed that this approach was significantly more volatile and complex than an approach based on utilizing recent calendar year paid ULAE to paid loss ratios since it relies in part on projections of calendar year paid losses. As a result, the WCIRB recommends a paid loss-based ULAE projection based on the average of the two most recent calendar year paid ULAE to paid loss ratios for private insurers.

Calendar Year Paid ULAE Projections Trended from the Latest Year

Exhibit 5 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 the latest calendar year (2019) only. The projection based on this methodology is somewhat lower than that based on the analogous methodology recommended by the WCIRB which applies the trend to the average of the latest two calendar years. 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 the two most recent calendar years.

Calendar Year Paid ULAE Per Open Indemnity Claim-Based Projections Using Estimated Ultimate Claim Settlement Rates

Exhibit 6 shows a projection based on the relationship of ULAE paid to the number of open indemnity claims in which the future number of open indemnity claims were projected using estimated ultimate indemnity claim settlement rates. This methodology, which was the basis of the WCIRB's open claim count-based ULAE projection in prior pure premium rate filings, produces a ULAE projection that is higher than the WCIRB's recommended methodology. The WCIRB's recent study of ULAE projection methodologies showed that an approach that projected open indemnity claim counts using incremental claim settlement rates was more accurate than the alternative methods reviewed. As a result, the WCIRB recommends an open claim count-based ULAE projection that utilizes incremental claim settlement rates.

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 most recent two calendar year paid ULAE to paid loss ratios, Table 1 shows an alternative ULAE projection based on the paid ULAE to paid loss ratio for the latest calendar year (2019). 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 the two most recent calendar years.

The ULAE to loss ratio projections for policies incepting between September 1, 2021 and August 31, 2022 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, 2021 Filing Methodology	
Paid ULAE Per Open Indemnity Claim Applied to the Latest Two Years	13.5%
Latest Two Calendar Year Paid ULAE to Loss Ratios	14.0%
Average of Open Indemnity Claim-Based and Paid Loss-Based Projections	13.7%
Alternative Methodologies	
Paid ULAE to Paid Loss Projection Applied to the Latest Two Years	12.1%
Paid ULAE Per Open Indemnity Claim Applied to the Latest Year Only	12.7%
Paid ULAE Per Open Indemnity Claim Applied to the Latest Two Years with Open Indemnity Claims Projected Based on Estimated Ultimate Indemnity Claim Settlement Rates	14.4%
Latest Calendar Year Paid ULAE to Loss Ratio	13.1%

ALAE Projection – Excluding MCCP Costs

The WCIRB is projecting the ALAE to loss ratio for policies incepting between September 1, 2021 and August 31, 2022 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.

The COVID-19 pandemic has had a significant impact on the workers' compensation system including the filing of several thousand claims arising out of a diagnosis of COVID-19 for accident year 2020. As shown in Appendix B, Exhibit 1, significant ALAE and MCCP costs have been paid on COVID-19 claims as of December 31, 2020. The WCIRB believes these claims reflect the uniqueness of the COVID-19 pandemic and may not be indicative of claim costs that will incur on policies incepting between September 1, 2021 and August 31, 2022. As a result, as with the loss projections, the WCIRB has excluded COVID-19 claims from the ALAE and MCCP cost information for accident year 2020 included in this Appendix.

Effective January 1, 2013, Senate Bill No. 863 (SB 863) created the process of independent medical review (IMR) and independent bill review (IBR) to resolve medical treatment and billing disputes. Prior to January 1, 2016, the cost of IMR and IBR reports paid had been included in paid MCCP costs reported in ALAE. Beginning with IMR and IBR reports paid on or after January 1, 2016, the USRP requires that the cost of these reports no longer be included in reported MCCP costs although such costs continue to be required to be reported as ALAE. As a result, ALAE excluding MCCP costs paid in 2016 and later include the cost of IMR and IBR while ALAE excluding MCCP costs paid prior to 2016 do not include IMR and IBR costs. In order to review ALAE excluding MCCP costs on a comparable basis, 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. This adjustment was based on information on the number and average cost of an IMR and IBR obtained from the Division of Workers' Compensation (DWC). This adjustment is reflected in the paid ALAE amounts and projections of ratios of ALAE to loss included in this Appendix. (A similar adjustment is made to MCCP costs, which is discussed separately below.)

Exhibit 7.1 shows average paid ALAE per reported indemnity claim by accident year for private insurers. Recent average ALAE costs at the latest evaluation for the accident years shown have been relatively consistent with prior years. Exhibit 7.2 shows ratios of paid ALAE to paid losses for private insurers. As loss severities have decreased following the implementation of SB 863, ratios of paid ALAE to paid losses

have generally increased steadily. The average paid ALAE per indemnity claim and paid ALAE to paid loss ratio for accident year 2020 shown in Exhibits 7.1 and 7.2 is lower than that for 2019. This is likely in part a result of the pandemic and stay-at-home orders slowing the claims resolution process in 2020 and limiting the ability of conducting hearings on claim disputes.

Exhibit 8 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 30, 2020, the selected paid ALAE development for private insurers from Exhibit 10.1 and projected indemnity claim count development analogous to that shown in Exhibit 10.3 for private insurers. Exhibit 9 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 modest.

Exhibits 10.1 through 10.4 show the projected ratio of ALAE to loss for policies incepting between September 1, 2021 and August 31, 2022 based on the projected frequency of indemnity claims and projected average ALAE cost per indemnity claim. Given State Fund's LAE characteristics discussed with respect to ULAE above, as with the projection of ULAE, 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 increased steadily for several years following the implementation of SB 863 and up to the onset of the pandemic. In the most recent calendar year, the slowdown of the claim resolution process during the pandemic has resulted in declining indemnity claim settlement rates for more recent accident years. As discussed in Appendix A, the WCIRB has reflected adjustments to paid indemnity and medical loss development for the impact of changes in claim settlement rates including an adjustment to later period paid loss development for the recent claim settlement rate acceleration. In 2019 and 2020, the WCIRB studied the potential impact of claim settlement rate changes on paid ALAE development which 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 For example, during a period of significant claim settlement increase, the WCIRB's study found that future paid ALAE development for that accident year emerged lower than otherwise projected. As a result, the WCIRB is reflecting an adjustment to paid ALAE development for the impact of claim settlement rate changes.

The adjustment to paid ALAE development, which is developed similar to the approach used in the January 1, 2021 Pure Premium Rate Filing, 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 prior age. Table 2 shows the adjustments to paid ALAE development based on the regression model through 72 months.

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

**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 3, indemnity claim settlement rates for accident years 2018 and 2019 at the latest evaluation decreased by 1.5 points or greater over the prior year, while accident year 2015 through 2017 claim settlement rates at the prior (December 31, 2019) evaluation increased by more than 1.5 points over the prior year. As a result, the WCIRB adjusted paid ALAE age-to-age development projected for these accident years and evaluations based on the values shown in Table 2, as shown in Table 3. The adjusted paid ALAE age-to-age development factors shown in Table 3 are also used to project cumulative paid ALAE development for accident years prior to that age (i.e., the adjusted factors shown in Table 3 are also used to project ALAE development for accident year 2020 after 12 months and accident year 2019 after 24 months).

Table 3 – Adjustment to Paid ALAE Development for Claim Settlement Rate Changes

Age	Evaluated as of 12/31/2019			Evaluated as of 12/31/2020		
	Settlement Rate Point Change	Unadjusted Age-to-Age Factor	Adjusted Age-to-Age Factor	Settlement Rate Point Change	Unadjusted Age-to-Age Factor	Adjusted Age-to-Age Factor
72	1.1	1.056	N/A	0.6	1.048	N/A
60	1.6	1.081	1.072	0.4	1.071	N/A
48	1.9	1.128	1.119	0.0	1.117	N/A
36	2.1	1.240	1.224	-1.7	1.218	1.231
24	0.2	1.546	N/A	-2.1	1.533	1.564
12	0.1	3.767	N/A	-0.9	3.654	N/A

As discussed for losses in Appendix A, the COVID-19 pandemic has distorted paid loss development in the second quarter of 2020, while, based on a recent WCIRB study, the adjustments for changes in claim settlement rates substantially corrected for the impact of this distortion. The WCIRB believes some of the declining paid ALAE development in 2020 as shown in Exhibit 10.1 is in part related to volatility emerging during the pandemic period. As a result, similar to the loss development projection, the WCIRB utilized a two-year average of the paid ALAE age-to-age factors (adjusted for changes in claim settlement rates for particular ages as shown in Table 3) to project future ALAE development through 360 months. The selected age-to-age paid ALAE development on this basis is shown in Exhibit 10.1 based on private insurers' ALAE experience.

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.

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 348-to-360-month period, with the ALAE tail development factor based on the fitted curve values through 65 development years. The ALAE tail development factor derived based on this approach is shown in Exhibit 10.1 based on private insurer experience. (Exhibit 10.2 shows, for informational purposes, private insurer paid ALAE age-to-age factors on a quarterly basis.)

As discussed for losses in Appendix B, the COVID-19 pandemic has significantly impacted exposure, premium and claim cost levels for accident year 2020. Although COVID-19 claims have been excluded from the accident year 2020 information included in this filing, the economic slowdown has had a significant impact on classification mix, the number of claims filed, medical services delivered and the overall claims process. In particular for ALAE, accident year 2020 ALAE information may be understated due to the pandemic and stay-at-home orders significantly slowing down the claims resolution process. Given these significant and likely temporary impacts of the pandemic, the WCIRB does not believe that accident year 2020 is an appropriate basis to project the ALAE to loss ratio for policies incepting between September 1, 2021 and August 31, 2022. As a result, the WCIRB is basing the projected ALAE to loss ratio for policies incepting between September 1, 2021 and August 31, 2022 by applying its recommended trending rates to accident year 2019 only.

The estimated ultimate number of indemnity claims shown in Exhibit 10.4 is projected based on the number of indemnity claims reported as of December 31, 2020, the latest year historical claim reporting pattern (see Exhibit 10.3) 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 accident year 2019.

The estimated ultimate ALAE per indemnity claim shown in Exhibit 10.4 is based on private insurers’ experience (see Exhibit 8). 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 (2015 to 2019) average rates of growth in (a) estimated ultimate ALAE per indemnity claim for private insurers (Exhibit 8) and (b) incremental paid ALAE per open indemnity claim for private insurers (Exhibit 9). Given the impact of the pandemic on paid ALAE for 2020 as discussed above, 2020 was not included in the computation of the average ALAE severity trends. This approach results in an annual average ALAE severity growth projection of 1.0%. This projected ALAE severity trend is lower than that reflected in the January 1, 2021 Pure Premium Rate Filing of 1.5% and higher than the generally flat ultimate ALAE per indemnity claim experienced over the last several years. The WCIRB believes that this severity trend, which gives consideration to both longer-term and shorter-term rates of growth in ALAE per indemnity claim, is appropriate given the long-tailed nature of ALAE and that ALAE is generally based on the cost levels within the calendar year they are paid rather than the accident year in which the claim occurred. The projected ALAE per indemnity claim for policies incepting between September 1, 2021 and August 31, 2022 is based on the selected 1.0% ALAE severity trend applied to the accident year 2019 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 other alternative methods tested.¹⁵ Exhibit 10.4 shows the projected ratio of

¹⁵ See Item AC14-12-02 of the December 3, 2014 WCIRB Actuarial Committee Agenda.

ALAE (excluding MCCC 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 16.6%.

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. As discussed in Appendix B, the WCIRB estimates a 70% reduction in lien filings resulted from SB 1160 and AB 1244, which corresponds to an approximate 11.2% reduction in ALAE (excluding MCCC) costs.¹⁶ Given that liens are generally filed much later in the life of claims, accident year 2017 and forward paid ALAE costs as of December 31, 2020 are only partially affected by the SB 1160 and AB 1244 lien reform provisions. In addition, SB 1160 and AB 1244 have also impacted the recent decreases in paid ALAE development for older accident years. 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 4.5% reduction in ALAE costs in the projections of the ALAE ratio.¹⁷ 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 10.4, 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, 2020 (60%). As shown on line (h) of Exhibit 10.4, the projected ratio of ALAE (excluding MCCC costs) to loss, after reflecting the impact of SB 1160 and AB 1244, is 15.9%.

Summary of Alternative ALAE (excluding MCCC Costs) Projections

For informational purposes, the WCIRB has computed alternative ALAE to loss ratio projections based on a number of alternative 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 11 and 12 and are discussed below.

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

Exhibits 11.1 and 11.2 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 with adjustments for changes in claim settlement rates. This projection is lower than that based on the WCIRB's selected ALAE projection methodology which projects paid ALAE development based on the average of the latest two years. Given the potential impact of the pandemic on paid ALAE development emerging in 2020, the WCIRB recommends using the average of the latest two years of paid ALAE development to mitigate this potential volatility.

Projected Ultimate ALAE Per Indemnity Claim and Future Number of Indemnity Claims with Trend Applied to the Latest Two Years

Exhibit 12 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 most recent two accident years (2019 and 2020). This projection is slightly lower than that based on the WCIRB's selected ALAE projection methodology which is based on projecting from accident year 2019 only. Given the impact of the pandemic on exposures and claims for accident year 2020, which is expected to be temporary, the WCIRB believes basing the projection on accident year 2019 only is more appropriate. In particular for ALAE, accident year 2020 ALAE information may be understated due to the pandemic and stay-at-home orders significantly slowing down the claim resolution process.

¹⁶ The estimated 70% reduction in lien filings is updated from 60% reflected in the January 1, 2021 Pure Premium Rate Filing based on the latest available information on lien filings. See Section B of the WCIRB's July 1, 2018 Pure Premium Rate Filing and Attachment C to the WCIRB's Amended January 1, 2018 Pure Premium Rate Filing for more information on the estimated impact of SB 1160 and AB 1244 on ALAE costs.

¹⁷ In that medical bill disputes that would otherwise result in a filed lien are continuing to be pursued with insurer claim personnel, the WCIRB is not recommending an adjustment to the ULAE projection to reflect the SB 1160 and AB 1244 reduction in liens.

The projections of ratios of ALAE to loss for policies incepting between September 1, 2021 and August 31, 2022 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 4.

Table 4: ALAE (Excluding MCCP Costs) to Loss Ratio Projections

ALAE Projection Methodologies	Statewide with Private Insurer Average ALAE
September 1, 2021 Filing Methodology Projected Ultimate ALAE Per Indemnity Claim – 2-Year Average Adjusted Paid ALAE Development – Trend Applied to 2019	15.9%
Alternative Methodologies Projected Ultimate ALAE Per Indemnity Claim – Latest Year Adjusted Paid ALAE Development – Trend Applied to 2019	15.6%
Projected Ultimate ALAE Per Indemnity Claim – 2-Year Average Adjusted Paid ALAE Development – Trend Applied to 2019 and 2020	15.3%

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 related to litigation, 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 MCCP costs for accident year 2020.

Beginning in 2016, the cost of IMR and IBR is no longer reported in MCCP as a component of ALAE. As a result, MCCP costs paid in 2016 and later do not include the cost of IMR and IBR while MCCP costs paid prior to 2016 do include IMR and IBR costs. For consistency of comparison, similar to ALAE excluding MCCP costs, the WCIRB adjusted all pre-2016 MCCP payments to exclude the cost of IMR and IBR for all periods based on information obtained from the DWC on IMR and IBR determinations made prior to 2016 by accident year. This adjustment is reflected in the paid MCCP cost amounts and projections of ratios of MCCP costs to loss included in this Appendix. In this way, MCCP cost payment patterns can be reviewed on a consistent basis.

Exhibit 13 shows average paid MCCP per reported indemnity claim by accident year. Exhibit 14 shows estimated ultimate accident year MCCP per indemnity claim. Exhibit 15 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). After increasing in 2018, average MCCP costs declined by an analogous rate in 2019. As also discussed for ALAE excluding MCCP costs above, declines in MCCP costs for accident year 2020 are likely in part related to the general slowdown of the claim resolution process during the pandemic.

Exhibits 16.1 and 16.2 show the projection of MCCP costs on a statewide basis based on reported MCCP paid costs through December 31, 2020. The methodology used to project MCCP costs is very similar to the WCIRB's methodology used to project ALAE excluding MCCP costs. Reported accident year MCCP paid costs were developed to an ultimate basis using (a) two-year average paid MCCP age-to-age development factors through 108 months and (b) the cumulative medical loss development factors based on December 31, 2020 experience after 108 months.¹⁸ As with losses and ALAE excluding MCCP costs,

¹⁸ 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.

the WCIRB believes projecting M CCP cost development based on a two-year average mitigates volatility emerging during the pandemic period.

The projected M CCP cost severity trend was based on the approximate average of the annual rates of growth in (a) ultimate accident year M CCP costs per indemnity claim from 2012 through 2019 shown in Exhibit 14 and (b) calendar year M CCP costs per open indemnity claim from 2009 through 2019 shown in Exhibit 15, which is consistent with the approach used in the last several pure premium rate filings. As discussed for ALAE excluding M CCP costs above, 2020 was not included in the computation of the average M CCP cost severity trends given the unique and likely temporary impact the pandemic has had on M CCP costs. This approach results in an annual M CCP severity growth projection of -1.0% annually. This trend is slightly lower to the 0% M CCP severity trend selected in the January 1, 2021 Pure Premium Rate Filing but is responsive to the recent period of declining average M CCP costs.

Inasmuch as the previously discussed factors impacting State Fund's ULAE and ALAE excluding M CCP cost experience do not impact State Fund's M CCP cost experience, the WCIRB's M CCP cost projection reflects statewide M CCP experience. As shown in Exhibit 16.2, the WCIRB's projected ratio of M CCP costs to loss for policies incepting between September 1, 2021 and August 31, 2022 based on this approach is 3.9%.

