## Actuarial Committee

## Meeting Agenda

| Date | Time | Location | Staff Contact |
| :--- | :--- | :--- | :--- |
| August 4,2020 | $9: 30$ AM | WCIRB California | David M. Bellusci |
|  |  | 1221 Broadway, Suite 900 |  |
|  |  | Oakland, CA |  |
| 1221 Broadway, Suite $900 \cdot$ Oakland, CA $94612 \cdot 415.777 .0777 \cdot$ Fax 415.778.7007• www.wcirb.com • wcirb@wcirb.com |  |  |  |

Released: July 28, 2020

## Due to the coronavirus (COVID-19) pandemic, this meeting is being held via webinar teleconference.

Please register for the August 4, 2020 WCIRB Actuarial Committee Meeting at:
https://attendee.gotowebinar.com/register/8143589354782604816
After registering, you will receive a confirmation email containing information about joining the webinar.

## I. Approval of Minutes

Meeting held on June 12, 2020
II. Working Group Meeting Summaries

None
III. Unfinished Business
A. AC19-08-04: Impact of Claim Settlement Rate Changes on ALAE Development
B. AC19-08-05: Review of Loss Development Tail Methodology
C. AC20-04-04: COVID-19 Crisis
D. AC20-06-01: 3/31/2020 Experience - Review of Methodologies

## IV. New Business

A. AC20-08-01: Third Quarter 2020 Review of Diagnostics
B. AC20-08-02: 1/1/2021 Filing - Loss Adjustment Expense Experience Review
C. AC20-08-03: 1/1/2021 Filing - Review of Alternative Loss Projection Methodologies

## Antitrust Notice

As members of the Workers' Compensation Insurance Rating Bureau of California, you are bound, when involved in meetings or other activities of the WCIRB California, to limit your actions (and discussions other than social ones) to matters relating to the business of the WCIRB California. Matters that do not relate directly to WCIRB California business should be avoided. Members should particularly avoid discussions or conduct that could be construed as intended to affect competition (or access to markets). Thus, as members, you should not discuss or pursue the business interests of individual insurers or others, including, in particular, the plans of individual members involving, or the possibility or desirability of (a) raising, lowering, or stabilizing prices (premiums or commissions); (b) doing business or refusing to do business with particular, or classes of, insurers, reinsurers, agents, brokers, or insureds, or in particular locales; or (c) potential actions that would affect the availability of products or service either generally or in specific markets or locales.
D. AC20-08-04: Impact of Economic Slowdown on Pure Premium Rate Indications
E. AC20-08-05: Potential Impact of Medical Care Delays
F. AC20-08-06: 1/1/2021 Filing - Telecommuting Advisory Pure Premium Rate

## V. Matters Arising at Time of Meeting

VI. Next Meeting Date: September 1, 2020
VII. Adjournment

## Notice <br> The information in this Agenda was developed by the Workers' Compensation Insurance Rating Bureau of California (WCIRB) for the purpose of assisting the WCIRB Actuarial Committee. The WCIRB cannot make any guarantees if this information is used for any other purpose and the WCIRB shall not be liable for any damages, of any kind, whether direct, indirect, incidental, punitive or consequential, arising from the use of or reliance upon this information for any other purpose.

© 2020 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. Each WCIRB member company, including any registered third party entities, (Company) is authorized to reproduce any part of this work solely for the following purposes in connection with the transaction of workers' compensation insurance: (1) as necessary in connection with Company's required filings with the California Department of Insurance; (2) to incorporate portions of this work, as necessary, into Company manuals distributed at no charge only to Company employees; and (3) to the extent reasonably necessary for the training of Company personnel. Each Company and all agents and brokers licensed to transact workers' compensation insurance in the state of California are authorized to physically reproduce any part of this work for issuance to a prospective or current policyholder upon request at no charge solely for the purpose of transacting workers' compensation insurance and for no other purpose. This reproduction right does not include the right to make any part of this work available on any website or any form of social media.
Workers' Compensation Insurance Rating Bureau of California, WCIRB, WCIRB California, WCIRB Connect, WCIRB Inquiry, WCIRB CompEssentials, X-Mod Direct, eSCAD, Comprehensive Risk Summary, X-Mods and More and the WCIRB California logo (WCIRB Marks) are registered trademarks or service marks of the WCIRB. WCIRB Marks may not be displayed or used in any manner without the WCIRB's prior written permission. Any permitted copying of this work must maintain any and all trademarks and/or service marks on all copies.
To seek permission to use any of the WCIRB Marks or any copyrighted material, please contact the WCIRB at customerservice@wcirb.com.

## Item AC19-08-04 <br> Impact of Claim Settlement Rate Changes on ALAE Development

Over the last several years, as indemnity claim settlement rates have accelerated, ALAE paid development factors projected based on the most recent age-to-age factor have generally overstated the actual paid ALAE development to emerge. At the August 1, 2019 meeting, the Committee reviewed a study of the impact of claim settlement rate changes on future paid ALAE development. Based on the results of the study, the Committee recommended reflecting an adjustment to the paid ALAE development factors during periods of significant claim settlement rate changes (i.e., greater than $1.5 \%$ in absolute value). The adjustment, which was reflected in the ALAE projection in the January 1, 2020 Pure Premium Rate Filing, was based on the approximate statistical relationship between claim settlement rate changes for an accident year and the change in cumulative paid ALAE development emerging for the accident year compared to that projected based on the latest calendar year. ${ }^{1}$

The adjustment developed in 2019 works well during periods where claim settlement rates continue to change significantly. However, since it was based on the most recent evaluation of changes in claim settlement rates and cumulative paid ALAE development, it may not fully reflect the impact during periods in which claim settlement rates begin to moderate. For example, in 2018 the ultimate indemnity claim settlement rate at 27 months is comparable to that for 2017. ${ }^{2}$ Under the approach developed in 2019, an adjustment to paid ALAE development from 27 months to ultimate for accident year 2018 would not be applied. In this case, no adjustment may be appropriate when selecting age-to-age development from 2017 to develop 2018 from 27 to 39 months. However, the claim settlement rate for 2018 at 27 months is $2.9 \%$ higher when compared to 2016. As a result, ALAE development selected from 2016 and prior accident years to develop 2018 from 39 months may still be impacted by the claim settlement rate change since a different claim settlement pattern is reflected in the development for those years.

The approach developed in 2019 is based on reviewing changes in claim settlement rates for the accident years evaluated at 15 and 27 months (2019 and 2018 as of March 31, 2020). The adjustment applied to the paid ALAE development for those years is based on the statistical relationship observed for historical periods between the change in claim settlement rate at 15 or 27 months and the change in the emerging ALAE development from what was projected based on the latest calendar year of paid ALAE development. Table 1 summarizes the results of the statistical analysis, which was originally presented at the August 1, 2019 meeting, updated for March 31, 2020 experience. Given the modest R-squared of the statistical analysis, the adjustment was tempered to be approximately $40 \%$ (based on the average $R$ squared) of the modeled relationship when applied to the paid ALAE development. This resulted in a 1 point increase in indemnity claim settlement rates at 15 months indicating a $2.4 \%$ decrease in the projected 15 -to-ultimate ALAE development factor and a 1 point increase in indemnity claim settlement rates at 27 months indicating a $1 \%$ decrease in the projected 27 -to-ultimate ALAE development factor.

Table 1 - Estimated Change in Future ALAE Development after Settlement Rate Change

| Settlement Rate <br> Change Period | $15-$ to-39 <br> Modeled | $39-$ to-63 <br> Modeled | $63-$ to-87 <br> Modeled | $87-$ to-111 <br> Modeled | 111-to-Ult. <br> Extrapolated | X-to-Ult. <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 Months | $-2.7 \%$ | $-1.6 \%$ | $-0.6 \%$ | $-0.6 \%$ | $-0.6 \%$ | $-6.1 \%$ |
| Adj. R-Squared <br> @15 Months | 0.46 | 0.53 | 0.06 | 0.38 | N/A | N/A |
| 27 Months | N/A | $-1.1 \%$ | $-0.8 \%$ | $-0.4 \%$ | $-0.4 \%$ | $-2.6 \%$ |
| Adj. R-Squared <br> @27 Months | N/A | 0.64 | 0.62 | 0.31 | N/A | N/A |

[^0]In order to account for changes in claim settlement rates over multiple periods, staff refined the approach to be applied to age-to-age paid ALAE development rather than cumulative development. Given that changes in age-to-age development are often more modest and volatile compared to changes in cumulative development, the statistical model used to develop the cumulative adjustment approach was used as the basis for the age-to-age adjustment approach. Table 2 shows how the factors for the age-toage adjustment approach were derived for both the full model and the $40 \%$ tempered model. Each age-to-age factor was computed based on the incremental difference from the cumulative adjustment at the prior age. (The cumulative adjustment for 27 months was updated to reflect the 27 -to- 39 development factor which was not included in the original analysis.)

## Table 2 - Adjustment to ALAE Development based on 1\% of Settlement Rate Change

|  | Full <br> Cumulative <br> Adjustment | Full <br> Age-to-Age <br> Adjustment | $40 \%$ Tempered <br> Cumulative <br> Adjustment | 40\% Tempered <br> Age-to-Age <br> Adjustment |
| :---: | :---: | :---: | :---: | :---: |
| 75 | $-0.9 \%$ | $\mathbf{- 0 . 9 \%}$ | $-0.4 \%$ | $\mathbf{- 0 . 4 \%}$ |
| 63 | $-1.6 \%$ | $\mathbf{- 0 . 7 \%}$ | $-0.6 \%$ | $\mathbf{- 0 . 2 \%}$ |
| 51 | $-1.8 \%$ | $\mathbf{- 0 . 2 \%}$ | $-0.7 \%$ | $\mathbf{- 0 . 1 \%}$ |
| 39 | $-2.6 \%$ | $\mathbf{- 0 . 8 \%}$ | $-1.0 \%$ | $\mathbf{- 0 . 3 \%}$ |
| 27 | $-2.8 \%$ | $\mathbf{- 0 . 2 \%}$ | $-1.1 \%$ | $\mathbf{- 0 . 1 \%}$ |
| 15 | $-6.1 \%$ | $\mathbf{- 3 . 3 \%}$ | $-2.4 \%$ | $\mathbf{- 1 . 3 \%}$ |

Staff recommends that the adjustment factors shown in Table 2 only be applied to the projected age-toage ALAE development if the claim settlement rate for the accident year at that evaluation changed by more than 1.5 points in absolute value. 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. ${ }^{3}$ If the claim settlement rate did not change by more than 1.5 points, staff recommends that the adjustment not be applied. Table 3 shows an example of how this approach would be applied based on March 31, 2020 ALAE experience and the full factors with no tempering. Given the greater precision of the age-to-age adjustment approach, staff does not believe the judgmental tempering is needed under this approach.

Table 3 - Application of Age-to-Age ALAE Adjustment to March 31, 2020 Experience

| Accident <br> Year (Age) | $(1)$ <br> Settlement <br> Rate <br> Change | $(2)$ <br> Unadjusted <br> Age-to-Age <br> Factor | $(3)$ <br> Unadjusted <br> Age-to-Ult. <br> Factor | $(4)$ <br> Adjusted <br> Age-to-Age <br> Factor | $(5)$ <br> Adjusted <br> Age-to-Ult. <br> Factor | $(6)$ <br> Impact of <br> Adjustment <br> $(5) /(3)-1.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2014(75)$ | $0.8 \%$ | 1.049 | 1.369 | 1.049 | 1.369 | $0.0 \%$ |
| $2015(63)$ | $1.5 \%$ | 1.073 | 1.468 | 1.062 | 1.454 | $-1.0 \%$ |
| $2016(51)$ | $1.6 \%$ | 1.113 | 1.633 | 1.108 | 1.611 | $-1.3 \%$ |
| $2017(39)$ | $1.7 \%$ | 1.201 | 1.962 | 1.184 | 1.908 | $-2.7 \%$ |
| $2018(27)$ | $0.0 \%$ | 1.428 | 2.801 | 1.428 | 2.725 | $-2.7 \%$ |
| $2019(15)$ | $0.1 \%$ | 2.601 | 7.285 | 2.601 | 7.087 | $-2.7 \%$ |

[^1]
## Item AC19-08-05 <br> Review of Loss Development Tail Methodology

At the March 16, 2020 meeting, the Committee reviewed an updated analysis of the loss development tail methodology that was first reviewed at the August 1, 2019 meeting. The Committee noted that based on retrospective tests included in the analysis, paid development has been significantly more accurate than incurred development for later periods. ${ }^{1}$ It was also noted that the loss development tail based on an inverse power curve fit to paid development was more stable than that based on incurred development. ${ }^{2}$ However, in that current claim settlement patterns are very different from those on accident years in which post-264 month development is emerging, prior to reflecting paid development after approximately 264 months (which is currently predicated on incurred development), the Committee recommended staff review the impact of the recent claim settlement rate increases on future paid loss development patterns.

Staff reviewed several potential approaches for reflecting the impact of claim settlement rate changes on future paid loss development patterns, including a statistical approach similar to that used for paid ALAE development (see Item AC19-08-04). In reviewing this approach for paid medical, the statistical relationship between early claim settlement rate changes and late-term paid medical development was not very significant. This is likely due to the limited availability of data (available claim counts and paid medical development after 264 months is only available for accident years 1990 through 1997) and that the medical payment pattern for the period with available data has undergone significant shifts due to reforms. Given that this approach did not fit well for medical, staff did not review its applicability for indemnity.

Staff also reviewed potential incremental development approaches. Incremental development approaches allow for payments and open claim counts to be projected incrementally for the accident year and are less reliant on the cumulative payments and associated proportion of open claims for older accident years. Although staff believes there may be some value in these approaches for earlier development periods, ${ }^{3}$ given the fewer number of open claims and greater volatility of payments in later periods, staff did not believe an incremental approach would be appropriate for projecting paid development after 264 months.

Staff also reviewed an approach based on cumulative paid loss development that is adjusted for the underlying change in open claim count share between the historical accident year and projection accident year. The computations for this approach are shown in Exhibits 1.1 through 1.5 based on December 31, 2019 experience. The number of ultimate indemnity claims and ultimate claim settlement ratios are projected for each accident year based on the latest-year claim reporting pattern as shown in Exhibit 1.1. The incremental claim disposal rate (ratio of incremental closed claims to prior estimated open claims) is selected based on the average of the latest three years in order to not over project the recent acceleration in claim settlement rates as shown in Exhibit 1.2. The projected future number of open indemnity claims based on the selected claim disposal rate for each accident year and age is projected based on the claim open rate ( 1.0 minus the selected claim disposal rate) and the number of claims open from the prior age as shown in Item 18 of Exhibit 1.2. The difference in the open claim share between the historical data and the projected data is shown in Exhibit 1.3. A three-year average is selected for the historical data to mitigate volatility.

Exhibit 1.4 shows (unadjusted) selected age-to-age and cumulative paid indemnity and medical development through 384 months. Exhibit 1.5 shows the application of the adjustment to paid development from 264 months through 384 months. The development portion of each age-to-age factor (the factor minus 1.0 ) is adjusted by the difference in the open claim share projected for the accident year

[^2]compared to the historical data (Item 21 of Exhibit 1.3). The impact of the adjustment for development from 264 through 384 months compared to the unadjusted paid development is shown in Item 26 of Exhibit 1.5. The adjustment applied through 384 months, before any modification, has a modest impact on paid indemnity development ( $-0.8 \%$ ) and a moderate impact on paid medical development ( $-3.1 \%$ ) for these accident years.

The adjustment shown in Exhibits 1.1 through 1.5 is applied starting at 264 months. The WCIRB's current loss development methodology utilizes incurred development after approximately 264 months, which has been the period of focus in this study. A significant shift in claim settlement rates likely also impacts paid development prior to 264 months. However, there may be many other factors that impacts development in these earlier periods. Staff recommends reviewing the applicability of this approach to earlier development periods in the future.

The adjustment shown in Exhibits 1.1 through 1.5 stops at 384 months as three years of indemnity claim count information is only available through 384 months. To apply this approach after 384 months, staff assumed the average ratio of the open claim share between the projected data and the historical data for the 348-month through 384-month periods applied from 384 months through 420 months (see Item 21 of Exhibit 1.3). Applying the adjustment to this additional period has only a modest impact on the projected development factors given that a relatively lower level of paid development occurs in this later period.

The adjustment shown in Exhibits 1.1 through 1.5 assumes that the change in claim settlement has an approximate 1-to-1 impact on the projected paid development at late-term periods. Staff retrospectively tested the relationship between the change in open claim count share and paid medical development to determine if (a) there is a predictive relationship between these two measures and (b) whether the approximate 1-to-1 relationship is appropriate. Staff performed the retrospective tests for paid medical development from 252 months through 360 months based on data for calendar years 2009 through 2018. In each retrospective test, a base calendar year was selected to base the change in open claim share and paid development. An example for a base calendar year of 2011 is shown in Exhibit 2. The change in open claim share and paid development from the base year were compared. If the two were comparable, an implied adjustment of $100 \%$ was indicated. Otherwise, the indicated adjustment to the change in open claim share to make them comparable was determined (see Item E of Exhibit 2).

In a high proportion of the retrospective tests, the comparison for a one-year or two-year change in open claim share was very volatile (as shown in the earliest diagonals of Item $E$ of Exhibit 2). This is likely due to the changes in open share for a small-year gap being too modest to explain a significant proportion of the loss development change. However, when the gap was three or more years, the change in open claim share was generally predictive of the development change but tended to somewhat overstate the development change. Table 1 summarizes the average adjustments to the open claim share indicated across the retrospective tests based on the gap in years. On average, the retrospective review indicated that the change in open claim share should be adjusted by $40 \%$ to $70 \%$ to approximate the development change with both the average and median adjustments indicated for larger-year gaps to be approximately $40 \%$. Staff recommends the $40 \%$ adjustment be used in applying this approach to developing losses after 264 months.

Table 1 - Retrospectively Indicated Average and Median Adjustments to Change in Open Claim Share to Approximate Development Change

| Gap from <br> Base Year | Number of <br> Observations | Average <br> Adjustment | Median <br> Adjustment |
| :---: | :---: | :---: | :---: |
| 3 Years | 84 | $72 \%$ | $47 \%$ |
| 4 Years | 56 | $75 \%$ | $43 \%$ |
| 5 Years | 35 | $39 \%$ | $43 \%$ |
| 6 Years | 20 | $43 \%$ | $39 \%$ |

III-B-2
WCIRB California ${ }^{\circledR}$

Actuarial Committee
Meeting Agenda for August 4, 2020

To project losses to ultimate, a tail development factor is applied after 420 months. The tail development factor is based on an inverse power curve fit to age-to-age development from the $10^{\text {th }}$ through $29^{\text {th }}$ development years and extrapolated to 80 development years. To compute the tail factor under the adjusted paid approach, the inverse power curve was fit to adjusted age-to-age paid development from 120 months through 348 months (including the additional $40 \%$ adjustment to the open claim ratio discussed above). The impact of this approach on the tail factor is shown in Table 2.

Table 2 shows the approximate impact of this approach with the $40 \%$ adjustment for accident year 2019 development projected from 12 months compared to the unadjusted paid development method as well as to the WCIRB's current method which applies incurred development after 264 months. Staff recommends this approach with the $40 \%$ adjustment.

Table 2 - Impact of Adjustment to Accident Year 2019 Paid Development

|  | Development | Unadjusted <br> Paid <br> Period | Current <br> Method <br> Development | $40 \%$ Adjusted <br> Paid <br> Cevelopment | Difference <br> from <br> Development | Difference <br> from <br> Paid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indemnity | 264 -to-384 | 1.013 | 1.022 | 1.009 | $-0.3 \%$ | Current |
| Method |  |  |  |  |  |  |$|$

[^3]III-B-3

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported | Projected | Reported | Open + IBNR |  |  |  |  | $=(5) /(2)$ | $=(6) /(2)$ | $=(7) /(2)$ | $=(8) /(2)$ |
|  | Ind Counts | Ultimate | pen Counts | Ind Counts | Reported Closed Claims |  |  |  | Ultimate Settlement Ratio |  |  |  |
| AY | @12/31/19 | Ind Counts | @12/31/19 | @12/31/19 | @12/31/16 @ | 12/31/17 | 12/31/18 | 2/31/19 | @12/31/16 | @12/31/17 | @12/31/18 | Q12/31/19 |
| 1989 | 212,182 | 212,182 | 460 | 460 | 211,496 | 211,577 | 211,665 | 211,722 | 99.7\% | 99.7\% | 99.8\% | 99.8\% |
| 1990 | 232,549 | 232,563 | 445 | 459 | 231,827 | 231,916 | 232,025 | 232,104 | 99.7\% | 99.7\% | 99.8\% | 99.8\% |
| 1991 | 233,666 | 233,700 | 563 | 597 | 232,798 | 232,893 | 233,010 | 233,103 | 99.6\% | 99.7\% | 99.7\% | 99.7\% |
| 1992 | 184,112 | 184,152 | 513 | 553 | 183,352 | 183,438 | 183,519 | 183,599 | 99.6\% | 99.6\% | 99.7\% | 99.7\% |
| 1993 | 144,221 | 144,263 | 538 | 580 | 143,435 | 143,513 | 143,607 | 143,683 | 99.4\% | 99.5\% | 99.5\% | 99.6\% |
| 1994 | 131,654 | 131,705 | 637 | 688 | 130,693 | 130,828 | 130,937 | 131,017 | 99.2\% | 99.3\% | 99.4\% | 99.5\% |
| 1995 | 122,864 | 122,935 | 767 | 838 | 121,717 | 121,862 | 121,987 | 122,097 | 99.0\% | 99.1\% | 99.2\% | 99.3\% |
| 1996 | 117,993 | 118,087 | 820 | 914 | 116,803 | 116,895 | 117,052 | 117,173 | 98.9\% | 99.0\% | 99.1\% | 99.2\% |
| 1997 | 122,807 | 122,928 | 1,047 | 1,168 | 121,242 | 121,399 | 121,582 | 121,760 | 98.6\% | 98.8\% | 98.9\% | 99.0\% |
| 1998 | 133,136 | 133,304 | 1,371 | 1,539 | 131,146 | 131,322 | 131,569 | 131,765 | 98.4\% | 98.5\% | 98.7\% | 98.8\% |
| 1999 | 134,933 | 135,130 | 1,472 | 1,669 | 132,675 | 132,965 | 133,224 | 133,461 | 98.2\% | 98.4\% | 98.6\% | 98.8\% |
| 2000 | 146,104 | 146,321 | 1,824 | 2,041 | 143,221 | 143,560 | 143,953 | 144,280 | 97.9\% | 98.1\% | 98.4\% | 98.6\% |
| 2001 | 185,700 | 185,970 | 3,234 | 3,504 | 180,737 | 181,357 | 181,963 | 182,466 | 97.2\% | 97.5\% | 97.8\% | 98.1\% |
| 2002 | 194,726 | 195,017 | 3,208 | 3,499 | 189,547 | 190,288 | 190,923 | 191,518 | 97.2\% | 97.6\% | 97.9\% | 98.2\% |
| 2003 | 184,260 | 184,564 | 3,212 | 3,516 | 178,797 | 179,643 | 180,380 | 181,048 | 96.9\% | 97.3\% | 97.7\% | 98.1\% |
| 2004 | 159,000 | 159,262 | 2,893 | 3,155 | 153,877 | 154,698 | 155,481 | 156,107 | 96.6\% | 97.1\% | 97.6\% | 98.0\% |
| 2005 | 139,566 | 139,797 | 2,709 | 2,940 | 134,543 | 135,454 | 136,216 | 136,857 | 96.2\% | 96.9\% | 97.4\% | 97.9\% |
| 2006 | 133,286 | 133,488 | 3,127 | 3,329 | 127,374 | 128,510 | 129,421 | 130,159 | 95.4\% | 96.3\% | 97.0\% | 97.5\% |
| 2007 | 130,329 | 130,543 | 3,320 | 3,534 | 123,508 | 124,998 | 126,090 | 127,009 | 94.6\% | 95.8\% | 96.6\% | 97.3\% |
| 2008 | 123,069 | 123,296 | 3,683 | 3,910 | 115,161 | 116,949 | 118,360 | 119,386 | 93.4\% | 94.9\% | 96.0\% | 96.8\% |
| 2009 | 113,746 | 113,994 | 4,042 | 4,290 | 104,288 | 106,640 | 108,408 | 109,704 | 91.5\% | 93.5\% | 95.1\% | 96.2\% |
| 2010 | 117,633 | 117,901 | 4,609 | 4,877 | 105,808 | 109,135 | 111,406 | 113,024 | 89.7\% | 92.6\% | 94.5\% | 95.9\% |
| 2011 | 118,317 | 118,645 | 5,434 | 5,762 | 102,779 | 107,552 | 110,792 | 112,883 | 86.6\% | 90.7\% | 93.4\% | 95.1\% |
| 2012 | 125,053 | 125,465 | 6,957 | 7,369 | 103,251 | 110,335 | 115,029 | 118,096 | 82.3\% | 87.9\% | 91.7\% | 94.1\% |
| 2013 | 133,293 | 133,822 | 9,095 | 9,624 | 101,303 | 112,583 | 119,538 | 124,198 | 75.7\% | 84.1\% | 89.3\% | 92.8\% |
| 2014 | 139,578 | 140,350 | 12,894 | 13,666 | 90,512 | 108,398 | 120,018 | 126,684 | 64.5\% | 77.2\% | 85.5\% | 90.3\% |
| 2015 | 144,795 | 145,915 | 17,625 | 18,745 | 70,676 | 97,992 | 116,338 | 127,170 | 48.4\% | 67.2\% | 79.7\% | 87.2\% |
| 2016 | 147,856 | 149,454 | 25,856 | 27,454 | 32,398 | 76,266 | 104,229 | 122,000 | 21.7\% | 51.0\% | 69.7\% | 81.6\% |
| 2017 | 147,371 | 150,002 | 39,555 | 42,186 | 0 | 35,866 | 80,944 | 107,816 | 0.0\% | 23.9\% | 54.0\% | 71.9\% |
| 2018 | 146,958 | 153,084 | 64,135 | 70,261 | 0 | 0 | 37,352 | 82,823 | 0.0\% | 0.0\% | 24.4\% | 54.1\% |
| 2019 | 122,306 | 156,190 | 83,913 | 117,797 | 0 | 0 | 0 | 38,393 | 0.0\% | 0.0\% | 0.0\% | 24.6\% |

Notes:
(2) Projected based on the latest year claim reporting pattern.
$(4)=(3)+(2)-(1)$

|  | (13) | (14) | (15) | (16) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Share of |  |  |  |  |  |  |  |  |  |  |  |
|  | Ratio of Incremental Closed to Prior Open |  |  |  | Open on Prior Open |  | (18) Projected Number of Open Claims for Age in Months |  |  |  |  |  |  |  |  |  |
| Age | @12/31/17 | @12/31/18 | @12/31/19 | $3-\mathrm{Yr}$ Avg |  | AY | 264 | 276 | 288 | 300 | 312 | 324 | 336 | 348 | 360 | 372 |
| 372 | --- | --- | 11.0\% | 11.0\% | 89.0\% | 1989 |  |  |  |  |  |  |  | 605 | 517 | 460 |
| 360 | --- | 14.6\% | 14.7\% | 14.6\% | 85.4\% | 1990 |  |  |  |  |  |  | 647 | 538 | 459 | 409 |
| 348 | 11.8\% | 16.9\% | 13.5\% | 14.1\% | 85.9\% | 1991 |  |  |  |  |  | 808 | 690 | 597 | 510 | 454 |
| 336 | 12.1\% | 14.5\% | 12.6\% | 13.1\% | 86.9\% | 1992 |  |  |  |  | 714 | 633 | 553 | 475 | 406 | 361 |
| 324 | 10.5\% | 11.4\% | 11.6\% | 11.2\% | 88.8\% | 1993 |  |  |  | 750 | 656 | 580 | 504 | 433 | 370 | 329 |
| 312 | 10.8\% | 12.5\% | 10.4\% | 11.2\% | 88.8\% | 1994 |  |  | 877 | 768 | 688 | 611 | 531 | 457 | 390 | 347 |
| 300 | 9.4\% | 12.4\% | 11.6\% | 11.2\% | 88.8\% | 1995 |  | 1,073 | 948 | 838 | 744 | 661 | 574 | 494 | 422 | 375 |
| 288 | 13.3\% | 11.7\% | 11.7\% | 12.2\% | 87.8\% | 1996 | 1,192 | 1,035 | 914 | 812 | 721 | 641 | 557 | 479 | 409 | 364 |
| 276 | 11.9\% | 13.2\% | 13.2\% | 12.8\% | 87.2\% | 1997 | 1,346 | 1,168 | 1,025 | 911 | 808 | 718 | 624 | 537 | 458 | 408 |
| 264 | 7.2\% | 12.0\% | 11.3\% | 10.1\% | 89.9\% | 1998 | 1,539 | 1,343 | 1,178 | 1,047 | 929 | 826 | 718 | 617 | 527 | 469 |
| 252 | 9.3\% | 12.5\% | 12.4\% | 11.4\% | 88.6\% | 1999 | 1,499 | 1,308 | 1,148 | 1,020 | 905 | 804 | 699 | 601 | 513 | 456 |
| 240 | 8.2\% | 12.0\% | 13.8\% | 11.3\% | 88.7\% | 2000 | 1,625 | 1,417 | 1,244 | 1,105 | 981 | 872 | 758 | 651 | 556 | 495 |
| 228 | 11.8\% | 14.2\% | 12.6\% | 12.9\% | 87.1\% | 2001 | 2,474 | 2,158 | 1,894 | 1,683 | 1,494 | 1,327 | 1,153 | 991 | 846 | 753 |
| 216 | 10.9\% | 13.1\% | 14.5\% | 12.9\% | 87.1\% | 2002 | 2,153 | 1,878 | 1,648 | 1,464 | 1,300 | 1,155 | 1,004 | 863 | 737 | 655 |
| 204 | 11.8\% | 13.4\% | 16.0\% | 13.7\% | 86.3\% | 2003 | 1,885 | 1,644 | 1,443 | 1,282 | 1,138 | 1,011 | 879 | 755 | 645 | 574 |
| 192 | 13.5\% | 15.0\% | 16.6\% | 15.0\% | 85.0\% | 2004 | 1,459 | 1,273 | 1,117 | 992 | 881 | 783 | 680 | 585 | 499 | 444 |
| 180 | 14.7\% | 17.2\% | 17.9\% | 16.6\% | 83.4\% | 2005 | 1,155 | 1,008 | 884 | 786 | 697 | 620 | 539 | 463 | 395 | 352 |
| 168 | 15.2\% | 17.5\% | 18.1\% | 17.0\% | 83.0\% | 2006 | 1,091 | 952 | 835 | 742 | 659 | 585 | 509 | 437 | 373 | 332 |
| 156 | 17.3\% | 18.3\% | 20.6\% | 18.8\% | 81.2\% | 2007 | 961 | 839 | 736 | 654 | 581 | 516 | 448 | 385 | 329 | 293 |
| 144 | 18.6\% | 19.7\% | 20.8\% | 19.7\% | 80.3\% | 2008 | 864 | 754 | 662 | 588 | 522 | 464 | 403 | 346 | 296 | 263 |
| 132 | 21.2\% | 22.2\% | 23.2\% | 22.2\% | 77.8\% | 2009 | 762 | 664 | 583 | 518 | 460 | 409 | 355 | 305 | 261 | 232 |
| 120 | 22.0\% | 24.0\% | 24.9\% | 23.6\% | 76.4\% | 2010 | 674 | 588 | 516 | 458 | 407 | 361 | 314 | 270 | 230 | 205 |
| 108 | 24.2\% | 25.9\% | 26.6\% | 25.6\% | 74.4\% | 2011 | 608 | 530 | 465 | 413 | 367 | 326 | 283 | 244 | 208 | 185 |
| 96 | 27.5\% | 29.2\% | 29.4\% | 28.7\% | 71.3\% | 2012 | 578 | 504 | 443 | 393 | 349 | 310 | 270 | 232 | 198 | 176 |
| 84 | 30.1\% | 31.0\% | 32.6\% | 31.2\% | 68.8\% | 2013 | 538 | 470 | 412 | 366 | 325 | 289 | 251 | 216 | 184 | 164 |
| 72 | 31.9\% | 32.7\% | 32.8\% | 32.5\% | 67.5\% | 2014 | 526 | 459 | 403 | 358 | 317 | 282 | 245 | 211 | 180 | 160 |
| 60 | 34.7\% | 36.4\% | 36.6\% | 35.9\% | 64.1\% | 2015 | 487 | 425 | 373 | 331 | 294 | 261 | 227 | 195 | 167 | 148 |
| 48 | 35.9\% | 38.3\% | 39.3\% | 37.8\% | 62.2\% | 2016 | 457 | 399 | 350 | 311 | 276 | 245 | 213 | 183 | 156 | 139 |
| 36 | 36.3\% | 38.2\% | 38.9\% | 37.8\% | 62.2\% | 2017 | 437 | 381 | 334 | 297 | 264 | 234 | 204 | 175 | 149 | 133 |
| 24 | 37.5\% | 39.5\% | 39.3\% | 38.8\% | 61.2\% | 2018 | 452 | 395 | 346 | 308 | 273 | 243 | 211 | 181 | 155 | 138 |
| 12 | 23.9\% | 24.4\% | 24.6\% | 24.3\% | 75.7\% | 2019 | 465 | 405 | 356 | 316 | 281 | 249 | 217 | 186 | 159 | 141 |

Notes:
(13) $=[(10)-(9)] /[1.0-(9)]$
$(14)=[(11)-(10)] /[1.0-(10)]$
$(15)=[(12)-(11)] /[1.0-(11)]$
$(17)=1.0-(16)$

Notes:
(18) Figures shaded in green are based on the latest three years of reported data

Projections are based on the latest number of open claims (Exhibit 1.1, Item 4)
multiplied by the share of open claims compared to prior open claims (Item 17).

|  | (19) Ratio of Projected Open Claims to Ultimate Number of Claims |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY | 264 | 276 | 288 | 300 | 312 | 324 | 336 | 348 | 360 | 372 |
| 1989 |  |  |  |  |  |  |  | 0.3\% | 0.2\% | 0.2\% |
| 1990 |  |  |  |  |  |  | 0.3\% | 0.2\% | 0.2\% | 0.2\% |
| 1991 |  |  |  |  |  | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% |
| 1992 |  |  |  |  | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% |
| 1993 |  |  |  | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% |
| 1994 |  |  | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% |
| 1995 |  | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% |
| 1996 | 1.0\% | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% |
| 1997 | 1.1\% | 1.0\% | 0.8\% | 0.7\% | 0.7\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% |
| 1998 | 1.2\% | 1.0\% | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.4\% |
| 1999 | 1.1\% | 1.0\% | 0.8\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% |
| 2000 | 1.1\% | 1.0\% | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% |
| 2001 | 1.3\% | 1.2\% | 1.0\% | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% |
| 2002 | 1.1\% | 1.0\% | 0.8\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% |
| 2003 | 1.0\% | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% |
| 2004 | 0.9\% | 0.8\% | 0.7\% | 0.6\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% |
| 2005 | 0.8\% | 0.7\% | 0.6\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% |
| 2006 | 0.8\% | 0.7\% | 0.6\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% |
| 2007 | 0.7\% | 0.6\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% |
| 2008 | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% |
| 2009 | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% |
| 2010 | 0.6\% | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% |
| 2011 | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% |
| 2012 | 0.5\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% |
| 2013 | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% |
| 2014 | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% |
| 2015 | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% |
| 2016 | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| 2017 | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| 2018 | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| 2019 | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |

$\begin{array}{rlllllllll}\text { (20) Historical 3-Yr Avg: } & & & & & & & & \\ 1.1 \% & 0.9 \% & 0.7 \% & 0.6 \% & 0.5 \% & 0.4 \% & 0.3 \% & 0.3 \% & 0.2 \% & 0.2 \%\end{array}$
Notes:
$(19)=(18) /(2)$
(20) Based on the average of the latest three historical years (Item 19)

| (21) Ratio of Projected Open \% to Historical Open \% |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 264 | 276 | 288 | 300 | 312 | 324 | 336 | 348 | 360 | 372 |
|  |  |  |  |  |  |  |  |  | 0.81 |
|  |  |  |  |  |  |  |  | 0.99 | 0.90 |
|  |  |  |  |  |  |  | 1.00 | 1.00 | 0.90 |
|  |  |  |  |  |  | 1.20 | 1.17 | 1.16 | 1.05 |
|  |  |  |  |  | 1.28 | 1.39 | 1.35 | 1.34 | 1.22 |
|  |  |  |  | 1.33 | 1.48 | 1.60 | 1.56 | 1.55 | 1.41 |
|  |  |  | 1.16 | 1.34 | 1.49 | 1.62 | 1.57 | 1.57 | 1.42 |
|  |  | 1.13 | 1.25 | 1.45 | 1.61 | 1.74 | 1.70 | 1.69 | 1.53 |
|  | 1.12 | 1.20 | 1.32 | 1.53 | 1.70 | 1.85 | 1.80 | 1.79 | 1.62 |
| 1.02 | 1.08 | 1.15 | 1.27 | 1.47 | 1.64 | 1.78 | 1.73 | 1.72 | 1.56 |
| 1.02 | 1.08 | 1.15 | 1.27 | 1.47 | 1.64 | 1.78 | 1.73 | 1.72 | 1.56 |
| 1.22 | 1.29 | 1.38 | 1.52 | 1.77 | 1.96 | 2.13 | 2.07 | 2.06 | 1.87 |
| 1.02 | 1.07 | 1.15 | 1.26 | 1.46 | 1.63 | 1.77 | 1.72 | 1.71 | 1.55 |
| 0.94 | 0.99 | 1.06 | 1.17 | 1.36 | 1.51 | 1.63 | 1.59 | 1.58 | 1.43 |
| 0.84 | 0.89 | 0.95 | 1.05 | 1.22 | 1.35 | 1.47 | 1.43 | 1.42 | 1.29 |
| 0.76 | 0.80 | 0.86 | 0.94 | 1.10 | 1.22 | 1.32 | 1.29 | 1.28 | 1.16 |
| 0.75 | 0.79 | 0.85 | 0.93 | 1.08 | 1.21 | 1.31 | 1.27 | 1.27 | 1.15 |
| 0.68 | 0.71 | 0.77 | 0.84 | 0.98 | 1.09 | 1.18 | 1.15 | 1.14 | 1.03 |
| 0.65 | 0.68 | 0.73 | 0.80 | 0.93 | 1.03 | 1.12 | 1.09 | 1.09 | 0.98 |
| 0.62 | 0.65 | 0.69 | 0.76 | 0.89 | 0.99 | 1.07 | 1.04 | 1.04 | 0.94 |
| 0.53 | 0.55 | 0.59 | 0.65 | 0.76 | 0.84 | 0.91 | 0.89 | 0.89 | 0.80 |
| 0.47 | 0.50 | 0.53 | 0.59 | 0.68 | 0.76 | 0.82 | 0.80 | 0.79 | 0.72 |
| 0.42 | 0.45 | 0.48 | 0.53 | 0.61 | 0.68 | 0.74 | 0.72 | 0.71 | 0.65 |
| 0.37 | 0.39 | 0.42 | 0.46 | 0.53 | 0.59 | 0.64 | 0.63 | 0.62 | 0.56 |
| 0.34 | 0.36 | 0.39 | 0.43 | 0.50 | 0.55 | 0.60 | 0.58 | 0.58 | 0.53 |
| 0.31 | 0.32 | 0.35 | 0.38 | 0.44 | 0.49 | 0.53 | 0.52 | 0.52 | 0.47 |
| 0.28 | 0.30 | 0.32 | 0.35 | 0.41 | 0.45 | 0.49 | 0.48 | 0.47 | 0.43 |
| 0.27 | 0.28 | 0.30 | 0.33 | 0.39 | 0.43 | 0.47 | 0.45 | 0.45 | 0.41 |
| 0.27 | 0.29 | 0.31 | 0.34 | 0.39 | 0.44 | 0.47 | 0.46 | 0.46 | 0.42 |
| 0.27 | 0.29 | 0.31 | 0.34 | 0.39 | 0.44 | 0.48 | 0.46 | 0.46 | 0.42 |

Average Ratio for 348 through 372 for Accident Year: $\quad \frac{2017}{0.44} \quad \frac{2018}{0.44} \quad \frac{2019}{0.45}$

Notes:
$(21)=(19) /(20)$


Notes:
(23) Section is based on latest year through 96 months and 3 -year average after 96 months. Development is cumulative through 384 months. Shaded sections represent LDFs to be applied to accident years 2017 through 2019.

|  | (24) Adjusted Paid Development Age-to-Age for Accident Year |  |  |  |  |  | (25) Adjusted Paid Development Cumulative for Accident Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indemnity |  |  | Medical |  |  | Indemnity |  |  | Medical |  |  |
| Age | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| 372 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 |
| 360 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.003 | 1.003 | 1.003 |
| 348 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.004 | 1.004 | 1.004 |
| 336 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.006 | 1.006 | 1.006 |
| 324 | 1.000 | 1.000 | 1.000 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.007 | 1.007 | 1.007 |
| 312 | 1.000 | 1.000 | 1.000 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.009 | 1.009 | 1.009 |
| 300 | 1.000 | 1.000 | 1.000 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.011 | 1.011 | 1.011 |
| 288 | 1.001 | 1.001 | 1.001 | 1.002 | 1.002 | 1.002 | 1.003 | 1.003 | 1.003 | 1.013 | 1.013 | 1.013 |
| 276 | 1.001 | 1.001 | 1.001 | 1.002 | 1.002 | 1.002 | 1.004 | 1.004 | 1.004 | 1.015 | 1.015 | 1.015 |
| 264 | 1.001 | 1.001 | 1.001 | 1.003 | 1.003 | 1.003 | 1.004 | 1.004 | 1.004 | 1.017 | 1.018 | 1.018 |
| 252 | 1.003 | 1.003 | 1.003 | 1.008 | 1.008 | 1.008 | 1.007 | 1.007 | 1.007 | 1.025 | 1.025 | 1.025 |
| 240 | 1.003 | 1.003 | 1.003 | 1.008 | 1.008 | 1.008 | 1.010 | 1.010 | 1.010 | 1.033 | 1.033 | 1.033 |
| 228 | 1.003 | 1.003 | 1.003 | 1.008 | 1.008 | 1.008 | 1.013 | 1.013 | 1.013 | 1.041 | 1.041 | 1.041 |
| 216 | 1.004 | 1.004 | 1.004 | 1.009 | 1.009 | 1.009 | 1.017 | 1.017 | 1.017 | 1.050 | 1.050 | 1.051 |
| 204 | 1.004 | 1.004 | 1.004 | 1.009 | 1.009 | 1.009 | 1.021 | 1.021 | 1.021 | 1.060 | 1.060 | 1.060 |
| 192 | 1.006 | 1.006 | 1.006 | 1.010 | 1.010 | 1.010 | 1.027 | 1.027 | 1.027 | 1.071 | 1.071 | 1.071 |
| 180 | 1.007 | 1.007 | 1.007 | 1.012 | 1.012 | 1.012 | 1.035 | 1.035 | 1.035 | 1.083 | 1.084 | 1.084 |
| 168 | 1.009 | 1.009 | 1.009 | 1.013 | 1.013 | 1.013 | 1.044 | 1.044 | 1.044 | 1.097 | 1.097 | 1.097 |
| 156 | 1.010 | 1.010 | 1.010 | 1.015 | 1.015 | 1.015 | 1.054 | 1.054 | 1.054 | 1.113 | 1.113 | 1.113 |
| 144 | 1.013 | 1.013 | 1.013 | 1.016 | 1.016 | 1.016 | 1.068 | 1.068 | 1.068 | 1.131 | 1.132 | 1.132 |
| 132 | 1.015 | 1.015 | 1.015 | 1.019 | 1.019 | 1.019 | 1.084 | 1.084 | 1.084 | 1.153 | 1.153 | 1.153 |
| 120 | 1.019 | 1.019 | 1.019 | 1.020 | 1.020 | 1.020 | 1.105 | 1.105 | 1.105 | 1.176 | 1.176 | 1.176 |
| 108 | 1.023 | 1.023 | 1.023 | 1.025 | 1.025 | 1.025 | 1.130 | 1.130 | 1.130 | 1.206 | 1.206 | 1.206 |
| 96 | 1.027 | 1.027 | 1.027 | 1.029 | 1.029 | 1.029 | 1.161 | 1.161 | 1.161 | 1.241 | 1.241 | 1.241 |
| 84 | 1.035 | 1.035 | 1.035 | 1.039 | 1.039 | 1.039 | 1.202 | 1.202 | 1.202 | 1.290 | 1.290 | 1.290 |
| 72 | 1.044 | 1.044 | 1.044 | 1.048 | 1.048 | 1.048 | 1.255 | 1.255 | 1.255 | 1.352 | 1.352 | 1.353 |
| 60 | 1.071 | 1.071 | 1.071 | 1.076 | 1.076 | 1.076 | 1.344 | 1.344 | 1.344 | 1.455 | 1.455 | 1.455 |
| 48 | 1.119 | 1.119 | 1.119 | 1.111 | 1.111 | 1.111 | 1.504 | 1.504 | 1.504 | 1.617 | 1.617 | 1.617 |
| 36 | 1.230 | 1.230 | 1.230 | 1.197 | 1.197 | 1.197 | 1.851 | 1.851 | 1.851 | 1.935 | 1.935 | 1.935 |
| 24 | 1.569 | 1.569 | 1.569 | 1.391 | 1.391 | 1.391 |  | 2.904 | 2.904 |  | 2.692 | 2.693 |
| 12 | 3.109 | 3.109 | 3.109 | 2.378 | 2.378 | 2.378 |  |  | 9.030 |  |  | 6.402 |

(26) Difference from Histoircal Selected @12/31/2019

| $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $-0.8 \%$ | $-0.8 \%$ | $-0.8 \%$ | $-3.1 \%$ | $-3.1 \%$ | $-3.1 \%$ |

Notes:
(24) Equal to Item 23 (Selected) through 252 months. Equal to [(23) - 1.0] * (21) + 1.0 after 252 months.
(25) Based on Item 24.
$(26)=(25) /(23)-1.0$

## Retrospective Review of Relationship between Open Claim Rate and Paid Medical Development Example from Base Calendar Year of 2011

| A. Share of Ultimate Claims Open at Age |  |  |  |
| :--- | :--- | :--- | :--- |
| $\underline{\text { AY }}$ | $\underline{252}$ | $\underline{264}$ | $\underline{276}$ |
| 1989 |  |  | $0.6 \%$ |
| 1990 |  | $0.5 \%$ | $0.5 \%$ |
| 1991 | $0.6 \%$ | $0.6 \%$ | $0.5 \%$ |
| 1992 | $0.6 \%$ | $0.6 \%$ | $0.5 \%$ |
| 1993 | $0.8 \%$ | $0.7 \%$ | $0.6 \%$ |
| 1994 | $1.0 \%$ | $0.9 \%$ | $0.8 \%$ |
| 1995 | $1.1 \%$ | $1.0 \%$ | $0.9 \%$ |
| 1996 | $1.1 \%$ | $1.0 \%$ | $0.9 \%$ |
| 1997 | $1.2 \%$ | $1.1 \%$ |  |
| 1998 | $1.3 \%$ |  |  |

C. Paid Medical Age-to-Age Factor

| $\frac{\text { AY }}{1989}$ | $\underline{252-264}$ |  | $\underline{264-276}$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | $\underline{276-288}$ |  |
| 1990 |  | 1.006 | 1.004 |  |
| 1991 | 1.006 | 1.005 | 1.006 |  |
| 1992 | 1.008 | 1.006 | 1.005 |  |
| 1993 | 1.011 | 1.007 | 1.006 |  |
| 1994 | 1.009 | 1.008 | 1.007 |  |
| 1995 | 1.009 | 1.012 | 1.007 |  |
| 1996 | 1.007 | 1.009 | 1.008 |  |
| 1997 | 1.007 | 1.007 |  |  |
| 1998 | 1.009 |  |  |  |


| B. Ratio of Open Claim | Share to Base CY (201 |
| :---: | :---: | ---: | :---: |
| $\underline{\text { AY }}$ $\underline{\mathbf{2 5 2}}$ $\underline{264}$ $\underline{\mathbf{2 7 6}}$ <br> 1989  1.000 0.849 <br> 1990  1.119 0.912 <br> 1991 1.000 1.150 0.970 <br> 1992 1.051 1.150  <br> 1993 1.272 1.383 1.165 <br> 1994 1.555 1.684 1.389 <br> 1995 1.768 1.946 1.577 <br> 1996 1.779 1.982 1.584 <br> 1997 2.034 2.149  <br> 1998 2.129   |  |


| D. Ratio of Age-to-Age Development to Base C |  |  |  |
| :---: | :---: | :---: | :---: |
| AY | 252-264 | 264-276 | 276-288 |
| 1989 |  |  | 1.000 |
| 1990 |  | 1.000 | 0.667 |
| 1991 | 1.000 | 0.833 | 1.000 |
| 1992 | 1.333 | 1.000 | 0.833 |
| 1993 | 1.833 | 1.167 | 1.000 |
| 1994 | 1.500 | 1.333 | 1.167 |
| 1995 | 1.500 | 2.000 | 1.167 |
| 1996 | 1.167 | 1.500 | 1.333 |
| 1997 | 1.167 | 1.167 |  |
| 1998 | 1.500 |  |  |

E. Implied Adjustment between Open Claim Share Change and Age-to-Age Development Change ${ }^{3}$

| $\frac{\text { AY }}{1989}$ | 252-264 |  | 264-276 |  |
| :--- | ---: | ---: | ---: | ---: |
| 1990 |  |  |  |  |
| 1991 |  | $-140 \%$ | $221 \%$ |  |
| 1992 | $660 \%$ | $0 \%$ | $55 \%$ |  |
| 1993 | $306 \%$ | $44 \%$ | $0 \%$ |  |
| 1994 | $90 \%$ | $49 \%$ | $43 \%$ |  |
| 1995 | $65 \%$ | $106 \%$ | $29 \%$ |  |
| 1996 | $21 \%$ | $51 \%$ | $57 \%$ |  |
| 1997 | $16 \%$ | $15 \%$ |  |  |
| 1998 | $44 \%$ |  |  |  |


| Averages |  |
| :--- | ---: |
| All | $106 \%$ |
| $\geq 3-\mathrm{yr}$ Gap | $79 \%$ |
| $\geq 5-\mathrm{yr}$ Gap | $42 \%$ |

${ }^{1}$ Ratio of Open Share from Item A to the Open Share for CY 2011 (green color in Item A).
${ }^{2}$ Ratio of [Factor-1.0] from Item C to the [Factor-1.0] for CY 2011 (green color in Item C).
${ }^{3}$ Equal to [ltem D-1.0] / [ltem B-1.0]. This is the implied adjustment to the open share change to make it comparable to the development change.

## Item AC20-04-04 COVID-19 Crisis

At the June 12, 2020 meeting, the Committee discussed the January 1, 2021 Pure Premium Rate Filing process at length. The Committee agreed that accident year 2019 and prior experience evaluated as of March 31, 2020 was largely unaffected by the COVID-19 pandemic, but accident year 2020 claim experience and premium levels are greatly affected. Since the experience of the 2020 year would not normally be used in the January 1, 2021 Pure Premium Rate Filing, the Committee agreed that using the accident year 2019 and prior pre-pandemic data evaluated as of March 31, 2020 as the basis for the filing with appropriate assumptions as to exposure, frequency and severity trend to policy year 2021 was a reasonable approach for the January 1, 2021 Pure Premium Rate Filing.

At the June 12, 2020 meeting, the Committee also reviewed a summary of key COVID-19 WCIRB ratemaking and research issues that included the statistical information needed to evaluate the issue, when the information is available and whether the information is critical to the January 1, 2021 Pure Premium Rate Filing projections. Among the key issues identified as critical to the January 1, 2021 Pure Premium Rate Filing projections was analysis of the impact of the pandemic-related economic slowdown on exposure and claim costs and the potential frequency of COVID-19 claims in 2021 and beyond. The impact of the economic slowdown on wage projections, class mix and frequency is discussed in Agenda Item AC20-08-04. A summary of projected COVID-19 claim costs for the January 1, 2021 through August 31,2021 policy period will be discussed at the meeting.

Staff will also present an update to the preliminary indicators of post-COVID-19 emerging claim experience that was initially presented at the June 12, 2020 meeting.

## Item AC20-06-01 <br> 3/31/2020 Experience - Review of Methodologies

At the June 12, 2020 meeting, the Committee reviewed a preliminary analysis of statewide experience through March 31, 2020. Exhibits 1 through 8 contain an updated preliminary analysis of March 31, 2020 experience. The methodologies used are consistent with those reviewed at the June 12, 2020 meeting. In total, approximately $100 \%$ of the market is included. Wage and loss levels are projected to November 1, 2021-the approximate midpoint of experience on policies incepting between January 1, 2021 and August $31,2021,{ }^{1}$ and premiums were adjusted to the industry average filed pure premium rate level as of January 1, 2020.

The projections shown in Exhibits 1 through 8 are preliminary and, in large part, prior to the impact of the COVID-19 pandemic and resulting economic downturn. At the June 12, 2020 meeting, the Committee discussed the critical components of the January 1, 2021 Pure Premium Rate Filing projections that may be significantly impacted by the COVID-19 crisis. Staff will present additional information on these components at the meeting (see Items AC20-04-04 and AC20-08-04).

As shown on Exhibit 8, the projected loss to the industry average filed pure premium ratio for January 1, 2021 through August 31, 2021 polices based on March 31, 2020 experience and the January 1, 2020 Pure Prelim Rate Filing loss development and trending methodologies and largely prior to the impact of the COVID-19 pandemic and the resulting economic slowdown is 0.571 . (The projected loss ratio based on the data presented at the June 12, 2020 meeting is $0.569 .{ }^{2}$ The projected loss ratio for policies incepting between July 1, 2020 and December 31, 2020 reviewed at the April 2, 2020 meeting based on December 31, 2019 experience was 0.584 .)

Additional supplemental information is included in Exhibits 9 through 12.

[^4]
## California Workers' Compensation

## Accident Year Experience as of March 31, 2020

| Year | Earned Premium | Paid Indemnity | Indemnity <br> Reserves | Paid <br> Medical** | Medical <br> Reserves | IBNR* | Total Incurred** | Loss <br> Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1987 | 4,373,509,816 | 1,506,581,121 | 6,983,407 | 1,335,377,316 | 44,279,337 | 50,419,639 | 2,943,640,820 | 0.673 |
| 1988 | 5,172,229,109 | 1,703,875,822 | 6,458,643 | 1,542,464,647 | 34,417,539 | 37,747,005 | 3,324,963,656 | 0.643 |
| 1989 | 5,675,115,503 | 1,940,152,253 | 6,816,066 | 1,798,960,215 | 51,453,347 | 40,047,984 | 3,837,429,865 | 0.676 |
| 1990 | 5,704,524,437 | 2,260,962,681 | 7,327,076 | 2,045,978,980 | 40,906,550 | 58,896,651 | 4,414,071,938 | 0.774 |
| 1991 | 5,866,491,692 | 2,478,655,908 | 15,729,942 | 2,202,401,910 | 48,094,600 | 55,794,315 | 4,800,676,675 | 0.818 |
| 1992 | 5,685,231,287 | 1,977,895,273 | 13,786,564 | 1,765,313,045 | 51,723,615 | 55,223,685 | 3,863,942,182 | 0.680 |
| 1993 | 5,934,618,230 | 1,694,444,969 | 12,984,535 | 1,516,338,467 | 62,883,556 | 45,253,182 | 3,331,904,709 | 0.561 |
| 1994 | 5,030,976,034 | 1,627,765,443 | 21,740,481 | 1,468,802,916 | 83,801,231 | 37,197,744 | 3,239,307,815 | 0.644 |
| 1995 | 3,789,174,380 | 1,766,957,340 | 26,055,810 | 1,626,396,784 | 92,481,760 | 47,132,765 | 3,559,024,459 | 0.939 |
| 1996 | 3,746,680,214 | 1,958,037,008 | 31,693,872 | 1,721,467,863 | 93,514,307 | 54,291,180 | 3,859,004,230 | 1.030 |
| 1997 | 3,926,898,608 | 2,320,858,576 | 37,004,610 | 2,019,379,717 | 121,974,525 | 93,454,281 | 4,592,671,709 | 1.170 |
| 1998 | 4,332,127,034 | 2,775,663,864 | 49,791,377 | 2,646,170,295 | 211,915,71 | 177,919,727 | 5,861,460,976 | 1.353 |
| 1999 | 4,550,437,880 | 3,058,455,609 | 52,765,081 | 3,042,521,969 | 169,133,198 | 242,865,344 | 6,565,741,201 | 1.443 |
| 2000 | 5,921,821,993 | 3,430,606,404 | 67,101,409 | 3,564,698,988 | 205,305,637 | 392,563,026 | 7,660,275,464 | 1.294 |
| 2001 | 10,118,688,616 | 4,845,593,327 | 99,518,290 | 5,374,235,665 | 346,062,260 | 591,752,362 | 11,257,161,904 | 1.113 |
| 2002 | 13,432,760,460 | 4,776,940,962 | 89,663,689 | 5,493,844,907 | 309,363,098 | 875,418,894 | 11,545,231,550 | 0.859 |
| 2003 | 19,472,988,351 | 4,553,717,488 | 146,596,578 | 5,069,50 | 343,967,143 | 1,228,419,721 | 11,342,202,738 | 0.582 |
| 2004 | 23,092,633,294 | 3,216,052,970 | 117,756,339 | 4,061,258, | 275,721,117 | 1,365,058,077 | 9,035,847,429 | 0.391 |
| 2005 | 21,394,600,575 | 2,533,693,094 | 102,222,811 | 3,656, | 263,688,739 | 1,096,615,955 | 7,652,883,994 | 0.358 |
| 2006 | 17,233,032,862 | 2,619,140,337 | 113,117,905 | 3,761,224,4 | 288,687,471 | 764,326,617 | 7,546,496,806 | 0.438 |
| 2007 | 13,276,770,615 | 2,763,508,131 | 131,925,738 | 4,037,349,711 | 328,613,704 | 699,243,500 | 7,960,640,784 | 0.600 |
| 2008 | 10,765,114,133 | 2,808,088,687 | 4,752,7 | 25,654,697 | 344,725,246 | 609,883,694 | 7,933,105,032 | 0.737 |
| 2009 | 8,901,420,752 | 2,682,006,901 | 143,113 | 3,831,422,827 | 347,688,212 | 477,492,147 | 7,481,723,904 | 0.841 |
| 2010 | 9,408,127,723 | 2,699,250,967 | 139,770,807 | 3,934,900,892 | 299,469,667 | 556,811,330 | 7,630,203,663 | 0.811 |
| 2011 | 10,141,174,044 | 2,665,257,728 | 150,568,88 | 3,553,502,212 | 338,343,769 | 749,413,786 | 7,457,086,379 | 0.735 |
| 2012 | 11,718,095,745 | 2,697,041,252 | 187,941,514 | 3,440,952,399 | 377,937,600 | 917,922,244 | 7,621,795,009 | 0.650 |
| 2013 | 14,186,071,217 | 2,720,7 | 205,970,987 | 3,268,505,783 | 395,440,928 | 1,527,448,614 | 8,118,165,665 | 0.572 |
| 2014 | 16,014,478,353 | 2,825,585,7 | 264,834,754 | 3,160,322,602 | 453,436,952 | 2,047,626,218 | 8,751,806,271 | 0.546 |
| 2015 | 17,059,790,388 | 2,787,269 | 353,242,253 | 3,000,974,440 | 595,588,668 | 3,005,392,351 | 9,742,467,436 | 0.571 |
| 2016 | 17,954,507,147 | 2,551,609,312 | 471,184,966 | 2,743,753,818 | 720,445,341 | 3,129,175,293 | 9,616,168,730 | 0.536 |
| 2017 | 17,671,411,530 | 2,180,409,778 | 687,355,209 | 2,401,169,952 | 1,002,022,857 | 3,392,418,832 | 9,663,376,628 | 0.547 |
| 2018 | 17,426,346,235 | 1,600,841,246 | 976,708,976 | 1,931,210,839 | 1,343,255,345 | 4,112,745,655 | 9,964,762,061 | 0.572 |
| 2019 | 16,120,444,510 | 722,775,823 | 1,021,097,928 | 1,045,964,570 | 1,579,983,484 | 5,014,273,572 | 9,384,095,377 | 0.582 |
| 2020 | 3,646,976,236 | 20,824,389 | 124,922,618 | 35,919,840 | 273,841,179 | 1,648,400,410 | 2,103,908,436 | 0.577 |

[^5]Source: WCIRB quarterly experience calls

III-D-2
WCIRB California ${ }^{\circledR}$
Incurred Indemnity Loss Development Factors

|  |  |  |  |  |  |  |  | ge-to-Age | (in month |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | $\underline{27 / 15}$ | 39/27 | 51/39 | 63/51 | 75/63 | 87/75 | 99/87 | 111/99 | 123/111 | 135/123 | 147/135 | 159/147 | 171/159 | 183/171 | 195/183 | $\underline{207 / 195}$ |
| 1994 |  |  |  |  |  |  |  |  |  |  | 1.002 | 1.001 | 1.002 | 0.999 | 0.999 | 1.001 |
| 1995 |  |  |  |  |  |  |  |  |  | 1.002 | 1.003 | 1.002 | 1.003 | 1.001 | 1.002 | 1.001 |
| 1996 |  |  |  |  |  |  |  |  | 1.003 | 1.002 | 1.002 | 1.002 | 1.000 | 0.999 | 1.002 | 1.001 |
| 1997 |  |  |  |  |  |  |  | 1.004 | 1.006 | 1.005 | 1.003 | 1.002 | 1.003 | 1.002 | 1.001 | 1.001 |
| 1998 |  |  |  |  |  |  | 1.005 | 1.008 | 1.004 | 1.002 | 1.002 | 1.004 | 1.004 | 1.000 | 1.003 | 1.001 |
| 1999 |  |  |  |  |  | 1.012 | 1.011 | 1.003 | 1.007 | 1.004 | 1.002 | 1.004 | 1.003 | 1.002 | 1.002 | 1.000 |
| 2000 |  |  |  |  | 1.018 | 1.014 | 1.009 | 1.007 | 1.005 | 1.004 | 1.004 | 1.003 | 1.002 | 1.003 | 1.002 | 1.000 |
| 2001 |  |  |  | 1.027 | 1.021 | 1.018 | 1.014 | 1.007 | 1.008 | 1.007 | 1.005 | 1.005 | 1.003 | 1.001 | 1.002 | 1.001 |
| 2002 |  |  | 1.051 | 1.032 | 1.027 | 1.019 | 1.010 | 1.011 | 1.009 | 1.006 | 1.005 | 1.002 | 1.001 | 1.003 | 1.002 | 1.002 |
| 2003 |  | 1.125 | 1.068 | 1.047 | 1.030 | 1.018 | 1.020 | 1.016 | 1.012 | 1.008 | 1.008 | 1.002 | 1.003 | 1.003 | 1.002 | 1.005 |
| 2004 | 1.283 | 1.140 | 1.063 | 1.042 | 1.037 | 1.026 | 1.025 | 1.015 | 1.015 | 1.007 | 1.006 | 1.003 | 1.001 | 1.002 | 1.005 |  |
| 2005 | 1.400 | 1.168 | 1.085 | 1.063 | 1.049 | 1.039 | 1.022 | 1.016 | 1.010 | 1.005 | 1.006 | 1.004 | 1.003 | 1.004 |  |  |
| 2006 | 1.519 | 1.188 | 1.100 | 1.072 | 1.051 | 1.031 | 1.020 | 1.012 | 1.008 | 1.008 | 1.005 | 1.002 | 1.005 |  |  |  |
| 2007 | 1.562 | 1.216 | 1.104 | 1.066 | 1.045 | 1.030 | 1.022 | 1.012 | 1.009 | 1.003 | 1.009 | 1.008 |  |  |  |  |
| 2008 | 1.618 | 1.245 | 1.116 | 1.063 | 1.043 | 1.025 | 1.018 | 1.011 | 1.008 | 1.007 | 1.007 |  |  |  |  |  |
| 2009 | 1.670 | 1.233 | 1.124 | 1.067 | 1.043 | 1.021 | 1.016 | 1.013 | 1.010 | 1.009 |  |  |  |  |  |  |
| 2010 | 1.665 | 1.250 | 1.112 | 1.062 | 1.037 | 1.023 | 1.017 | 1.011 | 1.009 |  |  |  |  |  |  |  |
| 2011 | 1.657 | 1.225 | 1.109 | 1.053 | 1.032 | 1.024 | 1.016 | 1.010 |  |  |  |  |  |  |  |  |
| 2012 | 1.662 | 1.218 | 1.093 | 1.059 | 1.033 | 1.022 | 1.014 |  |  |  |  |  |  |  |  |  |
| 2013 | 1.604 | 1.201 | 1.093 | 1.047 | 1.030 | 1.017 |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.625 | 1.224 | 1.097 | 1.049 | 1.023 |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.630 | 1.195 | 1.085 | 1.039 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 1.606 | 1.187 | 1.080 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 1.588 | 1.183 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.568 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 1.568 | 1.183 | 1.080 | 1.039 | 1.023 | 1.017 | 1.014 | 1.010 | 1.009 | 1.007 | 1.007 | 1.004 | 1.003 | 1.003 | 1.003 | 1.002 |
| Cumulative | 2.327 | 1.484 | 1.254 | 1.162 | 1.118 | 1.093 | 1.075 | 1.060 | 1.049 | 1.040 | 1.033 | 1.026 | 1.023 | 1.020 | 1.017 | 1.015 |





III-D-9
WCIRB California ${ }^{\circledR}$
III-D-10
Selected Indemnity Development Factors - Paid to Age 267, Incurred from Age 267 to Ultimate


III-D-11
Selected Indemnity Development Factors - Paid to Age 267, Incurred from Age 267 to Ultimate (Continued)

|  | Accident Year | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 279/267 | 291/279 | 303/291 | 315/303 | 327/315 | 339/327 | 351/339 | 363/351 | 375/363 | 387/375 | 399/387 | 411/399 | 423/411 | ULT/423Inc (c) |
|  | 1983 | 1.002 | 1.000 | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 1.000 |  |
|  | 1984 | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 0.999 | 1.000 | 1.000 | 1.001 | 1.001 |  |
|  | 1985 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |
|  | 1986 | 1.000 | 1.001 | 1.000 | 1.002 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 |  |  |
|  | 1987 | 1.000 | 1.000 | 1.002 | 1.001 | 1.000 | 1.000 | 1.001 | 1.000 | 1.001 | 1.000 | 1.001 |  |  |  |
|  | 1988 | 1.002 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.001 |  |  |  |  |
|  | 1989 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.001 | 1.000 |  |  |  |  |  |
|  | 1990 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |
|  | 1991 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 |  |  |  |  |  |  |  |
|  | 1992 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 |  |  |  |  |  |  |  |  |
|  | 1993 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |
|  | 1994 | 1.001 | 1.000 | 1.001 | 1.002 |  |  |  |  |  |  |  |  |  |  |
|  | 1995 | 1.001 | 1.000 | 1.001 |  |  |  |  |  |  |  |  |  |  |  |
|  | 1996 | 1.000 | 1.002 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1997 | 1.001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\Sigma$ | 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\bigcirc$ | Selected (a) | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 |  |
| 产 $\stackrel{\text { N }}{ }$ | Cumulative | 1.009 | 1.008 | 1.008 | 1.007 | 1.007 | 1.007 | 1.006 | 1.006 | 1.006 | 1.006 | 1.005 | 1.005 | 1.004 | 1.004 |
| $\stackrel{\square}{0}$ | (d) | The ULT/423Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339 -to- 351 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years. |  |  |  |  |  |  |  |  |  |  |  |  |  |

Paid Indemnity Loss Development Factors

## With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates

A. Total Reported Indemnity Claim Counts

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2011 |  |  |  |  |  | 118,057 |  |
| 2012 |  |  |  |  | 124,734 | 125,038 |  |
| 2013 |  |  |  | 137,696 | 138,887 | 133,240 |  |
| 2014 |  |  | 141,125 | 143,383 | 144,053 | 139,291 |  |
| 2015 | 130,819 | 143,982 | 146,759 | 147,507 | 139,487 |  |  |
| 2016 | 133,054 | 144,784 | 147,273 |  |  |  |  |
| 2017 | 135,505 | 147,945 |  |  |  |  |  |
| 2018 | 138,773 |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

B. Development of Total Reported Indemnity Claim Counts

| Accident | Age-to-Age Development (in months): |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-Ult |
| 2012 |  |  |  |  | 1.002 |  |
| 2013 |  |  |  | 1.004 | 1.001 |  |
| 2014 |  |  | 1.008 | 1.004 | 1.001 |  |
| 2015 |  | 1.016 | 1.005 | 1.003 |  |  |
| 2016 | 1.101 | 1.019 | 1.005 |  |  |  |
| 2017 | 1.088 | 1.017 |  |  |  |  |
| 2018 | 1.092 |  |  |  |  |  |
| Latest Year | 1.092 | 1.017 | 1.005 | 1.003 | 1.001 |  |
| Cumulative | 1.127 | 1.032 | 1.015 | 1.010 | 1.007 | 1.005 |
| Acc. Year | $\underline{2019}$ | $\underline{2018}$ | 2017 | $\underline{2016}$ | $\underline{2015}$ | $\underline{2014}$ |
| Ult. Claim Counts | 156,389 | 152,707 | 149,444 | 148,922 | 145,435 | 140,215 |

C. Closed Indemnity Claim Counts

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2011 |  |  |  |  |  | 104,094 |  |
| 2012 |  |  |  |  | 105,308 | 111,792 |  |
| 2013 |  |  |  |  | 104,691 | 114,901 |  |
| 2014 |  |  | 95,260 | 111,745 | 121,808 | 127,800 |  |
| 2015 |  | 77,963 | 102,951 | 119,252 | 128,566 |  |  |
| 2016 | 46,802 | 83,513 | 109,302 | 124,497 |  |  |  |
| 2017 | 50,699 | 88,131 | 112,161 |  |  |  |  |
| 2018 | 52,569 | 90,050 |  |  |  |  |  |
| 2019 | 53,895 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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

Paid Indemnity Loss Development Factors With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
D. Ultimate Indemnity Claim Settlement Ratio (a)

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2011 |  |  |  |  | $83.8 \%$ | $87.7 \%$ |  |
| 2012 |  |  |  |  | $78.1 \%$ | $85.7 \%$ |  |
| 2013 |  |  | $67.9 \%$ | $79.7 \%$ | $86.9 \%$ | $90.3 \%$ |  |
| 2014 |  | $53.6 \%$ | $70.8 \%$ | $82.0 \%$ | $88.4 \%$ |  |  |
| 2015 | $31.4 \%$ | $56.1 \%$ | $73.4 \%$ | $83.6 \%$ |  |  |  |
| 2016 | $33.9 \%$ | $59.0 \%$ | $75.1 \%$ |  |  |  |  |
| 2017 | $34.4 \%$ | $59.0 \%$ |  |  |  |  |  |
| 2018 | $34.5 \%$ |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | 75 |
| 2011 |  |  |  |  |  | 108,127 |
| 2012 |  |  |  |  | 111,048 | 114,497 |
| 2013 |  |  |  | 112,122 | 118,562 | 122,244 |
| 2014 |  |  | 105,234 | 117,218 | 123,951 | 127,800 |
| 2015 |  | 85,762 | 109,152 | 121,582 | 128,566 |  |
| 2016 | 51,322 | 87,818 | 111,770 | 124,497 |  |  |
| 2017 | 51,501 | 88,126 | 112,161 |  |  |  |
| 2018 | 52,626 | 90,050 |  |  |  |  |
| 2019 | 53,895 |  |  |  |  |  |

F. Average Paid Indemnity per Closed Claim

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

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

Paid Indemnity Loss Development Factors With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
G. Adjusted Average Paid Indemnity per Closed Claim (c)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  | 17,120 | 18,589 |
| 2012 |  |  |  | 18,119 |  |  |
| 2013 |  |  | 13,078 | 15,217 | 16,731 | 17,648 |
| 2014 |  | 8,545 | 1,042 | 15,684 | 17,280 | 18,242 |
| 2015 |  |  | 17,256 |  |  |  |
| 2016 | 3,416 | 8,292 | 12,458 | 15,085 |  |  |
| 2017 | 3,571 | 7,784 | 12,017 |  |  |  |
| 2018 | 8,204 |  |  |  |  |  |
| 2019 | 3,812 |  |  |  |  |  |
| 2020 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 |
| 2011 |  |  |  |  |  | 2,009,933 |
| 2012 |  |  |  |  | 1,901,170 | 2,074,519 |
| 2013 |  |  |  | 1,706,191 | 1,983,641 | 2,157,391 |
| 2014 |  |  | 1,376,227 | 1,840,067 | 2,141,836 | 2,331,271 |
| 2015 |  | 732,827 | 1,423,586 | 1,906,936 | 2,218,577 |  |
| 2016 | 185,563 | 728,208 | 1,392,471 | 1,878,099 |  |  |
| 2017 | 175,226 | 685,969 | 1,347,786 |  |  |  |
| 2018 | 187,908 | 738,795 |  |  |  |  |
| 2019 | 205,444 |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 51 | $\underline{63}$ | 75 |
| 2011 |  |  |  |  | 522,066 |
| 2012 |  |  |  | 626,216 | 500,429 |
| 2013 |  |  | 745,920 | 593,097 | 461,197 |
| 2014 |  |  | 751,500 | 589,298 | 463,732 |
| 2015 |  | 848,825 | 710,785 | 555,919 |  |
| 2016 | 458,630 | 824,626 | 665,539 |  |  |
| 2017 | 461,628 | 822,467 |  |  |  |
| 2018 | 493,585 | 857,088 |  |  |  |
| 2019 | 515,277 |  |  |  |  |

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

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

Paid Indemnity Loss Development Factors With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
J. Average Paid Indemnity per Open Claim for Indemnity Claims in Transition (e)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  |  | 37,391 |
| 2012 |  |  |  |  | 32,236 | 37,779 |
| 2013 |  |  |  | 26,644 | 32,342 | 37,563 |
| 2014 |  |  | 21,003 | 27,775 | 33,707 | 39,689 |
| 2015 |  | 13,439 | 21,679 | 28,660 | 34,939 |  |
| 2016 | 5,459 | 13,637 | 22,154 | 28,924 |  |  |
| 2017 | 5,605 | 10,090 | 23,507 |  |  |  |
| 2018 | 5,951 | 14,804 |  |  |  |  |
| 2019 | 6,071 |  |  |  |  |  |

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) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | 63 | 75 |
| 2011 |  |  |  |  |  | -150,796 |
| 2012 |  |  |  |  | -185,035 | -102,155 |
| 2013 |  |  |  | -197,965 | -118,403 | -41,394 |
| 2014 |  |  | -209,480 | -152,013 | -72,234 |  |
| 2015 |  | -104,810 | -134,454 | -66,777 |  |  |
| 2016 | -24,668 | -58,721 | -54,677 |  |  |  |
| 2017 | -4,496 | 50 |  |  |  |  |
| 2018 | -339 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  | 371,269 |
| 2012 |  |  |  | 441,181 | 398,274 |
| 2013 |  |  | 547,955 | 474,694 | 419,802 |
| 2014 |  |  | 599,487 | 517,064 | 463,732 |
| 2015 |  | 744,015 | 644,008 | 555,919 |  |
| 2016 | 433,961 | 765,905 | 665,539 |  |  |
| 2017 | 457,132 | 822,517 |  |  |  |
| 2018 | 493,245 | 857,088 |  |  |  |
| 2019 | 515,277 |  |  |  |  |

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

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

Paid Indemnity Loss Development Factors With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
M. Adjusted Total Paid Indemnity (in \$000) (h)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  |  | 2,381,203 |
| 2012 |  |  |  |  | 2,342,351 | 2,472,793 |
| 2013 |  |  |  | 2,254,147 | 2,458,334 | 2,577,194 |
| 2014 |  |  | 2,058,005 | 2,439,554 | 2,658,899 | 2,795,003 |
| 2015 |  | 1,476,842 | 2,165,671 | 2,550,944 | 2,774,496 |  |
| 2016 | 619,524 | 1,494,113 | 2,167,626 | 2,543,638 |  |  |
| 2017 | 632,358 | 1,508,486 | 2,173,148 |  |  |  |
| 2018 | 681,154 | 1,595,883 |  |  |  |  |
| 2019 | 720,721 |  |  |  |  |  |

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

| Accident |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{5}-27$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2011 |  |  |  |  |  |
| 2012 |  |  |  | 1.091 | 1.056 |
| 2013 |  |  | 1.185 | 1.098 | 1.051 |
| 2014 |  | 1.466 | 1.178 | 1.088 |  |
| 2015 |  |  |  |  |  |
| 2016 | 2.412 | 1.451 | 1.173 |  |  |
| 2017 | 2.385 | 1.441 |  |  |  |
| 2018 | 2.343 |  |  |  |  |
|  |  |  |  |  |  |
| Latest Year | 2.343 | 1.441 | 1.173 | 1.088 | 1.051 |
| 3-Year Average | 2.380 | 1.453 | 1.179 | 1.089 | 1.052 |

O. Paid Indemnity Loss Development Factors (i)

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2012 |  |  |  | 1.110 | 1.075 |
| 2013 |  |  | 1.215 | 1.109 | 1.063 |
| 2014 |  | 1.476 | 1.202 | 1.100 |  |
| 2015 |  | 1.459 | 1.188 |  |  |
| 2016 | 2.403 | 1.450 |  |  |  |
| 2017 | 2.391 | 1.441 |  |  |  |
| 2018 | 2.343 |  |  |  |  |

(h) Each amount is the sum of the adjusted paid indemnity on closed claims (Item H ) and the adjusted paid indemnity on open claims (Item L).
(i) Development factors are based on paid indemnity losses from the same insurer mix as that used in the adjustment for changes in claim settlement rates and applied in the calculation of the development factors in Item N .