Summary of Alternative M CCP Cost Projections

For informational purposes, the WCIRB has computed alternative M CCP cost to loss ratio projections based on a number of alternative methodologies reflecting underlying assumptions that differ from those reflected in the WCIRB's recommended methodology. These alternative M CCP cost to loss ratio projections are shown in Exhibits 17 and 18 and are discussed below.

Projected Ultimate M CCP Cost Per Indemnity Claim and Future Number of Indemnity Claims Based on Latest Year Paid M CCP Cost Development

Exhibit 17 shows a method that projects the M CCP cost to loss ratio based on changes in indemnity claim frequency and M CCP cost severities in which the paid M CCP costs is developed using the latest year's paid M CCP cost age-to-age factors. This projection is slightly lower than that based on the WCIRB's selected M CCP cost projection methodology which projects paid M CCP cost development based on the average of the latest two years. Given the potential impact of the pandemic on paid M CCP cost development emerging in 2020, the WCIRB recommends using the average of the latest two years of paid M CCP cost development to mitigate this potential volatility.

Projected Ultimate M CCP Cost Per Indemnity Claim and Future Number of Indemnity Claims with Trend Applied to the Latest Two Years

Exhibit 18 shows a method that projects the M CCP cost to loss ratio based on changes in indemnity claim frequency and M CCP cost severities which applies the WCIRB's projected frequency and M CCP cost severity trends to the projected ultimate indemnity claim counts and ultimate M CCP costs per indemnity claim for the most recent two accident years (2019 and 2020). This projection is slightly lower than that based on the WCIRB's selected M CCP cost projection methodology which is based on projecting from accident year 2019 only. Given the impact of the pandemic on exposures and claims for accident year 2020, which is expected to be temporary, the WCIRB believes basing the projection on accident year 2019 only is more appropriate.

The projections of the ratios of M CCP costs to loss derived from each of these alternative M CCP cost projection methodologies as well as the WCIRB's selected methodology are shown in Table 5.

Table 5: M CCP Cost to Loss Ratio Projections

M CCP Cost Projection Method	Statewide
September 1, 2021 Filing Methodology Projected Ultimate M CCP Per Indemnity Claim – 2-Year Average Paid M CCP Development – Trend Applied to 2019	3.9%
Alternative Methodologies Projected Ultimate M CCP Per Indemnity Claim – Latest Year Paid M CCP Development – Trend Applied to 2019	3.8%
Projected Ultimate M CCP Per Indemnity Claim – 2-Year Average Paid M CCP Development – Trend Applied to 2019 and 2020	3.8%

Based on the methodologies discussed above, the WCIRB projects a total provision of LAE to loss of 33.5% for policies incepting between September 1, 2021 and August 31, 2022.

Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios^[1]

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2007	5.4%	13.3%	15.4%	12.3%	15.2%
2008	5.6%	11.5%	13.3%	11.1%	13.1%
2009	6.2%	15.7%	14.8%	12.8%	14.9%
2010	5.9%	14.1%	15.5%	13.3%	15.3%
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%	23.0%	21.0%	22.4%
2019	12.9%	17.8%	22.8%	20.9%	22.0%

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>
2010	27.9%	17.3%	6.4%	12.3%	7.9%
2011	28.9%	15.9%	6.5%	11.9%	7.7%
2012	45.0% ^[2]	15.0%	6.4%	14.8% ^[2]	7.5%
2013 ^[3]	21.8%	16.3%	8.5%	11.7%	9.4%
2014 ^[3]	28.8%	14.7%	7.7%	11.6%	8.6%
2015 ^[4]	35.1%	14.8%	10.2%	13.9%	10.9%
2016 ^[4]	37.6%	14.2%	12.8%	15.9%	13.0%
2017 ^[4]	25.6%	16.1%	14.1%	15.8%	14.4%
2018 ^[4]	24.8%	14.9%	14.8%	16.1%	14.8%
2019 ^[4]	21.3%	14.4%	12.8%	14.1%	13.1%

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>
2010	33.8%	31.4%	22.0%	25.6%	23.3%
2011	34.8%	31.8%	23.8%	26.8%	24.8%
2012	51.3% ^[2]	30.3%	25.5%	31.0% ^[2]	26.1%
2013 ^[3]	27.7%	31.7%	28.5%	28.6%	28.9%
2014 ^[3]	37.2%	32.5%	29.0%	30.6%	29.4%
2015 ^[4]	45.2%	32.8%	32.8%	34.4%	32.8%
2016 ^[4]	48.6%	32.1%	35.2%	36.3%	34.7%
2017 ^[4]	36.4%	36.0%	36.9%	36.7%	36.7%
2018 ^[4]	36.2%	34.4%	37.8%	37.1%	37.2%
2019 ^[4]	34.2%	32.2%	35.7%	35.0%	35.1%

Notes: ^[1] Medical Cost Containment Program (MCCP) costs on claims covered by policies incepting prior to July 1, 2010 are considered medical loss; those on claims covered by policies incepting July 1, 2010 and beyond are considered allocated loss adjustment expenses.

^[2] 2012 figure includes a one-time adjustment made by State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

^[3] 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.

^[4] 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 2019 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]	1,072	304,634	146,120	3,520	4.8%
2019 ^[6]	947	293,377	149,363	3,229	-8.3%

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 2019 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.

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
1992																0.999
1993															1.000	1.000
1994														1.000	1.000	1.000
1995													1.000	1.004	1.001	1.000
1996												1.001	1.001	1.000	1.000	1.000
1997											1.000	1.000	1.000	1.000	1.000	1.000
1998										1.000	1.000	1.000	1.001	1.000	1.000	1.000
1999									1.002	1.000	1.000	1.000	1.000	1.000	1.001	1.000
2000								0.998	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001							0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002						1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003					1.008	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2004				1.000	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
2005			1.004	1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2006		1.013	1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000	1.000	1.000			
2007	1.125	1.015	1.006	1.004	1.002	1.000	1.001	1.001	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					
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	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							
2011	1.230	1.033	1.014	1.007	1.002	1.001	1.001	1.000								
2012	1.241	1.035	1.013	1.005	1.003	1.001	1.001									
2013	1.240	1.031	1.010	1.004	1.002	1.001										
2014	1.239	1.027	1.010	1.004	1.002											
2015	1.236	1.027	1.006	1.003												
2016	1.244	1.029	1.007													
2017	1.220	1.023														
2018	1.226															

Age-to-Age Development Factors

@12/31/18	1.220	1.029	1.006	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
@12/31/19	1.226	1.023	1.007	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Age-to-Ultimate

@12/31/18	1.275	1.046	1.016	1.011	1.007	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002
@12/31/19	1.277	1.041	1.018	1.011	1.008	1.006	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002

Estimated Percent of Ultimate Indemnity Claims Reported

@12/31/18	78.4%	95.6%	98.4%	98.9%	99.3%	99.5%	99.6%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%
@12/31/19	78.3%	96.0%	98.3%	98.9%	99.2%	99.5%	99.6%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

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
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
1990		0.999	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
1991	0.999	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			
1993	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					
1995	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							
1997	1.000	1.000	1.000	1.000	1.000	1.000								
1998	1.000	1.000	1.000	1.000	1.000									
1999	1.000	1.000	1.000	1.000										
2000	1.000	1.000	1.000											
2001	1.000	1.000												
2002	1.000													

Age-to-Age Development Factors

@12/31/18	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	
@12/31/19	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

@12/31/18	1.002	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
@12/31/19	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

Estimated Percent of Ultimate Indemnity Claims Reported

@12/31/18	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%
@12/31/19	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%

Source: WCIRB quarterly calls for experience.

Reported Indemnity Claim Closing Rate - Statewide

Accident	Evaluated as of (in months):															
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
1992																98.7%
1993															98.4%	98.5%
1994														97.8%	98.0%	98.2%
1995													96.9%	97.2%	97.5%	97.6%
1996												95.9%	96.3%	96.7%	96.9%	97.1%
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%
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%
2002						84.6%	88.3%	90.9%	92.5%	93.8%	94.8%	95.9%	96.4%	96.9%	97.4%	97.7%
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%
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%
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%	
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%		
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%			
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%				
2009	26.7%	46.3%	60.1%	70.8%	79.2%	84.6%	88.6%	91.8%	93.8%	95.3%	96.4%					
2010	27.0%	46.9%	60.7%	72.5%	80.5%	85.8%	90.1%	92.8%	94.7%	96.1%						
2011	27.5%	47.2%	62.0%	73.4%	81.4%	86.9%	90.9%	93.6%	95.3%							
2012	27.7%	48.1%	63.3%	74.8%	82.8%	88.3%	92.1%	94.4%								
2013	26.9%	48.4%	64.4%	76.4%	84.7%	89.9%	93.2%									
2014	26.9%	49.5%	65.8%	78.1%	86.2%	90.8%										
2015	27.3%	50.5%	68.3%	80.6%	87.8%											
2016	28.2%	53.4%	71.0%	82.5%												
2017	30.4%	56.2%	73.1%													
2018	31.2%	56.3%														
2019	31.2%															

Reported Closing Rate

@12/31/18	31.2%	56.2%	71.0%	80.6%	86.2%	89.9%	92.1%	93.6%	94.7%	95.3%	96.2%	96.8%	97.1%	97.6%	97.8%	97.9%
@12/31/19	31.2%	56.3%	73.1%	82.5%	87.8%	90.8%	93.2%	94.4%	95.3%	96.1%	96.4%	97.0%	97.5%	97.7%	98.1%	98.2%

Estimated Percent Closed^[1]

@12/31/18	24.4%	53.8%	69.8%	79.7%	85.6%	89.4%	91.7%	93.3%	94.5%	95.1%	96.0%	96.6%	96.9%	97.4%	97.6%	97.7%
@12/31/19	24.4%	54.1%	71.9%	81.6%	87.1%	90.3%	92.8%	94.1%	95.1%	95.8%	96.2%	96.8%	97.3%	97.5%	97.9%	98.0%

Accident	Evaluated as of (in months):														
Year	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372
1989			99.2%	99.3%	99.3%	99.4%	99.4%	99.4%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.7%
1990		99.1%	99.1%	99.2%	99.2%	99.2%	99.3%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	99.5%	
1991	98.8%	98.9%	98.9%	99.0%	99.0%	99.1%	99.1%	99.1%	99.2%	99.2%	99.2%	99.3%	99.3%		
1992	98.7%	98.8%	98.9%	98.9%	99.0%	99.0%	99.0%	99.1%	99.1%	99.2%	99.2%	99.2%			
1993	98.6%	98.6%	98.8%	98.8%	98.9%	98.9%	99.0%	99.0%	99.1%	99.1%	99.2%				
1994	98.3%	98.4%	98.5%	98.6%	98.6%	98.7%	98.8%	98.8%	98.9%	98.9%					
1995	97.8%	97.9%	98.0%	98.1%	98.2%	98.3%	98.4%	98.4%	98.5%						
1996	97.3%	97.4%	97.6%	97.7%	97.8%	97.8%	98.0%	98.1%							
1997	97.5%	97.6%	97.7%	97.9%	98.0%	98.1%	98.3%								
1998	97.7%	97.9%	98.0%	98.2%	98.3%	98.5%									
1999	97.9%	98.1%	98.4%	98.5%	98.7%										
2000	97.9%	98.1%	98.3%	98.6%											
2001	97.7%	98.0%	98.3%												
2002	98.1%	98.4%													
2003	98.3%														

Reported Closing Rate

@12/31/18	98.1%	98.0%	98.3%	98.5%	98.3%	98.1%	98.0%	98.4%	98.9%	99.1%	99.2%	99.3%	99.4%	99.6%	
@12/31/19	98.3%	98.4%	98.3%	98.6%	98.7%	98.5%	98.3%	98.1%	98.5%	98.9%	99.2%	99.2%	99.3%	99.5%	99.7%

Estimated Percent Closed^[1]

@12/31/18	97.8%	97.8%	98.1%	98.4%	98.2%	98.0%	97.8%	98.3%	98.8%	99.0%	99.1%	99.2%	99.4%	99.6%	
@12/31/19	98.1%	98.2%	98.1%	98.4%	98.5%	98.3%	98.1%	97.9%	98.4%	98.9%	99.1%	99.2%	99.3%	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.

Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide

Selected Indemnity Claim Reporting and Closure Patterns as of								Cumulative Indemnity Claim Counts				
December 31 of							Incremental	as of December 31, 2019				
	2018	2019	2018	2019	2018	2019	Closing			Estimated	Annual	
Year	Percent Reported ^[1]		Percent Closed ^[2]		Opening Rate ^[3]		Rate ^[4]	AY	Reported	Open	Ultimate ^[5]	Change
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)	(10)	
1	78.4%	78.3%	24.4%	24.4%	54.0%	53.9%	46.1%	1989	222,853	779	222,853	
2	95.6%	96.0%	53.8%	54.1%	41.9%	41.9%	22.3%	1990	249,159	1,326	249,184	
3	98.4%	98.3%	69.8%	71.9%	28.5%	26.4%	37.0%	1991	250,051	1,726	250,112	
4	98.9%	98.9%	79.7%	81.6%	19.2%	17.3%	39.3%	1992	198,558	1,498	198,622	
5	99.3%	99.2%	85.6%	87.1%	13.7%	12.1%	37.0%	1993	156,201	1,283	156,269	
6	99.5%	99.5%	89.4%	90.3%	10.1%	9.2%	33.0%	1994	143,801	1,538	143,889	
7	99.6%	99.6%	91.7%	92.8%	7.9%	6.8%	32.8%	1995	135,244	2,005	135,357	
8	99.7%	99.7%	93.3%	94.1%	6.4%	5.6%	29.8%	1996	133,160	2,590	133,308	
9	99.7%	99.7%	94.5%	95.1%	5.3%	4.7%	26.9%	1997	137,418	2,403	137,591	
10	99.7%	99.8%	95.1%	95.8%	4.7%	3.9%	25.1%	1998	147,525	2,266	147,745	
11	99.8%	99.8%	96.0%	96.2%	3.8%	3.5%	24.1%	1999	148,705	1,913	148,957	
12	99.8%	99.8%	96.6%	96.8%	3.2%	3.0%	21.1%	2000	161,993	2,310	162,285	
13	99.8%	99.8%	96.9%	97.3%	2.9%	2.5%	21.2%	2001	185,697	3,231	186,035	
14	99.8%	99.8%	97.4%	97.5%	2.4%	2.3%	18.9%	2002	194,704	3,194	195,062	
15	99.8%	99.8%	97.6%	97.9%	2.2%	1.9%	19.6%	2003	184,249	3,194	184,595	
16	99.8%	99.8%	97.7%	98.0%	2.1%	1.8%	17.9%	2004	158,995	2,886	159,284	
17	99.8%	99.8%	97.8%	98.1%	1.9%	1.7%	17.7%	2005	139,603	2,709	139,854	
18	99.8%	99.8%	97.8%	98.2%	2.0%	1.6%	15.3%	2006	133,337	3,119	133,557	
19	99.8%	99.8%	98.1%	98.1%	1.6%	1.7%	13.3%	2007	130,396	3,321	130,628	
20	99.8%	99.8%	98.4%	98.4%	1.5%	1.4%	13.7%	2008	123,140	3,683	123,385	
21	99.8%	99.8%	98.2%	98.5%	1.7%	1.3%	11.7%	2009	113,927	4,047	114,191	
22	99.8%	99.9%	98.0%	98.3%	1.9%	1.5%	7.8%	2010	118,837	4,686	119,124	
23	99.8%	99.9%	97.8%	98.1%	2.0%	1.7%	6.4%	2011	121,024	5,656	121,376	
24	99.9%	99.9%	98.3%	97.9%	1.6%	1.9%	4.1%	2012	128,128	7,147	128,560	
25	99.9%	99.9%	98.8%	98.4%	1.1%	1.5%	4.6%	2013	136,198	9,255	136,747	
26	99.9%	99.9%	99.0%	98.9%	0.9%	1.1%	3.9%	2014	141,073	13,007	141,852	
27	99.9%	100.0%	99.1%	99.1%	0.8%	0.8%	5.4%	2015	144,826	17,647	145,949	
28	99.9%	100.0%	99.2%	99.2%	0.7%	0.8%	4.7%	2016	147,842	25,875	149,416	
29	100.0%	100.0%	99.4%	99.3%	0.6%	0.7%	5.1%	2017	147,355	39,583	149,947	
30	100.0%	100.0%	99.6%	99.5%	0.4%	0.5%	3.8%	2018	146,965	64,156	153,032	
31		100.0%		99.7%	0.0%	0.3%	5.0%	2019	122,263	84,155	156,070	
										Projected ^[6]		
								2020			148,422	-4.9%
								2021			151,984	2.4%
								2022			153,808	1.2%
								Total	4,803,227	322,188		

Notes:

^[1] See Exhibit 3.1.^[2] See Exhibit 3.2.^[3] Column (1) - Column (3) for 12/31/2018 and Column (2) - Column (4) for 12/31/2019.^[4] 1.0 minus ratio of Column (6) claim opening rate for accident year YYYY at 12/31/2019 to Column (5) claim opening rate for accident year YYYY at 12/31/2018.^[5] Estimated based on number of reported indemnity claims as of December 31, 2019 (column (8)) and selected reporting pattern on Column (2).^[6] Estimated based on projected frequency trends for accident years 2020 to 2022. 2020 is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), 2021 and 2022 estimated frequency trends are based on the projected growth in intra-class indemnity claim frequency (see 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]		
	@12/31/20 (1)	@12/31/21 (2)	@12/31/22 (3)	@12/31/20 (4)	@12/31/21 (5)	@12/31/22 (6)
1989	222,853	222,853	222,853	740	703	668
1990	249,184	249,184	249,184	1,260	1,196	1,137
1991	250,087	250,112	250,112	1,661	1,577	1,498
1992	198,574	198,603	198,622	1,422	1,368	1,300
1993	156,218	156,231	156,253	1,223	1,161	1,117
1994	143,827	143,843	143,854	1,455	1,387	1,317
1995	135,274	135,298	135,313	1,927	1,823	1,738
1996	133,196	133,226	133,250	2,472	2,376	2,248
1997	137,439	137,476	137,507	2,304	2,199	2,113
1998	147,559	147,582	147,622	2,121	2,033	1,941
1999	148,735	148,770	148,792	1,764	1,652	1,583
2000	162,010	162,043	162,081	2,040	1,881	1,761
2001	185,699	185,719	185,757	2,790	2,463	2,272
2002	194,708	194,711	194,732	2,769	2,391	2,111
2003	184,257	184,261	184,263	2,705	2,345	2,024
2004	158,986	158,992	158,995	2,376	2,012	1,744
2005	139,599	139,591	139,597	2,223	1,830	1,550
2006	133,318	133,315	133,307	2,509	2,059	1,695
2007	130,413	130,394	130,391	2,692	2,166	1,777
2008	123,166	123,181	123,164	2,902	2,353	1,893
2009	113,965	113,989	114,003	3,193	2,516	2,040
2010	118,848	118,888	118,913	3,556	2,806	2,211
2011	121,083	121,095	121,135	4,237	3,215	2,537
2012	128,187	128,250	128,262	5,227	3,916	2,972
2013	136,287	136,350	136,417	6,499	4,753	3,561
2014	141,283	141,375	141,441	8,739	6,136	4,488
2015	145,148	145,364	145,459	11,823	7,943	5,578
2016	148,266	148,596	148,816	16,292	10,915	7,333
2017	148,368	148,793	149,124	24,014	15,120	10,130
2018	150,387	151,420	151,855	40,438	24,532	15,447
2019	149,882	153,372	154,426	65,361	41,197	24,993
<u>Projected</u>						
2020	116,272	142,537	145,856	80,032	62,159	39,179
2021		119,063	145,958		81,952	63,651
2022			120,491			82,936
Total	4,953,078	5,104,475	5,257,804	310,765	304,138	300,542

Notes:

^{[1], [2]} Estimated based on the projected number of indemnity claims as of 12/31/2019 (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
Using Incremental Claim Closing Rate and Trend Applied to 2018 and 2019
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Calendar Year	Number of Open Indemnity Claims at Beginning of the Year	ULAE Paid per Open Indemnity Claim	ULAE Paid (\$000)
	(1)	(2)	(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	3,520	1,233,524
2019	333,086	3,229	1,075,655
Projected			
2020	322,188	3,552	1,144,514
2021	310,765	3,652	1,134,846
2022	304,138	3,758	1,142,855
2023	300,542	3,878	1,165,480
(4) Projected ULAE Paid (\$000):			1,264,815
(5) Calendar Year 2019 Earned Premium (\$000):			16,099,958
(6) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.596
(7) Premium Adjustment Factor for Calendar Year 2019:			0.973
(8) Projected Losses (\$000): (5) x (6) x (7)			9,336,316
(9) Projected Ratio of ULAE to Losses: (4)/(8)			13.5%

Notes:

- (1) Calendar years 2010 to 2020 are based on WCIRB accident year experience calls. 2021 to 2023 open claim counts are based on incremental indemnity claim closing rates (see Total of Columns (4) to (6) of Exhibit 3.4).
- (2) Calendar years 2010 to 2019 are from column (4) of Exhibit 2. Calendar years 2020 to 2023 are projected based on applying the California average annual wage level changes selected by the WCIRB (see of Section B, Exhibit 5.1), to the ULAE paid per open indemnity claim from averaging 2018 and 2019.
- (3) Column (1) x Column (2).
- (4) Weighted average of calendar years 2021 with 5.6%, 2022 with 72.2% and 2023 with 22.2%, projected 3 years to the approximate average midpoint of ultimate ULAE payments on September 1, 2021 to August 31, 2022 policies, based on applying the average annual change of 3.3% from 2022 to 2024 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (5) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
- (6) See Exhibit 8 of Section B.
- (7) See Exhibit 5.2 of Section B.

Projected Ratio of ULAE to Loss - Statewide

Based on Private Insurers ULAE Paid to Paid Losses Ratio
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Calendar Year	Paid ULAE as % of Paid Losses ¹ (a)	Paid Loss as % of Premium (b)	Paid ULAE as % of Premium (c)=(a) x (b)
2011	0.077	70.1%	5.4%
2012	0.075	65.3%	4.9%
2013	0.094	58.5%	5.5%
2014	0.086	50.3%	4.3%
2015	0.109	47.8%	5.2%
2016	0.130	46.0%	6.0%
2017	0.144	46.8%	6.8%
2018	0.148	47.4%	7.0%
2019	0.131	51.5%	6.7%
Projected			
2021	0.139 ²	50.2% ³	7.0% ⁴
2022	0.139 ²	50.3% ³	7.0% ⁴
2023	0.139 ²	50.4% ³	7.0% ⁴
(d) Projected ULAE Paid to CY2019 Earned Premium Ratio: (5.6% of 2021, 72.2% of 2022 and 22.2% of 2023 in Column (c))			7.0%
(e) Projected Loss to Industry Average Filed Pure Premium Ratio ⁵ :			0.596
(f) Premium Adjustment Factor for Calendar Year 2019 ⁶ :			0.973
(g) Projected Ratio of ULAE to Losses: (d) / [(e) x (f)]			12.1%

Notes:

¹ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.

² Based on averaging of the 2018 and 2019 paid ULAE to paid loss ratios.

³ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2019 experience.

⁴ (a) x (b).

⁵ See Exhibit 8 of Section B.

⁶ See Exhibit 5.2 of Section B.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Using Incremental Claim Closing Rate and Trend Applied to 2019
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Calendar Year	Number of Open Indemnity Claims at Beginning of the Year	ULAE Paid per Open Indemnity Claim	ULAE Paid (\$000)
	(1)	(2)	(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	3,520	1,233,524
2019	333,086	3,229	1,075,655
Projected			
2020	322,188	3,323	1,070,635
2021	310,765	3,416	1,061,591
2022	304,138	3,515	1,069,083
2023	300,542	3,628	1,090,247
(4) Projected ULAE Paid (\$000):			1,183,170
(5) Calendar Year 2019 Earned Premium (\$000):			16,099,958
(6) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.596
(7) Premium Adjustment Factor for Calendar Year 2019:			0.973
(8) Projected Losses (\$000): (5) x (6) x (7)			9,336,316
(9) Projected Ratio of ULAE to Losses: (4)/(8)			12.7%

Notes:

- (1) Calendar years 2010 to 2020 are based on WCIRB accident year experience calls. 2021 to 2023 open claim counts are based on incremental indemnity claim closing rates (see Total of Columns (4) to (6) of Exhibit 3.4).
- (2) Calendar years 2010 to 2019 are from column (4) of Exhibit 2. Calendar years 2020 to 2023 are projected based on applying the California average annual wage level changes selected by the WCIRB (see Section B, Exhibit 5.1), to the 2019 ULAE paid per open indemnity claim.
- (3) Column (1) x Column (2).
- (4) Weighted average of calendar years 2021 with 5.6%, 2022 with 72.2% and 2023 with 22.2%, projected 3 years to the approximate average midpoint of ultimate ULAE payments on September 1, 2021 to August 31, 2022 policies, based on applying the average annual change of 3.3% from 2022 to 2024 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (5) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
- (6) See Exhibit 8 of Section B.
- (7) See Exhibit 5.2 of Section B.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Using Estimated Ultimate Claim Closing Rate and Trend Applied to 2018 and 2019
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

<u>Calendar Year</u>	<u>Number of Open Indemnity Claims at Beginning of the Year</u>	<u>ULAE Paid per Open Indemnity Claim</u>	<u>ULAE Paid (\$000)</u>
	(1)	(2)	(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	3,520	1,233,524
2019	333,086	3,229	1,075,655
Projected			
2020	322,188	3,552	1,144,514
2021	321,748	3,652	1,174,956
2022	323,170	3,758	1,214,370
2023	325,856	3,878	1,263,648
(4) Projected ULAE Paid (\$000):			1,348,230
(5) Calendar Year 2019 Earned Premium (\$000):			16,099,958
(6) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.596
(7) Premium Adjustment Factor for Calendar Year 2019:			0.973
(8) Projected Losses (\$000): (5) x (6) x (7)			9,336,316
(9) Projected Ratio of ULAE to Losses: (4)/(8)			14.4%

Notes:

- (1) Calendar years 2010 to 2020 are based on WCIRB accident year experience calls. 2021 to 2023 open claim counts are based on the information shown in Exhibit 3.1 to 3.4 and the approach reflected in the January 1, 2021 Pure Premium Rate Filing.
- (2) Calendar years 2010 to 2019 are from column (d) of Exhibit 2. Calendar years 2020 to 2023 are projected based on applying the California average annual wage level changes selected by the WCIRB (see Section B, Exhibit 5.1), to the ULAE paid per open indemnity claim from averaging 2018 and 2019.
- (3) Column (1) x column (2).
- (4) Weighted average of calendar years 2021 with 5.6%, 2022 with 72.2% and 2023 with 22.2%, projected 3 years to the approximate average midpoint of ultimate ULAE payments on September 1, 2021 to August 31, 2022 policies, based on applying the average annual change of 3.3% for 2022 and 2023 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (5) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
- (6) See Exhibit 8 of Section B.
- (7) See Exhibit 5.2 of Section B.

Average Paid ALAE per Reported Indemnity Claim - Private Insurers

As of December 31, 2020

Accident	Evaluated as of (in months):									
Year	12	24	36	48	60	72	84	96	108	120
2000								4,521	4,709	4,900
2001							5,480	5,704	5,977	6,144
2002						5,673	5,944	6,260	6,454	6,614
2003					5,475	5,917	6,315	6,597	6,809	7,015
2004				4,369	5,062	5,577	5,955	6,223	6,437	6,644
2005			3,023	3,987	4,698	5,219	5,591	5,899	6,162	6,330
2006		1,853	3,126	4,127	4,876	5,436	5,865	6,184	6,410	6,622
2007	575	1,978	3,323	4,419	5,230	5,864	6,378	6,697	6,978	7,190
2008	619	2,118	3,620	4,859	5,789	6,501	6,986	7,387	7,671	7,884
2009	675	2,406	4,083	5,460	6,484	7,203	7,783	8,196	8,490	8,713
2010	745	2,541	4,279	5,593	6,547	7,290	7,870	8,243	8,514	8,702
2011	753	2,563	4,188	5,522	6,537	7,325	7,837	8,205	8,441	8,598
2012	758	2,555	4,332	5,728	6,766	7,451	7,905	8,225	8,419	
2013	777	2,790	4,582	5,936	6,851	7,426	7,825	8,067		
2014	879	2,992	4,769	6,056	6,865	7,393	7,740			
2015	951	3,067	4,846	6,028	6,768	7,222				
2016	933	3,157	4,897	6,017	6,694					
2017	1,016	3,279	4,939	5,963						
2018	1,110	3,380	5,050							
2019	1,118	3,312								
2020	1,072									

Accident	Annual Change									
Year	12	24	36	48	60	72	84	96	108	120
2001								26.2%	26.9%	25.4%
2002							8.5%	9.7%	8.0%	7.6%
2003						4.3%	6.2%	5.4%	5.5%	6.1%
2004					-7.5%	-5.7%	-5.7%	-5.7%	-5.5%	-5.3%
2005				-8.7%	-7.2%	-6.4%	-6.1%	-5.2%	-4.3%	-4.7%
2006			3.4%	3.5%	3.8%	4.2%	4.9%	4.8%	4.0%	4.6%
2007		6.8%	6.3%	7.1%	7.3%	7.9%	8.7%	8.3%	8.8%	8.6%
2008	7.8%	7.1%	8.9%	9.9%	10.7%	10.9%	9.5%	10.3%	9.9%	9.7%
2009	8.9%	13.6%	12.8%	12.4%	12.0%	10.8%	11.4%	11.0%	10.7%	10.5%
2010	10.4%	5.6%	4.8%	2.4%	1.0%	1.2%	1.1%	0.6%	0.3%	-0.1%
2011	1.1%	0.9%	-2.1%	-1.3%	-0.1%	0.5%	-0.4%	-0.5%	-0.8%	-1.2%
2012	0.7%	-0.3%	3.4%	3.7%	3.5%	1.7%	0.9%	0.2%	-0.3%	
2013	2.5%	9.2%	5.8%	3.6%	1.3%	-0.3%	-1.0%	-1.9%		
2014	13.2%	7.2%	4.1%	2.0%	0.2%	-0.5%	-1.1%			
2015	8.1%	2.5%	1.6%	-0.4%	-1.4%	-2.3%				
2016	-1.8%	2.9%	1.0%	-0.2%	-1.1%					
2017	8.9%	3.9%	0.9%	-0.9%						
2018	9.2%	3.1%	2.3%							
2019	0.7%	-2.0%								
2020	-4.1%									

Note: All paid ALAE exclude the paid cost of medical cost containment programs. Accident Year 2020 excludes COVID-19 claims.

Source: WCIRB accident year experience calls.

Ratio of Paid ALAE to Paid Loss - Private Insurers

As of December 31, 2020

Accident	Evaluated as of (in months):									
Year	12	24	36	48	60	72	84	96	108	120
2000								0.108	0.108	0.109
2001							0.120	0.121	0.122	0.123
2002						0.134	0.136	0.137	0.138	0.139
2003					0.140	0.144	0.146	0.147	0.148	0.149
2004				0.149	0.154	0.157	0.159	0.160	0.160	0.160
2005			0.130	0.142	0.148	0.152	0.154	0.155	0.155	0.155
2006		0.106	0.125	0.136	0.142	0.146	0.148	0.149	0.150	0.150
2007	0.070	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	0.151	0.158	0.164	0.166	0.168	0.168	0.166
2012	0.086	0.131	0.149	0.161	0.170	0.173	0.174	0.175	0.173	
2013	0.091	0.143	0.162	0.173	0.178	0.181	0.182	0.183		
2014	0.101	0.155	0.170	0.176	0.179	0.181	0.183			
2015	0.110	0.158	0.170	0.174	0.177	0.179				
2016	0.106	0.160	0.172	0.177	0.181					
2017	0.111	0.163	0.172	0.177						
2018	0.115	0.162	0.173							
2019	0.116	0.161								
2020	0.109									

Accident	Annual Change									
Year	12	24	36	48	60	72	84	96	108	120
2001								11.2%	12.7%	12.2%
2002							13.1%	13.8%	13.4%	13.1%
2003						6.8%	7.2%	7.3%	6.9%	7.3%
2004					10.0%	9.5%	9.3%	8.7%	8.1%	7.7%
2005				-5.0%	-4.0%	-3.2%	-3.4%	-3.2%	-2.8%	-3.2%
2006			-3.9%	-4.1%	-4.3%	-4.3%	-4.0%	-3.6%	-3.7%	-3.1%
2007		-0.3%	-1.5%	-1.6%	-1.0%	-0.7%	-0.5%	-1.2%	-0.9%	-1.1%
2008	-4.8%	-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%	1.7%	1.4%
2011	8.0%	4.8%	1.5%	2.0%	4.4%	5.6%	5.6%	5.4%	5.0%	3.6%
2012	-0.5%	0.5%	3.3%	6.8%	7.3%	5.4%	4.8%	4.6%	2.8%	
2013	5.1%	9.2%	9.0%	7.1%	4.8%	4.7%	4.6%	4.7%		
2014	11.8%	8.3%	4.6%	1.9%	0.7%	0.3%	0.3%			
2015	8.2%	1.8%	0.1%	-1.2%	-1.2%	-1.0%				
2016	-3.3%	1.2%	1.6%	1.8%	2.0%					
2017	4.8%	1.9%	-0.2%	-0.1%						
2018	3.7%	-0.4%	0.6%							
2019	0.4%	-0.9%								
2020	-6.1%									

Note: All paid ALAE exclude the paid cost of medical cost containment programs. Accident years 2010 and prior paid loss include the paid cost of medical cost containment programs. Accident year 2020 excludes COVID-19 claims.

Source: WCIRB accident year experience calls.