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

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

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2012 |  |  |  |  | $-1.84 \%$ |
| 2013 |  |  |  | $-1.79 \%$ | $-1.38 \%$ |
| 2014 |  |  | $-2.43 \%$ | $-1.71 \%$ | $-1.03 \%$ |
| 2015 |  | $-0.62 \%$ | $-1.98 \%$ | $-1.12 \%$ |  |
| 2016 | $0.37 \%$ | $-0.60 \%$ | $-1.18 \%$ |  |  |
| 2017 | $-0.21 \%$ | $0.00 \%$ |  |  |  |
| 2018 | $-0.02 \%$ |  |  |  |  |

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

(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
III-D-19
Selected Medical Development Factors - Paid to Age 267, Incurred from Age 267 to Ultimate (Continued)


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 | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  |  | 118,057 |
| 2012 |  |  |  |  | 124,734 | 125,038 |
| 2013 |  |  |  | 132,687 | 133,240 | 133,420 |
| 2014 |  |  | 137,696 | 138,801 | 139,291 | 139,484 |
| 2015 |  | 141,125 | 143,383 | 144,053 | 144,477 |  |
| 2016 | 130,819 | 143,982 | 146,759 | 147,507 |  |  |
| 2017 | 133,054 | 144,784 | 147,273 |  |  |  |
| 2018 | 135,505 | 147,945 |  |  |  |  |
| 2019 | 138,773 |  |  |  |  |  |

B. Development of Total Reported Indemnity Claim Counts

| Accident | Age-to-Age Development (in months): |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-Ult |
| 2012 |  |  |  |  | 1.002 |  |
| 2013 |  |  |  | 1.004 | 1.001 |  |
| 2014 |  |  | 1.008 | 1.004 | 1.001 |  |
| 2015 |  | 1.016 | 1.005 | 1.003 |  |  |
| 2016 | 1.101 | 1.019 | 1.005 |  |  |  |
| 2017 | 1.088 | 1.017 |  |  |  |  |
| 2018 | 1.092 |  |  |  |  |  |
| Latest Year | 1.092 | 1.017 | 1.005 | 1.003 | . 00 |  |
| Cumulative | 1.127 | 1.032 | 1.015 | 1.010 | 1.007 | 1.005 |
| Acc. Year | $\underline{2019}$ | $\underline{2018}$ | $\underline{2017}$ | 2016 | $\underline{2015}$ | $\underline{2014}$ |
| Ult. Claim Counts | 156,389 | 152,707 | 149,444 | 48,922 | 45,435 | 140,215 |

## C. Closed Indemnity Claim Counts

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2011 |  |  |  |  |  | 104,094 |
| 2012 |  |  |  |  | 105,308 | 111,792 |
| 2013 |  |  |  | 104,691 | 114,901 | 121,142 |
| 2014 |  |  | 95,260 | 111,745 | 121,808 | 127,800 |
| 2015 |  | 77,963 | 102,951 | 119,252 | 128,566 |  |
| 2016 | 46,80 | 83,513 | 109,302 | 124,497 |  |  |
| 2017 | 50,699 | 88,131 | 112,161 |  |  |  |
| 2018 | 52,569 | 90,050 |  |  |  |  |
| 2019 | 53,895 |  |  |  |  |  |

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

Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
D. Ultimate Indemnity Claim Settlement Ratio (a)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ |
| 2011 |  |  |  |  |  | 87.7\% |
| 2012 |  |  |  |  | 83.8\% | 89.0\% |
| 2013 |  |  |  | 78.1\% | 85.7\% | 90.3\% |
| 2014 |  |  | 67.9\% | 79.7\% | 86.9\% | 91.1\% |
| 2015 |  | 53.6\% | 70.8\% | 82.0\% | 88.4\% |  |
| 2016 | 31.4\% | 56.1\% | 73.4\% | 83.6\% |  |  |
| 2017 | 33.9\% | 59.0\% | 75.1\% |  |  |  |
| 2018 | 34.4\% | 59.0\% |  |  |  |  |
| 2019 | 34.5\% |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 |
| 2011 |  |  |  |  |  | 108,127 |
| 2012 |  |  |  |  | 111,048 | 114,497 |
| 2013 |  |  |  | 112,122 | 118,562 | 122,244 |
| 2014 |  |  | 105,234 | 117,218 | 123,951 | 127,800 |
| 2015 |  | 85,762 | 109,152 | 121,582 | 128,566 |  |
| 2016 | 51,322 | 87,818 | 111,770 | 124,497 |  |  |
| 2017 | 51,501 | 88,126 | 112,161 |  |  |  |
| 2018 | 52,626 | 90,050 |  |  |  |  |
| 2019 | 53,895 |  |  |  |  |  |

F. Average Paid Medical per Closed Indemnity Claim

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 51 | 63 | 75 |
| 2011 |  |  |  |  | 20,750 |
| 2012 |  |  |  | 17,545 | 19,756 |
| 2013 |  |  | 14,304 | 16,973 | 18,828 |
| 2014 |  |  | 14,384 | 16,831 | 18,480 |
| 2015 |  | 7,263 | 14,566 | 16,561 |  |
| 2016 | 3,462 | 7,489 | 14,059 |  |  |
| 2017 | 3,565 | 7,704 |  |  |  |
| 2018 | 3,665 | 7,988 |  |  |  |
| 2019 | 3,912 |  |  |  |  |

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

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

Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
G. Adjusted Average Paid Medical per Closed Indemnity Claim (c)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | 75 |
| 2011 |  |  |  |  |  | 22,672 |
| 2012 |  |  |  |  | 19,489 | 20,776 |
| 2013 |  |  |  | 16,201 | 18,038 | 19,156 |
| 2014 |  |  | 12,925 | 15,667 | 17,403 | 18,480 |
| 2015 |  | 8,345 | 12,469 | 15,041 | 16,561 |  |
| 2016 | 3,807 | 8,023 | 11,721 | 14,059 |  |  |
| 2017 | 3,625 | 7,704 | 11,398 |  |  |  |
| 2018 | 3,670 | 7,988 |  |  |  |  |
| 2019 | 3,912 |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 |
| 2011 |  |  |  |  |  | 2,451,448 |
| 2012 |  |  |  |  | 2,164,244 | 2,378,763 |
| 2013 |  |  |  | 1,816,444 | 2,138,615 | 2,341,655 |
| 2014 |  |  | 1,360,127 | 1,836,483 | 2,157,162 | 2,361,683 |
| 2015 |  | 715,723 | 1,360,973 | 1,828,752 | 2,129,175 |  |
| 2016 | 195,386 | 704,563 | 1,310,103 | 1,750,271 |  |  |
| 2017 | 186,674 | 678,903 | 1,278,441 |  |  |  |
| 2018 | 193,121 | 719,277 |  |  |  |  |
| 2019 | 210,837 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 51 | 63 | $\underline{75}$ |
| 2011 |  |  |  |  | 736,639 |
| 2012 |  |  |  | 800,570 | 651,489 |
| 2013 |  |  | 864,337 | 689,196 | 549,374 |
| 2014 |  |  | 793,689 | 624,796 | 505,334 |
| 2015 |  | 883,986 | 730,322 | 595,434 |  |
| 2016 | 552,356 | 864,167 | 709,347 |  |  |
| 2017 | 568,207 | 856,257 |  |  |  |
| 2018 | 596,167 | 903,593 |  |  |  |
| 2019 | 587,536 |  |  |  |  |

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

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

Paid Medical Loss Development Factors With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
J. Average Paid Medical per Open Indemnity Claim for Indemnity Claims in Transition (e)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  |  | 52,758 |
| 2012 |  |  |  |  | 41,211 | 49,183 |
| 2013 |  |  |  | 30,874 | 37,582 | 44,745 |
| 2014 |  |  | 21,993 | 29,334 | 35,737 | 43,250 |
| 2015 |  | 13,996 | 21,800 | 29,447 | 37,423 |  |
| 2016 | 6,574 | 14,291 | 22,320 | 30,828 |  |  |
| 2017 | 6,900 | 15,114 | 23,527 |  |  |  |
| 2018 | 7,188 | 15,607 |  |  |  |  |
| 2019 | 6,922 |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 |
| 2011 |  |  |  |  |  | -212,775 |
| 2012 |  |  |  |  | -236,554 | -132,992 |
| 2013 |  |  |  | -229,392 | -137,588 | -49,308 |
| 2014 |  |  | -219,362 | -160,547 | -76,585 |  |
| 2015 |  | -109,151 | -135,203 | -68,612 |  |  |
| 2016 | -29,710 | -61,536 | -55,087 |  |  |  |
| 2017 | -5,533 | 62 |  |  |  |  |
| 2018 | -410 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 51 | 63 | $\underline{75}$ |
| 2011 |  |  |  |  | 523,864 |
| 2012 |  |  |  | 564,017 | 518,497 |
| 2013 |  |  | 634,945 | 551,608 | 500,065 |
| 2014 |  |  | 633,143 | 548,211 | 505,334 |
| 2015 |  | 774,834 | 661,710 | 595,434 |  |
| 2016 | 522,647 | 802,631 | 709,347 |  |  |
| 2017 | 562,674 | 856,319 |  |  |  |
| 2018 | 595,758 | 903,593 |  |  |  |
| 2019 | 587,536 |  |  |  |  |

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

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

Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
M. Paid Medical on Medical-Only Claims (in \$000)

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2011 |  |  |  |  | 221,203 | 225,191 |  |
| 2012 |  |  |  | 221,653 | 228,317 | 230,781 |  |
| 2013 |  |  | 239,463 | 246,220 | 248,931 | 251,794 |  |
| 2014 |  | 241,457 | 250,793 | 256,181 | 261,405 |  |  |
| 2015 | 217,062 | 258,096 | 268,099 | 275,130 |  |  |  |
| 2016 | 236,913 | 276,919 | 287,435 |  |  |  |  |
| 2017 | 250,889 | 300,289 |  |  |  |  |  |
| 2018 | 244,471 |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2011 |  |  |  |  |  | $3,459,475$ |
| 2012 |  |  |  | $2,313,529$ | $2,715,846$ | $2,954,303$ |
| 2013 |  |  | $1,732,014$ | $2,357,984$ | $2,746,644$ | $2,986,014$ |
| 2014 | 935,095 | $1,765,290$ | $2,359,170$ | $2,734,748$ |  |  |
| 2015 | 986,261 | $1,812,141$ | $2,391,939$ |  |  |  |
| 2016 | $1,039,767$ | $1,923,159$ |  |  |  |  |
| 2017 | $1,042,845$ |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2012 |  |  |  | 1.092 | 1.059 |
| 2013 |  |  | 1.174 | 1.088 | 1.053 |
| 2014 |  | 1.361 | 1.165 | 1.087 |  |
| 2015 |  |  | 1.888 | 1.336 | 1.159 |
| 2016 | 1.837 | 1.320 |  |  |  |
| 2017 | 1.850 |  |  |  |  |
| 2018 | 1.850 | 1.320 | 1.159 | 1.087 | 1.056 |

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

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

Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims for Changes in Claim Settlement Rates
P. Paid Medical Loss Development Factors (i)

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2012 |  |  |  |  | 1.075 |
| 2013 |  |  |  | 1.110 | 1.067 |
| 2014 |  |  | 1.194 | 1.105 | 1.067 |
| 2015 |  | 1.359 | 1.185 | 1.096 |  |
| 2016 | 1.876 | 1.339 | 1.168 |  |  |
| 2017 | 1.838 | 1.320 |  |  |  |
| 2018 | 1.850 |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 |
| 2012 |  |  |  |  | -1.54\% |
| 2013 |  |  |  | -1.64\% | -1.37\% |
| 2014 |  |  | -1.65\% | -1.51\% | -1.03\% |
| 2015 |  | 0.18\% | -1.68\% | -0.84\% |  |
| 2016 | 0.62\% | -0.23\% | -0.77\% |  |  |
| 2017 | -0.04\% | 0.00\% |  |  |  |
| 2018 | 0.00\% |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2012 |  |  |  | 1.101 | 1.065 |
| 2013 |  |  | 1.183 | 1.095 | 1.059 |
| 2014 |  |  | 1.367 | 1.170 | 1.090 |
| 2015 | 1.894 | 1.341 | 1.161 |  |  |
| 2016 | 1.843 | 1.321 |  |  |  |
| 2017 |  |  |  |  |  |
| 2018 | 1.849 | 1.321 | 1.161 | 1.090 | 1.059 |
|  | 1.862 | 1.343 | 1.171 | 1.095 | 1.061 |

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

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

## Developed Indemnity Loss Ratios Using Selected Loss Development Factors Adjusted for Changes in Claim Settlement Rates Based on Experience as of March 31, 2020

Development Factors

| AccidentYear | (1) | (2) | (3) | (4) <br> Projected Ultimate |
| :---: | :---: | :---: | :---: | :---: |
|  | Paid or |  |  |  |
|  | Incurred Loss |  |  |  |
|  | Ratio (a) | Annual (b) | Cumulative | Loss Ratio |
|  |  |  |  | (4) $=(1) \times(3)$ |
| 1986 | 0.396 | 1.000 | 1.004 | 0.398 |
| 1987 | 0.346 | 1.001 | 1.005 | 0.348 |
| 1988 | 0.331 | 1.000 | 1.005 | 0.332 |
| 1989 | 0.343 | 1.000 | 1.006 | 0.345 |
| 1990 | 0.398 | 1.000 | 1.006 | 0.400 |
| 1991 | 0.425 | 1.000 | 1.006 | 0.428 |
| 1992 | 0.350 | 1.001 | 1.006 | 0.353 |
| 1993 | 0.288 | 1.001 | 1.007 | 0.290 |
| 1994 | 0.328 | 1.000 | 1.007 | 0.330 |
| 1995 | 0.473 | 1.000 | 1.007 | -0.477 |
| 1996 | 0.531 | 1.000 | 1.008 | 0.535 |
| 1997 | 0.600 | 1.000 | 1.008 | 0.605 |
| 1998 | 0.652 | 1.001 | 1.009 | 0.658 |
| 1999 | 0.672 | 1.003 | 1.030 | 0.692 |
| 2000 | 0.579 | 1.003 | 1.033 | 0.598 |
| 2001 | 0.479 | 1.003 | 1.036 | 0.496 |
| 2002 | 0.356 | 1.004 | 1.040 | 0.370 |
| 2003 | 0.234 | 1.005 | 1.044 | 0.244 |
| 2004 | 0.139 | 1.006 | 1.050 | 0.146 |
| 2005 | 0.118 | 1.007 | 1.058 | 0.125 |
| 2006 | 0.152 | 1.009 | 1.067 | 0.162 |
| 2007 | 0.208 | 1.009 | 1.077 | 0.224 |
| 2008 | 0.261 | 1.012 | 1.090 | 0.284 |
| 2009 | 0.301 | 1.015 | 1.106 | 0.333 |
| 2010 | 0.287 | 1.017 | 1.125 | 0.323 |
| 2011 | 0.263 | 1.022 | 1.149 | 0.302 |
| 2012 | 0.230 | 1.023 | 1.176 | 0.271 |
| 2013 | 0.192 | 1.031 | 1.212 | 0.232 |
| 2014 | 0.176 | 1.038 | 1.258 | 0.222 |
| 2015 | 0.163 | 1.051 | 1.322 | 0.216 |
| 2016 | 0.142 | 1.088 | 1.439 | 0.204 |
| 2017 | 0.123 | 1.174 | 1.689 | 0.208 |
| 2018 | 0.092 | 1.441 | 2.434 | 0.224 |
| 2019 | 0.045 | 2.345 | 5.706 | 0.256 |

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

# Developed Medical Loss Ratios Using Selected Loss Development Factors <br> Adjusted for Changes in Claim Settlement Rates Based on Experience as of March 31, 2020 

|  | (1) | (2) | (3) | (4) |  | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year |  | Adjusted Paid or Incurred Loss Ratio (b) | Development Factors |  |  | $\begin{gathered} \text { Adjusted } \\ \text { Developed } \\ \text { Loss Ratio (d) } \\ \hline \end{gathered}$ | Projected Ultimate Loss Ratio |
|  |  |  | Cumulative |  |  |  |  |
|  | Paid or Incurred |  |  | Unadjusted for | Adjusted for |  |  |
|  | Loss Ratio (a) |  | Annual (c) | Reforms (c) | Reforms (c) |  |  |
|  |  |  |  |  |  | (2) $\times$ (5) | (1) + ((6)-(2)) |
| 1986 | 0.332 | 0.332 | 1.000 | 1.023 | 1.023 | 0.340 | 0.340 |
| 1987 | 0.315 | 0.315 | 0.998 | 1.021 | 1.021 | 0.322 | 0.322 |
| 1988 | 0.305 | 0.305 | 1.002 | 1.023 | 1.023 | 0.312 | 0.312 |
| 1989 | 0.326 | 0.326 | 1.001 | 1.024 | 1.024 | 0.334 | 0.334 |
| 1990 | 0.366 | 0.366 | 1.000 | 1.024 | 1.024 | 0.374 | 0.374 |
| 1991 | 0.384 | 0.384 | 0.999 | 1.023 | 1.023 | 0.392 | 0.392 |
| 1992 | 0.320 | 0.320 | 1.000 | 1.023 | 1.023 | 0.327 | 0.327 |
| 1993 | 0.266 | 0.266 | 1.001 | 1.024 | 1.024 | 0.272 | 0.272 |
| 1994 | 0.309 | 0.309 | 1.000 | 1.023 | 1.023 | 0.316 | 0.316 |
| 1995 | 0.454 | 0.454 | 1.001 | 1.025 | 1.025 | 0.465 | 0.465 |
| 1996 | 0.484 | 0.484 | 1.000 | 1.024 | 1.024 | 0.496 | 0.496 |
| 1997 | 0.545 | 0.545 | 0.999 | 1.024 | 1.024 | 0.558 | 0.558 |
| 1998 | 0.660 | 0.660 | 0.999 | 1.022 | 1.022 | 0.674 | 0.674 |
| 1999 | 0.669 | 0.596 | 1.008 | 1.107 | 1.107 | 0.660 | 0.732 |
| 2000 | 0.602 | 0.537 | 1.009 | 1.116 | 1.116 | 0.600 | 0.664 |
| 2001 | 0.531 | 0.476 | 1.008 | 1.126 | 1.126 | 0.536 | 0.591 |
| 2002 | 0.409 | 0.368 | 1.009 | 1.136 | 1.136 | 0.418 | 0.459 |
| 2003 | 0.260 | 0.235 | 1.010 | 1.147 | 1.147 | 0.269 | 0.295 |
| 2004 | 0.176 | 0.159 | 1.011 | 1.160 | 1.160 | 0.184 | 0.201 |
| 2005 | 0.171 | 0.155 | 1.012 | 1.174 | 1.174 | 0.182 | 0.198 |
| 2006 | 0.218 | 0.198 | 1.014 | 1.191 | 1.191 | 0.236 | 0.256 |
| 2007 | 0.304 | 0.277 | 1.015 | 1.208 | 1.208 | 0.335 | 0.362 |
| 2008 | 0.374 | 0.343 | 1.017 | 1.229 | 1.229 | 0.421 | 0.452 |
| 2009 | 0.430 | 0.397 | 1.019 | 1.253 | 1.253 | 0.497 | 0.531 |
| 2010 | 0.418 | 0.388 | 1.020 | 1.278 | 1.278 | 0.496 | 0.526 |
| 2011 | 0.350 | 0.328 | 1.026 | 1.311 | 1.311 | 0.431 | 0.453 |
| 2012 | 0.294 | 0.278 | 1.029 | 1.349 | 1.349 | 0.375 | 0.391 |
| 2013 | 0.230 | 0.220 | 1.039 | 1.402 | 1.402 | 0.308 | 0.319 |
| 2014 | 0.197 | 0.192 | 1.046 | 1.467 | 1.456 | 0.279 | 0.285 |
| 2015 | 0.176 | 0.173 | 1.059 | 1.553 | 1.530 | 0.265 | 0.268 |
| 2016 | 0.153 | 0.152 | 1.090 | 1.692 | 1.651 | 0.250 | 0.251 |
| 2017 | 0.136 | 0.135 | 1.161 | 1.965 | 1.892 | 0.256 | 0.257 |
| 2018 | 0.111 | 0.111 | 1.321 | 2.596 | 2.500 | 0.277 | 0.277 |
| 2019 | 0.065 | - 0.065 | 1.849 | 4.799 | 4.622 | 0.300 | 0.300 |

(a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
(b) Based on experience evaluated as of March 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

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

## Annual Medical Cost Level Change - Non-Legislative


(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) <br> Annual Legislative Cost Impact on Medical Severity (a) | (2) <br> Annual Legislative Cost Impact on Medical Due to Frequency Changes (b) | (3) <br> Annual Total Legislative Cost Impact on Medical (c) |
| :---: | :---: | :---: | :---: |
| 1987 | 0.0\% | 0.0\% | 0.0\% |
| 1988 | 0.0\% | 0.0\% | 0.0\% |
| 1989 | 0.0\% | 0.0\% | 0.0\% |
| 1990 | -0.7\% | 19.9\% | 19.1\% |
| 1991 | -1.6\% | 14.7\% | 12.9\% |
| 1992 | 0.5\% | -8.4\% | -7.9\% |
| 1993 | -0.7\% | -18.1\% | -18.7\% |
| 1994 | -2.6\% | 0.3\% | -2.3\% |
| 1995 | 0.0\% | 0.5\% | 0.5\% |
| 1996 | 0.0\% | 0.4\% | 0.4\% |
| 1997 | 0.0\% | 0.2\% | 0.2\% |
| 1998 | 12.6\% | 0.0\% | 12.6\% |
| 1999 | 12.6\% | 0.0\% | 12.6\% |
| 2000 | 7.0\% | 0.0\% | 7.0\% |
| 2001 | 6.6\% | 0.0\% | 6.6\% |
| 2002 | -5.6\% | 0.0\% | -5.6\% |
| 2003 | -6.0\% | 0.0\% | -6.0\% |
| 2004 | -24.4\% | -12.5\% | -33.9\% |
| 2005 | 0.0\% | -13.9\% | -13.9\% |
| 2006 | 0.1\% | -5.2\% | -5.1\% |
| 2007 | 0.1\% | 0.0\% | 0.1\% |
| 2008 | 0.2\% | 0.3\% | 0.5\% |
| 2009 | 0.0\% | 1.0\% | 1.0\% |
| 2010 | 0.0\% | 0.0\% | 0.0\% |
| 2011 | -2.0\% | 0.0\% | -2.0\% |
| 2012 | -4.4\% | 0.0\% | -4.4\% |
| 2013 | -8.2\% | 0.2\% | -8.0\% |
| 2014 | -5.9\% | 1.3\% | -4.7\% |
| 2015 | -2.0\% | 0.0\% | -2.0\% |
| 2016 | -0.5\% | 0.0\% | -0.5\% |
| 2017 | -0.4\% | 0.0\% | -0.4\% |
| 2018 | -0.3\% | 0.0\% | -0.3\% |
| 2019 | 0.0\% | 0.0\% | 0.0\% |
| 2020 | 0.0\% | 0.0\% | 0.0\% |
| 2021 | 0.0\% | 0.0\% | 0.0\% |
| 11/1/2021 | 0.0\% | 0.0\% | 0.0\% |

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

Total Medical Cost Level Factors
$\left.\begin{array}{ccccc} & \begin{array}{c}\text { (1) } \\ \text { Annual }\end{array} & \begin{array}{c}(2) \\ \text { Annual } \\ \text { Non-Legislative } \\ \text { Cost Impact on } \\ \text { Medical (a) }\end{array} & \begin{array}{c}\text { Legislative } \\ \text { Cost Impact on } \\ \text { Medical (b) }\end{array} & \begin{array}{c}(3) \\ \text { Accident }\end{array} \\ \text { Year } & & & \begin{array}{c}\text { Total } \\ \text { Annual Cost } \\ \text { Impact on } \\ \text { Medical (c) }\end{array} & \begin{array}{c}\text { (4) } \\ \text { Composite } \\ \text { Medical }\end{array} \\ 1987 & 3.8 \% & 0.0 \% & & \text { On-level } \\ \text { Factor (d) }\end{array}\right]$
(a) See Exhibit 4.2, Column (6).
(b) See Exhibit 4.3, Column (3).
(c) Column (3) $=[1.0+$ Column (1) $] \times[1.0+$ Column (2) $]-1.0$.
(d) These factors adjust the annual impact shown in Column (3) to the $11 / 1 / 2021$ level.

## Annual Wage Level Changes

| Year | Annual Wage Level Change (a) | Factor to a 11/1/2021 Wage Level |
| :---: | :---: | :---: |
| 1987 | 5.6 | 3.190 |
| 1988 | 4.4 | 3.055 |
| 1989 | 4.3 | 2.929 |
| 1990 | 5.0 | 2.790 |
| 1991 | 2.3 | 2.727 |
| 1992 | 4.7 | 2.605 |
| 1993 | 1.2 | 2.574 |
| 1994 | 1.8 | 2.528 |
| 1995 | 2.9 | 2.457 |
| 1996 | 3.4 | 2.376 |
| 1997 | 4.7 | 2.270 |
| 1998 | 5.2 | 2.157 |
| 1999 | 6.2 | 2.031 |
| 2000 | 9.0 | 1.864 |
| 2001 | 0.6 | 1.853 |
| 2002 | 1.1 | 1.832 |
| 2003 | 3.6 | 1.769 |
| 2004 | 5.0 | 1.685 |
| 2005 | 3.2 | 1.632 |
| 2006 | 4.6 | 1.561 |
| 2007 | 4.5 | 1.493 |
| 2008 | 2.1 | 1.463 |
| 2009 | 0.5 | 1.455 |
| 2010 | 3.0 | 1.413 |
| 2011 | 3.0 | 1.372 |
| 2012 | 4.2 | 1.317 |
| 2013 | 0.7 | 1.307 |
| 2014 | 3.3 | 1.266 |
| 2015 | 4.4 | 1.212 |
| 2016 | 1.8 | 1.191 |
| 2017 | 4.2 | 1.143 |
| 2018 | 4.1 | 1.098 |
| 2019 | 4.1 | 1.055 |
| Projected: |  |  |
| 2020 | 1.5 |  |
| 2021 | 2.6 |  |
| 11/1/2021 | 1.3 |  |

(a) Historical wage changes through 2018 are based on Bureau of Labor Statistics data. Forecasts for 2019 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of March 2020 and those made by the California Department of Finance as of April 2020.

## Premium Adjustment Factors

|  | (1) | (2a) | (2b) | (2c) | (3) | (4) | (5) | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Factor to Adjust |  |  |  |  |  |
|  |  | Ratio of | Factor to | Insurer Premium |  |  | Off-Balance |  |  |
|  |  | Industry Average | Industry | to an Industry |  |  | Correction in | Factor to Adjust |  |
|  |  | Charged Rates | Average Filed | Average Filed | Adjustment |  | Advisory | for Impact | Composite |
|  | Factor to a | to Advisory | Pure Premium | Pure Premium | to Remove | Average | January 1, 2020 | of Premium | Premium |
| Calendar | 11/1/2021 | Pure Premium | Rate Level as of | Rate Level as of | Surcharge | Experience | Pure Premium | Resulting from | Adjustment |
| Year | Wage Level (a) | Rates (b) | January 1, 2021 (c) | January 1, 2021 (d) | Premium (e) | Modification (f) | Rates | Audits (g) | Factor (h) |
| 1987 | 3.190 | --- | --- | 0.612 | 0.992 | 0.983 | 1.014 | --- | 1.942 |
| 1988 | 3.055 | --- | --- | 0.548 | 0.993 | 0.963 | 1.014 | --- | 1.702 |
| 1989 | 2.929 | --- | --- | 0.539 | 0.993 | 0.945 | 1.014 | --- | 1.637 |
| 1990 | 2.790 | --- | --- | 0.526 | 0.991 | 0.942 | 1.014 | --- | 1.522 |
| 1991 | 2.727 | --- | --- | 0.487 | 0.987 | 0.939 | 1.014 | --- | 1.377 |
| 1992 | 2.605 | --- | --- | 0.467 | 0.982 | 0.940 | 1.014 | --- | 1.252 |
| 1993 | 2.574 | --- | --- | 0.462 | 0.981 | 0.949 | 1.014 | --- | 1.211 |
| 1994 | 2.528 | --- | --- | 0.528 | 0.986 | 0.948 | 1.014 | --- | 1.370 |
| 1995 | 2.457 | --- | --- | 0.715 | 0.995 | 0.958 | 1.014 | --- | 1.799 |
| 1996 | 2.376 | 1.023 | 0.759 | 0.742 | 1.000 | 0.935 | 1.014 | --- | 1.861 |
| 1997 | 2.270 | 0.989 | 0.758 | 0.766 | 1.000 | 0.949 | 1.014 | --- | 1.807 |
| 1998 | 2.157 | 0.965 | 0.789 | 0.818 | 1.000 | 0.959 | 1.014 | --- | 1.814 |
| 1999 | 2.031 | 0.972 | 0.798 | 0.821 | 1.000 | 0.954 | 1.014 | --- | 1.723 |
| 2000 | 1.864 | 1.005 | 0.723 | 0.720 | 1.000 | 0.970 | 1.014 | --- | 1.364 |
| 2001 | 1.853 | 1.030 | 0.637 | 0.618 | 1.000 | 0.969 | 1.014 | --- | 1.166 |
| 2002 | 1.832 | 1.157 | 0.570 | 0.493 | 1.000 | 0.991 | 1.014 | --- | 0.899 |
| 2003 | 1.769 | 1.266 | 0.467 | 0.369 | 1.000 | 1.005 | 1.014 | --- | 0.640 |
| 2004 | 1.685 | 1.397 | 0.475 | 0.340 | 1.000 | 0.981 | 1.014 | --- | 0.575 |
| 2005 | 1.632 | 1.470 | 0.571 | 0.388 | 1.000 | 0.982 | 1.014 | --- | 0.637 |
| 2006 | 1.561 | 1.446 | 0.736 | 0.509 | . 000 | 0.956 | 1.014 | --- | 0.819 |
| 2007 | 1.493 | 1.492 | 1.003 | 0.672 | 1.000 | 0.931 | 1.014 | 0.985 | 1.047 |
| 2008 | 1.463 | 1.426 | 1.193 | 0.837 | 1.000 | 0.946 | 1.014 | 0.991 | 1.265 |
| 2009 | 1.455 | 1.365 | 1.176 | 0.861 | 1.000 | 0.937 | 1.014 | 1.034 | 1.364 |
| 2010 | 1.413 | 1.383 | 1.153 | 0.833 | 1.000 | 0.941 | 1.014 | 1.005 | 1.240 |
| 2011 | 1.372 | 1.400 | 1.152 | 0.822 | 1.000 | 0.982 | 1.014 | --- | 1.133 |
| 2012 | 1.317 | 1.222 | 0.949 | 0.777 | 1.000 | 1.000 | 1.014 | --- | 1.009 |
| 2013 | 1.307 | 1.138 | 0.764 | 0.672 | 1.000 | 0.983 | 1.014 | --- | 0.881 |
| 2014 | 1.266 | 1.126 | 0.704 | 0.625 | 1.000 | 0.961 | 1.014 | --- | 0.812 |
| 2015 | 1.212 | 1.109 | 0.684 | 0.617 | 1.000 | 0.951 | 1.014 | --- | 0.776 |
| 2016 | 1.191 | 1.148 | 0.745 | 0.649 | 1.000 | 0.949 | 1.014 | --- | 0.803 |
| 2017 | 1.143 | 1.156 | 0.824 | 0.713 | 1.000 | 0.955 | 1.014 | --- | 0.841 |
| 2018 | 1.098 | 1.196 | 0.932 | 0.779 | 1.000 | 0.956 | 1.014 | --- | 0.882 |
| 2019 | 1.055 | 1.216 | 1.083 | 0.891 | 1.000 | 0.949 | 1.014 | --- | 0.976 |

(a) See Exhibit 5.1.
(b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.
(c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory January 1, 2020 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1,2020 pure premium rate ( $\$ 1.52$ ) to the industry average filed pure premium rate as of January 1, 2021 (\$1.92).
(d) $\quad(2 b) \div(2 a)$. 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) $x(2 \mathrm{c}) \times(3) \times(6) \div[(4) \times(5)]$ for calendar years 2007 to 2010. (1) $x(2 \mathrm{c}) \times(3) \div[(4) \times(5)]$ for all other calendar years.

2019 Accident Year Indemnity Claim Frequency Model
As of PY 2017 Preliminary 1st Set \& March 2020 UCLA
Prior to the Impact of COVID-19

| AY | Annual \% Changes IntraClass Ind Freq Total | Annual Log Differences |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Intra-Class Indemnity Frequency per \$M Exposure at PY 2017 Level |  |  | AY+1 Indemnity Benefit Level | Cumulative Injury Index | EconomicVariables(1st Prin. Comp.) | $\begin{gathered} \hline \text { CalOSHA } \\ \text { Dummy } \\ \text { Variable } \\ \hline \end{gathered}$ |
|  |  | Total | Cumulative | Non-cum. |  |  |  |  |
| 1979 | 0.5\% | 0.005 | -0.053 | 0.007 | 0.000 | -0.060 | 0.134 | 0.000 |
| 1980 | -6.5\% | -0.068 | -0.132 | -0.066 | 0.033 | -0.066 | -0.080 | 0.000 |
| 1981 | -3.5\% | -0.036 | -0.028 | -0.036 | 0.000 | 0.008 | -0.079 | 0.000 |
| 1982 | -1.6\% | -0.016 | 0.153 | -0.022 | 0.352 | 0.175 | -0.294 | 0.000 |
| 1983 | 6.2\% | 0.060 | 0.214 | 0.054 | 0.081 | 0.160 | 0.029 | 0.000 |
| 1984 | 9.5\% | 0.091 | 0.235 | 0.084 | 0.000 | 0.151 | 0.222 | 0.000 |
| 1985 | 2.0\% | 0.020 | 0.138 | 0.014 | 0.000 | 0.124 | 0.081 | 0.000 |
| 1986 | -2.4\% | -0.024 | 0.039 | -0.028 | 0.000 | 0.067 | 0.078 | 0.000 |
| 1987 | 1.5\% | 0.015 | 0.053 | 0.013 | 0.000 | 0.041 | 0.151 | 0.000 |
| 1988 | 0.7\% | 0.007 | 0.104 | 0.000 | 0.000 | 0.104 | 0.088 | 0.000 |
| 1989 | 2.5\% | 0.024 | 0.212 | 0.009 | 0.046 | 0.203 | 0.045 | 0.000 |
| 1990 | 9.0\% | 0.087 | 0.337 | 0.061 | 0.071 | 0.276 | -0.121 | 0.000 |
| 1991 | 0.3\% | 0.003 | 0.166 | -0.018 | 0.023 | 0.184 | -0.293 | 0.000 |
| 1992 | -11.1\% | -0.118 | -0.272 | -0.098 | 0.013 | -0.174 | -0.186 | 0.068 |
| 1993 | -14.9\% | -0.162 | -0.240 | -0.153 | -0.057 | -0.088 | -0.022 | 0.464 |
| 1994 | -12.8\% | -0.136 | -0.462 | -0.107 | 0.061 | -0.355 | 0.106 | 0.173 |
| 1995 | -4.6\% | -0.048 | -0.016 | -0.050 | 0.053 | - 0.034 | 0.092 | 0.295 |
| 1996 | -6.8\% | -0.070 | -0.136 | -0.065 | 0.096 | -0.071 | 0.075 | 0.000 |
| 1997 | -3.3\% | -0.033 | -0.023 | -0.034 | 0.066 | 0.011 | 0.138 | 0.000 |
| 1998 | -3.8\% | -0.038 | -0.040 | -0.038 | 0.058 | -0.002 | 0.079 | 0.000 |
| 1999 | 1.5\% | 0.014 | 0.100 | 0.008 | 0.040 | 0.092 | 0.128 | 0.000 |
| 2000 | 4.0\% | 0.039 | 0.071 | 0.037 | -0.003 | 0.034 | 0.066 | 0.000 |
| 2001 | -6.9\% | -0.072 | -0.018 | -0.076 | -0.007 | 0.059 | -0.101 | 0.000 |
| 2002 | -2.3\% | -0.023 | 0.007 | -0.026 | 0.060 | 0.033 | -0.202 | 0.000 |
| 2003 | -2.9\% | -0.029 | -0.005 | -0.031 | -0.065 | 0.026 | -0.023 | 0.000 |
| 2004 | -16.6\% | -0.182 | -0.209 | -0.180 | -0.398 | -0.030 | 0.093 | 0.000 |
| 2005 | -13.6\% | -0.146 | -0.298 | -0.133 | 0.051 | -0.165 | 0.141 | 0.000 |
| 2006 | -5.7\% | -0.059 | -0.050 | -0.059 | 0.016 | 0.009 | 0.095 | 0.000 |
| 2007 | -1.6\% | -0.017 | 0.021 | -0.019 | 0.049 | 0.040 | -0.084 | 0.000 |
| 2008 | -2.7\% | -0.027 | 0.038 | -0.033 | 0.006 | 0.071 | -0.308 | 0.000 |
| 2009 | -0.2\% | -0.002 | 0.168 | -0.018 | 0.066 | 0.186 | -0.427 | 0.000 |
| 2010 | 8.9\% | 0.085 | 0.139 | 0.079 | 0.012 | 0.060 | -0.092 | 0.000 |
| 2011 | 1.2\% | 0.012 | 0.032 | 0.010 | 0.003 | 0.022 | 0.043 | 0.000 |
| 2012 | 4.7\% | 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 | 0.051 | -0.006 | 0.003 | 0.056 | 0.178 | 0.000 |
| 2015 | -1.2\% | -0.012 | 0.025 | -0.018 | 0.002 | 0.043 | 0.194 | 0.000 |
| 2016 | -2.4\% | -0.025 | 0.062 | -0.039 | 0.004 | 0.101 | 0.124 | 0.000 |
| 2017 | -2.3\% | -0.023 | -0.042 | -0.019 | 0.004 | -0.023 | 0.137 | 0.000 |
| 2018* | -1.4\% | -0.014 | -0.085 | 0.000 | 0.003 | -0.085 | 0.132 | 0.000 |
| 2019 | -1.7\% | -0.017 | --0.017 | -0.017 | 0.004 | 0.000 | 0.023 | 0.000 |
| 2020 | -2.7\% | -0.027 | -0.027 | -0.027 | 0.004 | 0.000 | -0.076 | 0.000 |
| 2021 | -2.0\% | -0.021 | -0.021 | -0.021 | 0.004 | 0.000 | -0.013 | 0.000 |
| 2022 | -2.0\% | -0.020 | -0.020 | -0.020 | 0.004 | 0.000 | -0.012 | 0.000 |
| $\mathbf{Y}=$ Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency |  |  |  |  |  |  |  |  |
|  |  | Constant |  | -0.020 |  |  |  |  |
|  |  | Std Err of Y Est |  | 0.039 |  |  |  |  |
|  |  | R Squared |  | 0.571 |  |  |  |  |
|  |  | No. of Observations |  | 40 |  |  |  |  |
|  |  | Degrees of Freedom |  | 35 |  |  |  |  |
|  |  | cient(s) |  |  | 0.178 | 0.275 | 0.103 | -0.143 |
|  |  | of Coef. |  |  | 0.072 | 0.060 | 0.043 | 0.075 |

Notes:
Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency.
The Indemnity Benefit Level change for Ogilvie \& Almaraz / Guzman in 2009-2010 is not leading.
The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits.
The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03.
For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda Item III.
Economic variables are historical through 2019; March 2020 UCLA Anderson Forecasts for 2020 on.
Regression is over AY 1979 through AY 2018. AY 2019 through AY 2022 are projections.
The constant term, -0.020 , consists of measured offsets that recognize annual changes in real benefit levels relative to nominal
benefit levels and long-term economic growth. Without these offsets, the indemnity benefit level and economic variables would project
frequency to increase without bound.
*AY 2018 is preliminary and change is based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.

## Projection of Indemnity Severity Trends by Accident Year Based on Experience as of March 31, 2020

| Accident Year | (1) | (2) | (3) | (4) | (5) <br> Annual \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated |  | Indemnity | Ultimate |  |
|  | Ultimate | Annual | Adjustment | On-level |  |
|  | Severity | \% Change | Factor (a) | Severity |  |
|  |  |  |  | (1) $\times$ (3) |  |
| 1990 | 9,981 | --- | 1.922 | 19,181 | --- |
| 1991 | 10,933 | 9.5\% | 1.817 | 19,870 | 3.6\% |
| 1992 | 11,036 | 0.9\% | 1.757 | 19,392 | -2.4\% |
| 1993 | 12,004 | 8.8\% | 1.747 | 20,967 | 8.1\% |
| 1994 | 12,990 | 8.2\% | 1.830 | 23,766 | 13.3\% |
| 1995 | 14,563 | 12.1\% | 1.704 | 24,818 | 4.4\% |
| 1996 | 16,339 | 12.2\% | 1.599 | 26,129 | 5.3\% |
| 1997 | 19,381 | 18.6\% | 1.435 | 27,808 | 6.4\% |
| 1998 | 21,257 | 9.7\% | 1.323 | 28,132 | 1.2\% |
| 1999 | 23,302 | 9.6\% | 1.226 | 28,575 | 1.6\% |
| 2000 | 24,750 | 6.2\% | 1.145 | 28,333 | -0.8\% |
| 2001 | 27,249 | 10.1\% | 1.146 | 31,226 | 10.2\% |
| 2002 | 26,346 | -3.3\% | 1.174 | 30,924 | -1.0\% |
| 2003 | 26,017 | -1.2\% | 1.170 | 30,443 | -1.6\% |
| 2004 | 21,246 | -18.3\% | 1.382 | 29,369 | -3.5\% |
| 2005 | 19,216 | -9.6\% | 1.587 | 30,493 | 3.8\% |
| 2006 | 20,927 | 8.9\% | 1.470 | 30,770 | 0.9\% |
| 2007 | 22,791 | 8.9\% | 1.417 | 32,304 | 5.0\% |
| 2008 | 24,836 | 9.0\% | 1.339 | 33,258 | 3.0\% |
| 2009 | 26,044 | 4.9\% | 1.331 | 34,668 | 4.2\% |
| 2010 | 25,548 | -1.9\% | 1.306 | 33,372 | -3.7\% |
| 2011 | 25,266 | -1.1\% | 1.288 | 32,547 | -2.5\% |
| 2012 | 24,686 | -2.3\% | 1.272 | 31,407 | -3.5\% |
| 2013 | 24,137 | -2.2\% | 1.247 | 30,090 | -4.2\% |
| 2014 | 25,087 | 3.9\% | 1.159 | 29,070 | -3.4\% |
| 2015 | 25,267 | 0.7\% | 1.142 | 28,862 | -0.7\% |
| 2016 | 24,582 | -2.7\% | 1.128 | 27,726 | -3.9\% |
| 2017 | 24,564 | -0.1\% | 1.098 | 26,983 | -2.7\% |
| 2018 | 25,427 | 3.5\% | 1.070 | 27,210 | 0.8\% |
| 2019 | 26,291 | 3.4\% | 1.041 | 27,373 | 0.6\% |
| (6) Estimated Annual Exponential Trend Based on 1990 to 2019: 1.1\% |  |  |  |  |  |
| (7) Estimated Annual Exponential Trend Based on 2005 to 2019: |  |  |  |  | -1.4\% |
| (8) Estimated Annual Exponential Trend Based on 2015 to 2019: |  |  |  |  | -1.2\% |
| Selected Indemnity Severity Trend: |  |  |  |  | 0.0\% |

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

Source: WCIRB experience calls.

## Projection of Medical Severity Trends by Accident Year Based on Experience as of March 31, 2020


(a) Estimated ultimate severities for all accident years are derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts. The estimated ultimate medical severities were derived from the projected ultimate loss ratios shown in Exhibit 3.2, column (7).
(b) These adjustment factors are based on Exhibit 4.4, excluding the impact of frequency, and including the impact of SB 1160 provisions applicable to outstanding medical losses.
(c) Severities for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Severities for accident years 2010 and prior do reflect MCCP costs.

Source: WCIRB experience calls.
Projection of Medical Severity Trends by Accident Year Projection of Medical Severity Trends by Accident Year
Adjusted to Remove the Cost of Medical Cost Containment Programs (MCCP) Based on Experience as of March 31, 2020

| Projection of Medical Severity Trends by Accident Year <br> Adjusted to Remove the Cost of Medical Cost Containment Programs (MCCP) <br> MCCP Included <br> Based on Experience as of March 31, 2020 <br> MCCP Removed Based on WCIRB Aggregate |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|  |  | Estimated |  | Ultimate |  | Estimated |  | Ultimate |  |
|  | Accident Year | Ultimate | Annual | On-Level | Annual | Ultimate | Annual | On-Level | Annual |
|  |  | Severity (a) | \% Change | Severity (c) | \% Change | Severity (a) | \% Change | Severity (c) | \% Change |
| 2005 |  | 28,625 | --- | 23,015 | --- | 27,144 | --- | 21,824 | --- |
| 2006 |  | 31,181 | 8.9\% | 24,970 | 8.5\% | 29,256 | 7.8\% | 23,428 | 7.4\% |
| 2007 |  | 34,807 | 11.6\% | 27,354 | 9.5\% | 32,520 | 11.2\% | 25,556 | 9.1\% |
| 2008 |  | 37,480 | 7.7\% | 29,337 | 7.2\% | 34,231 | 5.3\% | 26,794 | 4.8\% |
| 2009 |  | 39,475 | 5.3\% | 30,776 | 4.9\% | 36,211 | 5.8\% | 28,230 | 5.4\% |
| 2010 |  | 39,716 | 0.6\% | 30,870 | 0.3\% | 36,395 | 0.5\% | 28,289 | 0.2\% |
| $\sum 2011$ |  | 39,456 | -0.7\% | 31,523 | 2.1\% | 36,036 | -1.0\% | 28,790 | 1.8\% |
| = 2012 |  | 36,995 | -6.2\% | 31,212 | -1.0\% | 33,848 | -6.1\% | 28,557 | -0.8\% |
| - | 2013 | 34,388 | -7.0\% | 31,920 | 2.3\% | 31,380 | -7.3\% | 29,129 | 2.0\% |
| $\stackrel{\text { On }}{\sim}$ | 2014 | 33,251 | -3.3\% | 32,842 | 2.9\% | 30,374 | -3.2\% | 30,000 | 3.0\% |
|  | 2015 | 32,172 | -3.2\% | 32,526 | -1.0\% | 29,462 | -3.0\% | 29,786 | -0.7\% |
|  | 2016 | 30,857 | -4.1\% | 31,228 | -4.0\% | 28,315 | -3.9\% | 28,656 | -3.8\% |
|  | 2017 | 30,836 | -0.1\% | 31,269 | 0.1\% | 28,228 | -0.3\% | 28,625 | -0.1\% |
|  | 2018 | 32,219 | 4.5\% | 32,705 | 4.6\% | 29,341 | 3.9\% | 29,783 | 4.0\% |
|  | 2019 | 31,687 | -1.6\% | 32,037 | -2.0\% | 28,756 | -2.0\% | 29,073 | -2.4\% |
| Estimated Annual Exponential Trend |  |  |  |  |  |  |  |  |  |
| Trend Based on 1990 to 2019: |  |  |  |  | 5.5\% |  |  |  | N/A |
| Trend Based on 2005 to 2019: |  |  |  |  | 1.9\% |  | - |  | 1.6\% |
| Trend Based on 2015 to 2019: |  |  |  |  | 0.2\% |  |  |  | -0.1\% |
|  |  |  |  |  |  | cted Medical | y Trend: |  | 1.5\% |

[^6]
## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios <br> Based on Experience as of March 31, 2020

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident | Developed Indemnity | Composite Indemnity | Composite Premium | On-Level Indemnity to Industry Average Filed |
| Year | Loss Ratio (a) | Adjustment Factor (b) | Adjustment Factor (c) | Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 1986 | 0.398 | 1.573 | 2.562 | 0.244 |
| 1987 | 0.348 | 1.544 | 1.942 | 0.277 |
| 1988 | 0.332 | 1.521 | 1.702 | 0.297 |
| 1989 | 0.345 | 1.499 | 1.637 | 0.316 |
| 1990 | 0.400 | 1.202 | 1.522 | 0.316 |
| 1991 | 0.428 | 0.990 | 1.377 | 0.307 |
| 1992 | 0.353 | 1.044 | 1.252 | 0.294 |
| 1993 | 0.290 | 1.267 | 1.211 | 0.303 |
| 1994 | 0.330 | 1.324 | 1.370 | 0.319 |
| 1995 | 0.477 | 1.226 | 1.799 | 0.325 |
| 1996 | 0.535 | 1.146 | 1.861 | 0.330 |
| 1997 | 0.605 | 1.026 | 1.807 | 0.344 |
| 1998 | 0.658 | 0.946 | 1.814 | 0.343 |
| 1999 | 0.692 | 0.877 | 1.723 | 0.352 |
| 2000 | 0.598 | 0.819 | 1.364 | 0.359 |
| 2001 | 0.496 | 0.819 | 1.166 | 0.349 |
| 2002 | 0.370 | 0.839 | 0.899 | 0.345 |
| 2003 | 0.244 | 0.837 | 0.640 | 0.319 |
| 2004 | 0.146 | 1.145 | 0.575 | 0.291 |
| 2005 | 0.125 | 1.552 | 0.637 | 0.305 |
| 2006 | 0.162 | 1.525 | 0.819 | 0.302 |
| 2007 | 0.224 | 1.470 | 1.047 | 0.315 |
| 2008 | 0.284 | 1.381 | 1.265 | 0.310 |
| 2009 | 0.333 | 1.354 | 1.364 | 0.331 |
| 2010 | 0.323 | 1.328 | 1.240 | 0.346 |
| 2011 | 0.302 | -1.310 | 1.133 | 0.349 |
| 2012 | 0.271 | - 1.294 | 1.009 | 0.347 |
| 2013 | 0.232 | - 1.265 | 0.881 | 0.334 |
| 2014 | 0.222 | 1.159 | 0.812 | 0.317 |
| 2015 | 0.216 | 1.142 | 0.776 | 0.318 |
| 2016 | 0.204 | 1.128 | 0.803 | 0.287 |
| 2017 | 0.208 | 1.098 | 0.841 | 0.272 |
| 2018 | 0.224 | 1.070 | 0.882 | 0.271 |
| 2019 | 0.256 | 1.041 | 0.976 | 0.273 |
|  |  |  |  | Projections (d) |
| 2020 |  |  |  | 0.266 |
| 2021 |  |  |  | 0.260 |
| 11/1/2021 |  |  |  | 0.259 |

(a) See Exhibit 3.1.
(b) See Exhibit 4.1.
(c) See Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from Exhibit 6.2, the actual frequency trend for accident year 2019 from Exhibit 12, and projected frequency trends for accident years 2020 through 2021 from Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

## On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios <br> Based on Experience as of March 31, 2020



* On-level indemnity to industry average filed pure premium ratios (see Exhibit 7.1)
** The 11/1/2021 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2018 and 2019 years.


## Projected On-Level Accident Year <br> Medical Loss to Industry Average Filed Pure Premium Ratios <br> Based on Experience as of March 31, 2020

| (1) |  | (2) | (3) | (4) <br> On-Level Medical to Industry Average Filed Pure Premium Ratio (e) |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Accident Year | Developed Medical | Composite Medical | Composite Premium |  |
|  | Loss Ratio (a) | On-Level Factor (b) | Adjustment Factor (c) |  |
|  |  |  |  | $(1) \times(2) \div(3)$ |
| 1986 | 0.340 | 0.839 | 2.562 | 0.111 |
| 1987 | 0.322 | 0.808 | 1.942 | 0.134 |
| 1988 | 0.312 | 0.778 | 1.702 | 0.143 |
| 1989 | 0.334 | 0.756 | 1.637 | 0.154 |
| 1990 | 0.374 | 0.612 | 1.522 | 0.151 |
| 1991 | 0.392 | 0.523 | 1.377 | 0.149 |
| 1992 | 0.327 | 0.552 | 1.252 | 0.144 |
| 1993 | 0.272 | 0.661 | 1.211 | 0.149 |
| 1994 | 0.316 | 0.693 | 1.370 | 0.160 |
| 1995 | 0.465 | 0.683 | 1.799 | 0.176 |
| 1996 | 0.496 | 0.673 | 1.861 | 0.180 |
| 1997 | 0.558 | 0.667 | 1.807 | 0.206 |
| 1998 | 0.674 | 0.588 | 1.814 | 0.219 |
| 1999 | 0.660 | 0.510 | 1.723 | 0.195 |
| 2000 | 0.600 | 0.468 | 1.364 | 0.206 |
| 2001 | 0.536 | 0.427 | 1.166 | 0.196 |
| 2002 | 0.418 | 0.443 | 0.899 | 0.206 |
| 2003 | 0.269 | 0.465 | 0.640 | 0.196 |
| 2004 | 0.184 | 0.703 | 0.575 | 0.225 |
| 2005 | 0.182 | 0.817 | 0.637 | 0.233 |
| 2006 | 0.236 | 0.858 | 0.819 | 0.247 |
| 2007 | 0.335 | 0.842 | 1.047 | 0.269 |
| 2008 | 0.421 | 0.836 | 1.265 | 0.278 |
| 2009 | 0.497 | 0.825 | 1.364 | 0.301 |
| 2010 | 0.496 | 0.822 | 1.240 | 0.328 |
| 2011 | 0.431 | 0.836 | 1.133 | 0.318 |
| 2012 | 0.375 | 0.874 | 1.009 | 0.325 |
| 2013 | 0.308 | 0.949 | 0.881 | 0.332 |
| 2014 | 0.279 | 0.993 | 0.812 | 0.341 |
| 2015 | 0.265 | 1.011 | 0.776 | 0.345 |
| 2016 | 0.250 | 1.012 | 0.803 | 0.315 |
| 2017 | 0.256 | 1.014 | 0.841 | 0.309 |
| 2018 | 0.277 | 1.015 | 0.882 | 0.319 |
| 2019 | 0.300 | 1.011 | 0.976 | 0.311 |
|  |  |  |  | Projections (d) |
| 2020 |  |  |  | 0.315 |
| 2021 |  |  |  | 0.313 |
| 11/1/2021 |  |  |  | 0.312 |

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

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



* On-level medical to industry average filed pure premium ratios (see Exhibit 7.3)
** The 11/1/2021 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2018 and 2019 years.


# Indicated Loss to Industry Average Filed Pure Premium Ratios <br> For Policies with Effective Dates between January 1, 2021 and August 31, 2021 <br> Based on Experience as of March 31, 2020 <br> Prior to the Impact of COVID-19 

|  | Indemnity | Medical | Total |
| :--- | :--- | ---: | :--- |
| 1. Projected Loss to Industry Average Filed Pure Premium Ratio | 0.259 | 0.312 | 0.571 |
| (See Exhibits 7.1 and 7.3) |  |  |  |

Quarterly Incurred Indemnity Loss Development Factors
Through March 31, 2020

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 6/3 | 2.542 | 2.715 | 2.755 | 2.740 | 2.841 | 2.834 | 2.736 | 2.463 | 2.417 | 2.724 | 2.785 | 3.031 | 3.116 | 3.052 | 3.238 | 3.344 | 3.303 | 3.209 | 3.201 | 3.372 | 3.200 | 3.227 |
| 9/6 | 1.750 | 1.808 | 1.780 | 1.784 | 1.790 | 1.808 | 1.776 | 1.618 | 1.656 | 1.776 | 1.820 | 1.848 | 1.904 | 2.001 | 1.966 | 1.940 | 1.960 | 1.948 | 1.945 | 1.874 | 1.998 | 2.017 |
| 12/9 | 1.437 | 1.530 | 1.518 | 1.500 | 1.520 | 1.473 | 1.460 | 1.355 | 1.448 | 1.511 | 1.510 | 1.530 | 1.564 | 1.632 | 1.587 | 1.585 | 1.570 | 1.578 | 1.578 | 1.580 | 1.578 | 1.597 |
| 15/12 | 1.229 | 1.260 | 1.268 | 1.250 | 1.257 | 1.238 | 1.180 | 1.149 | 1.189 | 1.234 | 1.248 | 1.293 | 1.306 | 1.306 | 1.303 | 1.301 | 1.301 | 1.313 | 1.309 | 1.298 | 1.298 | 1.295 |
| 18/15 | 1.172 | 1.202 | 1.188 | 1.184 | 1.206 | 1.167 | 1.101 | 1.103 | 1.140 | 1.158 | 1.182 | 1.194 | 1.197 | 1.195 | 1.206 | 1.178 | 1.190 | 1.187 | 1.189 | 1.177 | 1.183 |  |
| 21/18 | 1.145 | 1.140 | 1.150 | 1.148 | 1.153 | 1.127 | 1.066 | 1.096 | 1.117 | 1.128 | 1.139 | 1.153 | 1.140 | 1.146 | 1.141 | 1.141 | 1.132 | 1.137 | 1.134 | 1.138 | 1.123 |  |
| 24/21 | 1.126 | 1.112 | 1.121 | 1.111 | 1.117 | 1.094 | 1.045 | 1.082 | 1.098 | 1.106 | 1.106 | 1.114 | 1.119 | 1.117 | 1.111 | 1.104 | 1.114 | 1.111 | 1.104 | 1.100 | 1.102 |  |
| 27/24 | 1.074 | 1.096 | 1.093 | 1.100 | 1.094 | 1.073 | 1.045 | 1.070 | 1.082 | 1.081 | 1.088 | 1.089 | 1.091 | 1.085 | 1.087 | 1.081 | 1.082 | 1.087 | 1.079 | 1.078 | 1.071 |  |
| 30/27 | 1.078 | 1.069 | 1.074 | 1.082 | 1.064 | 1.051 | 1.040 | 1.054 | 1.057 | 1.072 | 1.075 | 1.075 | 1.080 | 1.071 | 1.068 | 1.067 | 1.074 | 1.066 | 1.064 | 1.059 |  |  |
| 33/30 | 1.045 | 1.058 | 1.048 | 1.062 | 1.047 | 1.032 | 1.036 | 1.042 | 1.049 | 1.053 | 1.059 | 1.052 | 1.064 | 1.053 | 1.060 | 1.047 | 1.055 | 1.050 | 1.047 | 1.047 |  |  |
| 36/33 | 1.043 | 1.046 | 1.039 | 1.046 | 1.035 | 1.020 | 1.029 | 1.033 | 1.039 | 1.043 | 1.051 | 1.049 | 1.049 | 1.043 | 1.041 | 1.043 | 1.042 | 1.036 | 1.037 | 1.038 |  |  |
| 39/36 | 1.038 | 1.041 | 1.035 | 1.038 | 1.028 | 1.017 | 1.027 | 1.029 | 1.031 | 1.033 | 1.040 | 1.039 | 1.039 | 1.041 | 1.035 | 1.031 | 1.036 | 1.030 | 1.028 | 1.028 |  |  |
| 42/39 | 1.027 | 1.028 | 1.034 | 1.030 | 1.023 | 1.018 | 1.020 | 1.020 | 1.031 | 1.033 | 1.036 | 1.038 | 1.035 | 1.032 | 1.028 | 1.031 | 1.030 | 1.027 | 1.026 |  |  |  |
| 45/42 | 1.024 | 1.026 | 1.026 | 1.020 | 1.009 | 1.019 | 1.018 | 1.024 | 1.026 | 1.028 | 1.030 | 1.035 | 1.027 | 1.033 | 1.022 | 1.024 | 1.024 | 1.024 | 1.021 |  |  |  |
| 48/45 | 1.025 | 1.020 | 1.022 | 1.013 | 1.008 | 1.013 | 1.013 | 1.021 | 1.019 | 1.021 | 1.024 | 1.024 | 1.026 | 1.023 | 1.024 | 1.020 | 1.020 | 1.016 | 1.017 |  |  |  |
| 51/48 | 1.022 | 1.017 | 1.018 | 1.015 | 1.010 | 1.016 | 1.010 | 1.018 | 1.021 | 1.018 | 1.022 | 1.023 | 1.021 | 1.018 | 1.017 | 1.015 | 1.019 | 1.015 | 1.014 |  |  |  |
| 54/51 | 1.019 | 1.018 | 1.013 | 1.009 | 1.007 | 1.017 | 1.009 | 1.017 | 1.021 | 1.020 | 1.021 | 1.020 | 1.020 | 1.016 | 1.019 | 1.015 | 1.014 | 1.013 |  |  |  |  |
| 57/54 | 1.014 | 1.017 | 1.012 | 1.006 | 1.008 | 1.011 | 1.011 | 1.018 | 1.017 | 1.014 | 1.018 | 1.017 | 1.015 | 1.014 | 1.013 | 1.011 | 1.014 | 1.011 |  |  |  |  |
| 60/57 | 1.013 | 1.014 | 1.007 | 1.005 | 1.008 | 1.009 | 1.011 | 1.013 | 1.019 | 1.016 | 1.013 | 1.015 | 1.012 | 1.014 | 1.012 | 1.012 | 1.011 | 1.007 |  |  |  |  |
| 63/60 | 1.012 | 1.012 | 1.007 | 1.007 | 1.008 | 1.008 | 1.010 | 1.014 | 1.013 | 1.015 | 1.011 | 1.014 | 1.014 | 1.009 | 1.012 | 1.008 | 1.010 | 1.007 |  |  |  |  |
| 66/63 | 1.014 | 1.009 | 1.005 | 1.006 | 1.011 | 1.008 | 1.010 | 1.013 | 1.016 | 1.014 | 1.015 | 1.013 | 1.013 | 1.009 | 1.010 | 1.009 | 1.008 |  |  |  |  |  |
| 69/66 | 1.010 | 1.007 | 1.003 | 1.005 | 1.008 | 1.007 | 1.011 | 1.012 | 1.011 | 1.010 | 1.009 | 1.012 | 1.007 | 1.010 | 1.010 | 1.007 | 1.006 |  |  |  |  |  |
| 72/69 | 1.009 | 1.006 | 1.005 | 1.005 | 1.005 | 1.009 | 1.009 | 1.013 | 1.011 | 1.009 | 1.009 | 1.009 | 1.010 | 1.008 | 1.007 | 1.007 | 1.005 |  |  |  |  |  |
| 75/72 | 1.006 | 1.004 | 1.004 | 1.005 | 1.003 | 1.005 | 1.007 | 1.010 | 1.011 | 1.010 | 1.010 | 1.008 | 1.007 | 1.004 | 1.006 | 1.007 | 1.004 |  |  |  |  |  |
| 78/75 | 1.007 | 1.004 | 1.003 | 1.007 | 1.005 | 1.006 | 1.006 | 1.012 | 1.009 | 1.010 | 1.006 | 1.006 | 1.006 | 1.007 | 1.005 | 1.006 |  |  |  |  |  |  |
| 81/78 | 1.005 | 1.002 | 1.003 | 1.004 | 1.004 | . 005 | 1.006 | 1.010 | 1.009 | 1.007 | 1.007 | 1.006 | 1.006 | 1.007 | 1.005 | 1.005 |  |  |  |  |  |  |
| 84/81 | 1.003 | 1.003 | 1.005 | 1.003 | 1.006 | 1.006 | 1.007 | 1.008 | 1.005 | 1.009 | 1.006 | 1.004 | 1.007 | 1.004 | 1.007 | 1.003 |  |  |  |  |  |  |
| 87/84 | 1.003 | 1.003 | 1.002 | 1.003 | 1.004 | 1.002 | 1.007 | 1.010 | 1.007 | 1.004 | 1.005 | 1.006 | 1.004 | 1.006 | 1.004 | 1.003 |  |  |  |  |  |  |
| 90/87 | 1.001 | 1.003 | 1.003 | 1.003 | 1.003 | 1.004 | 1.008 | 1.008 | 1.008 | 1.008 | 1.004 | 1.005 | 1.005 | 1.005 | 1.004 |  |  |  |  |  |  |  |
| 93/90 | 1.001 | 1.002 | 1.004 | 1.003 | 1.002 | 1.005 | 1.006 | 1.008 | 1.006 | 1.007 | 1.006 | 1.003 | 1.004 | 1.005 | 1.004 |  |  |  |  |  |  |  |
| 96/93 | 1.002 | 1.003 | 1.001 | 1.004 | 1.002 | 1.006 | 1.006 | 1.003 | 1.002 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls

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

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | $\underline{2000}$ | 2001 | 2002 | $\underline{2003}$ | 2004 | 42005 | $\underline{2006}$ | 2007 | 2008 | 2009 | $\underline{2010}$ | 2011 | $\underline{2012}$ | 2013 | 2014 | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| 6/3 | 2.561 | 2.661 | 2.536 | 2.624 | 2.797 | 2.805 | 2.671 | 2.530 | 2.584 | 2.662 | 2.782 | 2.892 | 2.992 | 2.757 | 2.853 | 2.843 | 2.921 | 2.863 | 3.019 | 3.209 | 2.891 | 2.830 |
| 9/6 | 1.705 | 1.733 | 1.713 | 1.725 | 1.768 | 1.762 | 1.703 | 1.670 | 1.650 | 1.744 | 1.717 | 1.807 | 1.800 | 1.827 | 1.833 | 1.819 | 1.840 | 1.884 | 1.755 | 1.740 | 1.820 | 1.845 |
| 12/9 | 1.418 | 1.461 | 1.463 | 1.447 | 1.570 | 1.425 | 1.400 | 1.375 | 1.453 | 1.443 | 1.466 | 1.454 | 1.488 | 1.521 | 1.484 | 1.500 | 1.482 | 1.451 | 1.487 | 1.448 | 1.459 | 1.470 |
| 15/12 | 1.144 | 1.168 | 1.201 | 1.207 | 1.203 | 1.197 | 1.132 | 1.145 | 1.138 | 1.182 | 1.167 | 1.199 | 1.206 | 1.228 | 1.211 | 1.207 | 1.199 | 1.206 | 1.215 | 1.184 | 1.191 | 1.183 |
| 18/15 | 1.093 | 1.116 | 1.123 | 1.144 | 1.151 | 1.126 | 1.086 | 1.087 | 1.103 | 1.106 | 1.126 | 1.135 | 1.129 | 1.141 | 1.136 | 1.117 | 1.114 | 1.094 | 1.095 | 1.087 | 1.096 |  |
| 21/18 | 1.078 | 1.086 | 1.101 | 1.122 | 1.116 | 1.093 | 1.055 | 1.061 | 1.073 | 1.081 | 1.090 | 1.097 | 1.101 | 1.103 | 1.085 | 1.088 | 1.077 | 1.082 | 1.069 | 1.069 | 1.064 |  |
| 24/21 | 1.074 | 1.072 | 1.080 | 1.083 | 1.082 | 1.060 | 1.040 | 1.052 | 1.070 | 1.074 | 1.067 | 1.074 | 1.080 | 1.080 | 1.067 | 1.064 | 1.055 | 1.059 | 1.057 | 1.046 | 1.044 |  |
| 27/24 | 1.044 | 1.061 | 1.070 | 1.080 | 1.075 | 1.042 | 1.034 | 1.048 | 1.055 | 1.058 | 1.053 | 1.071 | 1.066 | 1.072 | 1.058 | 1.048 | 1.046 | 1.048 | 1.040 | 1.036 | 1.030 |  |
| 30/27 | 1.044 | 1.052 | 1.058 | 1.070 | 1.051 | 1.038 | 1.039 | 1.049 | 1.046 | 1.054 | 1.057 | 1.048 | 1.063 | 1.052 | 1.046 | 1.037 | 1.044 | 1.037 | 1.032 | 1.028 |  |  |
| 33/30 | 1.035 | 1.047 | 1.051 | 1.059 | 1.035 | 1.018 | 1.032 | 1.030 | 1.041 | 1.045 | 1.045 | 1.051 | 1.055 | 1.045 | 1.046 | . 031 | 1.033 | 1.033 | 1.026 | 1.029 |  |  |
| 36/33 | 1.037 | 1.042 | 1.035 | 1.040 | 1.029 | 1.016 | 1.024 | 1.034 | 1.042 | 1.033 | 1.042 | 1.040 | 1.041 | 1.037 | 1.028 | 1.026 | 1.027 | 1.021 | 1.021 | 1.020 |  |  |
| 39/36 | 1.029 | 1.032 | 1.034 | 1.037 | 1.018 | 1.012 | 1.028 | 1.025 | 1.027 | 1.029 | 1.033 | 1.031 | 1.040 | 1.039 | 1.027 | 1.021 | 1.023 | 1.022 | 1.011 | 1.018 |  |  |
| 42/39 | 1.025 | 1.031 | 1.036 | 1.026 | 1.019 | 1.013 | 1.017 | 1.020 | 1.025 | 1.035 | 1.036 | 1.037 | 1.037 | 1.031 | 1.022 | 1.026 | 1.022 | 1.017 | 1.010 |  |  |  |
| 45/42 | 1.025 | 1.033 | 1.032 | 1.023 | 1.012 | 1.019 | 1.033 | 1.021 | 1.025 | 1.029 | 1.026 | 1.030 | 1.028 | 1.027 | 1.021 | 1.018 | 1.017 | 1.015 | 1.011 |  |  |  |
| 48/45 | 1.028 | 1.023 | 1.026 | 1.017 | 1.008 | 1.013 | 1.025 | 1.018 | 1.022 | 1.025 | 1.029 | 1.034 | . 022 | 1.023 | 1.020 | 1.018 | 1.014 | 1.008 | 1.012 |  |  |  |
| 51/48 | 1.019 | 1.020 | 1.024 | 1.014 | 1.009 | 1.013 | 1.018 | 1.015 | 1.020 | 1.021 | 1.021 | 1.026 | 1.024 | 1.019 | 1.014 | 1.013 | 1.010 | 1.008 | 1.008 |  |  |  |
| 54/51 | 1.025 | 1.027 | 1.017 | 1.016 | 1.010 | 1.012 | 1.021 | 1.019 | 1.022 | 1.022 | 1.027 | 1.023 | 1.019 | 1.018 | 1.015 | 1.011 | 1.009 | 1.009 |  |  |  |  |
| 57/54 | 1.027 | 1.024 | 1.014 | 1.007 | 1.011 | 1.017 | 1.020 | 1.018 | 1.019 | 1.019 | 1.023 | 1.020 | 1.017 | 1.018 | 1.013 | 1.007 | 1.009 | 1.007 |  |  |  |  |
| 60/57 | 1.021 | 1.021 | 1.015 | 1.009 | 1.008 | 1.014 | 1.020 | 1.019 | 1.018 | . 017 | 1.019 | 1.016 | 1.015 | 1.014 | 1.012 | 1.007 | 1.007 | 1.005 |  |  |  |  |
| 63/60 | 1.014 | 1.020 | 1.013 | 1.012 | 1.008 | 1.016 | 1.015 | 1.021 | 1.015 | . 018 | 1.016 | 1.020 | 1.015 | 1.009 | 1.009 | 1.005 | 1.008 | 1.005 |  |  |  |  |
| 66/63 | 1.023 | 1.016 | 1.010 | 1.012 | 1.015 | 1.013 | 1.015 | 1.022 | 1.019 | 1.018 | 1.017 | 1.015 | 1.010 | 1.008 | 1.008 | 1.006 | 1.010 |  |  |  |  |  |
| 69/66 | 1.025 | 1.013 | 1.006 | 1.008 | 1.016 | 1.018 | 1.015 | 1.023 | 1.017 | 1.017 | 1.015 | 1.014 | 1.010 | 1.008 | 1.008 | 1.005 | 1.008 |  |  |  |  |  |
| 72/69 | 1.020 | 1.009 | 1.007 | 1.009 | 1.015 | 1.010 | 1.014 | 1.015 | 1.013 | 1.014 | 1.012 | 1.011 | 1.010 | 1.007 | 1.005 | 1.005 | 1.002 |  |  |  |  |  |
| 75/72 | 1.015 | 1.008 | 1.006 | 1.008 | 1.010 | 1.009 | 1.012 | 1.012 | 1.011 | 1.018 | 1.013 | 1.008 | 1.006 | 1.001 | 1.003 | 1.006 | 1.003 |  |  |  |  |  |
| 78/75 | 1.012 | 1.012 | 1.008 | 1.012 | 1.01 | 1.011 | 1.018 | 1.013 | 1.012 | 1.012 | 1.010 | 1.008 | 1.008 | 1.006 | 1.005 | 1.003 |  |  |  |  |  |  |
| 81/78 | 1.006 | 1.006 | 1.006 | 1.009 | 1.010 | 1.014 | 1.018 | 1.017 | 1.016 | 1.009 | 1.009 | 1.005 | 1.006 | 1.006 | 1.005 | 1.004 |  |  |  |  |  |  |
| 84/81 | 1.008 | 1.006 | 1.009 | 1.014 | 1.009 | 1.007 | 1.012 | 1.011 | 1.008 | 1.010 | 1.008 | 1.007 | 1.005 | 1.001 | 1.003 | 1.002 |  |  |  |  |  |  |
| 87/84 | 1.005 | 1.0081 | 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 | 1.002 | 1.005 | 1.008 | 1.008 | 1.009 | 1.012 | 1.009 | 1.009 | 1.013 | 1.008 | 1.006 | 1.006 | 1.003 | 1.006 | 1.006 |  |  |  |  |  |  |  |
| 93/90 | 1.006 | 1.007 | 1.015 | 1.009 | 1.011 | 1.010 | 1.011 | 1.012 | 1.009 | 1.009 | 1.007 | 1.002 | 1.003 | 1.002 | 1.004 |  |  |  |  |  |  |  |
| 96/93 | 1.007 | 1.007 | 1.010 | 1.012 | 1.008 | 1.010 | 1.011 | 1.009 | 1.005 | 1.006 | 1.005 | 1.003 | 1.002 | 1.001 | 1.003 |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls

[^7]Quarterly Paid Indemnity Loss Development Factors
Through March 31, 2020

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | 2000 | $\underline{2001}$ | $\underline{2002}$ | $\underline{2003}$ | 2004 | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | 2008 | $\underline{2009}$ | $\underline{2010}$ | 2011 | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | 2016 | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| 6/3 | 4.325 | 4.0244 | 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 |
| 9/6 | 2.2842 | 2.3672 | 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 |
| 12/9 | 1.826 | 1.806 | 1.839 | 1.855 | 1.897 | 1.876 | 1.841 | 1.774 | 1.812 | 1.834 | 1.810 | 1.825 | 1.861 | 1.869 | 1.877 | 1.866 | 1.879 | 1.910 | 1.882 | 1.892 | 1.891 | 1.903 |
| 15/12 | 1.4991 | 1.5361 | 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 | 1.380 | 1.399 | 1.395 | 1.401 | 1.403 | 1.379 | 1.331 | 1.306 | 1.306 | 1.327 | 1.332 | 1.343 | 1.355 | 1.361 | 1.361 | 1.353 | 1.364 | 1.372 | 1.366 | 1.358 | 1.353 |  |
| 21/18 | 1.323 | 1.298 | 1.303 | 1.303 | 1.311 | 1.297 | 1.241 | 1.217 | 1.233 | 1.235 | 1.243 | 1.259 | 1.257 | 1.261 | 1.261 | 1.263 | 1.267 | 1.264 | 1.256 | 1.260 | 1.248 |  |
| 24/21 | 1.259 | 1.2571 | 1.256 | 1.258 | 1.260 | 1.244 | 1.183 | 1.181 | 1.195 | 1.191 | 1.194 | 1.206 | 1.209 | 1.215 | 1.213 | 1.204 | 1.216 | 1.211 | 1.206 | 1.205 | 1.206 |  |
| $27 / 24$ | 1.186 | 1.1991 | 1.203 | 1.200 | 1.205 | 1.186 | 1.140 | 1.142 | 1.151 | 11.149 | 1.153 | 1.162 | 1.165 | 1.168 | 1.164 | 1.159 | 1.170 | 1.176 | 1.161 | 1.159 | 1.152 |  |
| 30/27 | 1.157 | 1.1611 | 1.165 | 1.175 | 1.172 | 1.161 | 1.122 | 1.117 | 1.126 | 1.129 | 1.130 | 1.141 | 1.141 | 1.137 | 1.134 | 1.141 | 1.147 | 1.142 | 1.137 | 1.131 |  |  |
| 33/30 | 1.118 | 1.1251 | 1.130 | 1.142 | 1.136 | 1.123 | 1.097 | 1.096 | 1.100 | 1.101 | 1.108 | 1.114 | 1.116 | 1.112 | 1.1 | 1.111 | 1.115 | 1.107 | 1.104 | 1.105 |  |  |
| 36/33 | 1.102 | 1.1031 | 1.103 | 1.115 | 1.111 | 1.097 | 1.085 | 1.081 | 1.080 | 1.084 | 1.092 | 1.094 | 1.098 | 1.091 | 1.091 | 1.096 | 1.092 | 1.089 | 1.088 | 1.083 |  |  |
| 39/36 | 1.0741 | 1.0811 | 1.081 | 1.092 | 1.087 | 1.072 | 1.070 | 1.066 | 1.064 | 1.067 | 1.074 | 1.078 | 1.077 | 1.073 | 1.0 | 1.074 | 1.075 | 1.071 | 1.068 | 1.064 |  |  |
| 42/39 | 1.0671 | 1.0711 | 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 |  |  |  |
| 45/42 | 1.0571 | 1.0541 | 1.063 | 1.064 | 1.056 | 1.049 | 1.047 | 1.049 | 1.047 | 1.051 | 1.058 | 1.059 | 1.057 | 1.055 | 1.054 | 1.052 | 1.050 | 1.050 | 1.045 |  |  |  |
| 48/45 | 1.0491 | 1.0501 | 1.055 | 1.053 | 1.046 | 1.044 | 1.041 | 1.044 | 1.043 | 1.047 | 1.049 | 1.051 | 1.050 | 1.048 | 1.048 | 1.048 | 1.045 | 1.041 | 1.040 |  |  |  |
| 51/48 | 1.0391 | 1.0381 | 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 | 1.0351 | 1.0381. | 1.036 | 1.037 | 1.034 | 1.035 | 1.030 | 1.028 | 1.035 | 1.036 | 1.038 | 1.041 | 1.038 | 1.036 | 1.036 | 1.033 | 1.032 | 1.031 |  |  |  |  |
| 57/54 | 1.0291 | 1.0331 | 1.037 | 1.030 | 1.028 | 1.026 | 1.025 | 1.028 | 1.030 | 1.032 | 1.033 | 1.033 | 1.032 | 1.033 | 1.028 | 1.027 | 1.028 | 1.025 |  |  |  |  |
| 60/57 | 1.0251 | 1.0301 | 1.027 | 1.026 | 1.024 | 1.024 | 1.024 | 1.024 | 1.028 | 1.02 | 1.029 | 1.032 | 1.027 | 1.030 | 1.028 | 1.025 | 1.025 | 1.023 |  |  |  |  |
| 63/60 | 1.0231 | 1.0261 | 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 | 1.0231 | 1.0231 | 1.023 | 1.021 | 1.019 | 1.019 | 1.01 | 1.020 | 1.025 | 1.025 | 1.025 | 1.025 | 1.023 | 1.022 | 1.022 | 1.018 | 1.018 |  |  |  |  |  |
| 69/66 | 1.0191 | 1.0211 | 1.020 | 1.017 | 1.016 | 1.017 | 1.016 | 1.021 | 1.020 | 1.020 | 1.020 | 1.022 | 1.020 | 1.019 | 1.022 | 1.017 | 1.014 |  |  |  |  |  |
| 72/69 | 1.0181 | 1.0161 | 1.018 | 1.016 | 1.016 | 1.015 | . 017 | 1.015 | 1.020 | 1.019 | 1.019 | 1.019 | 1.019 | 1.019 | 1.016 | 1.014 | 1.016 |  |  |  |  |  |
| 75/72 | 1.0151 | 1.0161 | 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 | 1.0141 | 1.0141 | 1.012 | 1.013 | 1.012 | 1.011 | 1.012 | 1.015 | 1.017 | 1.016 | 1.015 | 1.016 | 1.016 | 1.015 | 1.013 | 1.011 |  |  |  |  |  |  |
| 81/78 | 1.0131 | 1.0131 | 1.011 | 1.012 | . 011 | 1.010 | 1.012 | 1.015 | 1.015 | 1.016 | 1.015 | 1.015 | 1.013 | 1.012 | 1.011 | 1.010 |  |  |  |  |  |  |
| 84/81 | 1.0111 | 1.0111 | 1.013 | 1.010 | 1.010 | 1.009 | 1.011 | 1.013 | 1.015 | 1.014 | 1.013 | 1.012 | 1.013 | 1.013 | 1.011 | 1.010 |  |  |  |  |  |  |
| 87/84 | 1.0121 | 1.0101 | 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 | 1.0081 | 1.0091. | 1.010 | 1.009 | 1.008 | 1.008 | 1.011 | 1.012 | 1.013 | 1.012 | 1.011 | 1.010 | 1.010 | 1.010 | 1.009 |  |  |  |  |  |  |  |
| 93/90 | 1.0091 | 1.0091 | 1.008 | 1.008 | 1.007 | 1.008 | 1.012 | 1.011 | 1.011 | 1.012 | 1.010 | 1.010 | 1.009 | 1.009 | 1.008 |  |  |  |  |  |  |  |
| 96/93 | 1.0081 | 1.0091 | 1.006 | 1.007 | 1.007 | 1.007 | 1.008 | 1.011 | 1.011 | 1.008 | 1.010 | 1.010 | 1.009 | 1.010 | 1.007 |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls

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

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | $\underline{2000}$ | 2001 | $\underline{2002}$ | $\underline{2003}$ | 2004 | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | 2008 | $\underline{2009}$ | 2010 | 2011 | $\underline{2012}$ | 2013 | $\underline{2014}$ | 2015 | $\underline{2016}$ | $\underline{2017}$ |  | $\underline{2019}$ |
| 6/3 | 6.375 | 5.9555 | 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 |
| 9/6 | 2.3692 | 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 |
| 12/9 | 1.728 | 1.739 | 1.749 | 1.857 | 1.882 | 1.825 | 1.759 | 1.666 | 1.716 | 1.765 | 1.731 | 1.723 | 1.756 | 1.746 | 1.763 | 1.736 | 1.750 | 1.705 | 1.752 | 1.737 | 1.719 | 1.796 |
| 15/12 | 1.4531 | 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 | 1.241 | 1.267 | 1.286 | 1.310 | 1.330 | 1.295 | 1.243 | 1.230 | 1.227 | 1.259 | 1.243 | 1.259 | 1.268 | 1.282 | 1.284 | 1.263 | 1.265 | 1.278 | 1.263 | 1.250 | 1.245 |  |
| 21/18 | 1.164 | 1.168 | 1.192 | 1.219 | 1.211 | 1.179 | 1.153 | 1.151 | 1.163 | 1.173 | 1.170 | 1.178 | 1.182 | 1.187 | 1.192 | 1.193 | 1.192 | 1.189 | 1.173 | 1.170 | 1.173 |  |
| 24/21 | 1.132 | 1.124 | 1.149 | 1.159 | 1.154 | 1.125 | 1.115 | 1.118 | 1.127 | 1.133 | 1.132 | 1.137 | 1.144 | 1.153 | 1.154 | 1.148 | 1.146 | 1.146 | 1.141 | 1.131 | 1.143 |  |
| 27/24 | 1.0961 | 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 | 1.0771 | 1.088 | 1.101 | 1.108 | 1.103 | 1.077 | 1.084 | 1.087 | 1.097 | 1.100 | 1.100 | 1.106 | 1.107 | 1.111 | 1.109 | 1.111 | 1.111 | 1.105 | 1.100 | 1.092 |  |  |
| 33/30 | 1.065 | 1.072 | 1.086 | 1.089 | 1.077 | 1.063 | 1.071 | 1.065 | 1.081 | 1.083 | 1.086 | 1.092 | 1.094 | 1.093 | 1.094 | 1.090 | 1.089 | 1.082 | 1.082 | 1.077 |  |  |
| 36/33 | 1.055 | 1.066 | 1.069 | 1.076 | 1.061 | 1.055 | 1.062 | 1.062 | 1.071 | 11.072 | 1.072 | 1.077 | 1.083 | 1.082 | 1.078 | 1.080 | 1.076 | 1.071 | 1.067 | 1.065 |  |  |
| 39/36 | 1.051 | 1.0591 | 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 | 1.044 | 1.0491 | 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 |  |  |  |
| 45/42 | 1.039 | 1.045 | 1.047 | 1.044 | 1.036 | 1.037 | 1.040 | 1.047 | 1.048 | 1.049 | 1.054 | 1.053 | 1.056 | 1.056 | 1.053 | 1.051 | 1.045 | 1.044 | 1.042 |  |  |  |
| 48/45 | 1.035 | 1.039 | 1.044 | 1.037 | 1.032 | 1.035 | 1.037 | 1.043 | 1.043 | 1.046 | 1.047 | 1.050 | . 051 | 1.046 | 1.045 | 1.046 | 1.041 | 1.040 | 1.038 |  |  |  |
| 51/48 | 1.0301 | 1.0351 | 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 | 1.031 | 1.036 | 1.032 | 1.027 | 1.030 | 1.029 | 1.034 | 1.034 | 1.035 | 1.035 | 1.036 | 1.042 | 1.038 | 1.035 | 1.035 | 1.034 | 1.032 | 1.029 |  |  |  |  |
| 57/54 | 1.0261 | 1.0301 | 1.027 | 1.024 | 1.024 | 1.024 | 1.029 | 1.031 | 1.034 | 1.031 | 1.033 | 1.038 | 1.034 | 1.034 | 1.031 | 1.028 | 1.026 | 1.025 |  |  |  |  |
| 60/57 | 1.0261 | 1.028 | 1.026 | 1.021 | 1.023 | 1.026 | 1.028 | 1.029 | 1.028 | 1.032 | 1.032 | 1.035 | 1.030 | 1.030 | 1.030 | 1.023 | 1.022 | 1.021 |  |  |  |  |
| 63/60 | 1.0231 | 1.0251 | 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 | 1.026 | 1.021 | 1.020 | 1.020 | 1.018 | 1.021 | 1.023 | 1.024 | 1.026 | 1.026 | 1.029 | 1.029 | 1.024 | 1.028 | 1.023 | 1.021 | 1.018 |  |  |  |  |  |
| 69/66 | 1.021 | 1.022 | 1.019 | 1.018 | 1.016 | 1.019 | 1.021 | 1.023 | 1.023 | 31.021 | 1.024 | 1.024 | 1.022 | 1.020 | 1.020 | 1.017 | 1.016 |  |  |  |  |  |
| 72/69 | 1.022 | 1.0181 | 1.016 | 1.017 | 1.018 | 1.016 | 1.021 | 1.021 | 1.022 | 1.022 | 1.023 | 1.021 | 1.020 | 1.019 | 1.016 | 1.015 | 1.017 |  |  |  |  |  |
| 75/72 | 1.0171 | 1.0161 | 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 | 1.018 | 1.0151 | 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 |  |  |  |  |  |  |
| 81/78 | 1.015 | 1.0141 | 1.013 | 1.014 | 1.013 | 1.014 | 1.018 | 1.018 | 1.015 | 1.019 | 1.018 | 1.015 | 1.015 | 1.013 | 1.012 | 1.011 |  |  |  |  |  |  |
| 84/81 | 1.013 | 1.0121 | 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 |  |  |  |  |  |  |
| 87/84 | 1.0131 | 1.0111 | 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 | 1.013 | 1.0121 | 1.011 | 1.013 | 1.012 | 1.013 | 1.015 | 1.013 | 1.015 | 1.013 | 1.013 | 1.012 | 1.011 | 1.012 | 1.009 |  |  |  |  |  |  |  |
| 93/90 | 1.011 | 1.0101 | 1.011 | 1.012 | 1.011 | 1.013 | 1.013 | 1.012 | 1.014 | 1.014 | 1.013 | 1.011 | 1.010 | 1.009 | 1.010 |  |  |  |  |  |  |  |
| 96/93 | 1.010 | 1.0101 | 1.008 | 1.010 | 1.010 | 1.009 | 1.013 | 1.015 | 1.016 | 1.011 | 1.012 | 1.010 | 1.009 | 1.009 | 1.009 |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls

[^8]
## Reported Indemnity Claim Count Development

| Accident Year | Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 | 159-171 | 171-183 | 183-195 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 |
| 1998 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 |
| 1999 |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2000 |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 |
| 2001 |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2002 |  |  |  |  |  |  |  |  | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2003 |  |  |  |  |  |  |  | 0.999 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2004 |  |  |  |  |  |  | 0.999 | 0.999 | 1.000 | 0.999 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2005 |  |  |  |  |  | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |
| 2006 |  |  |  |  | 1.002 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |
| 2007 |  |  |  | 1.006 | 1.003 | 1.002 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |
| 2008 |  |  | 1.017 | 1.009 | 1.004 | 1.003 | 1.001 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |
| 2009 |  | 1.080 | 1.023 | 1.008 | 1.005 | 1.003 | 1.003 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |
| 2010 | 7.377 | 1.089 | 1.022 | 1.010 | 1.006 | 1.004 | 1.002 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |
| 2011 | 7.503 | 1.100 | 1.026 | 1.011 | 1.007 | 1.002 | 1.001 | 1.001 | 1.000 |  |  |  |  |  |  |  |
| 2012 | 7.670 | 1.120 | 1.026 | 1.013 | 1.005 | 1.002 | 1.001 | 1.000 |  |  |  |  |  |  |  |  |
| 2013 | 8.154 | 1.101 | 1.029 | 1.008 | 1.004 | 1.001 | 1.002 |  |  |  |  |  |  |  |  |  |
| 2014 | 7.695 | 1.114 | 1.019 | 1.008 | 1.004 | 1.001 |  |  |  |  |  |  |  |  |  |  |
| 2015 | 8.133 | 1.100 | 1.016 | 1.005 | 1.003 |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 7.682 | 1.101 | 1.019 | 1.005 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 7.737 | 1.088 | 1.017 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 7.741 | 1.092 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 7.896 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $7.896$ <br> Age-to-Ult | $1.092$ <br> mate | 1.017 | 1.005 | 1.003 | 1.001 | 1.002 | 1.000 | 000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
|  | 8.898 | 1.127 | 1.032 | 1.015 | 1.010 | 1.007 | 1.005 | . 004 | 003 | 1.003 | 1.002 | 1.002 | 1.002 | 1.002 | 1.001 | 1.002 |
| Source: WCIRB accident year experience calls |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Quarterly Reported Indemnity Claim Count Development Factors

| Accident | Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 | 24-27 | $\underline{27-30}$ | 30-33 | 33-36 | 36-39 | 39-42 | 42-45 | 45-48 |
| 2008 | 2.539 | 1.651 | 1.336 | 1.093 | 1.025 | 1.015 | 1.010 | 1.008 | 1.006 | 1.004 | 1.003 | 1.003 | 1.002 | 1.003 | 1.002 |
| 2009 | 2.681 | 1.683 | 1.382 | 1.109 | 1.036 | 1.021 | 1.012 | 1.009 | 1.007 | 1.007 | 1.005 | 1.004 | 1.003 | 1.002 | 1.002 |
| 2010 | 2.688 | 1.708 | 1.407 | 1.124 | 1.037 | 1.021 | 1.015 | 1.011 | 1.008 | 1.005 | 1.005 | 1.003 | 1.004 | 1.003 | 1.001 |
| 2011 | 2.691 | 1.738 | 1.424 | 1.123 | 1.041 | 1.026 | 1.018 | 1.010 | 1.010 | 1.006 | 1.005 | 1.004 | 1.004 | 1.003 | 1.002 |
| 2012 | 2.749 | 1.727 | 1.420 | 1.123 | 1.050 | 1.028 | 1.018 | 1.012 | 1.010 | 1.007 | 1.004 | 1.004 | 1.003 | 1.007 | 1.001 |
| 2013 | 2.821 | 1.739 | 1.421 | 1.138 | 1.045 | 1.027 | 1.016 | 1.010 | 1.009 | 1.013 | 1.003 | 1.003 | 1.003 | 1.001 | 1.002 |
| 2014 | 2.778 | 1.723 | 1.421 | 1.130 | 1.045 | 1.037 | 1.015 | 1.010 | 1.008 | 1.004 | 1.003 | 1.003 | 1.003 | 1.002 | 1.002 |
| 2015 | 2.817 | 1.781 | 1.414 | 1.135 | 1.045 | 1.023 | 1.014 | 1.014 | 1.008 | 1.005 | 1.003 | 1.003 | 1.002 | 1.002 | 1.002 |
| 2016 | 2.733 | 1.717 | 1.410 | 1.149 | 1.047 | 1.027 | 1.018 | 1.012 | 1.010 | 1.006 | 1.004 | 1.003 | 1.002 | 1.002 | 1.002 |
| 2017 | 2.893 | 1.696 | 1.423 | 1.134 | 1.042 | 1.026 | 1.014 | 1.009 | 1.008 | 1.005 | 1.004 | 1.003 |  |  |  |
| 2018 | 2.826 | 1.732 | 1.414 | 1.139 | 1.045 | 1.023 | 1.017 | 1.010 |  |  |  |  |  |  |  |
| 2019 | 2.782 | 1.751 | 1.425 | 1.138 |  |  |  |  |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls


| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 | 123 | 135 | 147 | 159 | 171 | 183 | $\underline{195}$ |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.6\% |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.3\% | 98.5\% |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.8\% | 98.0\% | 98.2\% |
| 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.2\% | 97.5\% | 97.8\% | 98.1\% |
| 1999 |  |  |  |  |  |  |  |  |  |  |  |  | 96.7\% | 97.1\% | 97.4\% | 97.8\% | 98.0\% |
| 2000 |  |  |  |  |  |  |  |  |  |  |  | 95.7\% | 96.3\% | 96.8\% | 97.3\% | 97.6\% | 97.8\% |
| 2001 |  |  |  |  |  |  |  |  |  |  | 93.8\% | 94.7\% | 95.4\% | 96.2\% | 96.7\% | 97.1\% | 97.4\% |
| 2002 |  |  |  |  |  |  |  |  |  | 92.7\% | 94.0\% | 95.0\% | 96.0\% | 96.5\% | 97.0\% | 97.5\% | 97.8\% |
| 2003 |  |  |  |  |  |  |  |  | 91.0\% | 92.7\% | 94.1\% | 95.4\% | 96.0\% | 96.6\% | 97.1\% | 97.6\% | 98.0\% |
| 2004 |  |  |  |  |  |  |  | 88.8\% | 91.1\% | 92.8\% | 94.6\% | 95.6\% | 96.3\% | 96.9\% | 97.4\% | 97.9\% | 98.2\% |
| 2005 |  |  |  |  |  |  | 86.3\% | 89.1\% | 91.3\% | 93.5\% | 94.8\% | 95.7\% | 96.6\% | 97.2\% | 97.7\% | 98.1\% |  |
| 2006 |  |  |  |  |  | 82.2\% | 86.0\% | 89.0\% | 91.7\% | 93.4\% | 94.7\% | 95.8\% | 96.6\% | 97.3\% | 97.8\% |  |  |
| 2007 |  |  |  |  | 75.4\% | 81.3\% | 85.5\% | 89.5\% | 91.9\% | 93.7\% | 95.1\% | 96.2\% | 96.9\% | 97.6\% |  |  |  |
| 2008 |  |  |  | 64.5\% | 73.8\% | 80.5\% | 86.0\% | 89.6\% | 92.2\% | 94.0\% | 95.4\% | 96.4\% | 97.2\% |  |  |  |  |
| 2009 |  |  | 49.6\% | 62.7\% | 72.7\% | 80.5\% | 85.7\% | 89.6\% | 92.3\% | 94.2\% | 95.6\% | 96.6\% |  |  |  |  |  |
| 2010 |  | 33.6\% | 50.1\% | 63.5\% | 74.7\% | 82.0\% | 87.2\% | 90.9\% | 93.3\% | 95.1\% | 96.3\% |  |  |  |  |  |  |
| 2011 | 7.2\% | 34.0\% | 50.7\% | 65.3\% | 75.9\% | 83.2\% | 88.2\% | 91.7\% | 94.2\% | 95.7\% |  |  |  |  |  |  |  |
| 2012 | 7.2\% | 34.0\% | 51.8\% | 66.7\% | 77.2\% | 84.4\% | 89.4\% | 92.7\% | 94.8\% |  |  |  |  |  |  |  |  |
| 2013 | 8.5\% | 33.4\% | 52.8\% | 67.8\% | 78.9\% | 86.2\% | 90.8\% | 93.8\% |  |  |  |  |  |  |  |  |  |
| 2014 | 6.6\% | 33.8\% | 53.6\% | 69.2\% | 80.5\% | 87.4\% | 91.6\% |  |  |  |  |  |  |  |  |  |  |
| 2015 | 7.5\% | 34.0\% | 55.2\% | 71.8\% | 82.8\% | 89.0\% |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 7.2\% | 35.8\% | 58.0\% | 74.5\% | 84.4\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 7.2\% | 38.1\% | 60.9\% | 76.2\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 8.3\% | 38.8\% | 60.9\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 8.5\% | 38.8\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2020 | 8.9\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Source: W | R acc | ent yea | experien | ce calls |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 | $\underline{123}$ | $\underline{135}$ | 147 | 159 | 171 | 183 | $\underline{195}$ |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.3\% |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.0\% | 98.3\% |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.5\% | 97.7\% | 97.9\% |
| 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.0\% | 97.3\% | 97.6\% | 97.9\% |
| 1999 |  |  |  |  |  |  |  |  |  |  |  |  | 96.4\% | 96.8\% | 97.2\% | 97.6\% | 97.8\% |
| 2000 |  |  |  |  |  |  |  |  |  |  |  | 95.4\% | 96.0\% | 96.5\% | 97.1\% | 97.4\% | 97.7\% |
| 2001 |  |  |  |  |  |  |  |  |  |  | 93.5\% | 94.5\% | 95.2\% | 96.0\% | 96.5\% | 96.9\% | 97.3\% |
| 2002 |  |  |  |  |  |  |  |  |  | 92.6\% | 93.8\% | 94.8\% | 95.8\% | 96.4\% | 96.9\% | 97.3\% | 97.6\% |
| 2003 |  |  |  |  |  |  |  |  | 91.0\% | 92.6\% | 93.9\% | 95.2\% | 95.8\% | 96.4\% | 97.0\% | 97.4\% | 97.8\% |
| 2004 |  |  |  |  |  |  |  | 88.9\% | 91.0\% | 92.7\% | 94.4\% | 95.4\% | 96.1\% | 96.8\% | 97.3\% | 97.7\% | 98.1\% |
| 2005 |  |  |  |  |  |  | 86.0\% | 89.0\% | 91.1\% | 93.3\% | 94.6\% | 95.7\% | 96.4\% | 97.0\% | 97.6\% | 98.0\% |  |
| 2006 |  |  |  |  |  | 81.7\% | 85.7\% | 88.6\% | 91.4\% | 93.2\% | 94.6\% | 95.7\% | 96.4\% | 97.1\% | 97.6\% |  |  |
| 2007 |  |  |  |  | 74.6\% | 80.7\% | 85.1\% | 89.1\% | 91.5\% | 93.5\% | 94.9\% | 96.0\% | 96.8\% | 97.4\% |  |  |  |
| 2008 |  |  |  | 63.0\% | 72.8\% | 79.7\% | 85.4\% | 89.0\% | 91.9\% | 93.8\% | 95.1\% | 96.2\% | 97.0\% |  |  |  |  |
| 2009 |  |  | 47.3\% | 61.3\% | 71.6\% | 79.7\% | 85.1\% | 89.2\% | 92.0\% | 93.9\% | 95.4\% | 96.4\% |  |  |  |  |  |
| 2010 |  | 29.4\% | 47.9\% | 61.9\% | 73.6\% | 81.2\% | 86.7\% | 90.5\% | 93.1\% | 94.8\% | 96.1\% |  |  |  |  |  |  |
| 2011 | 0.8\% | 29.3\% | 48.1\% | 63.6\% | 74.9\% | 82.6\% | 87.7\% | 91.4\% | 93.9\% | 95.4\% |  |  |  |  |  |  |  |
| 2012 | 0.8\% | 28.9\% | 49.3\% | 65.1\% | 76.3\% | 83.8\% | 89.0\% | 92.4\% | 94.5\% |  |  |  |  |  |  |  |  |
| 2013 | 0.9\% | 29.0\% | 50.4\% | 66.5\% | 78.1\% | 85.7\% | 90.3\% | 93.4\% |  |  |  |  |  |  |  |  |  |
| 2014 | 0.7\% | 29.3\% | 51.6\% | 67.9\% | 79.7\% | 86.9\% | 91.1\% |  |  |  |  |  |  |  |  |  |  |
| 2015 | 0.8\% | 30.0\% | 53.6\% | 70.8\% | 82.0\% | 88.4\% |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 0.8\% | 31.4\% | 56.1\% | 73.4\% | 83.6\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 0.8\% | 33.9\% | 59.0\% | 75.1\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 0.9\% | 34.4\% | 59.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1.0\% | 34.5\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2020 | 1.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Source: W | B qua | erly call | for expe | rence |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Quarterly Ultimate Settlement Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | $\underline{3}$ | $\underline{6}$ | $\underline{9}$ | 12 | 15 | 18 | $\underline{21}$ | $\underline{24}$ | $\underline{27}$ | 30 | 33 | $\underline{36}$ | 39 | $\underline{42}$ | $\underline{45}$ | $\underline{48}$ |
| 2011 | 0.8\% | 5.1\% | 12.0\% | 21.3\% | 29.7\% | 35.9\% | 40.3\% | 44.7\% | 48.6\% | 52.9\% | 56.8\% | 60.8\% | 64.1\% | 67.1\% | 70.2\% | 72.9\% |
| 2012 | 0.8\% | 5.1\% | 12.1\% | 21.2\% | 29.5\% | 35.9\% | 40.8\% | 45.6\% | 49.8\% | 54.1\% | 58.3\% | 62.2\% | 65.6\% | 68.8\% | 71.7\% | 74.4\% |
| 2013 | 0.9\% | 5.1\% | 11.8\% | 21.0\% | 29.4\% | 36.0\% | 41.4\% | 46.4\% | 51.0\% | 55.5\% | 59.6\% | 63.6\% | 67.1\% | 70.5\% | 73.4\% | 76.2\% |
| 2014 | 0.8\% | 4.8\% | 11.8\% | 20.8\% | 29.6\% | 36.4\% | 42.1\% | 47.3\% | 52.0\% | 56.5\% | 60.8\% | 64.8\% | 68.2\% | 71.7\% | 74.6\% | 77.5\% |
| 2015 | 0.8\% | 4.8\% | 12.2\% | 21.2\% | 30.4\% | 37.8\% | 43.5\% | 48.8\% | 53.9\% | 59.0\% | 63.4\% | 67.5\% | 71.1\% | 74.4\% | 77.4\% | 80.0\% |
| 2016 | 0.8\% | 5.1\% | 12.3\% | 21.9\% | 31.7\% | 39.5\% | 45.5\% | 51.3\% | 56.3\% | 61.5\% | 65.9\% | 70.1\% | 73.7\% | 76.9\% | 79.3\% | 81.6\% |
| 2017 | 0.9\% | 5.6\% | 13.5\% | 24.2\% | 34.2\% | 42.1\% | 48.3\% | 54.2\% | 59.1\% | 64.0\% | 68.1\% | 71.9\% | 75.1\% |  |  |  |
| 2018 | 1.0\% | 5.8\% | 13.9\% | 24.6\% | 34.7\% | 42.6\% | 48.6\% | 54.1\% | 59.0\% |  |  |  |  |  |  |  |
| 2019 | 1.0\% | 5.9\% | 13.7\% | 24.6\% | 34.5\% |  |  |  |  |  |  |  |  |  |  |  |
| 2020 | 1.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accident | Quarterly Incremental Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 | 24-27 | 27-30 | 30-33 | 33-36 | 36-39 | 39-42 | 42-45 | 45-48 |  |
| 2011 | 4.3\% | 6.9\% | 9.3\% | 8.5\% | 6.1\% | 4.5\% | 4.3\% | 3.9\% | 4.4\% | 3.9\% | 4.0\% | 3.3\% | 3.1\% | 3.0\% | 2.7\% |  |
| 2012 | 4.2\% | 7.1\% | 9.1\% | 8.3\% | 6.4\% | 4.8\% | 4.9\% | 4.1\% | 4.3\% | 4.2\% | 3.9\% | 3.4\% | 3.2\% | 3.0\% | 2.7\% |  |
| 2013 | 4.2\% | 6.7\% | 9.1\% | 8.4\% | 6.6\% | 5.4\% | 5.0\% | 4.6\% | 4.5\% | 4.1\% | 3.9\% | 3.6\% | 3.4\% | 2.9\% | 2.8\% |  |
| 2014 | 4.1\% | 6.9\% | 9.1\% | 8.8\% | 6.7\% | 5.8\% | 5.1\% | 4.8\% | 4.5\% | 4.3\% | 4.0\% | 3.4\% | 3.5\% | 2.9\% | 2.8\% |  |
| 2015 | 4.0\% | 7.4\% | 9.0\% | 9.3\% | 7.4\% | 5.7\% | 5.3\% | 5.1\% | 5.1\% | 4.4\% | 4.1\% | 3.6\% | 3.4\% | 3.0\% | 2.6\% |  |
| 2016 | 4.2\% | 7.3\% | 9.6\% | 9.8\% | 7.8\% | 6.0\% | 5.8\% | 5.0\% | 5.2\% | 4.3\% | 4.3\% | 3.6\% | 3.2\% | 2.3\% | 2.4\% |  |
| 2017 | 4.8\% | 7.8\% | 10.7\% | 10.0\% | 7.9\% | 6.2\% | 5.9\% | 5.0\% | 4.9\% | 4.1\% | 3.8\% | 3.2\% |  |  |  |  |
| 2018 | 4.9\% | 8.1\% | 10.7\% | 10.1\% | 7.9\% | 6.0\% | 5.5\% | 4.9\% |  |  |  |  |  |  |  |  |
| 2019 | 4.9\% | 7.9\% | 10.8\% | 9.9\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Notes | All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from $85 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2019 earned premium levels). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Source: | WCIRB quarterly calls for experience |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year



## Note:

The 2019 estimate is based on a comparison of claim counts based on WCIRB accident year experience as of March 31,2020 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

## Item AC20-08-01 <br> Third Quarter 2020 Review of Diagnostics

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

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

Please note the following:

1. While permanent disability claims continue to close at a faster rate throughout the state, the greatest acceleration has been in the Los Angeles and San Diego regions. The percent of permanent disability claims closed in those regions are now generally higher than in other parts of the state (Exhibit M5).
2. The median cost of Medicare set-asides declined at both first and second survey levels (Exhibit M10.1). In contrast, in the WCIRB's recently released summary of calendar year losses and expenses, the overall cost of Medicare set-asides increased and in calendar year 2019 was $7 \%$ of all medical payments as compared to $3 \%$ in calendar year 2014.
3. After reaching a historical high in the second quarter of 2018, the number of eligible independent medical reviews (IMR) filed by quarter has decreased steadily. With the COVID-19 pandemic, the number of eligible IMRs in the second quarter of 2020 was $28 \%$ below the second quarter of 2019 (Exhibit M14).
4. Following number of years of increases, indemnity claim settlement rates began to plateau and show sign of decrease before the pandemic (Exhibit C3.2).
5. On a preliminary basis, at first report level, the percentage of indemnity claims involving permanent disability in accident year 2018 decreased by about $10 \%$ in all regions. San Diego decreased by $17 \%$ from accident year 2017 (Exhibit C17).
6. Retrospective evaluations of the performance of alternative loss development methodologies indicate that the latest year reform and claim settlement rate adjusted methodology for projecting ultimate loss ratios is consistently closer to actual loss ratio than the other methodologies reviewed (Exhibits D6.1 to D6.5).
7. Although 3-month evaluations of accident year severities are volatile, both indemnity and medical severities increased significantly in the first quarter of 2020 (Exhibits S2.1 through S5.2).
8. The policy year average incurred indemnity severity increased by $4.3 \%$, while the median decreased by $2.0 \%$. Similarly, the average policy year 2017 incurred medical severity increased by $3.2 \%$, and the median decreased by $1.7 \%$ (Exhibit S9). This divergence between the average and median severity could suggest an increase in relatively large claims.
9. The average temporary disability duration on permanent disability claims for accident year 2017 based on WCIRB Permanent Disability Claim Survey data at first survey level decreased by $48 \%$ from accident year 2016 (Exhibit S10.2).