Estimated Ultimate ALAE per Indemnity Claim - Private Insurers

Based on 2-Year Average Paid ALAE Development Adjusted for Changes in Claim Settlement Rates

Acc. Year	Paid ALAE ^[1] @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/20 (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)
1993	238,357	1.044	248,802	113,472	1.001	113,541	2,191	---
1994	221,138	1.047	231,455	105,362	1.001	105,458	2,195	0.2%
1995	244,627	1.050	256,871	101,387	1.001	101,496	2,531	15.3%
1996	291,323	1.054	307,010	103,174	1.001	103,328	2,971	17.4%
1997	368,504	1.059	390,135	104,838	1.002	105,020	3,715	25.0%
1998	507,672	1.064	539,920	112,472	1.002	112,704	4,791	29.0%
1999	557,771	1.069	595,994	116,386	1.002	116,661	5,109	6.6%
2000	662,488	1.073	711,116	118,438	1.003	118,736	5,989	17.2%
2001	788,060	1.078	849,910	113,973	1.003	114,305	7,435	24.2%
2002	826,034	1.084	895,730	112,963	1.003	113,338	7,903	6.3%
2003	836,040	1.091	912,017	108,397	1.004	108,787	8,383	6.1%
2004	717,853	1.098	788,037	99,470	1.004	99,855	7,892	-5.9%
2005	668,197	1.105	738,230	96,016	1.004	96,413	7,657	-3.0%
2006	725,008	1.114	807,785	101,139	1.004	101,585	7,952	3.8%
2007	813,746	1.124	914,976	106,139	1.004	106,615	8,582	7.9%
2008	875,118	1.136	994,128	105,694	1.005	106,185	9,362	9.1%
2009	910,872	1.150	1,047,771	101,063	1.005	101,576	10,315	10.2%
2010	967,198	1.168	1,129,791	109,080	1.005	109,628	10,306	-0.1%
2011	970,597	1.189	1,154,160	112,888	1.005	113,454	10,173	-1.3%
2012	1,022,934	1.214	1,241,804	121,214	1.005	121,845	10,192	0.2%
2013	1,030,621	1.248	1,285,954	127,757	1.005	128,459	10,011	-1.8%
2014	1,011,409	1.294	1,308,440	130,670	1.006	131,516	9,949	-0.6%
2015	976,982	1.361	1,329,330	135,272	1.008	136,306	9,753	-2.0%
2016	938,392	1.458	1,367,878	140,179	1.011	141,740	9,651	-1.0%
2017	840,828	1.630	1,370,780	140,992	1.015	143,163	9,575	-0.8%
2018	723,591	2.001	1,447,800	143,279	1.024	146,731	9,867	3.1%
2019	470,447	3.111	1,463,668	142,063	1.051	149,309	9,803	-0.6%
2020 ^[4]	106,702	11.544	1,231,766	99,491	1.297	129,009	9,548	-2.6%

Estimated Annual Exponential Trend Based on:**R²**

2008 to 2019	-0.3%	0.207
2015 to 2019	0.3%	0.182
Average:	0.0%	

Notes:^[1] All paid ALAE exclude the paid cost of medical cost containment programs.^[2] Based on the 2-year average paid ALAE age-to-age development from Exhibit 10.1 adjusted for change in claim settlement ratios.^[3] Based on analogous Exhibit 10.3, applicable to private insurers only.^[4] AY2020 excluded COVID-19 claims.

**Ratio of Accident Year Incremental Paid ALAE^[1] to Indemnity Claims Inventory^[2]
By Payment Year - Private Insurers**

Acc. Year	Payment Year Ending December 31													
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1989	1,055	923	1,167	1,027	1,221	1,236	1,525	1,530	1,368	1,669	1,784	1,517	1,653	3,318
1990	1,198	1,086	1,406	1,138	1,341	1,386	1,584	1,777	1,496	1,551	1,906	1,680	1,745	1,956
1991	1,120	1,203	1,481	1,384	1,577	1,308	1,678	1,541	1,714	1,431	2,136	2,035	1,935	2,021
1992	1,485	1,507	1,647	1,477	1,718	1,434	1,579	1,633	1,501	1,925	1,596	1,738	1,964	2,035
1993	1,630	1,677	1,945	1,450	1,732	1,788	1,932	1,934	1,802	2,095	2,240	2,053	2,219	2,175
1994	1,784	1,748	1,864	1,389	1,514	1,774	1,830	1,812	1,804	1,775	1,862	1,587	1,795	1,549
1995	1,649	1,771	1,866	1,682	2,022	1,602	1,996	2,144	1,998	2,179	2,434	1,956	2,104	2,105
1996	2,006	2,003	2,040	1,938	1,755	1,868	2,035	2,244	2,008	2,174	2,144	1,921	2,176	2,222
1997	2,503	2,463	2,343	2,268	2,196	2,281	2,489	2,350	1,951	2,303	2,173	2,355	2,357	2,299
1998	2,604	2,405	2,426	2,374	2,398	2,338	2,401	2,362	2,306	2,324	2,453	2,509	2,516	2,013
1999	2,752	2,526	2,468	2,806	2,659	2,600	2,662	2,452	2,130	2,322	2,433	2,199	2,139	2,112
2000	2,861	2,658	2,699	2,806	2,773	2,781	2,841	2,670	2,530	2,798	2,669	2,449	2,387	2,136
2001	2,618	2,918	2,644	2,756	2,707	2,730	2,841	3,113	3,290	3,044	2,801	2,592	2,582	2,636
2002	2,746	3,081	2,881	2,976	2,949	3,029	2,959	3,285	3,428	3,193	3,171	3,024	2,961	3,027
2003	2,818	3,077	3,014	3,007	3,226	3,208	3,518	3,604	3,687	3,582	3,229	2,942	2,861	2,895
2004	2,562	2,919	3,062	3,170	3,256	3,156	3,084	3,462	3,556	3,487	3,113	2,948	2,962	2,874
2005	1,692	2,493	2,877	3,084	3,227	3,286	3,267	3,580	3,568	3,562	3,669	3,387	3,493	3,229
2006	529	1,815	2,675	2,969	3,220	3,478	3,468	3,489	3,511	3,566	3,193	3,184	3,060	2,787
2007		572	1,987	2,752	3,155	3,398	3,572	3,756	3,671	3,745	3,518	3,478	3,529	3,274
2008			620	2,095	2,976	3,480	3,559	3,716	3,840	3,952	3,698	3,708	3,637	3,795
2009				674	2,380	3,307	3,620	3,797	3,964	4,048	3,871	3,843	3,875	3,658
2010					746	2,542	3,411	3,684	3,888	4,137	4,351	4,029	4,051	3,838
2011						766	2,569	3,342	3,825	4,120	4,428	4,150	4,289	3,885
2012							773	2,593	3,610	4,036	4,260	4,181	4,109	4,196
2013								791	2,844	3,691	3,931	4,092	4,005	4,127
2014									909	3,031	3,631	3,964	3,967	4,133
2015										923	2,969	3,754	3,928	4,063
2016											933	3,137	3,880	4,036
2017												1,016	3,273	3,911
2018													1,110	3,334
2019														1,118
2020														
ALAE per Claim Annual	1,915	1,979	2,047	2,160	2,318	2,480	2,563	2,639	2,797	2,906	2,918	2,946	2,992	2,997
Change		3.4%	3.4%	5.5%	7.3%	7.0%	3.4%	3.0%	6.0%	3.9%	0.4%	1.0%	1.5%	0.2%

<u>Estimated Annual Exponential Trend Based on Payment Year:</u>	<u>R²</u>
2008-2019	3.6% 0.945
<u>2015-2019</u>	<u>0.9%</u> 0.947
Average:	2.2%

^[1] All paid ALAE exclude the paid cost of medical cost containment programs. AY2020 excluded COVID-19 claims.

^[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.

Paid Allocated Loss Adjustment Expense Development - Private Insurers
As of December 31, 2020

Accident	Age-to-Age Development (in months):															
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204
1994	3.130	1.649	1.285	1.126	1.087	1.055	1.046	1.027	1.020	1.016	1.015	1.017	1.014	1.012	1.008	1.007
1995	3.401	1.698	1.258	1.180	1.081	1.058	1.038	1.031	1.025	1.021	1.020	1.017	1.016	1.011	1.012	1.008
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	1.008
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	
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		
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			
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				
2009	4.322	1.775	1.354	1.199	1.126	1.083	1.054	1.037	1.027	1.019	1.014					
2010	4.300	1.737	1.342	1.190	1.120	1.076	1.049	1.034	1.023	1.017						
2011	4.225	1.729	1.351	1.196	1.109	1.072	1.048	1.030	1.019							
2012	4.338	1.773	1.344	1.174	1.105	1.063	1.042	1.026								
2013	4.542	1.706	1.297	1.161	1.087	1.056	1.032									
2014	4.322	1.635	1.285	1.140	1.081	1.048										
2015	4.041	1.630	1.255	1.128	1.071											
2016	4.254	1.603	1.240	1.117												
2017	3.979	1.546	1.218													
2018	3.767	1.533														
2019	3.654															
<u>December 31, 2019</u>																
Age-to-Age	3.767	1.546	1.240	1.128	1.081	1.056	1.042	1.030	1.023	1.019	1.017	1.013	1.011	1.010	1.008	1.007
Cumulative	12.231	3.247	2.100	1.693	1.502	1.389	1.316	1.264	1.227	1.200	1.178	1.158	1.143	1.131	1.119	1.110
Adjusted ^[1]	11.881	3.154	2.040	1.667	1.489	---	---	---	---	---	---	---	---	---	---	---
<u>December 31, 2020</u>																
Age-to-Age	3.654	1.533	1.218	1.117	1.071	1.048	1.032	1.026	1.019	1.017	1.014	1.012	1.010	1.008	1.009	1.006
Cumulative	10.874	2.976	1.941	1.594	1.427	1.332	1.271	1.232	1.201	1.178	1.159	1.143	1.129	1.118	1.109	1.099
Adjusted ^[1]	11.213	3.069	1.963	1.594	1.427	---	---	---	---	---	---	---	---	---	---	---
<u>2-Year Arithmetic Average</u>																
Age-to-Age	3.710	1.540	1.229	1.122	1.076	1.052	1.037	1.028	1.021	1.018	1.015	1.013	1.010	1.009	1.008	1.006
Cumulative	11.535	3.109	2.019	1.643	1.464	1.361	1.294	1.248	1.214	1.189	1.168	1.150	1.136	1.124	1.114	1.105
Adjusted ^[1]	11.544	3.111	2.001	1.630	1.458	---	---	---	---	---	---	---	---	---	---	---
Accident	Age-to-Age Development (in months):															
Year	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
1988	1.004	1.005	1.005	1.012	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.002
1989	1.005	1.004	1.004	1.003	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.005	1.002	
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		
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			
1992	1.002	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.002	1.003	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					
1994	1.008	1.007	1.006	1.006	1.005	1.005	1.004	1.004	1.003	1.003						
1995	1.009	1.009	1.008	1.008	1.008	1.006	1.006	1.005	1.004							
1996	1.009	1.008	1.007	1.007	1.006	1.006	1.005	1.004								
1997	1.008	1.008	1.007	1.007	1.006	1.005	1.004									
1998	1.010	1.010	1.008	1.007	1.005	1.004										
1999	1.010	1.008	1.007	1.005	1.004											
2000	1.009	1.007	1.006	1.004												
2001	1.008	1.007	1.005													
2002	1.007	1.005														
2003	1.006															
<u>December 31, 2019</u>																
Age-to-Age	1.007	1.007	1.006	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.002	1.002	1.002	1.005	1.003	
Cumulative ^[2]	1.103	1.096	1.088	1.082	1.076	1.070	1.065	1.059	1.054	1.050	1.047	1.044	1.042	1.040	1.037	
<u>December 31, 2020</u>																
Age-to-Age	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.002
Cumulative ^[2]	1.093	1.086	1.081	1.075	1.071	1.067	1.063	1.058	1.054	1.050	1.047	1.044	1.041	1.040	1.037	
<u>2-Year Arithmetic Average</u>																
Age-to-Age	1.006	1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.003	1.003	1.002	1.002	1.003	1.002	1.003
Cumulative ^[2]	1.098	1.091	1.084	1.078	1.073	1.069	1.064	1.059	1.054	1.050	1.047	1.044	1.042	1.040	1.037	

Note:

^[1] The paid ALAE factors are adjusted for significant changes in claim settlement rates 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 accident year experience calls. Excludes MCCC costs.

Quarterly Paid ALAE Loss Development Factors^[1] - Private Insurers

Age in Months		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
3	- 6		7.976	7.570	5.434	9.136	8.769	8.693	8.584	6.234	9.866	8.946	8.934	8.191	7.885	7.437
6	- 9	2.427	3.016	2.765	2.630	3.023	3.176	3.213	3.058	3.163	3.173	3.144	3.064	3.161	3.139	2.859
9	- 12	2.022	2.078	2.021	2.034	2.077	2.165	2.115	2.133	2.158	2.107	2.101	2.137	2.091	2.131	2.238
12	- 15	1.653	1.627	1.687	1.724	1.737	1.701	1.713	1.784	1.744	1.734	1.776	1.701	1.672	1.661	
15	- 18	1.415	1.486	1.494	1.509	1.482	1.486	1.510	1.494	1.488	1.482	1.491	1.451	1.442	1.432	
18	- 21	1.357	1.328	1.289	1.326	1.334	1.343	1.338	1.349	1.332	1.309	1.309	1.311	1.289	1.261	
21	- 24	1.255	1.234	1.237	1.255	1.253	1.248	1.249	1.237	1.239	1.225	1.227	1.227	1.213	1.218	
24	- 27	1.187	1.191	1.190	1.197	1.189	1.186	1.205	1.187	1.177	1.184	1.167	1.150	1.150		
27	- 30	1.165	1.167	1.172	1.170	1.158	1.163	1.160	1.156	1.151	1.142	1.132	1.129	1.123		
30	- 33	1.128	1.119	1.135	1.138	1.133	1.131	1.130	1.123	1.116	1.110	1.109	1.099	1.101		
33	- 36	1.107	1.103	1.111	1.114	1.113	1.108	1.104	1.101	1.095	1.088	1.092	1.084	1.078		
36	- 39	1.093	1.090	1.097	1.094	1.091	1.095	1.093	1.085	1.085	1.073	1.068	1.061			
39	- 42	1.083	1.086	1.096	1.082	1.083	1.081	1.081	1.077	1.072	1.062	1.062	1.055			
42	- 45	1.063	1.069	1.069	1.074	1.069	1.068	1.070	1.061	1.057	1.054	1.049	1.047			
45	- 48	1.057	1.059	1.063	1.064	1.062	1.059	1.057	1.055	1.051	1.046	1.043	1.039			
48	- 51	1.050	1.050	1.052	1.053	1.053	1.051	1.050	1.047	1.041	1.036	1.034				
51	- 54	1.049	1.050	1.049	1.050	1.048	1.048	1.046	1.042	1.035	1.034	1.031				
54	- 57	1.038	1.043	1.045	1.043	1.040	1.043	1.038	1.035	1.031	1.027	1.025				
57	- 60	1.037	1.038	1.039	1.039	1.037	1.036	1.035	1.031	1.028	1.026	1.023				
60	- 63	1.032	1.032	1.034	1.034	1.032	1.031	1.031	1.025	1.023	1.021					
63	- 66	1.030	1.031	1.033	1.032	1.032	1.029	1.028	1.022	1.021	1.019					
66	- 69	1.027	1.029	1.028	1.029	1.028	1.024	1.024	1.021	1.018	1.016					
69	- 72	1.025	1.028	1.026	1.026	1.024	1.023	1.021	1.018	1.018	1.014					
72	- 75	1.022	1.023	1.023	1.022	1.021	1.021	1.019	1.016	1.015						
75	- 78	1.020	1.023	1.022	1.022	1.020	1.019	1.016	1.015	1.013						
78	- 81	1.019	1.020	1.020	1.020	1.017	1.017	1.015	1.013	1.011						
81	- 84	1.018	1.019	1.018	1.017	1.016	1.014	1.014	1.012	1.009						
84	- 87	1.016	1.016	1.016	1.015	1.014	1.014	1.011	1.010							
87	- 90	1.015	1.015	1.016	1.015	1.012	1.012	1.011	1.008							
90	- 93	1.014	1.014	1.014	1.012	1.012	1.012	1.011	1.007							
93	- 96	1.013	1.013	1.013	1.012	1.010	1.011	1.009	1.007							
96	- 99	1.012	1.011	1.011	1.010	1.010	1.008	1.008								
99	- 102	1.012	1.012	1.011	1.009	1.009	1.008	1.007								
102	- 105	1.012	1.011	1.009	1.009	1.008	1.007	1.006								
105	- 108	1.010	1.010	1.008	1.008	1.007	1.007	1.006								
108	- 111	1.009	1.009	1.008	1.008	1.006	1.005									
111	- 114	1.009	1.008	1.007	1.007	1.006	1.005									
114	- 117	1.008	1.007	1.007	1.007	1.006	1.004									
117	- 120	1.008	1.007	1.006	1.006	1.006	1.004									
120	- 123	1.007	1.006	1.006	1.006	1.005										

^[1] All paid allocated loss adjustment expense exclude the paid cost of medical cost containment programs. COVID-19 claims are included for accident year 2020.

Source: WCIRB quarterly calls for experience.