Actuarial Committee
Meeting Agenda for August 4, 2020
10. The number of claims in excess of $\$ 1,000,000$ has continued to grow with a sharp increase in 2017, as these claims contributed more to overall incurred indemnity losses and incurred medical losses (Exhibit S16.3).
11. Percentages of represented permanent disability claims by region and loss type declined for accident year 2017 based on WCIRB Permanent Disability Claim Survey data at first survey level (Exhibit E7).

# Exhibit Numbering Guide August 2020 

| Exhibit \# | Exhibit Name |
| :---: | :---: |
| Market/Claim Characteristics |  |
| M3 | Total Incurred Loss Distribution by Insurer |
| M5 | Percentage of Claims Closed by Injury Type and Region - First through Third Report Level |
| M7 | Division of Workers' Compensation (DWC) Distribution of Decisions by Type |
| M8 | Quarterly Expedited Hearings by Region |
| M9 | Number of Division of Workers' Compensation (DWC) Lien Decisions |
| M10 | Medicare Set-aside Costs by Age Interval \& Permanent Disability Rating Interval |
| M14 | IMR Filed Counts |
| Claim Count |  |
| C1 | Reported Indemnity Claim Count Development - Statewide |
| C3 | Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims |
| C4 | Reopening Rates Based on Unit Statistical Data \& by Injury Type |
| C5 | Closed-Closed Development Based on Unit Statistical Data |
| C8 | California OPRL Injury \& Illness Rates |
| C9 | Self-Insured Employers - Claim Frequency |
| C10 | Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness |
| C11 | Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts |
| C12 | Economic Variables |
| C15 | Accident Year Cumulative Injury Indemnity Claim Counts by Policy Year and Report Level |
| C17 | Claim Count Ratios by Region Based on Unit Statistical Data at 1st Report Level |
| C18 | Ratio of Total Indemnity Claim Counts to Total Claim Counts |
| C19 | Distribution of Cumulative Injury Claims by Injury Type |
| C20 | Indemnity Claim Frequency Relativities by NAICS Sector |
| C21 | Indemnity Claim Frequency by Geographic Region |
| C24 | Percentage of Cumulative Trauma Indemnity Claims by Policy Years and Industry Sector |
| Loss Development |  |
| D4 | Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year |
| D5 | Incremental Paid Indemnity \& Medical - Ratios of Actual to Expected |
| D6 | Comparison of Projected Loss Ratios |
| Claim Severity |  |
| S2 | Average Incurred Indemnity Loss per Reported Indemnity Claim \& Incurred Medical Loss per Reported Claim |
| S3 | Average Indemnity \& Medical Case Outstanding Per Open Indemnity Claim |
| S4 | Average Paid Losses per Indemnity Claim \& Average Paid Medical Loss Per Claim |
| S5 | Average Paid Losses per Closed Indemnity Claim |
| S6 | Ratio of Incremental Paid Indemnity \& Medical to Indemnity Claims Open During Period |
| S7 | Ratio of Quarterly Paid Medical to Indemnity Claims Inventory |
| S9 | Average and Median Indemnity Claim Severities at USR 1st |
| S10 | Changes in the Number of Weeks of Temporary Disability Benefits |
| S14 | Self Insured Employers - Claim Severity |
| S15 | Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness |
| S16 | Claim Counts and Losses on Claims in Excess of \$250,000 \& \$500,000 \& \$1,000,000 |
| Loss Adjustment Expense |  |
| E1 | Summary of Paid LAE Ratios by Insurer Type |
| E5 | Average Paid ALAE Per Reported Indemnity Claim - Private Insurers |
| E6 | Ratio of Paid ALAE to Paid Loss - Private Insurers |
| E7 | Percentage of Represented Permanent Disability Claims by Region and Loss Type |
| E8 | Distribution of Total ALAE \& MCCP Components - Private Insurers |
| E9 | Applicant Attorney Expense Paid - Private Insurers |
| E10 | Median Expense Costs per Represented PD Claim - Private Insurers Only |
| E13 | Changes in the Number and Cost of Medical-Legal Reports by Service Year |
| E15 | Average Paid MCCP per Reported Indemnity Claim - Statewide |

## Total Incurred Loss Distribution by Insurer*

I. Distribution based on State Fund, Top Ten Private Insurers and All Other Private Insurers Combined**

| Group | AY 2015 <br> @ 12/31/2015 | AY 2016 $@ 12 / 31 / 2016$ | AY 2017 <br> @ 12/31/2017 | AY 2018 $@ 12 / 31 / 2018$ | $\begin{gathered} \text { AY } 2019 \\ @ 12 / 31 / 2019 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Fund | 12.0\% | 9.5\% | 10.8\% | 12.7\% | 14.0\% |
| 1 | 8.0\% | 8.0\% | 8.4\% | 8.4\% | 8.4\% |
| 2 | 7.7\% | 7.4\% | 6.4\% | 6.5\% | 6.6\% |
| 3 | 7.8\% | 7.6\% | 6.8\% | 6.2\% | 5.9\% |
| 4 | 6.9\% | 6.8\% | 5.2\% | 5.4\% | 5.1\% |
| 5 | 4.3\% | 4.7\% | 4.9\% | 4.9\% | 5.0\% |
| 6 | 3.6\% | 3.6\% | 3.9\% | 3.4\% | 4.2\% |
| 7 | 3.4\% | 3.2\% | 3.1\% | 3.4\% | 3.3\% |
| 8 | 3.6\% | 3.6\% | 3.5\% | 2.9\% | 2.8\% |
| 9 | 2.7\% | 2.8\% | 2.2\% | 2.3\% | 2.6\% |
| 10 | 1.9\% | 2.0\% | 2.2\% | 2.1\% | 2.1\% |
| All Other | 38.2\% | 40.9\% | 42.7\% | 41.9\% | 40.0\% |

II. Distribution based on Top Ten Private Insurers and All Other Private Insurers Combined**

| Group | AY 2015 <br> @ 12/31/2015 | AY 2016 <br> @ 12/31/2016 | AY 2017 <br> @ 12/31/2017 | AY 2018 <br> @ 12/31/2018 | AY 2019 <br> @ 12/31/2019 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 9.1\% | 8.9\% | 9.4\% | 9.7\% | 9.7\% |
| 2 | 8.8\% | 8.1\% | 7.2\% | 7.4\% | 7.7\% |
| 3 | 8.8\% | 8.4\% | 7.6\% | 7.2\% | 6.9\% |
| 4 | 7.9\% | 7.5\% | 5.8\% | 6.2\% | 5.9\% |
| 5 | 4.9\% | 5.2\% | 5.5\% | 5.6\% | 5.8\% |
| 6 | 4.0\% | 4.0\% | 4.4\% | 3.9\% | 4.9\% |
| 7 | 3.8\% | 3.5\% | 3.5\% | 3.9\% | 3.9\% |
| 8 | 4.1\% | 4.0\% | 3.9\% | 3.3\% | 3.2\% |
| 9 | 3.0\% | 3.0\% | 2.4\% | 2.6\% | 3.0\% |
| 10 | 2.1\% | 2.2\% | 2.5\% | 2.4\% | 2.4\% |
| All Other | 43.4\% | 45.2\% | 47.9\% | 47.9\% | 46.5\% |

*Total incurred losses reflect the sum of paid indemnity and medical losses and indemnity and medical case reserves.
**Groups are ranked according to accident year 2019 incurred losses.

Source: WCIRB quarterly calls for experience

IV-A-4
WCIRB California ${ }^{\circledR}$

## Percentage of Claims Closed by Injury Type and Region

Permanent Partial \& Temporary

| Permanent Partial |  | Policy Year |  |  |  |  |  |  | Latest Year Reported Claim Distribution |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Report Level | Region* | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ |  |
| 1 | Bay Area | 12\% | 14\% | 15\% | 16\% | 18\% | 19\% | 20\% | 15\% |
| 1 | Los Angeles | 12\% | 15\% | 16\% | 17\% | 21\% | 24\% | 25\% | 53\% |
| 1 | San Diego | 13\% | 17\% | 20\% | 20\% | 23\% | 26\% | 27\% | 7\% |
| 1 | Remainder of CA | 13\% | 15\% | 17\% | 17\% | 20\% | 22\% | 23\% | 26\% |
|  | ALL REGIONS COMBINED | 12\% | 15\% | 16\% | 17\% | 20\% | 23\% | 24\% | 100\% |
| 2 | Bay Area | 35\% | 38\% | 38\% | 41\% | 45\% | 47\% |  | 14\% |
| 2 | Los Angeles | 32\% | 37\% | 37\% | 40\% | 45\% | 51\% |  | 56\% |
| 2 | San Diego | 38\% | 43\% | 44\% | 46\% | 50\% | 53\% |  | 7\% |
| 2 | Remainder of CA | 36\% | 38\% | 39\% | 42\% | 47\% | 48\% |  | 24\% |
|  | ALL REGIONS COMBINED | 34\% | 38\% | 38\% | 41\% | 46\% | 50\% |  | 100\% |
| 3 | Bay Area | 55\% | 58\% | 59\% | 62\% | 65\% |  |  | 15\% |
| 3 | Los Angeles | 51\% | 55\% | 55\% | 59\% | 65\% |  |  | 54\% |
| 3 | San Diego | 59\% | 62\% | 65\% | 67\% | 70\% |  |  | 7\% |
| 3 | Remainder of CA | 56\% | 58\% | 59\% | 62\% | 67\% |  |  | 25\% |
|  | ALL REGIONS COMBINED | 53\% | 56\% | 58\% | 61\% | 66\% |  |  | 100\% |
| Temporary |  | Policy Year |  |  |  |  |  |  | Latest Year <br> Reported |
|  |  | Claim |  |
| Report Level | Region* |  |  |  |  |  |  |  | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | Distribution |
| 1 | Bay Area | 56\% | 54\% | 56\% | 59\% | 60\% | 61\% | 62\% | 18\% |
| 1 | Los Angeles | 51\% | 49\% | 47\% | 50\% | 51\% | 52\% | 54\% | 44\% |
| 1 | San Diego | 58\% | 56\% | 55\% | 56\% | 57\% | 60\% | 62\% | 6\% |
| 1 | Remainder of CA | 59\% | 57\% | 55\% | 59\% | 60\% | 61\% | 61\% | 32\% |
|  | ALL REGIONS COMBINED | 55\% | 53\% | 52\% | 55\% | 55\% | 57\% | 58\% | 100\% |
| 2 | Bay Area | 74\% | 73\% | 77\% | 77\% | 79\% | 79\% |  | 17\% |
| 2 | Los Angeles | 68\% | 67\% | 68\% | 70\% | 72\% | 73\% |  | 46\% |
| 2 | San Diego | 73\% | 75\% | 75\% | 76\% | 77\% | 80\% |  | 7\% |
| 2 | Remainder of CA | 75\% | 73\% | 74\% | 76\% | 77\% | 78\% |  | 31\% |
|  | ALL REGIONS COMBINED | 71\% | 71\% | 72\% | 73\% | 75\% | 76\% |  | 100\% |
| 3 | Bay Area | 85\% | 85\% | 87\% | 89\% | 89\% |  |  | 17\% |
| 3 | Los Angeles | 79\% | 80\% | 81\% | 82\% | 84\% |  |  | 45\% |
| 3 | San Diego | 85\% | 86\% | 87\% | 88\% | 89\% |  |  | 7\% |
| 3 | Remainder of CA | 84\% | 85\% | 86\% | 86\% | 88\% |  |  | 31\% |
|  | ALL REGIONS COMBINED | 82\% | 83\% | 84\% | 85\% | 86\% |  |  | 100\% |

[^9]Source: WCIRB unit statistical data

## Division of Workers' Compensation (DWC) Distribution of Decisions by Type

| Calendar Yea | Compromise \& Release | S | S |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1993 | 73.5\% | 19.6\% | 6.9\% |
| 1994 | 70.7\% | 22.3\% | 7.0\% |
| 1995 | 63.7\% | 28.7\% | 7.6\% |
| 1996 | 59.7\% | 31.3\% | 9.0\% |
| 1997 | 58.2\% | 32.7\% | 9.1\% |
| 1998 | 57.5\% | 33.2\% | 9.3\% |
| 1999 | 57.0\% | 34.4\% | 8.6\% |
| 2000 | 56.3\% | 35.3\% | 8.4\% |
| 2001 | 56.9\% | 35.3\% | 7.8\% |
| 2002 | 55.7\% | 36.3\% | 8.0\% |
| 2003 | 59.4\% | 33.1\% | 7.5\% |
| 2004 | 59.0\% | 34.0\% | 7.0\% |
| 2005 | 61.2\% | 31.5\% | 7.3\% |
| 2006 | 57.7\% | 33.5\% | 8.8\% |
| 2007 | 55.9\% | 34.7\% | 9.4\% |
| 2008* | 54.4\% | 38.3\% | 7.3\% |
| 2009 | 52.2\% | 43.4\% | 4.4\% |
| 2010 | 49.5\% | 46.0\% | 4.5\% |
| 2011 | 51.2\% | 44.4\% | 4.3\% |
| 2012 | 51.4\% | 44.4\% | 4.2\% |
| 2013 | 54.5\% | 41.9\% | 3.6\% |
| 2014 | 57.7\% | 38.9\% | 3.4\% |
| 2015 | 59.3\% | 37.7\% | 3.0\% |
| 2016 | 60.7\% | 36.6\% | 2.7\% |
| 2017 | 61.1\% | 36.2\% | 2.7\% |
| 2018 | 61.6\% | 35.9\% | 2.5\% |

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

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

## Quarterly Expedited Hearings by Region

| Time Period | Northern <br> California | Central California | Southern <br> California | Expedited Hearing | Change from Same Quarter in Prior Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Qtr 2011 | --- | --- | --- | 2,503 | --- |
| 2nd Qtr 2011 | --- | --- | --- | 2,098 | --- |
| 3rd Qtr 2011 | --- | --- | --- | 2,462 | --- |
| 4th Qtr 2011 | --- | --- | --- | 2,439 | --- |
| 1st Qtr 2012 | --- | --- | --- | 2,480 | -0.9\% |
| 2nd Qtr 2012 | --- | --- | --- | 2,525 | 20.4\% |
| 3rd Qtr 2012 | --- | --- | --- | 3,786 | 53.8\% |
| 4th Qtr 2012 | --- | --- | --- | 2,673 | 9.6\% |
| 1st Qtr 2013 | --- | --- | --- | 3,480 | 40.3\% |
| 2nd Qtr 2013 | --- | --- | --- | 3,615 | 43.2\% |
| 3rd Qtr 2013 | --- | --- | --- | 4,109 | 8.5\% |
| 4th Qtr 2013 | --- | --- | --- | 4,013 | 50.1\% |
| 1st Qtr 2014 | --- | --- | --- | 3,813 | 9.6\% |
| 2nd Qtr 2014 | 14.4\% | 24.6\% | 60.9\% | 4,463 | 23.5\% |
| 3rd Qtr 2014 | 16.6\% | 23.5\% | 59.8\% | 4,404 | 7.2\% |
| 4th Qtr 2014 | 16.9\% | 16.8\% | 66.3\% | 3,926 | -2.2\% |
| 1st Qtr 2015 | 15.9\% | 18.2\% | 65.9\% | 4,062 | 6.5\% |
| 2nd Qtr 2015 | 18.0\% | 18.0\% | 63.9\% | 3,993 | -10.5\% |
| 3rd Qtr 2015 | 17.6\% | 20.1\% | 62.3\% | 4,222 | -4.1\% |
| 4th Qtr 2015 | 19.1\% | 20.3\% | 60.6\% | 4,252 | 8.3\% |
| 1st Qtr 2016 | 18.4\% | 20.7\% | 60.8\% | 4,507 | 11.0\% |
| 2nd Qtr 2016 | 16.7\% | 20.5\% | 62.8\% | 4,631 | 16.0\% |
| 3rd Qtr 2016 | 17.5\% | 20.3\% | 62.2\% | 4,764 | 12.8\% |
| 4th Qtr 2016 | 18.3\% | 20.1\% | 61.6\% | 4,569 | 7.5\% |
| 1st Qtr 2017 | 19.1\% | 20.3\% | 60.6\% | 4,983 | 10.6\% |
| 2nd Qtr 2017 | 16.8\% | 17.8\% | 65.4\% | 4,990 | 7.8\% |
| 3rd Qtr 2017 | 16.8\% | 15.3\% | 67.9\% | 5,041 | 5.8\% |
| 4th Qtr 2017 | 16.5\% | 15.3\% | 68.2\% | 5,155 | 12.8\% |
| 1st Qtr 2018 | 20.0\% | 16.4\% | 63.6\% | 5,633 | 13.0\% |
| 2nd Qtr 2018 | 19.7\% | 14.8\% | 65.5\% | 5,768 | 15.6\% |
| 3rd Qtr 2018 | 20.7\% | 13.8\% | 65.5\% | 5,594 | 11.0\% |
| 4th Qtr 2018 | 20.3\% | 12.5\% | 67.2\% | 5,537 | 7.4\% |
| 1st Qtr 2019 | 20.1\% | 14.6\% | 65.3\% | 5,705 | 1.3\% |
| 2nd Qtr 2019 | 17.8\% | 12.0\% | 70.2\% | 5,831 | 1.1\% |
| 3rd Qtr 2019 | 17.7\% | 14.8\% | 67.5\% | 6,380 | 14.1\% |
| 4th Qtr 2019 | 15.8\% | 12.7\% | 71.5\% | 5,793 | 4.6\% |
| 1st Qtr 2020 | 17.8\% | 13.7\% | 68.5\% | 5,773 | 1.2\% |
| 2nd Qtr 2020 | 18.3\% | 13.3\% | 68.4\% | 4,773 | -18.1\% |

Source: DWC

## Quarterly Expedited Hearings - DOR Reasons by Region

Northern California

|  | Medical |  |  |
| :---: | :---: | :---: | :---: |
| Time Period | Treatment | TD | Other |
| 2Q14-4Q14 | 77.4\% | 18.1\% | 4.5\% |
| 2015 | 76.4\% | 19.9\% | 3.7\% |
| 2016 | 77.6\% | 19.2\% | 3.2\% |
| 2017 | 77.5\% | 20.5\% | 2.0\% |
| 2018 | 80.8\% | 17.3\% | 1.9\% |
| 2019 | 81.1\% | 17.1\% | 1.8\% |
| 1Q20-2Q20 | 81.4\% | 17.0\% | 1.6\% |

## Central California

| Medical |  |  |
| :---: | :---: | :---: |
| Treatment | TD | Other |
| 86.8\% | 12.2\% | 1.0\% |
| 84.6\% | 14.2\% | 1.2\% |
| 87.3\% | 12.0\% | 0.7\% |
| 84.8\% | 14.3\% | 0.9\% |
| 84.7\% | 14.9\% | 0.4\% |
| 82.7\% | 17.0\% | 0.3\% |
| 80.3\% | 19.5\% | 0.2\% |

## Southern California

| Medical |  |  |  |
| :---: | :---: | :---: | :---: |
| Time Period | Treatment | TD | Other |
| 2Q14-4Q14 | 70.0\% | 19.4\% | 10.7\% |
| 2015 | 65.4\% | 20.5\% | 14.1\% |
| 2016 | 69.1\% | 18.9\% | 12.0\% |
| 2017 | 71.5\% | 18.6\% | 9.9\% |
| 2018 | 74.2\% | 17.0\% | 8.8\% |
| 2019 | 77.7\% | 16.0\% | 6.3\% |
| 1Q20-2Q20 | 78.6\% | 15.7\% | 5.7\% |


| Counts by Region** |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Period | Bay Area | Central Coast/ Valley | Los <br> Angeles County | Remainder of LA Basin | Remaining CA Zip Codes | Sacramento | San Diego County | Total |
| 2011 | 18,723 | 24,414 | 283,774 | 114,554 | 2,535 | 3,934 | 15,922 | 463,856 |
| 1st Qtr 2012 | 5,490 | 7,245 | 97,245 | 38,034 | 895 | 1,248 | 4,936 | 155,093 |
| 2nd Qtr 2012 | 5,467 | 8,970 | 122,040 | 44,065 | 1,102 | 1,322 | 4,991 | 187,957 |
| 3rd Qtr 2012 | 6,434 | 15,289 | 207,639 | 85,152 | 698 | 1,407 | 6,611 | 323,230 |
| 4th Qtr 2012 | 10,397 | 25,730 | 342,549 | 123,129 | 1,119 | 1,557 | 8,523 | 513,004 |
| 1st Qtr 2013 | 1,232 | 2,193 | 46,830 | 17,032 | 230 | 268 | 1,312 | 69,097 |
| 2nd Qtr 2013 | 1,450 | 1,562 | 18,947 | 6,917 | 211 | 339 | 684 | 30,110 |
| 3rd Qtr 2013 | 1,607 | 1,795 | 25,999 | 9,855 | 247 | 410 | 991 | 40,904 |
| 4th Qtr 2013 | 1,928 | 2,025 | 29,537 | 10,893 | 276 | 358 | 1,136 | 46,153 |
| 1st Qtr 2014 | 1,841 | 2,029 | 25,668 | 10,117 | 239 | 384 | 1,165 | 41,443 |
| 2nd Qtr 2014 | 1,697 | 2,306 | 29,417 | 11,942 | 265 | 354 | 1,263 | 47,244 |
| 3rd Qtr 2014 | 1,941 | 1,996 | 29,665 | 12,198 | 355 | 424 | 1,378 | 47,957 |
| 4th Qtr 2014 | 1,690 | 2,371 | 34,772 | 12,469 | 374 | 384 | 1,488 | 53,548 |
| 1st Qtr 2015 | 2,071 | 3,058 | 45,827 | 18,016 | 431 | 488 | 2,133 | 72,024 |
| 2nd Qtr 2015 | 2,370 | 4,218 | 54,147 | 22,198 | 501 | 500 | 2,787 | 86,721 |
| 3rd Qtr 2015 | 2,428 | 4,977 | 61,619 | 24,827 | 691 | 526 | 3,047 | 98,115 |
| 4th Qtr 2015 | 2,338 | 4,991 | 68,843 | 26,571 | 686 | 495 | 3,085 | 107,009 |
| 1st Qtr 2016 | 2,884 | 5,410 | 67,259 | 27,326 | 672 | 538 | 3,931 | 108,020 |
| 2nd Qtr 2016 | 2,543 | 5,112 | 66,511 | 26,852 | 536 | 506 | 3,912 | 105,972 |
| 3rd Qtr 2016 | 2,243 | 4,167 | 45,707 | 20,136 | 420 | 462 | 3,404 | 76,539 |
| 4th Qtr 2016 | 1,872 | 4,433 | 66,169 | 25,942 | 506 | 397 | 4,400 | 103,719 |
| 1st Qtr 2017 | 1,228 | 1,872 | 24,947 | 9,594 | 334 | 312 | 1,380 | 39,667 |
| 2nd Qtr 2017 | 1,537 | 2,211 | 33,194 | 11,969 | 349 | 369 | 1,764 | 51,393 |
| 3rd Qtr 2017 | 1,700 | 2,047 | 29,215 | 10,487 | 298 | 419 | 1,149 | 45,315 |
| 4th Qtr 2017 | 1,535 | 1,804 | 26,566 | 9,914 | 313 | 366 | 1,176 | 41,674 |
| 1st Qtr 2018 | 1,501 | 1,575 | 28,754 | 10,848 | 312 | 406 | 1,314 | 44,710 |
| 2nd Qtr 2018 | 1,264 | 1,538 | 23,697 | 9,034 | 312 | 338 | 986 | 37,169 |
| 3rd Qtr 2018 | 1,156 | 1,178 | 18,596 | 6,340 | 241 | 309 | 702 | 28,522 |
| 4th Qtr 2018 | 1,276 | 1,217 | 19,034 | 6,108 | 230 | 308 | 690 | 28,863 |
| 1st Qtr 2019 | 1,206 | 1,044 | 17,863 | 5,664 | 268 | 336 | 577 | 26,958 |
| 2nd Qtr 2019 | 1,447 | 1,049 | 15,862 | 5,073 | 244 | 334 | 445 | 24,454 |
| 3rd Qtr 2019 | 1,246 | 1,195 | 16,354 | 4,731 | 319 | 381 | 549 | 24,775 |
| 4th Qtr 2019 | 1,206 | 948 | 15,597 | 4,496 | 286 | 334 | 434 | 23,301 |
| 1st Qtr 2020 | 1,189 | 1,108 | 14,627 | 4,095 | 260 | 360 | 461 | 22,100 |
| 2nd Qtr 2020 | 1,059 | 878 | 11,743 | 3,548 | 213 | 288 | 480 | 18,209 |
| Counts by Type |  |  |  |  |  |  |  |  |
|  | Interpreter | Medical | Medical- | Copy |  |  |  |  |
| $\underline{\text { Tme Period }}$ | Interpreter | Medical |  |  | Other ${ }^{* * *}$ | $\underline{\text { Total }}$ |  |  |
| 2011 | 28,721 | 292,982 | 39,569 | 539 | 102,045 | 463,856 |  |  |
| 1st Qtr 2012 | 12,937 | 85,152 | 22,931 | 139 | 33,934 | 155,093 |  |  |
| 2nd Qtr 2012 | 17,162 | 106,336 | 37,440 | 65 | 26,954 | 187,957 |  |  |
| 3rd Qtr 2012 | 46,095 | 182,474 | 64,912 | 91 | 29,658 | 323,230 |  |  |
| 4th Qtr 2012 | 47,427 | 317,241 | 80,916 | 62 | 67,358 | 513,004 |  |  |
| 1st Qtr 2013 | 2,397 | 45,631 | 11,411 | 11 | 9,647 | 69,097 |  |  |
| 2nd Qtr 2013 | 831 | 22,480 | 587 | 20 | 6,192 | 30,110 |  |  |
| 3rd Qtr 2013 | 484 | 32,356 | 653 | 23 | 7,388 | 40,904 |  |  |
| 4th Qtr 2013 | 378 | 37,515 | 537 | 8 | 7,715 | 46,153 |  |  |
| 1st Qtr 2014 | 421 | 33,105 | 397 | 16 | 7,504 | 41,443 |  |  |
| 2nd Qtr 2014 | 275 | 38,534 | 320 | 10 | 8,105 | 47,244 |  |  |
| 3rd Qtr 2014 | 140 | 39,810 | 179 | 7 | 7,821 | 47,957 |  |  |
| 4th Qtr 2014 | 156 | 45,440 | 160 | 4 | 7,788 | 53,548 |  |  |
| 1st Qtr 2015 | 143 | 60,155 | 216 | 18 | 11,492 | 72,024 |  |  |
| 2nd Qtr 2015 | 152 | 74,037 | 268 | 7 | 12,257 | 86,721 |  |  |
| 3rd Qtr 2015 | 134 | 84,290 | 191 | 7 | 13,493 | 98,115 |  |  |
| 4th Qtr 2015 | 101 | 91,820 | 236 | 15 | 14,837 | 107,009 |  |  |
| 1st Qtr 2016 | 60 | 93,393 | 233 | 5 | 14,329 | 108,020 |  |  |
| 2nd Qtr 2016 | 90 | 89,781 | 467 | 6 | 15,628 | 105,972 |  |  |
| 3rd Qtr 2016 | 64 | 64,924 | 262 | 11 | 11,278 | 76,539 |  |  |
| 4th Qtr 2016 | 94 | 91,867 | 68 | 4 | 11,686 | 103,719 |  |  |
| 1st Qtr 2017 | 29 | 33,952 | 19 | 3 | 5,664 | 39,667 |  |  |
| 2nd Qtr 2017 | 33 | 43,470 | 34 | 5 | 7,851 | 51,393 |  |  |
| 3rd Qtr 2017 | 77 | 37,815 | 31 | 0 | 7,392 | 45,315 |  |  |
| 4th Qtr 2017 | 65 | 33,876 | 18 | 1 | 7,714 | 41,674 |  |  |
| 1st Qtr 2018 | 64 | 36,674 | 29 | 2 | 7,941 | 44,710 |  |  |
| 2nd Qtr 2018 | 103 | 29,276 | 22 | 0 | 7,768 | 37,169 |  |  |
| 3rd Qtr 2018 | 79 | 21,334 | 14 | 4 | 7,091 | 28,522 |  |  |
| 4th Qtr 2018 | 60 | 21,595 | 22 | 1 | 7,185 | 28,863 |  |  |
| 1st Qtr 2019 | 75 | 19,887 | 12 | 1 | 6,983 | 26,958 |  |  |
| 2nd Qtr 2019 | 54 | 18,497 | 17 | 1 | 5,885 | 24,454 |  |  |
| 3rd Qtr 2019 | 43 | 17,721 | 9 | 1 | 6,674 | 24,775 |  |  |
| 4th Qtr 2019 | 48 | 15,977 | 14 | 0 | 7,262 | 23,301 |  |  |
| 1st Qtr 2020 | 38 | 15,775 | 16 | 0 | 6,271 | 22,100 |  |  |
| 2nd Qtr 2020 | 16 | 12,693 | 8 | 0 | 5,492 | 18,209 |  |  |

* Lien Counts exclude SDI/EDD Liens
** Regions reflect the following WCAB Office mapping: Bay Area - Oakland, San Jose, San Francisco; Central Coast/Valley -
Bakersfield, Fresno, Goleta, Grover Beach, Salinas, Stockton; Los Angeles County - Long Beach, Los Angeles, Marina Del Rey,
Pomona, Van Nuys; Remainder of LA Basin - Anaheim, Oxnard, Riverside, San Bernardino, Santa Ana; Remaining CA Zip Codes -
Eureka, Redding, San Luis Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego
${ }^{* * *}$ Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens
Source: EAMS Liens Data

| Counts by Region** |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Bay Area | Central <br> Coast/ <br> Valley | Los Angeles County | Remainder of LA Basin | Remaining <br> CA Zip <br> Codes | Sacramento | San Diego County | Total |
| Jan-17 | 210 | 347 | 5,362 | 2,380 | 69 | 64 | 316 | 8,748 |
| Feb-17 | 421 | 598 | 8,251 | 3,112 | 122 | 118 | 453 | 13,075 |
| Mar-17 | 597 | 927 | 11,334 | 4,102 | 143 | 130 | 611 | 17,844 |
| Apr-17 | 474 | 764 | 11,573 | 4,118 | 110 | 106 | 640 | 17,785 |
| May-17 | 519 | 835 | 11,395 | 4,175 | 121 | 132 | 573 | 17,750 |
| Jun-17 | 544 | 612 | 10,226 | 3,676 | 118 | 131 | 551 | 15,858 |
| Jul-17 | 530 | 548 | 10,092 | 3,636 | 101 | 130 | 426 | 15,463 |
| Aug-17 | 594 | 703 | 10,712 | 3,690 | 109 | 146 | 412 | 16,366 |
| Sep-17 | 576 | 796 | 8,411 | 3,161 | 88 | 143 | 311 | 13,486 |
| Oct-17 | 514 | 773 | 9,856 | 3,585 | 100 | 128 | 413 | 15,369 |
| Nov-17 | 451 | 496 | 8,506 | 3,214 | 110 | 119 | 371 | 13,267 |
| Dec-17 | 570 | 535 | 8,204 | 3,115 | 103 | 119 | 392 | 13,038 |
| Jan-18 | 473 | 565 | 9,986 | 3,636 | 98 | 123 | 457 | 15,338 |
| Feb-18 | 490 | 479 | 8,982 | 3,451 | 101 | 140 | 481 | 14,124 |
| Mar-18 | 538 | 531 | 9,786 | 3,761 | 113 | 143 | 376 | 15,248 |
| Apr-18 | 387 | 546 | 8,851 | 3,375 | 97 | 90 | 361 | 13,707 |
| May-18 | 477 | 513 | 8,380 | 3,433 | 112 | 126 | 308 | 13,349 |
| Jun-18 | 400 | 479 | 6,466 | 2,226 | 103 | 122 | 317 | 10,113 |
| Jul-18 | 386 | 414 | 6,101 | 2,109 | 79 | 124 | 229 | 9,442 |
| Aug-18 | 406 | 422 | 7,039 | 2,338 | 76 | 91 | 275 | 10,647 |
| Sep-18 | 364 | 342 | 5,456 | 1,893 | 86 | 94 | 198 | 8,433 |
| Oct-18 | 476 | 454 | 6,645 | 2,270 | 74 | 106 | 271 | 10,296 |
| Nov-18 | 454 | 431 | 6,436 | 2,097 | 81 | 117 | 237 | 9,853 |
| Dec-18 | 346 | 332 | 5,953 | 1,741 | 75 | 85 | 182 | 8,714 |
| Jan-19 | 434 | 371 | 6,394 | 1,918 | 78 | 113 | 191 | 9,499 |
| Feb-19 | 407 | 385 | 5,581 | 1,802 | 120 | 116 | 205 | 8,616 |
| Mar-19 | 365 | 288 | 5,888 | 1,944 | 70 | 107 | 181 | 8,843 |
| Apr-19 | 449 | 374 | 5,683 | 1,903 | 99 | 121 | 188 | 8,817 |
| May-19 | 535 | 366 | 5,352 | 1,734 | 82 | 113 | 152 | 8,334 |
| Jun-19 | 463 | 309 | 4,827 | 1,436 | 63 | 100 | 105 | 7,303 |
| Jul-19 | 444 | 389 | 5,595 | 1,685 | 96 | 139 | 167 | 8,515 |
| Aug-19 | 457 | 483 | 5,717 | 1,580 | 115 | 122 | 202 | 8,676 |
| Sep-19 | 345 | 323 | 5,042 | 1,466 | 108 | 120 | 180 | 7,584 |
| Oct-19 | 453 | 379 | 5,941 | 1,778 | 112 | 135 | 161 | 8,959 |
| Nov-19 | 394 | 294 | 5,056 | 1,461 | 86 | 107 | 150 | 7,548 |
| Dec-19 | 359 | 275 | 4,600 | 1,257 | 88 | 92 | 123 | 6,794 |
| Jan-20 | 477 | 296 | 5,126 | 1,402 | 117 | 157 | 169 | 7,744 |
| Feb-20 | 396 | 420 | 4,720 | 1,323 | 76 | 114 | 159 | 7,208 |
| Mar-20 | 316 | 392 | 4,781 | 1,370 | 67 | 89 | 133 | 7,148 |
| Apr-20 | 324 | 237 | 4,111 | 1,322 | 71 | 76 | 163 | 6,304 |
| May-20 | 374 | 226 | 3,469 | 1,025 | 73 | 81 | 113 | 5,361 |
| Jun-20 | 361 | 415 | 4,163 | 1,201 | 69 | 131 | 204 | 6,544 |
| Counts by Type |  |  |  |  |  |  |  |  |
|  |  |  | Medical- | Copy |  |  |  |  |
| Month | Interpreter | Medical | Legal | Service | Other ${ }^{* * *}$ | Total |  |  |
| Jan-17 | 9 | 7,460 | 5 | 2 | 1,272 | 8,748 |  |  |
| Feb-17 | 8 | 11,103 | 10 | 1 | 1,953 | 13,075 |  |  |
| Mar-17 | 12 | 15,389 | 4 | 0 | 2,439 | 17,844 |  |  |
| Apr-17 | 13 | 15,188 | 12 | 3 | 2,569 | 17,785 |  |  |
| May-17 | 7 | 14,838 | 14 | , | 2,890 | 17,750 |  |  |
| Jun-17 | 13 | 13,444 | 8 | 1 | 2,392 | 15,858 |  |  |
| Jul-17 | 37 | 13,022 | 9 | 0 | 2,395 | 15,463 |  |  |
| Aug-17 | 24 | 13,599 | 11 | 0 | 2,732 | 16,366 |  |  |
| Sep-17 | 16 | 11,194 | 11 | 0 | 2,265 | 13,486 |  |  |
| Oct-17 | 13 | 12,692 | 5 |  | 2,658 | 15,369 |  |  |
| Nov-17 | 19 | 10,666 | 5 | 0 | 2,577 | 13,267 |  |  |
| Dec-17 | 33 | 10,518 | 8 | 0 | 2,479 | 13,038 |  |  |
| Jan-18 | 41 | 12,695 | 12 | 1 | 2,589 | 15,338 |  |  |
| Feb-18 | 17 | 11,551 | 9 | 1 | 2,546 | 14,124 |  |  |
| Mar-18 | 6 | 12,428 | 8 | 0 | 2,806 | 15,248 |  |  |
| Apr-18 | 18 | 10,714 | 11 | 0 | 2,964 | 13,707 |  |  |
| May-18 | 25 | 10,744 | 8 | 0 | 2,572 | 13,349 |  |  |
| Jun-18 | 60 | 7,818 | 3 | 0 | 2,232 | 10,113 |  |  |
| Jul-18 | 44 | 7,056 | 0 | 3 | 2,339 | 9,442 |  |  |
| Aug-18 | 23 | 7,914 | 8 | 1 | 2,701 | 10,647 |  |  |
| Sep-18 | 12 | 6,364 | 6 | 0 | 2,051 | 8,433 |  |  |
| Oct-18 | 23 | 7,720 | 9 | 0 | 2,544 | 10,296 |  |  |
| Nov-18 | 24 | 7,309 | 7 | 1 | 2,512 | 9,853 |  |  |
| Dec-18 | 13 | 6,566 | 6 | 0 | 2,129 | 8,714 |  |  |
| Jan-19 | 26 | 6,759 | 7 | 1 | 2,706 | 9,499 |  |  |
| Feb-19 | 38 | 6,011 | 3 | 0 | 2,564 | 8,616 |  |  |
| Mar-19 | 11 | 7,117 | 2 | 0 | 1,713 | 8,843 |  |  |
| Apr-19 | 27 | 6,707 | 4 | 1 | 2,078 | 8,817 |  |  |
| May-19 | 22 | 6,357 | 10 | 0 | 1,945 | 8,334 |  |  |
| Jun-19 | 5 | 5,433 | 3 | 0 | 1,862 | 7,303 |  |  |
| Jul-19 | 22 | 6,307 | 2 | 1 | 2,183 | 8,515 |  |  |
| Aug-19 | 8 | 6,265 | 4 | 0 | 2,399 | 8,676 |  |  |
| Sep-19 | 13 | 5,149 | 3 | 0 | 2,419 | 7,584 |  |  |
| Oct-19 | 38 | 5,957 | 4 | 0 | 2,960 | 8,959 |  |  |
| Nov-19 | 2 | 5,280 | 8 | 0 | 2,258 | 7,548 |  |  |
| Dec-19 | 8 | 4,740 | 2 | 0 | 2,044 | 6,794 |  |  |
| Jan-20 | 5 | 5,335 | 7 | 0 | 2,397 | 7,744 |  |  |
| Feb-20 | 20 | 5,157 | 7 | 0 | 2,024 | 7,208 |  |  |
| Mar-20 | 13 | 5,283 | 2 | 0 | 1,850 | 7,148 |  |  |
| Apr-20 | 6 | 4,447 | 2 | 0 | 1,849 | 6,304 |  |  |
| May-20 | 5 | 3,774 | 5 | 0 | 1,577 | 5,361 |  |  |
| Jun-20 | 5 | 4,472 | 1 | 0 | 2,066 | 6,544 |  |  |

* Lien Counts exclude SDI/EDD Liens
** Regions reflect the following WCAB Office mapping: Bay Area - Oakland, San Jose, San Francisco; Central Coast/Valley - Bakersfield, Fresno, Goleta, Grover Beach, Salinas, Stockton; Los Angeles County - Long Beach, Los Angeles, Marina Del Rey, Pomona, Van Nuys; Remainder of LA Basin - Anaheim, Oxnard, Riverside, San Bernardino, Santa Ana; Remaining CA Zip Codes - Eureka, Redding, San Luis Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego
${ }^{* * *}$ Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens
Source: EAMS Liens Data

Medicare Set-aside Costs by Age Interval

| First Survey Level |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of PD Claims Involving Set-aside Claims |  |  |  | Average <br> Set-aside Amount |  |  | Median <br> Set-aside Amount |  |  |
| Accident Year | 59 or <br> Younger | 60 or Older | Average | $\begin{gathered} 59 \text { or } \\ \text { Younger } \end{gathered}$ | 60 or Older | Average | $\begin{gathered} 59 \text { or } \\ \text { Younger } \end{gathered}$ | 60 or Older | Average |
| 2011 | 0.9\% | 10.5\% | 1.9\% | 54,190 | 34,138 | 43,194 | 22,743 | 12,634 | 20,247 |
| 2012 | 0.5\% | 6.6\% | 1.1\% | 93,330 | 35,779 | 57,555 | 44,154 | 28,224 | 28,615 |
| 2013 | 0.8\% | 11.5\% | 2.0\% | 85,397 | 34,890 | 53,190 | 28,729 | 22,656 | 25,166 |
| 2014 | 0.8\% | 9.2\% | 1.7\% | 47,245 | 40,012 | 42,880 | 41,975 | 25,230 | 37,439 |
| 2015 | 0.1\% | 7.4\% | 0.9\% | 38,145 | 32,853 | 33,514 | 38,145 | 27,533 | 27,533 |
| 2016 | 0.6\% | 7.9\% | 1.5\% | 40,326 | 29,231 | 33,194 | 32,117 | 16,540 | 24,399 |
| 2017 | 0.2\% | 8.7\% | 1.2\% | 35,509 | 32,958 | 33,306 | 8,587 | 17,169 | 15,340 |
| Second Survey Level |  |  |  |  |  |  |  |  |  |
| Percentage of PD Claims Involving Set-aside Claims |  |  |  | Average <br> Set-aside Amount |  |  | Median <br> Set-aside Amount |  |  |
| Accident Year | 59 or <br> Younger | 60 or Older | Average | $\begin{gathered} 59 \text { or } \\ \text { Younger } \end{gathered}$ | 60 or Older | Average | 59 or Younger | 60 or Older | Average |
| 2011 | 1.6\% | 16.8\% | 3.1\% | 66,781 | 33,195 | 49,020 | 31,500 | 21,755 | 29,410 |
| 2012 | 1.3\% | 14.3\% | 2.7\% | 94,412 | 43,793 | 65,801 | 37,097 | 33,038 | 35,237 |
| 2013 | 1.5\% | 16.0\% | 3.1\% | 76,734 | 44,122 | 58,314 | 40,222 | 25,672 | 32,569 |
| 2014 | 1.9\% | 15.1\% | 3.4\% | 95,430 | 40,321 | 67,392 | 52,572 | 28,736 | 39,474 |
| 2015 | 0.2\% | 21.0\% | 2.7\% | 65,493 | 40,884 | 42,641 | 65,493 | 34,098 | 34,098 |
| 2016 | 1.2\% | 16.3\% | 3.1\% | 45,467 | 29,823 | 35,201 | 31,920 | 15,521 | 21,240 |

Source: WCIRB Permanent Disability Claim Survey.

## IMR Filed Counts

Quarterly IMRs Filed

| Year \& Quarter | IMRs Filed | Change from Same Quarter in Prior Year | Eligible IMRs | Change from Same Quarter in Prior Year |
| :---: | :---: | :---: | :---: | :---: |
| 2013 1Q \& 2Q | 878 | --- | --- | --- |
| 2013 3Q | 31,950 | --- | --- | --- |
| 2013 4Q | 51,092 | --- | --- | --- |
| 2014 1Q | 49,929 | --- | 17,421 | --- |
| 2014 2Q | 60,023 | --- | 24,417 | --- |
| 2014 3Q | 59,678 | 86.8\% | 54,959 | --- |
| 2014 4Q | 58,577 | 14.7\% | 46,512 | --- |
| 2015 1Q | 61,142 | 22.5\% | 36,314 | 108.4\% |
| 2015 2Q | 65,418 | 9.0\% | 48,628 | 99.2\% |
| 2015 3Q | 65,889 | 10.4\% | 40,603 | -26.1\% |
| 2015 4Q | 61,330 | 4.7\% | 39,950 | -14.1\% |
| 2016 1Q | 60,772 | -0.6\% | 41,023 | 13.0\% |
| 2016 2Q | 64,852 | -0.9\% | 44,287 | -8.9\% |
| 2016 3Q | 62,411 | -5.3\% | 43,892 | 8.1\% |
| 2016 4Q | 61,318 | 0.0\% | 43,618 | 9.2\% |
| 2017 1Q | 61,253 | 0.8\% | 43,194 | 5.3\% |
| 2017 2Q | 62,773 | -3.2\% | 42,866 | -3.2\% |
| 2017 3Q | 63,380 | 1.6\% | 42,836 | -2.4\% |
| 2017 4Q | 60,125 | -1.9\% | 43,298 | -0.7\% |
| 2018 1Q | 64,533 | 5.4\% | 47,336 | 9.6\% |
| 2018 2Q | 66,647 | 6.2\% | 48,175 | 12.4\% |
| 2018 3Q | 61,658 | -2.7\% | 45,775 | 6.9\% |
| 2018 4Q | 59,539 | -1.0\% | 44,941 | 3.8\% |
| 2019 1Q | 56,083 | -13.1\% | 42,334 | -10.6\% |
| 2019 2Q | 57,498 | -13.7\% | 43,658 | -9.4\% |
| 2019 3Q | 55,759 | -9.6\% | 43,873 | -4.2\% |
| 2019 4Q | 52,759 | -11.4\% | 42,489 | -5.5\% |
| 2020 1Q | 51,925 | -7.4\% | 38,405 | -9.3\% |
| 2020 2Q | 40,642 | -29.3\% | 31,524 | -27.8\% |

Yearly IMR Counts

|  | Original IMR |  |  |  |  | Eligible IMR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Applications | Duplicates | Ineligible | Total Rejected | Eligible IMRs | Yearly Change |
| 2013 IMR Counts | 83,920 | 15,560 | 15,516 | 31,076 | 52,844 | --- |
| 2014 IMR Counts | 228,084 | 56,503 | 28,272 | 84,775 | 143,309 | 171.2\% |
| 2015 IMR Counts | 253,776 | 58,106 | 30,175 | 88,281 | 165,495 | 15.5\% |
| 2016 IMR Counts | 249,353 | 53,314 | 23,219 | 76,533 | 172,820 | 4.4\% |
| 2017 IMR Counts | 247,531 | 54,993 | 20,344 | 75,337 | 172,194 | -0.4\% |
| 2018 IMR Counts | 252,377 | 52,294 | 13,856 | 66,150 | 186,227 | 8.1\% |
| 2019 IMR Counts | 222,099 | 44,773 | 4,972 | 49,745 | 172,354 | -7.4\% |

Reported Indemnity Claim Count Development - Statewide

| Accident Year | 3-15 | 15-27 | 27-39 | 39-51 | -63 | 75 |  |  | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 |  |  |  |  |  |  |  |  | 1.000 |
| 2003 |  |  |  |  |  |  |  | 0.999 | 0.999 |
| 2004 |  |  |  |  |  |  | 0.999 | 0.999 | 1.000 |
| 2005 |  |  |  |  |  | 1.000 | 1.001 | 1.000 | 1.000 |
| 2006 |  |  |  |  | 1.002 | 1.001 | 1.001 | 1.000 | 1.001 |
| 2007 |  |  |  | 1.006 | 1.003 | 1.002 | 1.000 | 1.000 | 1.001 |
| 2008 |  |  | 1.017 | 1.009 | 1.004 | 1.003 | 1.001 | 1.002 | 1.001 |
| 2009 |  | 1.080 | 1.023 | 1.008 | 1.005 | 1.003 | 1.003 | 1.001 | 1.000 |
| 2010 | 7.372 | 1.089 | 1.022 | 1.010 | 1.006 | 1.004 | 1.002 | 1.001 | 1.000 |
| 2011 | 7.523 | 1.100 | 1.026 | 1.011 | 1.007 | 1.002 | 1.001 | 1.000 | 1.000 |
| 2012 | 7.673 | 1.120 | 1.026 | 1.013 | 1.005 | 1.002 | 1.001 | 1.001 |  |
| 2013 | 8.168 | 1.101 | 1.029 | 1.008 | 1.004 | 1.001 | 1.002 |  |  |
| 2014 | 7.695 | 1.114 | 1.019 | 1.008 | 1.003 | 1.001 |  |  |  |
| 2015 | 8.136 | 1.100 | 1.016 | 1.005 | 1.003 |  |  |  |  |
| 2016 | 7.693 | 1.101 | 1.019 | 1.005 |  |  |  |  |  |
| 2017 | 7.742 | 1.088 | 1.017 |  |  |  |  |  |  |
| 2018 | 7.736 | 1.088 |  |  |  |  |  |  |  |
| 2019 | 7.847 |  |  |  |  |  |  |  |  |

Latest Year

| I. Age-to-Age |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7.847 | 1.088 | 1.017 | 1.005 | 1.003 | 1.001 | 1.002 | 1.001 | 1.000 |  |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |
| 8.810 | 1.123 | 1.032 | 1.015 | 1.010 | 1.007 | 1.005 | 1.004 | 1.003 | 1.003 |
| III. Estimated Percent of Ultimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |  |
| 11.4\% | 89.1\% | 96.9\% | 98.6\% | 99.1\% | 99.3\% | 99.5\% | 99.6\% | 99.7\% | 99.7\% |

Reported Total Claim Count Development - Statewide

| Accident Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 |  |  |  |  |  |  |  |  | $\frac{1.001}{}$ |
| 2003 |  |  |  |  |  |  |  | 1.001 | 1.000 |
| 2004 |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 |
| 2005 |  |  |  |  |  | 1.002 | 1.001 | 1.001 | 1.001 |
| 2006 |  |  |  |  | 1.003 | 1.001 | 1.001 | 1.001 | 1.001 |
| 2007 |  |  |  | 1.005 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 |
| 2008 |  |  | 1.010 | 1.006 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 |
| 2009 |  | 1.044 | 1.013 | 1.005 | 1.004 | 1.002 | 1.002 | 1.001 | 1.000 |
| 2010 | 7.244 | 1.047 | 1.011 | 1.006 | 1.003 | 1.003 | 1.002 | 1.001 | 1.001 |
| 2011 | 7.169 | 1.050 | 1.014 | 1.006 | 1.004 | 1.002 | 1.001 | 1.001 | 1.001 |
| 2012 | 7.191 | 1.062 | 1.013 | 1.007 | 1.003 | 1.002 | 1.001 | 1.001 |  |
| 2013 | 7.744 | 1.054 | 1.016 | 1.005 | 1.003 | 1.001 | 1.001 |  |  |
| 2014 | 7.431 | 1.062 | 1.011 | 1.005 | 1.003 | 1.002 |  |  |  |
| 2015 | 7.519 | 1.054 | 1.010 | 1.004 | 1.003 |  |  |  |  |
| 2016 | 7.373 | 1.055 | 1.012 | 1.005 |  |  |  |  |  |
| 2017 | 7.608 | 1.046 | 1.009 |  |  |  |  |  |  |
| 2018 | 7.324 | 1.046 |  |  |  |  |  |  |  |
| 2019 | 7.425 |  |  |  |  |  |  |  |  |


| Latest Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Age-to-Age |  |  |  |  |  |  |  |  |  |
| 7.425 | 1.046 | 1.009 | 1.005 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 |  |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |
| 7.953 | 1.071 | 1.024 | 1.015 | 1.010 | 1.008 | 1.006 | 1.005 | 1.004 | 1.004 |
| III. Estimated Percent of Ultimate Total Claims Reported |  |  |  |  |  |  |  |  |  |
| 12.6\% | 93.4\% | 97.6\% | 98.5\% | 99.0\% | 99.2\% | 99.4\% | 99.5\% | 99.6\% | 99.6\% |

Source: WCIRB quarterly calls for experience

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

| Accident Year | Development |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2002 |  |  |  |  |  |  |  |  | 16.9\% |
| 2003 |  |  |  |  |  |  |  | 18.1\% | 18.1\% |
| 2004 |  |  |  |  |  |  | 20.2\% | 19.1\% | 18.6\% |
| 2005 |  |  |  |  |  | 22.2\% | 21.0\% | 19.5\% | 24.3\% |
| 2006 |  |  |  |  | 25.6\% | 21.4\% | 20.8\% | 24.4\% | 20.2\% |
| 2007 |  |  |  | 27.1\% | 24.1\% | 22.9\% | 26.8\% | 22.0\% | 23.3\% |
| 2008 |  |  | 26.9\% | 26.4\% | 25.2\% | 27.9\% | 25.1\% | 25.5\% | 23.9\% |
| 2009 |  | 25.4\% | 26.5\% | 26.7\% | 28.5\% | 26.4\% | 27.6\% | 26.0\% | 24.0\% |
| 2010 | 29.0\% | 26.1\% | 27.0\% | 30.5\% | 28.8\% | 29.3\% | 28.6\% | 26.9\% | 25.3\% |
| 2011 | 28.8\% | 26.6\% | 29.9\% | 30.8\% | 30.8\% | 29.4\% | 29.4\% | 29.0\% | 25.6\% |
| 2012 | 28.3\% | 28.6\% | 31.2\% | 32.0\% | 31.8\% | 31.8\% | 30.8\% | 28.2\% |  |
| 2013 | 28.3\% | 30.3\% | 32.5\% | 34.4\% | 34.6\% | 32.4\% | 32.0\% |  |  |
| 2014 | 28.7\% | 31.6\% | 33.6\% | 36.6\% | 35.2\% | 32.5\% |  |  |  |
| 2015 | 29.4\% | 33.7\% | 37.0\% | 38.3\% | 35.5\% |  |  |  |  |
| 2016 | 30.9\% | 35.9\% | 39.4\% | 38.3\% |  |  |  |  |  |
| 2017 | 33.4\% | 37.9\% | 39.1\% |  |  |  |  |  |  |
| 2018 | 33.8\% | 37.2\% |  |  |  |  |  |  |  |
| 2019 | 33.7\% |  |  |  |  |  |  |  |  |

Source: WCIRB quarterly calls for experience

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

| Accident | Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 | 24-27 | 27-30 | 30-33 | 33-36 | 36-39 | 39-42 | 42-45 | 45-48 |
| 2008 | 4.7\% | 8.3\% | 11.2\% | 11.2\% | 9.2\% | 7.0\% | 6.6\% | 6.7\% | 7.3\% | 7.4\% | 8.1\% | 7.3\% | 7.4\% | 7.7\% | 7.5\% |
| 2009 | 4.0\% | 7.9\% | 10.3\% | 10.6\% | 8.5\% | 6.8\% | 6.6\% | 6.5\% | 6.9\% | 7.6\% | 7.8\% | 7.2\% | 7.9\% | 7.1\% | 7.7\% |
| 2010 | 4.1\% | 7.5\% | 10.4\% | 11.1\% | 8.5\% | 6.8\% | 7.1\% | 6.8\% | 7.6\% | 7.3\% | 7.9\% | 7.8\% | 9.1\% | 8.8\% | 9.3\% |
| 2011 | 4.3\% | 7.2\% | 10.6\% | 10.7\% | 8.7\% | 7.0\% | 7.3\% | 7.0\% | 8.4\% | 8.3\% | 9.2\% | 8.4\% | 8.5\% | 9.2\% | 9.1\% |
| 2012 | 4.3\% | 7.4\% | 10.4\% | 10.5\% | 9.1\% | 7.5\% | 8.2\% | 7.6\% | 8.6\% | 9.2\% | 9.3\% | 8.9\% | 9.3\% | 9.5\% | 9.6\% |
| 2013 | 4.2\% | 7.1\% | 10.4\% | 10.6\% | 9.4\% | 8.4\% | 8.6\% | 8.5\% | 9.3\% | 9.4\% | 9.9\% | 9.8\% | 10.3\% | 9.9\% | 10.6\% |
| 2014 | 4.2\% | 7.4\% | 10.4\% | 11.1\% | 9.5\% | 9.2\% | 9.0\% | 9.2\% | 9.5\% | 9.8\% | 10.5\% | 9.7\% | 11.3\% | 10.2\% | 11.4\% |
| 2015 | 4.1\% | 7.7\% | 10.4\% | 11.8\% | 10.6\% | 9.1\% | 9.6\% | 10.1\% | 11.2\% | 10.6\% | 11.2\% | 11.2\% | 11.8\% | 11.3\% | 11.6\% |
| 2016 | 4.3\% | 7.6\% | 11.0\% | 12.5\% | 11.4\% | 10.0\% | 10.6\% | 10.3\% | 11.8\% | 11.2\% | 12.4\% | 11.8\% | 12.1\% | 10.9\% | 11.8\% |
| 2017 | 4.8\% | 8.3\% | 12.2\% | 13.0\% | 12.0\% | 10.7\% | 11.4\% | 10.7\% | 11.8\% | 11.5\% | 12.0\% | 10.5\% |  |  |  |
| 2018 | 4.8\% | 8.5\% | 12.2\% | 13.2\% | 11.9\% | 10.6\% | 10.7\% | 10.3\% |  |  |  |  |  |  |  |
| 2019 | 4.7\% | 8.2\% | 12.3\% | 12.7\% |  |  |  |  |  |  |  |  |  |  |  |

Note: All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from $77 \%$ to $99 \%$ of the total California workers' compensation insured market measured using 2019 earned premium levels).

Source: WCIRB quarterly calls for experience

## Reopening Rates Based on Unit Statistical Data

|  | Reopening Rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1st to 2nd | 2nd to 3rd | 3rd to 4th | 4th to 5th | 5th to 6th | 6th to 7th | 7th to 8th |
| 2002 | $0.92 \%$ | $0.45 \%$ | $0.35 \%$ | $0.33 \%$ | $0.24 \%$ | $0.19 \%$ | $0.16 \%$ |
| 2003 | $0.68 \%$ | $0.43 \%$ | $0.38 \%$ | $0.31 \%$ | $0.24 \%$ | $0.23 \%$ | $0.18 \%$ |
| 2004 | $0.60 \%$ | $0.40 \%$ | $0.32 \%$ | $0.27 \%$ | $0.27 \%$ | $0.18 \%$ | $0.12 \%$ |
| 2005 | $0.63 \%$ | $0.34 \%$ | $0.29 \%$ | $0.29 \%$ | $0.25 \%$ | $0.14 \%$ | $0.11 \%$ |
| 2006 | $0.62 \%$ | $0.38 \%$ | $0.39 \%$ | $0.37 \%$ | $0.22 \%$ | $0.15 \%$ | $0.13 \%$ |
| 2007 | $0.64 \%$ | $0.60 \%$ | $0.53 \%$ | $0.29 \%$ | $0.23 \%$ | $0.17 \%$ | $0.14 \%$ |
| 2008 | $1.24 \%$ | $0.80 \%$ | $0.38 \%$ | $0.32 \%$ | $0.27 \%$ | $0.17 \%$ | $0.14 \%$ |
| 2009 | $1.22 \%$ | $0.48 \%$ | $0.40 \%$ | $0.38 \%$ | $0.26 \%$ | $0.19 \%$ | $0.16 \%$ |
| 2010 | $0.74 \%$ | $0.53 \%$ | $0.45 \%$ | $0.35 \%$ | $0.26 \%$ | $0.20 \%$ | $0.14 \%$ |
| 2011 | $0.86 \%$ | $0.60 \%$ | $0.48 \%$ | $0.40 \%$ | $0.31 \%$ | $0.18 \%$ |  |
| 2012 | $0.92 \%$ | $0.60 \%$ | $0.54 \%$ | $0.39 \%$ | $0.26 \%$ |  |  |
| 2013 | $0.89 \%$ | $0.67 \%$ | $0.47 \%$ | $0.37 \%$ |  |  |  |
| 2014 | $0.84 \%$ | $0.62 \%$ | $0.41 \%$ |  |  |  |  |
| 2015 | $0.74 \%$ | $0.53 \%$ |  |  |  |  |  |
| 2016 | $0.72 \%$ |  |  |  |  |  |  |


|  | Average Incurred for Reopened Claims |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th |
| 2002 | 30,525 | 32,543 | 44,273 | 59,359 | 63,946 | 79,544 | 76,263 |
| 2003 | 23,295 | 26,362 | 47,715 | 50,915 | 57,195 | 62,371 | 72,056 |
| 2004 | 20,348 | 27,536 | 35,748 | 50,349 | 50,964 | 71,644 | 75,968 |
| 2005 | 24,800 | 30,865 | 41,020 | 47,858 | 59,755 | 66,347 | 79,249 |
| 2006 | 25,237 | 29,803 | 36,576 | 45,402 | 62,900 | 65,690 | 76,528 |
| 2007 | 24,977 | 25,653 | 36,417 | 57,370 | 67,285 | 75,642 | 83,655 |
| 2008 | 17,783 | 22,985 | 45,903 | 58,719 | 65,007 | 79,550 | 109,922 |
| 2009 | 19,985 | 32,723 | 43,640 | 56,804 | 67,492 | 78,072 | 76,602 |
| 2010 | 25,513 | 33,258 | 47,060 | 56,399 | 66,372 | 82,341 | 81,822 |
| 2011 | 26,482 | 34,265 | 45,437 | 57,611 | 61,198 | 68,020 |  |
| 2012 | 26,314 | 34,862 | 44,611 | 55,943 | 61,313 |  |  |
| 2013 | 26,914 | 36,436 | 47,811 | 53,086 |  |  |  |
| 2014 | 28,634 | 38,942 | 45,984 |  |  |  |  |
| 2015 | 28,197 | 35,267 |  |  |  |  |  |
| 2016 | 28,193 |  |  |  |  |  |  |

Source: WCIRB unit statistical data

## Reopening Rates by Injury Type



## All Claims

| PY/RL | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 6 | 6 to 7 | 7 to 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 | $0.92 \%$ | $0.45 \%$ | $0.35 \%$ | $0.33 \%$ | $0.24 \%$ | $0.19 \%$ | $0.16 \%$ |
| 2003 | $0.68 \%$ | $0.43 \%$ | $0.38 \%$ | $0.31 \%$ | $0.24 \%$ | $0.23 \%$ | $0.18 \%$ |
| 2004 | $0.60 \%$ | $0.40 \%$ | $0.32 \%$ | $0.27 \%$ | $0.27 \%$ | $0.18 \%$ | $0.12 \%$ |
| 2005 | $0.63 \%$ | $0.34 \%$ | $0.29 \%$ | $0.29 \%$ | $0.25 \%$ | $0.14 \%$ | $0.11 \%$ |
| 2006 | $0.62 \%$ | $0.38 \%$ | $0.39 \%$ | $0.37 \%$ | $0.22 \%$ | $0.15 \%$ | $0.13 \%$ |
| 2007 | $0.64 \%$ | $0.60 \%$ | $0.53 \%$ | $0.29 \%$ | $0.23 \%$ | $0.17 \%$ | $0.14 \%$ |
| 2008 | $1.24 \%$ | $0.80 \%$ | $0.38 \%$ | $0.32 \%$ | $0.27 \%$ | $0.17 \%$ | $0.14 \%$ |
| 2009 | $1.22 \%$ | $0.48 \%$ | $0.40 \%$ | $0.38 \%$ | $0.26 \%$ | $0.19 \%$ | $0.16 \%$ |
| 2010 | $0.74 \%$ | $0.53 \%$ | $0.45 \%$ | $0.35 \%$ | $0.26 \%$ | $0.20 \%$ | $0.14 \%$ |
| 2011 | $0.86 \%$ | $0.60 \%$ | $0.48 \%$ | $0.40 \%$ | $0.31 \%$ | $0.18 \%$ |  |
| 2012 | $0.92 \%$ | $0.60 \%$ | $0.54 \%$ | $0.39 \%$ | $0.26 \%$ |  |  |
| 2013 | $0.89 \%$ | $0.67 \%$ | $0.47 \%$ | $0.37 \%$ |  |  |  |
| 2014 | $0.84 \%$ | $0.62 \%$ | $0.41 \%$ |  |  |  |  |
| 2015 | $0.74 \%$ | $0.53 \%$ |  |  |  |  |  |
| 2016 | $0.72 \%$ |  |  |  |  |  |  |

Note: Injury types are fixed at denominator age.

Source: WCIRB unit statistical data

## Closed-Closed Development Based on Unit Statistical Data

|  |  | Developing Closed Claim Rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1st to 2nd | 2nd to 3rd | 3rd to 4th | 4th to 5th | 5th to 6th | 6th to 7th | 7th to 8th |
| 2002 | $20.85 \%$ | $13.76 \%$ | $10.47 \%$ | $10.22 \%$ | $14.10 \%$ | $7.81 \%$ | $4.53 \%$ |
| 2003 | $24.16 \%$ | $13.85 \%$ | $12.12 \%$ | $18.44 \%$ | $9.70 \%$ | $5.04 \%$ | $5.54 \%$ |
| 2004 | $22.60 \%$ | $14.45 \%$ | $21.30 \%$ | $9.15 \%$ | $5.26 \%$ | $5.26 \%$ | $1.11 \%$ |
| 2005 | $20.78 \%$ | $20.68 \%$ | $8.28 \%$ | $4.98 \%$ | $4.34 \%$ | $1.36 \%$ | $1.11 \%$ |
| 2006 | $27.49 \%$ | $9.95 \%$ | $5.46 \%$ | $4.42 \%$ | $1.84 \%$ | $1.49 \%$ | $1.43 \%$ |
| 2007 | $20.05 \%$ | $6.62 \%$ | $5.38 \%$ | $2.53 \%$ | $2.36 \%$ | $1.90 \%$ | $1.48 \%$ |
| 2008 | $11.84 \%$ | $6.47 \%$ | $3.85 \%$ | $3.43 \%$ | $2.80 \%$ | $2.08 \%$ | $1.58 \%$ |
| 2009 | $11.69 \%$ | $5.58 \%$ | $4.72 \%$ | $3.83 \%$ | $2.93 \%$ | $2.23 \%$ | $1.85 \%$ |
| 2010 | $10.20 \%$ | $6.10 \%$ | $4.45 \%$ | $3.36 \%$ | $2.57 \%$ | $2.11 \%$ | $1.65 \%$ |
| 2011 | $10.88 \%$ | $5.43 \%$ | $3.76 \%$ | $2.71 \%$ | $2.13 \%$ | $1.58 \%$ |  |
| 2012 | $10.42 \%$ | $5.27 \%$ | $3.97 \%$ | $2.92 \%$ | $3.32 \%$ |  |  |
| 2013 | $9.95 \%$ | $5.69 \%$ | $3.96 \%$ | $4.21 \%$ |  |  |  |
| 2014 | $9.19 \%$ | $5.12 \%$ | $5.04 \%$ |  |  |  |  |
| 2015 | $9.12 \%$ | $6.18 \%$ |  |  |  |  |  |
| 2016 | $9.33 \%$ |  |  |  |  |  |  |

Closed-Closed Total Incurred Development as a Percent of Total Incurred Development on All Claims

| PY/RL | 1st to 2nd | 2nd to 3rd | 3rd to 4th | 4th to 5th | 5th to 6th | 6th to 7th | 7th to 8th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 | $0.78 \%$ | $2.28 \%$ | $5.14 \%$ | $3.80 \%$ | $8.49 \%$ | $6.39 \%$ | $4.49 \%$ |
| 2003 | $1.43 \%$ | $2.43 \%$ | $5.04 \%$ | $8.44 \%$ | $6.10 \%$ | $3.57 \%$ | $4.00 \%$ |
| 2004 | $1.64 \%$ | $2.18 \%$ | $6.20 \%$ | $4.24 \%$ | $3.13 \%$ | $3.65 \%$ | $3.13 \%$ |
| 2005 | $1.49 \%$ | $3.49 \%$ | $2.91 \%$ | $3.23 \%$ | $3.49 \%$ | $3.52 \%$ | $3.54 \%$ |
| 2006 | $1.93 \%$ | $1.88 \%$ | $2.61 \%$ | $3.12 \%$ | $3.18 \%$ | $3.23 \%$ | $5.20 \%$ |
| 2007 | $1.43 \%$ | $1.57 \%$ | $2.46 \%$ | $3.25 \%$ | $4.55 \%$ | $2.93 \%$ | $5.55 \%$ |
| 2008 | $0.99 \%$ | $1.62 \%$ | $2.32 \%$ | $3.81 \%$ | $4.41 \%$ | $6.09 \%$ | $5.39 \%$ |
| 2009 | $1.01 \%$ | $1.46 \%$ | $2.96 \%$ | $4.18 \%$ | $4.71 \%$ | $9.16 \%$ | $10.13 \%$ |
| 2010 | $0.87 \%$ | $1.94 \%$ | $3.53 \%$ | $5.35 \%$ | $7.31 \%$ | $9.40 \%$ | $8.01 \%$ |
| 2011 | $1.05 \%$ | $2.26 \%$ | $4.31 \%$ | $5.75 \%$ | $7.38 \%$ | $7.55 \%$ |  |
| 2012 | $1.32 \%$ | $3.07 \%$ | $5.33 \%$ | $6.71 \%$ | $4.87 \%$ |  |  |
| 2013 | $1.41 \%$ | $3.52 \%$ | $6.09 \%$ | $6.04 \%$ |  |  |  |
| 2014 | $1.62 \%$ | $3.29 \%$ | $5.50 \%$ |  |  |  |  |
| 2015 | $1.60 \%$ | $3.47 \%$ |  |  |  |  |  |
| 2016 | $1.55 \%$ |  |  |  |  |  |  |

Source: WCIRB unit statistical data

## California OPRL Injury \& Illness Rates

| A | B | C | D | E | F | G |  | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Reportable | Total | Total Days Away | Ind Proxy/ | California Avg Ann | Frequen per 1,000 | y Rates | Annual Frequen | hange in | Insured System Overall Ind |
| CY | Incidents | Cases(a) | Cases | Incidents | Employment(b) | Incidents | "Indemnity" | Incidents | "Indemnity" | Freq Change(c) |
| 1992 | 993.9 | 456.6 | 359.8 | 36.2\% | 12,171.0 | 81.7 | 29.6 | --- | --- |  |
| 1993 | 918.4 | 425.0 | 324.8 | 35.4\% | 11,964.1 | 76.8 | 27.1 | -6.0\% | -8.2\% | -16.0\% |
| 1994 | 902.6 | 436.7 | 313.3 | 34.7\% | 12,150.9 | 74.3 | 25.8 | -3.2\% | -5.0\% | -12.8\% |
| 1995 | 825.3 | 401.0 | 278.0 | 33.7\% | 12,458.6 | 66.2 | 22.3 | -10.8\% | -13.5\% | -4.5\% |
| 1996 | 784.7 | 384.3 | 253.3 | 32.3\% | 12,739.1 | 61.6 | 19.9 | -7.0\% | -10.9\% | -7.9\% |
| 1997 | 809.3 | 409.8 | 251.6 | 31.1\% | 13,149.1 | 61.5 | 19.1 | -0.1\% | -3.8\% | -4.5\% |
| 1998 | 779.5 | 388.2 | 241.0 | 30.9\% | 13,583.5 | 57.4 | 17.7 | -6.8\% | -7.3\% | -4.3\% |
| 1999 | 758.9 | 370.8 | 229.1 | 30.2\% | 14,135.5 | 53.7 | 16.2 | -6.4\% | -8.6\% | -0.1\% |
| 2000 | 787.4 | 396.4 | 246.2 | 31.3\% | 14,616.5 | 53.9 | 16.8 | 0.3\% | 3.9\% | 1.0\% |
| 2001 | 748.2 | 413.4 | 259.0 | 34.6\% | 14,747.4 | 50.7 | 17.6 | -5.8\% | 4.3\% | -6.8\% |
| 2002 | 694.1 | 404.1 | 231.8 | 33.4\% | 14,593.0 | 47.6 | 15.9 | -6.2\% | -9.6\% | -1.0\% |
| 2003 | 684.7 | 387.0 | 223.5 | 32.6\% | 14,301.3 | 47.9 | 15.6 | 0.7\% | -1.6\% | -2.7\% |
| 2004 | 645.1 | 367.3 | 201.4 | 31.2\% | 14,383.1 | 44.9 | 14.0 | -6.3\% | -10.4\% | -16.8\% |
| 2005 | 629.9 | 344.1 | 179.4 | 28.5\% | 14,570.7 | 43.2 | 12.3 | -3.6\% | -12.1\% | -13.9\% |
| 2006 | 603.0 | 340.4 | 171.0 | 28.4\% | 14,892.9 | 40.5 | 11.5 | -6.3\% | -6.7\% | -6.5\% |
| 2007 | 594.4 | 328.6 | 168.2 | 28.3\% | 15,428.6 | 38.5 | 10.9 | -4.8\% | -5.1\% | -2.3\% |
| 2008 | 541.8 | 298.4 | 158.9 | 29.3\% | 15,452.7 | 35.1 | 10.3 | -9.0\% | -5.7\% | -3.9\% |
| 2009 | 491.9 | 269.3 | 142.3 | 28.9\% | 14,877.9 | 33.1 | 9.6 | -5.7\% | -7.0\% | -2.0\% |
| 2010 | 464.1 | 257.1 | 137.4 | 29.6\% | 14,255.0 | 32.6 | 9.6 | -1.5\% | 0.8\% | 6.8\% |
| 2011 | 440.9 | 243.6 | 134.2 | 30.4\% | 13,875.2 | 31.8 | 9.7 | -2.4\% | 0.3\% | -0.2\% |
| 2012 | 451.5 | 257.1 | 140.1 | 31.0\% | 14,959.8 | 30.2 | 9.4 | (b) | (b) | 3.5\% |
| 2013 | 468.4 | 265.0 | 146.8 | 31.3\% | 15,379.0 | 30.5 | 9.5 | 0.9\% | 1.9\% | 0.0\% |
| 2014 | 460.7 | 265.1 | 142.8 | 31.0\% | 15,809.1 | 29.1 | 9.0 | -4.3\% | -5.4\% | 0.4\% |
| 2015 | 470.6 | 273.5 | 144.0 | 30.6\% | 16,295.2 | 28.9 | 8.8 | -0.9\% | -2.2\% | -1.9\% |
| 2016 | 466.6 | 272.7 | 145.9 | 31.3\% | 16,718.6 | 27.9 | 8.7 | -3.4\% | -1.2\% | -3.2\% |
| 2017 | 466.6 | 267.3 | 146.5 | 31.4\% | 17,019.7 | 27.4 | 8.6 | -1.8\% | -1.4\% | -2.9\% |
| 2018 | 466.5 | 277.2 | 147.3 | 31.6\% | 17,355.9 | 26.9 | 8.5 | -2.0\% | -1.4\% | -1.4\% |
|  | 000s | 000s | 000s | Proxy for | 000s | Proxy for | Proxy for | Change in | Change in |  |
|  | Broad OSHA |  | Proxy for | Indemnity |  | Indemnity | Indemnity | Column G | Column H |  |
|  | Definition |  | Indemnity | to Total |  | \& Med-Only | D / F | Proxy for | Proxy for |  |
|  | Proxy for |  |  | Ratio |  | Combined |  | Indemnity | Indemnity |  |
|  | Med \& Ind |  |  | D / B |  | B / F |  | \& Med-Only |  |  |
|  | Combined |  |  |  |  |  |  | Combined |  |  |

Notes: (a) Cases with days away from work, job restrictions or transfers.
(b) Series Change: OPRL data element was discontinued in 2012. BLS QCEW data element for 2013 and later.
(c) Insured System AY 2018 change is based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.