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
1992																0.999
1993															1.000	1.000
1994														1.000	1.000	1.000
1995													1.000	1.004	1.001	1.000
1996												1.001	1.001	1.000	1.000	1.000
1997											1.000	1.000	1.000	1.000	1.000	1.000
1998										1.000	1.000	1.000	1.001	1.000	1.000	1.000
1999									1.002	1.000	1.000	1.000	1.000	1.000	1.001	1.000
2000								0.998	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001							0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002						1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003					1.008	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2004				1.000	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005			1.004	1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006		1.013	1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000		
2007	1.125	1.015	1.006	1.004	1.002	1.000	1.001	1.001	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				
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	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						
2011	1.230	1.033	1.014	1.007	1.002	1.001	1.001	1.000	1.000							
2012	1.241	1.035	1.013	1.005	1.003	1.001	1.001	1.000								
2013	1.240	1.031	1.010	1.004	1.002	1.001	1.001									
2014	1.239	1.027	1.010	1.004	1.002	1.000										
2015	1.236	1.027	1.006	1.003	1.002											
2016	1.244	1.029	1.007	1.003												
2017	1.220	1.023	1.007													
2018	1.226	1.023														
2019	1.222															
<u>I. Age-to-Age (Latest Year)</u>																
	1.222	1.023	1.007	1.003	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<u>II. Age-to-Ultimate</u>																
	1.271	1.040	1.016	1.009	1.006	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003	1.003

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	
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	
1990		0.999	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	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			
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					
1994	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							
1996	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									
1998	1.000	1.000	1.000	1.000	1.000	1.000										
1999	1.000	1.000	1.000	1.000	1.000											
2000	1.000	1.000	1.000	1.000												
2001	1.000	1.000	1.000													
2002	1.000	1.000														
2003	1.000															
2004																
<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	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000

Source: WCIRB quarterly calls for experience.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Private Insurers ALAE Severity using 2-Year Average Paid ALAE Development
Adjusted for Changes in Claim Settlement Rates
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Acc. Year	Indemnity Claim Counts @12/31/20	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)
	(1)	(2)	(3)=(1)x(2)	(4)	(5)=(3)x(4)
1993	156,077	1.000	156,149	2,191	342,168
1994	143,672	1.001	143,767	2,195	315,534
1995	135,234	1.001	135,337	2,531	342,519
1996	133,143	1.001	133,287	2,971	396,024
1997	137,403	1.001	137,584	3,715	511,103
1998	147,490	1.002	147,727	4,791	707,700
1999	148,670	1.002	148,941	5,109	760,903
2000	161,969	1.002	162,292	5,989	971,976
2001	185,648	1.002	186,061	7,435	1,383,455
2002	194,645	1.002	195,104	7,903	1,541,945
2003	184,191	1.002	184,640	8,383	1,547,930
2004	158,941	1.002	159,335	7,892	1,257,442
2005	138,214	1.003	138,566	7,657	1,060,998
2006	130,074	1.003	130,408	7,952	1,036,976
2007	128,979	1.002	129,290	8,582	1,109,579
2008	123,050	1.002	123,338	9,362	1,154,725
2009	113,853	1.002	114,128	10,315	1,177,254
2010	118,746	1.002	119,022	10,306	1,226,600
2011	120,538	1.002	120,805	10,173	1,228,937
2012	127,549	1.002	127,850	10,192	1,303,002
2013	135,575	1.002	135,903	10,011	1,360,474
2014	140,767	1.003	141,215	9,949	1,404,929
2015	145,181	1.003	145,684	9,753	1,420,788
2016	148,278	1.006	149,161	9,651	1,439,491
2017	148,427	1.009	149,751	9,575	1,433,862
2018	150,393	1.016	152,841	9,867	1,508,096
2019	149,395	1.040	155,381	9,803	1,523,197
2020 ^[4]	106,972	1.271	135,970	9,548	1,298,234

Projected Based on 2019:

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2021	151,314	10,000	1,513,141
2022	153,130	10,100	1,546,612
9/1/2022	153,206	10,117	1,549,952
(a) Projected ALAE Incurred (\$000):			1,549,952
(b) Calendar Year 2019 Earned Premium ^[8] (\$000):			16,099,958
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[9] :			0.596
(d) Premium Adjustment Factor for Calendar Year 2019 ^[10] :			0.973
(e) Projected Losses (\$000): (b) x (c) x (d)			9,336,316
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e)			16.6%
(g) Impact of SB 1160 and AB 1244 ^[11]			-4.5%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]			15.9%

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 10.3.

^[3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 8.

^[4] AY2020 data excluded COVID-19 claims.

^[5] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 2019 ultimate indemnity claim counts.

^[6] Severities are projected by applying an annual growth rate of 1.0%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 8 and (ii) paid ALAE per open indemnity claim from Exhibit 9, to the 2019 ultimate ALAE severity.

^[7] Column(3) x Column(4) / 1,000.

^[8] Based on the reported earned premium for calendar year 2019 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2020.

^[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 60% to reflect the impact of the reforms in the emerging ALAE data.

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] @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/20 (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)
1993	238,357	1.044	248,750	113,472	1.001	113,541	2,191	---
1994	221,138	1.047	231,473	105,362	1.001	105,458	2,195	0.2%
1995	244,627	1.050	256,827	101,387	1.001	101,496	2,530	15.3%
1996	291,323	1.054	307,076	103,174	1.001	103,328	2,972	17.4%
1997	368,504	1.058	389,984	104,838	1.002	105,020	3,713	25.0%
1998	507,672	1.063	539,413	112,472	1.002	112,704	4,786	28.9%
1999	557,771	1.067	595,015	116,386	1.002	116,661	5,100	6.6%
2000	662,488	1.071	709,552	118,438	1.003	118,736	5,976	17.2%
2001	788,060	1.075	847,421	113,973	1.003	114,305	7,414	24.1%
2002	826,034	1.081	892,696	112,963	1.003	113,338	7,876	6.2%
2003	836,040	1.086	908,027	108,397	1.004	108,787	8,347	6.0%
2004	717,853	1.093	784,342	99,470	1.004	99,855	7,855	-5.9%
2005	668,197	1.099	734,467	96,016	1.004	96,413	7,618	-3.0%
2006	725,008	1.109	804,085	101,139	1.004	101,585	7,915	3.9%
2007	813,746	1.118	909,722	106,139	1.004	106,615	8,533	7.8%
2008	875,118	1.129	988,115	105,694	1.005	106,185	9,306	9.1%
2009	910,872	1.143	1,040,827	101,063	1.005	101,576	10,247	10.1%
2010	967,198	1.159	1,120,662	109,080	1.005	109,628	10,222	-0.2%
2011	970,597	1.178	1,143,719	112,888	1.005	113,454	10,081	-1.4%
2012	1,022,934	1.201	1,228,293	121,214	1.005	121,845	10,081	0.0%
2013	1,030,621	1.232	1,269,698	127,757	1.005	128,459	9,884	-2.0%
2014	1,011,409	1.271	1,285,903	130,670	1.006	131,516	9,778	-1.1%
2015	976,982	1.332	1,301,755	135,272	1.008	136,306	9,550	-2.3%
2016	938,392	1.427	1,339,111	140,179	1.011	141,740	9,448	-1.1%
2017	840,828	1.594	1,340,272	140,992	1.015	143,163	9,362	-0.9%
2018	723,591	1.963	1,420,232	143,279	1.024	146,731	9,679	3.4%
2019	470,447	3.069	1,443,817	142,063	1.051	149,309	9,670	-0.1%
2020 ^[4]	106,702	11.213	1,196,464	99,491	1.297	129,009	9,274	-4.1%

Estimated Annual Exponential Trend Based on:**R²**

2008 to 2019 -0.4% 0.151

2015 to 2019 0.5% 0.286

Average: 0.0%

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 10.1 adjusted for change in claim settlement ratios.^[3] Based on analogous Exhibit 10.3, applicable to private insurers only.^[4] AY2020 excluded 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, 2021 and August 31, 2022

Acc. Year	Indemnity Claim Counts @12/31/20	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)
	(1)	(2)	(3)=(1)x(2)	(4)	(5)=(3)x(4)
1993	156,077	1.000	156,149	2,191	342,096
1994	143,672	1.001	143,767	2,195	315,558
1995	135,234	1.001	135,337	2,530	342,461
1996	133,143	1.001	133,287	2,972	396,108
1997	137,403	1.001	137,584	3,713	510,905
1998	147,490	1.002	147,727	4,786	707,036
1999	148,670	1.002	148,941	5,100	759,653
2000	161,969	1.002	162,292	5,976	969,838
2001	185,648	1.002	186,061	7,414	1,379,403
2002	194,645	1.002	195,104	7,876	1,536,721
2003	184,191	1.002	184,640	8,347	1,541,159
2004	158,941	1.002	159,335	7,855	1,251,546
2005	138,214	1.003	138,566	7,618	1,055,588
2006	130,074	1.003	130,408	7,915	1,032,227
2007	128,979	1.002	129,290	8,533	1,103,207
2008	123,050	1.002	123,338	9,306	1,147,740
2009	113,853	1.002	114,128	10,247	1,169,452
2010	118,746	1.002	119,022	10,222	1,216,689
2011	120,538	1.002	120,805	10,081	1,217,819
2012	127,549	1.002	127,850	10,081	1,288,825
2013	135,575	1.002	135,903	9,884	1,343,277
2014	140,767	1.003	141,215	9,778	1,380,730
2015	145,181	1.003	145,684	9,550	1,391,316
2016	148,278	1.006	149,161	9,448	1,409,219
2017	148,427	1.009	149,751	9,362	1,401,950
2018	150,393	1.016	152,841	9,679	1,479,380
2019	149,395	1.040	155,381	9,670	1,502,539
2020 ^[4]	106,972	1.271	135,970	9,274	1,261,027

Projected Based on 2019:

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2021	151,314	9,864	1,492,619
2022	153,130	9,963	1,525,636
9/1/2022	153,206	9,980	1,528,932

(a) Projected ALAE Incurred (\$000):	1,528,932
(b) Calendar Year 2019 Earned Premium ^[8] (\$000):	16,099,958
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[9] :	0.596
(d) Premium Adjustment Factor for Calendar Year 2019 ^[10] :	0.973
(e) Projected Losses (\$000): (b) x (c) x (d)	9,336,316
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e)	16.4%
(g) Impact of SB 1160 and AB 1244 ^[11]	-4.5%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]	15.6%

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 10.3.
- ^[3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 11.1.
- ^[4] AY2020 data excluded COVID-19 claims.
- ^[5] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 2019 ultimate indemnity claim counts.
- ^[6] Severities are projected by applying an annual growth rate of 1.0%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 8 and (ii) paid ALAE per open indemnity claim from Exhibit 9, to the 2019 ultimate ALAE severity.
- ^[7] Column(3) x Column(4) / 1,000.
- ^[8] Based on the reported earned premium for calendar year 2019 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2020.
- ^[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 60% 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 2-Year Average Paid ALAE Development
Adjusted for Changes in Claim Settlement Rates - Trend Applied to 2019 and 2020
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Acc.	Indemnity	Cumulative	Estimated	Estimated	Estimated
Year	Claim Counts	Count	Ultimate	Ult. ALAE	Ult. ALAE
	@12/31/20	Development	Ind. Counts	per Indemnity	(in \$000)
	(1)	Factors ^[2]	(3)=(1)x(2)	Claim ^[3]	(5)=(3)x(4)
	(1)	(2)	(3)	(4)	(5)
1993	156,077	1.000	156,149	2,191	342,168
1994	143,672	1.001	143,767	2,195	315,534
1995	135,234	1.001	135,337	2,531	342,519
1996	133,143	1.001	133,287	2,971	396,024
1997	137,403	1.001	137,584	3,715	511,103
1998	147,490	1.002	147,727	4,791	707,700
1999	148,670	1.002	148,941	5,109	760,903
2000	161,969	1.002	162,292	5,989	971,976
2001	185,648	1.002	186,061	7,435	1,383,455
2002	194,645	1.002	195,104	7,903	1,541,945
2003	184,191	1.002	184,640	8,383	1,547,930
2004	158,941	1.002	159,335	7,892	1,257,442
2005	138,214	1.003	138,566	7,657	1,060,998
2006	130,074	1.003	130,408	7,952	1,036,976
2007	128,979	1.002	129,290	8,582	1,109,579
2008	123,050	1.002	123,338	9,362	1,154,725
2009	113,853	1.002	114,128	10,315	1,177,254
2010	118,746	1.002	119,022	10,306	1,226,600
2011	120,538	1.002	120,805	10,173	1,228,937
2012	127,549	1.002	127,850	10,192	1,303,002
2013	135,575	1.002	135,903	10,011	1,360,474
2014	140,767	1.003	141,215	9,949	1,404,929
2015	145,181	1.003	145,684	9,753	1,420,788
2016	148,278	1.006	149,161	9,651	1,439,491
2017	148,427	1.009	149,751	9,575	1,433,862
2018	150,393	1.016	152,841	9,867	1,508,096
2019	149,395	1.040	155,381	9,803	1,523,197
2020 ^[4]	106,972	1.271	135,970	9,548	1,298,234

Projected Based on 2-Year verage of 2019 and 2020

	Ult. Ind. Counts ^[5]	Ult. ALAE per Ind. Counts ^[6]	Ultimate ALAE ^[7]
2021	145,274	9,822	1,426,836
2022	147,017	9,920	1,458,398
9/1/2022	147,091	9,936	1,461,548

(a) Projected ALAE Incurred (\$000):	1,461,548
(b) Average of Calendar Years 2019 and 2020 Earned Premium ^[8] (\$000):	15,075,833
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[9] :	0.596
(d) Premium Adjustment Factor ^[10] :	1.018
(e) Projected Losses (\$000): (b) x (c) x (d)	9,143,198
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e)	16.0%
(g) Impact of SB 1160 and AB 1244 ^[11]	-4.5%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]	15.3%

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 10.3.
- ^[3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 8.
- ^[4] AY2020 data excluded COVID-19 claims.
- ^[5] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 ultimate indemnity claim counts estimated from averaging 2019 and 2020.
- ^[6] Severities are projected by applying an annual growth rate of 1.0%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 8 and (ii) paid ALAE per open indemnity claim from Exhibit 9, to the ultimate ALAE severity estimated from averaging 2019 and 2020.
- ^[7] Column(3) x Column(4) / 1,000.
- ^[8] Based on the reported earned premium for calendar years 2019 and 2020 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2020.
- ^[9] See Exhibit 8 of Section B.
- ^[10] Average of 2019 and 2020 premium adjustment factors. 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 60% to reflect the impact of the reforms in the emerging ALAE data.

Average Paid M CCP per Reported Indemnity Claim - Statewide
As of December 31, 2020

Accident	Evaluated as of (in months):							
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>
2012	674	1,361	1,744	1,990	2,097	2,208	2,284	2,356
2013	655	1,253	1,620	1,821	1,962	2,068	2,130	2,170
2014	616	1,200	1,576	1,786	1,931	2,011	2,072	
2015	603	1,209	1,538	1,748	1,863	1,929		
2016	592	1,152	1,453	1,628	1,726			
2017	585	1,125	1,429	1,600				
2018	639	1,178	1,459					
2019	607	1,140						
2020	578							

Accident	Annual Change							
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>
2013	-2.8%	-7.9%	-7.1%	-8.5%	-6.4%	-6.3%	-6.7%	-7.9%
2014	-6.0%	-4.2%	-2.7%	-1.9%	-1.6%	-2.8%	-2.7%	
2015	-2.1%	0.7%	-2.4%	-2.2%	-3.5%	-4.0%		
2016	-1.9%	-4.7%	-5.5%	-6.9%	-7.4%			
2017	-1.1%	-2.3%	-1.6%	-1.7%				
2018	9.1%	4.7%	2.1%					
2019	-4.9%	-3.2%						
2020	-4.8%							

Note: Accident year 2020 excludes COVID-19 claims.

Source: WCIRB accident year experience calls.

Estimated Ultimate M CCP per Indemnity Claim - Statewide
Based on 2-Year Average Paid M CCP Development

Accident Year	Paid M CCP @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate M CCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/20 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate M CCP per Indemnity Claim (7)=(3)/(6) x 1000	Annual change
2012	302,375	1.313	397,037	127,549	1.002	127,850	3,105	---
2013	294,253	1.332	392,007	135,575	1.002	135,903	2,884	-7.1%
2014	291,715	1.361	397,058	140,767	1.003	141,215	2,812	-2.5%
2015	280,112	1.404	393,189	145,181	1.003	145,684	2,699	-4.0%
2016	255,872	1.461	373,815	148,278	1.006	149,161	2,506	-7.1%
2017	237,547	1.558	370,058	148,427	1.009	149,751	2,471	-1.4%
2018	219,419	1.758	385,659	150,393	1.016	152,841	2,523	2.1%
2019	170,322	2.256	384,251	149,395	1.040	155,381	2,473	-2.0%
2020 ^[3]	61,861	5.139	317,906	106,972	1.271	135,970	2,338	-5.5%

Estimated Annual Exponential Trend Based on:

2012 to 2019	-3.2%
2015 to 2019	-1.7%

Notes:

^[1] Based on 2-Year average paid M CCP development through 108 months from Exhibit 16.1. 108-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 10.3.

^[3] AY2020 excluded 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	\$963	-2.1%
2015	\$1,033	7.3%
2016	\$1,032	-0.2%
2017	\$943	-8.6%
2018	\$956	1.3%
2019	\$942	-1.4%

Estimated Annual Exponential Trend Based on:

2009-2019	1.3%
R ²	0.390

^[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.

Paid MCCP Development Factors - Statewide
Quarterly Development

Age in Months		Accident Year								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
3	- 6	5.599	5.796	6.047	5.652	6.118	5.561	5.864	5.288	4.814
6	- 9	2.356	2.432	2.402	2.457	2.407	2.395	2.335	2.354	2.295
9	- 12	1.763	1.773	1.771	1.742	1.725	1.776	1.825	1.775	1.756
12	- 15	1.476	1.412	1.456	1.468	1.477	1.444	1.420	1.423	
15	- 18	1.277	1.253	1.299	1.282	1.244	1.254	1.242	1.239	
18	- 21	1.171	1.157	1.194	1.177	1.170	1.155	1.148	1.165	
21	- 24	1.128	1.121	1.128	1.120	1.125	1.122	1.117	1.117	
24	- 27	1.083	1.099	1.096	1.096	1.086	1.091	1.084		
27	- 30	1.077	1.081	1.073	1.073	1.076	1.071	1.065		
30	- 33	1.051	1.068	1.045	1.062	1.054	1.057	1.054		
33	- 36	1.045	1.054	1.036	1.047	1.053	1.052	1.041		
36	- 39	1.047	1.053	1.033	1.040	1.036	1.045			
39	- 42	1.036	1.043	1.026	1.039	1.032	1.030			
42	- 45	1.036	1.035	1.025	1.029	1.028	1.025			
45	- 48	1.031	1.027	1.019	1.028	1.026	1.022			
48	- 51	1.031	1.023	1.025	1.019	1.020				
51	- 54	1.025	1.023	1.025	1.020	1.016				
54	- 57	1.022	1.019	1.018	1.015	1.014				
57	- 60	1.017	1.016	1.016	1.014	1.012				
60	- 63	1.015	1.015	1.012	1.011					
63	- 66	1.016	1.016	1.013	1.010					
66	- 69	1.014	1.012	1.011	1.009					
69	- 72	1.011	1.012	1.009	1.007					
72	- 75	1.009	1.010	1.009						
75	- 78	1.010	1.009	1.007						
78	- 81	1.007	1.006	1.010						
81	- 84	1.009	1.006	1.005						
84	- 87	1.008	1.006							

Annual Development

Age in		Accident Year								
Months		2012	2013	2014	2015	2016	2017	2018	2019	
12	- 24	2.491	2.292	2.446	2.476	2.423	2.336	2.262	2.294	
24	- 36	1.281	1.341	1.364	1.306	1.294	1.300	1.267		
36	- 48	1.160	1.168	1.144	1.143	1.128	1.128			
48	- 60	1.097	1.082	1.084	1.069	1.063				
60	- 72	1.055	1.055	1.044	1.038					
72	- 84	1.036	1.032	1.031						
84	- 96	1.024	1.020							
96	- 108	1.015								
		<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-Ult.</u>
Latest Year		2.294	1.267	1.128	1.063	1.038	1.031	1.020	1.015	
Age -to-Ult. ^[1]		5.068	2.209	1.743	1.545	1.453	1.400	1.358	1.332	1.313
2-Year Average		2.278	1.284	1.128	1.066	1.041	1.031	1.022	1.015	
Age -to-Ult. ^[1]		5.139	2.256	1.758	1.558	1.461	1.404	1.361	1.332	1.313
12/31/2019		2.262	1.300	1.128	1.069	1.044	1.032	1.024	1.015	
Age -to-Ult. ^[1]		5.209	2.303	1.772	1.570	1.469	1.407	1.364	1.332	1.313

Notes:

^[1] 108-to-Ult. is based on selected paid medical 108-to-ultimate development factor on Exhibit 3.2 of Section B.

Source: WCIRB quarterly calls for experience.

Projected Ratio of MCCP to Losses - Statewide

Projected Ultimate MCCP per Indemnity Claim based on 2-Year Average Paid MCCP Development
Trend Applied to 2019
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Accident Year	Paid MCCP @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2) (4)	Indemnity Claim Counts @12/31/20 (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	302,375	1.313	397,037	127,549	1.002	127,850	3,105
2013	294,253	1.332	392,007	135,575	1.002	135,903	2,884
2014	291,715	1.361	397,058	140,767	1.003	141,215	2,812
2015	280,112	1.404	393,189	145,181	1.003	145,684	2,699
2016	255,872	1.461	373,815	148,278	1.006	149,161	2,506
2017	237,547	1.558	370,058	148,427	1.009	149,751	2,471
2018	219,419	1.758	385,659	150,393	1.016	152,841	2,523
2019	170,322	2.256	384,251	149,395	1.040	155,381	2,473
2020 ^[3]	61,861	5.139	317,906	106,972	1.271	135,970	2,338

Projected Based on 2019:

	Ultimate MCCP ^[6]	Ult. Ind. Counts ^[4]	Ult. MCCP per Ind. Counts ^[5]
2021	366,746	151,314	2,424
2022	367,436	153,130	2,400
9/1/2022	367,004	153,206	2,395

(a) Projected MCCP (\$000):	367,004
(b) Calendar Year 2019 Earned Premium ^[7] (\$000):	16,099,958
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.596
(d) Premium Adjustment Factor for Calendar Year 2019 ^[9] :	0.973
(e) Projected Losses (\$000): (b) x (c) x (d)	9,336,316
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.9%

Notes:

^[1] Based on 2-year average paid MCCP development through 108 months from Exhibit 16.1. 108-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 10.3.

^[3] AY2020 data excluded COVID-19 claims.

^[4] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 2019 ultimate indemnity claim counts.

^[5] Severities are 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 14 and calendar year MCCP paid per open claim from Exhibit 15 to the 2019 ultimate MCCP severity.

^[6] Column(6) x Column(7) / 1,000.

^[7] Based on the reported earned premium for calendar year 2019 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, 2020.

^[8] See Exhibit 8 of Section B.

^[9] See Exhibit 5.2 of Section B.

Projected Ratio of M CCP to Losses - Statewide

Projected Ultimate M CCP per Indemnity Claim based on Latest Year Paid M CCP Development
Trend Applied to 2019
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Accident Year	Paid M CCP @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate M CCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/20 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate M CCP per Indemnity Claim (7)=(3)/(6) x 1000
2012	302,375	1.313	397,037	127,549	1.002	127,850	3,105
2013	294,253	1.332	392,007	135,575	1.002	135,903	2,884
2014	291,715	1.358	396,249	140,767	1.003	141,215	2,806
2015	280,112	1.400	392,220	145,181	1.003	145,684	2,692
2016	255,872	1.453	371,872	148,278	1.006	149,161	2,493
2017	237,547	1.545	367,085	148,427	1.009	149,751	2,451
2018	219,419	1.743	382,543	150,393	1.016	152,841	2,503
2019	170,322	2.209	376,315	149,395	1.040	155,381	2,422
2020 ^[3]	61,861	5.068	313,535	106,972	1.271	135,970	2,306

Projected Based on 2019:

	Ultimate M CCP ^[6]	Ult. Ind. Counts ^[4]	Ult. M CCP per Ind. Counts ^[5]
2021	359,172	151,314	2,374
2022	359,848	153,130	2,350
9/1/2022	359,425	153,206	2,346

(a) Projected M CCP (\$000):	359,425
(b) Calendar Year 2019 Earned Premium ^[7] (\$000):	16,099,958
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.596
(d) Premium Adjustment Factor for Calendar Year 2019 ^[9] :	0.973
(e) Projected Losses (\$000): (b) x (c) x (d)	9,336,316
(f) Projected Ratio of M CCP to Losses: (a)/(e)	3.8%

Notes:

- ^[1] Based on latest year paid M CCP development through 108 months from Exhibit 16.1. 108-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 10.3.
- ^[3] AY2020 data excluded COVID-19 claims.
- ^[4] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 2019 ultimate indemnity claim counts.
- ^[5] Severities are projected by applying an annual growth rate of -1.0% based on the average of the longer-term average rates of growth in ultimate M CCP per indemnity claim from Exhibit 14 and calendar year M CCP paid per open claim from Exhibit 15 to the 2019 ultimate M CCP severity.
- ^[6] Column(6) x Column(7) / 1,000.
- ^[7] Based on the reported earned premium for calendar year 2019 from the same group of insurers that reported the paid M CCP in column (1) and the indemnity claim counts in column (4) by accident year as of December 31, 2020.
- ^[8] See Exhibit 8 of Section B.
- ^[9] See Exhibit 5.2 of Section B.

Projected Ratio of MCCP to Losses - Statewide

Projected Ultimate MCCP per Indemnity Claim based on 2-Year Average Year Paid MCCP Development
Trend Applied to 2019 and 2020
for Policies with Effective Dates between September 1, 2021 and August 31, 2022

Year	Paid MCCP @12/31/20 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2) (3)	Indemnity Claim Counts @12/31/20 (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	302,375	1.313	397,037	127,549	1.002	127,850	3,105
2013	294,253	1.332	392,007	135,575	1.002	135,903	2,884
2014	291,715	1.361	397,058	140,767	1.003	141,215	2,812
2015	280,112	1.404	393,189	145,181	1.003	145,684	2,699
2016	255,872	1.461	373,815	148,278	1.006	149,161	2,506
2017	237,547	1.558	370,058	148,427	1.009	149,751	2,471
2018	219,419	1.758	385,659	150,393	1.016	152,841	2,523
2019	170,322	2.256	384,251	149,395	1.040	155,381	2,473
2020 ^[3]	61,861	5.139	317,906	106,972	1.271	135,970	2,338

Projected Based on 2-Year Average of 2019 and 2020:

	Ultimate MCCP ^[6]	Ult. Ind. Counts ^[4]	Ult. MCCP per Ind. Counts ^[5]
2021	344,184	145,274	2,369
2022	344,831	147,017	2,346
9/1/2022	344,426	147,091	2,342

(a) Projected MCCP (\$000):	344,426
(b) Average of Calendar Years 2019 and 2020 Earned Premium ^[7] (\$000):	15,075,833
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.596
(d) Premium Adjustment Factor ^[9] :	1.018
(e) Projected Losses (\$000): (b) x (c) x (d)	9,143,198
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.8%

Notes:

- ^[1] Based on 2-year average paid MCCP development through 108 months from Exhibit 16.1. 108-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 10.3.
- ^[3] AY2020 data excluded COVID-19 claims.
- ^[4] Estimated based on projected frequency trends for accident years 2020 to 2023. The 2020 frequency trend is the actual trend adjusted for class mix and wage level (see Section B, Appendix B, Exhibit 3), and 2021 to 2023 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 ultimate indemnity claim counts estimated from averaging 2019 and 2020.
- ^[5] Severities are 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 14 and calendar year MCCP paid per open claim from Exhibit 15 to the ultimate MCCP severity estimated from averaging 2018 and 2019.
- ^[6] Column(6) x Column(7) / 1,000.
- ^[7] Based on the reported earned premium for calendar years 2019 and 2020 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, 2020.
- ^[8] See Exhibit 8 of Section B.
- ^[9] Average of 2019 and 2020 premium adjustment factors. See Section B, Exhibit 5.2.

Section B**Appendix D****Evaluation of March 1, 2021 Changes to the Official Medical Fee Schedule****Background**

The cost of physician services comprises approximately 48% of all payments for medical services in the California workers' compensation system and payments for Evaluation and Management (E&M) services comprise 37% of all payments for physician services.¹ Fees for physician services in California are based on the California Official Medical Fee Schedule (Schedule), which since 2014 is predicated on the Resource-Based Relative Value Scale (RBRVS) established by Medicare. The Division of Workers' Compensation (DWC) generally adopts the regular updates made to the Medicare schedule values, most of which are inflationary adjustments. The impacts of these changes are typically modest and regular in nature. As a result, rather than reflecting these impacts explicitly in the on-leveling process for medical losses in the WCIRB pure premium rate filings, these impacts are considered part of the overall medical residual trend applied to the medical on-level ratios. In contrast, the cost impacts of significant changes to the Schedule are evaluated when adopted and, if significant, reflected as on-level adjustments to medical losses.

Effective March 1, 2021, the DWC adopted adjustments to the Schedule to conform to relevant 2021 changes in the Medicare payment system. The adjustments include significant changes to E&M services, including the following:

- Updates to conversion factors
- Updates to relative value units (RVUs)
- Updates to the telehealth list
- Altered the billing process for E&M services
 - 1995 and 1997 E&M Documentation Guidelines are no longer used
 - The level of E&M office/outpatient visit service is determined using either the level of medical decision making or total time
 - First level new patient office/outpatient visit code CPT 99201 has been eliminated
 - Medicare Prolonged Service Code HCPCS G2212 is adopted for use in place of Current Procedural Terminology (CPT) code 99417 for prolonged E&M service provided on the date of service where the level of service is selected based upon time

The March 1, 2021 Schedule changes include significant increases to the RVUs, a key factor in the calculation of reimbursement rates², for E&M office/outpatient visits. The following table summarizes the CPT codes for all office/outpatient visits and the corresponding reimbursement rate change under the March 1, 2021 Schedule. As shown in the table, the reimbursement rates increased significantly for office/outpatient visits for established patients (CPT codes 99212 through 99215) under the March 1, 2021 Schedule changes.

¹ 2019 *California Workers' Compensation Losses and Expenses*, WCIRB, June 2020. Includes copy services and interpreter services as medical services but excludes medical liens.

² Calculation of the reimbursement rate (i.e., Base Maximum Fee) is detailed in Article 5.3 Official Medical Fee Schedule in Title 8, California Code of Regulations.

E&M Office/Outpatient Visit CPT Code	Description	Change in Reimbursement Rates from the 2020 Schedule to the March 1, 2021 Schedule ³
99202	New patient straightforward complexity 15-29 min	-3%
99203	New patient low complexity 30-44 min	5%
99204	New patient moderate complexity 45-59 min	3%
99205	New patient high complexity 60-74 min	8%
99211	Established patient minimal problem(s)	0%
99212	Established patient straightforward complexity 10-19 min	25%
99213	Established patient low complexity 20-29 min	23%
99214	Established patient moderate complexity 30-39 min	20%
99215	Established patient high complexity 40-54 min	25%

Exhibit 1 summarizes the payment distribution of E&M services over time. As shown in Exhibit 1, the E&M office/outpatient visits account for almost 90% of the payments for all E&M services through 2020 and the majority of the costs arose from office/outpatient visits for established patients with low and moderate complexity (CPT codes 99213 and 99214).⁴ In total, the cost of office/outpatient E&M visits comprise 15.9% of total medical costs.⁵

Analysis Approach

The WCIRB's evaluation of the March 1, 2021 Schedule changes focused on the cost impact of increased reimbursement rates for the E&M office/outpatient visits and was based on a review of the WCIRB's medical transaction data on E&M services provided in 2019.⁶ (E&M services provided in 2020 were excluded from the analysis due to the potential impact of the COVID-19 pandemic on medical services provided.)

While the March 1, 2021 Schedule changes also impacted the billing process for E&M services, the WCIRB does not have a statistically credible basis to evaluate the cost impact of those billing process changes at this time. The WCIRB intends to evaluate the cost impact of E&M billing process changes retrospectively in the future based on the actual billing and payment pattern under the March 1, 2021 Schedule.

In essence, the WCIRB estimated the expected payments for E&M services provided in 2019 under the March 1, 2021 Schedule values and compared those to the historical payments for those services. In determining the expected payments under the March 1, 2021 Schedule changes, the WCIRB applied the

³ The reimbursement rate change in the E&M office/outpatient visit procedure codes shown in the table are based on the non-facility procedures, which account for 99% of all E&M office/outpatient visits and payments. The reimbursement rate changes for the office/outpatient visits provided in a facility setting are similar.

⁴ CPT code 99213 is for office/outpatient E&M visit with low complexity for established patients and 99214 is for office/outpatient E&M visit with moderate complexity for established patients.

⁵ Based on physician services as 48.4% of medical services, E&M services as 37.3% of physician services and office visits as 88% of E&M services. E&M services are assumed to be proportional in the future medical component of claim settlements, Medicare set-asides and medical liens.

⁶ E&M services provided before 2019 used a statewide geographic factor in the fee schedule. The statewide geographic factor was replaced by a region-specific adjustment factor – Medicare Geographic Practice Cost Index (GPCI) in 2019 for physician services provided in 2019 and after.

updated RVUs and conversion factor and determined the appropriate Geographic Practice Cost Index (GPCI) to apply in the reimbursement rate calculation for the service.⁷

The key assumptions underlying the WCIRB's evaluation of the March 1, 2021 Schedule changes include the following:

- The mix of E&M services to be provided under the March 1, 2021 Schedule, including the geographic distribution of the E&M services, is generally consistent with that in 2019.
- The magnitude of the average medical provider network discount reflected in paid amounts for E&M services is generally consistent over time.
- The annual inflationary adjustment contemplated in the regular Schedule update based on the Medicare payment system is 2 to 3%.⁸ The WCIRB's estimated cost impact estimate of the March 1, 2021 Schedule changes are net of the standard inflationary impact.

Analysis and Findings

Exhibits 2 and 3 summarize the WCIRB's cost evaluation of the increased reimbursement rates for E&M office/outpatient visits in the March 1, 2021 Schedule. Exhibit 2 summarizes the historical average medical provider network discount for E&M services in 2019 and 2020 as reflected in the paid amounts for those services. As shown in Exhibit 2, the average network discount is similar across different E&M office/outpatient visits and the weighted average discount for all E&M office/outpatient visits is about 12% for both 2019 and 2020. The WCIRB assumed that the average network discount for each office/outpatient visit would apply to E&M office/outpatient visits under the March 1, 2021 Schedule changes.

Exhibit 3 summarizes the WCIRB's cost estimate of the March 1, 2021 Schedule changes by E&M procedure. Specifically, for each office/outpatient visit procedure code, Exhibit 3 shows the share of historical transactions and historical average payments for E&M office/outpatient visits in 2019, as well as the expected average payments under the March 1, 2021 Schedule changes computed as described above. As shown in Exhibit 3, the WCIRB estimates that the increased reimbursement rates in the March 1, 2021 Schedule changes will increase the cost of E&M office/outpatient visits by 20%. After adjusting for the two years of the typical Medicare inflationary increase (2.5% per year), the cost impact of the March 1, 2021 Schedule changes on the reimbursement rates for the E&M office/outpatient visits is estimated to be 15%.⁹

Summary

In summary, the WCIRB estimated a 15% indicated increase in the E&M office/outpatient visits costs due to the implementation of the March 1, 2021 Schedule changes. The 15% cost impact estimate translates to a 2.4% increase in overall medical costs since costs of E&M office/outpatient visits comprise approximately 15.9% of overall medical costs.¹⁰ The WCIRB notes that the March 1, 2021 Schedule changes apply to all E&M office/outpatient visits provided on or after that date, including those on claims incurred against in-force or expired policies. Nevertheless, the WCIRB is not proposing any adjustment to the advisory pure premium rates applicable to the unexpired terms of in-force policies.

⁷ Calculation of the reimbursement rate (i.e., Base Maximum Fee) is detailed in Article 5.3 Official Medical Fee Schedule in Title 8, California Code of Regulations. Calculation of the reimbursement rates for both Facility and Non-Facility E&M office/outpatient visits were included in the analysis.