Sources: California Department of Industrial Relations - Office of Policy, Research, and Legislation
Bureau of Labor Statistics - Quarterly Census of Employment and Wages
WCIRB Indemnity Claim Frequency Model for insured system

| CY | Private Self-Insured Employers |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Cases Reported During Year |  |  | Indemnity /Total | Annual <br> Change | Private Employees | Total <br> Frequency | Total Freq. <br> Annual Change | Indemnity <br> Frequency | Ind. Freq <br> Annual Change |
|  | Medical-Only | Indemnity | Total |  |  |  |  |  |  |  |
| 2001 | 73,527 | 46,596 | 120,123 | 0.388 | --- | 2,049,611 | 0.059 | --- | 0.023 | --- |
| 2002 | 72,130 | 46,218 | 118,348 | 0.391 | 0.7\% | 1,968,800 | 0.060 | 2.6\% | 0.023 | 3.3\% |
| 2003 | 69,761 | 46,477 | 116,238 | 0.400 | 2.4\% | 2,474,025 | 0.047 | -21.8\% | 0.019 | -20.0\% |
| 2004 | 70,630 | 42,455 | 113,085 | 0.375 | -6.1\% | 2,595,470 | 0.044 | -7.3\% | 0.016 | -12.9\% |
| 2005 | 66,467 | 40,102 | 106,569 | 0.376 | 0.2\% | 2,814,083 | 0.038 | -13.1\% | 0.014 | -12.9\% |
| 2006 | 69,395 | 35,570 | 104,965 | 0.339 | -9.9\% | 2,681,843 | 0.039 | 3.4\% | 0.013 | -6.9\% |
| 2007 | 61,432 | 30,247 | 91,679 | 0.330 | -2.6\% | 2,295,155 | 0.040 | 2.1\% | 0.013 | -0.6\% |
| 2008 | 59,764 | 32,631 | 92,395 | 0.353 | 7.0\% | 2,393,095 | 0.039 | -3.3\% | 0.014 | 3.5\% |
| 2009 | 51,916 | 29,557 | 81,473 | 0.363 | 2.7\% | 2,173,519 | 0.037 | -2.9\% | 0.014 | -0.3\% |
| 2010 | 50,039 | 29,036 | 79,075 | 0.367 | 1.2\% | 2,145,570 | 0.037 | -1.7\% | 0.014 | -0.5\% |
| 2011 | 48,360 | 29,026 | 77,386 | 0.375 | 2.1\% | 2,111,065 | 0.037 | -0.5\% | 0.014 | 1.6\% |
| 2012 | 49,492 | 28,065 | 77,557 | 0.362 | -3.5\% | 2,122,757 | 0.037 | -0.3\% | 0.013 | -3.8\% |
| 2013 | 46,442 | 29,573 | 76,015 | 0.389 | 7.5\% | 2,088,402 | 0.036 | -0.4\% | 0.014 | 7.1\% |
| 2014 | 45,775 | 30,652 | 76,427 | 0.401 | 3.1\% | 2,190,516 | 0.035 | -4.1\% | 0.014 | -1.2\% |
| 2015 | 43,785 | 31,899 | 75,684 | 0.421 | 5.1\% | 2,259,451 | 0.033 | -4.0\% | 0.014 | 0.9\% |
| 2016 | 46,039 | 32,365 | 78,404 | 0.413 | -2.1\% | 2,374,484 | 0.033 | -1.4\% | 0.014 | -3.5\% |
| 2017 | 48,008 | 31,647 | 79,655 | 0.397 | -3.8\% | 2,255,013 | 0.035 | 7.0\% | 0.014 | 3.0\% |
| 2018 | 50,082 | 33,791 | 83,873 | 0.403 | 1.4\% | 2,260,244 | 0.037 | 5.1\% | 0.015 | 6.5\% |
| Public Self-Insured Employers |  |  |  |  |  |  |  |  |  |  |
|  | Number of Cases Reported During Year |  |  | Indemnity | Annual | Public | Total | Total Freq. Annual | Indemnity | Ind. Freq Annual |
| FY | Medical-Only | Indemnity | Total | /Total | Change | Employees | Frequency | Change | Frequency | Change |
| 2000/2001 | 65,103 | 56,168 | 121,271 | 0.463 | --- | 1,379,977 | 0.088 | --- | 0.041 | --- |
| 2001/2002 | 65,372 | 60,688 | 126,060 | 0.481 | 3.9\% | 1,504,119 | 0.084 | -4.6\% | 0.040 | -0.9\% |
| 2002/2003 | 69,985 | 65,043 | 135,028 | 0.482 | 0.1\% | 1,646,055 | 0.082 | -2.1\% | 0.040 | -2.1\% |
| 2003/2004 | 68,563 | 64,214 | 132,777 | 0.484 | 0.4\% | 1,804,405 | 0.074 | -10.3\% | 0.036 | -9.9\% |
| 2004/2005 | 69,739 | 56,265 | 126,004 | 0.447 | -7.7\% | 1,764,198 | 0.071 | -2.9\% | 0.032 | -10.4\% |
| 2005/2006 | 66,405 | 52,524 | 118,929 | 0.442 | -1.1\% | 1,670,607 | 0.071 | -0.3\% | 0.031 | -1.4\% |
| 2006/2007 | 65,564 | 50,664 | 116,228 | 0.436 | -1.3\% | 1,842,017 | 0.063 | -11.4\% | 0.028 | -12.5\% |
| 2007/2008 | 70,784 | 57,618 | 128,402 | 0.449 | 2.9\% | 1,939,483 | 0.066 | 4.9\% | 0.030 | 8.0\% |
| 2008/2009 | 68,184 | 57,595 | 125,779 | 0.458 | 2.0\% | 2,095,055 | 0.060 | -9.3\% | 0.027 | -7.5\% |
| 2009/2010 | 64,031 | 57,322 | 121,353 | 0.472 | 3.2\% | 2,040,413 | 0.059 | -0.9\% | 0.028 | 2.2\% |
| 2010/2011 | 61,806 | 57,201 | 119,007 | 0.481 | 1.8\% | 1,920,695 | 0.062 | 4.2\% | 0.030 | 6.0\% |
| 2011/2012 | 61,151 | 57,461 | 118,612 | 0.484 | 0.8\% | 1,898,064 | 0.062 | 0.9\% | 0.030 | 1.7\% |
| 2012/2013 | 60,303 | 56,398 | 116,701 | 0.483 | -0.2\% | 1,891,873 | 0.062 | -1.3\% | 0.030 | -1.5\% |
| 2013/2014 | 58,263 | 56,858 | 115,121 | 0.494 | 2.2\% | 2,396,139 | 0.048 | -22.1\% | 0.024 | -20.4\% |
| 2014/2015 | 57,276 | 57,519 | 114,795 | 0.501 | 1.4\% | 1,991,021 | 0.058 | 20.0\% | 0.029 | 21.7\% |
| 2015/2016 | 59,033 | 56,797 | 115,830 | 0.490 | -2.1\% | 2,068,691 | 0.056 | -2.9\% | 0.027 | -5.0\% |
| 2016/2017 | 60,528 | 55,723 | 116,251 | 0.479 | -2.2\% | 2,127,675 | 0.055 | -2.4\% | 0.026 | -4.6\% |
| 2017/2018 | 58,395 | 57,475 | 115,870 | 0.496 | 3.5\% | 2,080,967 | 0.056 | 1.9\% | 0.028 | 5.5\% |
| 2018/2019 | 57,230 | 58,287 | 115,517 | 0.505 | 1.7\% | 2,113,128 | 0.055 | -1.8\% | 0.028 | -0.1\% |


| CY | All Self-Insured Employers |  |  |  |  |  |  |  |  |  | Insured System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Cases Reported During Year |  |  | Indemnity <br> /Total | Annual <br> Change | All Self-Ins. <br> Employees | Total <br> Frequency | Total Freq <br> Annual Change | Indemnity <br> Frequency | Ind. Freq <br> Annual Change |  | Ind. Freq Annual |
|  | Medical-Only | Indemnity | Total |  |  |  |  |  |  |  | AY | Change |
| 2001 | 138,765 | 105,024 | 243,789 | 0.431 | --- | 3,491,659 | 0.070 | --- | 0.030 | --- | 2001 | -6.8\% |
| 2002 | 139,809 | 109,084 | 248,892 | 0.438 | 1.7\% | 3,543,887 | 0.070 | 0.6\% | 0.031 | 2.3\% | 2002 | -1.0\% |
| 2003 | 139,035 | 111,106 | 250,141 | 0.444 | 1.3\% | 4,199,255 | 0.060 | -15.2\% | 0.026 | -14.0\% | 2003 | -2.7\% |
| 2004 | 139,781 | 102,695 | 242,476 | 0.424 | -4.6\% | 4,379,772 | 0.055 | -7.1\% | 0.023 | -11.4\% | 2004 | -16.8\% |
| 2005 | 134,539 | 94,497 | 229,036 | 0.413 | -2.6\% | 4,531,486 | 0.051 | -8.7\% | 0.021 | -11.1\% | 2005 | -13.9\% |
| 2006 | 135,380 | 87,164 | 222,544 | 0.392 | -5.1\% | 4,438,155 | 0.050 | -0.8\% | 0.020 | -5.8\% | 2006 | -6.5\% |
| 2007 | 129,606 | 84,388 | 213,994 | 0.394 | 0.7\% | 4,185,905 | 0.051 | 2.0\% | 0.020 | 2.6\% | 2007 | -2.3\% |
| 2008 | 129,248 | 90,238 | 219,486 | 0.411 | 4.3\% | 4,410,364 | 0.050 | -2.7\% | 0.020 | 1.5\% | 2008 | -3.9\% |
| 2009 | 118,024 | 87,016 | 205,039 | 0.424 | 3.2\% | 4,241,253 | 0.048 | -2.9\% | 0.021 | 0.3\% | 2009 | -2.0\% |
| 2010 | 112,958 | 86,298 | 199,255 | 0.433 | 2.1\% | 4,126,124 | 0.048 | -0.1\% | 0.021 | 1.9\% | 2010 | 6.8\% |
| 2011 | 109,839 | 86,357 | 196,196 | 0.440 | 1.6\% | 4,020,445 | 0.049 | 1.1\% | 0.021 | 2.7\% | 2011 | -0.2\% |
| 2012 | 110,219 | 84,995 | 195,214 | 0.435 | -1.1\% | 4,017,726 | 0.049 | -0.4\% | 0.021 | -1.5\% | 2012 | 3.5\% |
| 2013 | 105,725 | 86,201 | 191,926 | 0.449 | 3.2\% | 4,232,408 | 0.045 | -6.7\% | 0.020 | -3.7\% | 2013 | 0.0\% |
| 2014 | 103,545 | 87,841 | 191,385 | 0.459 | 2.2\% | 4,384,096 | 0.044 | -3.7\% | 0.020 | -1.6\% | 2014 | 0.4\% |
| 2015 | 101,940 | 89,057 | 190,997 | 0.466 | 1.6\% | 4,289,307 | 0.045 | 2.0\% | 0.021 | 3.6\% | 2015 | -1.9\% |
| 2016 | 105,820 | 88,625 | 194,445 | 0.456 | -2.2\% | 4,472,667 | 0.043 | -2.4\% | 0.020 | -4.6\% | 2016 | -3.2\% |
| 2017 | 107,470 | 88,246 | 195,716 | 0.451 | -1.1\% | 4,359,334 | 0.045 | 3.3\% | 0.020 | 2.2\% | 2017 | -2.9\% |
| 2018 | 107,895 | 91,672 | 199,567 | 0.459 | 1.9\% | 4,357,292 | 0.046 | 2.0\% | 0.021 | 3.9\% | 2018 | -1.4\% |

Notes: $\quad$ Fiscal Year Public data prorated to $\mathrm{CYs} 50 \% / 50 \%$.
Insured System AY 2018 change is based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.

Sources: California Department of Industrial Relations
WCIRB Indemnity Claim Frequency Model for insured system

Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness

| Policy Year | Report Level | Change in Frequency Hazardousness | Indemnity <br> Frequency Hazardousness Index | Annual \% Change in Ind Frequency Attributable to Change in Mix of Exposures |
| :---: | :---: | :---: | :---: | :---: |
| 1961 | 3 | 1.000000 | 1.000000 | ------ |
| 1962 | 3 | 0.990262 | 0.990262 | -0.9738 |
| 1963 | 3 | 0.998718 | 0.988993 | -0.1282 |
| 1964 | 3 | 0.994304 | 0.983359 | -0.5696 |
| 1965 | 3 | 0.993875 | 0.977336 | -0.6125 |
| 1966 | 3 | 0.983584 | 0.961291 | -1.6416 |
| 1967 | 3 | 0.987626 | 0.949396 | -1.2374 |
| 1968 | 3 | 0.997512 | 0.947033 | -0.2488 |
| 1969 | 3 | 0.986390 | 0.934144 | -1.3610 |
| 1970 | 3 | 0.989966 | 0.924770 | -1.0034 |
| 1971 | 3 | 1.000824 | 0.925532 | 0.0824 |
| 1972 | 3 | 1.000505 | 0.926000 | 0.0505 |
| 1973 | 3 | 0.998631 | 0.924732 | -0.1369 |
| 1974 | 3 | 0.986017 | 0.911802 | -1.3983 |
| 1975 | 3 | 0.984110 | 0.897313 | -1.5890 |
| 1976 | 3 | 1.004996 | 0.901796 | 0.4996 |
| 1977 | 3 | 1.009490 | 0.910354 | 0.9490 |
| 1978 | 3 | 1.012494 | 0.921728 | 1.2494 |
| 1979 | 3 | 0.997841 | 0.919739 | -0.2159 |
| 1980 | 3 | 0.988843 | 0.909477 | -1.1157 |
| 1981 | 3 | 0.981336 | 0.892503 | -1.8664 |
| 1982 | 3 | 0.979033 | 0.873790 | -2.0967 |
| 1983 | 3 | 0.997989 | 0.872032 | -0.2011 |
| 1984 | 3 | 0.998272 | 0.870525 | -0.1728 |
| 1985 | 3 | 0.992516 | 0.864010 | -0.7484 |
| 1986 | 3 | 0.989667 | 0.855082 | -1.0333 |
| 1987 | 3 | 0.997751 | 0.853159 | -0.2249 |
| 1988 | 3 | 1.000574 | 0.853649 | 0.0574 |
| 1989 | 5 | 0.998212 | 0.852122 | -0.1788 |
| 1990 | 5 | 0.986184 | 0.840349 | -1.3816 |
| 1991 | 5 | 0.982822 | 0.825913 | -1.7178 |
| 1992 | 5 | 0.987393 | 0.815501 | -1.2607 |
| 1993 | 5 | 0.987562 | 0.805358 | -1.2438 |
| 1994 | 5 | 1.007382 | 0.811303 | 0.7382 |
| 1995 | 5 | 0.997625 | 0.809376 | -0.2375 |
| 1996 | 5 | 0.980288 | 0.793422 | -1.9712 |
| 1997 | 5 | 0.993034 | 0.787895 | -0.6966 |
| 1998 | 5 | 0.994743 | 0.783752 | -0.5257 |
| 1999 | 5 | 0.978134 | 0.766615 | -2.1866 |
| 2000 | 5 | 0.965472 | 0.740145 | -3.4528 |
| 2001 | 5 | 1.027926 | 0.760814 | 2.7926 |
| 2002 | 5 | 1.002823 | 0.762962 | 0.2823 |
| 2003 | 5 | 1.001398 | 0.764029 | 0.1398 |
| 2004 | 5 | 0.995209 | 0.760369 | -0.4791 |
| 2005 | 5 | 0.998285 | 0.759065 | -0.1715 |
| 2006 | 5 | 0.986896 | 0.749118 | -1.3104 |
| 2007 | 5 | 0.998047 | 0.747655 | -0.1953 |
| 2008 | 5 | 0.980684 | 0.733213 | -1.9316 |
| 2009 | 5 | 0.982600 | 0.720455 | -1.7400 |
| 2010 | 5 | 0.980260 | 0.706234 | -1.9740 |
| 2011 | 5 | 0.990176 | 0.699296 | -0.9824 |
| 2012 | 5 | 0.986305 | 0.689719 | -1.3695 |
| 2013 | 5 | 1.004750 | 0.692995 | 0.4750 |
| 2014 | Proj to 5th | 0.999916 | 0.692937 | -0.0084 |
| 2015 | Proj to 5th | 0.989042 | 0.685344 | -1.0958 |
| 2016 | Proj to 5th | 0.995713 | 0.682406 | -0.4287 |
| 2017 | Proj to 5th | 0.989680 | 0.675363 | -1.0320 |

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

|  | Change in Statewide Incremental Number of Indemnity Claims |  |
| :---: | :---: | :---: |
|  | Change in | Change in |
|  | Quarterly Increment | 4-Quarter Increment |
| Calendar Quarter | from Same Quarter at Prior | from Same Quarter at Prior |
| Evaluation | Calendar Year | Calendar Year |
| 3/31/2015 | -2.3\% | -0.4\% |
| 6/30/2015 | 2.4\% | 0.2\% |
| 9/30/2015 | 18.4\% | 4.8\% |
| 12/31/2015 | 2.7\% | 5.5\% |
| 3/31/2016 | 5.0\% | 7.3\% |
| 6/30/2016 | 2.7\% | 7.3\% |
| 9/30/2016 | -13.7\% | -1.6\% |
| 12/31/2016 | 0.3\% | -2.2\% |
| 3/31/2017 | 3.8\% | -2.4\% |
| 6/30/2017 | 3.8\% | -2.1\% |
| 9/30/2017 | 0.9\% | 2.2\% |
| 12/31/2017 | 2.1\% | 2.6\% |
| 3/31/2018 | -3.1\% | 0.9\% |
| 6/30/2018 | -1.9\% | -0.5\% |
| 9/30/2018 | 7.4\% | 1.1\% |
| 12/31/2018 | 3.6\% | 1.5\% |
| 3/31/2019 | 4.4\% | 3.3\% |
| 6/30/2019 | 2.7\% | 4.5\% |
| 9/30/2019 | 2.1\% | 3.2\% |
| 12/31/2019 | 5.9\% | 3.7\% |
| 3/31/2020 | 7.0\% | 4.3\% |

Source: WCIRB quarterly calls for experience

Economic Variables

| CY | Aggregate Employment | Unemployment Rate | Annual Log Differences |  | Economic <br> Variables 1st Prin. Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Aggregate Employment | Unemployment Rate |  |
| 1961 | 3,963,242 | 6.90 |  |  |  |
| 1962 | 4,146,749 | 5.80 | 0.045 | -0.174 | 0.178 |
| 1963 | 4,293,966 | 6.00 | 0.035 | 0.034 | -0.029 |
| 1964 | 4,426,369 | 6.00 | 0.030 | 0.000 | 0.004 |
| 1965 | 4,546,719 | 5.90 | 0.027 | -0.017 | 0.020 |
| 1966 | 4,793,964 | 4.90 | 0.053 | -0.186 | 0.191 |
| 1967 | 4,929,157 | 5.70 | 0.028 | 0.151 | -0.146 |
| 1968 | 5,134,603 | 5.40 | 0.041 | -0.054 | 0.059 |
| 1969 | 5,369,271 | 5.20 | 0.045 | -0.038 | 0.044 |
| 1970 | 5,336,545 | 7.30 | -0.006 | 0.339 | -0.337 |
| 1971 | 5,285,062 | 8.79 | -0.010 | 0.186 | -0.186 |
| 1972 | 6,022,635 | 7.61 | 0.131 | -0.145 | 0.161 |
| 1973 | 6,500,706 | 7.02 | 0.076 | -0.081 | 0.090 |
| 1974 | 6,709,500 | 7.30 | 0.032 | 0.040 | -0.035 |
| 1975 | 6,685,230 | 9.88 | -0.004 | 0.302 | -0.300 |
| 1976 | 7,261,209 | 9.17 | 0.083 | -0.075 | 0.085 |
| 1977 | 7,681,971 | 8.25 | 0.056 | -0.105 | 0.112 |
| 1978 | 9,203,099 | 7.11 | 0.181 | -0.149 | 0.173 |
| 1979 | 9,621,815 | 6.24 | 0.044 | -0.130 | 0.134 |
| 1980 | 10,269,331 | 6.83 | 0.065 | 0.090 | -0.080 |
| 1981 | 10,408,249 | 7.41 | 0.013 | 0.081 | -0.079 |
| 1982 | 10,235,071 | 9.95 | -0.017 | 0.294 | -0.294 |
| 1983 | 10,334,786 | 9.68 | 0.010 | -0.028 | 0.029 |
| 1984 | 10,826,006 | 7.79 | 0.046 | -0.218 | 0.222 |
| 1985 | 11,178,336 | 7.21 | 0.032 | -0.077 | 0.081 |
| 1986 | 11,489,283 | 6.69 | 0.027 | -0.075 | 0.078 |
| 1987 | 11,893,711 | 5.77 | 0.035 | -0.148 | 0.151 |
| 1988 | 12,361,079 | 5.31 | 0.039 | -0.084 | 0.088 |
| 1989 | 12,692,805 | 5.09 | 0.026 | -0.042 | 0.045 |
| 1990 | 12,946,887 | 5.77 | 0.020 | 0.125 | -0.121 |
| 1991 | 12,782,341 | 7.74 | -0.013 | 0.294 | -0.293 |
| 1992 | 12,582,274 | 9.32 | -0.016 | 0.186 | -0.186 |
| 1993 | 12,483,226 | 9.52 | -0.008 | 0.021 | -0.022 |
| 1994 | 12,615,828 | 8.56 | 0.011 | -0.106 | 0.106 |
| 1995 | 12,873,417 | 7.82 | 0.020 | -0.090 | 0.092 |
| 1996 | 13,231,630 | 7.28 | 0.027 | -0.072 | 0.075 |
| 1997 | 13,619,654 | 6.37 | 0.029 | -0.135 | 0.137 |
| 1998 | 14,082,965 | 5.91 | 0.033 | -0.075 | 0.079 |
| 1999 | 14,479,767 | 5.21 | 0.028 | -0.125 | 0.128 |
| 2000 | 14,992,265 | 4.90 | 0.035 | -0.062 | 0.066 |
| 2001 | 15,098,050 | 5.43 | 0.007 | 0.103 | -0.101 |
| 2002 | 14,972,541 | 6.65 | -0.008 | 0.203 | -0.202 |
| 2003 | 14,950,702 | 6.81 | -0.001 | 0.023 | -0.023 |
| 2004 | 15,130,469 | 6.20 | 0.012 | -0.093 | 0.093 |
| 2005 | 15,422,217 | 5.40 | 0.019 | -0.139 | 0.141 |
| 2006 | 15,697,957 | 4.92 | 0.018 | -0.093 | 0.095 |
| 2007 | 15,844,029 | 5.36 | 0.009 | 0.087 | -0.084 |
| 2008 | 15,689,423 | 7.31 | -0.010 | 0.310 | -0.308 |
| 2009 | 14,807,953 | 11.15 | -0.058 | 0.423 | -0.427 |
| 2010 | 14,664,517 | 12.22 | -0.010 | 0.091 | -0.092 |
| 2011 | 14,826,042 | 11.72 | 0.011 | -0.042 | 0.043 |
| 2012 | 15,161,033 | 10.38 | 0.022 | -0.121 | 0.123 |
| 2013 | 15,563,642 | 8.94 | 0.026 | -0.149 | 0.151 |
| 2014 | 15,991,717 | 7.50 | 0.027 | -0.176 | 0.178 |
| 2015 | 16,471,000 | 6.19 | 0.030 | -0.191 | 0.193 |
| 2016 | 16,904,583 | 5.49 | 0.026 | -0.122 | 0.124 |
| 2017 | 17,249,442 | 4.79 | 0.020 | -0.135 | 0.137 |
| 2018 | 17,594,683 | 4.26 | 0.020 | -0.118 | 0.120 |
| 2019 | 17,854,342 | 4.04 | 0.015 | -0.052 | 0.054 |
| 2020 | 16,159,548 | 10.49 | -0.100 | 0.953 | -0.958 |
| 2021 | 16,265,283 | 8.16 | 0.007 | -0.250 | 0.249 |
| 2022 | 17,333,060 | 6.84 | 0.064 | -0.178 | 0.185 |

Notes: The first principal component is of the annual log difference data from 1962-2019.
The first principal component of the annual log difference of the economic variables is: 1st PC of Econ Variables $=-0.1373546 \times$ Aggregate Employment $+0.9905219 \times$ Unemployment Rate
Sources: Government historical labor statistics through 2019
UCLA Anderson forecasts through 2022 are as of June 2020

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

Cumulative Injury Indemnity Claim Counts by Accident Year and Report Level

| AY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | 12,018 | 12,876 | 13,224 | 13,474 | 13,751 | 14,240 | 14,394 | 14,391 | 14,444 | 14,527 |
| 2005 | 7,921 | 8,802 | 9,390 | 9,817 | 10,320 | 10,563 | 10,652 | 10,767 | 10,854 | 10,874 |
| 2006 | 7,368 | 8,491 | 9,048 | 9,520 | 9,771 | 9,889 | 9,980 | 10,149 | 10,236 | 10,252 |
| 2007 | 7,560 | 8,657 | 9,341 | 9,754 | 9,965 | 10,130 | 10,333 | 10,372 | 10,426 | 10,446 |
| 2008 | 7,278 | 8,577 | 9,429 | 9,855 | 10,157 | 10,416 | 10,586 | 10,675 | 10,696 | 10,677 |
| 2009 | 7,749 | 9,332 | 10,201 | 10,699 | 11,145 | 11,306 | 11,435 | 11,498 | 11,502 | 11,512 |
| 2010 | 8,622 | 9,950 | 10,690 | 11,486 | 11,640 | 11,839 | 11,974 | 11,967 | 12,023 |  |
| 2011 | 8,393 | 10,363 | 11,630 | 11,930 | 12,187 | 12,345 | 12,397 | 12,470 |  |  |
| 2012 | 9,470 | 12,099 | 12,814 | 13,284 | 13,578 | 13,741 | 13,926 |  |  |  |
| 2013 | 12,040 | 14,207 | 15,143 | 15,566 | 15,856 | 16,115 |  |  |  |  |
| 2014 | 12,834 | 15,180 | 15,811 | 16,324 | 16,791 |  |  |  |  |  |
| 2015 | 12,858 | 15,335 | 16,099 | 16,813 |  |  |  |  |  |  |
| 2016 | 13,064 | 16,632 | 18,133 |  |  |  |  |  |  |  |
| 2017 | 12,837 | 16,773 |  |  |  |  |  |  |  |  |
| 2018 | 12,145 |  |  |  |  |  |  |  |  |  |

Cumulative Injury Share of Total Indemnity Count

| AY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 8.8\% | 9.2\% | 9.4\% | 9.6\% | 9.8\% | 10.1\% | 10.3\% | 10.3\% | 10.3\% | 10.4\% |
| 2005 | 6.7\% | 7.3\% | 7.8\% | 8.1\% | 8.5\% | 8.7\% | 8.8\% | 8.8\% | 8.9\% | 8.9\% |
| 2006 | 6.6\% | 7.5\% | 7.9\% | 8.3\% | 8.5\% | 8.6\% | 8.6\% | 8.8\% | 8.9\% | 8.9\% |
| 2007 | 7.1\% | 7.9\% | 8.5\% | 8.8\% | 8.9\% | 9.1\% | 9.2\% | 9.3\% | 9.3\% | 9.3\% |
| 2008 | 7.4\% | 8.4\% | 9.1\% | 9.4\% | 9.7\% | 9.9\% | 10.0\% | 10.1\% | 10.1\% | 10.1\% |
| 2009 | 8.6\% | 9.9\% | 10.6\% | 11.1\% | 11.5\% | 11.6\% | 11.7\% | 11.8\% | 11.8\% | 11.8\% |
| 2010 | 9.4\% | 10.3\% | 10.9\% | 11.6\% | 11.7\% | 11.9\% | 12.0\% | 12.0\% | 12.3\% |  |
| 2011 | 9.0\% | 10.6\% | 11.6\% | 11.8\% | 12.0\% | 12.2\% | 12.2\% | 12.2\% |  |  |
| 2012 | 9.7\% | 11.7\% | 12.1\% | 12.5\% | 12.7\% | 12.8\% | 12.8\% |  |  |  |
| 2013 | 11.5\% | 12.9\% | 13.5\% | 13.8\% | 14.0\% | 14.3\% |  |  |  |  |
| 2014 | 11.9\% | 13.3\% | 13.7\% | 14.0\% | 14.3\% |  |  |  |  |  |
| 2015 | 11.9\% | 13.4\% | 13.9\% | 14.1\% |  |  |  |  |  |  |
| 2016 | 12.0\% | 14.4\% | 15.5\% |  |  |  |  |  |  |  |
| 2017 | 11.8\% | 14.8\% |  |  |  |  |  |  |  |  |
| 2018 | 10.8\% |  |  |  |  |  |  |  |  |  |

Source: WCIRB unit statistical data

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

| Region | Ratio of Permanent Disability Claims to Indemnity Claims for Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | 0.359 | 0.309 | 0.303 | 0.283 | 0.296 | 0.305 | 0.313 | 0.323 | 0.309 | 0.293 | 0.302 | 0.310 | 0.299 | 0.284 | 0.254 |
| Los Angeles/LA Basin | 0.456 | 0.398 | 0.382 | 0.388 | 0.405 | 0.405 | 0.397 | 0.403 | 0.398 | 0.369 | 0.374 | 0.392 | 0.381 | 0.375 | 0.348 |
| San Diego | 0.411 | 0.341 | 0.330 | 0.329 | 0.336 | 0.362 | 0.356 | 0.357 | 0.361 | 0.327 | 0.348 | 0.360 | 0.345 | 0.353 | 0.293 |
| All Other | 0.370 | 0.324 | 0.315 | 0.299 | 0.320 | 0.315 | 0.325 | 0.320 | 0.314 | 0.290 | 0.302 | 0.315 | 0.301 | 0.293 | 0.251 |
| All Regions | 0.410 | 0.356 | 0.344 | 0.339 | 0.357 | 0.360 | 0.360 | 0.363 | 0.358 | 0.332 | 0.341 | 0.355 | 0.343 | 0.334 | 0.302 |
|  | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Region | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | --- | -14.0\% | -1.8\% | -6.6\% | 4.4\% | 3.1\% | 2.5\% | 3.3\% | -4.4\% | -5.2\% | 3.0\% | 2.7\% | -3.5\% | -4.9\% | -10.5\% |
| Los Angeles/LA Basin | --- | -12.8\% | -4.0\% | 1.7\% | 4.3\% | -0.1\% | -2.1\% | 1.6\% | -1.3\% | -7.2\% | 1.4\% | 4.8\% | -2.8\% | -1.5\% | -7.2\% |
| San Diego | --- | -16.9\% | -3.4\% | -0.1\% | 2.2\% | 7.6\% | -1.5\% | 0.2\% | 1.1\% | -9.3\% | 6.2\% | 3.4\% | -4.1\% | 2.3\% | -17.0\% |
| All Other | --- | -12.5\% | -2.7\% | -5.2\% | 7.1\% | -1.6\% | 3.3\% | -1.7\% | -1.8\% | -7.8\% | 4.2\% | 4.4\% | -4.4\% | -2.9\% | -14.1\% |
| All Regions | --- | -13.3\% | -3.2\% | -1.5\% | 5.3\% | 0.9\% | 0.0\% | 0.8\% | -1.5\% | -7.3\% | 2.7\% | 4.2\% | -3.5\% | -2.5\% | -9.6\% |


| Region | Ratio of Indemnity Claims to Total Claims for Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | 0.307 | 0.284 | 0.285 | 0.289 | 0.295 | 0.307 | 0.315 | 0.323 | 0.322 | 0.331 | 0.328 | 0.333 | 0.334 | 0.333 | 0.328 |
| Los Angeles/LA Basin | 0.333 | 0.304 | 0.297 | 0.305 | 0.316 | 0.341 | 0.352 | 0.359 | 0.372 | 0.389 | 0.393 | 0.391 | 0.391 | 0.371 | 0.368 |
| San Diego | 0.281 | 0.263 | 0.259 | 0.260 | 0.272 | 0.285 | 0.303 | 0.313 | 0.327 | 0.329 | 0.329 | 0.327 | 0.327 | 0.315 | 0.312 |
| All Other | 0.321 | 0.299 | 0.289 | 0.294 | 0.300 | 0.313 | 0.321 | 0.329 | 0.330 | 0.343 | 0.339 | 0.331 | 0.332 | 0.319 | 0.307 |
| All Regions | 0.320 | 0.295 | 0.290 | 0.295 | 0.304 | 0.323 | 0.333 | 0.340 | 0.348 | 0.361 | 0.361 | 0.358 | 0.358 | 0.344 | 0.338 |
|  | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Region | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | --- | -7.4\% | 0.6\% | 1.1\% | 2.3\% | 3.9\% | 2.7\% | 2.4\% | -0.2\% | 2.8\% | -0.8\% | 1.4\% | 0.3\% | -0.4\% | -1.3\% |
| Los Angeles/LA Basin | --- | -8.7\% | -2.4\% | 2.5\% | 3.8\% | 7.9\% | 3.3\% | 1.7\% | 3.7\% | 4.7\% | 0.9\% | -0.4\% | -0.2\% | -5.1\% | -0.7\% |
| San Diego | --- | -6.4\% | -1.4\% | 0.2\% | 4.7\% | 4.6\% | 6.4\% | 3.5\% | 4.3\% | 0.5\% | 0.0\% | -0.6\% | 0.1\% | -3.5\% | -1.2\% |
| All Other | --- | -6.9\% | -3.2\% | 1.6\% | 2.2\% | 4.2\% | 2.7\% | 2.3\% | 0.4\% | 3.9\% | -1.3\% | -2.3\% | 0.3\% | -3.9\% | -3.9\% |
| All Regions | --- | -7.8\% | -2.0\% | 1.8\% | 3.2\% | 6.0\% | 3.3\% | 2.1\% | 2.2\% | 3.8\% | 0.0\% | -0.8\% | 0.0\% | -4.0\% | -1.7\% |


| Region | Cumulative Injury Claims per 100 Indemnity Claims for Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | 8.82 | 7.39 | 6.51 | 7.51 | 7.55 | 8.20 | 8.18 | 8.21 | 7.73 | 9.12 | 8.74 | 8.04 | 8.05 | 8.11 | 7.77 |
| Los Angeles/LA Basin | 10.47 | 7.98 | 7.86 | 8.50 | 8.90 | 10.60 | 11.63 | 11.26 | 12.52 | 14.89 | 15.62 | 16.18 | 16.58 | 16.62 | 15.97 |
| San Diego | 8.86 | 6.58 | 6.00 | 6.43 | 6.96 | 7.30 | 9.20 | 8.51 | 8.77 | 11.76 | 12.44 | 12.22 | 12.17 | 12.08 | 12.39 |
| All Other | 6.16 | 4.47 | 4.92 | 4.86 | 4.86 | 5.77 | 6.30 | 5.94 | 6.15 | 7.02 | 7.12 | 6.79 | 6.66 | 6.43 | 7.59 |
| All Regions | 8.76 | 6.71 | 6.60 | 7.09 | 7.37 | 8.61 | 9.39 | 9.04 | 9.69 | 11.51 | 11.90 | 11.89 | 12.02 | 11.77 | 11.95 |


| Region | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bay Area | --- | -16.2\% | -11.9\% | 15.4\% | 0.5\% | 8.7\% | -0.3\% | 0.4\% | -5.8\% | 18.0\% | -4.1\% | -8.0\% | 0.1\% | 0.7\% | -4.1\% |
| Los Angeles/LA Basin | --- | -23.8\% | -1.5\% | 8.1\% | 4.8\% | 19.1\% | 9.6\% | -3.1\% | 11.2\% | 18.9\% | 4.9\% | 3.6\% | 2.5\% | 0.2\% | -4.0\% |
| San Diego | --- | -25.8\% | -8.8\% | 7.1\% | 8.4\% | 4.8\% | 26.1\% | -7.6\% | 3.0\% | 34.2\% | 5.8\% | -1.8\% | -0.4\% | -0.8\% | 2.6\% |
| All Other | --- | -27.6\% | 10.2\% | -1.2\% | -0.1\% | 18.8\% | 9.2\% | -5.8\% | 3.6\% | 14.1\% | 1.5\% | -4.7\% | -1.9\% | -3.4\% | 17.9\% |
| All Regions | --- | -23.4\% | -1.6\% | 7.4\% | 4.0\% | 16.9\% | 9.1\% | -3.8\% | 7.2\% | 18.8\% | 3.3\% | 0.0\% | 1.0\% | -2.1\% | 1.6\% |

Cumulative injury claims include occupational disease.

Ratio of Total Indemnity Claim Counts to Total Claim Counts

| AccidentYear | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | 99 | 111 |
| 2003 |  |  |  |  |  |  |  |  | 0.352 | 0.351 |
| 2004 |  |  |  |  |  |  |  | 0.316 | 0.315 | 0.315 |
| 2005 |  |  |  |  |  |  | 0.291 | 0.291 | 0.291 | 0.290 |
| 2006 |  |  |  |  |  | 0.288 | 0.288 | 0.288 | 0.288 | 0.288 |
| 2007 |  |  |  |  | 0.295 | 0.296 | 0.296 | 0.296 | 0.296 | 0.296 |
| 2008 |  |  |  | 0.306 | 0.307 | 0.307 | 0.307 | 0.307 | 0.308 | 0.308 |
| 2009 |  |  | 0.325 | 0.328 | 0.330 | 0.330 | 0.330 | 0.331 | 0.331 | 0.331 |
| 2010 |  | 0.327 | 0.340 | 0.344 | 0.345 | 0.346 | 0.346 | 0.346 | 0.346 | 0.346 |
| 2011 | 0.319 | 0.335 | 0.351 | 0.355 | 0.357 | 0.358 | 0.358 | 0.358 | 0.358 | 0.358 |
| 2012 | 0.316 | 0.338 | 0.356 | 0.361 | 0.363 | 0.363 | 0.363 | 0.363 | 0.363 |  |
| 2013 | 0.332 | 0.351 | 0.366 | 0.371 | 0.372 | 0.372 | 0.372 | 0.372 |  |  |
| 2014 | 0.336 | 0.348 | 0.365 | 0.368 | 0.369 | 0.369 | 0.369 |  |  |  |
| 2015 | 0.324 | 0.350 | 0.365 | 0.368 | 0.368 | 0.368 |  |  |  |  |
| 2016 | 0.336 | 0.351 | 0.366 | 0.369 | 0.369 |  |  |  |  |  |
| 2017 | 0.332 | 0.337 | 0.351 | 0.353 |  |  |  |  |  |  |
| 2018 | 0.320 | 0.338 | 0.352 |  |  |  |  |  |  |  |
| 2019 | 0.326 | 0.345 |  |  |  |  |  |  |  |  |
| 2020 | 0.361 |  |  |  |  |  |  |  |  |  |

Source: WCIRB quarterly calls for experience

## Distribution of Cumulative Injury Claims by Injury Type

## Permanent Indemnity*

| Percentage of All Cumulative Injury Claims |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | $33.8 \%$ | $35.1 \%$ | $35.3 \%$ | $35.6 \%$ | $36.1 \%$ |
| 2000 | $31.6 \%$ | $34.0 \%$ | $34.7 \%$ | $35.4 \%$ | $34.5 \%$ |
| 2001 | $30.8 \%$ | $34.4 \%$ | $36.7 \%$ | $37.6 \%$ | $37.9 \%$ |
| 2002 | $33.3 \%$ | $37.4 \%$ | $38.9 \%$ | $39.3 \%$ | $39.1 \%$ |
| 2003 | $33.5 \%$ | $37.4 \%$ | $38.6 \%$ | $38.8 \%$ | $39.2 \%$ |
| 2004 | $28.6 \%$ | $31.6 \%$ | $32.8 \%$ | $33.6 \%$ | $34.9 \%$ |
| 2005 | $22.0 \%$ | $25.3 \%$ | $27.7 \%$ | $30.0 \%$ | $31.6 \%$ |
| 2006 | $20.2 \%$ | $25.1 \%$ | $28.4 \%$ | $30.1 \%$ | $31.0 \%$ |
| 2007 | $20.7 \%$ | $26.6 \%$ | $29.4 \%$ | $29.9 \%$ | $31.1 \%$ |
| 2008 | $21.6 \%$ | $27.8 \%$ | $31.0 \%$ | $31.2 \%$ | $33.1 \%$ |
| 2009 | $24.3 \%$ | $30.9 \%$ | $34.2 \%$ | $36.0 \%$ | $37.0 \%$ |
| 2010 | $25.4 \%$ | $33.2 \%$ | $36.0 \%$ | $37.8 \%$ | $38.5 \%$ |
| 2011 | $27.7 \%$ | $34.2 \%$ | $37.6 \%$ | $39.3 \%$ | $40.3 \%$ |
| 2012 | $29.2 \%$ | $35.5 \%$ | $38.8 \%$ | $40.5 \%$ | $41.3 \%$ |
| 2013 | $30.7 \%$ | $37.6 \%$ | $40.7 \%$ | $42.3 \%$ | $42.6 \%$ |
| 2014 | $32.9 \%$ | $39.6 \%$ | $42.1 \%$ | $42.9 \%$ | $45.0 \%$ |
| 2015 | $33.8 \%$ | $39.5 \%$ | $41.4 \%$ | $44.9 \%$ |  |
| 2016 | $32.1 \%$ | $41.0 \%$ | $41.8 \%$ |  |  |
| 2017 | $29.1 \%$ | $39.2 \%$ |  |  |  |
| 2018 | $25.5 \%$ |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | --- | --- | -- | --- | --- |
| 2000 | $-6.5 \%$ | $-3.0 \%$ | $-1.8 \%$ | $-0.4 \%$ | $-4.5 \%$ |
| 2001 | $-2.5 \%$ | $1.2 \%$ | $5.9 \%$ | $6.0 \%$ | $10.0 \%$ |
| 2002 | $8.1 \%$ | $8.8 \%$ | $5.8 \%$ | $4.7 \%$ | $3.0 \%$ |
| 2003 | $0.6 \%$ | $-0.1 \%$ | $-0.6 \%$ | $-1.4 \%$ | $0.2 \%$ |
| 2004 | $-14.4 \%$ | $-15.6 \%$ | $-15.1 \%$ | $-13.4 \%$ | $-10.8 \%$ |
| 2005 | $-23.1 \%$ | $-19.8 \%$ | $-15.6 \%$ | $-10.7 \%$ | $-9.5 \%$ |
| 2006 | $-8.4 \%$ | $-0.9 \%$ | $2.8 \%$ | $0.6 \%$ | $-1.9 \%$ |
| 2007 | $2.6 \%$ | $6.1 \%$ | $3.4 \%$ | $-0.8 \%$ | $0.4 \%$ |
| 2008 | $4.2 \%$ | $4.4 \%$ | $5.6 \%$ | $4.3 \%$ | $6.2 \%$ |
| 2009 | $12.8 \%$ | $11.0 \%$ | $10.2 \%$ | $15.6 \%$ | $11.9 \%$ |
| 2010 | $4.5 \%$ | $7.4 \%$ | $5.2 \%$ | $5.0 \%$ | $4.1 \%$ |
| 2011 | $9.1 \%$ | $3.1 \%$ | $4.6 \%$ | $3.9 \%$ | $4.7 \%$ |
| 2012 | $5.4 \%$ | $3.9 \%$ | $3.1 \%$ | $3.0 \%$ | $2.6 \%$ |
| 2013 | $5.1 \%$ | $6.1 \%$ | $4.7 \%$ | $4.5 \%$ | $3.1 \%$ |
| 2014 | $7.0 \%$ | $5.3 \%$ | $3.5 \%$ | $1.4 \%$ | $5.5 \%$ |
| 2015 | $2.7 \%$ | $-0.2 \%$ | $-1.7 \%$ | $4.7 \%$ |  |
| 2016 | $-4.8 \%$ | $3.8 \%$ | $1.1 \%$ |  |  |
| 2017 | $-9.3 \%$ | $-4.5 \%$ |  |  |  |
| 2018 | $-12.3 \%$ |  |  |  |  |

Temporary Indemnity

|  | Percentage of All Cumulative Injury Claims |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | $19.0 \%$ | $15.9 \%$ | $15.0 \%$ | $14.5 \%$ | $14.2 \%$ |
| 2000 | $19.2 \%$ | $16.3 \%$ | $16.1 \%$ | $15.6 \%$ | $15.1 \%$ |
| 2001 | $19.9 \%$ | $18.3 \%$ | $17.7 \%$ | $16.7 \%$ | $16.1 \%$ |
| 2002 | $20.2 \%$ | $18.9 \%$ | $16.8 \%$ | $15.9 \%$ | $15.9 \%$ |
| 2003 | $22.1 \%$ | $18.6 \%$ | $17.1 \%$ | $16.8 \%$ | $16.4 \%$ |
| 2004 | $22.0 \%$ | $19.2 \%$ | $18.1 \%$ | $17.1 \%$ | $16.1 \%$ |
| 2005 | $21.6 \%$ | $19.4 \%$ | $17.9 \%$ | $16.2 \%$ | $15.1 \%$ |
| 2006 | $21.6 \%$ | $19.0 \%$ | $16.5 \%$ | $15.5 \%$ | $14.7 \%$ |
| 2007 | $22.5 \%$ | $18.7 \%$ | $17.2 \%$ | $16.1 \%$ | $15.8 \%$ |
| 2008 | $22.8 \%$ | $19.4 \%$ | $17.5 \%$ | $16.4 \%$ | $16.6 \%$ |
| 2009 | $25.2 \%$ | $21.7 \%$ | $19.5 \%$ | $18.4 \%$ | $17.9 \%$ |
| 2010 | $26.4 \%$ | $21.8 \%$ | $19.7 \%$ | $18.9 \%$ | $18.1 \%$ |
| 2011 | $26.3 \%$ | $23.5 \%$ | $21.8 \%$ | $20.2 \%$ | $19.2 \%$ |
| 2012 | $27.5 \%$ | $25.3 \%$ | $22.5 \%$ | $21.0 \%$ | $20.1 \%$ |
| 2013 | $30.5 \%$ | $25.6 \%$ | $22.9 \%$ | $21.2 \%$ | $20.7 \%$ |
| 2014 | $29.7 \%$ | $24.7 \%$ | $21.9 \%$ | $21.1 \%$ | $20.1 \%$ |
| 2015 | $26.9 \%$ | $23.0 \%$ | $21.3 \%$ | $20.0 \%$ |  |
| 2016 | $27.3 \%$ | $23.0 \%$ | $22.2 \%$ |  |  |
| 2017 | $27.4 \%$ | $22.6 \%$ |  |  |  |
| 2018 | $28.5 \%$ |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | --- | --- | --- | --- | --- |
| 2000 | $0.9 \%$ | $2.0 \%$ | $7.5 \%$ | $8.0 \%$ | $6.6 \%$ |
| 2001 | $3.9 \%$ | $12.6 \%$ | $10.2 \%$ | $7.0 \%$ | $6.3 \%$ |
| 2002 | $1.6 \%$ | $3.5 \%$ | $-5.3 \%$ | $-4.6 \%$ | $-1.2 \%$ |
| 2003 | $9.2 \%$ | $-2.1 \%$ | $2.0 \%$ | $5.2 \%$ | $3.0 \%$ |
| 2004 | $-0.3 \%$ | $3.6 \%$ | $5.5 \%$ | $2.3 \%$ | $-1.9 \%$ |
| 2005 | $-1.9 \%$ | $0.8 \%$ | $-1.0 \%$ | $-5.3 \%$ | $-5.9 \%$ |
| 2006 | $0.2 \%$ | $-1.9 \%$ | $-7.7 \%$ | $-4.9 \%$ | $-2.4 \%$ |
| 2007 | $4.0 \%$ | $-1.5 \%$ | $4.0 \%$ | $4.5 \%$ | $7.0 \%$ |
| 2008 | $1.6 \%$ | $3.4 \%$ | $2.0 \%$ | $1.4 \%$ | $5.1 \%$ |
| 2009 | $10.4 \%$ | $12.3 \%$ | $11.3 \%$ | $12.5 \%$ | $7.9 \%$ |
| 2010 | $4.7 \%$ | $0.3 \%$ | $0.8 \%$ | $2.4 \%$ | $1.3 \%$ |
| 2011 | $-0.4 \%$ | $8.0 \%$ | $10.7 \%$ | $6.9 \%$ | $5.9 \%$ |
| 2012 | $4.6 \%$ | $7.3 \%$ | $3.5 \%$ | $4.2 \%$ | $4.9 \%$ |
| 2013 | $10.9 \%$ | $1.3 \%$ | $1.8 \%$ | $0.8 \%$ | $3.0 \%$ |
| 2014 | $-2.4 \%$ | $-3.5 \%$ | $-4.4 \%$ | $-0.1 \%$ | $-3.0 \%$ |
| 2015 | $-9.7 \%$ | $-6.7 \%$ | $-2.9 \%$ | $-5.4 \%$ |  |
| 2016 | $1.8 \%$ | $0.0 \%$ | $4.4 \%$ |  |  |
| 2017 | $0.1 \%$ | $-2.1 \%$ |  |  |  |
| 2018 | $4.1 \%$ |  |  |  |  |

Medical-Only

| Percentage of All Cumulative Injury Claims |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | $47.2 \%$ | $49.0 \%$ | $49.7 \%$ | $49.9 \%$ | $49.7 \%$ |
| 2000 | $49.3 \%$ | $49.7 \%$ | $49.2 \%$ | $49.0 \%$ | $50.4 \%$ |
| 2001 | $49.3 \%$ | $47.3 \%$ | $45.5 \%$ | $45.7 \%$ | $46.0 \%$ |
| 2002 | $46.5 \%$ | $43.6 \%$ | $44.3 \%$ | $44.7 \%$ | $45.0 \%$ |
| 2003 | $44.5 \%$ | $44.0 \%$ | $44.2 \%$ | $44.5 \%$ | $44.5 \%$ |
| 2004 | $49.4 \%$ | $49.2 \%$ | $49.1 \%$ | $49.3 \%$ | $49.0 \%$ |
| 2005 | $56.4 \%$ | $55.3 \%$ | $54.4 \%$ | $53.8 \%$ | $53.3 \%$ |
| 2006 | $58.2 \%$ | $55.9 \%$ | $55.1 \%$ | $54.4 \%$ | $54.2 \%$ |
| 2007 | $56.8 \%$ | $54.6 \%$ | $53.4 \%$ | $53.9 \%$ | $53.1 \%$ |
| 2008 | $55.6 \%$ | $52.8 \%$ | $51.4 \%$ | $52.5 \%$ | $50.4 \%$ |
| 2009 | $50.5 \%$ | $47.4 \%$ | $46.3 \%$ | $45.5 \%$ | $45.1 \%$ |
| 2010 | $48.2 \%$ | $45.0 \%$ | $44.3 \%$ | $43.3 \%$ | $43.4 \%$ |
| 2011 | $46.0 \%$ | $42.3 \%$ | $40.6 \%$ | $40.5 \%$ | $40.5 \%$ |
| 2012 | $43.3 \%$ | $39.3 \%$ | $38.7 \%$ | $38.5 \%$ | $38.5 \%$ |
| 2013 | $38.8 \%$ | $36.8 \%$ | $36.4 \%$ | $36.5 \%$ | $36.6 \%$ |
| 2014 | $37.4 \%$ | $35.7 \%$ | $36.0 \%$ | $35.9 \%$ | $34.9 \%$ |
| 2015 | $39.4 \%$ | $37.4 \%$ | $37.3 \%$ | $35.0 \%$ |  |
| 2016 | $40.5 \%$ | $35.9 \%$ | $35.9 \%$ |  |  |
| 2017 | $43.5 \%$ | $38.2 \%$ |  |  |  |
| 2018 | $46.2 \%$ |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | --- | --- | -- | --- | --- |
| 2000 | $4.3 \%$ | $1.5 \%$ | $-1.0 \%$ | $-2.0 \%$ | $1.4 \%$ |
| 2001 | $0.1 \%$ | $-4.9 \%$ | $-7.5 \%$ | $-6.6 \%$ | $-8.7 \%$ |
| 2002 | $-5.7 \%$ | $-7.8 \%$ | $-2.6 \%$ | $-2.2 \%$ | $-2.1 \%$ |
| 2003 | $-4.4 \%$ | $1.0 \%$ | $-0.3 \%$ | $-0.6 \%$ | $-1.3 \%$ |
| 2004 | $11.0 \%$ | $11.7 \%$ | $11.1 \%$ | $10.8 \%$ | $10.2 \%$ |
| 2005 | $14.3 \%$ | $12.4 \%$ | $10.8 \%$ | $9.1 \%$ | $8.7 \%$ |
| 2006 | $3.2 \%$ | $1.1 \%$ | $1.1 \%$ | $1.2 \%$ | $1.8 \%$ |
| 2007 | $-2.4 \%$ | $-2.2 \%$ | $-3.0 \%$ | $-0.8 \%$ | $-2.1 \%$ |
| 2008 | $-2.1 \%$ | $-3.3 \%$ | $-3.7 \%$ | $-2.8 \%$ | $-5.1 \%$ |
| 2009 | $-9.2 \%$ | $-10.3 \%$ | $-10.0 \%$ | $-13.2 \%$ | $-10.4 \%$ |
| 2010 | $-4.5 \%$ | $-5.0 \%$ | $-4.2 \%$ | $-4.9 \%$ | $-3.9 \%$ |
| 2011 | $-4.6 \%$ | $-6.1 \%$ | $-8.5 \%$ | $-6.4 \%$ | $-6.6 \%$ |
| 2012 | $-5.8 \%$ | $-7.2 \%$ | $-4.7 \%$ | $-5.0 \%$ | $-4.9 \%$ |
| 2013 | $-10.4 \%$ | $-6.4 \%$ | $-5.8 \%$ | $-5.2 \%$ | $-5.0 \%$ |
| 2014 | $-3.7 \%$ | $-2.9 \%$ | $-1.2 \%$ | $-1.6 \%$ | $-4.7 \%$ |
| 2015 | $5.3 \%$ | $4.9 \%$ | $3.7 \%$ | $-2.4 \%$ |  |
| 2016 | $2.9 \%$ | $-4.0 \%$ | $-3.7 \%$ |  |  |
| 2017 | $7.3 \%$ | $6.5 \%$ |  |  |  |
| 2018 | $6.1 \%$ |  |  |  |  |

* Includes Permanent Partial, Permanent Total, and Death

Note: Cumulative injury claims include occupational disease.
Source: WCIRB unit statistical data

## Indemnity Claim Frequency Relativities by NAICS Sector

| NAICS | NAICS | Indemnity Claim Frequency Relativity for Accident Year at 1st Report |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sector | Name | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| 11\&21 | Agriculture \& Mining | 2.655 | 2.744 | 2.878 | 2.829 | 2.888 | 2.811 | 2.897 | 2.956 | 3.050 | 3.195 | 3.299 | 3.310 | 3.425 | 3.609 | 3.581 | 3.529 | 3.427 |
| 23 | Construction | 2.349 | 2.313 | 2.371 | 2.448 | 2.425 | 2.330 | 2.281 | 2.230 | 2.231 | 2.239 | 2.228 | 2.210 | 2.207 | 2.170 | 2.072 | 2.025 | 1.997 |
| 31 | Manufacturing | 1.790 | 1.803 | 1.758 | 1.734 | 1.751 | 1.710 | 1.687 | 1.667 | 1.663 | 1.711 | 1.795 | 1.842 | 1.930 | 1.995 | 2.058 | 2.058 | 1.936 |
| 42 | Wholesale | 2.809 | 2.814 | 2.877 | 2.873 | 2.947 | 3.011 | 3.002 | 2.998 | 3.148 | 3.310 | 3.436 | 3.482 | 3.554 | 3.556 | 3.641 | 3.981 | 4.334 |
| 44 | Retail | 1.645 | 1.645 | 1.680 | 1.753 | 1.822 | 1.874 | 2.003 | 2.069 | 2.049 | 2.000 | 2.028 | 1.985 | 1.962 | 2.051 | 2.053 | 2.071 | 2.112 |
| 22\&48 | Utilities \& Transportation | 3.155 | 3.177 | 3.367 | 3.629 | 3.830 | 3.905 | 3.851 | 3.668 | 3.587 | 3.504 | 3.471 | 3.485 | 3.512 | 3.542 | 3.546 | 3.682 | 3.834 |
| 51 | Information | 0.800 | 0.815 | 0.787 | 0.787 | 0.795 | 0.845 | 0.934 | 0.897 | 0.842 | 0.835 | 0.872 | 0.851 | 0.893 | 0.934 | 0.969 | 1.036 | 1.091 |
| 52 | Finance | 0.391 | 0.332 | 0.355 | 0.334 | 0.322 | 0.353 | 0.393 | 0.408 | 0.402 | 0.371 | 0.339 | 0.293 | 0.263 | 0.240 | 0.230 | 0.234 | 0.230 |
| 53 | Real Estate | 0.852 | 0.757 | 0.737 | 0.735 | 0.853 | 1.041 | 1.114 | 1.126 | 1.136 | 1.114 | 1.061 | 0.977 | 0.960 | 0.971 | 0.926 | 0.900 | 0.892 |
| 54 | Prof. Services | 0.194 | 0.194 | 0.191 | 0.184 | 0.178 | 0.166 | 0.171 | 0.164 | 0.147 | 0.132 | 0.116 | 0.105 | 0.098 | 0.090 | 0.087 | 0.086 | 0.081 |
| 56 | Administrative | 3.081 | 2.968 | 3.002 | 3.000 | 3.136 | 3.254 | 3.399 | 3.562 | 3.624 | 3.635 | 3.725 | 3.752 | 3.911 | 3.959 | 3.874 | 3.811 | 3.656 |
| 61 | Education | 0.792 | 0.803 | 0.691 | 0.717 | 0.708 | 0.721 | 0.768 | 0.754 | 0.739 | 0.727 | 0.733 | 0.689 | 0.667 | 0.665 | 0.685 | 0.743 | 0.767 |
| 62 | Health | 1.293 | 1.244 | 1.176 | 1.128 | 1.142 | 1.184 | 1.220 | 1.252 | 1.294 | 1.270 | 1.258 | 1.233 | 1.184 | 1.167 | 1.163 | 1.151 | 1.111 |
| 71 | Hospitality | 2.063 | 1.976 | 1.966 | 2.063 | 2.192 | 2.264 | 2.328 | 2.289 | 2.327 | 2.398 | 2.429 | 2.339 | 2.199 | 2.163 | 2.201 | 2.129 | 1.900 |
| 72 | Entertainment | 2.230 | 2.199 | 2.113 | 2.124 | 2.203 | 2.214 | 2.305 | 2.501 | 2.710 | 2.844 | 3.055 | 3.190 | 3.229 | 3.214 | 3.136 | 3.108 | 3.051 |
| 81 | Other Services | 1.459 | 1.431 | 1.454 | 1.471 | 1.470 | 1.472 | 1.532 | 1.574 | 1.646 | 1.704 | 1.756 | 1.751 | 1.771 | 1.791 | 1.755 | 1.699 | 1.596 |
| 8742 | Outside Sales | 0.240 | 0.261 | 0.243 | 0.218 | 0.212 | 0.210 | 0.208 | 0.211 | 0.203 | 0.190 | 0.185 | 0.178 | 0.176 | 0.172 | 0.169 | 0.174 | 0.176 |
| 92\&8810 | Clerical \& Public Adm | 0.260 | 0.254 | 0.235 | 0.210 | 0.192 | 0.182 | 0.190 | 0.195 | 0.186 | 0.174 | 0.174 | 0.166 | 0.156 | 0.150 | 0.141 | 0.138 | 0.138 |
| Accid | nt Year Total Frequency | 0.329 | 0.314 | 0.278 | 0.241 | 0.222 | 0.213 | 0.199 | 0.196 | 0.203 | 0.207 | 0.209 | 0.212 | 0.213 | 0.211 | 0.204 | 0.201 | 0.193 |
| NAICS | NAICS |  |  |  |  |  |  |  | Annua | Change |  |  |  |  |  |  |  |  |
| Sector | Name | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| 11\&21 | Agriculture \& Mining | --- | 3.4\% | 4.9\% | -1.7\% | 2.1\% | -2.7\% | 3.1\% | 2.1\% | 3.2\% | 4.7\% | 3.3\% | 0.3\% | 3.5\% | 5.4\% | -0.8\% | -1.5\% | -2.9\% |
| 23 | Construction | --- | -1.5\% | 2.5\% | 3.2\% | -0.9\% | -3.9\% | -2.1\% | -2.2\% | 0.0\% | 0.4\% | -0.5\% | -0.8\% | -0.1\% | -1.7\% | -4.5\% | -2.3\% | -1.4\% |
| 31 | Manufacturing | --- | 0.7\% | -2.5\% | -1.3\% | 1.0\% | -2.3\% | -1.4\% | -1.2\% | -0.2\% | 2.8\% | 4.9\% | 2.6\% | 4.8\% | 3.4\% | 3.2\% | 0.0\% | -5.9\% |
| 42 | Wholesale | --- | 0.2\% | 2.2\% | -0.1\% | 2.6\% | 2.2\% | -0.3\% | -0.1\% | 5.0\% | 5.1\% | 3.8\% | 1.3\% | 2.1\% | 0.1\% | 2.4\% | 9.3\% | 8.9\% |
| 44 | Retail | --- | 0.0\% | 2.1\% | 4.3\% | 3.9\% | 2.9\% | 6.9\% | 3.3\% | -1.0\% | -2.4\% | 1.4\% | -2.1\% | -1.2\% | 4.6\% | 0.1\% | 0.9\% | 2.0\% |
| 22\&48 | Utilities \& Transportation | --- | 0.7\% | 6.0\% | 7.8\% | 5.5\% | 2.0\% | -1.4\% | -4.8\% | -2.2\% | -2.3\% | -1.0\% | 0.4\% | 0.8\% | 0.9\% | 0.1\% | 3.9\% | 4.1\% |
| 51 | Information | --- | 2.0\% | -3.5\% | 0.0\% | 1.0\% | 6.3\% | 10.6\% | -3.9\% | -6.2\% | -0.8\% | 4.4\% | -2.3\% | 4.8\% | 4.6\% | 3.8\% | 6.9\% | 5.3\% |
| 52 | Finance | --- | -15.2\% | 6.9\% | -5.8\% | -3.7\% | 9.7\% | 11.6\% | 3.7\% | -1.5\% | -7.7\% | -8.5\% | -13.6\% | -10.4\% | -8.7\% | -3.9\% | 1.7\% | -1.6\% |
| 53 | Real Estate | --- | -11.1\% | -2.7\% | -0.3\% | 16.1\% | 22.0\% | 7.0\% | 1.1\% | 1.0\% | -2.0\% | -4.7\% | -7.9\% | -1.7\% | 1.2\% | -4.7\% | -2.7\% | -0.9\% |
| 54 | Prof. Services | --- | 0.0\% | -1.5\% | -4.0\% | -3.3\% | -6.4\% | 2.8\% | -4.0\% | -10.5\% | -10.0\% | -12.0\% | -9.9\% | -6.7\% | -7.6\% | -3.1\% | -2.0\% | -5.7\% |
| 56 | Administrative | --- | -3.7\% | 1.2\% | -0.1\% | 4.5\% | 3.8\% | 4.4\% | 4.8\% | 1.7\% | 0.3\% | 2.5\% | 0.7\% | 4.2\% | 1.2\% | -2.2\% | -1.6\% | -4.1\% |
| 61 | Education | --- | 1.4\% | -13.9\% | 3.8\% | -1.3\% | 1.9\% | 6.4\% | -1.8\% | -2.0\% | -1.6\% | 0.8\% | -6.0\% | -3.3\% | -0.2\% | 2.9\% | 8.5\% | 3.3\% |
| 62 | Health | --- | -3.8\% | -5.4\% | -4.1\% | 1.3\% | 3.6\% | 3.1\% | 2.6\% | 3.3\% | -1.8\% | -0.9\% | -2.0\% | -4.0\% | -1.4\% | -0.3\% | -1.1\% | -3.5\% |
| 71 | Hospitality | --- | -4.2\% | -0.5\% | 4.9\% | 6.3\% | 3.3\% | 2.9\% | -1.7\% | 1.7\% | 3.0\% | 1.3\% | -3.7\% | -6.0\% | -1.6\% | 1.7\% | -3.3\% | -10.8\% |
| 72 | Entertainment | --- | -1.4\% | -3.9\% | 0.5\% | 3.7\% | 0.5\% | 4.1\% | 8.5\% | 8.4\% | 4.9\% | 7.4\% | 4.4\% | 1.2\% | -0.5\% | -2.4\% | -0.9\% | -1.8\% |
| 81 | Other Services | --- | -1.9\% | 1.6\% | 1.2\% | -0.1\% | 0.2\% | 4.0\% | 2.8\% | 4.6\% | 3.5\% | 3.1\% | -0.2\% | 1.1\% | 1.2\% | -2.1\% | -3.2\% | -6.0\% |
| 8742 | Outside Sales | --- | 8.6\% | -7.1\% | -10.1\% | -2.8\% | -1.2\% | -0.6\% | 1.2\% | -3.9\% | -6.3\% | -2.5\% | -4.1\% | -1.1\% | -2.2\% | -1.5\% | 2.9\% | 1.3\% |
| 92\&8810 | Clerical \& Public Admin. | --- | -2.2\% | -7.5\% | -10.9\% | -8.6\% | -4.9\% | 4.0\% | 3.1\% | -4.9\% | -6.2\% | -0.2\% | -4.8\% | -6.0\% | -3.6\% | -5.9\% | -2.2\% | -0.3\% |
| Acciden | nt Year Total Frequency | --- | -4.3\% | -11.5\% | -13.2\% | -8.1\% | -4.1\% | -6.2\% | -1.7\% | 3.4\% | 1.9\% | 1.3\% | 1.1\% | 0.8\% | -1.3\% | -3.0\% | -1.6\% | -3.9\% |

Figures in italics are based on partial data.

## Bay Area

|  | Indemnity Claim Frequency |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | per $\$ 100 \mathrm{M}$ of Exposure at AY 2018 | Level |  |  |  |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 22.98 | 23.63 | 24.14 | 23.84 | 23.87 |
| 2002 | 22.49 | 22.88 | 23.09 | 23.08 | 23.12 |
| 2003 | 20.97 | 21.33 | 21.46 | 21.56 | 21.85 |
| 2004 | 18.41 | 18.64 | 18.72 | 18.96 | 19.02 |
| 2005 | 16.25 | 16.28 | 16.55 | 16.62 | 16.59 |
| 2006 | 14.85 | 15.14 | 15.28 | 15.30 | 15.29 |
| 2007 | 13.93 | 14.19 | 14.27 | 14.33 | 14.36 |
| 2008 | 12.82 | 13.07 | 13.22 | 13.31 | 13.36 |
| 2009 | 12.18 | 12.56 | 12.71 | 12.80 | 12.83 |
| 2010 | 12.17 | 12.71 | 12.85 | 12.94 | 12.98 |
| 2011 | 11.85 | 12.40 | 12.61 | 12.71 | 12.76 |
| 2012 | 11.72 | 12.22 | 12.43 | 12.51 | 12.55 |
| 2013 | 11.38 | 11.86 | 12.00 | 12.07 | 12.10 |
| 2014 | 11.27 | 11.71 | 11.83 | 11.89 | 11.91 |
| 2015 | 10.93 | 11.35 | 11.45 | 11.50 |  |
| 2016 | 10.21 | 10.56 | 10.66 |  |  |
| 2017 | 10.03 | 10.37 |  |  |  |
| 2018 | 9.98 |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | --- | --- | --- | --- | --- |
| 2002 | $-2.1 \%$ | $-3.2 \%$ | $-4.3 \%$ | $-3.2 \%$ | $-3.2 \%$ |
| 2003 | $-6.8 \%$ | $-6.7 \%$ | $-7.1 \%$ | $-6.6 \%$ | $-5.5 \%$ |
| 2004 | $-12.2 \%$ | $-12.6 \%$ | $-12.8 \%$ | $-12.1 \%$ | $-13.0 \%$ |
| 2005 | $-11.8 \%$ | $-12.6 \%$ | $-11.6 \%$ | $-12.4 \%$ | $-12.8 \%$ |
| 2006 | $-8.6 \%$ | $-7.0 \%$ | $-7.7 \%$ | $-8.0 \%$ | $-7.8 \%$ |
| 2007 | $-6.2 \%$ | $-6.3 \%$ | $-6.6 \%$ | $-6.3 \%$ | $-6.1 \%$ |
| 2008 | $-8.0 \%$ | $-7.9 \%$ | $-7.4 \%$ | $-7.2 \%$ | $-7.0 \%$ |
| 2009 | $-5.0 \%$ | $-3.9 \%$ | $-3.9 \%$ | $-3.8 \%$ | $-3.9 \%$ |
| 2010 | $-0.1 \%$ | $1.2 \%$ | $1.2 \%$ | $1.1 \%$ | $1.1 \%$ |
| 2011 | $-2.6 \%$ | $-2.4 \%$ | $-1.9 \%$ | $-1.7 \%$ | $-1.7 \%$ |
| 2012 | $-1.1 \%$ | $-1.4 \%$ | $-1.5 \%$ | $-1.6 \%$ | $-1.6 \%$ |
| 2013 | $-2.9 \%$ | $-3.0 \%$ | $-3.5 \%$ | $-3.5 \%$ | $-3.6 \%$ |
| 2014 | $-1.0 \%$ | $-1.2 \%$ | $-1.4 \%$ | $-1.5 \%$ | $-1.5 \%$ |
| 2015 | $-3.0 \%$ | $-3.1 \%$ | $-3.2 \%$ | $-3.3 \%$ |  |
| 2016 | $-6.6 \%$ | $-6.9 \%$ | $-6.9 \%$ |  |  |
| 2017 | $-1.7 \%$ | $-1.9 \%$ |  |  |  |
| 2018 | $-0.5 \%$ |  |  |  |  |

## Los Angeles/L.A. Basin

Indemnity Claim Frequency

|  | per $\$ 100 \mathrm{M}$ of Exposure at AY 2018 Level |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 31.44 | 33.00 | 33.39 | 33.34 | 33.19 |
| 2002 | 31.71 | 33.21 | 33.16 | 33.06 | 32.96 |
| 2003 | 30.45 | 31.45 | 31.23 | 31.21 | 31.06 |
| 2004 | 26.57 | 26.74 | 26.78 | 26.73 | 26.77 |
| 2005 | 22.81 | 22.79 | 22.87 | 23.02 | 23.09 |
| 2006 | 21.11 | 21.30 | 21.51 | 21.68 | 21.73 |
| 2007 | 20.31 | 20.90 | 21.20 | 21.36 | 21.45 |
| 2008 | 19.64 | 20.61 | 20.98 | 21.21 | 21.32 |
| 2009 | 19.77 | 20.90 | 21.37 | 21.57 | 21.67 |
| 2010 | 20.76 | 22.03 | 22.56 | 22.76 | 22.83 |
| 2011 | 21.33 | 22.85 | 23.36 | 23.58 | 23.68 |
| 2012 | 22.31 | 23.96 | 24.44 | 24.63 | 24.78 |
| 2013 | 22.87 | 24.44 | 24.87 | 25.06 | 25.18 |
| 2014 | 23.43 | 24.99 | 25.41 | 25.57 | 25.66 |
| 2015 | 23.41 | 24.92 | 25.28 | 25.40 |  |
| 2016 | 22.76 | 24.39 | 24.70 |  |  |
| 2017 | 22.43 | 24.19 |  |  |  |
| 2018 | 21.65 |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | --- | --- | --- | -- | --- |
| 2002 | $0.8 \%$ | $0.7 \%$ | $-0.7 \%$ | $-0.8 \%$ | $-0.7 \%$ |
| 2003 | $-4.0 \%$ | $-5.3 \%$ | $-5.8 \%$ | $-5.6 \%$ | $-5.8 \%$ |
| 2004 | $-12.7 \%$ | $-15.0 \%$ | $-14.3 \%$ | $-14.4 \%$ | $-13.8 \%$ |
| 2005 | $-14.2 \%$ | $-14.8 \%$ | $-14.6 \%$ | $-13.9 \%$ | $-13.7 \%$ |
| 2006 | $-7.5 \%$ | $-6.5 \%$ | $-5.9 \%$ | $-5.8 \%$ | $-5.9 \%$ |
| 2007 | $-3.8 \%$ | $-1.9 \%$ | $-1.5 \%$ | $-1.5 \%$ | $-1.3 \%$ |
| 2008 | $-3.3 \%$ | $-1.4 \%$ | $-1.0 \%$ | $-0.7 \%$ | $-0.6 \%$ |
| 2009 | $0.7 \%$ | $1.4 \%$ | $1.9 \%$ | $1.7 \%$ | $1.7 \%$ |
| 2010 | $5.0 \%$ | $5.4 \%$ | $5.6 \%$ | $5.5 \%$ | $5.4 \%$ |
| 2011 | $2.8 \%$ | $3.7 \%$ | $3.5 \%$ | $3.6 \%$ | $3.7 \%$ |
| 2012 | $4.6 \%$ | $4.9 \%$ | $4.6 \%$ | $4.5 \%$ | $4.6 \%$ |
| 2013 | $2.5 \%$ | $2.0 \%$ | $1.8 \%$ | $1.7 \%$ | $1.6 \%$ |
| 2014 | $2.4 \%$ | $2.3 \%$ | $2.2 \%$ | $2.0 \%$ | $1.9 \%$ |
| 2015 | $-0.1 \%$ | $-0.3 \%$ | $-0.5 \%$ | $-0.7 \%$ |  |
| 2016 | $-2.8 \%$ | $-2.1 \%$ | $-2.3 \%$ |  |  |
| 2017 | $-1.5 \%$ | $-0.8 \%$ |  |  |  |
| 2018 | $-3.4 \%$ |  |  |  |  |

San Diego

|  | Indemnity Claim Frequency |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| per $\$ 100 \mathrm{M}$ of Exposure at AY 2018 | Level |  |  |  |  |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 32.07 | 32.87 | 33.08 | 33.04 | 32.84 |
| 2002 | 30.73 | 31.05 | 31.03 | 30.74 | 30.84 |
| 2003 | 28.14 | 28.34 | 28.10 | 28.03 | 28.14 |
| 2004 | 24.62 | 24.52 | 24.56 | 24.44 | 24.02 |
| 2005 | 21.42 | 21.49 | 21.49 | 20.81 | 20.57 |
| 2006 | 20.02 | 19.90 | 19.33 | 18.99 | 19.02 |
| 2007 | 19.31 | 18.81 | 18.52 | 18.23 | 18.28 |
| 2008 | 17.74 | 17.80 | 17.96 | 17.73 | 17.82 |
| 2009 | 16.73 | 17.40 | 17.58 | 17.70 | 17.80 |
| 2010 | 17.37 | 18.11 | 18.35 | 18.55 | 18.61 |
| 2011 | 17.67 | 18.35 | 18.62 | 18.81 | 18.87 |
| 2012 | 17.85 | 18.50 | 18.74 | 18.86 | 18.92 |
| 2013 | 17.59 | 18.25 | 18.41 | 18.50 | 18.58 |
| 2014 | 17.90 | 18.66 | 18.80 | 18.89 | 18.98 |
| 2015 | 18.14 | 18.95 | 19.09 | 19.18 |  |
| 2016 | 17.82 | 18.55 | 18.64 |  |  |
| 2017 | 17.18 | 17.84 |  |  |  |
| 2018 | 15.68 |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | -- | --- | --- | --- | -- |
| 2002 | $-4.2 \%$ | $-5.6 \%$ | $-6.2 \%$ | $-7.0 \%$ | $-6.1 \%$ |
| 2003 | $-8.4 \%$ | $-8.7 \%$ | $-9.4 \%$ | $-8.8 \%$ | $-8.8 \%$ |
| 2004 | $-12.5 \%$ | $-13.5 \%$ | $-12.6 \%$ | $-12.8 \%$ | $-14.6 \%$ |
| 2005 | $-13.0 \%$ | $-12.4 \%$ | $-12.5 \%$ | $-14.9 \%$ | $-14.4 \%$ |
| 2006 | $-6.5 \%$ | $-7.4 \%$ | $-10.1 \%$ | $-8.7 \%$ | $-7.5 \%$ |
| 2007 | $-3.5 \%$ | $-5.5 \%$ | $-4.2 \%$ | $-4.0 \%$ | $-3.9 \%$ |
| 2008 | $-8.2 \%$ | $-5.4 \%$ | $-3.0 \%$ | $-2.7 \%$ | $-2.5 \%$ |
| 2009 | $-5.7 \%$ | $-2.2 \%$ | $-2.1 \%$ | $-0.1 \%$ | $-0.1 \%$ |
| 2010 | $3.9 \%$ | $4.1 \%$ | $4.4 \%$ | $4.8 \%$ | $4.6 \%$ |
| 2011 | $1.7 \%$ | $1.3 \%$ | $1.5 \%$ | $1.4 \%$ | $1.3 \%$ |
| 2012 | $1.0 \%$ | $0.8 \%$ | $0.7 \%$ | $0.3 \%$ | $0.3 \%$ |
| 2013 | $-1.5 \%$ | $-1.3 \%$ | $-1.8 \%$ | $-1.9 \%$ | $-1.8 \%$ |
| 2014 | $1.8 \%$ | $2.2 \%$ | $2.1 \%$ | $2.1 \%$ | $2.2 \%$ |
| 2015 | $1.3 \%$ | $1.6 \%$ | $1.6 \%$ | $1.5 \%$ |  |
| 2016 | $-1.8 \%$ | $-2.1 \%$ | $-2.4 \%$ |  |  |
| 2017 | $-3.6 \%$ | $-3.8 \%$ |  |  |  |
| 2018 | $-8.7 \%$ |  |  |  |  |

Indemnity Claim Frequency by Geographic Regior

## All Other

|  | Indemnity Claim Frequency |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | per $\$ 100 \mathrm{M}$ of Exposure at AY 2018 | Level |  |  |  |
| AY/RL | 2 | 3 | 4 | 5 |  |
| 2001 | 39.17 | 40.85 | 40.98 | 41.49 | 42.03 |
| 2002 | 38.30 | 39.40 | 40.10 | 40.60 | 40.93 |
| 2003 | 36.21 | 37.50 | 37.98 | 38.16 | 38.31 |
| 2004 | 33.04 | 33.80 | 33.93 | 34.12 | 34.25 |
| 2005 | 28.91 | 29.33 | 29.55 | 29.80 | 29.97 |
| 2006 | 26.44 | 26.79 | 27.12 | 27.36 | 27.44 |
| 2007 | 25.07 | 25.64 | 26.10 | 26.36 | 26.41 |
| 2008 | 23.63 | 24.38 | 24.71 | 24.91 | 24.98 |
| 2009 | 23.08 | 23.85 | 24.04 | 24.20 | 24.29 |
| 2010 | 23.49 | 24.42 | 24.75 | 24.86 | 25.02 |
| 2011 | 23.72 | 24.88 | 25.27 | 25.43 | 25.53 |
| 2012 | 24.30 | 25.43 | 25.81 | 25.99 | 26.03 |
| 2013 | 24.15 | 25.21 | 25.56 | 25.70 | 25.76 |
| 2014 | 23.90 | 24.96 | 25.34 | 25.48 | 25.55 |
| 2015 | 23.84 | 24.84 | 25.21 | 25.34 |  |
| 2016 | 22.74 | 23.72 | 24.02 |  |  |
| 2017 | 22.64 | 23.62 |  |  |  |
| 2018 | 23.04 |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | --- | --- | --- | -- | --- |
| 2002 | $-2.2 \%$ | $-3.6 \%$ | $-2.2 \%$ | $-2.2 \%$ | $-2.6 \%$ |
| 2003 | $-5.5 \%$ | $-4.8 \%$ | $-5.3 \%$ | $-6.0 \%$ | $-6.4 \%$ |
| 2004 | $-8.8 \%$ | $-9.8 \%$ | $-10.7 \%$ | $-10.6 \%$ | $-10.6 \%$ |
| 2005 | $-12.5 \%$ | $-13.2 \%$ | $-12.9 \%$ | $-12.7 \%$ | $-12.5 \%$ |
| 2006 | $-8.5 \%$ | $-8.7 \%$ | $-8.2 \%$ | $-8.2 \%$ | $-8.4 \%$ |
| 2007 | $-5.2 \%$ | $-4.3 \%$ | $-3.8 \%$ | $-3.7 \%$ | $-3.8 \%$ |
| 2008 | $-5.7 \%$ | $-4.9 \%$ | $-5.3 \%$ | $-5.5 \%$ | $-5.4 \%$ |
| 2009 | $-2.3 \%$ | $-2.2 \%$ | $-2.7 \%$ | $-2.8 \%$ | $-2.7 \%$ |
| 2010 | $1.8 \%$ | $2.4 \%$ | $2.9 \%$ | $2.7 \%$ | $3.0 \%$ |
| 2011 | $1.0 \%$ | $1.9 \%$ | $2.1 \%$ | $2.3 \%$ | $2.1 \%$ |
| 2012 | $2.4 \%$ | $2.2 \%$ | $2.1 \%$ | $2.2 \%$ | $2.0 \%$ |
| 2013 | $-0.6 \%$ | $-0.9 \%$ | $-1.0 \%$ | $-1.1 \%$ | $-1.0 \%$ |
| 2014 | $-1.0 \%$ | $-1.0 \%$ | $-0.8 \%$ | $-0.9 \%$ | $-0.8 \%$ |
| 2015 | $-0.2 \%$ | $-0.5 \%$ | $-0.5 \%$ | $-0.6 \%$ |  |
| 2016 | $-4.6 \%$ | $-4.5 \%$ | $-4.7 \%$ |  |  |
| 2017 | $-0.4 \%$ | $-0.4 \%$ |  |  |  |
| 2018 | $1.7 \%$ |  |  |  |  |

All Regions
Indemnity Claim Frequency

|  | per $\$ 100 \mathrm{M}$ of Exposure at AY 2018 Level |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 31.13 | 32.34 | 32.73 | 32.68 | 32.71 |
| 2002 | 30.84 | 31.89 | 32.01 | 32.03 | 32.07 |
| 2003 | 29.30 | 30.05 | 30.06 | 30.11 | 30.14 |
| 2004 | 25.85 | 26.13 | 26.18 | 26.23 | 26.24 |
| 2005 | 22.43 | 22.52 | 22.65 | 22.72 | 22.76 |
| 2006 | 20.64 | 20.86 | 21.02 | 21.11 | 21.16 |
| 2007 | 19.68 | 20.10 | 20.31 | 20.43 | 20.50 |
| 2008 | 18.61 | 19.26 | 19.55 | 19.71 | 19.80 |
| 2009 | 18.31 | 19.15 | 19.46 | 19.63 | 19.71 |
| 2010 | 18.84 | 19.82 | 20.19 | 20.34 | 20.42 |
| 2011 | 19.05 | 20.17 | 20.57 | 20.75 | 20.83 |
| 2012 | 19.52 | 20.66 | 21.02 | 21.18 | 21.27 |
| 2013 | 19.59 | 20.67 | 20.98 | 21.12 | 21.20 |
| 2014 | 19.70 | 20.77 | 21.08 | 21.20 | 21.27 |
| 2015 | 19.45 | 20.49 | 20.77 | 20.87 |  |
| 2016 | 18.65 | 19.71 | 19.94 |  |  |
| 2017 | 18.30 | 19.43 |  |  |  |
| 2018 | 17.95 |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | -- | --- | --- | --- | -- |
| 2002 | $-0.9 \%$ | $-1.4 \%$ | $-2.2 \%$ | $-2.0 \%$ | $-2.0 \%$ |
| 2003 | $-5.0 \%$ | $-5.8 \%$ | $-6.1 \%$ | $-6.0 \%$ | $-6.0 \%$ |
| 2004 | $-11.8 \%$ | $-13.0 \%$ | $-12.9 \%$ | $-12.9 \%$ | $-12.9 \%$ |
| 2005 | $-13.2 \%$ | $-13.8 \%$ | $-13.5 \%$ | $-13.4 \%$ | $-13.3 \%$ |
| 2006 | $-8.0 \%$ | $-7.4 \%$ | $-7.2 \%$ | $-7.1 \%$ | $-7.1 \%$ |
| 2007 | $-4.7 \%$ | $-3.7 \%$ | $-3.3 \%$ | $-3.2 \%$ | $-3.1 \%$ |
| 2008 | $-5.4 \%$ | $-4.2 \%$ | $-3.8 \%$ | $-3.5 \%$ | $-3.4 \%$ |
| 2009 | $-1.6 \%$ | $-0.6 \%$ | $-0.4 \%$ | $-0.4 \%$ | $-0.5 \%$ |
| 2010 | $2.9 \%$ | $3.5 \%$ | $3.7 \%$ | $3.6 \%$ | $3.6 \%$ |
| 2011 | $1.1 \%$ | $1.8 \%$ | $1.9 \%$ | $2.0 \%$ | $2.0 \%$ |
| 2012 | $2.4 \%$ | $2.4 \%$ | $2.2 \%$ | $2.1 \%$ | $2.1 \%$ |
| 2013 | $0.4 \%$ | $0.1 \%$ | $-0.2 \%$ | $-0.3 \%$ | $-0.3 \%$ |
| 2014 | $0.6 \%$ | $0.5 \%$ | $0.5 \%$ | $0.4 \%$ | $0.3 \%$ |
| 2015 | $-1.3 \%$ | $-1.3 \%$ | $-1.5 \%$ | $-1.6 \%$ |  |
| 2016 | $-4.1 \%$ | $-3.8 \%$ | $-4.0 \%$ |  |  |
| 2017 | $-1.9 \%$ | $-1.4 \%$ |  |  |  |
| 2018 | $-1.9 \%$ |  |  |  |  |

Percentage of Cumulative Trauma Indemnity Claims by Policy Year and NAICS Sector*

| Los Angeles | 1st Report Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NAICS Sector | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ |
| Professional Services | 15.7\% | 13.5\% | 16.5\% | 15.2\% | 21.1\% | 27.9\% | 29.4\% |
| Finance \& Insurance | 14.2\% | 30.4\% | 21.7\% | 23.7\% | 28.6\% | 24.5\% | 24.7\% |
| Outside Sales \& Clerical | 20.5\% | 22.7\% | 23.8\% | 21.6\% | 22.8\% | 24.7\% | 23.1\% |
| Manufacturing | 15.8\% | 17.8\% | 21.8\% | 22.5\% | 22.1\% | 26.6\% | 20.8\% |
| Hospitality | 11.6\% | 16.0\% | 19.0\% | 19.3\% | 19.0\% | 17.7\% | 19.6\% |
| Other Services | 14.6\% | 15.1\% | 16.0\% | 19.1\% | 18.0\% | 22.8\% | 19.4\% |
| Real Estate | 11.8\% | 15.2\% | 16.0\% | 13.6\% | 17.8\% | 15.0\% | 17.5\% |
| Los Angeles | 11.6\% | 13.8\% | 15.3\% | 15.9\% | 16.2\% | 17.4\% | 15.5\% |
| Arts \& Entertainment | 9.0\% | 13.4\% | 15.1\% | 14.0\% | 13.3\% | 13.6\% | 15.3\% |
| Administrative | 11.2\% | 13.4\% | 14.7\% | 18.6\% | 18.5\% | 15.9\% | 14.7\% |
| Agriculture \& Mining | 6.6\% | 6.4\% | 10.4\% | 11.7\% | 12.3\% | 11.9\% | 14.0\% |
| Health | 9.4\% | 12.1\% | 12.9\% | 12.5\% | 14.2\% | 15.0\% | 13.5\% |
| Wholesale \& Retail | 9.2\% | 9.7\% | 11.6\% | 12.1\% | 12.9\% | 14.4\% | 12.2\% |
| Education | 11.2\% | 11.6\% | 8.8\% | 10.4\% | 11.1\% | 12.4\% | 9.4\% |
| Construction | 7.2\% | 8.1\% | 8.5\% | 10.5\% | 11.1\% | 10.9\% | 9.3\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 5.6\% | 8.0\% | 7.6\% | 7.7\% | 7.5\% | 7.7\% | 7.6\% |
| Information | 9.8\% | 11.8\% | 8.7\% | 8.7\% | 7.1\% | 5.2\% | 7.3\% |
| Los Angeles | 3rd Report Level |  |  |  |  |  |  |
| NAICS Sector | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ |
| Finance \& Insurance | 15.8\% | 38.3\% | 35.8\% | 31.7\% | 24.2\% | 23.9\% | 30.5\% |
| Manufacturing | 18.2\% | 18.6\% | 20.6\% | 21.5\% | 24.4\% | 24.6\% | 25.7\% |
| Outside Sales \& Clerical | 20.3\% | 19.3\% | 23.6\% | 26.3\% | 26.1\% | 24.9\% | 25.3\% |
| Professional Services | 14.4\% | 13.5\% | 17.5\% | 15.2\% | 18.5\% | 16.2\% | 21.7\% |
| Hospitality | 12.8\% | 15.3\% | 14.4\% | 18.5\% | 21.6\% | 22.0\% | 20.9\% |
| Administrative | 11.3\% | 13.6\% | 13.0\% | 15.5\% | 17.3\% | 20.2\% | 20.5\% |
| Other Services | 17.0\% | 16.4\% | 16.9\% | 18.1\% | 18.0\% | 21.7\% | 20.3\% |
| Real Estate | 14.7\% | 13.1\% | 15.2\% | 17.2\% | 18.3\% | 15.9\% | 18.7\% |
| Los Angeles | 13.5\% | 14.2\% | 14.8\% | 16.4\% | 17.8\% | 18.2\% | 18.5\% |
| Arts \& Entertainment | 9.9\% | 11.1\% | 11.3\% | 14.3\% | 18.4\% | 16.6\% | 16.5\% |
| Agriculture \& Mining | 6.9\% | 7.8\% | 8.2\% | 7.6\% | 11.6\% | 12.8\% | 16.1\% |
| Health | 13.5\% | 13.9\% | 12.6\% | 14.9\% | 15.7\% | 15.6\% | 15.9\% |
| Wholesale \& Retail | 9.6\% | 9.8\% | 11.2\% | 12.1\% | 13.9\% | 14.4\% | 15.0\% |
| Construction | 11.1\% | 11.5\% | 9.5\% | 10.8\% | 10.8\% | 12.7\% | 12.6\% |
| Education | 10.9\% | 11.6\% | 12.1\% | 13.1\% | 10.5\% | 11.0\% | 11.3\% |
| Information | 12.3\% | 11.2\% | 12.6\% | 12.7\% | 11.4\% | 10.5\% | 9.6\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 7.9\% | 8.3\% | 6.9\% | 9.2\% | 9.8\% | 10.1\% | 8.5\% |
| Los Angeles | 5th Report Level |  |  |  |  |  |  |
| NAICS Sector | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ |
| Outside Sales \& Clerical | 18.4\% | 20.1\% | 21.0\% | 20.2\% | 24.7\% | 26.7\% | 27.3\% |
| Manufacturing | 15.4\% | 18.0\% | 19.5\% | 18.7\% | 20.6\% | 22.1\% | 25.0\% |
| Finance \& Insurance | 22.7\% | 26.2\% | 33.3\% | 39.1\% | 36.4\% | 32.3\% | 24.7\% |
| Hospitality | 9.9\% | 11.8\% | 13.6\% | 15.2\% | 15.0\% | 19.2\% | 21.8\% |
| Arts \& Entertainment | 7.9\% | 11.2\% | 10.5\% | 11.8\% | 12.2\% | 15.2\% | 19.1\% |
| Professional Services | 18.1\% | 16.9\% | 15.2\% | 15.3\% | 17.8\% | 16.1\% | 18.8\% |
| Other Services | 12.3\% | 14.1\% | 17.8\% | 16.5\% | 17.2\% | 19.0\% | 18.8\% |
| Real Estate | 9.6\% | 11.0\% | 15.4\% | 14.3\% | 15.8\% | 17.5\% | 18.6\% |
| Los Angeles | 11.2\% | 13.0\% | 14.4\% | 14.6\% | 15.3\% | 17.0\% | 18.3\% |
| Administrative | 7.5\% | 10.8\% | 11.5\% | 13.5\% | 13.3\% | 15.7\% | 17.0\% |
| Health | 11.1\% | 11.6\% | 13.6\% | 14.7\% | 13.4\% | 15.4\% | 16.1\% |
| Wholesale \& Retail | 8.8\% | 9.9\% | 10.4\% | 10.4\% | 11.8\% | 12.6\% | 14.5\% |
| Agriculture \& Mining | 5.3\% | 7.6\% | 7.2\% | 8.0\% | 8.8\% | 8.8\% | 12.7\% |
| Information | 16.1\% | 12.7\% | 12.7\% | 11.7\% | 12.7\% | 13.0\% | 11.6\% |
| Construction | 6.8\% | 9.5\% | 11.3\% | 12.0\% | 10.8\% | 11.3\% | 11.2\% |
| Education | 8.7\% | 9.0\% | 11.3\% | 13.5\% | 12.2\% | 13.3\% | 11.0\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 6.1\% | 6.8\% | 8.4\% | 8.9\% | 7.2\% | 9.7\% | 10.4\% |

*NAICS Sector order based on most recent Policy Year available Source: Unit Statistical Reported data

Percentage of Cumulative Trauma Indemnity Claims by Policy Year and NAICS Sector*

| Remainder of CA |  |  |  | 1st Report Level |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NAICS Sector | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ |
| Finance \& Insurance | 26.6\% | 26.1\% | 26.8\% | 22.9\% | 23.4\% | 26.5\% | 27.2\% |
| Outside Sales \& Clerical | 15.6\% | 16.9\% | 18.1\% | 14.6\% | 16.1\% | 17.9\% | 18.5\% |
| Professional Services | 11.1\% | 11.4\% | 11.1\% | 12.1\% | 9.9\% | 13.5\% | 14.3\% |
| Hospitality | 7.3\% | 9.0\% | 9.9\% | 10.4\% | 10.5\% | 11.2\% | 10.5\% |
| Manufacturing | 8.5\% | 9.1\% | 10.6\% | 9.5\% | 8.4\% | 9.6\% | 9.3\% |
| Health | 6.3\% | 7.6\% | 8.8\% | 8.2\% | 8.8\% | 9.0\% | 8.9\% |
| Information | 6.5\% | 10.8\% | 7.6\% | 10.4\% | 8.6\% | 10.5\% | 8.5\% |
| Other Services | 6.0\% | 5.9\% | 7.2\% | 9.2\% | 8.4\% | 8.6\% | 7.9\% |
| Remainder of CA | 6.9\% | 7.5\% | 8.6\% | 8.0\% | 7.8\% | 8.0\% | 7.8\% |
| Real Estate | 6.4\% | 6.7\% | 7.8\% | 9.4\% | 8.3\% | 7.0\% | 6.8\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 6.6\% | 6.5\% | 7.2\% | 6.3\% | 6.7\% | 6.2\% | 6.8\% |
| Wholesale \& Retail | 5.6\% | 6.1\% | 8.1\% | 6.9\% | 6.6\% | 6.3\% | 6.7\% |
| Administrative | 4.8\% | 5.3\% | 8.0\% | 8.3\% | 9.5\% | 8.7\% | 6.3\% |
| Arts \& Entertainment | 6.8\% | 9.0\% | 7.9\% | 8.8\% | 7.9\% | 7.2\% | 6.2\% |
| Education | 5.6\% | 5.3\% | 4.5\% | 5.1\% | 4.7\% | 5.2\% | 5.3\% |
| Agriculture \& Mining | 4.0\% | 4.2\% | 5.1\% | 5.2\% | 4.4\% | 4.4\% | 4.9\% |
| Construction | 3.9\% | 3.8\% | 4.0\% | 3.7\% | 3.3\% | 3.9\% | 3.4\% |
| Remainder of CA |  |  |  | Report L |  |  |  |
| NAICS Sector | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ |
| Finance \& Insurance | 28.4\% | 27.8\% | 28.9\% | 30.1\% | 26.5\% | 23.7\% | 23.6\% |
| Outside Sales \& Clerical | 20.6\% | 19.0\% | 17.7\% | 18.9\% | 19.7\% | 16.9\% | 18.5\% |
| Hospitality | 7.3\% | 8.5\% | 9.1\% | 10.6\% | 11.2\% | 11.7\% | 12.3\% |
| Professional Services | 14.4\% | 12.5\% | 13.5\% | 11.3\% | 13.5\% | 13.5\% | 11.6\% |
| Manufacturing | 8.9\% | 10.1\% | 11.8\% | 11.3\% | 11.9\% | 11.0\% | 11.2\% |
| Health | 9.0\% | 9.3\% | 7.8\% | 8.9\% | 9.8\% | 9.8\% | 11.0\% |
| Administrative | 5.2\% | 5.2\% | 7.2\% | 8.4\% | 9.8\% | 9.5\% | 10.0\% |
| Arts \& Entertainment | 7.5\% | 14.9\% | 13.1\% | 11.4\% | 10.9\% | 13.7\% | 9.9\% |
| Other Services | 8.6\% | 7.3\% | 8.3\% | 8.5\% | 9.6\% | 10.1\% | 9.9\% |
| Information | 7.7\% | 13.1\% | 10.3\% | 11.7\% | 10.6\% | 11.0\% | 9.5\% |
| Remainder of CA | 8.4\% | 8.6\% | 8.9\% | 9.2\% | 9.9\% | 9.4\% | 9.3\% |
| Real Estate | 6.7\% | 8.3\% | 8.0\% | 9.0\% | 9.7\% | 10.7\% | 9.2\% |
| Wholesale \& Retail | 6.7\% | 7.1\% | 7.7\% | 7.3\% | 9.1\% | 8.1\% | 7.7\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 6.6\% | 5.9\% | 7.5\% | 8.0\% | 8.3\% | 7.6\% | 7.6\% |
| Education | 7.0\% | 6.5\% | 6.6\% | 7.3\% | 5.9\% | 5.9\% | 5.9\% |
| Agriculture \& Mining | 3.9\% | 4.4\% | 5.2\% | 4.9\% | 6.1\% | 6.2\% | 5.4\% |
| Construction | 7.0\% | 6.4\% | 5.2\% | 5.2\% | 5.2\% | 5.2\% | 4.5\% |
| Remainder of CA |  |  |  | Report L |  |  |  |
| NAICS Sector | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ |
| Finance \& Insurance | 24.0\% | 28.4\% | 30.3\% | 29.1\% | 28.8\% | 30.3\% | 26.0\% |
| Outside Sales \& Clerical | 18.8\% | 20.2\% | 21.4\% | 19.6\% | 18.7\% | 19.7\% | 20.4\% |
| Professional Services | 15.2\% | 15.4\% | 14.1\% | 13.3\% | 13.5\% | 12.6\% | 13.6\% |
| Arts \& Entertainment | 7.2\% | 9.1\% | 10.7\% | 17.9\% | 14.9\% | 12.1\% | 12.6\% |
| Manufacturing | 9.3\% | 9.2\% | 10.4\% | 10.7\% | 12.3\% | 11.7\% | 12.2\% |
| Hospitality | 6.3\% | 7.0\% | 8.4\% | 9.1\% | 9.6\% | 10.9\% | 11.5\% |
| Information | 11.2\% | 20.7\% | 9.2\% | 12.8\% | 10.6\% | 11.8\% | 11.1\% |
| Health | 8.1\% | 8.4\% | 9.9\% | 9.3\% | 8.5\% | 9.6\% | 10.6\% |
| Remainder of CA | 7.4\% | 8.1\% | 9.2\% | 9.2\% | 9.5\% | 9.6\% | 10.2\% |
| Other Services | 7.8\% | 7.5\% | 9.0\% | 8.0\% | 8.9\% | 8.8\% | 9.8\% |
| Real Estate | 5.0\% | 4.6\% | 7.8\% | 8.3\% | 8.6\% | 9.6\% | 9.7\% |
| Administrative | 3.9\% | 4.2\% | 6.0\% | 6.7\% | 8.4\% | 8.2\% | 9.5\% |
| Wholesale \& Retail | 5.8\% | 6.4\% | 7.1\% | 7.6\% | 8.1\% | 7.7\% | 9.1\% |
| Utilities, Transportation \& Warehousing \& Public Admin | 6.4\% | 6.8\% | 6.6\% | 6.5\% | 7.9\% | 8.4\% | 8.5\% |
| Agriculture \& Mining | 3.4\% | 3.6\% | 4.2\% | 4.9\% | 5.6\% | 5.5\% | 6.4\% |
| Education | 6.6\% | 6.3\% | 7.7\% | 6.3\% | 6.8\% | 7.2\% | 5.7\% |
| Construction | 4.7\% | 5.9\% | 7.7\% | 6.9\% | 5.8\% | 5.6\% | 5.7\% |

*NAICS Sector order based on most recent Policy Year available
Source: Unit Statistical Reported data

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

| Accident | Paid Indemnity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1995 |  |  |  |  |  |  | 0.365 | 0.279 | 0.230 |
| 1996 |  |  |  |  |  | 0.396 | 0.300 | 0.272 | 0.214 |
| 1997 |  |  |  |  | 0.455 | 0.358 | 0.319 | 0.226 | 0.204 |
| 1998 |  |  |  | 0.548 | 0.396 | 0.348 | 0.285 | 0.211 | 0.249 |
| 1999 |  |  | 0.671 | 0.482 | 0.434 | 0.348 | 0.275 | 0.295 | 0.223 |
| 2000 |  | 0.823 | 0.585 | 0.517 | 0.401 | 0.344 | 0.313 | 0.289 | 0.242 |
| 2001 | 3.281 | 0.800 | 0.679 | 0.543 | 0.398 | 0.410 | 0.329 | 0.278 | 0.246 |
| 2002 | 3.228 | 0.818 | 0.625 | 0.497 | 0.467 | 0.401 | 0.353 | 0.291 | 0.245 |
| 2003 | 3.157 | 0.764 | 0.594 | 0.576 | 0.460 | 0.379 | 0.296 | 0.269 | 0.257 |
| 2004 | 2.995 | 0.608 | 0.617 | 0.471 | 0.398 | 0.355 | 0.291 | 0.306 | 0.293 |
| 2005 | 2.621 | 0.801 | 0.623 | 0.532 | 0.421 | 0.365 | 0.326 | 0.314 | 0.298 |
| 2006 | 3.890 | 0.861 | 0.637 | 0.505 | 0.439 | 0.387 | 0.334 | 0.301 | 0.268 |
| 2007 | 4.267 | 0.895 | 0.659 | 0.519 | 0.448 | 0.397 | 0.352 | 0.305 | 0.281 |
| 2008 | 4.578 | 0.958 | 0.709 | 0.569 | 0.480 | 0.414 | 0.348 | 0.325 | 0.251 |
| 2009 | 5.218 | 0.970 | 0.701 | 0.583 | 0.477 | 0.423 | 0.367 | 0.339 | 0.317 |
| 2010 | 5.725 | 0.977 | 0.742 | 0.597 | 0.512 | 0.457 | 0.409 | 0.366 | 0.312 |
| 2011 | 6.062 | 0.962 | 0.684 | 0.573 | 0.491 | 0.437 | 0.416 | 0.399 | 0.318 |
| 2012 | 6.226 | 0.977 | 0.716 | 0.586 | 0.531 | 0.470 | 0.406 | 0.348 |  |
| 2013 | 6.113 | 0.940 | 0.742 | 0.638 | 0.545 | 0.467 | 0.385 |  |  |
| 2014 | 6.139 | 0.994 | 0.791 | 0.650 | 0.541 | 0.454 |  |  |  |
| 2015 | 6.001 | 0.996 | 0.752 | 0.627 | 0.516 |  |  |  |  |
| 2016 | 6.086 | 1.004 | 0.763 | 0.620 |  |  |  |  |  |
| 2017 | 6.087 | 0.983 | 0.733 |  |  |  |  |  |  |
| 2018 | 6.206 | 0.950 |  |  |  |  |  |  |  |
| 2019 | 6.346 |  |  |  |  |  |  |  |  |


| Accident | Paid Medical |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1995 |  |  |  |  |  |  | 0.273 | 0.219 | 0.207 |
| 1996 |  |  |  |  |  | 0.302 | 0.263 | 0.263 | 0.176 |
| 1997 |  |  |  |  | 0.377 | 0.314 | 0.285 | 0.213 | 0.156 |
| 1998 |  |  |  | 0.431 | 0.347 | 0.319 | 0.217 | 0.175 | 0.187 |
| 1999 |  |  | 0.599 | 0.446 | 0.411 | 0.286 | 0.217 | 0.198 | 0.218 |
| 2000 |  | 0.819 | 0.571 | 0.475 | 0.331 | 0.253 | 0.222 | 0.254 | 0.192 |
| 2001 | 3.961 | 0.912 | 0.632 | 0.469 | 0.302 | 0.309 | 0.285 | 0.236 | 0.210 |
| 2002 | 4.391 | 0.858 | 0.534 | 0.364 | 0.365 | 0.350 | 0.278 | 0.252 | 0.210 |
| 2003 | 4.036 | 0.766 | 0.415 | 0.438 | 0.374 | 0.302 | 0.264 | 0.240 | 0.208 |
| 2004 | 3.403 | 0.571 | 0.509 | 0.427 | 0.372 | 0.310 | 0.278 | 0.237 | 0.229 |
| 2005 | 3.017 | 0.623 | 0.463 | 0.417 | 0.381 | 0.336 | 0.262 | 0.272 | 0.240 |
| 2006 | 4.033 | 0.629 | 0.493 | 0.411 | 0.362 | 0.327 | 0.278 | 0.253 | 0.202 |
| 2007 | 3.837 | 0.659 | 0.515 | 0.445 | 0.368 | 0.344 | 0.305 | 0.242 | 0.206 |
| 2008 | 4.007 | 0.679 | 0.531 | 0.469 | 0.414 | 0.349 | 0.287 | 0.243 | 0.201 |
| 2009 | 4.448 | 0.692 | 0.530 | 0.486 | 0.406 | 0.345 | 0.281 | 0.236 | 0.201 |
| 2010 | 4.627 | 0.689 | 0.575 | 0.491 | 0.409 | 0.348 | 0.316 | 0.264 | 0.228 |
| 2011 | 3.868 | 0.649 | 0.490 | 0.431 | 0.372 | 0.317 | 0.287 | 0.256 | 0.226 |
| 2012 | 3.942 | 0.611 | 0.488 | 0.429 | 0.387 | 0.322 | 0.286 | 0.258 |  |
| 2013 | 3.858 | 0.580 | 0.478 | 0.441 | 0.361 | 0.320 | 0.264 |  |  |
| 2014 | 4.027 | 0.598 | 0.509 | 0.445 | 0.376 | 0.341 |  |  |  |
| 2015 | 3.964 | 0.590 | 0.474 | 0.415 | 0.342 |  |  |  |  |
| 2016 | 4.094 | 0.572 | 0.461 | 0.400 |  |  |  |  |  |
| 2017 | 4.259 | 0.563 | 0.454 |  |  |  |  |  |  |
| 2018 | 3.994 | 0.563 |  |  |  |  |  |  |  |
| 2019 | 3.977 |  |  |  |  |  |  |  |  |

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

Incremental Paid Indemnity - Ratios of Actual to Expected*

| Accident | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 1997 |  |  |  |  |  | 1.061 | 1.158 | 0.871 | 1.008 | 0.944 | 1.154 | 1.000 | 0.778 |
| 1998 |  |  |  |  | 0.987 | 1.082 | 1.009 | 1.100 | 1.000 | 1.059 | 1.067 | 0.818 | 1.286 |
| 1999 |  |  |  | 1.005 | 1.145 | 1.028 | 0.954 | 1.000 | 0.840 | 1.000 | 0.875 | 1.111 | 1.000 |
| 2000 |  |  | 1.019 | 1.124 | 0.975 | 0.988 | 0.939 | 0.909 | 1.048 | 0.833 | 0.857 | 1.000 | 1.000 |
| 2001 |  | 1.008 | 1.105 | 1.014 | 0.919 | 0.897 | 0.978 | 1.000 | 1.000 | 1.067 | 1.167 | 1.100 | 1.222 |
| 2002 | 1.095 | 1.015 | 0.965 | 0.871 | 0.933 | 0.929 | 0.956 | 0.933 | 0.864 | 1.125 | 1.000 | 1.091 | 0.818 |
| 2003 | 1.046 | 0.917 | 0.877 | 0.900 | 0.982 | 0.985 | 0.907 | 1.036 | 1.316 | 1.222 | 1.429 | 1.250 | 1.111 |
| 2004 | 0.894 | 0.750 | 0.799 | 0.927 | 0.936 | 1.047 | 1.154 | 1.414 | 1.360 | 1.182 | 0.900 | 0.933 | 1.100 |
| 2005 | 0.864 | 0.926 | 0.962 | 1.047 | 1.020 | 1.090 | 1.267 | 1.171 | 1.088 | 0.962 | 1.056 | 1.000 | 1.091 |
| 2006 | 0.979 | 1.064 | 1.032 | 0.985 | 1.163 | 1.164 | 1.088 | 0.937 | 0.865 | 1.040 | 0.895 | 1.071 | 0.917 |
| 2007 | 1.113 | 1.026 | 1.031 | 1.071 | 1.050 | 1.000 | 0.984 | 0.933 | 1.000 | 0.962 | 1.000 | 1.067 | 1.182 |
| 2008 | 0.994 | 1.029 | 1.073 | 1.109 | 1.039 | 0.976 | 0.885 | 0.952 | 0.781 | 0.840 | 1.059 | 0.875 |  |
| 2009 | 1.097 | 1.070 | 1.066 | 1.017 | 1.023 | 1.012 | 1.037 | 0.975 | 1.160 | 1.095 | 0.889 |  |  |
| 2010 | 1.084 | 1.022 | 1.012 | 1.008 | 0.956 | 0.964 | 0.946 | 0.923 | 0.828 | 0.870 |  |  |  |
| 2011 | 0.961 | 1.024 | 0.952 | 0.946 | 1.000 | 0.938 | 1.000 | 1.056 | 0.958 |  |  |  |  |
| 2012 | 1.030 | 0.994 | 0.992 | 0.965 | 0.953 | 0.987 | 0.887 | 0.816 |  |  |  |  |  |
| 2013 | 1.063 | 0.973 | 1.027 | 0.986 | 0.902 | 0.840 | 0.809 |  |  |  |  |  |  |
| 2014 | 1.005 | 1.051 | 1.022 | 0.995 | 0.982 | 0.984 |  |  |  |  |  |  |  |
| 2015 | 1.036 | 1.009 | 0.950 | 0.940 | 0.917 |  |  |  |  |  |  |  |  |
| 2016 | 0.980 | 0.956 | 0.964 | 0.931 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.025 | 0.991 | 0.961 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 0.969 | 0.966 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1.010 |  |  |  |  |  |  |  |  |  |  |  |  |

* Expected paid indemnity losses are derived based on age-to-age paid indemnity development factors from the prior
evaluation (see Exhibit 2.3 of the WCIRB's June 12, 2020 Actuarial Committee Agenda item AC20-06-01).

Incremental Paid Medical - Ratios of Actual to Expected**

| Accident | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 1997 |  |  |  |  |  | 1.147 | 1.115 | 1.009 | 1.009 | 1.143 | 1.077 | 1.000 | 0.870 |
| 1998 |  |  |  |  | 1.133 | 1.207 | 0.958 | 0.907 | 1.088 | 1.031 | 1.143 | 1.080 | 1.050 |
| 1999 |  |  |  | 1.139 | 1.151 | 0.882 | 0.873 | 0.955 | 0.838 | 1.061 | 0.938 | 0.926 | 0.952 |
| 2000 |  |  | 1.110 | 1.107 | 0.864 | 0.889 | 0.962 | 0.929 | 1.194 | 0.857 | 0.867 | 0.880 | 1.000 |
| 2001 |  | 1.107 | 1.078 | 0.906 | 0.851 | 1.000 | 1.059 | 1.179 | 1.000 | 1.100 | 1.000 | 1.000 | 1.150 |
| 2002 | 1.282 | 1.012 | 0.848 | 0.822 | 1.053 | 0.958 | 0.981 | 0.935 | 0.865 | 0.818 | 0.923 | 1.045 | 0.739 |
| 2003 | 0.948 | 0.803 | 0.802 | 1.041 | 1.010 | 1.029 | 1.038 | 1.047 | 1.031 | 1.074 | 1.208 | 1.000 | 1.059 |
| 2004 | 0.911 | 0.847 | 1.151 | 1.071 | 1.210 | 1.229 | 1.200 | 1.044 | 1.182 | 1.276 | 1.000 | 0.957 | 1.000 |
| 2005 | 0.604 | 0.977 | 0.980 | 1.170 | 1.017 | 1.058 | 0.955 | 1.128 | 1.184 | 0.919 | 0.966 | 0.955 | 1.056 |
| 2006 | 1.024 | 1.063 | 1.171 | 1.010 | 1.024 | 0.934 | 1.016 | 0.981 | 0.822 | 0.941 | 0.857 | 0.952 | 0.842 |
| 2007 | 1.161 | 1.101 | 1.029 | 1.041 | 0.952 | 1.082 | 1.143 | 0.941 | 1.000 | 0.938 | 0.917 | 1.050 | 1.062 |
| 2008 | 1.087 | 0.971 | 1.020 | 1.025 | 1.117 | 1.000 | 0.875 | 0.979 | 0.919 | 0.867 | 0.909 | 0.762 |  |
| 2009 | 0.944 | 1.061 | 1.072 | 1.063 | 1.091 | 1.011 | 0.968 | 0.936 | 0.912 | 0.962 | 0.950 |  |  |
| 2010 | 1.014 | 1.057 | 1.044 | 1.041 | 0.903 | 0.946 | 1.016 | 0.932 | 0.935 | 1.080 |  |  |  |
| 2011 | 0.971 | 1.033 | 0.975 | 0.939 | 1.023 | 0.977 | 0.952 | 1.000 | 1.000 |  |  |  |  |
| 2012 | 1.038 | 1.011 | 1.003 | 1.009 | 1.000 | 0.965 | 0.949 | 0.951 |  |  |  |  |  |
| 2013 | 1.081 | 0.961 | 1.003 | 0.986 | 0.895 | 0.902 | 0.821 |  |  |  |  |  |  |
| 2014 | 0.886 | 1.011 | 1.003 | 0.953 | 0.941 | 0.946 |  |  |  |  |  |  |  |
| 2015 | 0.940 | 1.028 | 0.931 | 0.936 | 0.884 |  |  |  |  |  |  |  |  |
| 2016 | 1.087 | 0.920 | 0.942 | 0.895 |  |  |  |  |  |  |  |  |  |
| 2017 | 0.858 | 0.957 | 0.933 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.031 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 0.931 |  |  |  |  |  |  |  |  |  |  |  |  |

[^10]
## Comparison of Projected Loss Ratios as of March 31, 2020 <br> Accident Year 2014 Projected to 75 Months[1]

| Methodology | Indemnity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Based on Experience Evaluated as of (in months): |  |  |  |  |  |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | Current |
| 3-Year Avg. Incurred | 0.207 | 0.204 | 0.203 | 0.200 | 0.197 | 0.193 |
| Latest Year Incurred | 0.199 | 0.200 | 0.201 | 0.199 | 0.197 | 0.193 |
| 3-Year Avg. Paid | 0.199 | 0.202 | 0.204 | 0.201 | 0.197 | 0.193 |
| Latest Year Paid | 0.193 | 0.199 | 0.202 | 0.200 | 0.197 | 0.193 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.193 | 0.199 | 0.202 | 0.200 | 0.197 | 0.193 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.189 | 0.195 | 0.199 | 0.198 | 0.196 | 0.193 |
|  | Difference from Actual 75-Month Loss Ratio |  |  |  |  |  |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | Current |
| 3-Year Avg. Incurred | 7.3\% | 5.8\% | 5.2\% | 3.5\% | 2.1\% | 0.0\% |
| Latest Year Incurred | 3.0\% | 3.9\% | 4.3\% | 3.3\% | 2.0\% | 0.0\% |
| 3-Year Avg. Paid | 3.1\% | 5.0\% | 5.9\% | 4.2\% | 2.1\% | 0.0\% |
| Latest Year Paid | 0.2\% | 3.3\% | 5.0\% | 4.0\% | 2.1\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.2\% | 3.3\% | 5.0\% | 4.0\% | 2.1\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | -2.1\% | 0.9\% | 3.0\% | 2.6\% | 1.4\% | 0.0\% |
|  | Medical |  |  |  |  |  |
| Based on Experience Evaluated as of (in months): |  |  |  |  |  |  |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | Current |
| 3-Year Avg. Incurred | 0.284 | 0.268 | 0.257 | 0.244 | 0.234 | 0.225 |
| Latest Year Incurred | 0.259 | 0.252 | 0.248 | 0.239 | 0.232 | 0.225 |
| 3-Year Avg. Paid | 0.251 | 0.248 | 0.245 | 0.239 | 0.232 | 0.225 |
| Latest Year Paid | 0.245 | 0.244 | 0.242 | 0.237 | 0.232 | 0.225 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.245 | 0.244 | 0.242 | 0.237 | 0.232 | 0.225 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.242 | 0.241 | 0.239 | 0.235 | 0.231 | 0.225 |
| Difference from Actual 75-Month Loss Ratio |  |  |  |  |  |  |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | Current |
| 3-Year Avg. Incurred | 25.9\% | 18.7\% | 13.8\% | 8.2\% | 3.6\% | 0.0\% |
| Latest Year Incurred | 14.9\% | 12.0\% | 10.2\% | 6.2\% | 2.7\% | 0.0\% |
| 3-Year Avg. Paid | 11.4\% | 9.9\% | 8.8\% | 5.9\% | 2.8\% | 0.0\% |
| Latest Year Paid | 8.7\% | 8.4\% | 7.5\% | 5.3\% | 2.8\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 8.7\% | 8.4\% | 7.5\% | 5.3\% | 2.8\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 7.2\% | 6.9\% | 6.2\% | 4.4\% | 2.3\% | 0.0\% |

${ }^{[1]}$ Each loss ratio is projected to incurred losses at 75 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 75 months.
${ }^{[2]}$ The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
${ }^{[3]}$ The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

| Methodology | Indemnity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Based on Experience Evaluated as of (in months): |  |  |  |  |
|  | 15 | $\underline{27}$ | 39 | 51 | Current |
| 3-Year Avg. Incurred | 0.195 | 0.195 | 0.191 | 0.188 | 0.184 |
| Latest Year Incurred | 0.189 | 0.189 | 0.188 | 0.187 | 0.184 |
| 3-Year Avg. Paid | 0.191 | 0.195 | 0.194 | 0.189 | 0.184 |
| Latest Year Paid | 0.193 | 0.194 | 0.192 | 0.189 | 0.184 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.193 | 0.194 | 0.192 | 0.189 | 0.184 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.189 | 0.190 | 0.189 | 0.187 | 0.184 |

3-Year Avg. Incurred
Latest Year Incurred
3-Year Avg. Paid
Latest Year Paid
Reform-Adj. Paid ${ }^{[2]}$
Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$

| Difference from Actual 63-Month Loss Ratio |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 5}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{\text { Current }}$ |
| $6.0 \%$ | $2.9 \%$ | $2.3 \%$ | $0.0 \%$ |  |
| $2.7 \%$ | $2.8 \%$ | $2.2 \%$ | $1.5 \%$ | $0.0 \%$ |
| $4.1 \%$ | $5.9 \%$ | $5.3 \%$ | $3.0 \%$ | $0.0 \%$ |
| $5.0 \%$ | $5.4 \%$ | $4.2 \%$ | $2.8 \%$ | $0.0 \%$ |
| $5.0 \%$ | $5.4 \%$ | $4.2 \%$ | $2.8 \%$ | $0.0 \%$ |
| $2.8 \%$ | $3.3 \%$ | $2.7 \%$ | $2.0 \%$ | $0.0 \%$ |

## Medical

Based on Experience Evaluated as of (in months):
3-Year Avg. Incurred
Latest Year Incurred
3-Year Avg. Paid
Latest Year Paid
Reform-Adj. Paid
Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$

| Based on Experience Evaluated as of (in months). |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 0.245 | 0.237 | $\frac{39}{}$ | 0.230 | $0.2 \frac{51}{220}$ |
| 0.226 | 0.224 | 0.223 | 0.217 | $\frac{\text { Current }}{0.210}$ |
| 0.232 | 0.232 | 0.226 | 0.219 | 0.210 |
| 0.226 | 0.228 | 0.223 | 0.217 | 0.210 |
| 0.226 | 0.228 | 0.223 | 0.217 | 0.210 |
| 0.223 | 0.225 | 0.221 | 0.216 | 0.210 |
|  |  |  |  |  |

3-Year Avg. Incurred

| Difference from Actual 63-Month Loss Ratio |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $16.5 \%$ | $12 . \frac{27}{15}$ | $9 . \frac{39}{}$ | $\frac{51}{\underline{3}}$ | $\underline{\text { Current }}$ |
| $7.4 \%$ | $6.4 \%$ | $6.1 \%$ | $3.3 \%$ | $0.0 \%$ |
| $10.4 \%$ | $10.4 \%$ | $7.3 \%$ | $4.0 \%$ | $0.0 \%$ |
| $7.4 \%$ | $8.4 \%$ | $5.8 \%$ | $3.3 \%$ | $0.0 \%$ |
| $7.4 \%$ | $8.4 \%$ | $5.8 \%$ | $3.3 \%$ | $0.0 \%$ |
| $6.1 \%$ | $7.1 \%$ | $4.8 \%$ | $2.8 \%$ | $0.0 \%$ |

${ }^{[1]}$ Each loss ratio is projected to incurred losses at 63 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 63 months.
${ }^{[2]}$ The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
${ }^{[3]}$ The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

# Comparison of Projected Loss Ratios as of March 31, 2020 <br> Accident Year 2016 Projected to 51 Months[1] 

Indemnity

| Methodology | Based on Experience Evaluated as of (in months): |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | Current |
| 3-Year Avg. Incurred | 0.177 | 0.175 | 0.171 | 0.168 |
| Latest Year Incurred | 0.178 | 0.176 | 0.170 | 0.168 |
| 3-Year Avg. Paid | 0.179 | 0.177 | 0.173 | 0.168 |
| Latest Year Paid | 0.182 | 0.177 | 0.172 | 0.168 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.182 | 0.177 | 0.172 | 0.168 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.178 | 0.174 | 0.171 | 0.168 |
| Difference from Actual 51-Month Loss Ratio |  |  |  |  |
|  | 15 | $\underline{27}$ | 39 | Current |
| 3-Year Avg. Incurred | 5.0\% | 4.0\% | 1.7\% | 0.0\% |
| Latest Year Incurred | 5.9\% | 4.3\% | 1.2\% | 0.0\% |
| 3-Year Avg. Paid | 6.6\% | 5.0\% | 2.8\% | 0.0\% |
| Latest Year Paid | 8.4\% | 5.4\% | 2.4\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 8.4\% | 5.4\% | 2.4\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 5.9\% | 3.5\% | 1.7\% | 0.0\% |


|  | Medical |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Based on Experience Evaluated as of (in months): |  |  |  |
|  | 15 | $\underline{27}$ | 39 | Current |
| 3-Year Avg. Incurred | 0.217 | 0.209 | 0.201 | 0.193 |
| Latest Year Incurred | 0.212 | 0.207 | 0.199 | 0.193 |
| 3-Year Avg. Paid | 0.216 | 0.208 | 0.200 | 0.193 |
| Latest Year Paid | 0.216 | 0.206 | 0.199 | 0.193 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.216 | 0.206 | 0.199 | 0.193 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.213 | 0.204 | 0.198 | 0.193 |
| Difference from Actual 51-Month Loss Ratio |  |  |  |  |
|  | 15 | $\underline{27}$ | 39 | Current |
| 3-Year Avg. Incurred | 12.3\% | 8.4\% | 4.3\% | 0.0\% |
| Latest Year Incurred | 9.8\% | 7.3\% | 3.4\% | 0.0\% |
| 3-Year Avg. Paid | 12.2\% | 7.9\% | 3.8\% | 0.0\% |
| Latest Year Paid | 12.0\% | 7.0\% | 3.3\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 12.0\% | 7.0\% | 3.3\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 10.5\% | 5.7\% | 2.8\% | 0.0\% |

${ }^{[1]}$ Each loss ratio is projected to incurred losses at 51 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 51 months.
${ }^{[2]}$ The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
${ }^{[3]}$ The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

## Comparison of Projected Loss Ratios as of March 31, 2020

## Accident Year 2017 Projected to 39 Months[1]

Indemnity

| Methodology Based on Experience Evaluated as of (in months): |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | Current |
| 3-Year Avg. Incurred | 0.169 | 0.166 | 0.162 |
| Latest Year Incurred | 0.166 | 0.164 | 0.162 |
| 3-Year Avg. Paid | 0.171 | 0.168 | 0.162 |
| Latest Year Paid | 0.167 | 0.166 | 0.162 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.167 | 0.166 | 0.162 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.163 | 0.164 | 0.162 |
| Difference from Actual 39-Month Loss Ratio |  |  |  |
|  | 15 | $\underline{27}$ | Current |
| 3-Year Avg. Incurred | 4.1\% | 2.0\% | 0.0\% |
| Latest Year Incurred | 2.2\% | 1.0\% | 0.0\% |
| 3-Year Avg. Paid | 5.6\% | 3.4\% | 0.0\% |
| Latest Year Paid | 3.0\% | 2.5\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 3.0\% | 2.5\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.5\% | 1.0\% | 0.0\% |


|  | Medical |  |  |
| :---: | :---: | :---: | :---: |
|  | Based on Experience Evaluated as of (in months): |  |  |
|  | 15 | $\underline{27}$ | Current |
| 3-Year Avg. Incurred | 0.205 | 0.197 | 0.192 |
| Latest Year Incurred | 0.200 | 0.196 | 0.192 |
| 3-Year Avg. Paid | 0.210 | 0.201 | 0.192 |
| Latest Year Paid | 0.202 | 0.198 | 0.192 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.203 | 0.199 | 0.192 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.201 | 0.197 | 0.192 |
|  | Difference from Actual 39-Month Loss Ratio |  |  |
|  | 15 | $\underline{27}$ | Current |
| 3-Year Avg. Incurred | 6.6\% | 2.7\% | 0.0\% |
| Latest Year Incurred | 4.3\% | 2.1\% | 0.0\% |
| 3-Year Avg. Paid | 9.3\% | 4.5\% | 0.0\% |
| Latest Year Paid | 5.2\% | 3.1\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 5.9\% | 3.5\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 4.8\% | 2.6\% | 0.0\% |

${ }^{[1]}$ Each loss ratio is projected to incurred losses at 39 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 39 months.
${ }^{[2]}$ The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
${ }^{[3]}$ The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

## Comparison of Projected Loss Ratios as of March 31, 2020

## Accident Year 2018 Projected to 27 Months[1]

| Methodology | Indemnity |  |
| :---: | :---: | :---: |
|  | ce Eva |  |
|  | 15 Current | Current |
| 3-Year Avg. Incurred | 0.152 | 0.148 |
| Latest Year Incurred | 0.150 | 0.148 |
| 3-Year Avg. Paid | 0.153 | 0.148 |
| Latest Year Paid | 0.151 | 0.148 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.151 | 0.148 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3}$ | 0.150 | 0.148 |
| Difference from Actual 27-Month Loss Ratio |  |  |
|  | 15 | Current |
| 3-Year Avg. Incurred | 2.6\% | 0.0\% |
| Latest Year Incurred | 1.3\% | 0.0\% |
| 3-Year Avg. Paid | 3.2\% | 0.0\% |
| Latest Year Paid | 2.0\% | 0.0\% |
| Reform-Adj. Paid ${ }^{[2]}$ | 2.0\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3}$ | 1.7\% | 0.0\% |

## Medical


${ }^{[1]}$ Each loss ratio is projected to incurred losses at 27 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 27 months.
${ }^{[2]}$ The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
${ }^{\text {[3] }}$ The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | 99 | 111 |
| 1995 |  |  |  |  |  |  |  |  |  | 14,643 |
| 1996 |  |  |  |  |  |  |  |  | 16,821 | 16,933 |
| 1997 |  |  |  |  |  |  |  | 18,742 | 18,888 | 18,921 |
| 1998 |  |  |  |  |  |  | 20,526 | 20,841 | 20,853 | 20,953 |
| 1999 |  |  |  |  |  | 21,742 | 22,227 | 22,363 | 22,549 | 22,675 |
| 2000 |  |  |  |  | 22,057 | 22,835 | 23,089 | 23,326 | 23,581 | 23,734 |
| 2001 |  |  |  | 21,986 | 23,940 | 24,480 | 24,971 | 25,451 | 25,811 | 26,007 |
| 2002 |  |  | 18,083 | 21,258 | 22,233 | 22,833 | 23,484 | 23,937 | 24,187 | 24,445 |
| 2003 |  | 12,139 | 18,227 | 20,345 | 21,662 | 22,709 | 23,420 | 23,874 | 24,370 | 24,798 |
| 2004 | 8,707 | 11,681 | 14,409 | 16,440 | 17,497 | 18,231 | 18,936 | 19,451 | 19,955 | 20,262 |
| 2005 | 9,462 | 8,778 | 12,099 | 14,089 | 15,283 | 16,233 | 17,024 | 17,678 | 18,064 | 18,352 |
| 2006 | 6,910 | 8,799 | 13,021 | 15,347 | 16,801 | 17,983 | 18,874 | 19,405 | 19,772 | 20,007 |
| 2007 | 6,692 | 9,235 | 13,917 | 16,725 | 18,365 | 19,527 | 20,364 | 20,936 | 21,389 | 21,610 |
| 2008 | 6,446 | 9,853 | 15,055 | 18,448 | 20,397 | 21,601 | 22,446 | 22,966 | 23,322 | 23,553 |
| 2009 | 6,407 | 10,185 | 15,748 | 18,983 | 21,160 | 22,377 | 23,251 | 23,686 | 24,045 | 24,351 |
| 2010 | 6,225 | 10,157 | 15,456 | 18,900 | 20,758 | 21,913 | 22,630 | 23,113 | 23,474 | 23,729 |
| 2011 | 6,120 | 10,600 | 15,877 | 18,794 | 20,568 | 21,471 | 22,102 | 22,589 | 22,928 | 23,147 |
| 2012 | 6,218 | 10,660 | 15,687 | 18,561 | 20,032 | 21,115 | 21,765 | 22,222 | 22,525 |  |
| 2013 | 6,566 | 10,713 | 15,571 | 18,174 | 19,711 | 20,553 | 21,137 | 21,460 |  |  |
| 2014 | 6,252 | 10,781 | 15,743 | 18,890 | 20,545 | 21,485 | 21,942 |  |  |  |
| 2015 | 6,910 | 11,130 | 16,487 | 19,377 | 20,930 | 21,679 |  |  |  |  |
| 2016 | 6,714 | 11,194 | 16,328 | 19,006 | 20,431 |  |  |  |  |  |
| 2017 | 6,849 | 11,458 | 16,713 | 19,403 |  |  |  |  |  |  |
| 2018 | 7,170 | 12,123 | 17,384 |  |  |  |  |  |  |  |
| 2019 | 7,402 | 12,622 |  |  |  |  |  |  |  |  |
| 2020 | 8,348 |  |  |  |  |  |  |  |  |  |


| Accident |  |  |  |  | Annual | hange |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 |
| 1996 |  |  |  |  |  |  |  |  |  | 15.6\% |
| 1997 |  |  |  |  |  |  |  |  | 12.3\% | 11.7\% |
| 1998 |  |  |  |  |  |  |  | 11.2\% | 10.4\% | 10.7\% |
| 1999 |  |  |  |  |  |  | 8.3\% | 7.3\% | 8.1\% | 8.2\% |
| 2000 |  |  |  |  |  | 5.0\% | 3.9\% | 4.3\% | 4.6\% | 4.7\% |
| 2001 |  |  |  |  | 8.5\% | 7.2\% | 8.1\% | 9.1\% | 9.5\% | 9.6\% |
| 2002 |  |  |  | -3.3\% | -7.1\% | -6.7\% | -6.0\% | -5.9\% | -6.3\% | -6.0\% |
| 2003 |  |  | 0.8\% | -4.3\% | -2.6\% | -0.5\% | -0.3\% | -0.3\% | 0.8\% | 1.4\% |
| 2004 |  | -3.8\% | -20.9\% | -19.2\% | -19.2\% | -19.7\% | -19.1\% | -18.5\% | -18.1\% | -18.3\% |
| 2005 | 8.7\% | -24.9\% | -16.0\% | -14.3\% | -12.7\% | -11.0\% | -10.1\% | -9.1\% | -9.5\% | -9.4\% |
| 2006 | -27.0\% | 0.2\% | 7.6\% | 8.9\% | 9.9\% | 10.8\% | 10.9\% | 9.8\% | 9.5\% | 9.0\% |
| 2007 | -3.1\% | 5.0\% | 6.9\% | 9.0\% | 9.3\% | 8.6\% | 7.9\% | 7.9\% | 8.2\% | 8.0\% |
| 2008 | -3.7\% | 6.7\% | 8.2\% | 10.3\% | 11.1\% | 10.6\% | 10.2\% | 9.7\% | 9.0\% | 9.0\% |
| 2009 | -0.6\% | 3.4\% | 4.6\% | 2.9\% | 3.7\% | 3.6\% | 3.6\% | 3.1\% | 3.1\% | 3.4\% |
| 2010 | -2.8\% | -0.3\% | -1.9\% | -0.4\% | -1.9\% | -2.1\% | -2.7\% | -2.4\% | -2.4\% | -2.6\% |
| 2011 | -1.7\% | 4.4\% | 2.7\% | -0.6\% | -0.9\% | -2.0\% | -2.3\% | -2.3\% | -2.3\% | -2.5\% |
| 2012 | 1.6\% | 0.6\% | -1.2\% | -1.2\% | -2.6\% | -1.7\% | -1.5\% | -1.6\% | -1.8\% |  |
| 2013 | 5.6\% | 0.5\% | -0.7\% | -2.1\% | -1.6\% | -2.7\% | -2.9\% | -3.4\% |  |  |
| 2014 | -4.8\% | 0.6\% | 1.1\% | 3.9\% | 4.2\% | 4.5\% | 3.8\% |  |  |  |
| 2015 | 10.5\% | 3.2\% | 4.7\% | 2.6\% | 1.9\% | 0.9\% |  |  |  |  |
| 2016 | -2.8\% | 0.6\% | -1.0\% | -1.9\% | -2.4\% |  |  |  |  |  |
| 2017 | 2.0\% | 2.4\% | 2.4\% | 2.1\% |  |  |  |  |  |  |
| 2018 | 4.7\% | 5.8\% | 4.0\% |  |  |  |  |  |  |  |
| 2019 | 3.2\% | 4.1\% |  |  |  |  |  |  |  |  |
| 2020 | 12.8\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | -0.3\% | 1.1\% | 0.6\% | 0.1\% | -0.1\% | -0.2\% | -0.1\% | 0.2\% | 0.8\% | 1.6\% |
| $\mathrm{R}^{2}$ | 0.015 | 0.272 | 0.086 | 0.003 | 0.003 | 0.008 | 0.003 | 0.012 | 0.127 | 0.276 |
| 5-Year | 5.3\% | 3.4\% | 2.1\% | 1.4\% | 1.0\% | 0.4\% | -1.1\% | -2.3\% | -1.2\% | 1.5\% |
| $\mathrm{R}^{2}$ | 0.892 | 0.923 | 0.864 | 0.666 | 0.459 | 0.076 | 0.461 | 0.988 | 0.564 | 0.259 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

## Average Incurred Medical Loss per Reported Claim

 As of March 31, 2020| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | $\underline{51}$ | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 7,264 |
| 2000 |  |  |  |  |  |  |  |  | 7,992 | 8,162 |
| 2001 |  |  |  |  |  |  |  | 8,978 | 9,336 | 9,673 |
| 2002 |  |  |  |  |  |  | 9,066 | 9,417 | 9,747 | 10,034 |
| 2003 |  |  |  |  |  | 8,378 | 8,798 | 9,178 | 9,554 | 9,897 |
| 2004 |  |  |  |  | 6,464 | 6,947 | 7,339 | 7,791 | 8,091 | 8,346 |
| 2005 |  |  |  | 5,676 | 6,088 | 6,566 | 7,044 | 7,457 | 7,753 | 7,943 |
| 2006 |  |  | 5,483 | 6,315 | 6,885 | 7,393 | 7,848 | 8,224 | 8,505 | 8,650 |
| 2007 |  | 4,696 | 6,136 | 7,089 | 7,867 | 8,473 | 9,047 | 9,380 | 9,637 | 9,774 |
| 2008 | 4,160 | 5,157 | 6,825 | 8,034 | 8,944 | 9,702 | 10,218 | 10,562 | 10,761 | 10,856 |
| 2009 | 4,365 | 5,679 | 7,785 | 9,081 | 10,237 | 10,974 | 11,475 | 11,746 | 11,894 | 11,966 |
| 2010 | 4,460 | 5,896 | 8,018 | 9,595 | 10,602 | 11,281 | 11,650 | 11,883 | 11,998 | 12,119 |
| 2011 | 4,766 | 6,110 | 8,326 | 9,606 | 10,466 | 11,020 | 11,252 | 11,399 | 11,494 | 11,581 |
| 2012 | 4,761 | 6,231 | 8,132 | 9,211 | 9,852 | 10,307 | 10,534 | 10,666 | 10,812 |  |
| 2013 | 5,150 | 6,292 | 8,038 | 8,852 | 9,465 | 9,718 | 9,924 | 10,006 |  |  |
| 2014 | 4,777 | 6,108 | 7,612 | 8,529 | 9,016 | 9,284 | 9,473 |  |  |  |
| 2015 | 4,911 | 6,210 | 7,737 | 8,553 | 8,943 | 9,149 |  |  |  |  |
| 2016 | 4,907 | 6,348 | 7,741 | 8,358 | 8,655 |  |  |  |  |  |
| 2017 | 4,968 | 6,251 | 7,528 | 8,154 |  |  |  |  |  |  |
| 2018 | 5,264 | 6,562 | 7,852 |  |  |  |  |  |  |  |
| 2019 | 5,393 | 6,584 |  |  |  |  |  |  |  |  |
| 2020 | 6,397 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  |  |  | 12.4\% |
| 2001 |  |  |  |  |  |  |  |  | 16.8\% | 18.5\% |
| 2002 |  |  |  |  |  |  |  | 4.9\% | 4.4\% | 3.7\% |
| 2003 |  |  |  |  |  |  | -3.0\% | -2.5\% | -2.0\% | -1.4\% |
| 2004 |  |  |  |  |  | -17.1\% | -16.6\% | -15.1\% | -15.3\% | -15.7\% |
| 2005 |  |  |  |  | -5.8\% | -5.5\% | -4.0\% | -4.3\% | -4.2\% | -4.8\% |
| 2006 |  |  |  | 11.3\% | 13.1\% | 12.6\% | 11.4\% | 10.3\% | 9.7\% | 8.9\% |
| 2007 |  |  | 11.9\% | 12.3\% | 14.3\% | 14.6\% | 15.3\% | 14.1\% | 13.3\% | 13.0\% |
| 2008 |  | 9.8\% | 11.2\% | 13.3\% | 13.7\% | 14.5\% | 12.9\% | 12.6\% | 11.7\% | 11.1\% |
| 2009 | 4.9\% | 10.1\% | 14.1\% | 13.0\% | 14.5\% | 13.1\% | 12.3\% | 11.2\% | 10.5\% | 10.2\% |
| 2010 | 2.2\% | 3.8\% | 3.0\% | 5.7\% | 3.6\% | 2.8\% | 1.5\% | 1.2\% | 0.9\% | 1.3\% |
| 2011 | 6.9\% | 3.6\% | 3.8\% | 0.1\% | -1.3\% | -2.3\% | -3.4\% | -4.1\% | -4.2\% | -4.4\% |
| 2012 | -0.1\% | 2.0\% | -2.3\% | -4.1\% | -5.9\% | -6.5\% | -6.4\% | -6.4\% | -5.9\% |  |
| 2013 | 8.2\% | 1.0\% | -1.2\% | -3.9\% | -3.9\% | -5.7\% | -5.8\% | -6.2\% |  |  |
| 2014 | -7.2\% | -2.9\% | -5.3\% | -3.7\% | -4.7\% | -4.5\% | -4.5\% |  |  |  |
| 2015 | 2.8\% | 1.7\% | 1.6\% | 0.3\% | -0.8\% | -1.4\% |  |  |  |  |
| 2016 | -0.1\% | 2.2\% | 0.1\% | -2.3\% | -3.2\% |  |  |  |  |  |
| 2017 | 1.2\% | -1.5\% | -2.7\% | -2.4\% |  |  |  |  |  |  |
| 2018 | 6.0\% | 5.0\% | 4.3\% |  |  |  |  |  |  |  |
| 2019 | 2.5\% | 0.3\% |  |  |  |  |  |  |  |  |
| 2020 | 18.6\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | 2.5\% | 2.1\% | 2.0\% | 2.5\% | 3.1\% | 2.9\% | 2.6\% | 2.5\% | 2.9\% | 3.3\% |
| $\mathrm{R}^{2}$ | 0.778 | 0.719 | 0.382 | 0.348 | 0.415 | 0.398 | 0.380 | 0.415 | 0.520 | 0.580 |
| 5-Year | 6.3\% | 1.5\% | 0.3\% | -1.8\% | -3.1\% | -4.7\% | -5.2\% | -4.2\% | -0.2\% | 4.6\% |
| $\mathrm{R}^{2}$ | 0.829 | 0.765 | 0.112 | 0.922 | 0.959 | 0.956 | 0.992 | 0.880 | 0.006 | 0.647 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | 63 | $\underline{75}$ | 87 | 99 | 111 |
| 1995 |  |  |  |  |  |  |  |  |  | 32,914 |
| 1996 |  |  |  |  |  |  |  |  | 34,880 | 34,328 |
| 1997 |  |  |  |  |  |  |  | 31,955 | 32,209 | 32,904 |
| 1998 |  |  |  |  |  |  | 31,039 | 31,956 | 31,866 | 33,189 |
| 1999 |  |  |  |  |  | 27,369 | 27,965 | 28,207 | 29,118 | 30,523 |
| 2000 |  |  |  |  | 23,973 | 24,288 | 23,754 | 24,592 | 25,288 | 26,155 |
| 2001 |  |  |  | 20,465 | 20,525 | 19,859 | 19,921 | 21,270 | 22,985 | 23,810 |
| 2002 |  |  | 18,028 | 18,018 | 16,704 | 16,360 | 17,498 | 18,661 | 19,452 | 21,254 |
| 2003 |  | 12,790 | 16,742 | 15,188 | 15,459 | 16,997 | 18,932 | 21,077 | 24,249 | 27,898 |
| 2004 | 8,486 | 12,109 | 12,509 | 13,247 | 14,298 | 15,985 | 18,174 | 20,735 | 23,442 | 24,696 |
| 2005 | 9,132 | 8,142 | 10,168 | 11,569 | 12,911 | 15,327 | 18,380 | 21,812 | 23,144 | 25,852 |
| 2006 | 6,515 | 7,854 | 11,220 | 13,122 | 15,274 | 18,430 | 21,043 | 22,527 | 25,432 | 27,079 |
| 2007 | 6,147 | 8,254 | 11,796 | 14,341 | 16,511 | 18,515 | 20,584 | 23,909 | 27,103 | 29,204 |
| 2008 | 5,866 | 8,586 | 12,334 | 15,173 | 16,906 | 18,370 | 21,355 | 23,952 | 26,748 | 30,568 |
| 2009 | 5,814 | 8,950 | 12,972 | 14,810 | 17,019 | 19,091 | 21,429 | 23,319 | 25,722 | 28,565 |
| 2010 | 5,637 | 8,987 | 12,595 | 14,788 | 16,484 | 18,299 | 20,260 | 22,443 | 25,234 | 28,775 |
| 2011 | 5,552 | 9,643 | 13,189 | 15,222 | 17,448 | 18,886 | 20,731 | 23,292 | 25,810 | 29,143 |
| 2012 | 5,664 | 9,566 | 12,964 | 14,984 | 16,360 | 18,676 | 21,034 | 24,644 | 28,677 |  |
| 2013 | 6,127 | 9,579 | 13,110 | 14,229 | 15,748 | 17,623 | 20,640 | 24,397 |  |  |
| 2014 | 5,693 | 9,694 | 13,149 | 15,236 | 17,623 | 20,560 | 22,549 |  |  |  |
| 2015 | 6,418 | 10,050 | 14,282 | 16,706 | 19,681 | 22,152 |  |  |  |  |
| 2016 | 6,182 | 10,160 | 14,592 | 17,252 | 20,388 |  |  |  |  |  |
| 2017 | 6,328 | 10,820 | 15,972 | 19,281 |  |  |  |  |  |  |
| 2018 | 6,651 | 11,561 | 16,723 |  |  |  |  |  |  |  |
| 2019 | 6,853 | 12,025 |  |  |  |  |  |  |  |  |
| 2020 | 7,855 |  |  |  |  |  |  |  |  |  |


| Accident Year | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 |
| 1996 |  |  |  |  |  |  |  |  |  | 4.3\% |
| 1997 |  |  |  |  |  |  |  |  | -7.7\% | -4.1\% |
| 1998 |  |  |  |  |  |  |  | 0.0\% | -1.1\% | 0.9\% |
| 1999 |  |  |  |  |  |  | -9.9\% | -11.7\% | -8.6\% | -8.0\% |
| 2000 |  |  |  |  |  | -11.3\% | -15.1\% | -12.8\% | -13.2\% | -14.3\% |
| 2001 |  |  |  |  | -14.4\% | -18.2\% | -16.1\% | -13.5\% | -9.1\% | -9.0\% |
| 2002 |  |  |  | -12.0\% | -18.6\% | -17.6\% | -12.2\% | -12.3\% | -15.4\% | -10.7\% |
| 2003 |  |  | -7.1\% | -15.7\% | -7.5\% | 3.9\% | 8.2\% | 12.9\% | 24.7\% | 31.3\% |
| 2004 |  | -5.3\% | -25.3\% | -12.8\% | -7.5\% | -6.0\% | -4.0\% | -1.6\% | -3.3\% | -11.5\% |
| 2005 | 7.6\% | -32.8\% | -18.7\% | -12.7\% | -9.7\% | -4.1\% | 1.1\% | 5.2\% | -1.3\% | 4.7\% |
| 2006 | -28.7\% | -3.5\% | 10.3\% | 13.4\% | 18.3\% | 20.2\% | 14.5\% | 3.3\% | 9.9\% | 4.7\% |
| 2007 | -5.6\% | 5.1\% | 5.1\% | 9.3\% | 8.1\% | 0.5\% | -2.2\% | 6.1\% | 6.6\% | 7.8\% |
| 2008 | -4.6\% | 4.0\% | 4.6\% | 5.8\% | 2.4\% | -0.8\% | 3.7\% | 0.2\% | -1.3\% | 4.7\% |
| 2009 | -0.9\% | 4.2\% | 5.2\% | -2.4\% | 0.7\% | 3.9\% | 0.3\% | -2.6\% | -3.8\% | -6.6\% |
| 2010 | -3.0\% | 0.4\% | -2.9\% | -0.1\% | -3.1\% | -4.1\% | -5.5\% | -3.8\% | -1.9\% | 0.7\% |
| 2011 | -1.5\% | 7.3\% | 4.7\% | 2.9\% | 5.8\% | 3.2\% | 2.3\% | 3.8\% | 2.3\% | 1.3\% |
| 2012 | 2.0\% | -0.8\% | -1.7\% | -1.6\% | -6.2\% | -1.1\% | 1.5\% | 5.8\% | 11.1\% |  |
| 2013 | 8.2\% | 0.1\% | 1.1\% | -5.0\% | -3.7\% | -5.6\% | -1.9\% | -1.0\% |  |  |
| 2014 | -7.1\% | 1.2\% | 0.3\% | 7.1\% | 11.9\% | 16.7\% | 9.3\% |  |  |  |
| 2015 | 12.7\% | 3.7\% | 8.6\% | 9.7\% | 11.7\% | 7.7\% |  |  |  |  |
| 2016 | -3.7\% | 1.1\% | 2.2\% | 3.3\% | 3.6\% |  |  |  |  |  |
| 2017 | 2.4\% | 6.5\% | 9.5\% | 11.8\% |  |  |  |  |  |  |
| 2018 | 5.1\% | 6.8\% | 4.7\% |  |  |  |  |  |  |  |
| 2019 | 3.0\% | 4.0\% |  |  |  |  |  |  |  |  |
| 2020 | 14.6\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* $^{*}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | $-0.4 \%$ | $0.9 \%$ | $0.7 \%$ | $0.4 \%$ | $0.1 \%$ | $-0.4 \%$ | $-0.9 \%$ | $-1.0 \%$ | $-1.0 \%$ | $-0.8 \%$ |
| R$^{2}$ | 0.022 | 0.089 | 0.050 | 0.025 | 0.001 | 0.019 | 0.105 | 0.128 | 0.116 | 0.095 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $5.7 \%$ | $5.0 \%$ | $6.1 \%$ | $7.6 \%$ | $6.9 \%$ | $4.2 \%$ | $2.1 \%$ | $1.9 \%$ | $1.4 \%$ | $-0.6 \%$ |
| $R^{2}$ | 0.884 | 0.964 | 0.976 | 0.981 | 0.868 | 0.535 | 0.645 | 0.581 | 0.199 | 0.150 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

Average Medical Case Outstanding per Open Indemnity Claim
As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 1995 |  |  |  |  |  |  |  |  |  | 55,067 |
| 1996 |  |  |  |  |  |  |  |  | 45,934 | 50,829 |
| 1997 |  |  |  |  |  |  |  | 41,264 | 48,315 | 54,439 |
| 1998 |  |  |  |  |  |  | 38,633 | 44,288 | 50,472 | 59,926 |
| 1999 |  |  |  |  |  | 28,111 | 33,635 | 39,668 | 48,678 | 64,890 |
| 2000 |  |  |  |  | 22,903 | 27,794 | 31,569 | 38,570 | 50,999 | 59,032 |
| 2001 |  |  |  | 17,449 | 20,304 | 23,477 | 28,463 | 37,090 | 47,129 | 59,486 |
| 2002 |  |  | 14,995 | 16,600 | 18,008 | 21,266 | 28,384 | 35,706 | 44,697 | 54,060 |
| 2003 |  | 12,394 | 14,308 | 15,295 | 18,375 | 23,318 | 30,629 | 39,045 | 48,674 | 61,451 |
| 2004 | 12,021 | 12,351 | 12,912 | 15,389 | 20,078 | 26,349 | 32,298 | 42,432 | 51,361 | 60,457 |
| 2005 | 13,903 | 12,323 | 14,499 | 18,429 | 21,802 | 27,189 | 35,425 | 46,187 | 53,722 | 64,296 |
| 2006 | 11,325 | 12,338 | 16,764 | 21,426 | 25,836 | 32,387 | 39,403 | 47,693 | 59,328 | 67,207 |
| 2007 | 12,494 | 13,834 | 18,160 | 22,408 | 28,217 | 34,778 | 43,487 | 52,550 | 62,370 | 71,987 |
| 2008 | 12,386 | 14,426 | 18,599 | 23,490 | 28,683 | 35,656 | 44,585 | 53,607 | 62,976 | 71,238 |
| 2009 | 12,935 | 15,126 | 20,152 | 24,054 | 30,376 | 36,829 | 43,645 | 51,442 | 59,207 | 66,876 |
| 2010 | 12,995 | 15,317 | 19,870 | 24,756 | 29,818 | 36,006 | 41,781 | 47,890 | 53,649 | 63,701 |
| 2011 | 14,381 | 16,804 | 21,788 | 26,318 | 32,016 | 38,460 | 43,097 | 48,753 | 56,437 | 65,325 |
| 2012 | 14,649 | 17,154 | 21,124 | 25,055 | 29,111 | 34,605 | 40,774 | 47,642 | 57,911 |  |
| 2013 | 15,358 | 16,596 | 20,867 | 23,365 | 28,165 | 32,890 | 39,795 | 47,099 |  |  |
| 2014 | 13,581 | 16,209 | 19,333 | 22,806 | 27,228 | 32,558 | 38,648 |  |  |  |
| 2015 | 14,573 | 16,610 | 20,412 | 25,426 | 30,992 | 37,447 |  |  |  |  |
| 2016 | 14,041 | 17,048 | 21,343 | 26,090 | 31,253 |  |  |  |  |  |
| 2017 | 14,105 | 17,871 | 22,588 | 28,127 |  |  |  |  |  |  |
| 2018 | 15,824 | 19,006 | 23,272 |  |  |  |  |  |  |  |
| 2019 | 15,796 | 18,680 |  |  |  |  |  |  |  |  |
| 2020 | 17,205 |  |  |  |  |  |  |  |  |  |


| Accident Year | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ | 87 | 99 | 111 |
| 1996 |  |  |  |  |  |  |  |  |  | -7.7\% |
| 1997 |  |  |  |  |  |  |  |  | 5.2\% | 7.1\% |
| 1998 |  |  |  |  |  |  |  | 7.3\% | 4.5\% | 10.1\% |
| 1999 |  |  |  |  |  |  | -12.9\% | -10.4\% | -3.6\% | 8.3\% |
| 2000 |  |  |  |  |  | -1.1\% | -6.1\% | -2.8\% | 4.8\% | -9.0\% |
| 2001 |  |  |  |  | -11.3\% | -15.5\% | -9.8\% | -3.8\% | -7.6\% | 0.8\% |
| 2002 |  |  |  | -4.9\% | -11.3\% | -9.4\% | -0.3\% | -3.7\% | -5.2\% | -9.1\% |
| 2003 |  |  | -4.6\% | -7.9\% | 2.0\% | 9.6\% | 7.9\% | 9.4\% | 8.9\% | 13.7\% |
| 2004 |  | -0.3\% | -9.8\% | 0.6\% | 9.3\% | 13.0\% | 5.5\% | 8.7\% | 5.5\% | -1.6\% |
| 2005 | 15.7\% | -0.2\% | 12.3\% | 19.8\% | 8.6\% | 3.2\% | 9.7\% | 8.9\% | 4.6\% | 6.4\% |
| 2006 | -18.5\% | 0.1\% | 15.6\% | 16.3\% | 18.5\% | 19.1\% | 11.2\% | 3.3\% | 10.4\% | 4.5\% |
| 2007 | 10.3\% | 12.1\% | 8.3\% | 4.6\% | 9.2\% | 7.4\% | 10.4\% | 10.2\% | 5.1\% | 7.1\% |
| 2008 | -0.9\% | 4.3\% | 2.4\% | 4.8\% | 1.7\% | 2.5\% | 2.5\% | 2.0\% | 1.0\% | -1.0\% |
| 2009 | 4.4\% | 4.8\% | 8.4\% | 2.4\% | 5.9\% | 3.3\% | -2.1\% | -4.0\% | -6.0\% | -6.1\% |
| 2010 | 0.5\% | 1.3\% | -1.4\% | 2.9\% | -1.8\% | -2.2\% | -4.3\% | -6.9\% | -9.4\% | -4.7\% |
| 2011 | 10.7\% | 9.7\% | 9.7\% | 6.3\% | 7.4\% | 6.8\% | 3.2\% | 1.8\% | 5.2\% | 2.5\% |
| 2012 | 1.9\% | 2.1\% | -3.1\% | -4.8\% | -9.1\% | -10.0\% | -5.4\% | -2.3\% | 2.6\% |  |
| 2013 | 4.8\% | -3.3\% | -1.2\% | -6.7\% | -3.2\% | -5.0\% | -2.4\% | -1.1\% |  |  |
| 2014 | -11.6\% | -2.3\% | -7.4\% | -2.4\% | -3.3\% | -1.0\% | -2.9\% |  |  |  |
| 2015 | 7.3\% | 2.5\% | 5.6\% | 11.5\% | 13.8\% | 15.0\% |  |  |  |  |
| 2016 | -3.6\% | 2.6\% | 4.6\% | 2.6\% | 0.8\% |  |  |  |  |  |
| 2017 | 0.5\% | 4.8\% | 5.8\% | 7.8\% |  |  |  |  |  |  |
| 2018 | 12.2\% | 6.4\% | 3.0\% |  |  |  |  |  |  |  |
| 2019 | -0.2\% | -1.7\% |  |  |  |  |  |  |  |  |
| 2020 | 8.9\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | $1.8 \%$ | $2.9 \%$ | $3.2 \%$ | $3.4 \%$ | $3.3 \%$ | $2.9 \%$ | $2.0 \%$ | $1.8 \%$ | $1.6 \%$ | $1.5 \%$ |
| $R^{2}$ | 0.693 | 0.910 | 0.791 | 0.760 | 0.680 | 0.589 | 0.441 | 0.495 | 0.586 | 0.593 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $5.3 \%$ | $3.5 \%$ | $4.8 \%$ | $5.2 \%$ | $2.4 \%$ | $-1.1 \%$ | $-2.3 \%$ | $-1.8 \%$ | $-2.1 \%$ | $-3.0 \%$ |
| $R^{2}$ | 0.904 | 0.889 | 0.992 | 0.883 | 0.395 | 0.058 | 0.779 | 0.683 | 0.332 | 0.815 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

## Average Paid Indemnity Loss per Reported Indemnity Claim

As of March 31, 2020

| Accident Year | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | $\underline{51}$ | 63 | 75 | 87 | 99 | $\underline{111}$ |
| 1995 |  |  |  |  |  |  |  |  |  | 13,476 |
| 1996 |  |  |  |  |  |  |  |  | 15,130 | 15,473 |
| 1997 |  |  |  |  |  |  |  | 16,587 | 17,053 | 17,409 |
| 1998 |  |  |  |  |  |  | 17,393 | 18,239 | 18,748 | 19,187 |
| 1999 |  |  |  |  |  | 17,763 | 19,078 | 19,902 | 20,515 | 20,988 |
| 2000 |  |  |  |  | 16,698 | 18,734 | 20,086 | 20,933 | 21,635 | 22,109 |
| 2001 |  |  |  | 14,536 | 18,410 | 20,516 | 22,000 | 23,004 | 23,705 | 24,234 |
| 2002 |  |  | 9,112 | 14,441 | 17,626 | 19,653 | 20,943 | 21,849 | 22,470 | 22,893 |
| 2003 |  | 3,728 | 9,511 | 14,415 | 17,506 | 19,425 | 20,708 | 21,535 | 22,184 | 22,767 |
| 2004 | 760 | 3,760 | 8,044 | 11,682 | 13,926 | 15,347 | 16,384 | 17,134 | 17,861 | 18,476 |
| 2005 | 835 | 3,444 | 7,296 | 10,224 | 12,265 | 13,515 | 14,495 | 15,303 | 16,040 | 16,656 |
| 2006 | 771 | 3,637 | 7,809 | 11,031 | 13,129 | 14,693 | 15,931 | 16,915 | 17,660 | 18,215 |
| 2007 | 884 | 3,876 | 8,386 | 11,875 | 14,294 | 16,059 | 17,384 | 18,423 | 19,183 | 19,773 |
| 2008 | 910 | 4,226 | 9,058 | 13,056 | 15,970 | 18,011 | 19,448 | 20,461 | 21,227 | 21,724 |
| 2009 | 926 | 4,209 | 9,204 | 13,464 | 16,517 | 18,657 | 20,177 | 21,249 | 22,053 | 22,686 |
| 2010 | 905 | 4,191 | 9,178 | 13,509 | 16,592 | 18,616 | 20,030 | 21,056 | 21,786 | 22,309 |
| 2011 | 970 | 4,236 | 9,374 | 13,508 | 16,371 | 18,296 | 19,646 | 20,644 | 21,412 | 21,886 |
| 2012 | 962 | 4,351 | 9,435 | 13,566 | 16,294 | 18,203 | 19,530 | 20,421 | 21,036 |  |
| 2013 | 965 | 4,331 | 9,387 | 13,584 | 16,386 | 18,120 | 19,229 | 19,931 |  |  |
| 2014 | 933 | 4,368 | 9,639 | 14,188 | 17,101 | 18,894 | 20,043 |  |  |  |
| 2015 | 972 | 4,497 | 10,094 | 14,659 | 17,533 | 19,230 |  |  |  |  |
| 2016 | 976 | 4,670 | 10,199 | 14,603 | 17,246 |  |  |  |  |  |
| 2017 | 977 | 4,755 | 10,450 | 14,792 |  |  |  |  |  |  |
| 2018 | 1,066 | 5,035 | 10,811 |  |  |  |  |  |  |  |
| 2019 | 1,116 | 5,226 |  |  |  |  |  |  |  |  |
| 2020 | 1,191 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1996 |  |  |  |  |  |  |  |  |  | 14.8\% |
| 1997 |  |  |  |  |  |  |  |  | 12.7\% | 12.5\% |
| 1998 |  |  |  |  |  |  |  | 10.0\% | 9.9\% | 10.2\% |
| 1999 |  |  |  |  |  |  | 9.7\% | 9.1\% | 9.4\% | 9.4\% |
| 2000 |  |  |  |  |  | 5.5\% | 5.3\% | 5.2\% | 5.5\% | 5.3\% |
| 2001 |  |  |  |  | 10.3\% | 9.5\% | 9.5\% | 9.9\% | 9.6\% | 9.6\% |
| 2002 |  |  |  | -0.7\% | -4.3\% | -4.2\% | -4.8\% | -5.0\% | -5.2\% | -5.5\% |
| 2003 |  |  | 4.4\% | -0.2\% | -0.7\% | -1.2\% | -1.1\% | -1.4\% | -1.3\% | -0.5\% |
| 2004 |  | 0.9\% | -15.4\% | -19.0\% | -20.4\% | -21.0\% | -20.9\% | -20.4\% | -19.5\% | -18.8\% |
| 2005 | 9.8\% | -8.4\% | -9.3\% | -12.5\% | -11.9\% | -11.9\% | -11.5\% | -10.7\% | -10.2\% | -9.9\% |
| 2006 | -7.7\% | 5.6\% | 7.0\% | 7.9\% | 7.1\% | 8.7\% | 9.9\% | 10.5\% | 10.1\% | 9.4\% |
| 2007 | 14.6\% | 6.6\% | 7.4\% | 7.6\% | 8.9\% | 9.3\% | 9.1\% | 8.9\% | 8.6\% | 8.6\% |
| 2008 | 3.0\% | 9.0\% | 8.0\% | 10.0\% | 11.7\% | 12.1\% | 11.9\% | 11.1\% | 10.7\% | 9.9\% |
| 2009 | 1.7\% | -0.4\% | 1.6\% | 3.1\% | 3.4\% | 3.6\% | 3.7\% | 3.9\% | 3.9\% | 4.4\% |
| 2010 | -2.3\% | -0.4\% | -0.3\% | 0.3\% | 0.5\% | -0.2\% | -0.7\% | -0.9\% | -1.2\% | -1.7\% |
| 2011 | 7.2\% | 1.1\% | 2.1\% | 0.0\% | -1.3\% | -1.7\% | -1.9\% | -2.0\% | -1.7\% | -1.9\% |
| 2012 | -0.8\% | 2.7\% | 0.6\% | 0.4\% | -0.5\% | -0.5\% | -0.6\% | -1.1\% | -1.8\% |  |
| 2013 | 0.3\% | -0.5\% | -0.5\% | 0.1\% | 0.6\% | -0.5\% | -1.5\% | -2.4\% |  |  |
| 2014 | -3.3\% | 0.8\% | 2.7\% | 4.4\% | 4.4\% | 4.3\% | 4.2\% |  |  |  |
| 2015 | 4.1\% | 2.9\% | 4.7\% | 3.3\% | 2.5\% | 1.8\% |  |  |  |  |
| 2016 | 0.4\% | 3.8\% | 1.0\% | -0.4\% | -1.6\% |  |  |  |  |  |
| 2017 | 0.1\% | 1.8\% | 2.5\% | 1.3\% |  |  |  |  |  |  |
| 2018 | 9.2\% | 5.9\% | 3.5\% |  |  |  |  |  |  |  |
| 2019 | 4.7\% | 3.8\% |  |  |  |  |  |  |  |  |
| 2020 | 6.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend $^{*}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Year | $2.1 \%$ | $2.2 \%$ | $1.6 \%$ | $0.8 \%$ | $0.4 \%$ | $0.2 \%$ | $0.2 \%$ | $0.4 \%$ | $1.0 \%$ | $1.7 \%$ |
| R$^{2}$ | 0.844 | 0.899 | 0.570 | 0.143 | 0.028 | 0.007 | 0.007 | 0.033 | 0.142 | 0.278 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $5.5 \%$ | $3.8 \%$ | $2.7 \%$ | $2.0 \%$ | $1.8 \%$ | $1.4 \%$ | $-0.2 \%$ | $-1.6 \%$ | $-0.5 \%$ | $2.3 \%$ |
| $R^{2}$ | 0.950 | 0.979 | 0.965 | 0.824 | 0.784 | 0.686 | 0.033 | 0.977 | 0.153 | 0.461 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

## Average Paid Medical Loss per Indemnity Claim

As of March 31, 2020

| AccidentYear | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | $\underline{51}$ | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2002 |  |  |  |  |  |  |  |  |  | 23,159 |
| 2003 |  |  |  |  |  |  |  |  | 21,441 | 22,362 |
| 2004 |  |  |  |  |  |  |  | 18,476 | 19,608 | 20,642 |
| 2005 |  |  |  |  |  |  | 17,630 | 18,894 | 20,249 | 21,393 |
| 2006 |  |  |  |  |  | 18,002 | 19,851 | 21,399 | 22,721 | 23,696 |
| 2007 |  |  |  |  | 17,709 | 20,177 | 22,314 | 24,218 | 25,533 | 26,513 |
| 2008 |  |  |  | 15,923 | 19,626 | 22,582 | 24,942 | 26,687 | 27,964 | 28,910 |
| 2009 |  |  | 11,843 | 16,749 | 20,817 | 24,101 | 26,472 | 28,117 | 29,335 | 30,236 |
| 2010 |  | 6,123 | 11,822 | 17,014 | 21,307 | 24,231 | 26,329 | 27,958 | 29,070 | 29,873 |
| 2011 | 917 | 5,511 | 11,237 | 16,150 | 19,849 | 22,508 | 24,484 | 25,901 | 26,915 | 27,638 |
| 2012 | 772 | 5,529 | 10,944 | 15,467 | 18,759 | 21,197 | 22,843 | 24,041 | 24,906 |  |
| 2013 | 834 | 5,389 | 10,475 | 14,673 | 17,814 | 19,828 | 21,231 | 22,146 |  |  |
| 2014 | 946 | 5,239 | 10,180 | 14,398 | 17,340 | 19,251 | 20,600 |  |  |  |
| 2015 | 1,014 | 5,165 | 10,302 | 14,325 | 17,178 | 18,914 |  |  |  |  |
| 2016 | 914 | 5,467 | 10,366 | 14,156 | 16,688 |  |  |  |  |  |
| 2017 | 1,186 | 5,659 | 10,669 | 14,377 |  |  |  |  |  |  |
| 2018 | 1,125 | 5,864 | 11,081 |  |  |  |  |  |  |  |
| 2019 | 1,239 | 5,819 |  |  |  |  |  |  |  |  |
| 2020 | 1,248 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2003 |  |  |  |  |  |  |  |  |  | -3.4\% |
| 2004 |  |  |  |  |  |  |  |  | -8.5\% | -7.7\% |
| 2005 |  |  |  |  |  |  |  | 2.3\% | 3.3\% | 3.6\% |
| 2006 |  |  |  |  |  |  | 12.6\% | 13.3\% | 12.2\% | 10.8\% |
| 2007 |  |  |  |  |  | 12.1\% | 12.4\% | 13.2\% | 12.4\% | 11.9\% |
| 2008 |  |  |  |  | 10.8\% | 11.9\% | 11.8\% | 10.2\% | 9.5\% | 9.0\% |
| 2009 |  |  |  | 5.2\% | 6.1\% | 6.7\% | 6.1\% | 5.4\% | 4.9\% | 4.6\% |
| 2010** |  |  | -0.2\% | 1.6\% | 2.4\% | 0.5\% | -0.5\% | -0.6\% | -0.9\% | -1.2\% |
| 2011** |  | -10.0\% | -5.0\% | -5.1\% | -6.8\% | -7.1\% | -7.0\% | -7.4\% | -7.4\% | -7.5\% |
| 2012 | -15.8\% | 0.3\% | -2.6\% | -4.2\% | -5.5\% | -5.8\% | -6.7\% | -7.2\% | -7.5\% |  |
| 2013 | 8.0\% | -2.5\% | -4.3\% | -5.1\% | -5.0\% | -6.5\% | -7.1\% | -7.9\% |  |  |
| 2014 | 13.4\% | -2.8\% | -2.8\% | -1.9\% | -2.7\% | -2.9\% | -3.0\% |  |  |  |
| 2015 | 7.2\% | -1.4\% | 1.2\% | -0.5\% | -0.9\% | -1.8\% |  |  |  |  |
| 2016 | -9.9\% | 5.9\% | 0.6\% | -1.2\% | -2.9\% |  |  |  |  |  |
| 2017 | 29.7\% | 3.5\% | 2.9\% | 1.6\% |  |  |  |  |  |  |
| 2018 | -5.1\% | 3.6\% | 3.9\% |  |  |  |  |  |  |  |
| 2019 | 10.1\% | -0.8\% |  |  |  |  |  |  |  |  |
| 2020 | 0.7\% |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | ual Tren |  |  |  |  |  |
| All-Year | 5.1\% | 0.1\% | -1.2\% | -2.0\% | -1.8\% | -0.6\% | 1.2\% | 2.9\% | 3.8\% | 4.0\% |
| $\mathrm{R}^{2}$ | 0.787 | 0.002 | 0.417 | 0.778 | 0.409 | 0.031 | 0.072 | 0.331 | 0.590 | 0.705 |
| 5-Year | 6.9\% | 3.1\% | 2.1\% | -0.6\% | -2.7\% | -4.3\% | -6.1\% | -6.1\% | -3.1\% | 1.2\% |
| $\mathrm{R}^{2}$ | 0.679 | 0.881 | 0.904 | 0.497 | 0.937 | 0.944 | 0.984 | 0.949 | 0.568 | 0.112 |

*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

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 6,074 |
| 2000 |  |  |  |  |  |  |  |  | 6,679 | 6,935 |
| 2001 |  |  |  |  |  |  |  | 7,532 | 7,874 | 8,174 |
| 2002 |  |  |  |  |  |  | 7,600 | 7,998 | 8,348 | 8,634 |
| 2003 |  |  |  |  |  | 6,782 | 7,249 | 7,650 | 8,010 | 8,325 |
| 2004 |  |  |  |  | 4,870 | 5,442 | 5,904 | 6,294 | 6,645 | 6,969 |
| 2005 |  |  |  | 3,874 | 4,602 | 5,161 | 5,626 | 5,995 | 6,388 | 6,718 |
| 2006 |  |  | 3,226 | 4,282 | 5,092 | 5,726 | 6,259 | 6,705 | 7,086 | 7,369 |
| 2007 |  | 2,039 | 3,628 | 4,852 | 5,811 | 6,548 | 7,185 | 7,747 | 8,137 | 8,436 |
| 2008 | 413 | 2,333 | 4,077 | 5,480 | 6,640 | 7,561 | 8,294 | 8,838 | 9,244 | 9,543 |
| 2009 | 497 | 2,501 | 4,477 | 6,136 | 7,507 | 8,607 | 9,407 | 9,969 | 10,377 | 10,677 |
| 2010 | 518 | 2,571 | 4,649 | 6,492 | 8,003 | 9,039 | 9,793 | 10,362 | 10,755 | 11,031 |
| 2011 | 510 | 2,397 | 4,556 | 6,361 | 7,719 | 8,706 | 9,424 | 9,941 | 10,308 | 10,569 |
| 2012 | 461 | 2,411 | 4,504 | 6,200 | 7,440 | 8,347 | 8,960 | 9,401 | 9,720 |  |
| 2013 | 484 | 2,416 | 4,432 | 6,057 | 7,253 | 8,027 | 8,555 | 8,906 |  |  |
| 2014 | 519 | 2,381 | 4,340 | 5,941 | 7,054 | 7,770 | 8,272 |  |  |  |
| 2015 | 547 | 2,371 | 4,397 | 5,914 | 6,976 | 7,627 |  |  |  |  |
| 2016 | 523 | 2,506 | 4,457 | 5,902 | 6,853 |  |  |  |  |  |
| 2017 | 629 | 2,516 | 4,421 | 5,777 |  |  |  |  |  |  |
| 2018 | 611 | 2,619 | 4,630 |  |  |  |  |  |  |  |
| 2019 | 665 | 2,621 |  |  |  |  |  |  |  |  |
| 2020 | 744 |  |  |  |  |  |  |  |  |  |
| Accident |  |  |  |  | Annual | hange |  |  |  |  |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  |  |  | 14.2\% |
| 2001 |  |  |  |  |  |  |  |  | 17.9\% | 17.9\% |
| 2002 |  |  |  |  |  |  |  | 6.2\% | 6.0\% | 5.6\% |
| 2003 |  |  |  |  |  |  | -4.6\% | -4.4\% | -4.0\% | -3.6\% |
| 2004 |  |  |  |  |  | -19.8\% | -18.5\% | -17.7\% | -17.0\% | -16.3\% |
| 2005 |  |  |  |  | -5.5\% | -5.2\% | -4.7\% | -4.8\% | -3.9\% | -3.6\% |
| 2006 |  |  |  | 10.5\% | 10.6\% | 10.9\% | 11.3\% | 11.8\% | 10.9\% | 9.7\% |
| 2007 |  |  | 12.4\% | 13.3\% | 14.1\% | 14.4\% | 14.8\% | 15.5\% | 14.8\% | 14.5\% |
| 2008 |  | 14.4\% | 12.4\% | 13.0\% | 14.3\% | 15.5\% | 15.4\% | 14.1\% | 13.6\% | 13.1\% |
| 2009 | 20.5\% | 7.2\% | 9.8\% | 12.0\% | 13.1\% | 13.8\% | 13.4\% | 12.8\% | 12.3\% | 11.9\% |
| 2010 | 4.2\% | 2.8\% | 3.8\% | 5.8\% | 6.6\% | 5.0\% | 4.1\% | 3.9\% | 3.6\% | 3.3\% |
| 2011 | -1.6\% | -6.8\% | -2.0\% | -2.0\% | -3.5\% | -3.7\% | -3.8\% | -4.1\% | -4.2\% | -4.2\% |
| 2012 | -9.7\% | 0.6\% | -1.1\% | -2.5\% | -3.6\% | -4.1\% | -4.9\% | -5.4\% | -5.7\% |  |
| 2013 | 5.0\% | 0.2\% | -1.6\% | -2.3\% | -2.5\% | -3.8\% | -4.5\% | -5.3\% |  |  |
| 2014 | 7.3\% | -1.4\% | -2.1\% | -1.9\% | -2.7\% | -3.2\% | -3.3\% |  |  |  |
| 2015 | 5.4\% | -0.5\% | 1.3\% | -0.5\% | -1.1\% | -1.8\% |  |  |  |  |
| 2016 | -4.5\% | 5.7\% | 1.4\% | -0.2\% | -1.8\% |  |  |  |  |  |
| 2017 | 20.3\% | 0.4\% | -0.8\% | -2.1\% |  |  |  |  |  |  |
| 2018 | -2.9\% | 4.1\% | 4.7\% |  |  |  |  |  |  |  |
| 2019 | 9.0\% | 0.1\% |  |  |  |  |  |  |  |  |
| 2020 | 11.8\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Year | $3.7 \%$ | $1.1 \%$ | $1.8 \%$ | $2.8 \%$ | $3.6 \%$ | $3.4 \%$ | $3.2 \%$ | $3.2 \%$ | $3.5 \%$ |
| $\mathrm{R}^{2}$ | 0.787 | 0.428 | 0.438 | 0.449 | 0.536 | 0.493 | 0.446 | 0.456 | 0.550 |
|  |  |  |  |  |  |  |  |  | $0.0 \%$ |
| 5-Year | $7.9 \%$ | $2.5 \%$ | $1.4 \%$ | $-1.0 \%$ | $-2.0 \%$ | $-3.3 \%$ | $-4.2 \%$ | $-3.2 \%$ | $0.9 \%$ |
| $\mathrm{R}^{2}$ | 0.875 | 0.887 | 0.762 | 0.897 | 0.976 | 0.981 | 0.996 | 0.745 | 0.061 |

*Trend is based on an exponential distribution.
**All entries reflect the paid cost of medical cost containment programs.
Source: WCIRB quarterly calls for experience

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{\text { Year }}$ | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | $\underline{111}$ |
| 1995 |  |  |  |  |  |  |  |  |  | 12,061 |
| 1996 |  |  |  |  |  |  |  |  | 13,225 | 13,657 |
| 1997 |  |  |  |  |  |  |  | 14,275 | 14,834 | 15,303 |
| 1998 |  |  |  |  |  |  | 14,594 | 15,539 | 16,309 | 16,892 |
| 1999 |  |  |  |  |  | 14,430 | 16,040 | 17,133 | 17,903 | 18,659 |
| 2000 |  |  |  |  | 12,483 | 14,924 | 16,845 | 17,919 | 18,779 | 19,511 |
| 2001 |  |  |  | 9,036 | 13,581 | 16,467 | 17,788 | 19,121 | 20,131 | 20,896 |
| 2002 |  |  | 3,788 | 9,222 | 13,609 | 15,589 | 17,159 | 18,471 | 19,403 | 19,918 |
| 2003 |  | 1,448 | 4,621 | 10,563 | 13,286 | 15,598 | 17,186 | 18,245 | 18,882 | 19,579 |
| 2004 | 610 | 1,735 | 4,693 | 7,690 | 10,461 | 12,277 | 13,533 | 14,265 | 15,020 | 15,801 |
| 2005 | 527 | 1,638 | 3,472 | 6,428 | 9,009 | 10,579 | 11,663 | 12,521 | 13,403 | 14,442 |
| 2006 | 647 | 1,685 | 3,941 | 7,051 | 9,601 | 11,370 | 12,685 | 13,933 | 15,125 | 15,986 |
| 2007 | 886 | 1,628 | 4,327 | 7,573 | 10,192 | 12,145 | 13,843 | 15,365 | 16,477 | 17,439 |
| 2008 | 532 | 1,929 | 4,698 | 8,305 | 11,286 | 13,711 | 15,911 | 17,320 | 18,555 | 19,442 |
| 2009 | 575 | 1,963 | 4,886 | 8,659 | 11,934 | 14,787 | 16,782 | 18,463 | 19,645 | 20,587 |
| 2010 | 584 | 1,942 | 4,996 | 8,911 | 12,534 | 15,171 | 17,210 | 18,734 | 19,839 | 20,627 |
| 2011 | 561 | 2,165 | 5,360 | 9,451 | 12,857 | 15,481 | 17,262 | 18,638 | 19,750 | 20,468 |
| 2012 | 624 | 2,254 | 5,933 | 10,049 | 13,278 | 15,593 | 17,350 | 18,615 | 19,558 |  |
| 2013 | 576 | 2,607 | 6,304 | 10,467 | 13,626 | 15,833 | 17,356 | 18,397 |  |  |
| 2014 | 662 | 2,685 | 6,710 | 11,133 | 14,496 | 16,746 | 18,224 |  |  |  |
| 2015 | 718 | 2,997 | 7,356 | 11,875 | 15,189 | 17,262 |  |  |  |  |
| 2016 | 703 | 3,239 | 7,683 | 11,990 | 15,071 |  |  |  |  |  |
| 2017 | 717 | 3,328 | 7,775 | 12,017 |  |  |  |  |  |  |
| 2018 | 782 | 3,539 | 8,171 |  |  |  |  |  |  |  |
| 2019 | 824 | 3,818 |  |  |  |  |  |  |  |  |
| 2020 | 849 |  |  |  |  |  |  |  |  |  |


| AccidentYear | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | 111 |
| 1996 |  |  |  |  |  |  |  |  |  | 13.2\% |
| 1997 |  |  |  |  |  |  |  |  | 12.2\% | 12.1\% |
| 1998 |  |  |  |  |  |  |  | 8.9\% | 9.9\% | 10.4\% |
| 1999 |  |  |  |  |  |  | 9.9\% | 10.3\% | 9.8\% | 10.5\% |
| 2000 |  |  |  |  |  | 3.4\% | 5.0\% | 4.6\% | 4.9\% | 4.6\% |
| 2001 |  |  |  |  | 8.8\% | 10.3\% | 5.6\% | 6.7\% | 7.2\% | 7.1\% |
| 2002 |  |  |  | 2.1\% | 0.2\% | -5.3\% | -3.5\% | -3.4\% | -3.6\% | -4.7\% |
| 2003 |  |  | 22.0\% | 14.6\% | -2.4\% | 0.1\% | 0.2\% | -1.2\% | -2.7\% | -1.7\% |
| 2004 |  | 19.9\% | 1.6\% | -27.2\% | -21.3\% | -21.3\% | -21.3\% | -21.8\% | -20.5\% | -19.3\% |
| 2005 | -13.8\% | -5.6\% | -26.0\% | -16.4\% | -13.9\% | -13.8\% | -13.8\% | -12.2\% | -10.8\% | -8.6\% |
| 2006 | 22.8\% | 2.8\% | 13.5\% | 9.7\% | 6.6\% | 7.5\% | 8.8\% | 11.3\% | 12.8\% | 10.7\% |
| 2007 | 37.1\% | -3.4\% | 9.8\% | 7.4\% | 6.2\% | 6.8\% | 9.1\% | 10.3\% | 8.9\% | 9.1\% |
| 2008 | -39.9\% | 18.5\% | 8.6\% | 9.7\% | 10.7\% | 12.9\% | 14.9\% | 12.7\% | 12.6\% | 11.5\% |
| 2009 | 8.0\% | 1.8\% | 4.0\% | 4.3\% | 5.7\% | 7.9\% | 5.5\% | 6.6\% | 5.9\% | 5.9\% |
| 2010 | 1.6\% | -1.0\% | 2.3\% | 2.9\% | 5.0\% | 2.6\% | 2.6\% | 1.5\% | 1.0\% | 0.2\% |
| 2011 | -4.1\% | 11.4\% | 7.3\% | 6.1\% | 2.6\% | 2.0\% | 0.3\% | -0.5\% | -0.5\% | -0.8\% |
| 2012 | 11.3\% | 4.1\% | 10.7\% | 6.3\% | 3.3\% | 0.7\% | 0.5\% | -0.1\% | -1.0\% |  |
| 2013 | -7.7\% | 15.6\% | 6.3\% | 4.2\% | 2.6\% | 1.5\% | 0.0\% | -1.2\% |  |  |
| 2014 | 15.0\% | 3.0\% | 6.4\% | 6.4\% | 6.4\% | 5.8\% | 5.0\% |  |  |  |
| 2015 | 8.5\% | 11.6\% | 9.6\% | 6.7\% | 4.8\% | 3.1\% |  |  |  |  |
| 2016 | -2.2\% | 8.1\% | 4.5\% | 1.0\% | -0.8\% |  |  |  |  |  |
| 2017 | 2.0\% | 2.7\% | 1.2\% | 0.2\% |  |  |  |  |  |  |
| 2018 | 9.1\% | 6.3\% | 5.1\% |  |  |  |  |  |  |  |
| 2019 | 5.3\% | 7.9\% |  |  |  |  |  |  |  |  |
| 2020 | 3.0\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | $2.0 \%$ | $6.2 \%$ | $5.1 \%$ | $2.5 \%$ | $1.4 \%$ | $0.9 \%$ | $0.7 \%$ | $0.8 \%$ | $1.3 \%$ | $1.9 \%$ |
| $\mathrm{R}^{2}$ | 0.355 | 0.962 | 0.878 | 0.447 | 0.193 | 0.092 | 0.069 | 0.098 | 0.208 | 0.335 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $5.3 \%$ | $5.9 \%$ | $4.6 \%$ | $3.6 \%$ | $3.7 \%$ | $2.9 \%$ | $1.2 \%$ | $-0.1 \%$ | $1.1 \%$ | $3.9 \%$ |
| $\mathrm{R}^{2}$ | 0.964 | 0.981 | 0.920 | 0.841 | 0.909 | 0.913 | 0.641 | 0.084 | 0.411 | 0.701 |

*Trend is based on an exponential distribution.
**Paid indemnity losses used in the severity calculations above represent paid indemnity losses on closed claims only.