⁸ The annual inflationary adjustments in the regular fee schedule update were estimated through comparisons of the fee schedule reimbursement rates for the E&M office/outpatient visits in 2018, 2019 and 2020.

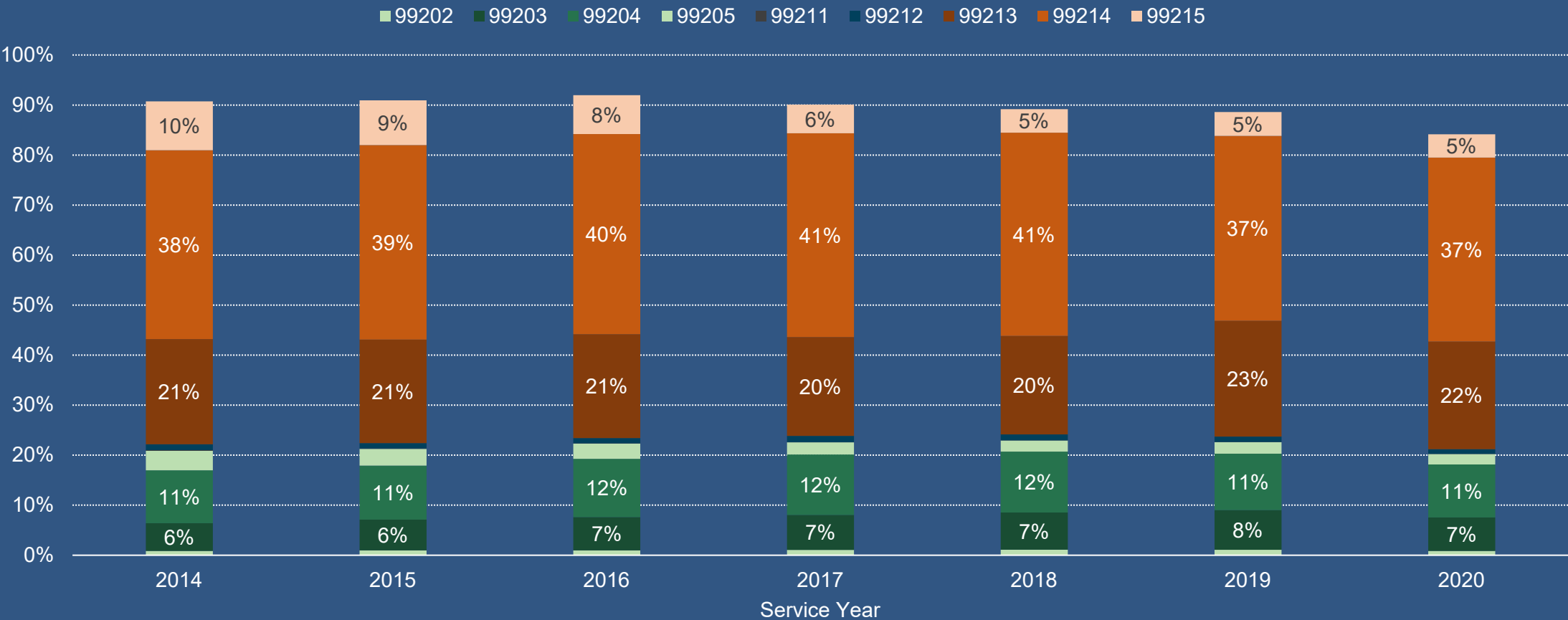
⁹ The WCIRB also compared the cost impact estimate of the March 1, 2021 Schedule changes using E&M services provided in 2020 as the basis for the computation. The estimate cost impact using the 2020 E&M service mix as the computation base was similar with that using 2019 (15.5% compared to 15%).

¹⁰ *2019 California Workers' Compensation Losses and Expenses*, WCIRB, June 2020. The 15.9% represents payments for E&M office/outpatient visits relative to all payments for medical services including copy services and interpreter services. The component of claim settlement payments for future medical services, Medicare set-aside related costs and medical lien payments were assumed to reflect E&M office/outpatient visits services proportionate to total medical services.

Distribution of Payments for E&M Office/Outpatient Visit Services (15.9% of payments for all medical payments*)

As of April 7, 2021

Share of E&M Total Medical Payments for E&M Office/Outpatient Visit Services



Note. * Based on physician services as 48.4% of medical services, E&M services as 37.3% of physician services, and office visits as 88% of E&M services. E&M services are assumed to be proportional in the future medical component of claim settlements, Medicare set-asides, and medical liens.
Source: 2019 California Workers' Compensation Losses and Expenses, WCIRB, June 2020. WCIRB Medical Transaction Data.

Historical Average Medical Network Discount

E&M Office/Outpatient Visit CPT Code	Description	Estimated Average Network Discount for Non-Facility Services in 2019	Estimated Average Network Discount for Non-Facility Services in 2020
99202	New patient straightforward complexity 15-29 min	-10%	-12%
99203	New patient low complexity 30-44 min	-10%	-11%
99204	New patient moderate complexity 45-59 min	-12%	-12%
99205	New patient high complexity 60-74 min	-16%	-16%
99211	Established patient minimal problem(s)	+2%	-10%
99212	Established patient straightforward 10-19 min	-10%	-12%
99213	Established patient low complexity 20-29 min	-11%	-13%
99214	Established patient moderate complexity 30-39 min	-13%	-14%
99215	Established patient high complexity 40-54 min	-17%	-17%
Weighted Average Network Discount*		-12%	-12%

Estimate for Cost Impact of Increased Reimbursement Rates to E&M Office/Outpatient Visit Services Under the March 1, 2021 Schedule Based on 2019 Medical Transaction Information

E&M Office/Outpatient Visit CPT Code	Transaction Share in 2019	Historical Average Payments in 2019	Expected Average Payments Adjusted for Discounting in 2021	Percentage Difference Comparing Actual Payments in 2019 and Expected Payments in 2021
99202	2%	\$97	\$96	-1%
99203	8%	\$135	\$145	+7%
99204	8%	\$199	\$210	+6%
99205	1%	\$239	\$266	+11%
99211	0%	\$33	\$34	+4%
99212	3%	\$58	\$74	+28%
99213	35%	\$92	\$117	+27%
99214	39%	\$132	\$163	+23%
99215	4%	\$168	\$215	+28%
Overall Weighted Average Payment*		\$124	\$149	+20%
Adjusting out the typical annual inflation from 2019 to 2021 (2.5% per year)				+15%

Section B**Appendix E****Evaluation of April 1, 2021 Changes to Medical-Legal Fee Schedule****Background**

Medical-legal services include medical-legal evaluations of an injured worker by a physician to resolve a disputed issue such as those related to permanent disability, cause of injury, part of body injured or temporary disability and expert testimony by independent medical experts. Medical-legal expenses are incurred whenever a physician completes a medical-legal evaluation and develops a narrative medical report or provides expert testimony. In 2019, the cost of medical-legal services comprised approximately 6.5%¹ of all medical costs in the California workers' compensation system.² Exhibits 1.1 through 1.3 summarize the cost and utilization of medical-legal services over time. As shown in Exhibit 1.1, the majority of medical-legal costs through 2020 arose from Complex Comprehensive Medical-Legal Evaluations involving four or more complexity factors (ML104).

Effective April 1, 2021, the Division of Workers' Compensation (DWC) adopted significant changes to California's Medical-Legal Fee Schedule (Schedule).³ The April 1, 2021 Schedule, which reflects the first significant change to medical-legal reimbursement levels since 2006, is intended to increase the reimbursement rate for medical-legal reports while eliminating the increased hourly billing provisions in the Schedule. Key provisions of the April 1, 2021 Schedule include:

- Adds a reimbursement rate for missed appointments (ML200) at a flat fee of \$503.75.
- Eliminates codes ML102 (Basic Comprehensive Medical-Legal Evaluation), ML103 (Complex Comprehensive Medical-Legal Evaluation involving three complexity factors) and ML104 (Complex Comprehensive Medical-Legal Evaluation involving four or more complexity factors) and creates a single code (ML201) for Comprehensive Medical-Legal Evaluations.
- Establishes a flat fee of \$2,015 for a comprehensive medical-legal evaluation (ML201), which contemplates a review of up to 200 pages of records.
- Establishes a fee of \$3 per page for additional records (MLPRR) to be reviewed on a comprehensive medical-legal evaluation.
- Establishes a flat fee for follow-up medical legal evaluations (ML202) of \$1,316.30, which contemplates the review of up to 200 pages of records, beyond which reimbursement is set at \$3 per page (MLPRR).
- Establishes a flat fee for supplemental medical-legal evaluations (ML203) of \$650, which contemplates the review of up to 50 pages of records, beyond which reimbursement is set at \$3 per page (MLPRR).
- Provides for an hourly rate of \$455 for medical-legal testimony (ML204).
- Provides for an hourly rate of \$325 for reviewing sub rosa recordings (ML205).
- Allows for expanded use of the interpreter modifier.⁴
- Increases the multiplier for an agreed medial evaluation (AME) but limits its use to medical-legal evaluations.⁵
- Adds modifiers with cost multipliers for medical-legal evaluations that have a primary focus of psychology/psychiatry, toxicology and oncology.

¹ Medical-legal costs reflected about 11% of all medical services paid directly to providers in 2019.

² 2019 *California Workers' Compensation Losses and Expenses*, WCIRB, June 2020. The cost of medical cost containment programs (MCCP) reported as medical costs were excluded from total medical.

³ Title 8, California Code of Regulations, Sections 9793, 9794 and 9795. <https://www.dir.ca.gov/dwc/DWCPropRegs/2020/Medical-Legal-Fee-Schedule/Med-Legal-Fee-Schedule.htm>.

⁴ The interpreter modifier is expanded to ML201-ML202 (corresponding to the pre-April 1, 2021 ML101-ML104) with the April 1, 2021 Schedule. With the pre-April 1, 2021 fee schedule, the interpreter modifier was only applicable to ML102 and ML103.

⁵ With the pre-April 1, 2021 fee schedule, the AME modifier was applicable to both medical-legal evaluation and testimony.

The table below summarizes the billing codes in the April 1, 2021 Schedule in relation to the codes in the pre-April 1, 2021 Schedule.

New Medical-Legal Code	Old Medical-Legal Code	Medical-Legal Code Description
ML200	ML100	Missed Appointment for a Comprehensive or Follow-Up Medical-Legal Evaluation
ML201	ML102	Basic Comprehensive Medical-Legal Evaluation
	ML103	Complex Comprehensive Medical-Legal Evaluation involving three complexity factors
	ML104	Complex Comprehensive Medical-Legal Evaluation involving four or more complexity factors
ML202	ML101	Follow-up Medical-Legal Evaluation
ML203	ML106	Fees for supplemental medical-legal evaluations
ML204	ML105	Fees for medical-legal testimony
ML205		Fees for Review of Sub Rosa Recordings
MLPRR		Record Review

Analysis Approach

The WCIRB's evaluation of the cost impact of the April 1, 2021 Schedule was based on a review of the WCIRB's medical transaction data on medical-legal services provided in 2018 and 2019. (Medical-legal services provided in 2020 were excluded from the analysis due to the potential impact of the COVID-19 pandemic on medical services provided.) In essence, the WCIRB estimated the expected payments for medical-legal services provided in 2018 and 2019 under the April 1, 2021 schedule and compared those to the historical payments for those services. In determining the expected payments under the April 1, 2021 Schedule, the WCIRB determined the appropriate new code(s) to apply, the applicable fee(s) for the code(s) and applied the appropriate modifiers.

The key assumptions underlying the WCIRB's evaluation of the April 1, 2021 Schedule include the following:

- The mix of medical-legal services to be provided under the April 1, 2021 Schedule, including the use of current modifiers for interpreter services and AMEs, is generally consistent with that in 2018 and 2019.
- The same share of existing ML101 and ML104 transactions would involve an interpreter under the April 1, 2021 Schedule as currently reflected in ML102 and ML103 transactions.⁶
- The shares of psychological/psychiatric and toxicological evaluations⁷ remain the same.
- Medical-legal evaluations provided by psychologists, psychiatrists and toxicologists based on the taxonomy code of the provider will be billed under the April 1, 2021 Schedule using the new modifiers.
- There will be a 15% reduction in the frequency of supplemental medical-legal evaluations with the April 1, 2021 Schedule (Code ML203).⁸
- Medical-legal testimonies under the April 1, 2021 Schedule (Code ML204) are assumed to be depositions.
- Sub rosa recording reviews under the April 1, 2021 Schedule (Code ML205) are assumed to be very rare and were not reflected in the WCIRB's cost evaluation.
- For purposes of estimating the cost of billing for additional page review under the April 1, 2021 Schedule, the WCIRB assumed the time billed under the pre-April 1, 2021 Schedule reflected an

⁶ The pre-April 1, 2021 Schedule did not provide for interpreter fees for ML101 and ML104 transactions.

⁷ These evaluations were identified as historical medical-legal evaluations provided by psychologist/psychiatrists and toxicologists or physicians in internal medicine based on the WCIRB medical transaction data. The evaluations provided by oncologists are very rare in the historical data and not reflected in the WCIRB's cost evaluation.

⁸ Assumed reduction is based on findings in *California Workers' Compensation Medical-Legal Fee Schedule Analysis and Recommendations*, RAND, October 2018.

average review of 100 pages of records per hour⁹ and that about one-third of the median time spent on ML101, ML104 and ML106 evaluations under the pre-April 1, 2021 Schedule was for record review.¹⁰

Analysis and Findings

Exhibits 2 through 5 summarize the WCIRB's cost evaluation of the April 1, 2021 Schedule. Exhibit 2 summarizes the historical distribution of the current modifiers for interpreter and AME services. As shown in Exhibit 2, the WCIRB estimates that about 35% of historical ML102 and ML103 transactions have a valid interpreter modifier. To estimate the cost impact of the expanded use of interpreter modifier as noted in the key assumptions detailed above, the WCIRB assumed that about 35% of ML101 and ML104 services which would be coded as ML202 and ML201 services, respectively, under the April 1, 2021 Schedule would have an interpreter modifier. In addition, the WCIRB assumed same share of services that fall under ML101-ML104 and ML106 would have an AME modifier.¹¹

Exhibit 3.1 for psychological and psychiatric evaluations and Exhibit 3.2 for toxicological evaluations summarize the historical distribution of these types of medical-legal evaluations. As noted in the key assumptions detailed above, the WCIRB assumed that historical medical-legal evaluations provided by a psychiatrist, psychologist or toxicologist would use the new modifier under the April 1, 2021 Schedule. While the April 1, 2021 Schedule also allows for a modifier to apply for medical-legal evaluations provided by an oncologist, such evaluations were very rare in the WCIRB's historical dataset.

Exhibit 4 summarizes the WCIRB's estimate of the April 1, 2021 Schedule by medical-legal procedure. Specifically, for each new medical-legal procedure code, Exhibit 4 shows the share of historical medical-legal payments and transactions in 2018 and 2019 as well as the expected payments under the April 1, 2021 Schedule computed as described above. As shown in Exhibit 4, the WCIRB estimates that the April 1, 2021 Schedule will increase the cost of medical-legal services by 22%.

Exhibit 5 shows estimates of the incremental impact of the various components of the April 1, 2021 Schedule. As shown, the majority of the increased costs of the April 1, 2021 Schedule arise from the changes related to the new modifiers and record review.

A critical component of the April 1, 2021 Schedule is that in lieu of billing for the time involved in conducting certain medical-legal evaluations (most complex evaluation, follow-up and supplemental evaluations), there is additional billing per page of records for reviewing records beyond the level specifically contemplated in the Schedule (up to 200 pages for comprehensive and follow-up medical-legal evaluations and up to 50 pages for supplemental medical-legal evaluations). In evaluating the cost impact of the April 1, 2021 Schedule, the WCIRB compared the cost of each medical-legal evaluation in 2018 and 2019 paid in accordance with the pre-April 1, 2021 Schedule including the amounts paid for additional time provisions to an estimated cost under the April 1, 2021 Schedule. In restating paid amounts that reflected billing for additional time provisions, the WCIRB assumed that one-third of the median time of the current evaluations involve record review and that physicians are reviewing on average 100 pages per hour. In discussing the cost impact evaluation with claims and medical experts, the highest level of uncertainty was around the cost of record review under the April 1, 2021 Schedule. As a result, while the WCIRB's estimated impact of the April 1, 2021 Schedule reflected a translation of paid amounts based on time under the pre-April 1, 2021 Schedule to number of pages that assumed 100 pages being reviewed per hour, the WCIRB also computed estimates assuming 50 page and 150 pages on average are reviewed per hour. Assuming a review of 50 pages per hour would reduce the WCIRB's estimated overall cost impact of the April 1, 2021 Schedule by 11 percentage points to 11%, while assuming a review rate of 150 pages per hour would increase the WCIRB's overall cost estimate by 13 percentage points to 35%.

⁹ This conversion assumption was reflected in the DWC stakeholder meetings on the April 1, 2021 Schedule.

¹⁰ The historical data on the time reported by ML101, ML104 and ML106 evaluations in the WCIRB medical transaction data was used to estimate the record review time for the new codes ML201 through ML203 under the April 1, 2021 Schedule.

¹¹ With the pre-April 1, 2021 Schedule, the AME modifier was applicable to both medical-legal evaluations (ML101-ML104 and ML106) and testimony (ML105). Under the April 1, 2021 Schedule, the AME modifier is only applicable to medical-legal evaluations.