Source: WCIRB quarterly calls for experience

## Average Paid Medical Loss per Closed Indemnity Claim***

As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2002 |  |  |  |  |  |  |  |  |  | 19,103 |
| 2003 |  |  |  |  |  |  |  |  | 17,233 | 18,159 |
| 2004 |  |  |  |  |  |  |  | 14,012 | 15,031 | 16,184 |
| 2005 |  |  |  |  |  |  | 12,904 | 13,967 | 15,344 | 17,048 |
| 2006 |  |  |  |  |  | 12,630 | 14,429 | 16,087 | 17,850 | 19,161 |
| 2007 |  |  |  |  | 11,638 | 13,969 | 16,180 | 18,610 | 20,348 | 22,034 |
| 2008 |  |  |  | 9,708 | 12,951 | 15,932 | 19,053 | 21,169 | 23,168 | 24,627 |
| 2009 |  |  | 6,239 | 10,183 | 14,050 | 17,905 | 20,705 | 23,168 | 24,975 | 26,442 |
| 2010 |  | 3,215 | 6,537 | 10,722 | 15,161 | 18,711 | 21,525 | 23,891 | 25,541 | 26,797 |
| 2011 | 1,029 | 2,625 | 6,080 | 10,619 | 14,619 | 18,010 | 20,698 | 22,751 | 24,305 | 25,333 |
| 2012 | 735 | 2,816 | 6,564 | 10,959 | 14,571 | 17,502 | 19,714 | 21,353 | 22,595 |  |
| 2013 | 691 | 2,965 | 6,695 | 10,916 | 14,311 | 16,990 | 18,843 | 20,105 |  |  |
| 2014 | 695 | 2,993 | 6,862 | 10,987 | 14,413 | 16,863 | 18,509 |  |  |  |
| 2015 | 852 | 3,226 | 7,270 | 11,356 | 14,591 | 16,595 |  |  |  |  |
| 2016 | 700 | 3,459 | 7,498 | 11,341 | 14,089 |  |  |  |  |  |
| 2017 | 975 | 3,585 | 7,769 | 11,478 |  |  |  |  |  |  |
| 2018 | 984 | 3,706 | 8,092 |  |  |  |  |  |  |  |
| 2019 | 837 | 4,009 |  |  |  |  |  |  |  |  |
| 2020 | 949 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2003 |  |  |  |  |  |  |  |  |  | -4.9\% |
| 2004 |  |  |  |  |  |  |  |  | -12.8\% | -10.9\% |
| 2005 |  |  |  |  |  |  |  | -0.3\% | 2.1\% | 5.3\% |
| 2006 |  |  |  |  |  |  | 11.8\% | 15.2\% | 16.3\% | 12.4\% |
| 2007 |  |  |  |  |  | 10.6\% | 12.1\% | 15.7\% | 14.0\% | 15.0\% |
| 2008 |  |  |  |  | 11.3\% | 14.1\% | 17.8\% | 13.7\% | 13.9\% | 11.8\% |
| 2009 |  |  |  | 4.9\% | 8.5\% | 12.4\% | 8.7\% | 9.4\% | 7.8\% | 7.4\% |
| 2010** |  |  | 4.8\% | 5.3\% | 7.9\% | 4.5\% | 4.0\% | 3.1\% | 2.3\% | 1.3\% |
| 2011** |  | -18.4\% | -7.0\% | -1.0\% | -3.6\% | -3.7\% | -3.8\% | -4.8\% | -4.8\% | -5.5\% |
| 2012 | -28.6\% | 7.3\% | 8.0\% | 3.2\% | -0.3\% | -2.8\% | -4.8\% | -6.1\% | -7.0\% |  |
| 2013 | -5.9\% | 5.3\% | 2.0\% | -0.4\% | -1.8\% | -2.9\% | -4.4\% | -5.8\% |  |  |
| 2014 | 0.6\% | 0.9\% | 2.5\% | 0.6\% | 0.7\% | -0.7\% | -1.8\% |  |  |  |
| 2015 | 22.5\% | 7.8\% | 5.9\% | 3.4\% | 1.2\% | -1.6\% |  |  |  |  |
| 2016 | -17.8\% | 7.2\% | 3.1\% | -0.1\% | -3.4\% |  |  |  |  |  |
| 2017 | 39.2\% | 3.6\% | 3.6\% | 1.2\% |  |  |  |  |  |  |
| 2018 | 0.9\% | 3.4\% | 4.2\% |  |  |  |  |  |  |  |
| 2019 | -14.9\% | 8.2\% |  |  |  |  |  |  |  |  |
| 2020 | 13.3\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | 1.7\% | 3.8\% | 3.0\% | 1.6\% | 1.5\% | 2.4\% | 3.9\% | 5.5\% | 5.9\% | 5.6\% |
| $\mathrm{R}^{2}$ | 0.101 | 0.733 | 0.905 | 0.871 | 0.358 | 0.357 | 0.482 | 0.638 | 0.739 | 0.749 |
| 5-Year | 4.6\% | 5.2\% | 4.0\% | 1.3\% | -0.5\% | -2.0\% | -3.9\% | -3.9\% | -0.8\% | 3.7\% |
| $\mathrm{R}^{2}$ | 0.248 | 0.975 | 0.989 | 0.886 | 0.278 | 0.951 | 0.982 | 0.819 | 0.057 | 0.544 |

*Trend is based on an exponential distribution.
**Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident years 2012 and subsequent exclude the paid cost of medical cost containment programs.
***Paid medical losses used in the severity calculations above represent paid medical losses on closed indemnity claims only.

Source: WCIRB quarterly calls for experience

Ratio of Incremental Paid Indemnity to Indemnity Claims Open During the Period As of March 31, 2020

| Accident Year | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1995 |  |  |  |  |  |  |  |  |  | 6,584 |
| 1996 |  |  |  |  |  |  |  |  | 8,395 | 7,325 |
| 1997 |  |  |  |  |  |  |  | 9,077 | 7,110 | 6,561 |
| 1998 |  |  |  |  |  |  | 9,317 | 8,579 | 6,571 | 6,810 |
| 1999 |  |  |  |  |  | 10,346 | 9,262 | 7,563 | 7,284 | 6,747 |
| 2000 |  |  |  |  | 10,946 | 9,356 | 8,308 | 6,786 | 7,244 | 6,148 |
| 2001 |  |  |  | 11,396 | 10,802 | 8,056 | 7,610 | 6,670 | 6,018 | 5,671 |
| 2002 |  |  | 8,779 | 10,826 | 8,606 | 7,548 | 6,636 | 6,213 | 5,445 | 4,763 |
| 2003 |  | 3,651 | 8,855 | 9,551 | 8,129 | 7,139 | 6,520 | 5,640 | 5,702 | 6,283 |
| 2004 | 760 | 3,678 | 6,659 | 7,293 | 6,252 | 5,695 | 5,709 | 5,291 | 6,390 | 6,852 |
| 2005 | 835 | 3,347 | 6,002 | 6,243 | 6,134 | 5,384 | 5,546 | 5,932 | 6,777 | 7,020 |
| 2006 | 771 | 3,554 | 6,409 | 7,003 | 6,462 | 6,558 | 6,976 | 7,090 | 6,777 | 6,762 |
| 2007 | 884 | 3,774 | 7,021 | 7,546 | 7,270 | 7,266 | 7,195 | 7,206 | 7,279 | 7,465 |
| 2008 | 910 | 4,117 | 7,512 | 8,388 | 8,390 | 7,942 | 7,519 | 7,354 | 7,604 | 6,580 |
| 2009 | 926 | 4,110 | 7,664 | 8,660 | 8,374 | 8,037 | 8,000 | 7,747 | 7,861 | 8,195 |
| 2010 | 905 | 4,100 | 7,711 | 8,889 | 8,670 | 8,239 | 8,143 | 8,162 | 8,109 | 7,847 |
| 2011 | 970 | 4,147 | 7,995 | 8,644 | 8,491 | 8,314 | 8,170 | 8,560 | 9,267 | 8,153 |
| 2012 | 962 | 4,266 | 7,973 | 8,822 | 8,480 | 8,548 | 8,682 | 8,503 | 8,506 |  |
| 2013 | 965 | 4,258 | 7,826 | 9,167 | 8,861 | 8,405 | 8,140 | 7,809 |  |  |
| 2014 | 933 | 4,283 | 8,214 | 9,975 | 9,636 | 9,344 | 9,229 |  |  |  |
| 2015 | 972 | 4,418 | 8,691 | 10,353 | 10,294 | 9,991 |  |  |  |  |
| 2016 | 976 | 4,586 | 8,825 | 10,665 | 10,493 |  |  |  |  |  |
| 2017 | 977 | 4,672 | 9,349 | 11,226 |  |  |  |  |  |  |
| 2018 | 1,066 | 4,950 | 9,596 |  |  |  |  |  |  |  |
| 2019 | 1,116 | 5,138 |  |  |  |  |  |  |  |  |
| 2020 | 1,191 |  |  |  |  |  |  |  |  |  |


| Accident |  |  |  |  | Annual | Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1996 |  |  |  |  |  |  |  |  |  | 11.3\% |
| 1997 |  |  |  |  |  |  |  |  | -15.3\% | -10.4\% |
| 1998 |  |  |  |  |  |  |  | -5.5\% | -7.6\% | 3.8\% |
| 1999 |  |  |  |  |  |  | -0.6\% | -11.8\% | 10.9\% | -0.9\% |
| 2000 |  |  |  |  |  | -9.6\% | -10.3\% | -10.3\% | -0.5\% | -8.9\% |
| 2001 |  |  |  |  | -1.3\% | -13.9\% | -8.4\% | -1.7\% | -16.9\% | -7.8\% |
| 2002 |  |  |  | -5.0\% | -20.3\% | -6.3\% | -12.8\% | -6.9\% | -9.5\% | -16.0\% |
| 2003 |  |  | 0.9\% | -11.8\% | -5.5\% | -5.4\% | -1.7\% | -9.2\% | 4.7\% | 31.9\% |
| 2004 |  | 0.7\% | -24.8\% | -23.6\% | -23.1\% | -20.2\% | -12.4\% | -6.2\% | 12.1\% | 9.1\% |
| 2005 | 9.8\% | -9.0\% | -9.9\% | -14.4\% | -1.9\% | -5.5\% | -2.9\% | 12.1\% | 6.1\% | 2.4\% |
| 2006 | -7.7\% | 6.2\% | 6.8\% | 12.2\% | 5.4\% | 21.8\% | 25.8\% | 19.5\% | 0.0\% | -3.7\% |
| 2007 | 14.6\% | 6.2\% | 9.5\% | 7.7\% | 12.5\% | 10.8\% | 3.1\% | 1.6\% | 7.4\% | 10.4\% |
| 2008 | 3.0\% | 9.1\% | 7.0\% | 11.2\% | 15.4\% | 9.3\% | 4.5\% | 2.1\% | 4.5\% | -11.9\% |
| 2009 | 1.7\% | -0.2\% | 2.0\% | 3.2\% | -0.2\% | 1.2\% | 6.4\% | 5.3\% | 3.4\% | 24.5\% |
| 2010 | -2.3\% | -0.2\% | 0.6\% | 2.6\% | 3.5\% | 2.5\% | 1.8\% | 5.4\% | 3.2\% | -4.3\% |
| 2011 | 7.2\% | 1.1\% | 3.7\% | -2.8\% | -2.1\% | 0.9\% | 0.3\% | 4.9\% | 14.3\% | 3.9\% |
| 2012 | -0.8\% | 2.9\% | -0.3\% | 2.1\% | -0.1\% | 2.8\% | 6.3\% | -0.7\% | -8.2\% |  |
| 2013 | 0.3\% | -0.2\% | -1.9\% | 3.9\% | 4.5\% | -1.7\% | -6.2\% | -8.2\% |  |  |
| 2014 | -3.3\% | 0.6\% | 5.0\% | 8.8\% | 8.7\% | 11.2\% | 13.4\% |  |  |  |
| 2015 | 4.1\% | 3.1\% | 5.8\% | 3.8\% | 6.8\% | 6.9\% |  |  |  |  |
| 2016 | 0.4\% | 3.8\% | 1.5\% | 3.0\% | 1.9\% |  |  |  |  |  |
| 2017 | 0.1\% | 1.9\% | 5.9\% | 5.3\% |  |  |  |  |  |  |
| 2018 | 9.2\% | 5.9\% | 2.7\% |  |  |  |  |  |  |  |
| 2019 | 4.7\% | 3.8\% |  |  |  |  |  |  |  |  |
| 2020 | 6.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | $2.1 \%$ | $2.2 \%$ | $1.5 \%$ | $1.1 \%$ | $0.8 \%$ | $0.8 \%$ | $0.5 \%$ | $0.6 \%$ | $1.2 \%$ | $1.2 \%$ |
| R $^{2}$ | 0.844 | 0.902 | 0.327 | 0.098 | 0.053 | 0.052 | 0.022 | 0.032 | 0.182 | 0.203 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $5.5 \%$ | $3.9 \%$ | $3.9 \%$ | $4.8 \%$ | $5.9 \%$ | $4.7 \%$ | $2.5 \%$ | $0.6 \%$ | $4.0 \%$ | $3.6 \%$ |
| R $^{2}$ | 0.950 | 0.979 | 0.974 | 0.963 | 0.968 | 0.824 | 0.491 | 0.038 | 0.637 | 0.380 |

*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

## Ratio of Incremental Paid Medical to Indemnity Claims Open During the Period** As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2002 |  |  |  |  |  |  |  |  |  | 9,314 |
| 2003 |  |  |  |  |  |  |  |  | 9,387 | 10,079 |
| 2004 |  |  |  |  |  |  |  | 8,901 | 10,036 | 11,554 |
| 2005 |  |  |  |  |  |  | 9,080 | 9,240 | 12,457 | 13,058 |
| 2006 |  |  |  |  |  | 9,172 | 10,404 | 11,116 | 11,998 | 11,829 |
| 2007 |  |  |  |  | 9,605 | 10,129 | 11,544 | 13,171 | 12,569 | 12,282 |
| 2008 |  |  |  | 9,421 | 10,646 | 11,456 | 12,248 | 12,578 | 12,528 | 12,334 |
| 2009 |  |  | 8,877 | 10,026 | 11,131 | 12,255 | 12,396 | 11,798 | 11,853 | 11,670 |
| 2010 |  | 6,044 | 8,971 | 10,690 | 12,025 | 11,850 | 12,001 | 12,887 | 12,304 | 12,031 |
| 2011 | 917 | 5,442 | 9,014 | 10,277 | 10,933 | 11,397 | 11,913 | 12,108 | 12,225 | 12,429 |
| 2012 | 772 | 5,480 | 8,630 | 9,689 | 10,201 | 10,877 | 10,747 | 11,399 | 11,935 |  |
| 2013 | 834 | 5,343 | 8,008 | 9,232 | 9,922 | 9,736 | 10,271 | 10,117 |  |  |
| 2014 | 946 | 5,160 | 7,869 | 9,298 | 9,734 | 9,943 | 10,811 |  |  |  |
| 2015 | 1,014 | 5,087 | 8,113 | 9,173 | 10,215 | 10,204 |  |  |  |  |
| 2016 | 914 | 5,399 | 8,000 | 9,247 | 10,053 |  |  |  |  |  |
| 2017 | 1,186 | 5,558 | 8,408 | 9,656 |  |  |  |  |  |  |
| 2018 | 1,125 | 5,780 | 8,833 |  |  |  |  |  |  |  |
| 2019 | 1,239 | 5,721 |  |  |  |  |  |  |  |  |
| 2020 | 1,248 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2003 |  |  |  |  |  |  |  |  |  | 8.2\% |
| 2004 |  |  |  |  |  |  |  |  | 6.9\% | 14.6\% |
| 2005 |  |  |  |  |  |  |  | 3.8\% | 24.1\% | 13.0\% |
| 2006 |  |  |  |  |  |  | 14.6\% | 20.3\% | -3.7\% | -9.4\% |
| 2007 |  |  |  |  |  | 10.4\% | 11.0\% | 18.5\% | 4.8\% | 3.8\% |
| 2008 |  |  |  |  | 10.8\% | 13.1\% | 6.1\% | -4.5\% | -0.3\% | 0.4\% |
| 2009 |  |  |  | 6.4\% | 4.6\% | 7.0\% | 1.2\% | -6.2\% | -5.4\% | -5.4\% |
| 2010** |  |  | 1.1\% | 6.6\% | 8.0\% | -3.3\% | -3.2\% | 9.2\% | 3.8\% | 3.1\% |
| 2011** |  | -10.0\% | 0.5\% | -3.9\% | -9.1\% | -3.8\% | -0.7\% | -6.0\% | -0.6\% | 3.3\% |
| 2012 | -15.8\% | 0.7\% | -4.3\% | -5.7\% | -6.7\% | -4.6\% | -9.8\% | -5.9\% | -2.4\% |  |
| 2013 | 8.0\% | -2.5\% | -7.2\% | -4.7\% | -2.7\% | -10.5\% | -4.4\% | -11.2\% |  |  |
| 2014 | 13.4\% | -3.4\% | -1.7\% | 0.7\% | -1.9\% | 2.1\% | 5.3\% |  |  |  |
| 2015 | 7.2\% | -1.4\% | 3.1\% | -1.3\% | 4.9\% | 2.6\% |  |  |  |  |
| 2016 | -9.9\% | 6.1\% | -1.4\% | 0.8\% | -1.6\% |  |  |  |  |  |
| 2017 | 29.7\% | 2.9\% | 5.1\% | 4.4\% |  |  |  |  |  |  |
| 2018 | -5.1\% | 4.0\% | 5.1\% |  |  |  |  |  |  |  |
| 2019 | 10.1\% | -1.0\% |  |  |  |  |  |  |  |  |
| 2020 | 0.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | 5.1\% | 0.0\% | -0.8\% | -0.9\% | -0.7\% | -0.2\% | 0.6\% | 1.8\% | 2.1\% | 2.3\% |
| $\mathrm{R}^{2}$ | 0.787 | 0.000 | 0.202 | 0.266 | 0.100 | 0.005 | 0.035 | 0.153 | 0.393 | 0.447 |
| 5-Year | 6.9\% | 3.1\% | 2.7\% | 0.8\% | 0.0\% | -3.1\% | -3.5\% | -4.2\% | -0.7\% | 0.0\% |
| $\mathrm{R}^{2}$ | 0.679 | 0.870 | 0.840 | 0.427 | 0.000 | 0.565 | 0.678 | 0.575 | 0.212 | 0.000 |

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

Source: WCIRB quarterly calls for experience

Ratio of Quarterly Paid Medical to Indemnity Claims Inventory*
Through March 31, 2020

| Developm $\epsilon$ |  |  |  |  | Evaluatio | Years |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ | $\underline{2020}$ |
| 3/0 | 1,147 | 1,289 | 1,553 | 1,615 | 1,714 | 1,601 | 1,587 | 1,672 | 1,847 | 1,737 | 2,105 | 2,124 | 2,273 | 2,241 |
| 6/3 | 2,330 | 2,870 | 3,029 | 3,071 | 3,139 | 3,000 | 3,013 | 2,873 | 3,178 | 3,161 | 3,357 | 3,497 | 3,296 |  |
| 9/6 | 2,517 | 2,952 | 3,160 | 3,137 | 3,108 | 3,148 | 3,269 | 3,080 | 3,089 | 3,221 | 3,310 | 3,604 | 3,312 |  |
| 12/9 | 2,697 | 3,012 | 3,075 | 3,134 | 3,065 | 3,243 | 3,033 | 2,983 | 2,951 | 3,157 | 3,361 | 3,513 | 3,519 |  |
| 12/0 | 5,103 | 6,035 | 6,228 | 6,172 | 6,076 | 6,139 | 6,065 | 5,902 | 5,997 | 6,232 | 6,547 | 6,844 | 6,580 |  |
| 15/12 | 2,571 | 2,927 | 3,040 | 3,131 | 3,159 | 3,354 | 3,316 | 3,074 | 3,130 | 3,135 | 3,406 | 3,446 | 3,558 | 3,467 |
| 18/15 | 2,186 | 2,680 | 2,784 | 2,924 | 2,982 | 3,221 | 3,187 | 2,839 | 2,871 | 3,006 | 3,039 | 3,150 | 3,171 |  |
| 21/18 | 2,168 | 2,474 | 2,616 | 2,711 | 2,802 | 2,975 | 2,914 | 2,827 | 2,824 | 2,817 | 2,791 | 2,933 | 3,061 |  |
| 24/21 | 2,190 | 2,407 | 2,537 | 2,603 | 2,738 | 3,035 | 2,929 | 2,747 | 2,706 | 2,790 | 2,870 | 2,921 | 3,236 |  |
| 24/12 | 7,576 | 8,762 | 9,141 | 9,420 | 9,576 | 10,215 | 9,966 | 9,299 | 9,274 | 9,359 | 9,483 | 9,685 | 10,106 |  |
| 27/24 | 1,728 | 2,214 | 2,353 | 2,531 | 2,563 | 2,740 | 3,022 | 2,862 | 2,784 | 2,810 | 2,889 | 2,811 | 3,111 | 3,115 |
| 30/27 | 1,801 | 2,337 | 2,607 | 2,708 | 2,857 | 2,988 | 3,162 | 3,036 | 3,027 | 3,055 | 3,016 | 3,080 | 3,105 |  |
| 33/30 | 1,807 | 2,342 | 2,560 | 2,770 | 2,912 | 3,100 | 3,196 | 3,177 | 3,003 | 2,984 | 2,926 | 3,094 | 3,192 |  |
| 36/33 | 1,965 | 2,389 | 2,596 | 2,731 | 2,889 | 3,406 | 3,308 | 3,120 | 3,096 | 3,072 | 3,041 | 3,092 | 3,311 |  |
| 36/24 | 6,452 | 8,158 | 8,942 | 9,452 | 9,861 | 10,661 | 11,007 | 10,483 | 10,161 | 10,091 | 9,885 | 9,910 | 10,397 |  |
| 39/36 | 1,710 | 2,032 | 2,278 | 2,500 | 2,680 | 3,019 | 3,258 | 3,177 | 3,265 | 3,026 | 3,041 | 3,111 | 3,102 | 3,332 |
| 42/39 | 1,791 | 2,146 | 2,524 | 2,786 | 2,944 | 3,124 | 3,539 | 3,463 | 3,344 | 3,114 | 3,267 | 3,481 | 3,205 |  |
| 45/42 | 1,836 | 2,166 | 2,517 | 2,735 | 3,083 | 3,246 | 3,427 | 3,691 | 3,372 | 3,215 | 3,017 | 3,237 | 3,279 |  |
| 48/45 | 1,953 | 2,251 | 2,551 | 2,913 | 3,072 | 3,411 | 3,629 | 3,433 | 3,281 | 3,414 | 3,141 | 3,410 | 3,511 |  |
| 48/36 | 6,360 | 7,478 | 8,645 | 9,621 | 10,316 | 11,224 | 12,024 | 11,867 | 11,391 | 10,771 | 10,478 | 10,940 | 10,673 |  |


| Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | 06-to-07 | 07-to-08 | 08-to-09 | 09-to-10 | 10-to-11 | 11-to-12 | 12-to-13 | 13-to-14 | 14-to-15 | 15-to-16 | 16-to-17 | 17-to-18 | 18-to-19 | 19-to-20 |
| 3/0 | -4.6\% | 12.4\% | 20.5\% | 4.0\% | 6.1\% | -6.6\% | -0.8\% | 5.4\% | 10.5\% | -6.0\% | 21.2\% | 0.9\% | 7.0\% | -1.4\% |
| 6/3 | -6.0\% | 23.2\% | 5.5\% | 1.4\% | 2.2\% | -4.4\% | 0.4\% | -4.6\% | 10.6\% | -0.6\% | 6.2\% | 4.2\% | -5.7\% |  |
| 9/6 | 3.1\% | 17.3\% | 7.0\% | -0.7\% | -0.9\% | 1.3\% | 3.9\% | -5.8\% | 0.3\% | 4.3\% | 2.8\% | 8.9\% | -8.1\% |  |
| 12/9 | 11.0\% | 11.7\% | 2.1\% | 1.9\% | -2.2\% | 5.8\% | -6.5\% | -1.6\% | -1.1\% | 7.0\% | 6.5\% | 4.5\% | 0.2\% |  |
| 12/0 | 5.5\% | 18.2\% | 3.2\% | -0.9\% | -1.5\% | 1.0\% | -1.2\% | -2.7\% | 1.6\% | 3.9\% | 5.1\% | 4.5\% | -3.9\% |  |
| 15/12 | 12.6\% | 13.8\% | 3.9\% | 3.0\% | 0.9\% | 6.2\% | -1.1\% | -7.3\% | 1.8\% | 0.1\% | 8.7\% | 1.2\% | 3.3\% | -2.6\% |
| 18/15 | -10.1\% | 22.6\% | 3.9\% | 5.0\% | 2.0\% | 8.0\% | -1.1\% | -10.9\% | 1.1\% | 4.7\% | 1.1\% | 3.7\% | 0.7\% |  |
| 21/18 | 15.3\% | 14.1\% | 5.8\% | 3.6\% | 3.4\% | 6.2\% | -2.1\% | -3.0\% | -0.1\% | -0.3\% | -0.9\% | 5.1\% | 4.4\% |  |
| 24/21 | 19.4\% | 9.9\% | 5.4\% | 2.6\% | 5.2\% | 10.8\% | -3.5\% | -6.2\% | -1.5\% | 3.1\% | 2.9\% | 1.8\% | 10.8\% |  |
| 24/12 | 19.1\% | 15.7\% | 4.3\% | 3.0\% | 1.7\% | 6.7\% | -2.4\% | -6.7\% | -0.3\% | 0.9\% | 1.3\% | 2.1\% | 4.3\% |  |
| 27/24 | 15.6\% | 28.1\% | 6.3\% | 7.6\% | 1.2\% | 6.9\% | 10.3\% | -5.3\% | -2.7\% | 0.9\% | 2.8\% | -2.7\% | 10.7\% | 0.1\% |
| 30/27 | -3.5\% | 29.8\% | 11.5\% | 3.9\% | 5.5\% | 4.6\% | 5.8\% | -4.0\% | -0.3\% | 0.9\% | -1.3\% | 2.1\% | 0.8\% |  |
| 33/30 | 10.7\% | 29.6\% | 9.3\% | 8.2\% | 5.1\% | 6.5\% | 3.1\% | -0.6\% | -5.5\% | -0.6\% | -2.0\% | 5.8\% | 3.2\% |  |
| 36/33 | 15.3\% | 21.6\% | 8.7\% | 5.2\% | 5.8\% | 17.9\% | -2.9\% | -5.7\% | -0.7\% | -0.8\% | -1.0\% | 1.7\% | 7.1\% |  |
| 36/24 | 16.5\% | 26.4\% | 9.6\% | 5.7\% | 4.3\% | 8.1\% | 3.2\% | -4.8\% | -3.1\% | -0.7\% | -2.0\% | 0.3\% | 4.9\% |  |
| 39/36 | 16.2\% | 18.8\% | 12.1\% | 9.8\% | 7.2\% | 12.6\% | 7.9\% | -2.5\% | 2.7\% | -7.3\% | 0.5\% | 2.3\% | -0.3\% | 7.4\% |
| 42/39 | -9.6\% | 19.8\% | 17.6\% | 10.4\% | 5.7\% | 6.1\% | 13.3\% | -2.1\% | -3.4\% | -6.9\% | 4.9\% | 6.6\% | -7.9\% |  |
| 45/42 | 11.5\% | 18.0\% | 16.2\% | 8.7\% | 12.7\% | 5.3\% | 5.6\% | 7.7\% | -8.7\% | -4.6\% | -6.2\% | 7.3\% | 1.3\% |  |
| 48/45 | 7.8\% | 15.2\% | 13.3\% | 14.2\% | 5.4\% | 11.0\% | 6.4\% | -5.4\% | -4.4\% | 4.1\% | -8.0\% | 8.5\% | 3.0\% |  |
| 48/36 | 14.6\% | 17.6\% | 15.6\% | 11.3\% | 7.2\% | 8.8\% | 7.1\% | -1.3\% | -4.0\% | -5.4\% | -2.7\% | 4.4\% | -2.4\% |  |

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

Source: WCIRB accident year experience calls.

## Average and Median Indemnity Claim Severities at USR 1st Report Level

|  | Average <br> Incurred <br> Indemnity <br> Severity | Mnnual <br> Change | Indernnity <br> Sever | Annual <br> Sear |
| ---: | ---: | ---: | ---: | ---: |
| 1999 | 11,132 | --- | 2,953 | --- |
| 2000 | 12,408 | $11.5 \%$ | 3,640 | $23.3 \%$ |
| 2001 | 13,468 | $8.5 \%$ | 4,320 | $18.7 \%$ |
| 2002 | 13,985 | $3.8 \%$ | 4,930 | $14.1 \%$ |
| 2003 | 13,905 | $-0.6 \%$ | 5,000 | $1.4 \%$ |
| 2004 | 11,397 | $-18.0 \%$ | 4,100 | $-18.0 \%$ |
| 2005 | 9,945 | $-12.7 \%$ | 3,400 | $-17.1 \%$ |
| 2006 | 10,643 | $7.0 \%$ | 3,520 | $3.5 \%$ |
| 2007 | 11,291 | $6.1 \%$ | 3,966 | $12.7 \%$ |
| 2008 | 11,947 | $5.8 \%$ | 4,402 | $11.0 \%$ |
| 2009 | 12,136 | $1.6 \%$ | 4,717 | $7.2 \%$ |
| 2010 | 11,976 | $-1.3 \%$ | 4,791 | $1.6 \%$ |
| 2011 | 12,514 | $4.5 \%$ | 5,000 | $4.4 \%$ |
| 2012 | 12,304 | $-1.7 \%$ | 5,000 | $0.0 \%$ |
| 2013 | 12,577 | $2.2 \%$ | 5,250 | $5.0 \%$ |
| 2014 | 13,008 | $3.4 \%$ | 5,274 | $0.5 \%$ |
| 2015 | 13,314 | $2.4 \%$ | 5,330 | $1.1 \%$ |
| 2016 | 13,527 | $1.6 \%$ | 5,417 | $1.6 \%$ |
| 2017 | 14,115 | $4.3 \%$ | 5,310 | $-2.0 \%$ |


|  | Average <br> Incurred <br> Medical | Median <br> Policy <br> Year | Severity <br> Change | Incurred <br> Medical <br> Severity |
| :---: | ---: | ---: | ---: | ---: | | Annual |
| ---: |
| Change |

[^11]
## Changes in the Number of Weeks of Temporary Disability Benefits

## First Survey Level

| Accident Year | Average TD Duration | Change | Median TD Duration | Change |
| :---: | :---: | :---: | :---: | :---: |
| 2004 | 51.4 | ----- | 39.2 | ----- |
| 2005 | 56.7 | 10.3\% | 46.5 | 18.5\% |
| 2006 | 59.0 | 4.2\% | 49.6 | 6.8\% |
| 2007 | 63.1 | 6.9\% | 56.2 | 13.3\% |
| 2008 | 67.4 | 6.8\% | 63.4 | 12.8\% |
| 2009 | 64.8 | -3.8\% | 58.5 | -7.7\% |
| 2010 | 61.7 | -4.7\% | 55.0 | -6.1\% |
| 2011 | 59.6 | -3.6\% | 48.8 | -11.2\% |
| 2012 | 58.7 | -1.4\% | 49.6 | 1.6\% |
| 2013 | 56.0 | -4.6\% | 49.5 | 0.0\% |
| 2014 | 55.9 | -0.2\% | 50.3 | 1.6\% |
| 2015 | 50.1 | -10.4\% | 43.2 | -14.2\% |
| 2016 | 49.5 | -1.3\% | 40.2 | -7.0\% |
| 2017 | 25.7 | -48.0\% | 19.6 | -51.3\% |

## Second Survey Level

| Accident Year | Average TD Duration | Change | Median TD Duration | Change |
| :---: | :---: | :---: | :---: | :---: |
| 2003 | 54.5 | ----- | 43.3 | ----- |
| 2004 | 51.9 | -4.7\% | 41.8 | -3.5\% |
| 2005 | 57.1 | 9.9\% | 50.4 | 20.8\% |
| 2006 | 58.6 | 2.6\% | 51.2 | 1.4\% |
| 2007 | 64.0 | 9.2\% | 58.4 | 14.1\% |
| 2008 | 69.2 | 8.2\% | 66.7 | 14.4\% |
| 2009 | 66.2 | -4.3\% | 61.9 | -7.3\% |
| 2010 | 60.8 | -8.2\% | 56.0 | -9.5\% |
| 2011 | 62.4 | 2.5\% | 52.8 | -5.7\% |
| 2012 | 58.1 | -6.8\% | 52.0 | -1.5\% |
| 2013 | 59.4 | 2.3\% | 52.8 | 1.5\% |
| 2014 | 57.1 | -3.9\% | 52.4 | -0.8\% |
| 2015 | 52.0 | -9.1\% | 45.8 | -12.5\% |
| 2016 | 50.2 | -3.5\% | 41.9 | -8.7\% |

Source: WCIRB Permanent Disability Claim Survey Data is recast from survey proportions to true proportions.

Self-Insured Employers - Claim Severity

| Private Self-Insured Employers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CY | Medical Paid | Indemnity Cases Open During Year | Paid Medical on Open Ind Claims | Annual Change |
| 2001 | 655,349,356 | 128,723 | 5,091 | --- |
| 2002 | 789,748,542 | 129,147 | 6,115 | 20.1\% |
| 2003 | 930,788,004 | 130,323 | 7,142 | 16.8\% |
| 2004 | 802,856,921 | 132,488 | 6,060 | -15.2\% |
| 2005 | 688,918,290 | 124,757 | 5,522 | -8.9\% |
| 2006 | 800,826,010 | 115,054 | 6,960 | 26.0\% |
| 2007 | 676,050,168 | 105,671 | 6,398 | -8.1\% |
| 2008 | 733,149,220 | 102,990 | 7,119 | 11.3\% |
| 2009 | 761,740,423 | 98,642 | 7,722 | 8.5\% |
| 2010 | 760,504,505 | 97,135 | 7,829 | 1.4\% |
| 2011 | 758,672,255 | 95,946 | 7,907 | 1.0\% |
| 2012 | 752,732,652 | 94,591 | 7,958 | 0.6\% |
| 2013 | 814,214,051 | 95,263 | 8,547 | 7.4\% |
| 2014 | 918,409,257 | 93,850 | 9,786 | 14.5\% |
| 2015 | 786,278,830 | 90,382 | 8,700 | -11.1\% |
| 2016 | 787,771,330 | 85,563 | 9,207 | 5.8\% |
| 2017 | 765,002,435 | 81,842 | 9,347 | 1.5\% |
| 2018 | 750,749,175 | 78,826 | 9,524 | 1.9\% |
| Public Self-Insured Employers |  |  |  |  |
| FY | Medical <br> Paid | Indemnity Cases Open During Year | Paid Medical on Open Ind Claims | Annual Change |
| 2000/2001 | 603,567,334 | 148,040 | 4,077 | --- |
| 2001/2002 | 736,531,748 | 153,231 | 4,807 | 17.9\% |
| 2002/2003 | 872,925,555 | 166,835 | 5,232 | 8.9\% |
| 2003/2004 | 932,492,476 | 176,127 | 5,294 | 1.2\% |
| 2004/2005 | 777,579,644 | 171,938 | 4,522 | -14.6\% |
| 2005/2006 | 768,887,952 | 163,511 | 4,702 | 4.0\% |
| 2006/2007 | 779,028,256 | 159,524 | 4,883 | 3.9\% |
| 2007/2008 | 887,316,859 | 173,348 | 5,119 | 4.8\% |
| 2008/2009 | 949,449,769 | 170,751 | 5,560 | 8.6\% |
| 2009/2010 | 978,954,150 | 171,444 | 5,710 | 2.7\% |
| 2010/2011 | 1,043,538,851 | 173,585 | 6,012 | 5.3\% |
| 2011/2012 | 1,073,241,078 | 177,309 | 6,053 | 0.7\% |
| 2012/2013 | 1,045,517,623 | 179,375 | 5,829 | -3.7\% |
| 2013/2014 | 1,086,439,359 | 178,788 | 6,077 | 4.3\% |
| 2014/2015 | 1,102,863,683 | 181,993 | 6,060 | -0.3\% |
| 2015/2016 | 1,097,857,099 | 180,467 | 6,083 | 0.4\% |
| 2016/2017 | 1,046,637,539 | 178,746 | 5,855 | -3.7\% |
| 2017/2018 | 1,119,293,067 | 180,404 | 6,204 | 6.0\% |
| 2018/2019 | 1,144,059,798 | 180,892 | 6,325 | 1.9\% |


| CY | All Self-Insured Employers |  |  |  | Insured System at 1st Report Paid Medical |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical Paid | Indemnity Cases Open During Year | Paid Medical on Open Ind Claims | Annual <br> Change | AY | Paid Medical Severity on Ind Claims | Annual Change |
| 2001 | 1,325,398,897 | 279,359 | 4,744 | --- | 2001 | 6,203 | --- |
| 2002 | 1,594,477,194 | 289,180 | 5,514 | 16.2\% | 2002 | 7,255 | 17.0\% |
| 2003 | 1,833,497,020 | 301,804 | 6,075 | 10.2\% | 2003 | 7,203 | -0.7\% |
| 2004 | 1,657,892,981 | 306,521 | 5,409 | -11.0\% | 2004 | 5,970 | -17.1\% |
| 2005 | 1,462,152,088 | 292,482 | 4,999 | -7.6\% | 2005 | 5,906 | -1.1\% |
| 2006 | 1,574,784,114 | 276,572 | 5,694 | 13.9\% | 2006 | 6,270 | 6.2\% |
| 2007 | 1,509,222,726 | 272,107 | 5,546 | -2.6\% | 2007 | 6,922 | 10.4\% |
| 2008 | 1,651,532,534 | 275,040 | 6,005 | 8.3\% | 2008 | 7,605 | 9.9\% |
| 2009 | 1,725,942,383 | 269,740 | 6,399 | 6.6\% | 2009 | 7,925 | 4.2\% |
| 2010 | 1,771,751,006 | 269,650 | 6,571 | 2.7\% | 2010 | 7,946 | 0.3\% |
| 2011 | 1,817,062,220 | 271,393 | 6,695 | 1.9\% | 2011 | 7,462 | -6.1\% |
| 2012 | 1,812,112,003 | 272,933 | 6,639 | -0.8\% | 2012 | 7,238 | -3.0\% |
| 2013 | 1,880,192,542 | 274,345 | 6,853 | 3.2\% | 2013 | 7,085 | -2.1\% |
| 2014 | 2,013,060,778 | 274,241 | 7,340 | 7.1\% | 2014 | 6,995 | -1.3\% |
| 2015 | 1,886,639,221 | 271,612 | 6,946 | -5.4\% | 2015 | 7,036 | 0.6\% |
| 2016 | 1,860,018,649 | 265,170 | 7,014 | 1.0\% | 2016 | 7,293 | 3.6\% |
| 2017 | 1,847,967,738 | 261,417 | 7,069 | 0.8\% | 2017 | 7,549 | 3.5\% |
| 2018 | 1,882,425,608 | 259,474 | 7,255 | 2.6\% | 2018 | 6,864 | 5.9\% |

Notes: Fiscal Year Public data prorated to CYs 50\%/50\%.
Insured System AY 2018 change is based on a comparison of 2018
accidents on 2017 policies to 2017 accidents on 2016 policies.

Sources: California Department of Industrial Relations for self-insured
WCIRB Unit Statistical Data for insured system

Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness

| PolicyYear | Report Level | Indemnity Claim Severity |  |  | Total Claim Severity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Change in Severity Hazardousness | Severity Hazardousness Index | Annual \% Change Attributable to Change in Industrial Mix | Change in Severity Hazardousness | Severity Hazardousness Index | Annual \% Change Attributable to Change in Industrial Mix |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1993 | 5 | 1.0000 | 1.0000 | --- | 1.0000 | 1.0000 | --- |
| 1994 | 5 | 1.0010 | 1.0010 | 0.10\% | 0.9986 | 0.9986 | -0.14\% |
| 1995 | 5 | 1.0007 | 1.0017 | 0.07\% | 1.0013 | 0.9998 | 0.13\% |
| 1996 | 5 | 0.9988 | 1.0005 | -0.12\% | 0.9993 | 0.9991 | -0.07\% |
| 1997 | 5 | 1.0032 | 1.0036 | 0.32\% | 1.0045 | 1.0036 | 0.45\% |
| 1998 | 5 | 1.0037 | 1.0074 | 0.37\% | 1.0050 | 1.0086 | 0.50\% |
| 1999 | 5 | 1.0023 | 1.0096 | 0.23\% | 1.0011 | 1.0097 | 0.11\% |
| 2000 | 5 | 1.0016 | 1.0112 | 0.16\% | 1.0009 | 1.0107 | 0.09\% |
| 2001 | 5 | 1.0031 | 1.0144 | 0.31\% | 1.0001 | 1.0108 | 0.01\% |
| 2002 | 5 | 0.9984 | 1.0128 | -0.16\% | 0.9996 | 1.0104 | -0.04\% |
| 2003 | 5 | 1.0042 | 1.0170 | 0.42\% | 1.0071 | 1.0176 | 0.71\% |
| 2004 | 5 | 1.0020 | 1.0190 | 0.20\% | 1.0048 | 1.0224 | 0.48\% |
| 2005 | 5 | 1.0010 | 1.0201 | 0.10\% | 1.0027 | 1.0252 | 0.27\% |
| 2006 | 5 | 0.9965 | 1.0165 | -0.35\% | 0.9917 | 1.0167 | -0.83\% |
| 2007 | 5 | 0.9935 | 1.0098 | -0.65\% | 0.9861 | 1.0025 | -1.39\% |
| 2008 | 5 | 0.9908 | 1.0005 | -0.92\% | 0.9845 | 0.9870 | -1.55\% |
| 2009 | 5 | 0.9884 | 0.9889 | -1.16\% | 0.9832 | 0.9704 | -1.68\% |
| 2010 | 5 | 0.9961 | 0.9851 | -0.39\% | 0.9938 | 0.9644 | -0.62\% |
| 2011 | 5 | 0.9996 | 0.9847 | -0.04\% | 1.0014 | 0.9657 | 0.14\% |
| 2012 | 5 | 0.9972 | 0.9819 | -0.28\% | 0.9978 | 0.9636 | -0.22\% |
| 2013 | 5 | 1.0012 | 0.9830 | 0.12\% | 1.0030 | 0.9665 | 0.30\% |
| 2014 | Proj 5 | 1.0018 | 0.9848 | 0.18\% | 1.0065 | 0.9728 | 0.65\% |
| 2015 | Proj 5 | 1.0005 | 0.9852 | 0.05\% | 1.0029 | 0.9756 | 0.29\% |
| 2016 | Proj 5 | 0.9992 | 0.9844 | -0.08\% | 0.9975 | 0.9731 | -0.25\% |
| 2017 | Proj 5 | 1.0017 | 0.9861 | 0.17\% | 1.0050 | 0.9780 | 0.50\% |

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

Source: WCIRB unit statistical data

Claim Counts and Losses on Claims in Excess of $\mathbf{\$ 2 5 0 , 0 0 0}$

| Number of Claims in Excess of \$250,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 541 | 929 | 1,550 | 2,323 | 3,104 | 3,589 | 4,071 | 4,395 |
| 2004 | 476 | 722 | 1,165 | 1,742 | 2,297 | 2,874 | 3,273 | 3,547 |
| 2005 | 496 | 783 | 1,292 | 1,921 | 2,657 | 3,170 | 3,505 | 3,783 |
| 2006 | 673 | 1,040 | 1,676 | 2,402 | 3,109 | 3,604 | 3,985 | 4,212 |
| 2007 | 671 | 1,191 | 2,095 | 3,017 | 3,759 | 4,323 | 4,643 | 4,844 |
| 2008 | 654 | 1,261 | 2,100 | 3,077 | 3,878 | 4,389 | 4,686 | 4,801 |
| 2009 | 605 | 1,216 | 2,111 | 3,083 | 3,784 | 4,227 | 4,443 | 4,579 |
| 2010 | 590 | 1,169 | 1,956 | 2,810 | 3,379 | 3,732 | 3,914 | 3,976 |
| 2011 | 653 | 1,205 | 1,920 | 2,654 | 3,116 | 3,446 | 3,549 |  |
| 2012 | 673 | 1,130 | 1,734 | 2,249 | 2,704 | 2,898 |  |  |
| 2013 | 713 | 1,120 | 1,664 | 2,186 | 2,551 |  |  |  |
| 2014 | 706 | 1,125 | 1,756 | 2,296 |  |  |  |  |
| 2015 | 682 | 1,224 | 1,760 |  |  |  |  |  |
| 2016 | 831 | 1,297 |  |  |  |  |  |  |
| 2017 | 887 |  |  |  |  |  |  |  |

$\%$ of Indemnity Incurred

| on Claims in Excess of \$250,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 5.81\% | 7.11\% | 9.89\% | 13.19\% | 16.47\% | 18.55\% | 21.16\% | 22.92\% |
| 2004 | 6.62\% | 7.82\% | 9.71\% | 13.12\% | 15.79\% | 19.69\% | 22.24\% | 24.01\% |
| 2005 | 7.95\% | 8.27\% | 11.00\% | 15.00\% | 19.77\% | 23.05\% | 25.52\% | 27.32\% |
| 2006 | 11.12\% | 11.51\% | 14.92\% | 18.95\% | 22.72\% | 25.76\% | 28.09\% | 29.90\% |
| 2007 | 10.23\% | 11.65\% | 16.25\% | 20.91\% | 24.93\% | 27.54\% | 29.43\% | 30.55\% |
| 2008 | 9.39\% | 11.21\% | 15.22\% | 20.28\% | 24.26\% | 27.11\% | 28.70\% | 29.79\% |
| 2009 | 9.08\% | 10.44\% | 15.09\% | 19.60\% | 23.44\% | 26.27\% | 27.36\% | 28.39\% |
| 2010 | 9.18\% | 10.85\% | 13.94\% | 18.20\% | 21.20\% | 22.88\% | 24.14\% | 25.51\% |
| 2011 | 9.46\% | 10.54\% | 13.48\% | 17.23\% | 19.56\% | 21.44\% | 22.97\% |  |
| 2012 | 9.10\% | 9.80\% | 12.48\% | 15.51\% | 17.94\% | 19.89\% |  |  |
| 2013 | 7.66\% | 8.81\% | 11.31\% | 14.23\% | 16.55\% |  |  |  |
| 2014 | 8.57\% | 9.43\% | 12.34\% | 15.49\% |  |  |  |  |
| 2015 | 8.67\% | 9.85\% | 12.44\% |  |  |  |  |  |
| 2016 | 9.79\% | 10.86\% |  |  |  |  |  |  |
| 2017 | 11.79\% |  |  |  |  |  |  |  |

Average Severity

| Average Severity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 829,214 | 697,030 | 579,912 | 531,520 | 513,563 | 511,184 | 536,729 | 548,977 |
| 2004 | 747,673 | 693,664 | 597,263 | 550,822 | 520,475 | 538,976 | 553,349 | 569,398 |
| 2005 | 739,367 | 668,592 | 545,833 | 501,441 | 498,380 | 513,087 | 526,756 | 543,589 |
| 2006 | 681,831 | 632,111 | 553,482 | 516,917 | 504,426 | 515,909 | 527,579 | 538,443 |
| 2007 | 653,675 | 573,372 | 507,023 | 494,341 | 494,637 | 501,201 | 512,169 | 519,917 |
| 2008 | 617,024 | 515,160 | 466,549 | 456,502 | 457,438 | 469,921 | 477,545 | 488,041 |
| 2009 | 648,507 | 526,189 | 479,951 | 458,056 | 463,534 | 477,964 | 479,239 | 484,173 |
| 2010 | 709,956 | 584,114 | 501,698 | 473,945 | 476,876 | 474,530 | 482,992 | 495,466 |
| 2011 | 687,390 | 560,645 | 499,039 | 478,213 | 472,300 | 469,937 | 476,281 |  |
| 2012 | 700,816 | 586,338 | 521,993 | 511,034 | 495,445 | 499,693 |  |  |
| 2013 | 577,966 | 507,453 | 478,599 | 459,747 | 460,433 |  |  |  |
| 2014 | 710,356 | 596,096 | 529,832 | 506,671 |  |  |  |  |
| 2015 | 724,682 | 600,280 | 546,974 |  |  |  |  |  |
| 2016 | 762,708 | 631,494 |  |  |  |  |  |  |
| 2017 | 866,669 |  |  |  |  |  |  |  |

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

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

| Number of Claims in Excess of \$500 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 174 | 219 | 300 | 431 | 584 | 800 | 1,066 | 1,275 |
| 2004 | 159 | 198 | 243 | 342 | 453 | 680 | 874 | 1,010 |
| 2005 | 160 | 184 | 238 | 349 | 532 | 704 | 880 | 1,003 |
| 2006 | 187 | 258 | 347 | 505 | 679 | 851 | 1,038 | 1,149 |
| 2007 | 187 | 260 | 368 | 528 | 741 | 964 | 1,139 | 1,255 |
| 2008 | 178 | 233 | 340 | 526 | 726 | 940 | 1,084 | 1,169 |
| 2009 | 173 | 234 | 335 | 504 | 705 | 842 | 943 | 1,027 |
| 2010 | 161 | 222 | 317 | 422 | 573 | 705 | 793 | 861 |
| 2011 | 179 | 232 | 308 | 442 | 553 | 651 | 724 |  |
| 2012 | 188 | 237 | 294 | 375 | 461 | 543 |  |  |
| 2013 | 180 | 211 | 262 | 357 | 449 |  |  |  |
| 2014 | 213 | 263 | 334 | 437 |  |  |  |  |
| 2015 | 186 | 250 | 309 |  |  |  |  |  |
| 2016 | 237 | 288 |  |  |  |  |  |  |
| 2017 | 285 |  |  |  |  |  |  |  |


| \% of Claims in Excess of \$500,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 0.034\% | 0.042\% | 0.057\% | 0.082\% | 0.111\% | 0.152\% | 0.203\% | 0.243\% |
| 2004 | 0.033\% | 0.040\% | 0.049\% | 0.069\% | 0.091\% | 0.137\% | 0.177\% | 0.204\% |
| 2005 | 0.035\% | 0.040\% | 0.051\% | 0.074\% | 0.113\% | 0.150\% | 0.188\% | 0.214\% |
| 2006 | 0.043\% | 0.058\% | 0.078\% | 0.113\% | 0.151\% | 0.189\% | 0.231\% | 0.255\% |
| 2007 | 0.045\% | 0.062\% | 0.087\% | 0.124\% | 0.174\% | 0.225\% | 0.266\% | 0.293\% |
| 2008 | 0.050\% | 0.063\% | 0.092\% | 0.141\% | 0.194\% | 0.251\% | 0.289\% | 0.312\% |
| 2009 | 0.052\% | 0.069\% | 0.098\% | 0.146\% | 0.204\% | 0.244\% | 0.273\% | 0.297\% |
| 2010 | 0.048\% | 0.065\% | 0.091\% | 0.121\% | 0.164\% | 0.201\% | 0.226\% | 0.253\% |
| 2011 | 0.053\% | 0.067\% | 0.088\% | 0.126\% | 0.157\% | 0.185\% | 0.211\% |  |
| 2012 | 0.055\% | 0.067\% | 0.082\% | 0.105\% | 0.128\% | 0.154\% |  |  |
| 2013 | 0.051\% | 0.058\% | 0.072\% | 0.097\% | 0.124\% |  |  |  |
| 2014 | 0.058\% | 0.070\% | 0.088\% | 0.116\% |  |  |  |  |
| 2015 | 0.049\% | 0.065\% | 0.080\% |  |  |  |  |  |
| 2016 | 0.062\% | 0.073\% |  |  |  |  |  |  |
| 2017 | 0.071\% |  |  |  |  |  |  |  |

\% of Medical Incurred

| on Claims in Excess of \$500,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 3.77\% | 3.93\% | 4.68\% | 5.55\% | 6.57\% | 7.94\% | 10.05\% | 11.78\% |
| 2004 | 3.89\% | 4.47\% | 4.52\% | 5.96\% | 6.76\% | 9.41\% | 11.48\% | 13.00\% |
| 2005 | 4.18\% | 3.64\% | 4.10\% | 5.79\% | 7.94\% | 9.92\% | 12.04\% | 13.53\% |
| 2006 | 5.06\% | 5.21\% | 6.38\% | 8.00\% | 9.55\% | 11.68\% | 13.56\% | 15.24\% |
| 2007 | 4.80\% | 5.10\% | 6.17\% | 7.74\% | 10.09\% | 11.61\% | 13.34\% | 14.46\% |
| 2008 | 4.10\% | 4.26\% | 5.18\% | 7.24\% | 9.06\% | 11.12\% | 12.24\% | 13.40\% |
| 2009 | 4.70\% | 3.89\% | 5.23\% | 6.47\% | 8.49\% | 10.35\% | 11.08\% | 12.13\% |
| 2010 | 4.82\% | 4.54\% | 4.95\% | 6.23\% | 7.60\% | 8.53\% | 9.60\% | 10.70\% |
| 2011 | 4.91\% | 4.41\% | 4.72\% | 5.99\% | 6.87\% | 7.95\% | 8.97\% |  |
| 2012 | 4.47\% | 4.18\% | 4.72\% | 5.97\% | 6.86\% | 8.12\% |  |  |
| 2013 | 2.86\% | 3.10\% | 3.63\% | 4.78\% | 5.89\% |  |  |  |
| 2014 | 4.35\% | 4.08\% | 4.66\% | 5.96\% |  |  |  |  |
| 2015 | 4.48\% | 4.05\% | 4.74\% |  |  |  |  |  |
| 2016 | 4.95\% | 4.73\% |  |  |  |  |  |  |
| 2017 | 7.24\% |  |  |  |  |  |  |  |


| on Claims in Excess of \$500,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 8.53\% | 8.91\% | 9.31\% | 10.81\% | 12.38\% | 13.91\% | 17.11\% | 18.91\% |
| 2004 | 8.47\% | 9.09\% | 10.06\% | 11.10\% | 11.97\% | 15.26\% | 17.84\% | 19.82\% |
| 2005 | 9.77\% | 10.47\% | 9.92\% | 10.55\% | 13.10\% | 15.72\% | 17.78\% | 20.10\% |
| 2006 | 10.86\% | 11.38\% | 11.63\% | 12.88\% | 14.71\% | 16.83\% | 18.98\% | 20.32\% |
| 2007 | 9.57\% | 9.85\% | 10.75\% | 12.91\% | 14.72\% | 17.07\% | 18.83\% | 20.12\% |
| 2008 | 8.84\% | 8.38\% | 8.94\% | 10.75\% | 12.65\% | 14.95\% | 16.59\% | 17.56\% |
| 2009 | 8.61\% | 8.67\% | 9.58\% | 10.93\% | 12.87\% | 14.85\% | 15.49\% | 16.21\% |
| 2010 | 9.54\% | 9.71\% | 9.85\% | 10.73\% | 12.41\% | 13.34\% | 14.35\% | 15.80\% |
| 2011 | 9.66\% | 9.20\% | 9.72\% | 10.96\% | 11.87\% | 12.45\% | 13.33\% |  |
| 2012 | 10.30\% | 9.58\% | 9.83\% | 10.90\% | 11.62\% | 12.52\% |  |  |
| 2013 | 7.86\% | 6.94\% | 7.52\% | 8.12\% | 9.25\% |  |  |  |
| 2014 | 10.40\% | 9.54\% | 10.13\% | 11.12\% |  |  |  |  |
| 2015 | 9.80\% | 10.33\% | 10.81\% |  |  |  |  |  |
| 2016 | 13.10\% | 12.00\% |  |  |  |  |  |  |
| 2017 | 15.14\% |  |  |  |  |  |  |  |

Median Severity

| on Claims in Excess of \$500,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 1,870,525 | 1,897,416 | 1,638,500 | 1,426,187 | 1,292,676 | 1,122,403 | 1,092,964 | 1,059,376 |
| 2004 | 1,572,672 | 1,667,615 | 1,635,033 | 1,466,714 | 1,278,692 | 1,188,341 | 1,142,355 | 1,142,140 |
| 2005 | 1,587,235 | 1,778,172 | 1,525,931 | 1,290,030 | 1,165,364 | 1,133,478 | 1,088,311 | 1,111,789 |
| 2006 | 1,596,575 | 1,561,904 | 1,422,051 | 1,225,576 | 1,125,012 | 1,103,038 | 1,068,071 | 1,075,001 |
| 2007 | 1,493,459 | 1,469,841 | 1,356,962 | 1,271,855 | 1,150,320 | 1,072,957 | 1,045,187 | 1,036,145 |
| 2008 | 1,377,062 | 1,369,040 | 1,203,205 | 1,085,961 | 1,008,698 | 973,190 | 955,105 | 961,576 |
| 2009 | 1,443,063 | 1,379,530 | 1,318,329 | 1,126,985 | 1,041,463 | 1,063,152 | 1,014,514 | 1,000,663 |
| 2010 | 1,729,192 | 1,708,498 | 1,436,361 | 1,329,843 | 1,210,278 | 1,097,815 | 1,083,658 | 1,089,348 |
| 2011 | 1,644,554 | 1,578,653 | 1,443,159 | 1,263,429 | 1,156,843 | 1,086,879 | 1,050,625 |  |
| 2012 | 1,662,469 | 1,590,226 | 1,515,563 | 1,458,656 | 1,339,956 | 1,258,937 |  |  |
| 2013 | 1,327,407 | 1,315,165 | 1,310,830 | 1,164,056 | 1,103,391 |  |  |  |
| 2014 | 1,590,101 | 1,486,686 | 1,413,076 | 1,295,284 |  |  |  |  |
| 2015 | 1,777,658 | 1,693,592 | 1,613,232 |  |  |  |  |  |
| 2016 | 1,859,683 | 1,721,075 |  |  |  |  |  |  |
| 2017 | 2,001,159 |  |  |  |  |  |  |  |


| on Claims in Excess of \$500,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | , | 4 | 5 | 6 | 7 | 8 |
| 2003 | 866,728 | 913,658 | 821,735 | 742,737 | 729,204 | 707,027 | 700,767 | 711,672 |
| 2004 | 827,255 | 875,244 | 772,132 | 760,725 | 715,829 | 712,192 | 713,607 | 720,782 |
| 2005 | 825,368 | 814,506 | 710,326 | 704,717 | 711,051 | 700,997 | 686,837 | 697,792 |
| 2006 | 809,751 | 770,012 | 739,379 | 713,205 | 711,000 | 701,420 | 691,932 | 695,728 |
| 2007 | 805,589 | 744,439 | 712,814 | 696,427 | 684,367 | 677,511 | 683,218 | 685,018 |
| 2008 | 844,408 | 776,176 | 722,571 | 683,487 | 665,759 | 670,404 | 684,754 | 694,212 |
| 2009 | 829,140 | 747,484 | 713,222 | 676,704 | 657,838 | 662,532 | 674,808 | 664,282 |
| 2010 | 893,022 | 784,927 | 702,366 | 689,490 | 702,851 | 687,631 | 675,461 | 663,209 |
| 2011 | 893,546 | 775,642 | 735,663 | 692,450 | 684,427 | 678,144 | 673,207 |  |
| 2012 | 888,727 | 791,723 | 769,498 | 741,951 | 706,548 | 678,786 |  |  |
| 2013 | 755,646 | 763,410 | 736,311 | 688,180 | 707,509 |  |  |  |
| 2014 | 861,815 | 830,166 | 808,800 | 696,920 |  |  |  |  |
| 2015 | 823,044 | 792,811 | 815,572 |  |  |  |  |  |
| 2016 | 851,764 | 792,811 |  |  |  |  |  |  |
| 2017 | 851,764 |  |  |  |  |  |  |  |

Notes: Incurred Amounts and Severities are first dollar

Source: WCIRB unit statistical data

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

| Number of Claims in Excess of \$1,000,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 73 | 95 | 114 | 135 | 161 | 194 | 248 | 315 |
| 2004 | 57 | 85 | 96 | 109 | 109 | 165 | 216 | 252 |
| 2005 | 58 | 72 | 74 | 95 | 133 | 173 | 208 | 245 |
| 2006 | 67 | 87 | 110 | 145 | 173 | 216 | 258 | 287 |
| 2007 | 66 | 82 | 110 | 134 | 159 | 201 | 235 | 268 |
| 2008 | 69 | 82 | 102 | 125 | 167 | 213 | 242 | 267 |
| 2009 | 66 | 81 | 98 | 121 | 150 | 174 | 202 | 203 |
| 2010 | 70 | 84 | 100 | 122 | 147 | 162 | 176 | 198 |
| 2011 | 73 | 85 | 95 | 110 | 129 | 144 | 155 |  |
| 2012 | 82 | 86 | 99 | 116 | 130 | 146 |  |  |
| 2013 | 63 | 70 | 87 | 98 | 113 |  |  |  |
| 2014 | 91 | 106 | 129 | 154 |  |  |  |  |
| 2015 | 80 | 95 | 102 |  |  |  |  |  |
| 2016 | 98 | 116 |  |  |  |  |  |  |
| 2017 | 147 |  |  |  |  |  |  |  |


| \% of Claims in Excess of \$1,000,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 0.014\% | 0.018\% | 0.022\% | 0.026\% | 0.030\% | 0.037\% | 0.047\% | 0.060\% |
| 2004 | 0.012\% | 0.017\% | 0.019\% | 0.022\% | 0.022\% | 0.033\% | 0.044\% | 0.051\% |
| 2005 | 0.013\% | 0.015\% | 0.016\% | 0.020\% | 0.028\% | 0.037\% | 0.044\% | 0.052\% |
| 2006 | 0.015\% | 0.020\% | 0.025\% | 0.032\% | 0.039\% | 0.048\% | 0.057\% | 0.064\% |
| 2007 | 0.016\% | 0.019\% | 0.026\% | 0.031\% | 0.037\% | 0.047\% | 0.055\% | 0.063\% |
| 2008 | 0.019\% | 0.022\% | 0.027\% | 0.034\% | 0.045\% | 0.057\% | 0.065\% | 0.071\% |
| 2009 | 0.020\% | 0.024\% | 0.029\% | 0.035\% | 0.043\% | 0.050\% | 0.058\% | 0.059\% |
| 2010 | 0.021\% | 0.024\% | 0.029\% | 0.035\% | 0.042\% | 0.046\% | 0.050\% | 0.058\% |
| 2011 | 0.022\% | 0.025\% | 0.027\% | 0.031\% | 0.037\% | 0.041\% | 0.045\% |  |
| 2012 | 0.024\% | 0.024\% | 0.028\% | 0.032\% | 0.036\% | 0.041\% |  |  |
| 2013 | 0.018\% | 0.019\% | 0.024\% | 0.027\% | 0.031\% |  |  |  |
| 2014 | 0.025\% | 0.028\% | 0.034\% | 0.041\% |  |  |  |  |
| 2015 | 0.021\% | 0.025\% | 0.026\% |  |  |  |  |  |
| 2016 | 0.026\% | 0.029\% |  |  |  |  |  |  |
| 2017 | 0.036\% |  |  |  |  |  |  |  |


| \% of Medical Incurred |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PYIRL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 6.84\% | 7.22\% | 7.12\% | 7.66\% | 8.13\% | 8.06\% | 9.50\% | 10.22\% |
| 2004 | 6.37\% | 7.20\% | 7.89\% | 7.93\% | 7.48\% | 9.04\% | 10.13\% | 11.26\% |
| 2005 | 7.42\% | 8.49\% | 7.44\% | 7.05\% | 7.78\% | 9.07\% | 9.75\% | 11.27\% |
| 2006 | 8.25\% | 8.56\% | 8.27\% | 8.40\% | 8.65\% | 9.71\% | 10.53\% | 11.15\% |
| 2007 | 7.04\% | 7.11\% | 7.55\% | 8.38\% | 8.43\% | 9.19\% | 9.67\% | 10.38\% |
| 2008 | 6.40\% | 5.95\% | 5.75\% | 5.95\% | 6.57\% | 7.26\% | 7.89\% | 8.29\% |
| 2009 | 6.42\% | 6.29\% | 6.59\% | 6.50\% | 6.92\% | 7.89\% | 7.85\% | 8.00\% |
| 2010 | 7.47\% | 7.59\% | 7.13\% | 7.32\% | 7.87\% | 7.61\% | 8.07\% | 9.03\% |
| 2011 | 7.41\% | 6.90\% | 6.90\% | 7.06\% | 7.20\% | 7.09\% | 7.23\% |  |
| 2012 | 8.17\% | 7.29\% | 7.38\% | 7.83\% | 8.04\% | 8.29\% |  |  |
| 2013 | 5.50\% | 4.79\% | 5.24\% | 5.09\% | 5.58\% |  |  |  |
| 2014 | 8.23\% | 7.31\% | 7.76\% | 8.01\% |  |  |  |  |
| 2015 | 7.93\% | 8.18\% | 8.23\% |  |  |  |  |  |
| 2016 | 10.73\% | 9.74\% |  |  |  |  |  |  |

Median Severity
on Claims in Excess of $\$ 1,000,000$

| on Claims in Excess of \$1,000,000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2003 | 2,346,394 | 2,313,505 | 2,282,077 | 2,173,422 | 1,756,000 | 1,668,325 | 1,533,770 | 1,489,999 |
| 2004 | 2,129,170 | 2,051,638 | 2,242,484 | 2,120,000 | 2,095,911 | 1,882,020 | 1,721,976 | 1,605,699 |
| 2005 | 1,990,755 | 2,160,065 | 2,089,211 | 1,864,346 | 1,737,110 | 1,666,100 | 1,645,929 | 1,664,019 |
| 2006 | 1,841,931 | 2,120,827 | 2,180,971 | 1,742,043 | 1,742,043 | 1,561,145 | 1,435,234 | 1,445,338 |
| 2007 | 1,953,016 | 2,210,826 | 1,727,733 | 1,835,183 | 1,905,520 | 1,586,274 | 1,614,738 | 1,561,314 |
| 2008 | 1,913,000 | 1,898,126 | 1,830,410 | 1,762,740 | 1,618,687 | 1,495,782 | 1,398,833 | 1,433,919 |
| 2009 | 1,970,712 | 1,711,957 | 1,833,872 | 1,682,373 | 1,512,298 | 1,445,376 | 1,435,699 | 1,492,253 |
| 2010 | 2,153,329 | 2,215,829 | 1,946,786 | 1,814,410 | 1,779,631 | 1,699,538 | 1,668,643 | 1,493,429 |
| 2011 | 2,103,755 | 1,945,519 | 1,945,509 | 1,912,820 | 1,633,108 | 1,520,232 | 1,671,465 |  |
| 2012 | 1,748,313 | 1,981,094 | 2,005,409 | 2,031,639 | 1,945,194 | 1,550,865 |  |  |
| 2013 | 1,749,237 | 1,835,395 | 1,767,043 | 1,768,597 | 1,945,194 |  |  |  |
| 2014 | 1,854,543 | 1,986,862 | 1,581,725 | 1,768,597 |  |  |  |  |
| 2015 | 1,873,825 | 1,817,303 | 1,581,725 |  |  |  |  |  |
| 2016 | 2,120,950 | 1,817,303 |  |  |  |  |  |  |
| 2017 | 2,120,950 |  |  |  |  |  |  |  |

Source: WCIRB unit statistical data

## Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios ${ }^{[1]}$

| CY | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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

| CY |  | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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

| CY |  | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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.
${ }^{\text {[3] }} 2013$ 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.

## Average Paid ALAE ${ }^{[1]}$ per Reported Indemnity Claim - Private Insurers <br> As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | $\underline{87}$ | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  | 4,340 | 4,548 | 4,786 |
| 2001 |  |  |  |  |  |  | 5,159 | 5,480 | 5,819 | 6,017 |
| 2002 |  |  |  |  |  | 5,264 | 5,668 | 6,064 | 6,308 | 6,493 |
| 2003 |  |  |  |  | 4,907 | 5,528 | 6,043 | 6,383 | 6,647 | 6,869 |
| 2004 |  |  |  | 3,570 | 4,548 | 5,212 | 5,673 | 6,022 | 6,283 | 6,495 |
| 2005 |  |  | 2,083 | 3,279 | 4,191 | 4,833 | 5,307 | 5,673 | 5,965 | 6,175 |
| 2006 |  | 797 | 2,176 | 3,410 | 4,328 | 5,022 | 5,550 | 5,920 | 6,211 | 6,471 |
| 2007 | 71 | 849 | 2,340 | 3,613 | 4,619 | 5,393 | 5,993 | 6,429 | 6,768 | 7,039 |
| 2008 | 85 | 944 | 2,494 | 3,933 | 5,103 | 5,975 | 6,595 | 7,096 | 7,468 | 7,729 |
| 2009 | 150 | 1,037 | 2,812 | 4,448 | 5,718 | 6,637 | 7,358 | 7,900 | 8,278 | 8,553 |
| 2010 | 87 | 1,111 | 2,981 | 4,586 | 5,816 | 6,746 | 7,484 | 7,978 | 8,319 | 8,566 |
| 2011 | 86 | 1,127 | 2,942 | 4,520 | 5,796 | 6,818 | 7,470 | 7,939 | 8,265 | 8,373 |
| 2012 | 85 | 1,120 | 3,012 | 4,721 | 6,067 | 6,965 | 7,585 | 7,985 | 8,271 |  |
| 2013 | 98 | 1,202 | 3,276 | 4,985 | 6,201 | 7,014 | 7,540 | 7,898 |  |  |
| 2014 | 140 | 1,340 | 3,480 | 5,147 | 6,288 | 7,009 | 7,498 |  |  |  |
| 2015 | 102 | 1,424 | 3,577 | 5,185 | 6,234 | 6,903 |  |  |  |  |
| 2016 | 108 | 1,443 | 3,640 | 5,215 | 6,220 |  |  |  |  |  |
| 2017 | 121 | 1,524 | 3,737 | 5,231 |  |  |  |  |  |  |
| 2018 | 142 | 1,629 | 3,856 |  |  |  |  |  |  |  |
| 2019 | 149 | 1,639 |  |  |  |  |  |  |  |  |
| 2020 | 138 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | $\underline{111}$ |  |
| 2001 |  |  |  |  |  |  |  | $26.3 \%$ | $27.9 \%$ | $25.7 \%$ |  |
| 2002 |  |  |  |  |  |  | $9.9 \%$ | $10.7 \%$ | $8.4 \%$ | $7.9 \%$ |  |
| 2003 |  |  |  |  |  | $5.0 \%$ | $6.6 \%$ | $5.2 \%$ | $5.4 \%$ | $5.8 \%$ |  |
| 2004 |  |  |  |  | $-7.3 \%$ | $-5.7 \%$ | $-6.1 \%$ | $-5.6 \%$ | $-5.5 \%$ | $-5.5 \%$ |  |
| 2005 |  |  |  | $-8.1 \%$ | $-7.8 \%$ | $-7.3 \%$ | $-6.5 \%$ | $-5.8 \%$ | $-5.0 \%$ | $-4.9 \%$ |  |
| 2006 |  |  | $4.4 \%$ | $4.0 \%$ | $3.3 \%$ | $3.9 \%$ | $4.6 \%$ | $4.4 \%$ | $4.1 \%$ | $4.8 \%$ |  |
| 2007 |  | $6.5 \%$ | $7.5 \%$ | $5.9 \%$ | $6.7 \%$ | $7.4 \%$ | $8.0 \%$ | $8.6 \%$ | $9.0 \%$ | $8.8 \%$ |  |
| 2008 | $20.3 \%$ | $11.3 \%$ | $6.6 \%$ | $8.9 \%$ | $10.5 \%$ | $10.8 \%$ | $10.0 \%$ | $10.4 \%$ | $10.3 \%$ | $9.8 \%$ |  |
| 2009 | $76.5 \%$ | $9.8 \%$ | $12.8 \%$ | $13.1 \%$ | $12.0 \%$ | $11.1 \%$ | $11.6 \%$ | $11.3 \%$ | $10.8 \%$ | $10.7 \%$ |  |
| 2010 | $-41.7 \%$ | $7.1 \%$ | $6.0 \%$ | $3.1 \%$ | $1.7 \%$ | $1.6 \%$ | $1.7 \%$ | $1.0 \%$ | $0.5 \%$ | $0.2 \%$ |  |
| 2011 | $-1.4 \%$ | $1.4 \%$ | $-1.3 \%$ | $-1.4 \%$ | $-0.3 \%$ | $1.1 \%$ | $-0.2 \%$ | $-0.5 \%$ | $-0.6 \%$ | $-2.3 \%$ |  |
| 2012 | $-1.2 \%$ | $-0.5 \%$ | $2.4 \%$ | $4.4 \%$ | $4.7 \%$ | $2.1 \%$ | $1.5 \%$ | $0.6 \%$ | $0.1 \%$ |  |  |
| 2013 | $15.4 \%$ | $7.3 \%$ | $8.8 \%$ | $5.6 \%$ | $2.2 \%$ | $0.7 \%$ | $-0.6 \%$ | $-1.1 \%$ |  |  |  |
| 2014 | $42.0 \%$ | $11.5 \%$ | $6.2 \%$ | $3.3 \%$ | $1.4 \%$ | $-0.1 \%$ | $-0.6 \%$ |  |  |  |  |
| 2015 | $-26.9 \%$ | $6.3 \%$ | $2.8 \%$ | $0.7 \%$ | $-0.9 \%$ | $-1.5 \%$ |  |  |  |  |  |
| 2016 | $6.2 \%$ | $1.3 \%$ | $1.8 \%$ | $0.6 \%$ | $-0.2 \%$ |  |  |  |  |  |  |
| 2017 | $11.8 \%$ | $5.6 \%$ | $2.7 \%$ | $0.3 \%$ |  |  |  |  |  |  |  |
| 2018 | $17.2 \%$ | $6.9 \%$ | $3.2 \%$ |  |  |  |  |  |  |  |  |
| 2019 | $5.0 \%$ | $0.6 \%$ |  |  |  |  |  |  |  |  |  |
| 2020 | $-7.7 \%$ |  |  |  |  |  |  |  |  |  |  |


| Annual Trend ${ }^{[2]}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Year | 4.3\% | 5.6\% | 4.9\% | 4.0\% | 3.2\% | 3.1\% | 3.3\% | 4.0\% | 4.3\% | 4.3\% |
| $\mathrm{R}^{3}$ | 0.421 | 0.975 | 0.961 | 0.915 | 0.796 | 0.779 | 0.817 | 0.815 | 0.814 | 0.805 |
| 5-Year | 7.1\% | 4.1\% | 2.5\% | 1.1\% | 0.6\% | 0.3\% | 0.1\% | 0.0\% | 2.0\% | 4.6\% |
| $\mathrm{R}^{4}$ | 0.694 | 0.938 | 0.992 | 0.837 | 0.427 | 0.171 | 0.110 | 0.000 | 0.477 | 0.705 |

[^12]Ratio of Paid ALAE to Paid Loss - Private Insurers
As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  | 0.107 | 0.107 | 0.109 |
| 2001 |  |  |  |  |  |  | 0.118 | 0.119 | 0.121 | 0.122 |
| 2002 |  |  |  |  |  | 0.132 | 0.134 | 0.137 | 0.137 | 0.138 |
| 2003 |  |  |  |  | 0.136 | 0.141 | 0.144 | 0.146 | 0.147 | 0.148 |
| 2004 |  |  |  | 0.139 | 0.150 | 0.155 | 0.158 | 0.159 | 0.160 | 0.160 |
| 2005 |  |  | 0.113 | 0.133 | 0.144 | 0.149 | 0.152 | 0.154 | 0.155 | 0.154 |
| 2006 |  | 0.076 | 0.112 | 0.129 | 0.138 | 0.143 | 0.146 | 0.148 | 0.148 | 0.150 |
| 2007 | 0.032 | 0.077 | 0.112 | 0.127 | 0.135 | 0.142 | 0.145 | 0.146 | 0.148 | 0.148 |
| 2008 | 0.037 | 0.078 | 0.110 | 0.126 | 0.136 | 0.141 | 0.143 | 0.146 | 0.147 | 0.148 |
| 2009 | 0.059 | 0.084 | 0.122 | 0.138 | 0.146 | 0.150 | 0.153 | 0.155 | 0.157 | 0.158 |
| 2010 | 0.033 | 0.092 | 0.130 | 0.143 | 0.148 | 0.152 | 0.156 | 0.158 | 0.159 | 0.160 |
| 2011 | 0.033 | 0.099 | 0.133 | 0.146 | 0.154 | 0.162 | 0.165 | 0.167 | 0.168 | 0.166 |
| 2012 | 0.034 | 0.098 | 0.138 | 0.155 | 0.166 | 0.170 | 0.173 | 0.174 | 0.172 |  |
| 2013 | 0.041 | 0.109 | 0.154 | 0.168 | 0.174 | 0.179 | 0.181 | 0.183 |  |  |
| 2014 | 0.058 | 0.121 | 0.163 | 0.172 | 0.177 | 0.180 | 0.189 |  |  |  |
| 2015 | 0.039 | 0.128 | 0.163 | 0.171 | 0.175 | 0.178 |  |  |  |  |
| 2016 | 0.046 | 0.124 | 0.165 | 0.174 | 0.178 |  |  |  |  |  |
| 2017 | 0.046 | 0.128 | 0.166 | 0.173 |  |  |  |  |  |  |
| 2018 | 0.050 | 0.130 | 0.166 |  |  |  |  |  |  |  |
| 2019 | 0.050 | 0.132 |  |  |  |  |  |  |  |  |
| 2020 | 0.048 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 2001 |  |  |  |  |  |  |  | 11.6\% | 13.2\% | 12.4\% |
| 2002 |  |  |  |  |  |  | 13.7\% | 14.7\% | 13.2\% | 13.4\% |
| 2003 |  |  |  |  |  | 7.2\% | 7.7\% | 6.9\% | 7.3\% | 7.1\% |
| 2004 |  |  |  |  | 10.1\% | 10.1\% | 9.3\% | 9.2\% | 8.5\% | 7.9\% |
| 2005 |  |  |  | -4.0\% | -4.1\% | -3.8\% | -3.3\% | -3.2\% | -3.0\% | -3.5\% |
| 2006 |  |  | -1.2\% | -3.5\% | -4.2\% | -4.3\% | -4.2\% | -4.0\% | -4.2\% | -2.8\% |
| 2007 |  | 1.8\% | 0.1\% | -1.7\% | -1.8\% | -0.8\% | -0.7\% | -1.2\% | -0.6\% | -1.1\% |
| 2008 | 16.2\% | 0.5\% | -1.5\% | -0.4\% | 0.5\% | -0.2\% | -1.1\% | -0.4\% | -0.3\% | -0.1\% |
| 2009 | 58.8\% | 8.7\% | 10.4\% | 9.6\% | 7.8\% | 6.0\% | 6.6\% | 6.5\% | 6.4\% | 6.2\% |
| 2010 | -43.4\% | 9.0\% | 7.2\% | 3.2\% | 1.0\% | 1.7\% | 2.3\% | 1.8\% | 1.7\% | 1.6\% |
| 2011 | -0.8\% | 7.1\% | 2.1\% | 2.4\% | 4.4\% | 6.2\% | 5.2\% | 5.6\% | 5.2\% | 3.6\% |
| 2012 | 4.0\% | -0.5\% | 3.6\% | 6.1\% | 7.6\% | 5.3\% | 5.3\% | 4.6\% | 2.8\% |  |
| 2013 | 20.1\% | 10.8\% | 11.5\% | 8.5\% | 4.9\% | 4.9\% | 4.5\% | 4.8\% |  |  |
| 2014 | 40.2\% | 11.4\% | 6.3\% | 2.3\% | 1.4\% | 0.5\% | 4.4\% |  |  |  |
| 2015 | -32.6\% | 5.8\% | -0.2\% | -0.5\% | -1.0\% | -1.1\% |  |  |  |  |
| 2016 | 17.6\% | -2.8\% | 1.0\% | 1.6\% | 1.9\% |  |  |  |  |  |
| 2017 | 0.9\% | 2.6\% | 0.8\% | -0.4\% |  |  |  |  |  |  |
| 2018 | 8.2\% | 2.2\% | 0.1\% |  |  |  |  |  |  |  |
| 2019 | -0.6\% | 1.2\% |  |  |  |  |  |  |  |  |
| 2020 | -3.4\% |  |  |  |  |  |  |  |  |  |

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.

Source: WCIRB a WCIRB accident year experience calls.

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

First and Second Survey Level, Open Claims Only

## First Survey Level

|  | Northern California | Southern California | CT Claims | Non-CT Claims |
| :---: | :---: | :---: | :---: | :---: |
| \% of Represented |  |  |  |  |
| AY 2011 | 66.1\% | 80.9\% | 77.6\% | 76.3\% |
| AY 2012 | 67.2\% | 82.4\% | 89.8\% | 76.0\% |
| AY 2013 | 68.7\% | 84.2\% | 90.1\% | 77.9\% |
| AY 2014 | 67.8\% | 83.1\% | 92.3\% | 76.2\% |
| AY 2015 | 66.5\% | 81.4\% | 89.1\% | 74.9\% |
| AY 2016 | 65.0\% | 79.6\% | 89.2\% | 73.0\% |
| AY 2017 | 61.2\% | 75.0\% | 90.9\% | 67.8\% |

## Second Survey Level

|  | Northern <br> California | Southern <br> California | CT Claims | Non-CT Claims |
| :---: | :---: | :---: | :---: | :---: |
| \% of Represented |  |  |  |  |
| AY 2011 | 69.1\% | 84.7\% | 79.6\% | 80.1\% |
| AY 2012 | 71.4\% | 87.4\% | 92.5\% | 81.0\% |
| AY 2013 | 71.7\% | 87.8\% | 91.7\% | 81.4\% |
| AY 2014 | 69.3\% | 84.9\% | 92.6\% | 78.0\% |
| AY 2015 | 67.9\% | 83.2\% | 93.3\% | 76.0\% |
| AY 2016 | 68.2\% | 83.6\% | 92.1\% | 76.7\% |

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

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

Distribution of Total ALAE \& MCCP Components - Private Insurers

| Calendar Year | MCCP | Defense Expense | Other Paid ALAE | Paid <br> ALAE |
| :---: | :---: | :---: | :---: | :---: |
| 2005 | 20.2\% | 54.9\% | 24.9\% | 100.0\% |
| 2006 | 22.6\% | 44.3\% | 33.1\% | 100.0\% |
| 2007 | 24.2\% | 49.0\% | 26.8\% | 100.0\% |
| 2008 | 31.8\% | 43.0\% | 25.2\% | 100.0\% |
| 2009 | 27.8\% | 45.4\% | 26.8\% | 100.0\% |
| 2010 | 27.7\% | 45.4\% | 26.9\% | 100.0\% |
| 2011 | 27.3\% | 46.1\% | 26.6\% | 100.0\% |
| 2012 | 27.7\% | 46.3\% | 26.0\% | 100.0\% |
| 2013 | 28.0\% | 47.1\% | 24.9\% | 100.0\% |
| 2014 | 28.2\% | 45.7\% | 26.2\% | 100.0\% |
| 2015 | 28.3\% | 42.5\% | 29.2\% | 100.0\% |
| 2016 | 26.7\% | 43.6\% | 29.7\% | 100.0\% |
| 2017 | 25.6\% | 45.9\% | 28.5\% | 100.0\% |
| 2018 | 25.6\% | 44.3\% | 30.1\% | 100.0\% |
| 2019 | 25.7\% | 46.4\% | 28.0\% | 100.0\% |

Source: WCIRB expense calls, aggregate indemnity and medical cost calls and quarterly calls for experience

## Applicant Attorney Expense Paid - Private Insurers

\(\left.$$
\begin{array}{cccc}\begin{array}{c}\text { Calendar } \\
\text { Year }\end{array} & \begin{array}{c}\text { Applicant Attorney } \\
\text { Amounts paid } \\
\text { (in \$millions) }\end{array} & \begin{array}{c}\text { Incurred Losses } \\
\text { (in \$millions) }\end{array} & \begin{array}{c}\text { Applicant Attorney Expenses } \\
\text { Paid as a Percent of }\end{array}
$$ <br>

Incurred Losses\end{array}\right]\)| In |
| :--- |
| 2003 |

Source: WCIRB expense calls and quarterly calls for experience

# Median Expense Costs per Open Represented PD Claim 

Private Insurers Only

First Survey Level

|  | Type of Expense |  |  |
| :---: | :---: | :---: | :---: |
| Northern California | ALAE |  | Remaining | Applicant Attorney

## Southern California

| AY 2012 | 5,734 | 2,805 | 3,245 |
| :--- | :--- | :--- | :--- |
| AY 2013 | 5,618 | 2,752 | 2,803 |
| AY 2014 | 5,433 | 2,318 | 3,614 |
| AY 2015 | 4,745 | 1,236 | 4,683 |
| AY 2016 | 5,021 | 1,395 | 5,335 |
| AY 2017 | 3,838 | 1,261 | 4,143 |

Second Survey Level

|  | Type of Expense |  |  |
| :---: | :---: | :---: | :---: |
| Northern California | ALAE |  | Remaining | Applicant Attorney

## Southern California

| AY 2011 | 7,013 | 3,101 | 4,869 |
| :--- | :--- | :--- | :--- |
| AY 2012 | 7,177 | 3,200 | 4,563 |
| AY 2013 | 6,939 | 3,048 | 4,563 |
| AY 2014 | 6,633 | 2,165 | 5,968 |
| AY 2015 | 4,732 | 1,364 | 5,412 |
| AY 2016 | 5,674 | 1,194 | 5,918 |

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

Source: WCIRB Permanent Disability Claim Survey
Data is recast from survey proportions to true proportions. Excludes $\$ 0$ paid amounts.

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

| Service Year | Number of Med-Legal Reports by Service Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | 56,933 | 15,782 | 27,450 | 100,165 | --- | --- | --- | --- |
| 2014 | 63,209 | 17,103 | 27,757 | 108,069 | 11.0\% | 8.4\% | 1.1\% | 7.9\% |
| 2015 | 64,827 | 16,969 | 27,657 | 109,453 | 2.6\% | -0.8\% | -0.4\% | 1.3\% |
| 2016 | 70,313 | 20,881 | 28,290 | 119,484 | 8.5\% | 23.1\% | 2.3\% | 9.2\% |
| 2017 | 67,054 | 20,345 | 27,657 | 115,056 | -4.6\% | -2.6\% | -2.2\% | -3.7\% |
| 2018 | 64,827 | 21,006 | 27,575 | 113,408 | -3.3\% | 3.2\% | -0.3\% | -1.4\% |
| 2019 | 67,335 | 20,301 | 26,301 | 113,937 | 3.9\% | -3.4\% | -4.6\% | 0.5\% |


| Service Year | Number of Med-Legal Reports per Claim ${ }^{[1]}$ by Service Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | 0.21 | 0.21 | 0.25 | 0.22 | --- | --- | --- | --- |
| 2014 | 0.22 | 0.23 | 0.25 | 0.23 | 6.5\% | 7.5\% | 0.3\% | 4.9\% |
| 2015 | 0.22 | 0.24 | 0.25 | 0.23 | -2.7\% | 7.6\% | 0.4\% | -0.5\% |
| 2016 | 0.23 | 0.28 | 0.25 | 0.24 | 8.3\% | 13.7\% | -0.2\% | 7.2\% |
| 2017 | 0.23 | 0.26 | 0.24 | 0.24 | -2.7\% | -6.3\% | -5.6\% | -3.9\% |
| 2018 | 0.22 | 0.27 | 0.24 | 0.23 | -2.2\% | 3.7\% | 0.1\% | -0.6\% |
| 2019 | 0.23 | 0.26 | 0.22 | 0.24 | 4.0\% | -3.2\% | -4.5\% | 0.6\% |


| Service | Med-Legal Payment per report by Service Year on All Claims ${ }^{[2]}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | \$1,689 | \$1,064 | \$1,305 | \$1,485 | --- | --- | --- | --- |
| 2014 | \$1,859 | \$1,222 | \$1,382 | \$1,636 | 10.1\% | 14.8\% | 6.0\% | 10.1\% |
| 2015 | \$1,821 | \$1,285 | \$1,368 | \$1,624 | -2.0\% | 5.1\% | -1.1\% | -0.8\% |
| 2016 | \$1,878 | \$1,244 | \$1,354 | \$1,643 | 3.1\% | -3.2\% | -1.0\% | 1.2\% |
| 2017 | \$1,692 | \$1,029 | \$1,242 | \$1,467 | -9.9\% | -17.3\% | -8.3\% | -10.7\% |
| 2018 | \$1,631 | \$1,028 | \$1,236 | \$1,423 | -3.6\% | -0.2\% | -0.5\% | -3.0\% |
| 2019 | \$1,618 | \$1,124 | \$1,260 | \$1,447 | -0.8\% | 9.4\% | 1.9\% | 1.7\% |

${ }^{[1]}$ Includes claims with any medical transaction for the service year.
${ }^{[2]}$ Includes services on all claims on the 10 most recent accident years for the service year and where payment for the service was made within the same service year.
Source: WCIRB medical data call (MDC).

## Average Paid MCCP per Reported Indemnity Claim - Statewide <br> As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ |
| 2012 | 197 | 891 | 1,506 | 1,819 | 1,984 | 2,127 | 2,228 | 2,323 |
| 2013 | 187 | 841 | 1,363 | 1,659 | 1,861 | 1,990 | 2,090 | 2,145 |
| 2014 | 169 | 784 | 1,312 | 1,639 | 1,828 | 1,954 | 2,032 |  |
| 2015 | 178 | 777 | 1,308 | 1,596 | 1,783 | 1,888 |  |  |
| 2016 | 156 | 766 | 1,237 | 1,507 | 1,666 |  |  |  |
| 2017 | 169 | 748 | 1,227 | 1,503 |  |  |  |  |
| 2018 | 174 | 808 | 1,277 |  |  |  |  |  |
| 2019 | 191 | 767 |  |  |  |  |  |  |
| 2020 | 170 |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ |
| 2013 | $-4.9 \%$ | $-5.7 \%$ | $-9.5 \%$ | $-8.8 \%$ | $-6.2 \%$ | $-6.5 \%$ | $-6.2 \%$ | $-7.7 \%$ |
| 2014 | $-9.5 \%$ | $-6.8 \%$ | $-3.7 \%$ | $-1.2 \%$ | $-1.8 \%$ | $-1.8 \%$ | $-2.8 \%$ |  |
| 2015 | $4.9 \%$ | $-0.8 \%$ | $-0.3 \%$ | $-2.6 \%$ | $-2.5 \%$ | $-3.4 \%$ |  |  |
| 2016 | $-12.0 \%$ | $-1.5 \%$ | $-5.4 \%$ | $-5.6 \%$ | $-6.6 \%$ |  |  |  |
| 2017 | $8.3 \%$ | $-2.3 \%$ | $-0.8 \%$ | $-0.3 \%$ |  |  |  |  |
| 2018 | $3.0 \%$ | $8.0 \%$ | $4.1 \%$ |  |  |  |  |  |
| 2019 | $9.3 \%$ | $-5.0 \%$ |  |  |  |  |  |  |
| 2020 | $-11.0 \%$ |  |  |  |  |  |  |  |

Annual Trend ${ }^{[1]}$

| All-Year | $-0.9 \%$ | $-1.7 \%$ | $-2.7 \%$ | $-3.6 \%$ | $-3.8 \%$ | $-3.7 \%$ | $-4.5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $R^{2}$ | 0.115 | 0.499 | 0.716 | 0.914 | 0.950 | 0.937 | 0.951 |

Notes
${ }^{[1]}$ Trend is based on exponential distribution.
Source: WCIRB accident year experience calls.

## Item AC20-08-02 1/1/2021 Filing - Loss Adjustment Expense Experience Review

Staff has developed the preliminary indicated ratio of loss adjustment expense (LAE) to loss for the January 1, 2021 to August 31, 2021 policy period based on calendar year unallocated loss adjustment expense (ULAE) experience through calendar year 2019, accident year allocated loss adjustment expense (ALAE) experience as of March 31, 2020, and projection methodologies consistent with those reflected in the WCIRB's January 1, 2020 Pure Premium Rate Filing. The indicated ULAE and ALAE projections, including projections for the cost of medical cost containment programs (MCCP), are summarized separately below.

The claim frequency projections included in the methodologies to compute the preliminary indicated LAE to loss ratios are based on those reviewed at the April 2, 2020 meeting and are prior to reflecting the impact of COVID-19 and the resulting economic downturn. These projections will be discussed in detail at the meeting (see Items AC20-04-04 and AC20-08-04). The projected loss ratios underlying the projected LAE to loss ratios are also prior to fully reflecting the impact of COVID-19 and resulting economic downturn.

## ULAE Projection

Beginning with the WCIRB's 2015 Expense Call, the WCIRB has collected information related to (a) negative "service fee" type adjustments that are sometimes reflected in reported countrywide ULAE,
(b) losses on claims on large deductible policies and/or handled by third-party administrators (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. ${ }^{1}$ This information is used to more accurately reflect the cost of handling claims in California primarily for insurers that make use of TPA or make other adjustments to countrywide reported ULAE costs that ultimately are apportioned to California. Beginning with the WCIRB's 2017 Expense Call, the WCIRB has also collected information related to countrywide open indemnity claim counts in order to more accurately estimate California's share of countrywide paid ULAE. ${ }^{2}$

The approach to derive the adjusted calendar year California paid ULAE for ratemaking purposes, as reflected in the January 1, 2020 Pure Premium Rate Filing, involves several steps. First, 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 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 computed in the first step described above to adjusted countrywide paid losses computed in the second step. Fourth, the adjusted countrywide paid ULAE was derived by multiplying the adjusted countrywide paid ULAE ratio by the reported countrywide paid losses. Finally, the adjusted countrywide paid ULAE was apportioned to California based on California's share of the insurer's countrywide indemnity claim counts open at the end of the previous calendar year.

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 staff believes open indemnity claim counts is a reasonable measure to apportion countrywide ULAE to California, some insurers may use a more detailed and accurate method

[^13]to derive the California ULAE. Given that these insurers do not require special adjustments to the reported paid ULAE amounts, 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 these insurers in lieu of the formulaic approach discussed above.

Exhibit 1 shows calendar year paid ALAE and ULAE as ratios to paid losses by type of insurer. Calendar years 2016 through 2019 ULAE have been computed as described above and include an apportionment of countrywide ULAE to California based on open indemnity claim counts. Calendar year 2015 ULAE is adjusted as described above but reflects an apportionment of countrywide ULAE to California based on paid losses. In addition, as discussed at prior meetings and reflected in prior pure premium rate filings, the ULAE for calendar years 2013 and 2014 also reflect partial adjustments for the issues addressed by the changes to the Expense Call for several large national insurers. As a result of these adjustments and enhancements, the ULAE ratios shown on Exhibit 1 for "national" insurers have become increasingly comparable to those for other private insurers since 2013. Also, as discussed at prior meetings, ULAE ratios for State Compensation Insurance Fund (State Fund) are much higher than those of other insurers.

Exhibit 2 shows the average calendar year paid ULAE per open indemnity claim for private insurers. The ULAE severities for calendar years 2016 through 2019 shown on Exhibit 2 were computed based on the approach described above and, as a result, are not comparable to the ULAE severities for prior years, which for 2013 through 2015 only partially reflect the adjustments discussed above and, for prior to 2013, are based solely on the California ULAE reported by insurers. After increasing in 2017 and 2018, adjusted private insurer paid ULAE per open indemnity claim decreased by 8\% in 2019.

Exhibits 3.1 through 3.5 show the preliminary projection of ULAE to loss based on the relationship of calendar year paid ULAE to the number of indemnity claims open the beginning of the calendar year. ${ }^{3}$ As in the last several pure premium rate filings, the ULAE projection shown in Exhibit 3.5 is based on statewide claim count and loss projections but using the estimated paid ULAE per open indemnity claim based on the experience of private insurers only. The ULAE projection shown in Exhibit 3.5 is based on the average of ULAE severities from the latest two calendar years. As in the January 1, 2020 Pure Premium Rate Filing, the projected ULAE severity trend was based on the average of the UCLA Anderson Forecast and California Department of Finance projected annual growth rates in California wage levels as reflected in the analysis of projected losses (Item AC20-06-01) and have not fully been adjusted for the pandemic related economic slowdown. As shown in Exhibit 3.5, the projected ratio of ULAE to loss based on this method for January 1, 2021 to August 31, 2021 policies is $14.4 \%$.

Exhibit 4 shows the projection of ULAE to loss based on the relationship of calendar year ULAE paid to calendar year paid losses. The ULAE projection shown in Exhibit 4 is based on statewide loss to premium information and paid ULAE to paid loss ratios based on the experience of private insurers only. As with the ULAE projection shown in Exhibit 3.5, the projected ratio of ULAE to losses shown in Exhibit 4 is based on the average of calendar years 2018 and 2019. The projected ratio of ULAE to loss based on this method for January 1, 2021 to August 31, 2021 policies is $13.3 \%$.

As in the last several pure premium rate filings, the projected ratio of ULAE to losses has been based on the average of the projections resulting from the two methodologies described above based on statewide data and average ULAE costs from private insurers (see Exhibits 3.5 and 4). (The ULAE experience of State Fund has been excluded for reasons that have been discussed at prior Committee meetings and in prior pure premium rate filings and California Department of Insurance decisions.) The preliminary ULAE projection for January 1, 2021 to August 31, 2021 policies based on this approach is $13.9 \%$. For comparison purposes, the projected ULAE to loss ratio reflected in the January 1, 2020 Pure Premium Rate Filing was $14.7 \%$.

Table 1 shows the projected ratio of ULAE to losses based on the January 1, 2020 Pure Premium Rate Filing methodology using statewide data and private insurer average ULAE. Table 1 also shows

[^14]alternative ULAE projections based on (a) the January 1, 2020 Pure Premium Rate Filing methodology but projected based on calendar year 2019 only as shown in Exhibits 5 and 6, (b) the projection of ULAE paid to a weighted number of indemnity claims as shown in Exhibit 7, and (c) projections based on recent calendar year ratios of paid ULAE to paid losses.

## Table 1: Projections of ULAE to Loss

| ULAE Projection Method | Statewide with <br> Private Insurer <br> Average ULAE |
| :--- | :---: |
| January 1, 2020 Pure Premium Rate Filing Methodology <br> Paid ULAE per Open Indemnity Claim Applied to the Latest | $14.4 \%$ |
| Two Years |  |
| Paid ULAE to Paid Losses Applied to the Latest Two Years | $13.3 \%$ |
| Average of Open Indemnity Claim-Based and Paid Loss- <br> Based Projections | $\mathbf{1 3 . 9 \%}$ |
| Alternative Methodologies |  |
| Paid ULAE per Open Indemnity Claim Applied to the Latest <br> Year Only | $13.5 \%$ |
| Paid ULAE to Paid Losses Applied to the Latest Year Only <br> Paid ULAE per Weighted Open Indemnity Claim Applied to <br> the Latest Two Years <br> Latest Two Calendar Year Paid ULAE to Loss Ratios <br> Latest Calendar Year Paid ULAE to Loss Ratio | $12.6 \%$ |

## ALAE Projection - Excluding MCCP Costs

For a number of years, the WCIRB has based the ALAE projection on a methodology that projects future ALAE as a function of the anticipated future number of indemnity claims and private insurer average ALAE per indemnity claim. (The ALAE projection excludes MCCP costs, which are discussed separately below.)

Exhibit 8.1 shows private insurer average paid ALAE per reported indemnity claim by accident year. Exhibit 8.2 shows private insurer ratios of paid ALAE to paid losses. Exhibit 9 show private insurer annual ALAE severity growth percentages based on the estimated ultimate ALAE per indemnity claim, while Exhibit 10 shows private insurer annual ALAE growth percentages based on ratios of incremental calendar year paid ALAE per indemnity claims inventory.

Exhibits 11.1 through 11.4 show the preliminary ALAE projection excluding MCCP costs, which is based on statewide claim and loss projections and private insurer average ALAE per indemnity claim. ${ }^{4}$ In the January 1, 2020 Pure Premium Rate Filing, the WCIRB reflected an adjustment to the cumulative paid ALAE development factor for accident year 2017 to reflect the impact of an increase in claim settlement rates for accident year 2017. The ALAE projection in this analysis is primarily predicated on paid ALAE from accident years 2018 and 2019 (compared to 2017 and 2018 in the January 1, 2020 Pure Premium Rate Filing). As shown in Exhibit 11.2 of Item AC20-06-01, claim settlement rate changes for accident years 2018 and 2019 have been modest. As a result, this adjustment based on cumulative paid ALAE development is not reflected in the projected paid ALAE development for accident years 2018 and 2019 shown in Exhibit 11.2. Staff will review the approach to adjust paid ALAE development for shifting claim settlement rates with the Committee at the meeting (see Item AC19-08-04).

[^15]The projection shown in Exhibit 11.4 was computed using a $2 \%$ ALAE severity trend selected based on the approximate average of the private insurer longer-term (post-2005) and shorter-term (five-year) growth rates of (a) estimated ultimate accident year ALAE per indemnity claim (Exhibit 9) and (b) incremental paid calendar year ALAE per open indemnity claim (Exhibit 10), which is consistent with the methodology used to select the ALAE severity trend in the last several pure premium rate filings. ${ }^{5}$ (The projected ALAE severity trend reflected in the January 1, 2020 Premium Rate Filing was $2.5 \%$.) The projected ratio of ALAE to loss based on this method for January 1, 2021 to August 31, 2021 policies, prior to adjustment for reforms, which is shown in line (f) of Exhibit 11.4, is $17.8 \%$.

Effective in 2017, Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) included several provisions related to lien filings. As discussed at prior meetings and in prior pure premium rate filings, liens incur significant LAE costs in addition to the settlement costs paid to the lien claimant. In the January 1, 2020 Pure Premium Rate Filing, the WCIRB estimated that SB 1160 and AB 1244 would reduce lien filings by $60 \%$, resulting in a $9.6 \%$ overall decrease in ALAE. Liens are typically not filed and paid on claims until much later. As a result, while some of the impact of the reforms is already reflected in the emerging paid ALAE for accident years 2017 and later and in the ALAE development factors, a significant portion is not yet reflected. To reflect the full impact of these reforms, consistent with the January 1, 2020 Pure Premium Rate Filing, staff recommends including a separate adjustment to the projected ALAE ratio. This adjustment, which is shown in line ( g ) of Exhibit 11.4, is based on the full impact of a $9.6 \%$ reduction in ALAE costs judgmentally tempered by $50 \%$ based on the estimated average percentage of 167-month ALAE costs paid as of March 31, 2020 for accident years 2017 and 2018. ${ }^{6}$

As shown in Exhibit 11.4, the preliminary projected ratio of ALAE (excluding MCCP) to loss based on statewide data and private insurer average ALAE costs and after reflecting the impact of SB 1160 and AB 1244 is $17.0 \%$. For comparison purposes, the projected ALAE excluding MCCP costs to loss ratio reflected in the January 1, 2020 Pure Premium Rate Filing was $17.2 \%$.

For informational purposes, the WCIRB has computed additional ALAE projections (excluding MCCP) based on a number of alternative methodologies with underlying assumptions that differ from those reflected in the January 1, 2020 Pure Premium Rate Filing ALAE projection methodology. Specifically, ALAE projections based on the following methodologies and using statewide data with private insurer ALAE have been included:

1. Projected Ultimate ALAE per Indemnity Claim and Future Number of Indemnity Claims Projection Based on the Latest Year - Exhibit 12
2. Latest Year Paid ALAE Ratio Development Compared to Losses - Projection Based on the Average of the Latest Two Years - Exhibit 13
3. Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses - Projection Based on the Average of the Latest Two Years - Exhibits 14.1 and 14.2

The ALAE projections for January 1, 2021 to August 31, 2021 policies derived based on the approach used in the January 1, 2020 Pure Premium Rate Filing and each of the alternative ALAE projection methodologies are shown in Table 2. ${ }^{7}$

[^16]Table 2: Projections of ALAE (Excluding MCCP) to Loss

| ALAE Projection Method | Statewide with <br> Private Insurer <br> Average ALAE |
| :---: | :---: |
| January 1, 2020 Pure Premium Rate Filing Methodology <br> Projected Ultimate ALAE per Indemnity Claim - Trend Applied <br> to the Latest Two Years | $\mathbf{1 7 . 0 \%}$ |
| Alternative Methodologies <br> Projected Ultimate ALAE per Indemnity Claim - Trend Applied <br> to the Latest Year | $17.0 \%$ |
| Latest Year Paid ALAE Ratio Development Compared to <br> Losses - Projection Based on Latest Two Years | $17.1 \%$ |
| Latest Year Paid ALAE to Paid Indemnity Development <br> Compared to Losses - Projection Based on Latest Two Years | $16.3 \%$ |

ALAE Projection - MCCP Costs
As in the last several pure premium rate filings, the projection of MCCP costs is based on a methodology analogous to that used for ALAE excluding MCCP costs and using statewide claim and MCCP cost data.

Exhibit 15 shows statewide average paid MCCP per reported indemnity claim by accident year. Exhibit 16 shows statewide annual MCCP severity growth percentages based on estimated accident year ultimate MCCP costs per indemnity claim. Exhibit 17 shows statewide annual MCCP severity growth percentages based on ratios of calendar year paid MCCP costs per indemnity claims inventory.

Exhibits 18.1 and 18.2 show the preliminary projection of MCCP costs based on statewide data. Projected MCCP development through 99 months is based on the latest year paid MCCP age-to-age factor, while projected MCCP development after 99 months is based on the selected paid medical 99-toultimate development factor. ${ }^{8}$ Exhibit 18.2 shows the projected ratio of MCCP to loss based on applying separate frequency and severity trends to the latest two years' projected ultimate indemnity claim counts and ultimate MCCP per indemnity claim, which is consistent with the methodology reflected in the last several pure premium rate filings. ${ }^{9}$ A $0 \%$ MCCP severity trend was selected based on the approximate average rates of growth in (a) estimated ultimate accident year MCCP costs per indemnity claim from 2012 through 2019 (Exhibit 16) and (b) statewide calendar year MCCP per indemnity claims inventory from 2009 through 2019 (Exhibit 17). (The projected MCCP severity trend reflected in the January 1, 2020 Premium Rate Filing based on this approach was also 0\%.) The preliminary projected ratio of MCCP to loss based on this methodology is $4.3 \%$. For comparison purposes, the projected MCCP to loss ratio reflected in the January 1, 2020 Pure Premium Rate Filing was $4.5 \%$.

For informational purposes, the WCIRB has computed additional MCCP cost projections based on a number of alternative methodologies with underlying assumptions that differ from those reflected in the January 1, 2020 Pure Premium Rate Filing MCCP projection methodology. Specifically, MCCP cost projections based on the following methodologies have been included:

1. Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims Projection Based on the Latest Year - Exhibit 19
2. Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims - Trend Based on Accident Year Ultimate MCCP per Indemnity Claim Applied to the Latest Two Years Exhibit 20

[^17]3. Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims - Trend Based on Calendar Year Paid MCCP per Open Indemnity Claim Applied to the Latest Two Years - Exhibit 21

The MCCP cost projections for January 1, 2021 to August 31, 2021 policies derived based on the approach used in the January 1, 2020 Pure Premium Rate Filing and each of the alternative MCCP projection methodologies are shown in Table 3.

Table 3: Projections of MCCP to Loss

| MCCP Projection Method | Statewide <br> MCCP Ratio |
| :--- | :---: |
| January 1, 2020 Pure Premium Rate Filing Methodology <br> Projected Ultimate MCCP per Indemnity Claim - Trend Applied to the <br> Latest Two Years | $4.3 \%$ |
| Alternative Methodologies <br> Projected Ultimate MCCP per Indemnity Claim - Trend Applied to the <br> Latest Year <br> Projected Ultimate MCCP per Indemnity Claim - Trend Based on AY <br> Ultimate MCCP per Indemnity Claim and Applied to the Latest Two <br> Years <br> Projected Ultimate MCCP per Indemnity Claim - Trend Based on CY <br> Paid MCCP per Open Indemnity Claim and Applied to the Latest <br> Two Years | $4.2 \%$ |

The total preliminary ratio of LAE to losses for January 1, 2021 to August 31, 2021 policies based on data evaluated as of March 31, 2020 and the projection methodologies described above is $35.2 \%$. For comparison purposes, the projected total LAE to loss ratio reflected in the January 1, 2020 Pure Premium Rate Filing was $36.4 \%$.

## Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios ${ }^{[1]}$


## Paid LAE to Paid Loss Ratios

| CY |  | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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\% | 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 (in Millions) | Number of Open Indemnity Claims at Beginning of the Year | Number of Indemnity Claims Reported During Year | ULAE Paid <br> per Open <br> Indemnity Claim | Annual <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) |
| 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 (f) | 644 | 294,011 | 131,749 | 2,192 | --- |
| 2014 (f) | 598 | 307,227 | 133,061 | 1,947 | -11.2\% |
| 2015 (g) | 774 | 311,158 | 140,302 | 2,486 | --- |
| 2016 (g) | 948 | 314,808 | 139,941 | 3,010 | --- |
| 2017 (g) | 1,045 | 311,196 | 145,909 | 3,359 | 11.6\% |
| 2018 (g) | 1,072 | 304,634 | 146,120 | 3,520 | 4.8\% |
| 2019 (g) | 947 | 293,377 | 149,363 | 3,229 | -8.3\% |

Notes:
(a)
)

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.
(b), (c) Based on WCIRB accident year experience calls. Column (c) is for information only.
(a)/(b) $\times 1,000,000$.
(f) 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.
(g) 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 |  |  |  |  |  | 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 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.004 | 1.001 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1998 |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |
| 1999 |  |  |  |  |  |  |  | 1.001 | 1.002 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 |
| 2000 |  |  |  |  |  |  | 1.000 | 0.998 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 |
| 2001 |  |  |  |  |  | 0.999 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2002 |  |  |  |  | 0.999 | 1.007 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2003 |  |  |  | 0.999 | 1.008 | 0.998 | 0.999 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2004 |  |  | 1.001 | 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 |  | 1.007 | 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 | 1.115 | 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 | 1.001 |  |  |  |  |  |  |  |
| 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 | 1.002 |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I. Age-to-Age (Latest Year) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.226 | 1.023 | 1.007 | 1.003 | 1.002 | 1.002 | 1.00 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.277 | 1.042 | 1.018 | 1.011 | 1.008 | 1.006 | 1.004 | . 004 | 1.003 | 1.003 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 |
| III. Estimated Percent of Ultimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 78.3\% | 96.0\% | 98.2\% | 98.9\% | 99.2\% | 9.4\% | 99.6\% | 99.6\% | 99.7\% | 99.8\% | 99.8\% | 99.8\% | 99.8\% | 99.8\% | 99.8\% |
| Accident Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | 192-204 | 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 |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1990 |  | 1.001 | 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 | 1.001 | 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 | 0.999 | 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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I. Age-to-Age (Latest Year) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| III. Estimated Percent of Ultimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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\% | 100.0\% | 100.0\% |

Source: WCIRB quarterly calls for experience.

## Ultimate Indemnity Claim Settlement Ratios - Statewide

| Acciden | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 12 | $\underline{24}$ | 36 | 48 | $\underline{60}$ | 72 | 84 | $\underline{96}$ | 108 | 120 | 132 | 144 | 156 | 168 | 180 | 192 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 96.8\% |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 96.7\% | 97.0\% |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  | 96.8\% | 96.7\% | 98.3\% |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  | 95.7\% | 95.1\% | 97.7\% | 98.0\% |
| 1996 |  |  |  |  |  |  |  |  |  |  |  | 94.9\% | 93.9\% | 97.3\% | 97.6\% | 97.8\% |
| 1997 |  |  |  |  |  |  |  |  |  |  | 95.1\% | 95.1\% | 96.9\% | 97.2\% | 97.5\% | 97.0\% |
| 1998 |  |  |  |  |  |  |  |  |  | 94.8\% | 94.2\% | 96.5\% | 96.9\% | 97.4\% | 97.4\% | 97.7\% |
| 1999 |  |  |  |  |  |  |  |  | 93.5\% | 92.8\% | 96.1\% | 96.7\% | 97.2\% | 97.4\% | 97.8\% | 97.8\% |
| 2000 |  |  |  |  |  |  |  | 91.0\% | 92.1\% | 95.4\% | 96.3\% | 97.0\% | 97.5\% | 98.0\% | 97.5\% | 97.4\% |
| 2001 |  |  |  |  |  |  | 86.5\% | 90.8\% | 93.7\% | 95.0\% | 96.0\% | 96.8\% | 97.6\% | 96.9\% | 96.8\% | 97.2\% |
| 2002 |  |  |  |  |  | 81.9\% | 88.6\% | 91.6\% | 93.2\% | 94.5\% | 95.5\% | 96.5\% | 96.6\% | 96.7\% | 97.2\% | 97.5\% |
| 2003 |  |  |  |  | 75.9\% | 85.2\% | 89.1\% | 91.3\% | 93.0\% | 94.2\% | 95.5\% | 96.0\% | 96.2\% | 96.9\% | 97.3\% | 97.7\% |
| 2004 |  |  |  | 68.9\% | 80.3\% | 85.7\% | 88.7\% | 90.9\% | 92.6\% | 94.4\% | 95.3\% | 95.9\% | 96.6\% | 97.1\% | 97.6\% | 98.0\% |
| 2005 |  |  | 58.7\% | 73.7\% | 81.3\% | 85.6\% | 88.6\% | 90.9\% | 93.2\% | 94.5\% | 95.5\% | 96.2\% | 96.9\% | 97.4\% | 97.9\% |  |
| 2006 |  | 45.5\% | 62.9\% | 74.1\% | 80.9\% | 85.2\% | 88.3\% | 91.3\% | 93.1\% | 94.3\% | 95.4\% | 96.3\% | 96.9\% | 97.5\% |  |  |
| 2007 | 21.8\% | 47.7\% | 62.8\% | 73.1\% | 80.1\% | 84.7\% | 88.9\% | 91.5\% | 93.1\% | 94.6\% | 95.7\% | 96.5\% | 97.3\% |  |  |  |
| 2008 | 22.7\% | 46.4\% | 61.1\% | 72.1\% | 79.4\% | 85.6\% | 89.4\% | 91.7\% | 93.4\% | 94.8\% | 95.9\% | 96.8\% |  |  |  |  |
| 2009 | 21.6\% | 44.8\% | 60.0\% | 71.1\% | 80.0\% | 85.7\% | 89.5\% | 91.5\% | 93.5\% | 94.9\% | 96.2\% |  |  |  |  |  |
| 2010 | 21.5\% | 45.8\% | 60.5\% | 73.0\% | 81.5\% | 86.7\% | 89.7\% | 92.5\% | 94.2\% | 95.8\% |  |  |  |  |  |  |
| 2011 | 21.8\% | 45.5\% | 61.7\% | 74.1\% | 82.0\% | 86.4\% | 90.5\% | 92.9\% | 95.0\% |  |  |  |  |  |  |  |
| 2012 | 21.6\% | 46.4\% | 63.2\% | 75.1\% | 82.1\% | 87.8\% | 91.3\% | 94.1\% |  |  |  |  |  |  |  |  |
| 2013 | 21.0\% | 46.7\% | 63.4\% | 75.5\% | 84.0\% | 88.9\% | 92.8\% |  |  |  |  |  |  |  |  |  |
| 2014 | 20.8\% | 46.9\% | 64.4\% | 77.2\% | 85.3\% | 90.3\% |  |  |  |  |  |  |  |  |  |  |
| 2015 | 20.8\% | 48.4\% | 67.1\% | 79.7\% | 87.1\% |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 21.7\% | 51.0\% | 69.7\% | 81.6\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 23.9\% | 53.9\% | 71.9\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 24.4\% | 54.1\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 24.4\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Acciden | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{204}$ | $\underline{216}$ | $\underline{228}$ | $\underline{240}$ | $\underline{252}$ | 264 | $\underline{276}$ | $\underline{288}$ | 300 | 312 | 324 | 336 | 348 | 360 | 372 |
| 1989 |  |  | 98.1\% | 98.4\% | 99,3\% | 99.3\% | 99.4\% | 99.4\% | 99.5\% | 99.5\% | 99.4\% | 99.5\% | 99.6\% | 99.6\% | 99.7\% |
| 1990 |  | 97.6\% | 97.9\% | 98.9\% | 98.9\% | 99.0\% | 99.0\% | 99.1\% | 99.2\% | 99.2\% | 99.3\% | 99.3\% | 99.4\% | 99.5\% |  |
| 1991 | 96.9\% | 97.0\% | 98.7\% | 98.6\% | 98.7\% | 98.8\% | 98.9\% | 98.9\% | 99.0\% | 99.1\% | 99.2\% | 99.2\% | 99.3\% |  |  |
| 1992 | 96.9\% | 98.6\% | 98.6\% | 98.7\% | 98.8\% | 98.8\% | 98.9\% | 99.0\% | 99.1\% | 99.1\% | 99.2\% | 99.2\% |  |  |  |
| 1993 | 98.5\% | 98.5\% | 98.6\% | 98.7\% | 98.7\% | 98.8\% | 98.9\% | 98.9\% | 99.0\% | 99.1\% | 99.1\% |  |  |  |  |
| 1994 | 98.4\% | 98.5\% | 98.4\% | 98.5\% | 98.6\% | 98.5\% | 98.6\% | 98.7\% | 98.8\% | 98.9\% |  |  |  |  |  |
| 1995 | 98.2\% | 97.8\% | 97.9\% | 98.0\% | 98.0\% | 98.1\% | 98.2\% | 98.3\% | 98.4\% |  |  |  |  |  |  |
| 1996 | 97.2\% | 97.4\% | 97.5\% | 97.5\% | 97.6\% | 97.7\% | 97.8\% | 97.9\% |  |  |  |  |  |  |  |
| 1997 | 97.3\% | 97.5\% | 97.5\% | 97.7\% | 97.8\% | 98.0\% | 98.1\% |  |  |  |  |  |  |  |  |
| 1998 | 97.8\% | 97.7\% | 97.8\% | 98.0\% | 98.2\% | 98.3\% |  |  |  |  |  |  |  |  |  |
| 1999 | 97.7\% | 97.9\% | 98.2\% | 98.4\% | 98.5\% |  |  |  |  |  |  |  |  |  |  |
| 2000 | 97.7\% | 97.9\% | 98.2\% | 98.4\% |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | 97.5\% | 97.8\% | 98.1\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 | 97.9\% | 98.2\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | 98.1\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: WCIRB quarterly calls for experience.

Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide As of December 31, 2019

| Selected Indemnity Claim Reporting and Closure Patterns - As of 12/31/2019 |  |  |  |  | Cumulative Indemnity Claim Counts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Percent | Percent | Percent |  | Open | Reported | Open | Estimated | Annual |
|  | Reported | Closed | Open | AY | Year | @12/31/19 | @12/31/19 | Ultimate(d) | Change |
|  | (a) | (b) | (c) | (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | 78.3\% | 24.4\% | 53.9\% | 1989 | 31 | 222,853 | 779 | 222,853 |  |
| 2 | 96.0\% | 54.1\% | 41.9\% | 1990 | 30 | 249,159 | 1,326 | 249,184 |  |
| 3 | 98.2\% | 71.9\% | 26.4\% | 1991 | 29 | 250,051 | 1,726 | 250,112 |  |
| 4 | 98.9\% | 81.6\% | 17.3\% | 1992 | 28 | 198,558 | 1,498 | 198,622 |  |
| 5 | 99.2\% | 87.1\% | 12.1\% | 1993 | 27 | 156,201 | 1,283 | 156,269 |  |
| 6 | 99.4\% | 90.3\% | 9.1\% | 1994 | 26 | 143,801 | 1,538 | 143,889 |  |
| 7 | 99.6\% | 92.8\% | 6.8\% | 1995 | 25 | 135,244 | 2,004 | 135,357 |  |
| 8 | 99.6\% | 94.1\% | 5.5\% | 1996 | 24 | 133,160 | 2,590 | 133,308 |  |
| 9 | 99.7\% | 95.0\% | 4.7\% | 1997 | 23 | 137,418 | 2,403 | 137,591 |  |
| 10 | 99.8\% | 95.8\% | 3.9\% | 1998 | 22 | 147,525 | 2,266 | 147,745 |  |
| 11 | 99.8\% | 96.2\% | 3.5\% | 1999 | 21 | 148,705 | 1,913 | 148,957 |  |
| 12 | 99.8\% | 96.8\% | 3.0\% | 2000 | 20 | 161,993 | 2,310 | 162,285 |  |
| 13 | 99.8\% | 97.3\% | 2.5\% | 2001 | 19 | 185,698 | 3,231 | 186,036 |  |
| 14 | 99.8\% | 97.5\% | 2.3\% | 2002 | 18 | 194,716 | 3,193 | 195,075 |  |
| 15 | 99.8\% | 97.9\% | 1.9\% | 2003 | 17 | 184,252 | 3,193 | 184,611 |  |
| 16 | 99.8\% | 98.0\% | 1.8\% | 2004 | 16 | 158,995 | 2,886 | 159,298 |  |
| 17 | 99.8\% | 98.1\% | 1.7\% | 2005 | 15 | 139,603 | 2,709 | 139,865 |  |
| 18 | 99.8\% | 98.2\% | 1.6\% | 2006 | 14 | 133,337 | 3,119 | 133,568 |  |
| 19 | 99.8\% | 98.1\% | 1.7\% | 2007 | 13 | 130,396 | 3,321 | 130,639 |  |
| 20 | 99.8\% | 98.4\% | 1.4\% | 2008 | 12 | 123,140 | 3,683 | 123,395 |  |
| 21 | 99.8\% | 98.5\% | 1.3\% | 2009 | 11 | 113,927 | 4,047 | 114,201 |  |
| 22 | 99.9\% | 98.3\% | 1.5\% | 2010 |  | 118,837 | 4,686 | 119,134 |  |
| 23 | 99.9\% | 98.1\% | 1.7\% | 2011 |  | 121,031 | 5,649 | 121,393 |  |
| 24 | 99.9\% | 97.9\% | 1.9\% | 2012 | 8 | 128,134 | 7,128 | 128,584 |  |
| 25 | 99.9\% | 98.4\% | 1.5\% | 2013 | 7 | 136,211 | 9,236 | 136,786 |  |
| 26 | 99.9\% | 98.9\% | 1.1\% | 2014 | 6 | 141,078 | 12,980 | 141,897 |  |
| 27 | 100.0\% | 99.1\% | 0.8\% | 2015 | 5 | 144,851 | 17,629 | 146,021 |  |
| 28 | 100.0\% | 99.2\% | 0.8\% | 2016 | 4 | 147,857 | 25,855 | 149,505 |  |
| 29 | 100.0\% | 99.3\% | 0.7\% | 2017 | 3 | 147,372 | 39,555 | 150,053 |  |
| 30 | 100.0\% | 99.5\% | 0.5\% | 2018 | 2 | 146,958 | 64,135 | 153,134 |  |
| 31 | 100.0\% | 99.7\% | 0.3\% | 2019 | 1 | 122,223 | 84,093 | 156,122 |  |
|  |  |  |  |  |  |  |  | Projected(e) |  |
|  |  |  |  | 2020 |  |  |  | 151,641 | -2.9\% |
|  |  |  |  | 2021 |  |  |  | 147,744 | -2.6\% |
|  |  |  |  | 2022 |  |  |  | 144,493 | -2.2\% |
|  |  |  |  | Total |  | 4,803,284 | 321,964 |  |  |

Notes:
(a) See Exhibit 3.1.
(b) See Exhibit 3.2.
(c) (a) - (b).
(d) Estimated based on number of reported indemnity claims as of December 31, 2019 (column (3)) and selected reporting pattern (column (a)).
(e) Estimated based on projected frequency trends for accident years 2020 to 2022. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.

## Estimated Number of Open Indemnity Claims - Statewide

Based on Selected Reporting and Closure Patterns - As of December 31, 2019

|  | Estimated Number of ReportedIndemnity Claims(a) Indemnity Claims(a) |  |  | Estimated Number of Open Indemnity Claims(b) |  |  | Estimated Number of Indemnity Claims Opened During(c) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY | @12/31/20 | @12/31/21 | @12/31/22 | @12/31/20 | @12/31/21 | @12/31/22 | $\underline{2020}$ | $\underline{2021}$ | $\underline{2022}$ |
| 1989 | 222,853 | 222,853 | 222,853 | 779 | 779 | 779 | 0 | 0 | 0 |
| 1990 | 249,184 | 249,184 | 249,184 | 871 | 871 | 871 | 25 | 0 | 0 |
| 1991 | 250,087 | 250,112 | 250,112 | 1,331 | 874 | 874 | 36 | 25 | 0 |
| 1992 | 198,574 | 198,603 | 198,622 | 1,371 | 1,057 | 694 | 16 | 29 | 20 |
| 1993 | 156,218 | 156,231 | 156,253 | 1,178 | 1,079 | 832 | 17 | 12 | 23 |
| 1994 | 143,827 | 143,843 | 143,854 | 1,182 | 1,085 | 993 | 26 | 16 | 12 |
| 1995 | 135,274 | 135,298 | 135,313 | 1,447 | 1,111 | 1,021 | 30 | 24 | 15 |
| 1996 | 133,196 | 133,226 | 133,250 | 1,974 | 1,425 | 1,095 | 36 | 30 | 24 |
| 1997 | 137,439 | 137,476 | 137,507 | 2,673 | 2,037 | 1,470 | 21 | 38 | 31 |
| 1998 | 147,559 | 147,582 | 147,622 | 2,580 | 2,871 | 2,187 | - 34 | 22 | 40 |
| 1999 | 148,735 | 148,770 | 148,792 | 2,284 | 2,601 | 2,894 | 30 | 35 | 22 |
| 2000 | 162,010 | 162,043 | 162,081 | 2,084 | 2,489 | 2,834 | 17 | 33 | 38 |
| 2001 | 185,700 | 185,720 | 185,758 | 2,648 | 2,389 | 2,853 | 2 | 20 | 38 |
| 2002 | 194,721 | 194,724 | 194,745 | 3,388 | 2,776 | 2,505 | 5 | 2 | 21 |
| 2003 | 184,271 | 184,276 | 184,278 | 3,022 | 3,207 | 2,627 | 19 | 5 | 2 |
| 2004 | 158,988 | 159,004 | 159,009 | 2,755 | 2,607 | 2,767 | -7 | 16 | 4 |
| 2005 | 139,599 | 139,593 | 139,608 | 2,534 | 2,419 | 2,289 | -4 | -6 | 14 |
| 2006 | 133,318 | 133,315 | 133,309 | 2,587 | 2,420 | 2,310 | -19 | -3 | -6 |
| 2007 | 130,413 | 130,394 | 130,391 | 3,050 | 2,530 | 2,367 | 17 | -19 | -3 |
| 2008 | 123,166 | 123,181 | 123,164 | 3,137 | 2,881 | 2,390 | 26 | 16 | -18 |
| 2009 | 113,965 | 113,989 | 114,003 | 3,409 | 2,903 | 2,666 | 38 | 24 | 15 |
| 2010 | 118,848 | 118,888 | 118,913 | 4,222 | 3,556 | 3,029 | 11 | 40 | 25 |
| 2011 | 121,090 | 121,102 | 121,142 | 4,775 | 4,302 | 3,623 | 59 | 12 | 40 |
| 2012 | 128,201 | 128,263 | 128,276 | 5,984 | 5,057 | 4,557 | 67 | 63 | 12 |
| 2013 | 136,307 | 136,378 | 136,444 | 7,583 | 6,365 | 5,380 | 96 | 71 | 67 |
| 2014 | 141,301 | 141,400 | 141,474 | 9,582 | 7,866 | 6,603 | 223 | 99 | 74 |
| 2015 | 145,178 | 145,408 | 145,510 | 13,357 | 9,860 | 8,094 | 327 | 230 | 102 |
| 2016 | 148,306 | 148,642 | 148,877 | 18,049 | 13,676 | 10,095 | 449 | 335 | 235 |
| 2017 | 148,400 | 148,851 | 149,187 | 25,950 | 18,116 | 13,726 | 1,028 | 451 | 336 |
| 2018 | 150,397 | 151,446 | 151,906 | 40,366 | 26,483 | 18,488 | 3,439 | 1,049 | 460 |
| 2019 | 149,825 | 153,332 | 154,401 | 65,387 | 41,153 | 27,000 | 27,602 | 3,506 | 1,069 |
| Projected |  |  |  |  |  |  |  |  |  |
| 2020 | 118,715 | 145,525 | 148,931 | 81,680 | 63,510 | 39,972 | 118,715 | 26,810 | 3,406 |
| 2021 |  | 115,664 | 141,785 |  | 79,580 | 61,878 |  | 115,664 | 26,121 |
| 2022 |  |  | 113,120 |  |  | 77,830 |  |  | 113,120 |
| Total | 4,955,667 | 5,104,315 | 5,249,673 | 323,217 | 321,936 | 319,594 | 152,383 | 148,648 | 145,358 |
| (d) Open Claims at Beginning of the Year: |  |  |  |  |  |  | 321,964 | 323,217 | 321,936 |
| (e) "Weighted" Open Claims: |  |  |  |  |  |  | 626,731 | 620,512 | 612,653 |

Notes:
(a), (b) Estimated based on the projected number of indemnity claims and selected reporting and closure patterns (see Exhibit 3.3).
(c) Based on the difference in the estimated numbers of reported indemnity claims between two consecutive December 31 evaluations.
(d) Based on the number of indemnity claims still open as of the previous year-end. For example, the number of open indemnity claims at the beginning of calendar year 2020 is the total number of indemnity claims from all accident years that were open as of December 31, 2019 (see column (4) total on Exhibit 3.3).
(e) The "weighted" number of open claims is the sum of the number of open claims at the beginning of the year and twice the number of claims opened during the year.

## Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers for Policies with Effective Dates between January 1, 2021 and August 31, 2021

| Calendar Year | Number of Open Indemnity <br> Claims at Beginning of the Year | ULAE Paid per Open Indemnity Claim | ULAE <br> Paid (\$000) |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |
| 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 | 321,964 | 3,497 | 1,125,938 |
| 2021 | 323,217 | 3,589 | 1,159,984 |
| 2022 | 321,936 | 3,724 | 1,198,867 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,296,556 |
| (e) Calendar Year 2019 Earned Premium (\$000): |  |  | 16,120,445 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.571 |
| (g) Premium Adjustment Factor for Calendar Year 2019: |  |  | 0.976 |
| (h) Projected Losses (\$000): (e) $\times$ (f) $\times(\mathrm{g}$ ) |  |  | 8,983,859 |
| (i) Projecte | LAE to Losses: (d)/(h) |  | 14.4\% |

Notes:
(a) Calendar years 2010 to 2019 are based on WCIRB accident year experience calls. 2020 to 2022 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2019 are from column (d) of Exhibit 2. Calendar years 2020 to 2022 are projected based on applying the California average annual wage level changes of $4.1 \%, 1.5 \%, 2.6 \%$ and $3.8 \%$ for 2019 to 2022 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the ULAE paid per open indemnity claim from averaging 2018 and 2019.
(c) Column (a) $x$ column (b).
(d) Weight average of calendar years 2021 with $67 \%$ and 2022 with $33 \%$, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2021 policies, based on applying the average annual change of $3.4 \%$ for 2022 and 2023 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
(f) See Exhibit 8 of Agenda Item AC20-06-01.
(g) See Exhibit 5.2 of Agenda Item AC20-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Private Insurers ULAE Paid to Paid Losses Ratio for Policies with Effective Dates between January 1, 2021 and August 31, 2021

| Calendar <br> Year | Paid ULAE as \% of Paid Losses ${ }^{1}$ | Paid Loss as \% of Premium | Paid ULAE as \% of Premium |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) $=(\mathrm{a}) \times(\mathrm{b})$ |
| 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 |  |  |  |
| 2020 | $0.139{ }^{2}$ | 52.6\% | 7.3\% ${ }^{4}$ |
| 2021 | $0.139{ }^{2}$ | 53.2\% | 7.4\% ${ }^{4}$ |
| 2022 | $0.139{ }^{2}$ | 53.3 | $7.4 \%{ }^{4}$ |
| (d) Projected ULAE Paid to CY2019 Earned Premium Ratio: ( $67 \%$ of 2021 and $33 \%$ of 2022 in column (c)) |  |  | 7.4\% |
| (e) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{5}$ : |  |  | 0.571 |
| (f) Premium Adjustment Factor for Calendar Year 20196: |  |  | 0.976 |
| (g) Projected Ratio of ULAE to Losses; |  |  | 13.3\% |
| (d) $/[(\mathrm{e}) \times(\mathrm{f})]$ |  |  |  |
| 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 (b) $\times$ (c). |  |  |  |
| ${ }^{5}$ See Exhibit 8 of Agenda Item AC20-06-01. |  |  |  |
| ${ }^{6}$ See Exhibit 5.2 of Agenda Item AC20-06-01. |  |  |  |

Projected Ratio of ULAE to Loss - Statewide
Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim
for Private Insurers-Trend from Latest Year
for Policies with Effective Dates between January 1, 2021 and August 31, 2021

| Calendar Year | Number of Open Indemnity Claims at Beginning of the Year | ULAE Paid per Open Indemnity Claim | ULAE <br> Paid (\$000) |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |
| 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 | 321,964 | 3,277 | 1,055,079 |
| 2021 | 323,217 | 3,363 | 1,086,983 |
| 2022 | 321,936 | 3,490 | 1,123,418 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,214,960 |
| (e) Calendar Year 2019 Earned Premium (\$000): |  |  | 16,120,445 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.571 |
| (g) Premium Adjustment Factor for Calendar Year 2019: |  |  | 0.976 |
| (h) Projected Losses (\$000): (e) $\times$ (f) $\times(\mathrm{g}$ ) |  |  | 8,983,859 |
| (i) Projecte | ULAE to Losses: (d)/(h) |  | 13.5\% |

Notes:
(a) Calendar years 2010 to 2019 are based on WCIRB accident year experience calls. 2020 to 2022 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2019 are from column (d) of Exhibit 2. Calendar years 2020 to 2022 are projected based on applying the California average annual wage level changes of $1.5 \%, 2.6 \%$ and $3.8 \%$ for 2020 to 2022 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the 2019 ULAE paid per open indemnity claim.
(c) Column (a) x column (b).
(d) Weight average of calendar years 2021 with $67 \%$ and 2022 with $33 \%$, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2021 policies, based on applying the average annual change of $3.4 \%$ for 2022 and 2023 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
(f) See Exhibit 8 of Agenda Item AC20-06-01.
(g) See Exhibit 5.2 of Agenda Item AC20-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Private Insurers ULAE Paid to Paid Losses Ratio - Trend from Latest Year for Policies with Effective Dates between January 1, 2021 and August 31, 2021


Notes:
${ }^{1}$ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.
${ }^{2}$ Based on 2019 paid ULAE to paid loss ratio.
${ }^{3}$ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2019 experience.
${ }^{4}$ (a) $\times(b)$.
${ }^{5}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{6}$ See Exhibit 5.2 of Agenda Item AC20-06-01.

## Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Weighted Open Indemnity Claim for Private Insurers for Policies with Effective Dates between January 1, 2021 and August 31, 2021

| Calendar <br> Year | Weighted Number of Open Indemnity Claims | ULAE Paid per Weighted Open Indemnity Claim | ULAE <br> Paid (\$000) |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |
| 2010 | 594,894 | 913 | 542,859 |
| 2011 | 605,973 | 900 | 545,458 |
| 2012 | 615,637 | 906 | 557,651 |
| 2013 | 642,294 | 1,156 | 742,428 |
| 2014 | 652,860 | 1,043 | 681,195 |
| 2015 | 669,113 | 1,307 | 874,717 |
| 2016 | 666,822 | 1,593 | 1,062,547 |
| 2017 | 667,648 | 1,734 | 1,157,516 |
| 2018 | 654,983 | 1,797 | 1,176,761 |
| 2019 | 643,632 | 1,600 | 1,029,872 |
| Projected |  |  |  |
| 2020 | 626,731 | 1,760 | 1,103,324 |
| 2021 | 620,512 | 1,807 | 1,121,045 |
| 2022 | 612,653 | 1,875 | 1,148,498 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,249,339 |
| (e) Calendar Year 2019 Earned Premium (\$000): |  |  | 16,120,445 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.571 |
| (g) Premium Adjustment Factor for Calendar Year 2019: |  |  | 0.976 |
| (h) Projected Losses (\$000): (e) $\times$ (f) $\times(\mathrm{g})$ |  |  | 8,983,859 |
| (i) Projecte | ULAE to Losses : (d)/(h) |  | 13.9\% |

## Notes:

(a) Calendar years 2010 to 2019 are based on the number of open indemnity claims and twice the number of reported indemnity claims form WCIRB accident year experience calls. 2020 to 2022 are from line (e), Exhibit 3.4.
(b) Calendar years 2010 to 2019 are from column (a) of Exhibit 2 divided by columns (b)+[2.0 x (c)] of Exhibit 2.2, multiplied by 1,000,000. Calendar years 2020 to 2022 are projected based on applying the California average annual wage level changes of $4.1 \%, 1.5 \%, 2.6 \%$ and $3.8 \%$ for 2019 to 2022 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per weighted open indemnity claim from averaging 2018 to 2019.
(c) Column (a) $x$ column (b).
(d) Weight average of calendar years 2021 with $67 \%$ and 2022 with $33 \%$, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2021 policies, based on applying the average annual change of $3.4 \%$ for 2022 and 2023 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2019.
(f) See Exhibit 8 of Agenda Item AC20-06-01.
(g) See Exhibit 5.2 of Agenda Item AC20-06-01.

# Average Paid ALAE ${ }^{[1]}$ per Reported Indemnity Claim - Private Insurers <br> As of March 31, 2020 

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | $\underline{111}$ |
| 2000 |  |  |  |  |  |  | 4,340 | 4,548 | 4,786 |
| 2001 |  |  |  |  |  | 5,159 | 5,480 | 5,819 | 6,017 |
| 2002 |  |  |  |  | 5,264 | 5,668 | 6,064 | 6,308 | 6,493 |
| 2003 |  |  |  | 4,907 | 5,528 | 6,043 | 6,383 | 6,647 | 6,869 |
| 2004 |  |  | 3,570 | 4,548 | 5,212 | 5,673 | 6,022 | 6,283 | 6,495 |
| 2005 |  | 2,083 | 3,279 | 4,191 | 4,833 | 5,307 | 5,673 | 5,965 | 6,175 |
| 2006 | 797 | 2,176 | 3,410 | 4,328 | 5,022 | 5,550 | 5,920 | 6,211 | 6,471 |
| 2007 | 849 | 2,340 | 3,613 | 4,619 | 5,393 | 5,993 | 6,429 | 6,768 | 7,039 |
| 2008 | 944 | 2,494 | 3,933 | 5,103 | 5,975 | 6,595 | 7,096 | 7,468 | 7,729 |
| 2009 | 1,037 | 2,812 | 4,448 | 5,718 | 6,637 | 7,358 | 7,900 | 8,278 | 8,553 |
| 2010 | 1,111 | 2,981 | 4,586 | 5,816 | 6,746 | 7,484 | 7,978 | 8,319 | 8,566 |
| 2011 | 1,127 | 2,942 | 4,520 | 5,796 | 6,818 | 7,470 | 7,939 | 8,265 | 8,373 |
| 2012 | 1,120 | 3,012 | 4,721 | 6,067 | 6,965 | 7,585 | 7,985 | 8,271 |  |
| 2013 | 1,202 | 3,276 | 4,985 | 6,201 | 7,014 | 7,540 | 7,898 |  |  |
| 2014 | 1,340 | 3,480 | 5,147 | 6,288 | 7,009 | 7,498 |  |  |  |
| 2015 | 1,424 | 3,577 | 5,185 | 6,234 | 6,903 |  |  |  |  |
| 2016 | 1,443 | 3,640 | 5,215 | 6,220 |  |  |  |  |  |
| 2017 | 1,524 | 3,737 | 5,231 |  |  |  |  |  |  |
| 2018 | 1,629 | 3,856 |  |  |  |  |  |  |  |
| 2019 | 1,639 |  |  |  |  |  |  |  |  |
| Accident |  |  |  | Annual | ange |  |  |  |  |
| Year | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | 111 |
| 2001 |  |  |  |  |  |  | 26.3\% | 27.9\% | 25.7\% |
| 2002 |  |  |  |  |  | 9.9\% | 10.7\% | 8.4\% | 7.9\% |
| 2003 |  |  |  |  | 5.0\% | 6.6\% | 5.2\% | 5.4\% | 5.8\% |
| 2004 |  |  |  | . 3 | -5.7\% | -6.1\% | -5.6\% | -5.5\% | -5.5\% |
| 2005 |  |  | -8.1\% | -7.8\% | -7.3\% | -6.5\% | -5.8\% | -5.0\% | -4.9\% |
| 2006 |  | 4.4\% | 4.0\% | 3.3\% | 3.9\% | 4.6\% | 4.4\% | 4.1\% | 4.8\% |
| 2007 | 6.5\% | 7.5\% | 5.9\% | 6.7\% | 7.4\% | 8.0\% | 8.6\% | 9.0\% | 8.8\% |
| 2008 | 11.3\% | 6.6\% | 8.9\% | 10.5\% | 10.8\% | 10.0\% | 10.4\% | 10.3\% | 9.8\% |
| 2009 | 9.8\% | 12.8\% | 13.1\% | 12.0\% | 11.1\% | 11.6\% | 11.3\% | 10.8\% | 10.7\% |
| 2010 | 7.1\% | 6.0\% | 3.1\% | 1.7\% | 1.6\% | 1.7\% | 1.0\% | 0.5\% | 0.2\% |
| 2011 | 1.4\% | -1.3\% | -1.4\% | -0.3\% | 1.1\% | -0.2\% | -0.5\% | -0.6\% | -2.3\% |
| 2012 | -0.5\% | 2.4\% | 4.4\% | 4.7\% | 2.1\% | 1.5\% | 0.6\% | 0.1\% |  |
| 2013 | 7.3\% | 8.8\% | 5.6\% | 2.2\% | 0.7\% | -0.6\% | -1.1\% |  |  |
| 2014 | 11.5\% | 6.2\% | 3.3\% | 1.4\% | -0.1\% | -0.6\% |  |  |  |
| 2015 | 6.3\% | 2.8\% | 0.7\% | -0.9\% | -1.5\% |  |  |  |  |
| 2016 | 1.3\% | 1.8\% | 0.6\% | -0.2\% |  |  |  |  |  |
| 2017 | 5.6\% | 2.7\% | 0.3\% |  |  |  |  |  |  |
| 2018 | 6.9\% | 3.2\% |  |  |  |  |  |  |  |
| 2019 | 0.6\% |  |  |  |  |  |  |  |  |


| Annual Trend $^{[2]}$ |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| All-Year | $5.6 \%$ | $4.9 \%$ | $4.0 \%$ | $3.2 \%$ | $3.1 \%$ | $3.3 \%$ | $4.0 \%$ | $4.3 \%$ | $4.3 \%$ |
| $\mathrm{R}^{3}$ | 0.975 | 0.961 | 0.915 | 0.796 | 0.779 | 0.817 | 0.815 | 0.814 | 0.805 |
|  |  |  |  |  |  |  |  |  |  |
| $5-Y e a r$ | $4.1 \%$ | $2.5 \%$ | $1.1 \%$ | $0.6 \%$ | $0.3 \%$ | $0.1 \%$ | $0.0 \%$ | $2.0 \%$ | $4.6 \%$ |
| $\mathrm{R}^{4}$ | 0.938 | 0.992 | 0.837 | 0.427 | 0.171 | 0.110 | 0.000 | 0.477 | 0.705 |

[^18]
## Ratio of Paid ALAE to Paid Loss - Private Insurers <br> As of March 31, 2020

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  | 0.107 | 0.107 | 0.109 |
| 2001 |  |  |  |  |  | 0.118 | 0.119 | 0.121 | 0.122 |
| 2002 |  |  |  |  | 0.132 | 0.134 | 0.137 | 0.137 | 0.138 |
| 2003 |  |  |  | 0.136 | 0.141 | 0.144 | 0.146 | 0.147 | 0.148 |
| 2004 |  |  | 0.139 | 0.150 | 0.155 | 0.158 | 0.159 | 0.160 | 0.160 |
| 2005 |  | 0.113 | 0.133 | 0.144 | 0.149 | 0.152 | 0.154 | 0.155 | 0.154 |
| 2006 | 0.076 | 0.112 | 0.129 | 0.138 | 0.143 | 0.146 | 0.148 | 0.148 | 0.150 |
| 2007 | 0.077 | 0.112 | 0.127 | 0.135 | 0.142 | 0.145 | 0.146 | 0.148 | 0.148 |
| 2008 | 0.078 | 0.110 | 0.126 | 0.136 | 0.141 | 0.143 | 0.146 | 0.147 | 0.148 |
| 2009 | 0.084 | 0.122 | 0.138 | 0.146 | 0.150 | 0.153 | 0.155 | 0.157 | 0.158 |
| 2010 | 0.092 | 0.130 | 0.143 | 0.148 | 0.152 | 0.156 | 0.158 | 0.159 | 0.160 |
| 2011 | 0.099 | 0.133 | 0.146 | 0.154 | 0.162 | 0.165 | 0.167 | 0.168 | 0.166 |
| 2012 | 0.098 | 0.138 | 0.155 | 0.166 | 0.170 | 0.173 | 0.174 | 0.172 |  |
| 2013 | 0.109 | 0.154 | 0.168 | 0.174 | 0.179 | 0.181 | 0.183 |  |  |
| 2014 | 0.121 | 0.163 | 0.172 | 0.177 | 0.180 | 0.182 |  |  |  |
| 2015 | 0.128 | 0.163 | 0.171 | 0.175 | 0.178 |  |  |  |  |
| 2016 | 0.124 | 0.165 | 0.174 | 0.178 |  |  |  |  |  |
| 2017 | 0.128 | 0.166 | 0.173 |  |  |  |  |  |  |
| 2018 | 0.130 | 0.166 |  |  |  |  |  |  |  |
| 2019 | 0.132 |  |  |  |  |  |  |  |  |


| Accident Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2001 |  |  |  |  |  |  | 11.6\% | 13.2\% | 12.4\% |
| 2002 |  |  |  |  |  | 13.7\% | 14.7\% | 13.2\% | 13.4\% |
| 2003 |  |  |  |  | 7.2\% | 7.7\% | 6.9\% | 7.3\% | 7.1\% |
| 2004 |  |  |  | 10.1\% | 10.1\% | 9.3\% | 9.2\% | 8.5\% | 7.9\% |
| 2005 |  |  | 4.0\% | -4.1\% | -3.8\% | -3.3\% | -3.2\% | -3.0\% | -3.5\% |
| 2006 |  | . $\%$ | -3.5\% | -4.2\% | -4.3\% | -4.2\% | -4.0\% | -4.2\% | -2.8\% |
| 2007 | 1.8\% | 0.1\% | -1.7\% | -1.8\% | -0.8\% | -0.7\% | -1.2\% | -0.6\% | -1.1\% |
| 2008 | 0.5\% | -1.5\% | -0.4\% | 0.5\% | -0.2\% | -1.1\% | -0.4\% | -0.3\% | -0.1\% |
| 2009 | 8.7\% | 10.4\% | 9.6\% | 7.8\% | 6.0\% | 6.6\% | 6.5\% | 6.4\% | 6.2\% |
| 2010 | 9.0\% | 7.2\% | 3.2\% | 1.0\% | 1.7\% | 2.3\% | 1.8\% | 1.7\% | 1.6\% |
| 2011 | 7.1\% | 2.1\% | 2.4\% | 4.4\% | 6.2\% | 5.2\% | 5.6\% | 5.2\% | 3.6\% |
| 2012 | -0.5\% | 3.6\% | 6.1\% | 7.6\% | 5.3\% | 5.3\% | 4.6\% | 2.8\% |  |
| 2013 | 10.8\% | 11.5\% | 8.5\% | 4.9\% | 4.9\% | 4.5\% | 4.8\% |  |  |
| 2014 | 11.4\% | 6.3\% | 2.3\% | 1.4\% | 0.5\% | 0.2\% |  |  |  |
| 2015 | 5.8\% | -0.2\% | -0.5\% | -1.0\% | -1.0\% |  |  |  |  |
| 2016 | -2.8\% | 1.0\% | 1.6\% | 1.9\% |  |  |  |  |  |
| 2017 | 2.6\% | 0.8\% | -0.4\% |  |  |  |  |  |  |
| 2018 | 2.2\% | 0.1\% |  |  |  |  |  |  |  |
| 2019 | 1.1\% |  |  |  |  |  |  |  |  |

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.

Source: WCIRB accident year experience calls.

Estimated Ultimate ALAE per Indemnity Claim - Private Insurers

|  | Paid ALAE ${ }^{[1]}$ | Cumulative | Estimated <br> Ultimate | Indemnity | Cumulative Count | Estimated | Estimated <br> Ultimate ALAE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acc. | @3/31/20 | Development | ALAE | Claim Counts | Development | Ultimate | per Indemnity | Annual |  |
| Year | (in \$000) | Factors ${ }^{[2]}$ | (in \$000) | @3/31/20 | Factors ${ }^{[3]}$ | Ind. Counts | Claim | Change |  |
|  | (1) | (2) | (3)=(1)x(2) | (4) | (5) | (6) $=(4) \times(5)$ | (7)=(3)/(6) $\times 1000$ | (8) |  |
| 1992 | 319,500 | 1.046 | 334,100 | 141,778 | 1.000 | 141,835 | 2,356 | --- |  |
| 1993 | 237,657 | 1.048 | 249,159 | 113,438 | 1.000 | 113,488 | 2,195 | -6.8\% |  |
| 1994 | 220,447 | 1.052 | 231,886 | 105,344 | 1.001 | 105,407 | 2,200 | 0.2\% |  |
| 1995 | 243,512 | 1.055 | 256,982 | 101,353 | 1.001 | 101,432 | 2,534 | 15.2\% |  |
| 1996 | 290,233 | 1.061 | 307,815 | 103,158 | 1.001 | 103,271 | 2,981 | 17.6\% |  |
| 1997 | 367,228 | 1.066 | 391,294 | 104,809 | 1.001 | 104,942 | 3,729 | 25.1\% |  |
| 1998 | 506,049 | 1.071 | 542,018 | 112,438 | 1.002 | 112,616 | 4,813 | 29.1\% |  |
| 1999 | 556,256 | 1.076 | 598,794 | 116,374 | 1.002 | 116,589 | 5,136 | 6.7\% |  |
| 2000 | 660,396 | 1.082 | 714,419 | 118,393 | 1.002 | 118,638 | 6,022 | 17.2\% |  |
| 2001 | 784,972 | 1.088 | 854,111 | 113,942 | 1.002 | 114,187 | 7,480 | 24.2\% |  |
| 2002 | 823,305 | 1.096 | 901,946 | 113,022 | 1.002 | 113,294 | 7,961 | 6.4\% |  |
| 2003 | 832,721 | 1.103 | 918,677 | 108,378 | 1.003 | 108,748 | 8,448 | 6.1\% |  |
| 2004 | 715,175 | 1.111 | 794,749 | 99,465 | 1.004 | 99,842 | 7,960 | -5.8\% |  |
| 2005 | 673,613 | 1.120 | 754,393 | 97,339 | 1.004 | 97,726 | 7,719 | -3.0\% |  |
| 2006 | 740,252 | 1.132 | 838,066 | 104,330 | 1.004 | 104,756 | 8,000 | 3.6\% |  |
| 2007 | 816,727 | 1.143 | 933,778 | 107,476 | 1.005 | 107,965 | 8,649 | 8.1\% |  |
| 2008 | 867,745 | 1.157 | 1,004,137 | 105,669 | 1.005 | 106,217 | 9,454 | 9.3\% |  |
| 2009 | 901,915 | 1.175 | 1,059,788 | 101,069 | 1.006 | 101,653 | 10,426 | 10.3\% |  |
| 2010 | 955,932 | 1.196 | 1,143,140 | 109,080 | 1.006 | 109,749 | 10,416 | -0.1\% |  |
| 2011 | 963,643 | 1.222 | 1,177,281 | 113,318 | 1.007 | 114,104 | 10,318 | -0.9\% |  |
| 2012 | 1,010,697 | 1.255 | 1,268,311 | 121,770 | 1.008 | 122,698 | 10,337 | 0.2\% |  |
| 2013 | 1,015,314 | 1.304 | 1,324,077 | 128,412 | 1.009 | 129,510 | 10,224 | -1.1\% |  |
| 2014 | 981,854 | 1.369 | 1,343,783 | 130,892 | 1.010 | 132,251 | 10,161 | -0.6\% |  |
| 2015 | 931,851 | 1.468 | 1,367,935 | 134,991 | 1.013 | 136,757 | 10,003 | -1.6\% |  |
| 2016 | 868,944 | 1.633 | 1,419,176 | 139,710 | 1.018 | 142,207 | 9,980 | -0.2\% |  |
| 2017 | 733,276 | 1.962 | 1,438,482 | 140,159 | 1.025 | 143,676 | 10,012 | 0.3\% |  |
| 2018 | 543,949 | 2.801 | 1,523,683 | 141,063 | 1.045 | 147,467 | 10,332 | 3.2\% |  |
| 2019 | 215,744 | 7.285 | 1,571,769 | 131,619 | 1.148 | 151,149 | 10,399 | 0.6\% |  |
|  |  |  |  |  | timated Annua | Exponential | Trend Based on: |  | $\underline{\mathrm{R}^{2}}$ |
|  |  |  |  |  |  |  | 2006 to 2019 | 1.2\% | 0.384 |
|  |  |  |  |  |  |  | 2015 to 2019 | 1.1\% | 0.795 |
|  |  |  |  |  |  |  | Average: | 1.2\% |  |

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 11.1
${ }^{[3]}$ Based on analogous Exhibit 11.3, applicable to private insurers only.

Ratio of Accident Year Incremental Paid $\mathrm{ALAE}^{[1]}$ to Indemnity Claims Inventory ${ }^{[2]}$
by Payment Year - Private Insurers

| Acc. | Payment Year Ending March 31 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| 1989 | 635 | 1,143 | 1,062 | 1,029 | 1,125 | 1,143 | 1,344 | 1,524 | 1,471 | 1,493 | 1,610 | 1,948 | 1,412 | 1,569 |
| 1990 | 987 | 2,157 | 1,139 | 1,274 | 1,193 | 1,355 | 1,542 | 1,432 | 1,812 | 1,590 | 1,600 | 1,828 | 1,643 | 1,790 |
| 1991 | 834 | 1,697 | 1,577 | 1,256 | 1,495 | 1,388 | 1,574 | 1,438 | 1,789 | 1,645 | 1,558 | 2,144 | 2,117 | 1,932 |
| 1992 | 1,416 | 1,837 | 1,653 | 1,405 | 1,827 | 1,389 | 1,669 | 1,502 | 1,636 | 1,576 | 1,811 | 1,682 | 1,856 | 1,900 |
| 1993 | 1,502 | 2,157 | 1,833 | 1,541 | 1,927 | 1,664 | 1,886 | 1,800 | 1,951 | 1,979 | 2,169 | 2,268 | 2,292 | 2,148 |
| 1994 | 1,686 | 1,932 | 1,717 | 1,617 | 1,646 | 1,576 | 1,632 | 1,833 | 1,663 | 2,106 | 1,790 | 1,802 | 1,628 | 1,696 |
| 1995 | 1,671 | 1,766 | 1,849 | 1,766 | 1,916 | 1,772 | 1,672 | 2,033 | 2,051 | 2,107 | 2,075 | 2,374 | 1,999 | 2,145 |
| 1996 | 2,027 | 1,997 | 1,979 | 1,947 | 1,946 | 1,686 | 2,011 | 2,085 | 2,144 | 2,076 | 2,297 | 2,097 | 1,888 | 2,236 |
| 1997 | 2,378 | 2,409 | 2,347 | 2,287 | 2,314 | 2,225 | 2,414 | 2,353 | 2,147 | 2,224 | 2,127 | 2,259 | 2,315 | 2,382 |
| 1998 | 2,556 | 2,484 | 2,502 | 2,336 | 2,432 | 2,381 | 2,277 | 2,340 | 2,344 | 2,292 | 2,459 | 2,325 | 2,527 | 2,387 |
| 1999 | 2,529 | 2,629 | 2,403 | 2,646 | 2,804 | 2,545 | 2,698 | 2,641 | 2,332 | 2,118 | 2,342 | 2,502 | 2,104 | 2,225 |
| 2000 | 2,525 | 2,805 | 2,720 | 2,864 | 2,854 | 2,740 | 2,803 | 2,842 | 2,539 | 2,536 | 2,749 | 2,592 | 2,529 | 2,217 |
| 2001 | 2,284 | 2,764 | 2,811 | 2,873 | 2,654 | 2,736 | 2,755 | 2,778 | 2,801 | 3,292 | 3,155 | 2,647 | 2,618 | 2,510 |
| 2002 | 2,537 | 2,873 | 2,910 | 3,083 | 2,899 | 2,967 | 3,021 | 2,915 | 3,015 | 3,432 | 3,203 | 3,165 | 3,126 | 2,837 |
| 2003 | 2,577 | 2,881 | 2,947 | 3,058 | 3,032 | 3,216 | 3,224 | 3,546 | 3,397 | 3,589 | 3,547 | 3,127 | 2,941 | 2,812 |
| 2004 | 2,100 | 2,676 | 3,009 | 3,077 | 3,145 | 3,263 | 3,130 | 3,060 | 3,306 | 3,584 | 3,248 | 3,032 | 2,945 | 2,923 |
| 2005 | 768 | 1,986 | 2,649 | 2,916 | 3,070 | 3,251 | 3,284 | 3,317 | 3,438 | 3,609 | 3,729 | 3,449 | 3,516 | 3,277 |
| 2006 | 106 | 782 | 2,162 | 2,758 | 2,992 | 3,243 | 3,474 | 3,296 | 3,404 | 3,583 | 3,365 | 3,161 | 3,254 | 2,942 |
| 2007 |  | 71 | 846 | 2,333 | 2,807 | 3,192 | 3,452 | 3,603 | 3,686 | 3,677 | 3,719 | 3,540 | 3,460 | 3,516 |
| 2008 |  |  | 85 | 939 | 2,399 | 3,110 | 3,500 | 3,591 | 3,702 | 3,835 | 3,887 | 3,713 | 3,718 | 3,654 |
| 2009 |  |  |  | 150 | 1,034 | 2,742 | 3,391 | 3,644 | 3,820 | 3,943 | 3,998 | 3,903 | 3,810 | 3,777 |
| 2010 |  |  |  |  | 87 | 1,129 | 2,898 | 3,450 | 3,743 | 3,893 | 4,073 | 4,097 | 4,004 | 3,993 |
| 2011 |  |  |  |  |  | 88 | 1,147 | 2,879 | 3,459 | 3,863 | 4,060 | 4,043 | 4,186 | 4,165 |
| 2012 |  |  |  |  |  |  |  | 1,147 | 3,007 | 3,677 | 3,952 | 4,069 | 4,177 | 4,030 |
| 2013 |  |  |  |  |  |  |  | 101 | 1,237 | 3,223 | 3,649 | 3,913 | 4,062 | 4,095 |
| 2014 |  |  |  |  |  |  |  |  | 144 | 1,378 | 3,284 | 3,739 | 3,917 | 3,985 |
| 2015 |  |  |  |  |  |  |  |  |  | 105 | 1,426 | 3,353 | 3,753 | 3,934 |
| 2016 |  |  |  |  |  |  |  |  |  |  | 108 | 1,443 | 3,487 | 3,904 |
| 2017 |  |  |  |  |  |  |  |  |  |  |  | 121 | 1,523 | 3,622 |
| 2018 |  |  |  |  |  |  |  |  |  |  |  |  | 142 | 1,628 |
| 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  | 149 |



$$
\begin{array}{llll}
\hline \text { Estimated Annual Exponential Trend Based on Payment Year: } & \underline{\mathbf{R}^{2}} \\
\hline 2006-2020 & 3.8 \% & 0.940 \\
\underline{2015-2020} & \underline{0.8 \%} & 0.885 \\
\text { Average: } & 2.3 \% &
\end{array}
$$

${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Indemnity claims inventory is the sum of indemnity claims open as of April 1 of Year N-1 and newly-reported indemnit) claims between April 1 of year N-1 and March 31 of year N.

Source: WCIRB quarterly calls for experience.