Summary

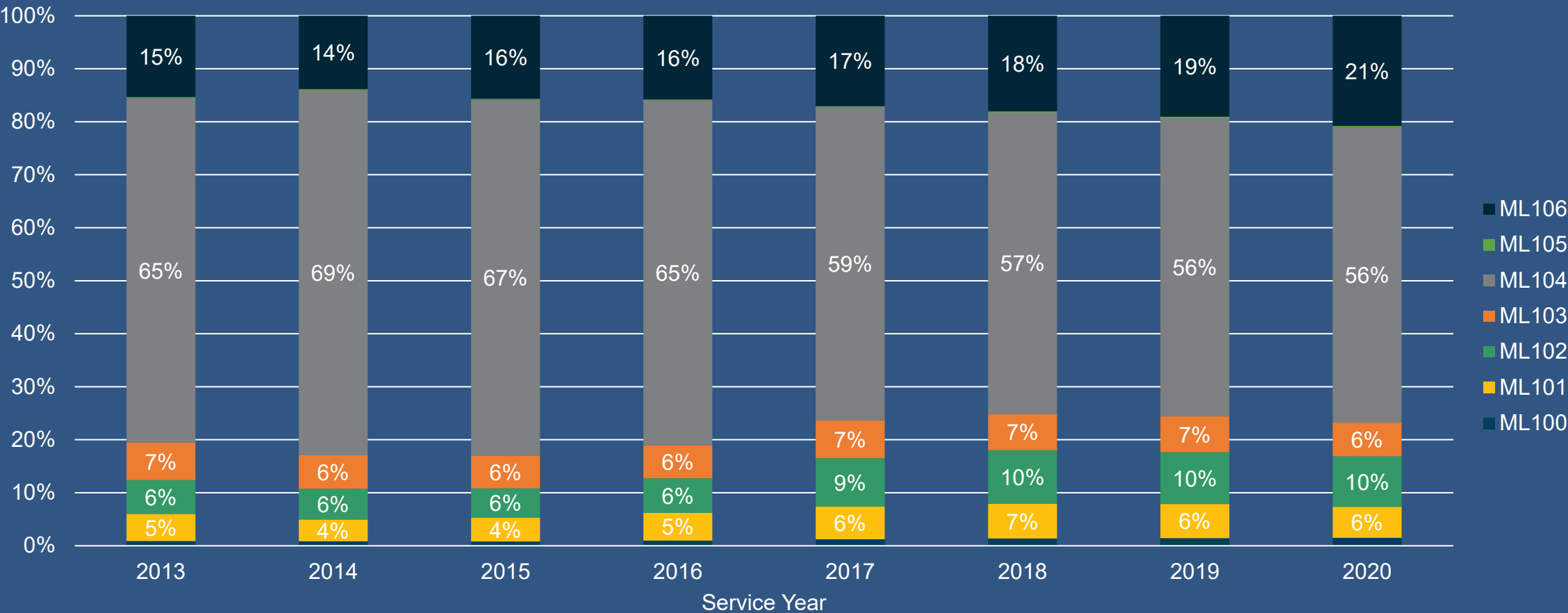
In summary, the 22% indicated increase in medical-legal costs due to the implementation of the April 1, 2021 Schedule translates to a 1.4% increase in overall medical costs since medical-legal costs comprise approximately 6.5% of overall medical costs.¹² The WCIRB notes that the April 1, 2021 Schedule applies to all medical-legal services provided on or after that date including those on claims incurred against in-force or expired policies. Nevertheless, the WCIRB is not proposing any adjustments to the advisory pure premium rates applicable to the unexpired terms of in-force policies.

¹² 2019 California Workers' Compensation Losses and Expenses, WCIRB, June 2020. MCCP costs paid as medical costs in 2019 were excluded.

Distribution of Payments for Medical-Legal Services (6.5% of all medical payments*)

As of April 7, 2021

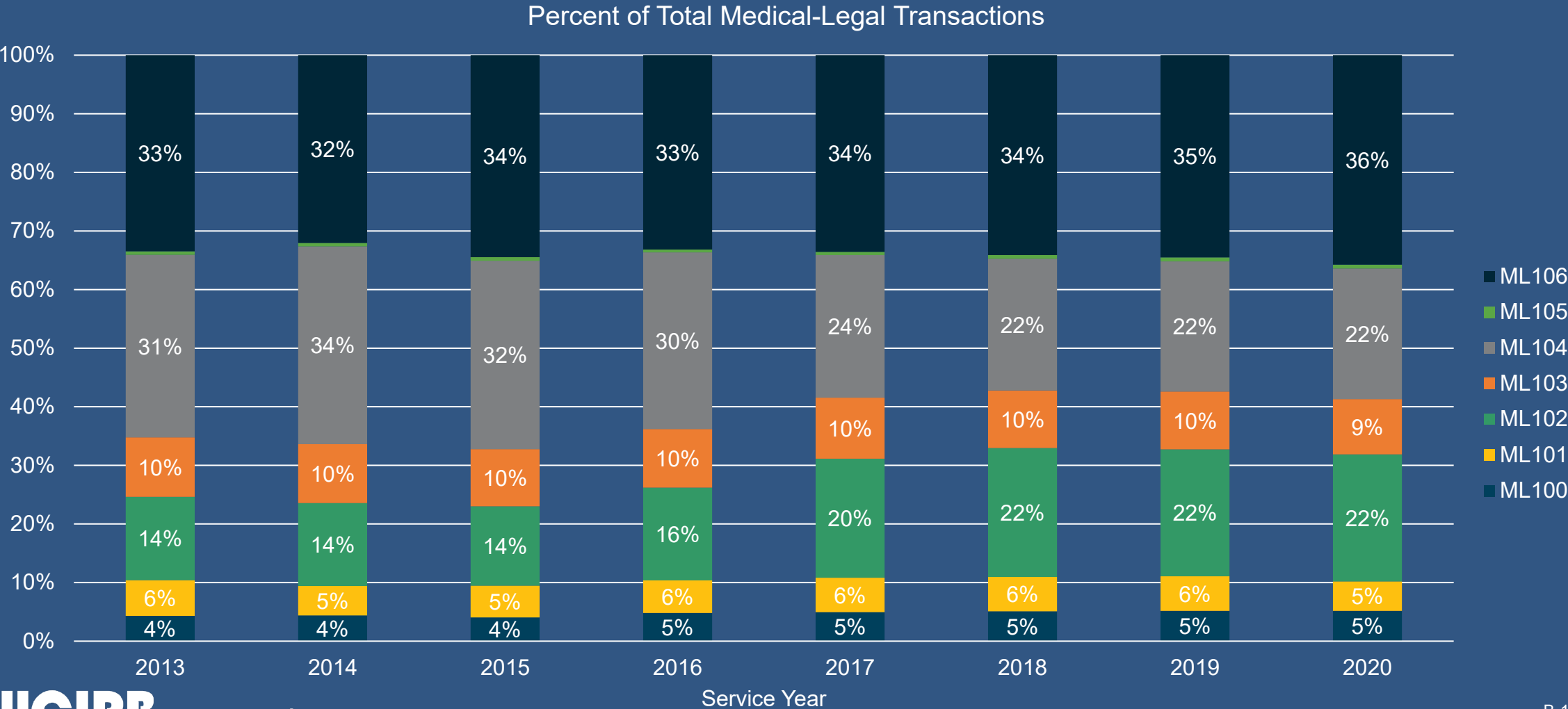
Percent of Total Medical-Legal Payments



* The cost of medical cost containment programs (MCCP) reported as medical costs were excluded from total medical.
Source: 2019 California Workers' Compensation Losses and Expenses, WCIRB, June 2020. WCIRB Medical Transaction Data.

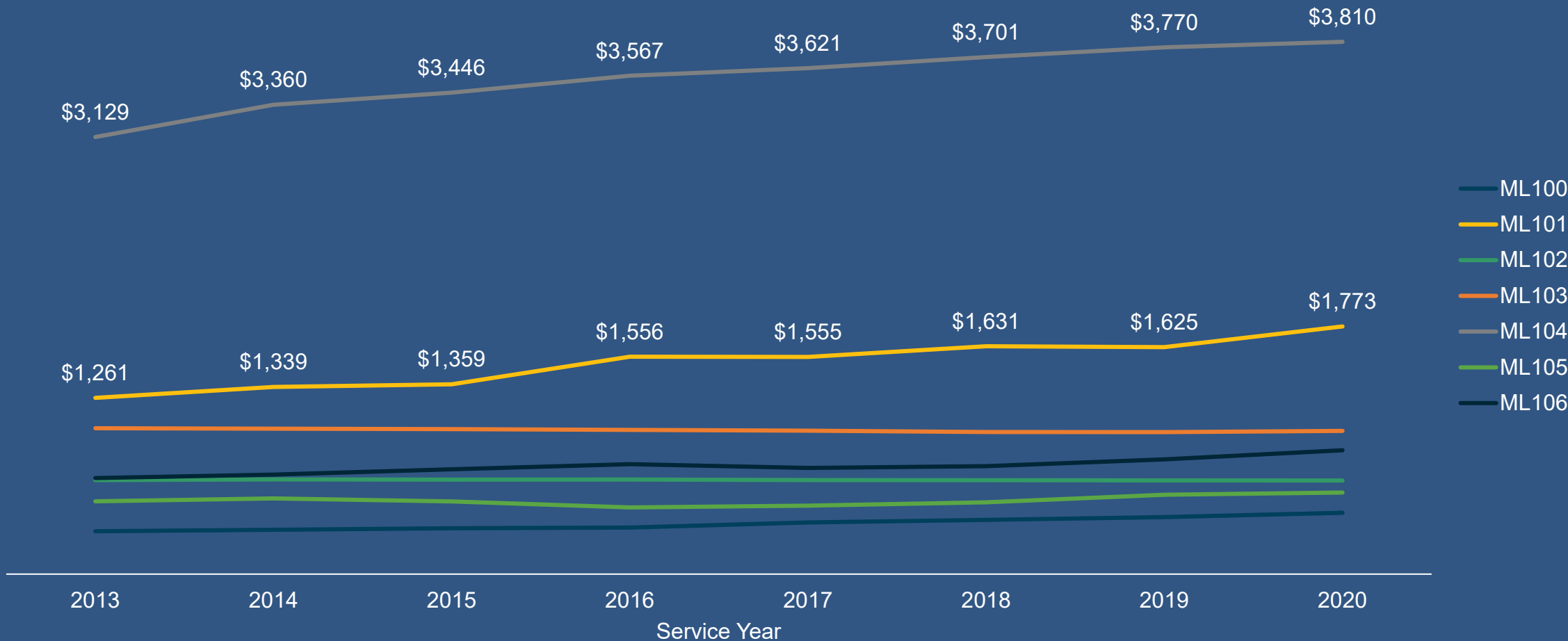
Distribution of Medical-Legal Service Utilization

As of April 7, 2021



Average Payments for Medical-Legal Services

As of April 7, 2021

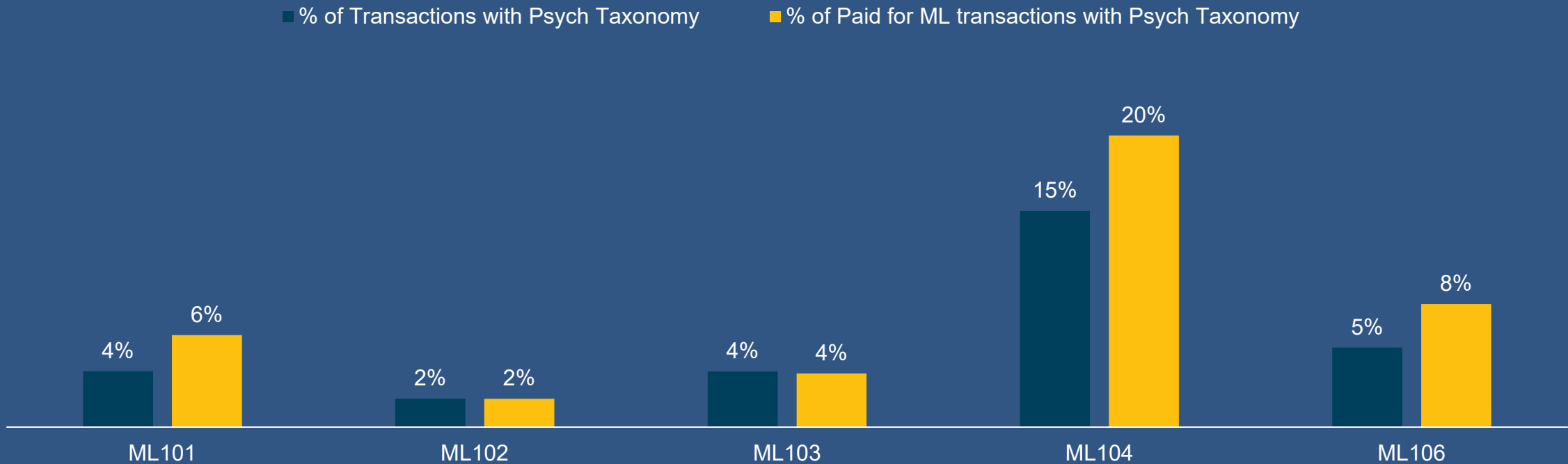


Historical Distribution of Interpreter and AME Modifiers on Medical-Legal Services - Based on Service Years (SYs) 2018-2019 Medical Transaction Information

- Interpreter modifier (93) only applicable to ML102 and ML103 under the old fee schedule is expanded in the new fee schedule to include services that would have fallen under ML101 and ML104
- Our evaluation assumes same share of services that currently fall under ML101 and ML104 would have an interpreter as ML102 and ML103 (about 35%)
- Our evaluation assumes same share of services currently fall under ML101-ML104 and ML106 would have an AME modifier under the new fee schedule

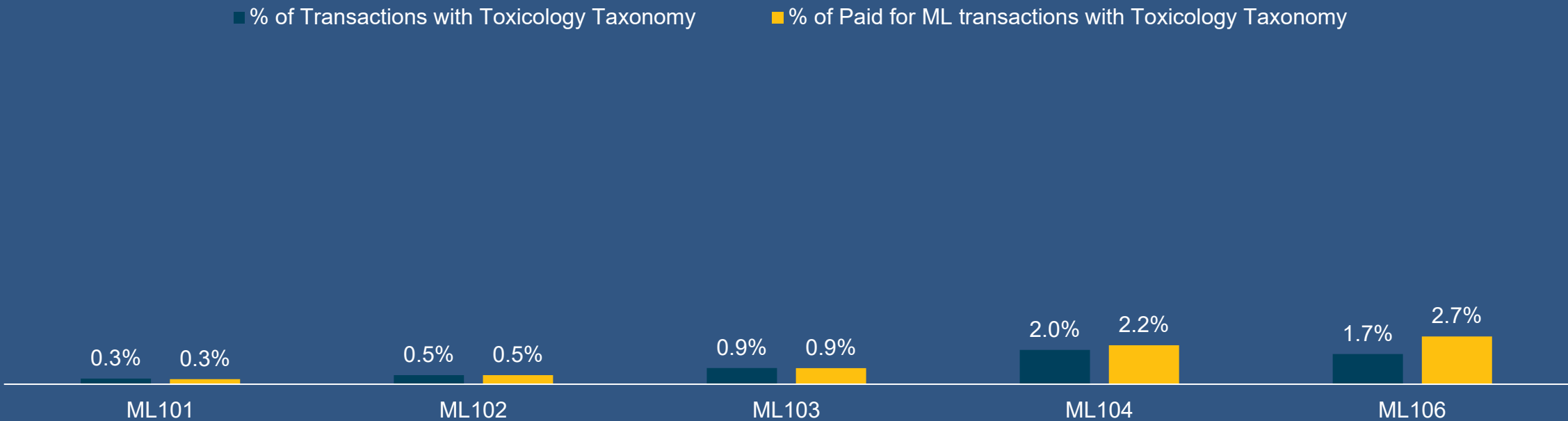
Modifier*	ML101	ML102	ML103	ML104	ML106
93 – Interpreter only	3%	32%	30%	2%	0%
94 – AME only	24%	11%	14%	22%	22%
Both 93 and 94	0.5%	4%	5%	0.4%	0%

Historical Distribution of Medical-Legal Psychological/Psychiatric Evaluations - Based on SY2018- SY2019 Medical Transaction Information



- The new psych modifier is applicable to ML201 - ML203 (old ML101-ML104 and ML106)
- Our evaluation assumes ML evaluations provided by a psychologist/psychiatrist would be using the new modifier

Historical Distribution of Medical-Legal Evaluations Provided by Toxicologists* - Based on SY2018- SY2019 Medical Transaction Information



- The new toxicologist modifier is applicable to ML201 - ML203 (current ML101-ML104 and ML106)
- Our evaluation assumes ML evaluations provided by a toxicologist/internist would be using the new modifier

Estimates of New Medical-Legal Fee Schedule Impact - Based on SY2018- SY2019 Medical Transaction Information

New ML Procedure	Brief Description	Historical Transaction Share	Historical Payments	Historical Payment Share	Expected Payments	Expected Payment Share	Percentage Difference in Payments
ML200	Missed Appointment	6.2%	\$5,331,455	1.4%	\$8,285,680	1.8%	+55%
ML201	ML Evaluation	53.4%	\$281,770,222	73.3%	\$336,849,372	71.8%	+20%
ML202	Follow-up ML Evaluation	5.8%	\$24,976,257	6.5%	\$23,550,609	5.0%	-6%
ML203	Supplemental ML Evaluation	33.9%	\$71,296,466	18.6%	\$55,980,543	11.9%	-22%
ML204	ML Testimony	0.7%	\$934,101	0.2%	\$1,567,930	0.3%	+68%
MLPRR	Record Review (100 pages / hour)				\$42,758,630	9.1%	
Total		100%	\$384,308,502	100%	\$468,992,763	100%	+22%

Cost Estimates of New Medical-Legal Fee Schedule Impact - Based on SY2018- SY2019 Medical Transaction Information