Paid Allocated Loss Adjustment Expense Development - Private Insurers
As of March 31, 2020

| Accident | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 | 159-171 | 171-183 | 183-195 | 195-207 |
| 1987 |  |  |  |  |  |  | 1.031 | 1.022 | 1.015 | 1.012 | 1.009 | 1.013 | 1.010 | 1.006 | 1.004 | 1.004 |
| 1988 |  |  |  |  |  | 1.048 | 1.033 | 1.021 | 1.014 | 1.011 | 1.011 | 1.014 | 1.004 | 1.004 | 1.004 | 1.004 |
| 1989 |  |  |  |  | 1.102 | 1.079 | 1.040 | 1.026 | 1.017 | 1.011 | 1.007 | 1.004 | 1.005 | 1.005 | 1.004 | 1.005 |
| 1990 |  |  |  | 1.149 | 1.097 | 1.046 | 1.032 | 1.020 | 1.014 | 1.009 | 1.007 | 1.006 | 1.005 | 1.005 | 1.006 | 1.006 |
| 1991 |  |  | 1.252 | 1.128 | 1.062 | 1.047 | 1.025 | 1.017 | 1.012 | 1.007 | 1.007 | 1.005 | 1.005 | 1.005 | 1.006 | 1.005 |
| 1992 |  | 1.512 | 1.229 | 1.102 | 1.074 | 1.045 | 1.027 | 1.018 | 1.011 | 1.009 | 1.007 | 1.007 | 1.008 | 1.005 | 1.006 | 1.005 |
| 1993 | 2.417 | 1.527 | 1.218 | 1.127 | 1.076 | 1.047 | 1.032 | 1.028 | 1.017 | 1.014 | 1.010 | 1.012 | 1.011 | 1.009 | 1.008 | 1.006 |
| 1994 | 2.485 | 1.498 | 1.231 | 1.117 | 1.082 | 1.045 | 1.036 | 1.023 | 1.020 | 1.014 | 1.019 | 1.017 | 1.013 | 1.011 | 1.008 | 1.007 |
| 1995 | 2.550 | 1.569 | 1.237 | 1.132 | 1.072 | 1.046 | 1.038 | 1.030 | 1.022 | 1.022 | 1.019 | 1.017 | 1.015 | 1.013 | 1.010 | 1.008 |
| 1996 | 2.454 | 1.490 | 1.239 | 1.114 | 1.072 | 1.056 | 1.046 | 1.036 | 1.031 | 1.026 | 1.021 | 1.017 | 1.014 | 1.008 | 1.011 | 1.009 |
| 1997 | 2.424 | 1.511 | 1.194 | 1.112 | 1.081 | 1.064 | 1.051 | 1.040 | 1.033 | 1.025 | 1.020 | 1.016 | 1.013 | 1.013 | 1.011 | 1.009 |
| 1998 | 2.618 | 1.463 | 1.229 | 1.139 | 1.102 | 1.083 | 1.055 | 1.041 | 1.028 | 1.023 | 1.020 | 1.018 | 1.014 | 1.013 | 1.011 | 1.011 |
| 1999 | 2.514 | 1.559 | 1.256 | 1.152 | 1.111 | 1.076 | 1.058 | 1.039 | 1.033 | 1.027 | 1.020 | 1.018 | 1.015 | 1.013 | 1.011 | 1.011 |
| 2000 | 2.801 | 1.593 | 1.262 | 1.166 | 1.110 | 1.079 | 1.051 | 1.042 | 1.030 | 1.024 | 1.020 | 1.018 | 1.015 | 1.013 | 1.013 | 1.010 |
| 2001 | 3.053 | 1.597 | 1.291 | 1.156 | 1.108 | 1.075 | 1.052 | 1.034 | 1.028 | 1.023 | 1.019 | 1.016 | 1.017 | 1.014 | 1.010 | 1.009 |
| 2002 | 2.790 | 1.592 | 1.261 | 1.153 | 1.102 | 1.064 | 1.040 | 1.031 | 1.025 | 1.020 | 1.017 | 1.016 | 1.013 | 1.011 | 1.009 | 1.007 |
| 2003 | 2.931 | 1.550 | 1.267 | 1.155 | 1.089 | 1.057 | 1.042 | 1.032 | 1.028 | 1.022 | 1.019 | 1.017 | 1.012 | 1.009 | 1.007 | 1.007 |
| 2004 | 2.785 | 1.573 | 1.283 | 1.149 | 1.090 | 1.064 | 1.045 | 1.033 | 1.029 | 1.024 | 1.019 | 1.014 | 1.011 | 1.009 | 1.008 |  |
| 2005 | 2.746 | 1.599 | 1.285 | 1.157 | 1.104 | 1.072 | 1.052 | 1.042 | 1.032 | 1.027 | 1.019 | 1.016 | 1.012 | 1.011 |  |  |
| 2006 | 2.878 | 1.591 | 1.278 | 1.165 | 1.108 | 1.075 | 1.056 | 1.043 | 1.032 | 1.023 | 1.018 | 1.013 | 1.010 |  |  |  |
| 2007 | 2.902 | 1.570 | 1.291 | 1.173 | 1.116 | 1.081 | 1.054 | 1.042 | 1.029 | 1.021 | 1.017 | 1.012 |  |  |  |  |
| 2008 | 2.832 | 1.621 | 1.311 | 1.177 | 1.115 | 1.077 | 1.055 | 1.037 | 1.027 | 1.020 | 1.015 |  |  |  |  |  |
| 2009 | 3.005 | 1.623 | 1.302 | 1.178 | 1.112 | 1.076 | 1.049 | 1.034 | 1.025 | 1.018 |  |  |  |  |  |  |
| 2010 | 2.944 | 1.591 | 1.295 | 1.166 | 1.108 | 1.068 | 1.044 | 1.030 | 1.022 |  |  |  |  |  |  |  |
| 2011 | 2.945 | 1.597 | 1.298 | 1.169 | 1.097 | 1.065 | 1.042 | 1.027 |  |  |  |  |  |  |  |  |
| 2012 | 3.060 | 1.610 | 1.288 | 1.154 | 1.092 | 1.055 | 1.039 |  |  |  |  |  |  |  |  |  |
| 2013 | 3.024 | 1.554 | 1.255 | 1.137 | 1.078 | 1.049 |  |  |  |  |  |  |  |  |  |  |
| 2014 | 2.902 | 1.512 | 1.234 | 1.120 | 1.073 |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 2.785 | 1.478 | 1.211 | 1.113 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 2.796 | 1.466 | 1.201 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 2.684 | 1.428 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 2.601 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Latest Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 2.601 | 1.428 | 1.201 | 1.113 | 1.073 | 1.049 | . 039 | . 027 | 1.022 | 1.018 | 1.015 | 1.012 | 1.010 | 1.011 | 1.008 | 1.007 |
| Cumulative | 7.285 | 2.801 | 1.962 | 1.633 | 1.468 | 1.369 | 30 | . 255 | 1.222 | 1.196 | 1.175 | 1.157 | 1.143 | 1.132 | 1.120 | 1.111 |
| 3-Year Arithmetic Average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 2.694 | 1.457 | 1.216 | 1.123 | 1.081 | 1.057 | 1.042 | 1.030 | 1.024 | 1.020 | 1.017 | 1.014 | 1.011 | 1.010 | 1.008 | 1.008 |
| Cumulative | 8.115 | 3.012 | 2.067 | 1.701 | 1.514 | 1.400 | 1.326 | 1.272 | 1.235 | 1.205 | 1.182 | 1.162 | 1.147 | 1.134 | 1.123 | 1.114 |
| Accident Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | 207-219 | 219-231 | 231-243 | 243-255 | 255-267 | 267-279 | 279-291 | 291-303 | 303-315 | 315-327 | 327-339 | 339-351 | 351-363 | 363-375 | 375-387 | 387-399 |
| 1987 | 1.004 | 1.006 | 1.006 | 1.008 | 1.004 | 1.004 | 1.006 | 1.005 | 1.004 | 1.005 | 1.006 | 1.004 | 1.004 | 1.003 | 1.004 | 1.003 |
| 1988 | 1.004 | 1.005 | 1.005 | 1.005 | 1.003 | 1.005 | 1.004 | 1.004 | 1.005 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 | 1.003 |  |
| 1989 | 1.004 | 1.004 | 1.004 | 1.003 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.003 | 1.005 | 1.003 |  |  |
| 1990 | 1.004 | 1.004 | 1.002 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.002 | 1.003 | 1.002 | 1.002 | 1.002 |  |  |  |
| 1991 | 1.003 | 1.002 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.002 | 1.003 | 1.003 | 1.002 | 1.002 |  |  |  |  |
| 1992 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 |  |  |  |  |  |
| 1993 | 1.006 | 1.007 | 1.006 | 1.006 | 1.005 | 1.005 | 1.005 | 1.004 | 1.004 | 1.003 |  |  |  |  |  |  |
| 1994 | 1.007 | 1.007 | 1.006 | 1.007 | 1.005 | 1.005 | 1.004 | 1.004 | 1.003 |  |  |  |  |  |  |  |
| 1995 | 1.009 | 1.009 | 1.008 | 1.007 | 1.008 | 1.006 | 1.006 | 1.005 |  |  |  |  |  |  |  |  |
| 1996 | 1.009 | 1.008 | 1.008 | 1.006 | 1.005 | 1.006 | 1.005 |  |  |  |  |  |  |  |  |  |
| 1997 | 1.008 | 1.008 | 1.007 | 1.006 | 1.006 | 1.005 |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.011 | 1.009 | 1.008 | 1.006 | 1.005 |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.009 | 1.007 | 1.007 | 1.005 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.008 | 1.007 | 1.006 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | 1.007 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Latest Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 1.007 | 1.007 | 1.006 | 1.005 | 1.005 | 1.005 | 1.005 | 1.005 | 1.003 | 1.003 | 1.003 | 1.002 | 1.002 | 1.003 | 1.004 | 1.003 |
| Cumulative ${ }^{[1]}$ | 1.103 | 1.096 | 1.088 | 1.082 | 1.076 | 1.071 | 1.066 | 1.061 | 1.055 | 1.052 | 1.048 | 1.046 | 1.043 | 1.040 | 1.038 |  |
| 3-Year Arithmetic Average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 1.008 | 1.007 | 1.007 | 1.006 | 1.005 | 1.006 | 1.005 | 1.004 | 1.003 | 1.003 | 1.002 | 1.002 | 1.003 | 1.003 | 1.003 | 1.003 |
| Cumulative | 1.105 | 1.097 | 1.090 | 1.082 | 1.076 | 1.070 | 1.064 | 1.059 | 1.055 | 1.051 | 1.048 | 1.046 | 1.043 | 1.040 | 1.038 |  |

Note:
${ }^{[1]}$ Factors in italics are based on powertail fit to the "3-Year Arithmetic Average" factors.
Source: WCIRB accident year experience calls. Excludes MCCP costs.

Quarterly Paid ALAE Loss Development Factors ${ }^{[1]}$ - Private Insurers

|  | Age in Months | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | 2011 | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 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 |
| 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 |
| 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 | 1.675 |
| 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 |  |
| 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 |  |
| 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 |  |
| 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 | 1.153 |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 36 | - 39 | 1.093 | 1.090 | 1.097 | 1.094 | 1.091 | 1.095 | 1.093 | 1.085 | 1.085 | 1.073 | 1.068 | 1.062 |  |  |
| 39 | - 42 | 1.083 | 1.086 | 1.096 | 1.082 | 1.083 | 1.081 | 1.081 | 1.077 | 1.072 | 1.062 | 1.062 |  |  |  |
| 42 | - 45 | 1.063 | 1.069 | 1.069 | 1.074 | 1.069 | 1.068 | 1.070 | 1.061 | 1.057 | 1.054 | 1.049 |  |  |  |
| 45 | 48 | 1.057 | 1.059 | 1.063 | 1.064 | 1.062 | 1.059 | 1.057 | 1.055 | 1.051 | 1.046 | 1.043 |  |  |  |
| 48 | - 51 | 1.050 | 1.050 | 1.052 | 1.053 | 1.053 | 1.051 | 1.050 | 1.04 | 1.04 | 1.036 | 1.035 |  |  |  |
| 51 | - 54 | 1.049 | 1.050 | 1.049 | 1.050 | 1.048 | 1.048 | 1.046 | 1.042 | 1.035 | 1.034 |  |  |  |  |
| 54 | - 57 | 1.038 | 1.043 | 1.045 | 1.043 | 1.040 | 1.043 | 1.038 | 1.035 | 1.031 | 1.027 |  |  |  |  |
| 57 | 60 | 1.037 | 1.038 | 1.039 | 1.039 | 1.037 | 1.036 | 1.035 | 1.031 | 1.028 | 1.026 |  |  |  |  |
| 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 |  |  |  |  |  |
| 66 | - 69 | 1.027 | 1.029 | 1.028 | 1.029 | 1.028 | . 024 | 1.024 | 1.021 | 1.018 |  |  |  |  |  |
| 69 | 72 | 1.025 | 1.028 | 1.026 | 1.026 | 1.024 | 1.023 | 1.021 | 1.018 | 1.018 |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 78 | - 81 | 1.019 | 1.020 | 1.020 | 1.020 | . 017 | 1.017 | 1.015 | 1.013 |  |  |  |  |  |  |
| 81 | 84 | 1.018 | 1.019 | 1.018 | 1.017 | 1.016 | 1.014 | 1.014 | 1.012 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |
| 90 | - 93 | 1.014 | 1.014 | 1.014 | 1.012 | 1.012 | 1.012 | 1.011 |  |  |  |  |  |  |  |
| 93 | 96 | 1.013 | 1.013 | 1.013 | 1.012 | 1.010 | 1.011 | 1.009 |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |
| 102 | - 105 | 1.012 | 1.011 | 1.009 | 1.009 | 1.008 | 1.007 |  |  |  |  |  |  |  |  |
| 105 | 5108 | 1.010 | 1.010 | 1.008 | 1.008 | 1.007 | 1.007 |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |
| 114 | - 117 | 1.008 | 1.007 | 1.007 | 1.007 | 1.006 |  |  |  |  |  |  |  |  |  |
| 117 | ------120 | 1.008 | 1.007 | 1.006 | 1.006 | 1.006 |  |  |  |  |  |  |  |  |  |
| 120 | - 123 | 1.007 | 1.006 | 1.006 | 1.006 | 1.006 |  |  |  |  |  |  |  |  |  |

[^19]
## Reported Indemnity Claim Count Development - Statewide

| Accider | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 47-159 | 159-171 | 171-183 | 183-195 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.001 | 1.001 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1998 |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1999 |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2000 |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 |
| 2001 |  |  |  |  |  | 1.000 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2002 |  |  |  |  | 1.000 | 1.000 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2003 |  |  |  | 1.000 | 0.998 | 0.999 | 0.999 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2004 |  |  | 1.000 | 1.000 | 0.999 | 0.999 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2005 |  | 1.005 | 1.001 | 1.001 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |
| 2006 | 1.029 | 1.008 | 1.004 | 1.002 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |
| 2007 | 1.036 | 1.012 | 1.006 | 1.003 | 1.002 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |
| 2008 | 1.059 | 1.017 | 1.009 | 1.004 | 1.003 | 1.002 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |
| 2009 | 1.083 | 1.023 | 1.009 | 1.005 | 1.003 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |
| 2010 | 1.091 | 1.022 | 1.010 | 1.006 | 1.003 | 1.002 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |
| 2011 | 1.102 | 1.027 | 1.011 | 1.005 | 1.002 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |  |
| 2012 | 1.120 | 1.026 | 1.010 | 1.005 | 1.002 | 1.001 | 1.001 |  |  |  |  |  |  |  |  |
| 2013 | 1.101 | 1.024 | 1.007 | 1.004 | 1.001 | 1.002 |  |  |  |  |  |  |  |  |  |
| 2014 | 1.105 | 1.019 | 1.008 | 1.003 | 1.001 |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.100 | 1.016 | 1.005 | 1.003 |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 1.101 | 1.019 | 1.005 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 1.088 | 1.017 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.092 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| I. Age-to-Age (Latest Year) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1.092 1.017 1.005 1.003 1.001 1.002 1.001 1.000 1.000 1.000 1.000 <br> 1.000 1.000 1.000 1.000        <br> II. Age-to-Ultimate           <br> 1.127 1.033 1.015 1.010 1.007 1.006 1.004 1.003 1.003 1.002 1.002 | 1.002 | 1.002 | 1.002 | 1.002 |



Source: WCIRB quarterly calls for experience.

Projected Ratio of ALAE ${ }^{[1]}$ to Losses - Statewide
Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity for Policies with Effective Dates between January 1, 2021 and August 31, 2021

|  |  | Cumulative |  | Estimated |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indemnity | Count | Estimated | Ult. ALAE | Estimated |
| Acc. | Claim Counts | Development | Ultimate | per Indemnity | Ult. ALAE |
| Year | @3/31/20 | Factors ${ }^{[2]}$ | Ind. Counts | Claim ${ }^{[3]}$ | (in \$000) |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5) $=(3) \times(4)$ |
| 1992 | 198,294 | 1.000 | 198,338 | 2,356 | 467,195 |
| 1993 | 156,047 | 1.000 | 156,089 | 2,195 | 342,687 |
| 1994 | 143,658 | 1.000 | 143,716 | 2,200 | 316,164 |
| 1995 | 135,198 | 1.001 | 135,272 | 2,534 | 342,718 |
| 1996 | 133,121 | 1.001 | 133,225 | 2,981 | 397,099 |
| 1997 | 137,369 | 1.001 | 137,491 | 3,729 | 512,659 |
| 1998 | 147,457 | 1.001 | 147,619 | 4,813 | 710,488 |
| 1999 | 148,655 | 1.001 | 148,848 | 5,136 | 764,471 |
| 2000 | 161,931 | 1.001 | 162,162 | 6,022 | 976,515 |
| 2001 | 185,637 | 1.001 | 185,897 | 7,480 | 1,390,496 |
| 2002 | 194,719 | 1.001 | 195,004 | 7,961 | 1,552,451 |
| 2003 | 184,181 | 1.002 | 184,542 | 8,448 | 1,558,971 |
| 2004 | 158,951 | 1.002 | 159,245 | 7,960 | 1,267,600 |
| 2005 | 139,548 | 1.002 | 139,802 | 7,719 | 1,079,199 |
| 2006 | 133,284 | 1.002 | 133,503 | - 8,000 | 1,068,047 |
| 2007 | 130,331 | 1.002 | 130,556 | 8,649 | 1,129,168 |
| 2008 | 123,059 | 1.002 | 123,296 | 9,454 | 1,165,599 |
| 2009 | 113,867 | 1.002 | 114,132 | 10,426 | 1,189,891 |
| 2010 | 118,755 | 1.002 | 119,042 | 10,416 | 1,239,930 |
| 2011 | 120,971 | 1.003 | 121,316 | 10,318 | 1,251,691 |
| 2012 | 128,131 | 1.003 | 128,546 | 10,337 | 1,328,762 |
| 2013 | 136,242 | 1.004 | 136,754 | 10,224 | 1,398,138 |
| 2014 | 141,062 | 1.005 | 141,833 | 10,161 | 1,441,149 |
| 2015 | 144,972 | 1.007 | 145,971 | 10,003 | 1,460,099 |
| 2016 | 147,920 | 1.010 | 149,379 | 9,980 | 1,490,747 |
| 2017 | 147,678 | 1.015 | 149,895 | 10,012 | 1,500,743 |
| 2018 | 148,356 | 1.032 | 153,171 | 10,332 | 1,582,618 |
| 2019 | 139,039 | 1.127 | 156,731 | 10,399 | 1,629,813 |

Projected Based on 2-Year Average of 2018 and 2019 :

| Ult. Ind. Counts ${ }^{[4]}$ | Ult. ALAE per Ind. Counts ${ }^{[5]}$ | Ultimate ALAE ${ }^{[6]}$ |
| :---: | :---: | :---: |
| 2020 151,166 | 10,678 | 1,614,192 |
| 2021 147,281 | 10,892 | 1,604,161 |
| 11/1/2021 146,204 | 10,963 | 1,602,869 |
| (a) Projected ALAE Incurred (\$000): |  | 1,602,869 |
| (b) Calendar Year 2019 Earned Premium ${ }^{[7]}$ (\$000): |  | 16,120,445 |
| (c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[8]}$ : |  | 0.571 |
| (d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[9]}$ : |  | 0.976 |
| (e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d) |  | 8,983,859 |
| (f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e) |  | 17.8\% |
| (g) Impact of SB 1160 and AB 1244 ${ }^{[10]}$ |  | -4.8\% |
| (h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: $\text { (f) } \times[1.0+(\mathrm{g})]$ |  | 17.0\% |

## Notes:

${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{[3]}$ Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 9.
${ }^{[4]}$ Estimated based on projected frequency trends for accident years 2019 to 2022. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2018 and 2019.
${ }^{[5]}$ Severity is projected by applying an annual growth rate of $2.0 \%$, 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 9 and (ii) paid ALAE per open indemnity claim from Exhibit 10, to the ultimate ALAE severity estimated from averaging 2018 and 2019.
${ }^{[6]}$ Column(3) x Column(4) / 1,000.
${ }^{[7]}$ 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 March 31, 2020.
${ }^{[8]}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[9]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.
${ }^{[10]}$ Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a $60 \%$ reduction in lien filings, offset by $50 \%$ to reflect the impact of the reforms in the emerging ALAE data.

Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity - Trend from Latest Year for Policies with Effective Dates between January 1, 2021 and August 31, 2021

|  |  | Cumulative |  | Estimated |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indemnity | Count | Estimated | Ult. ALAE | Estimated |
| Acc. | Claim Counts | Development | Ultimate | per Indemnity | Ult. ALAE |
| Year | @ 3/31/20 | Factors ${ }^{[2]}$ | Ind. Counts | Claim ${ }^{[3]}$ | (in \$000) |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5)=(3) $\times(4)$ |
| 1992 | 198,294 | 1.000 | 198,338 | 2,356 | 467,195 |
| 1993 | 156,047 | 1.000 | 156,089 | 2,195 | 342,687 |
| 1994 | 143,658 | 1.000 | 143,716 | 2,200 | 316,164 |
| 1995 | 135,198 | 1.001 | 135,272 | 2,534 | 342,718 |
| 1996 | 133,121 | 1.001 | 133,225 | 2,981 | 397,099 |
| 1997 | 137,369 | 1.001 | 137,491 | 3,729 | 512,659 |
| 1998 | 147,457 | 1.001 | 147,619 | 4,813 | 710,488 |
| 1999 | 148,655 | 1.001 | 148,848 | 5,136 | 764,471 |
| 2000 | 161,931 | 1.001 | 162,162 | 6,022 | 976,515 |
| 2001 | 185,637 | 1.001 | 185,897 | 7,480 | 1,390,496 |
| 2002 | 194,719 | 1.001 | 195,004 | 7,961 | 1,552,451 |
| 2003 | 184,181 | 1.002 | 184,542 | 8,448 | 1,558,971 |
| 2004 | 158,951 | 1.002 | 159,245 | 7,960 | 1,267,600 |
| 2005 | 139,548 | 1.002 | 139,802 | 7,719 | 1,079,199 |
| 2006 | 133,284 | 1.002 | 133,503 | 8,000 | 1,068,047 |
| 2007 | 130,331 | 1.002 | 130,556 | 8,649 | 1,129,168 |
| 2008 | 123,059 | 1.002 | 123,296 | 9,454 | 1,165,599 |
| 2009 | 113,867 | 1.002 | 114,132 | 10,426 | 1,189,891 |
| 2010 | 118,755 | 1.002 | 119,042 | 10,416 | 1,239,930 |
| 2011 | 120,971 | 1.003 | 121,316 | 10,318 | 1,251,691 |
| 2012 | 128,131 | 1.003 | 128,546 | 10,337 | 1,328,762 |
| 2013 | 136,242 | 1.004 | 136,754 | 10,224 | 1,398,138 |
| 2014 | 141,062 | 1.005 | 141,833 | 10,161 | 1,441,149 |
| 2015 | 144,972 | 1.007 | 145,971 | 10,003 | 1,460,099 |
| 2016 | 147,920 | 1.010 | 149,379 | 9,980 | 1,490,747 |
| 2017 | 147,678 | 1.015 | 149,895 | 10,012 | 1,500,743 |
| 2018 | 148,356 | 1.032 | 153,171 | 10,332 | 1,582,618 |
| 2019 | 139,039 | 1.127 | 156,731 | 10,399 | 1,629,813 |

## Projected Based on Latest Year

| Ult. Ind. Counts ${ }^{[4]}$ | Ult. ALAE per Ind. Counts ${ }^{[5]}$ | Ultimate ALAE ${ }^{[6]}$ |
| :---: | :---: | :---: |
| 2020 152,233 | 10,607 | 1,614,698 |
| 2021 148,320 | 10,819 | 1,604,664 |
| 11/1/2021 147,235 | 10,890 | 1,603,371 |
| (a) Projected ALAE Incurred (\$000): |  | 1,603,371 |
| (b) Calendar Year 2019 Earned Premium ${ }^{[7]}$ (\$000): |  | 16,120,445 |
| (c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[8]}$ : |  | 0.571 |
| (d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[9]}$ : |  | 0.976 |
| (e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d) |  | 8,983,859 |
| (f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a)/(e) |  | 17.9\% |
| (g) Impact of SB 1160 and AB 1244 ${ }^{[10]}$ |  | -4.8\% |
| (h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: $\text { (f) } x[1.0+(\mathrm{g})]$ |  | 17.0\% |

Notes:
${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{\text {[3] }}$ Based on estimated ultimate ALAE per indemnity for private insures from Exhibit 9.
${ }^{[4]}$ Estimated based on projected frequency trends for accident years 2020 and 2022. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency. These frequency trends were then applied to the 2019 ultimate indemnity claim counts.
${ }^{[5]}$ Severity is projected by applying an annual growth rate of $2.0 \%$, 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 9 and (ii) paid ALAE per open indemnity claim from Exhibit 10, to the 2019 ultimate ALAE severity.
${ }^{[6]}$ Column(3) x Column(4) / 1,000.
${ }^{[7]}$ 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 March 31, 2020.
${ }^{[8]}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[9]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.
${ }^{[10]}$ Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a $60 \%$ reduction in lien filings, offset by $50 \%$ to reflect the impact of the reforms in the emerging ALAE data.

# Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide 

Based on Private Insurers Paid ALAE as Percentage of Premium
For Policies with Effective Dates between January 1, 2021 and August 31, 2021
Latest Year Development Factors

| Accident Year | Paid ALAE as \% of Premium at $3 / 31 / 20$ | Development Factors | Ultimate ALAE as \% of Premium | Ultimate On-level Indemnity as \% of Premium | Ultimate On-level Medical as \% of Premium | Ultimate <br> ALAE as \% of Ultimate On-level Loss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| 1991 | 9.7\% | 1.043 | 10.2\% | 42.3\% | 20.5\% | 16.2\% |
| 1992 | 7.6\% | 1.046 | 7.9\% | 36.8\% | 18.1\% | 14.5\% |
| 1993 | 5.4\% | 1.048 | 5.6\% | 36.7\% | 18.0\% | 10.3\% |
| 1994 | 5.8\% | 1.052 | 6.1\% | 43.7\% | 21.9\% | 9.2\% |
| 1995 | 8.5\% | 1.055 | 8.9\% | 58.4\% | 31.7\% | 9.9\% |
| 1996 | 9.8\% | 1.061 | 10.4\% | 61.3\% | 33.4\% | 10.9\% |
| 1997 | 11.8\% | 1.066 | 12.6\% | 62.1\% | 37.3\% | 12.7\% |
| 1998 | 13.4\% | 1.071 | 14.4\% | 62.2\% | 39.7\% | 14.1\% |
| 1999 | 14.7\% | 1.076 | 15.8\% | 60.7\% | 33.6\% | 16.7\% |
| 2000 | 13.3\% | 1.082 | 14.4\% | 49.0\% | 28.1\% | 18.7\% |
| 2001 | 11.8\% | 1.088 | 12.8\% | 40.6\% | 22.9\% | 20.2\% |
| 2002 | 10.1\% | 1.096 | 11.1\% | 31.0\% | 18.5\% | 22.4\% |
| 2003 | 6.9\% | 1.103 | 7.6\% | 20.4\% | 12.5\% | 23.2\% |
| 2004 | 4.8\% | 1.111 | 5.3\% | 16.8\% | 13.0\% | 17.9\% |
| 2005 | 4.4\% | 1.120 | 4.9\% | 19.4\% | 14.8\% | 14.3\% |
| 2006 | 5.4\% | 1.132 | 6.1\% | 24.7\% | 20.2\% | 13.6\% |
| 2007 | 7.5\% | 1.143 | 8.6\% | 33.0\% | 28.2\% | 14.0\% |
| 2008 | 9.6\% | 1.157 | 11.1\% | 39.3\% | 35.2\% | 14.9\% |
| 2009 | 11.8\% | 1.175 | 13.9\% | 45.1\% | 41.0\% | 16.1\% |
| 2010 | 11.6\% | 1.196 | 13.8\% | 42.9\% | 40.7\% | 16.5\% |
| 2011 | 10.4\% | 1.222 | 12.7\% | 39.6\% | 36.0\% | 16.8\% |
| 2012 | 9.3\% | 1.255 | 11.7\% | 35.0\% | 32.7\% | 17.2\% |
| 2013 | 7.7\% | 1.304 | 10.1\% | 29.4\% | 29.3\% | 17.2\% |
| 2014 | 7.2\% | 1.369 | 9.8\% | 25.7\% | 27.7\% | 18.4\% |
| 2015 | 6.1\% | 1.458 | 8.9\% | 24.7\% | 26.7\% | 17.3\% |
| 2016 | 5.3\% | 1.609 | 8.5\% | 23.1\% | 25.3\% | 17.7\% |
| 2017 | 4.5\% | 1.924 | 8.6\% | 22.9\% | 26.0\% | 17.6\% |
| 2018 | 3.4\% | 2.747 | 9.3\% | 23.9\% | 28.1\% | 17.9\% |
| 2019 | 1.4\% | 7.144 | 10.3\% | 26.6\% | 30.3\% | 18.2\% |
| (7) Projected ALAE as a Percent of Ultimate On-level Losses |  |  |  |  |  |  |
| Prior to Impact of SB 1160 and $A B$ 1244: |  |  |  |  |  | 18.0\% |
| (8) Impact of SB 1160 and $A B$ 1244: |  |  |  |  |  | -4.8\% |
| $(7) \times[1.0+(8)]$ |  |  |  |  |  | 17.1\% |

Notes:
(1) Based on accident year paid ALAE and calendar year earned premium information from private insurers. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
(2) Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 11.1.
(3) $=(1) \times(2)$.
(4), (5) Based on Exhibits 7.1 and 7.3 of Agenda Item AC20-06-01. MCCP costs are not included in the medical ratios shown for accident years 2011 to 2019.
$(6)=(3) /[(4)+(5)]$.
(7) Based on averaging 2018 and 2019.
(8) Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a $60 \%$ reduction in lien filings, offset by $50 \%$ to reflect the impact of the reforms in the emerging ALAE data.

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  | Paid$\frac{\mathrm{ALAE}^{[2]}}{\underline{183-\mathrm{Ult}}}$ | $\begin{gathered} \begin{array}{c} \text { Paid } \\ \text { Indemnity }{ }^{[3]} \end{array} \\ \hline \underline{183-\text { Ult }} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 | 159-171 | 171-183 |  |  |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.004 |  |  |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  | 1.006 | 1.007 |  |  |
| 1998 |  |  |  |  |  |  |  |  |  |  |  | 1.008 | 1.006 | 1.006 |  |  |
| 1999 |  |  |  |  |  |  |  |  |  |  | 1.010 | 1.009 | 1.007 | 1.007 |  |  |
| 2000 |  |  |  |  |  |  |  |  |  | 1.012 | 1.010 | 1.009 | 1.008 | 1.006 |  |  |
| 2001 |  |  |  |  |  |  |  |  | 1.011 | 1.009 | 1.008 | 1.005 | 1.009 | 1.007 |  |  |
| 2002 |  |  |  |  |  |  |  | 1.012 | 1.007 | 1.006 | 1.005 | 1.007 | 1.006 | 1.005 |  |  |
| 2003 |  |  |  |  |  |  | 1.013 | 1.007 | 1.006 | 1.002 | 1.004 | 1.006 | 1.003 | 1.001 |  |  |
| 2004 |  |  |  |  |  | 1.018 | 1.004 | 0.999 | 1.003 | 1.006 | 1.005 | 1.003 | 1.003 | 1.001 |  |  |
| 2005 |  |  |  |  | 1.029 | 1.014 | 1.004 | 1.004 | 1.007 | 1.008 | 1.005 | 1.004 | 1.002 | 1.001 |  |  |
| 2006 |  |  |  | 1.040 | 1.021 | 1.012 | 1.011 | 1.011 | 1.006 | 1.006 | 1.003 | 1.002 | 1.000 |  |  |  |
| 2007 |  |  | 1.066 | 1.041 | 1.028 | 1.019 | 1.012 | 1.010 | 1.004 | 1.004 | 1.001 | 0.999 |  |  |  |  |
| 2008 |  | 1.104 | 1.063 | 1.040 | 1.029 | 1.022 | 1.014 | 1.011 | 1.006 | 1.002 | 1.001 |  |  |  |  |  |
| 2009 | 1.269 | 1.083 | 1.052 | 1.038 | 1.026 | 1.019 | 1.010 | 1.005 | 1.002 | 1.002 |  |  |  |  |  |  |
| 2010 | 1.227 | 1.057 | 1.044 | 1.033 | 1.025 | 1.015 | 1.008 | 1.006 | 1.001 |  |  |  |  |  |  |  |
| 2011 | 1.211 | 1.078 | 1.058 | 1.035 | 1.019 | 1.011 | 1.004 | 1.004 |  |  |  |  |  |  |  |  |
| 2012 | 1.263 | 1.090 | 1.056 | 1.028 | 1.016 | 1.008 | 1.008 |  |  |  |  |  |  |  |  |  |
| 2013 | 1.268 | 1.043 | 1.032 | 1.023 | 1.014 | 1.011 |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.182 | 1.007 | 1.016 | 1.010 | 1.010 |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.128 | 1.001 | 1.008 | 1.011 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 1.164 | 1.005 | 1.011 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 1.123 | 0.991 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.109 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Latest Year Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age to Age | 1.109 | 0.991 | 1.011 | 1.011 | 1.010 | . 01 | 1.008 | 1.004 | 1.001 | 1.002 | 1.001 | 0.999 | 1.000 | 1.001 |  |  |
| Age-to-Ult. | 1.234 | 1.113 | 1.123 | 1.111 | 1.098 | 1.087 | 1.075 | 1.067 | 1.063 | 1.062 | 1.060 | 1.059 | 1.060 | 1.060 | 1.120 | 1.058 |
| 3-Year Arithmetic Average Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age to Age | 1.132 | 0.999 | 1.012 | 1.015 | 1.013 | 1.010 | 1.007 | 1.005 | 1.003 | 1.003 | 1.002 | 1.002 | 1.002 | 1.001 |  |  |
| Age-to-Ult. | 1.292 | 1.141 | 1.142 | 1.129 | 1.113 | 1.098 | 1.087 | 1.080 | 1.074 | 1.071 | 1.068 | 1.067 | 1.065 | 1.063 | 1.123 | 1.058 |

Notes:
${ }^{[1]}$ Due to relatively sparse data and differing mixes of insurers represented in each factor, each factor shown is the ratio of the paid ALAE development factor to the paid indemnity development factor. The paid ALAE development is based on the private insurers' paid ALAE development from paid Exhibit 11.1, the paid indemnity development factors are from Exhibits 2.5.1 and 2.5.2 of Agenda Item AC20-06-01
${ }^{[2]}$ Based on the private insurers paid ALAE age-to-age development from Exhibit 11.1.
${ }^{[3]}$ Based on Exhibit 3.1 of Agenda Item AC20-06-01.

## Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide

For Policies with Effective Dates between January 1, 2021 and August 31, 2021
Using Paid ALAE as a Percent of Paid Indemnity for Private Insurers
Latest Year Development Factors

| Accident <br> Year | Paid ALAE as <br> a Percent of Paid Indemnity at $3 / 31 / 20$ (1) | Development Factors <br> (2) | Ultimate ALAE as a Percent of Ultimate Indemnity <br> (3) | Indemnity On-level Factors (4) | Ultimate ALAE as a Percent of Ultimate On-level Indemnity (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | 38.9\% | 1.059 | 41.2\% | 1.552 | 26.6\% |
| 2006 | 37.5\% | 1.060 | 39.7\% | 1.525 | 26.0\% |
| 2007 | 37.4\% | 1.060 | 39.6\% | 1.470 | 26.9\% |
| 2008 | 36.8\% | 1.059 | 39.0\% | 1.381 | 28.2\% |
| 2009 | 38.7\% | 1.060 | 41.1\% | 1.354 | 30.3\% |
| 2010 | 39.2\% | 1.062 | 41.6\% | 1.328 | 31.3\% |
| 2011 | 38.8\% | 1.063 | 41.3\% | 1.310 | 31.5\% |
| 2012 | 39.7\% | 1.067 | 42.4\% | 1.294 | 32.7\% |
| 2013 | 40.1\% | 1.075 | 43.2\% | 1.265 | 34.1\% |
| 2014 | 38.7\% | 1.087 | 42.1\% | 1.159 | 36.3\% |
| 2015 | 37.2\% | 1.098 | 40.9\% | 1.142 | 35.8\% |
| 2016 | 36.8\% | 1.111 | 40.9\% | 1.128 | 36.3\% |
| 2017 | 36.0\% | 1.123 | 40.4\% | 1.098 | 36.8\% |
| 2018 | 36.4\% | 1.113 | 40.5\% | 1.070 | 37.8\% |
| 2019 | 31.8\% | 1.234 | 39.3\% | 1.041 | 37.7\% |

Projected:
37.8\%
(6) ALAE as Percent of On-level Indemnity:
(7) Indicated Indemnity to Industry Average Filed Pure Premium Ratio: 0.259
(8) Indicated Medical to Industry Average Filed Pure Premium Ratio:
0.312
(9) ALAE as Percent of Total Losses Prior to Impact of SB 1160 and AB 1244:
17.1\%
(10) Impact of SB 1160 and AB 1244:
-4.8\%
(11) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244:
(9) $\times[1.0+(10)]$
16.3\%

Notes:
(1) Based on accident year paid ALAE information from private insurers. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
(2) See Exhibit 14.1.
(3) $=(1) \times(2)$.
(4) From Exhibit 4.1 of Agenda Item AC20-06-01.
(5) $=(3) /(4)$.
(6) Projected by averaging 2018 and 2019.
(7), (8) From Exhibit 8 of Agenda Item AC20-06-01.
(9) $=(6) \times(7) /[(7)+(8)]$.
(10) Based on the WCIRB's most recent evaluation of SB 1160 and $A B 1244$ reflecting a $60 \%$ reduction in lien filings, offset by $50 \%$ to reflect the impact of the reforms in the emerging ALAE data.

## Average Paid MCCP per Reported Indemnity Claim - Statewide <br> As of March 31, 2020

| Accident Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ |
| 2012 | 891 | 1,506 | 1,819 | 1,984 | 2,127 | 2,228 | 2,323 |
| 2013 | 841 | 1,363 | 1,659 | 1,861 | 1,990 | 2,090 | 2,145 |
| 2014 | 784 | 1,312 | 1,639 | 1,828 | 1,954 | 2,032 |  |
| 2015 | 777 | 1,308 | 1,596 | 1,783 | 1,888 |  |  |
| 2016 | 766 | 1,237 | 1,507 | 1,666 |  |  |  |
| 2017 | 748 | 1,227 | 1,503 |  |  |  |  |
| 2018 | 808 | 1,277 |  |  |  |  |  |
| 2019 | 767 |  |  |  |  |  |  |
| Accident |  |  |  |  |  |  |  |
| Year | 15 | $\underline{27}$ | 39 | $\underline{51}$ | 63 | 75 | 87 |
| 2013 | -5.7\% | -9.5\% | -8.8\% | -6.2 | .5\% | -6.2\% | -7.7\% |
| 2014 | -6.8\% | -3.7\% | -1.2\% | -1.8\% | 1.8\% | -2.8\% |  |
| 2015 | -0.8\% | -0.3\% | -2.6\% | . 5 | -3.4\% |  |  |
| 2016 | -1.5\% | -5.4\% | -5.6\% | .6\% |  |  |  |
| 2017 | -2.3\% | -0.8\% | -0.3\% |  |  |  |  |
| 2018 | 8.0\% | 4.1\% |  |  |  |  |  |
| 2019 | -5.0\% |  |  |  |  |  |  |
| Annual Trend ${ }^{[1]}$ |  |  |  |  |  |  |  |
| All-Year | -1.7\% |  | -3.6\% | -3.8\% | -3.7\% | -4.5\% |  |
| $\mathrm{R}^{2}$ | 0.499 | 0.7 | 0.914 | 0.950 | 0.937 | 0.951 |  |
| $\mathrm{R}^{3}$ |  |  |  |  |  |  |  |

## Estimated Ultimate MCCP per Indemnity Claim - Statewide

| Accident <br> Year | Paid MCCP $@ 3 / 31 / 20$ $\frac{(\text { in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ | Estimated Ultimate $(3)=\underline{\text { MCCP }}=(1) \times(2)$ | Indemnity Claim Counts @3/31/20 <br> (4) | Cumulative Count Development Factors ${ }^{[2]}$ (5) | Estimated Ultimate Ind. Counts (6) $=(4) \times(5)$ | $\begin{array}{r} \text { Estimated } \\ \text { Ultimate } \\ \text { MCCP per } \\ \text { Indemnity } \\ \text { Claim } \\ (7)=(3) /(6) \times 1000 \end{array}$ | Annual change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 300,326 | 1.349 | 405,140 | 128,131 | 1.003 | 128,546 | 3,152 | --- |
| 2013 | 291,857 | 1.377 | 401,826 | 136,242 | 1.004 | 136,754 | 2,938 | -6.8\% |
| 2014 | 286,588 | 1.416 | 405,688 | 141,062 | 1.005 | 141,833 | 2,860 | -2.7\% |
| 2015 | 273,650 | 1.474 | 403,392 | 144,972 | 1.007 | 145,971 | 2,764 | -3.4\% |
| 2016 | 246,464 | 1.565 | 385,662 | 147,920 | 1.010 | 149,379 | 2,582 | -6.6\% |
| 2017 | 221,909 | 1.739 | 385,988 | 147,678 | 1.015 | 149,895 | 2,575 | -0.3\% |
| 2018 | 189,494 | 2.167 | 410,716 | 148,356 | 1.032 | 153,171 | 2,681 | 4.1\% |
| 2019 | 106,656 | 3.744 | 399,280 | 139,039 | 1.127 | 156,731 | 2,548 | -5.0\% |

## Estimated Annual Exponential Trend Based on:

| 2013 to 2019 | $-2.2 \%$ |
| :--- | :--- |
| 2015 to 2019 | $-1.2 \%$ |

Notes:
[1] Based on MCCP development through 99 months from Exhibit 18.1. 99-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC20-06-01.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.

## Paid MCCP per Indemnity Claims Inventory ${ }^{[1]}$ by Calendar Year - Statewide

|  | Paid MCCP <br> per Indemnity Claim Adjusted to <br> Remove IMR/IBR Fees | Year-to-Year Change |
| :---: | :---: | :---: |
| Calendar Year | --- | --- |
| 2005 | --- | --- |
| 2006 | $\$ 562$ | --- |
| 2007 | $\$ 848$ | $50.8 \%$ |
| 2008 | $\$ 808$ | $-4.7 \%$ |
| 2009 | $\$ 872$ | $7.9 \%$ |
| 2010 | $\$ 914$ | $4.8 \%$ |
| 2011 | $\$ 942$ | $3.0 \%$ |
| 2012 | $\$ 984$ | $4.5 \%$ |
| 2013 | $\$ 952$ | $-3.3 \%$ |
| 2014 | $\$ 1,027$ | $7.9 \%$ |
| 2015 | $\$ 1,028$ | $0.1 \%$ |
| 2016 | $\$ 939$ | $-8.6 \%$ |
| 2017 | $\$ 952$ | $1.4 \%$ |
| 2018 | $\$ 939$ | $-1.4 \%$ |
| 2019 |  |  |

Estimated Annual Exponential Trend Based on:
2009-2019
1.3\%
$R^{2}$
0.376
${ }^{\text {[1] }}$ 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


Notes:
[1] Based on Latest Year.
[2] 99-to-Ult. is based on selected paid medical 96-to-ultimate development factor on Exhibit 3.2 of Agenda Item AC20-06-01.

Source: WCIRB quarterly calls for experience.

Projected Ratio of MCCP to Losses - Statewide
Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity for Policies with Effective Dates between July 1, 2021 and August 31, 2021

| Accident Year | $\begin{array}{r} \text { Paid } \\ \text { MCCP } \\ @ 3 / 31 / 20 \\ (\text { in } \$ 000) \\ \hline(1) \end{array}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | $\begin{aligned} & \text { Estimated } \\ & \text { Ultimate } \\ & \text { MCCP } \\ & (3)=(1) \times(2) \end{aligned}$ | Indemnity Claim Counts @ 3/31/20 <br> (4) | Cumulative Count Development Factors ${ }^{[2]}$ | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP per Indemnity Claim $(7)=(3) /(6) \times 1000$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 300,326 | 1.349 | 405,140 | 128,131 | 1.003 | 128,546 | 3,152 |
| 2013 | 291,857 | 1.377 | 401,826 | 136,242 | 1.004 | 136,754 | 2,938 |
| 2014 | 286,588 | 1.416 | 405,688 | 141,062 | 1.005 | 141,833 | 2,860 |
| 2015 | 273,650 | 1.474 | 403,392 | 144,972 | 1.007 | 145,971 | 2,764 |
| 2016 | 246,464 | 1.565 | 385,662 | 147,920 | 1.010 | 149,379 | 2,582 |
| 2017 | 221,909 | 1.739 | 385,988 | 147,678 | 1.015 | 149,895 | 2,575 |
| 2018 | 189,494 | 2.167 | 410,716 | 148,356 | 1.032 | 153,171 | 2,681 |
| 2019 | 106,656 | 3.744 | 399,280 | 139,039 | 1.127 | 156,731 | 2,548 |

Projected Based on 2-Year Average of 2018 and 2019:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts ${ }^{[3]}$ | Ult.MCCP per Ind. Counts ${ }^{[4]}$ |
| :---: | :---: | :---: | :---: |
| 2020 | 395,221 | 151,166 | 2,614 |
| 2021 | 385,064 | 147,281 | 2,614 |
| 11/1/2021 | 382,248 | 146,204 | 2,614 |

(a) Projected MCCP (\$000):

382,248
(b) Calendar Year 2019 Earned Premium ${ }^{[6]}$ (\$000):
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ :

16,120,445
(d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[8]}$ :
0.571
0.976
(e) Projected Losses (\$000): (b) $\times$ (c) $\times(d)$

8,983,859
(f) Projected Ratio of MCCP to Losses: (a)/(e)
4.3\%

Notes:
${ }^{[1]}$ Based on MCCP development through 99 months from Exhibit 18.1. 99-to-ultimate development factors is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC20-06-01.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{[3]}$ Estimated based on projected frequency trends for accident years 2019 to 2022. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2018 and 2019.
${ }^{[4]}$ Severity is projected by applying an annual growth rate of $0 \%$ to the ultimate MCCP severity estimated from averaging 2018 and 2019.
${ }^{[5]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[6]}$ 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 March 31, 2020.
${ }^{\text {[7] }}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[8]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.

## Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity - Trend from Latest Year for Policies with Effective Dates between July 1, 2021 and August 31, 2021

| Accident Year | Paid MCCP @3/31/20 $\frac{(\text { in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | $\begin{array}{r} \text { Estimated } \\ \text { Ultimate } \\ \text { MCCP } \\ (3)==(1) \times(2) \end{array}$ | Indemnity Claim Counts @ 3/31/20 (4) | Cumulative Count Development Factors ${ }^{[2]}$ | Estimated Ultimate Ind. Counts (6)=(4)x(5) | $\begin{gathered} \text { Estimated } \\ \text { Ultimate } \\ \text { MCCP per } \\ \text { Indemnity } \\ \text { Claim } \\ (7)=(3) /(6) \times 1000 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 300,326 | 1.349 | 405,140 | 128,131 | 1.003 | 128,546 | 3,152 |
| 2013 | 291,857 | 1.377 | 401,826 | 136,242 | 1.004 | 136,754 | 2,938 |
| 2014 | 286,588 | 1.416 | 405,688 | 141,062 | 1.005 | 141,833 | 2,860 |
| 2015 | 273,650 | 1.474 | 403,392 | 144,972 | 1.007 | 145,971 | 2,764 |
| 2016 | 246,464 | 1.565 | 385,662 | 147,920 | 1.010 | 149,379 | 2,582 |
| 2017 | 221,909 | 1.739 | 385,988 | 147,678 | 1.015 | 149,895 | 2,575 |
| 2018 | 189,494 | 2.167 | 410,716 | 148,356 | 1.032 | 153,171 | 2,681 |
| 2019 | 106,656 | 3.744 | 399,280 | 139,039 | 1.127 | 156,731 | 2,548 |

## Projected Based on Latest Year:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts ${ }^{[3]}$ | Ult.MCCP per Ind. Counts ${ }^{[4]}$ |
| :---: | :---: | :---: | :---: |
| 2020 | 387,821 | 152,233 | 2,548 |
| 2021 | 377,854 | 148,320 | 2,548 |
| 11/1/2021 | 375,090 | 147,235 | 2,548 |

(a) Projected MCCP (\$000):
(b) Calendar Year 2019 Earned Premium ${ }^{[6]}$ (\$000):

16,120,445
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ : 0.571
(d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[8]}$ : 0.976
(e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d)

8,983,859
(f) Projected Ratio of MCCP to Losses: (a)/(e)
4.2\%

Notes:
${ }^{[1]}$ Based on MCCP development through 99 months from Exhibit 18.1. 99-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC20-06-01.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{[3]}$ Estimated based on projected frequency trends for accident years 2020 to 2022. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency. These frequency trends were then applied to the 2019 ultimate indemnity claim counts.
${ }^{[4]}$ Severity is projected by applying an annual growth rate of $0 \%$ to the 2019 ultimate MCCP severity.
${ }^{[5]}$ Column(6) $x$ Column(7) / 1,000.
${ }^{[6]}$ 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 March 31, 2020.
${ }^{[7]}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[8]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.

## Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity with Trend Based on AY Ultimate MCCP per Indemnity Claim and Applied to the Latest Two Years for Policies with Effective Dates between July 1, 2021 and August 31, 2021

| Year | Paid MCCP @12/31/19 $\frac{(\text { in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | Estimated Ultimate $(3)=\frac{\text { MCCP }}{(1) \times(2)}$ | Indemnity Claim Counts @12/31/19 | Cumulative Count Development Factors ${ }^{[2]}$ | Estimated Ultimate <br> Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP per Indemnity <br> Claim $(7)=(3) /(\overline{6}) \times 1000$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 300,326 | 1.349 | 405,140 | 128,131 | 1.003 | 128,546 | 3,152 |
| 2013 | 291,857 | 1.377 | 401,826 | 136,242 | 1.004 | 136,754 | 2,938 |
| 2014 | 286,588 | 1.416 | 405,688 | 141,062 | 1.005 | 141,833 | 2,860 |
| 2015 | 273,650 | 1.474 | 403,392 | 144,972 | 1.007 | 145,971 | 2,764 |
| 2016 | 246,464 | 1.565 | 385,662 | 147,920 | 1.010 | 149,379 | 2,582 |
| 2017 | 221,909 | 1.739 | 385,988 | 147,678 | 1.015 | 149,895 | 2,575 |
| 2018 | 189,494 | 2.167 | 410,716 | 148,356 | 1.032 | 153,171 | 2,681 |
| 2019 | 106,656 | 3.744 | 399,280 | 139,039 | 1.127 | 156,731 | 2,548 |

Projected Based on 2-Year Average of 2018 and 2019:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts ${ }^{[3]}$ | Ult.MCCP per Ind. Counts ${ }^{[4]}$ |
| :---: | :---: | :---: | :---: |
| 2020 | 382,062 | 151,166 | 2,527 |
| 2021 | 363,989 | 147,281 | 2,471 |
| 11/1/2021 | 358,662 | 146,204 | 2,453 |

(a) Projected MCCP (\$000):

358,662
(b) Calendar Year 2019 Earned Premium[6] (\$000):

16,120,445
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$
0.571
(d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[8]}$ :
0.976
(e) Projected Losses (\$000): (b) $\times(\mathrm{c}) \times(\mathrm{d})$

8,983,859
(f) Projected Ratio of MCCP to Losses: (a)/(e)
4.0\%

Notes:
${ }^{[1]}$ Based on MCCP development through 99 months from Exhibit 18.1. 99-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC20-06-01.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{[3]}$ Estimated based on projected frequency trends for accident years 2019 and 2022. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.
${ }^{[4]}$ Severity is projected by applying an annual growth rate of $-2.2 \%$ to the ultimate MCCP severity estimated from averaging 2018 and 2019.
${ }^{[5]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[6]}$ 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 March 31, 2020.
[7] See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[8]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.

## Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity with Trend Based on CY Paid MCCP per Open Indemnity Claim and Applied to the Latest Two Years for Policies with Effective Dates between July 1, 2021 and August 31, 2021


Projected Based on 2-Year Average of 2018 and 2019:

|  | Ultimate MCCP ${ }^{[5]}$ |
| :--- | ---: | :--- | ---: |$\quad$| Ult. Ind. Counts ${ }^{[3]}$ |
| ---: | | Ult.MCCP per |
| :---: |
| Ind. Counts ${ }^{[4]}$ |

(a) Projected MCCP (\$000):

396,336
(b) Calendar Year 2019 Earned Premium ${ }^{[6]}$ (\$000):

16,120,445
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ :
0.571
(d) Premium Adjustment Factor for Calendar Year 2019 ${ }^{[8]}$ :
0.976
(e) Projected Losses (\$000): (b) $\times(\mathrm{c}) \times(\mathrm{d})$

8,983,859
(f) Projected Ratio of MCCP to Losses: (a)/(e)
4.4\%

Notes:
${ }^{[1]}$ Based on MCCP development through 99 months from Exhibit 18.1. 99-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC20-06-01.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
${ }^{[3]}$ Estimated based on projected frequency trends for accident years 2019 and 2022. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.
${ }^{[4]}$ Severity is projected by applying an annual growth rate of $1.3 \%$ to the ultimate MCCP severity estimated from averaging 2018 and 2019.
${ }^{[5]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[6]}$ 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 March 31, 2020.
${ }^{[7]}$ See Exhibit 8 of Agenda Item AC20-06-01.
${ }^{[8]}$ See Exhibit 5.2 of Agenda Item AC20-06-01.

## Item AC20-08-03 <br> 1/1/2021 Filing - Review of Alternative Loss Projection Methodologies

For a number of years, the WCIRB has included alternative loss development and trending methodology projections in its pure premium rate filing submissions.

## Loss Development Methodologies

The loss development projections based on the methodology reflected in the summary analysis of March 31, 2020 experience, included in Item AC20-06-01, included a combination of (a) latest year reform-adjusted ${ }^{1}$ paid loss development factors through 111 months with adjustments for changes in claim settlement rates applied through 75 months, (b) three-year average reform-adjusted paid loss development factors from 111 months through 267 months, and (c) six-year average (unadjusted) incurred loss development factors after 267 months. Included for the Committee's review are a number of alternative loss development projections based on methodologies that have been included, for informational purposes, in prior pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on March 31, 2020 experience, derived using the following loss development methodologies and the trending methodology reflected in the analysis included in Item AC20-06-01 are included: ${ }^{2}$

1. Three-Year Average Unadjusted Incurred Loss Development - Exhibits 1.1 through 1.3
2. Latest Year Unadjusted Incurred Loss Development - Exhibits 2.1 through 2.3
3. Three-Year Average Incurred Loss Development Adjusted for Changes in Case Reserve Levels Exhibits 3.1 through 3.11
4. Latest Year Incurred Loss Development Adjusted for Changes in Insurer Mix - Exhibits 4.1 through 4.3
5. Three-Year Average Unadjusted Paid Loss Development - Exhibits 5.1 through 5.3
6. Latest Year Unadjusted Paid Loss Development - Exhibits 6.1 through 6.3
7. Latest Year Paid Loss Development Adjusted for Reforms - Exhibits 7.1 and 7.2
8. Three-Year Average Paid Loss Development Adjusted for Changes in Claim Settlement Rates and Reforms - Exhibits 8.1 through 8.3
9. Latest Year Paid Loss Development Adjusted for Changes in Insurer Mix - Exhibits 9.1 through 9.3
10. Expected Loss Ratio with a Bornheutter-Ferguson (BF) Adjustment Based on Paid Loss Development to 27 Months with Latest Year Paid Loss Development Adjusted for Reforms after 27 Months - Exhibits 10.1 through 10.5
[^20]IV-C-1

A summary of the preliminary January 1, 2021 to August 31,2021 policy period loss ratio projections based on the alternative loss development methodologies described above is shown in Table 1.

Table 1: Projected Loss Ratios Based on Alternative Loss Development Methodologies ${ }^{3}$

| Loss Development Methodologies | Indemnity <br> Loss Ratio | Medical <br> Loss Ratio | Total <br> Loss Ratio |
| :--- | :---: | :---: | :---: |
| Current WCIRB Methodology <br> Latest Year Paid Adjusted for Reforms and Changes <br> in Claim Settlement Rates | $\mathbf{0 . 2 5 9}$ | $\mathbf{0 . 3 1 2}$ | $\mathbf{0 . 5 7 1}$ |
| Alternative Methodologies |  |  |  |
| Incurred Methodologies | 0.263 | 0.282 | 0.545 |
| Three-Year Average (Unadjusted) <br> Latest Year (Unadjusted) <br> Three-Year Average Adjusted for Changes in Case <br> Reserve Levels | 0.254 | 0.275 | 0.529 |
| Latest Year Adjusted for Changes in Insurer Mix | 0.252 | 0.280 | 0.535 |
| Paid Methodologies | 0.268 | 0.520 |  |
| Three-Year Average (Unadjusted) <br> Latest Year (Unadjusted) <br> Latest Year Adjusted for Reforms <br> Three-Year Average Adjusted for Changes in Claim <br> Settlement Rates and Reforms <br> Latest Year Adjusted for Changes in Insurer Mix <br> BF Paid to 27 Months; Latest Year Reform-Adjusted <br> after 27 Months <br> Hybrid Methodologies <br> 75\% Applied to Latest Year Paid Adjusted for <br> Reforms and Claim Settlement Rates and 25\% <br> Applied to 3-Year Average Unadjusted Incurred | 0.256 | 0.264 | 0.324 |

[^21]Actuarial Committee
Meeting Agenda for August 4, 2020

## Trending Methodologies

The trending projections reflected in the summary analysis of March 31, 2020 experience, included in Item AC20-06-01, are based on the average of the latest two years' on-level loss ratios with separate projections of claim frequency and claim severity growth applied. The claim frequency growth estimates were based on the January 1, 2020 Pure Premium Rate Filing approach of reflecting the preliminary actual 15-month frequency change for accident year 2019 and the WCIRB's indemnity claim frequency model projections for accident years 2020 through 2022, and are prior to reflecting the impact of the COVID-19 pandemic and resulting economic downturn. The severity growth estimates of 0\% for indemnity and 1.5\% for medical were consistent with those reflected in the January 1, 2020 Pure Premium Rate Filing which were selected based on a review of short-term and long-term growth in claim severities.

The trending projections for the January 1, 2021 to August 31, 2021 policy period are significantly impacted by the COVID-19 pandemic and resulting economic downturn. These issues will be discussed separately with the Committee at the meeting (see Items AC20-04-04 and AC20-08-04). Given the uncertainty surrounding the trending projections, staff will discuss alternative trending methodology assumptions with the Committee at the meeting.

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

(a) Based on AC20-06-01, 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 AC20-06-01, Exhibit 2.1.
(c) Based on AC20-06-01, 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 March 31, 2020

| Accident | (1) | $(2)$ | $(3)$ | $(4)$ <br> Year |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Developed Indemnity }}$Loss Ratio (a) | Composite Indemnity <br> Adjustment Factor (b) | On-Level Indemnity to |  |
| 2008 |  |  |  | Composite Premium <br> Idjustment Factor (c) <br> Pustry Average Filed Premium Ratio |
| 2009 | 0.281 | 1.381 | 1.265 | $(1) \times(2) \div(3)$ |
| 2010 | 0.328 | 1.354 | 1.364 | 0.307 |
| 2011 | 0.314 | 1.328 | 1.240 | 0.325 |
| 2012 | 0.291 | 1.310 | 1.133 | 0.336 |
| 2013 | 0.261 | 1.294 | 1.009 | 0.337 |
| 2014 | 0.222 | 1.265 | 0.881 | 0.335 |
| 2015 | 0.212 | 1.159 | 0.812 | 0.319 |
| 2016 | 0.208 | 1.142 | 0.776 | 0.303 |
| 2017 | 0.199 | 1.128 | 0.803 | 0.307 |
| 2018 | 0.209 | 1.098 | 0.841 | 0.280 |
| 2019 | 0.226 | 1.070 | 0.882 | 0.272 |

Projected (d)

| 2020 | 0.271 |
| :---: | :--- |
| 2021 | 0.265 |
| $11 / 1 / 2021$ | 0.263 |

(a) See Exhibit 1.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

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 March 31, 2020

| Accident <br> Year | (1) | $(2)$ <br> Developed Medical <br> Loss Ratio (a) | Composite Medical <br> Adjustment Factor (b) | $(3)$ <br> Composite Premium <br> Adjustment Factor (c) |
| :---: | :---: | :---: | :---: | :---: | | $(4)$ <br> On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: |
| 2008 |


| 2020 | 0.284 |
| :--- | :--- |
| 2021 | 0.282 |
| $11 / 1 / 2021$ | 0.282 |

(a) See Exhibit 1.1.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 March 31, 2020|  | (1) | ${ }^{(2)}$ Inder | mnity ${ }^{(3)}$ | (4) | (5) | Medical |  | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported Incurred | Annual | Cumulative |  | Reported Incurred | Annual | Cumulative |  | Total |
| Accident | Loss Ratio | Development | Development | Developed | Loss Ratio | Development | Development | Developed | Developed |
| Year | Ex IBNR (a) | Factor (b) | Factor | Loss Ratio | Ex IBNR (a) | Factor (c) | Factor | Loss Ratio | $\underline{\text { Loss Ratio }}$ |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times$ (7) | (4) + (8) |
| 2008 | 0.274 | 1.004 | 1.026 | 0.281 | 0.406 | 1.003 | 1.027 | 0.417 | 0.698 |
| 2009 | 0.317 | 1.007 | 1.033 | 0.328 | 0.469 | 1.004 | 1.031 | 0.484 | 0.812 |
| 2010 | 0.302 | 1.007 | 1.040 | 0.314 | 0.450 | 1.005 | 1.036 | 0.466 | 0.780 |
| 2011 | 0.278 | 1.009 | 1.049 | 0.291 | 0.384 | 1.007 | 1.044 | 0.401 | 0.692 |
| 2012 | 0.246 | 1.010 | 1.060 | 0.261 | 0.326 | 1.009 | 1.053 | 0.343 | 0.604 |
| 2013 | 0.206 | 1.014 | 1.075 | 0.222 | 0.258 | 1.015 | 1.069 | 0.276 | 0.498 |
| 2014 | 0.193 | 1.017 | 1.093 | 0.211 | 0.226 | 1.010 | 1.079 | 0.244 | 0.454 |
| 2015 | 0.184 | 1.023 | 1.118 | 0.206 | 0.211 | 1.022 | 1.103 | 0.233 | 0.438 |
| 2016 | 0.168 | 1.039 | 1.162 | 0.196 | 0.193 | 1.027 | 1.133 | 0.219 | 0.414 |
| 2017 | 0.162 | 1.080 | 1.254 | 0.204 | 0.193 | 1.042 | 1.181 | 0.227 | 0.431 |
| 2018 | 0.148 | 1.183 | 1.484 | 0.220 | 0.188 | 1.098 | 1.296 | 0.244 | 0.463 |
| 2019 | 0.108 | 1.568 | 2.327 | 0.252 | 0.163 | 1.253 | 1.624 | 0.265 | 0.516 |

(a) Based on AC20-06-01, 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 AC20-06-01, Exhibit 2.1.
(c) Based on AC20-06-01, 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 March 31, 2020

| Accident <br> Year | (1) | $(2)$ <br> Developed Indemnity <br> Loss Ratio (a) | Composite Indemnity <br> Adjustment Factor (b) | (3) | Composite Premium <br> Adjustment Factor (c) |
| :---: | :---: | :---: | :---: | :---: | :---: | | On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: |
| 2008 |

(a) See Exhibit 2.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

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 March 31, 2020

| Accident Year | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Medical Loss Ratio (a) | Composite Medical Adjustment Factor (b) | Composite Premium Adjustment Factor (c) | On-Level Medical to Industry Average Filed Pure Premium Ratio(e) |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2008 | 0.417 | 0.802 | 1.265 | 0.264 |
| 2009 | 0.484 | 0.791 | 1.364 | 0.281 |
| 2010 | 0.466 | 0.789 | 1.240 | 0.297 |
| 2011 | 0.401 | 0.811 | 1.133 | 0.287 |
| 2012 | 0.343 | 0.846 | 1.009 | 0.288 |
| 2013 | 0.276 | 0.928 | 0.881 | 0.291 |
| 2014 | 0.244 | 0.974 | 0.812 | 0.292 |
| 2015 | 0.233 | 0.995 | 0.776 | 0.298 |
| 2016 | 0.219 | 0.993 | 0.803 | 0.271 |
| 2017 | 0.227 | 0.991 | 0.841 | 0.268 |
| 2018 | 0.244 | 1.015 | 0.882 | 0.280 |
| 2019 | 0.265 | 1.011 | 0.976 | 0.274 |

Projected (d)

| 2020 | 0.277 |
| :--- | :--- |
| 2021 | 0.275 |
| $11 / 1 / 2021$ | 0.275 |

(a) See Exhibit 2.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
A. Indemnity Case Reserves Per Open Claim

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 25,649 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 35,679 | 35,730 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 31,357 | 33,245 | 35,090 |
| 2005 |  |  |  |  |  |  |  |  |  | 27,805 | 28,458 | 31,554 | 33,746 |
| 2006 |  |  |  |  |  |  |  |  | 26,994 | 27,481 | 30,957 | 32,744 | 34,400 |
| 2007 |  |  |  |  |  |  |  | 27,100 | 29,204 | 31,360 | 32,520 | 36,472 | 42,123 |
| 2008 |  |  |  |  |  |  | 23,878 | 26,713 | 30,551 | 33,560 | 36,891 | 41,290 |  |
| 2009 |  |  |  |  |  | 21,594 | 23,512 | 25,992 | 28,961 | 32,174 | 37,527 |  |  |
| 2010 |  |  |  |  | 18,225 | 20,213 | 22,415 | 25,251 | 28,814 | 31,909 |  |  |  |
| 2011 |  |  |  | 17,450 | 18,928 | 20,810 | 23,461 | 26,064 | 29,337 |  |  |  |  |
| 2012 |  |  | 14,952 | 16,363 | 18,719 | 21,181 | 24,855 | 28,916 |  |  |  |  |  |
| 2013 |  | 13,078 | 14,215 | 15,739 | 17,677 | 20,706 | 24,561 |  |  |  |  |  |  |
| 2014 | 9,665 | 13,125 | 15,214 | 17,625 | 20,572 | 22,577 |  |  |  |  |  |  |  |
| 2015 | 10,017 | 14,245 | 16,690 | 19,669 | 22,154 |  |  |  |  |  |  |  |  |
| 2016 | 10,147 | 14,596 | 17,283 | 20,430 |  |  |  |  |  |  |  |  |  |
| 2017 | 10,827 | 16,047 | 19,535 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 11,564 | 16,827 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 12,015 |  |  |  |  |  |  |  |  |  |  |  |  |

B. Average Paid Indemnity per Closed Claim

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 | $\underline{123}$ | $\underline{135}$ | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 21,923 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 21,467 | 21,958 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 17,165 | 17,663 | 18,083 |
| 2005 |  |  |  |  |  |  |  |  |  | 15,091 | 15,644 | 16,096 | 16,457 |
| 2006 |  |  |  |  |  |  |  |  | 15,970 | 16,738 | 17,349 | 17,825 | 18,227 |
| 2007 |  |  |  |  |  |  |  | 16,480 | 17,442 | 18,240 | 18,872 | 19,368 | 19,826 |
| 2008 |  |  |  |  |  |  | 17,318 | 18,552 | 19,442 | 20,117 | 20,747 | 21,305 |  |
| 2009 |  |  |  |  |  | 16,802 | 18,488 | 19,671 | 20,611 | 21,422 | 22,016 |  |  |
| 2010 |  |  |  |  | 15,155 | 17,187 | 18,709 | 19,812 | 20,600 | 21,267 |  |  |  |
| 2011 |  |  |  | 12,887 | 15,514 | 17,297 | 18,672 | 19,778 | 20,496 |  |  |  |  |
| 2012 |  |  | 10,038 | 13,266 | 15,579 | 17,331 | 18,590 | 19,533 |  |  |  |  |  |
| 2013 |  | 6,318 | 10,481 | 13,644 | 15,851 | 17,379 | 18,417 |  |  |  |  |  |  |
| 2014 | 2,691 | 6,720 | 11,149 | 14,513 | 16,766 | 18,242 |  |  |  |  |  |  |  |
| 2015 | 3,006 | 7,359 | 11,875 | 15,192 | 17,256 |  |  |  |  |  |  |  |  |
| 2016 | 3,252 | 7,699 | 12,005 | 15,085 |  |  |  |  |  |  |  |  |  |
| 2017 | 3,341 | 7,785 | 12,017 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 3,566 | 8,204 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 3,812 |  |  |  |  |  |  |  |  |  |  |  |  |

C. Annual Change of Average Paid Indemnity per Closed Claim

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | $\underline{123}$ | 135 | 147 | 159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  |  | 0.2\% |
| 2004 |  |  |  |  |  |  |  |  |  |  |  | -17.7\% | -17.6\% |
| 2005 |  |  |  |  |  |  |  |  |  |  | -8.9\% | -8.9\% | -9.0\% |
| 2006 |  |  |  |  |  |  |  |  |  | 10.9\% | 10.9\% | 10.7\% | 10.8\% |
| 2007 |  |  |  |  |  |  |  |  | 9.2\% | 9.0\% | 8.8\% | 8.7\% | 8.8\% |
| 2008 |  |  |  |  |  |  |  | 12.6\% | 11.5\% | 10.3\% | 9.9\% | 10.0\% |  |
| 2009 |  |  |  |  |  |  | 6.8\% | 6.0\% | 6.0\% | 6.5\% | 6.1\% |  |  |
| 2010 |  |  |  |  |  | 2.3\% | 1.2\% | 0.7\% | -0.1\% | -0.7\% |  |  |  |
| 2011 |  |  |  |  | 2.4\% | 0.6\% | -0.2\% | -0.2\% | -0.5\% |  |  |  |  |
| 2012 |  |  |  | 2.9\% | 0.4\% | 0.2\% | -0.4\% | -1.2\% |  |  |  |  |  |
| 2013 |  |  | 4.4\% | 2.8\% | 1.7\% | 0.3\% | -0.9\% |  |  |  |  |  |  |
| 2014 |  | 6.4\% | 6.4\% | 6.4\% | 5.8\% | 5.0\% |  |  |  |  |  |  |  |
| 2015 | 11.7\% | 9.5\% | 6.5\% | 4.7\% | 2.9\% |  |  |  |  |  |  |  |  |
| 2016 | 8.2\% | 4.6\% | 1.1\% | -0.7\% |  |  |  |  |  |  |  |  |  |
| 2017 | 2.8\% | 1.1\% | 0.1\% |  |  |  |  |  |  |  |  |  |  |
| 2018 | 6.7\% | 5.4\% |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 6.9\% |  |  |  |  |  |  |  |  |  |  |  |  |

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

Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
D. Indemnity Case Reserves per Open Claim Adjusted by Paid Indemnity Severity Trend (a)


| Accident <br> Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | 159 |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 6,735 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 7,331 | 6,280 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 7,030 | 5,946 | 4,928 |
| 2005 |  |  |  |  |  |  |  |  |  | 7,267 | 5,964 | 4,809 | 3,940 |
| 2006 |  |  |  |  |  |  |  |  | 8,769 | 7,094 | 5,611 | 4,538 | 3,651 |
| 2007 |  |  |  |  |  |  |  | 10,554 | 8,159 | 6,313 | 4,959 | 3,975 | 3,131 |
| 2008 |  |  |  |  |  |  | 12,761 | 9,569 | 7,309 | 5,697 | 4,399 | 3,496 |  |
| 2009 |  |  |  |  |  | 16,209 | 11,837 | 8,779 | 6,601 | 4,961 | 3,814 |  |  |
| 2010 |  |  |  |  | 21,013 | 15,020 | 10,735 | 7,820 | 5,761 | 4,323 |  |  |  |
| 2011 |  |  |  | 28,134 | 19,781 | 13,962 | 9,831 | 6,917 | 5,098 |  |  |  |  |
| 2012 |  |  | 40,886 | 28,351 | 19,426 | 13,246 | 9,117 | 6,479 |  |  |  |  |  |
| 2013 |  | 60,411 | 42,462 | 27,996 | 18,338 | 12,278 | 8,340 |  |  |  |  |  |  |
| 2014 | 80,242 | 62,676 | 42,436 | 27,057 | 17,483 | 11,684 |  |  |  |  |  |  |  |
| 2015 | 84,707 | 63,162 | 40,432 | 24,801 | 15,911 |  |  |  |  |  |  |  |  |
| 2016 | 84,017 | 60,470 | 37,457 | 23,010 |  |  |  |  |  |  |  |  |  |
| 2017 | 82,354 | 56,653 | 35,112 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 82,936 | 57,895 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 84,878 |  |  |  |  |  |  |  |  |  |  |  |  |


| Accident Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 313,712 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 305,013 | 292,959 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 205,672 | 203,551 | 189,318 |
| 2005 |  |  |  |  |  |  |  |  |  | 164,538 | 159,023 | 150,007 | 137,759 |
| 2006 |  |  |  |  |  |  |  |  | 200,458 | 178,176 | 165,936 | 156,767 | 141,387 |
| 2007 |  |  |  |  |  |  |  | 257,469 | 203,700 | 172,766 | 159,502 | 149,206 | 131,887 |
| 2008 |  |  |  |  |  |  | 294,726 | 262,808 | 203,395 | 171,969 | 155,566 | 144,350 |  |
| 2009 |  |  |  |  |  | 337,071 | 291,856 | 255,649 | 194,740 | 159,461 | 143,126 |  |  |
| 2010 |  |  |  |  | 408,825 | 319,502 | 267,846 | 229,367 | 169,866 | 137,944 |  |  |  |
| 2011 |  |  |  | 491,020 | 393,977 | 298,916 | 244,787 | 202,528 | 149,559 |  |  |  |  |
| 2012 |  |  | 667,214 | 509,332 | 388,522 | 284,124 | 226,021 | 187,350 |  |  |  |  |  |
| 2013 |  | 782,803 | 723,471 | 517,279 | 373,190 | 264,096 | 204,839 |  |  |  |  |  |  |
| 2014 | 680,679 | 863,900 | 769,143 | 531,766 | 376,311 | 263,790 |  |  |  |  |  |  |  |
| 2015 | 802,713 | 953,352 | 780,556 | 510,261 | 352,492 |  |  |  |  |  |  |  |  |
| 2016 | 861,100 | 954,903 | 730,982 | 470,084 |  |  |  |  |  |  |  |  |  |
| 2017 | 867,321 | 904,530 | 685,903 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 932,239 | 974,184 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1,019,838 |  |  |  |  |  |  |  |  |  |  |  |  |

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

Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
G. Paid Indemnity Loss on All Claims

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | $\underline{87}$ | $\underline{99}$ | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 4,692,873 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 4,430,784 | 4,476,070 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 3,062,153 | 3,105,141 | 3,139,503 |
| 2005 |  |  |  |  |  |  |  |  |  | 2,378,508 | 2,423,839 | 2,458,017 | 2,487,864 |
| 2006 |  |  |  |  |  |  |  |  | 2,418,052 | 2,481,088 | 2,523,732 | 2,562,806 | 2,590,181 |
| 2007 |  |  |  |  |  |  |  | 2,490,745 | 2,571,266 | 2,636,197 | 2,681,535 | 2,723,387 | 2,759,789 |
| 2008 |  |  |  |  |  |  | 2,502,016 | 2,601,299 | 2,665,621 | 2,720,324 | 2,769,556 | 2,807,577 |  |
| 2009 |  |  |  |  |  | 2,283,611 | 2,412,027 | 2,506,465 | 2,578,803 | 2,637,754 | 2,680,254 |  |  |
| 2010 |  |  |  |  | 2,167,179 | 2,342,244 | 2,466,302 | 2,554,597 | 2,616,405 | 2,670,269 |  |  |  |
| 2011 |  |  |  | 1,917,499 | 2,158,789 | 2,322,631 | 2,443,568 | 2,535,460 | 2,593,487 |  |  |  |  |
| 2012 |  |  | 1,660,276 | 2,019,628 | 2,266,781 | 2,437,851 | 2,552,045 | 2,630,902 |  |  |  |  |  |
| 2013 |  | 1,201,721 | 1,789,046 | 2,174,299 | 2,414,426 | 2,566,546 | 2,664,554 |  |  |  |  |  |  |
| 2014 | 529,355 | 1,301,568 | 1,953,347 | 2,373,215 | 2,631,521 | 2,795,003 |  |  |  |  |  |  |  |
| 2015 | 576,423 | 1,422,578 | 2,099,117 | 2,522,498 | 2,774,496 |  |  |  |  |  |  |  |  |
| 2016 | 610,812 | 1,467,626 | 2,141,952 | 2,543,638 |  |  |  |  |  |  |  |  |  |
| 2017 | 631,023 | 1,508,537 | 2,173,148 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 681,051 | 1,595,883 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 720,721 |  |  |  |  |  |  |  |  |  |  |  |  |

H. Adjusted Total Indemnity Incurred (in \$000) (c)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 | 123 | $\underline{135}$ | 147 | 159 |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 5,006,586 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 4,735,796 | 4,769,029 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 3,267,825 | 3,308,692 | 3,328,821 |
| 2005 |  |  |  |  |  |  |  |  |  | 2,543,046 | 2,582,862 | 2,608,024 | 2,625,623 |
| 2006 |  |  |  |  |  |  |  |  | 2,618,511 | 2,659,264 | 2,689,668 | 2,719,573 | 2,731,568 |
| 2007 |  |  |  |  |  |  |  | 2,748,214 | 2,774,966 | 2,808,963 | 2,841,037 | 2,872,593 | 2,891,676 |
| 2008 |  |  |  |  |  |  | 2,796,742 | 2,864,107 | 2,869,016 | 2,892,293 | 2,925,122 | 2,951,927 |  |
| 2009 |  |  |  |  |  | 2,620,682 | 2,703,884 | 2,762,114 | 2,773,544 | 2,797,215 | 2,823,381 |  |  |
| 2010 |  |  |  |  | 2,576,005 | 2,661,746 | 2,734,147 | 2,783,964 | 2,786,271 | 2,808,214 |  |  |  |
| 2011 |  |  |  | 2,408,520 | 2,552,765 | 2,621,547 | 2,688,355 | 2,737,987 | 2,743,046 |  |  |  |  |
| 2012 |  |  | 2,327,489 | 2,528,960 | 2,655,303 | 2,721,974 | 2,778,066 | 2,818,252 |  |  |  |  |  |
| 2013 |  | 1,984,524 | 2,512,517 | 2,691,578 | 2,787,616 | 2,830,642 | 2,869,393 |  |  |  |  |  |  |
| 2014 | 1,210,034 | 2,165,468 | 2,722,489 | 2,904,981 | 3,007,832 | 3,058,793 |  |  |  |  |  |  |  |
| 2015 | 1,379,136 | 2,375,930 | 2,879,672 | 3,032,759 | 3,126,988 |  |  |  |  |  |  |  |  |
| 2016 | 1,471,912 | 2,422,529 | 2,872,934 | 3,013,722 |  |  |  |  |  |  |  |  |  |
| 2017 | 1,498,343 | 2,413,067 | 2,859,051 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1,613,290 | 2,570,067 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1,740,559 |  |  |  |  |  |  |  |  |  |  |  |  |

I. Indemnity Incurred Loss Development Factors Based on Adjusted Total Indemnity Incurred

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.007 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.013 | 1.006 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.016 | 1.010 | 1.007 |
| 2006 |  |  |  |  |  |  |  |  | 1.016 | 1.011 | 1.011 | 1.004 |
| 2007 |  |  |  |  |  |  |  | 1.010 | 1.012 | 1.011 | 1.011 | 1.007 |
| 2008 |  |  |  |  |  |  | 1.024 | 1.002 | 1.008 | 1.011 | 1.009 |  |
| 2009 |  |  |  |  |  | 1.032 | 1.022 | 1.004 | 1.009 | 1.009 |  |  |
| 2010 |  |  |  |  | 1.033 | 1.027 | 1.018 | 1.001 | 1.008 |  |  |  |
| 2011 |  |  |  | 1.060 | 1.027 | 1.025 | 1.018 | 1.002 |  |  |  |  |
| 2012 |  |  | 1.087 | 1.050 | 1.025 | 1.021 | 1.014 |  |  |  |  |  |
| 2013 |  | 1.266 | 1.071 | 1.036 | 1.015 | 1.014 |  |  |  |  |  |  |
| 2014 | 1.790 | 1.257 | 1.067 | 1.035 | 1.017 |  |  |  |  |  |  |  |
| 2015 | 1.723 | 1.212 | 1.053 | 1.031 |  |  |  |  |  |  |  |  |
| 2016 | 1.646 | 1.186 | 1.049 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.610 | 1.185 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.593 |  |  |  |  |  |  |  |  |  |  |  |
| Latest Yea | 1.593 | 1.185 | 1.049 | 1.031 | 1.017 | 1.014 | 1.014 | 1.002 | 1.008 | 1.009 | 1.009 | 1.007 |
| 3-Yr Avera | 1.616 | 1.194 | 1.056 | 1.034 | 1.019 | 1.020 | 1.017 | 1.002 | 1.008 | 1.011 | 1.010 | 1.006 |

(c) Each amount is the sum of the adjusted total indemnity case reserves (Item F) and the total indemnity paid losses (Item G).

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

Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
J. Indemnity Incurred Loss Development Factors (d)

| Accident |  |  |  |  | ge-to- | Develo | nt (in m | ths): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.002 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.006 | 1.003 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.005 | 1.006 | 1.004 |
| 2006 |  |  |  |  |  |  |  |  | 1.008 | 1.008 | 1.005 | 1.002 |
| 2007 |  |  |  |  |  |  |  | 1.012 | 1.009 | 1.003 | 1.009 | 1.008 |
| 2008 |  |  |  |  |  |  | 1.018 | 1.011 | 1.008 | 1.007 | 1.007 |  |
| 2009 |  |  |  |  |  | 1.022 | 1.016 | 1.013 | 1.010 | 1.009 |  |  |
| 2010 |  |  |  |  | 1.038 | 1.023 | 1.017 | 1.011 | 1.009 |  |  |  |
| 2011 |  |  |  | 1.052 | 1.032 | 1.023 | 1.016 | 1.010 |  |  |  |  |
| 2012 |  |  | 1.093 | 1.059 | 1.033 | 1.022 | 1.014 |  |  |  |  |  |
| 2013 |  | 1.201 | 1.093 | 1.047 | 1.030 | 1.017 |  |  |  |  |  |  |
| 2014 | 1.628 | 1.223 | 1.097 | 1.050 | 1.023 |  |  |  |  |  |  |  |
| 2015 | 1.630 | 1.194 | 1.085 | 1.039 |  |  |  |  |  |  |  |  |
| 2016 | 1.606 | 1.187 | 1.080 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.588 | 1.183 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.567 |  |  |  |  |  |  |  |  |  |  |  |

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

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 0.53\% |
| 2004 |  |  |  |  |  |  |  |  |  |  | 0.63\% | 0.32\% |
| 2005 |  |  |  |  |  |  |  |  |  | 1.06\% | 0.35\% | 0.25\% |
| 2006 |  |  |  |  |  |  |  |  | 0.75\% | 0.34\% | 0.59\% | 0.28\% |
| 2007 |  |  |  |  |  |  |  | -0.21\% | 0.35\% | 0.84\% | 0.21\% | -0.15\% |
| 2008 |  |  |  |  |  |  | 0.61\% | -0.94\% | 0.03\% | 0.43\% | 0.23\% |  |
| 2009 |  |  |  |  |  | 1.00\% | 0.50\% | -0.87\% | -0.13\% | 0.01\% |  |  |
| 2010 |  |  |  |  | -0.41\% | 0.40\% | 0.15\% | -1.01\% | -0.14\% |  |  |  |
| 2011 |  |  |  | 0.77\% | -0.45\% | 0.21\% | 0.29\% | -0.81\% |  |  |  |  |
| 2012 |  |  | -0.62\% | -0.87\% | -0.81\% | -0.15\% | 0.02\% |  |  |  |  |  |
| 2013 |  | 5.39\% | -1.98\% | -1.11\% | -1.41\% | -0.35\% |  |  |  |  |  |  |
| 2014 | 9.94\% | 2.76\% | -2.70\% | -1.34\% | -0.55\% |  |  |  |  |  |  |  |
| 2015 | 5.71\% | 1.47\% | -2.95\% | -0.74\% |  |  |  |  |  |  |  |  |
| 2016 | 2.48\% | -0.08\% | -2.91\% |  |  |  |  |  |  |  |  |  |
| 2017 | 1.43\% | 0.19\% |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.66\% |  |  |  |  |  |  |  |  |  |  |  |

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

| AccidentYear | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.007 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.012 | 1.006 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.016 | 1.009 | 1.007 |
| 2006 |  |  |  |  |  |  |  |  | 1.016 | 1.011 | 1.011 | 1.005 |
| 2007 |  |  |  |  |  |  |  | 1.010 | 1.012 | 1.011 | 1.011 | 1.007 |
| 2008 |  |  |  |  |  |  | 1.024 | 1.002 | 1.008 | 1.011 | 1.009 |  |
| 2009 |  |  |  |  |  | 1.031 | 1.021 | 1.004 | 1.009 | 1.009 |  |  |
| 2010 |  |  |  |  | 1.033 | 1.027 | 1.019 | 1.001 | 1.008 |  |  |  |
| 2011 |  |  |  | 1.061 | 1.027 | 1.026 | 1.019 | 1.002 |  |  |  |  |
| 2012 |  |  | 1.086 | 1.050 | 1.025 | 1.020 | 1.014 |  |  |  |  |  |
| 2013 |  | 1.266 | 1.071 | 1.035 | 1.015 | 1.013 |  |  |  |  |  |  |
| 2014 | 1.786 | 1.258 | 1.067 | 1.035 | 1.017 |  |  |  |  |  |  |  |
| 2015 | 1.723 | 1.213 | 1.053 | 1.031 |  |  |  |  |  |  |  |  |
| 2016 | 1.646 | 1.186 | 1.049 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.611 | 1.185 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.594 |  |  |  |  |  |  |  |  |  |  |  |
| 3-Year Average | 1.617 | 1.195 | 1.056 | 1.034 | 1.019 | 1.020 | 1.017 | 1.002 | 1.008 | 1.011 | 1.010 | 1.006 |

(d) Development factors are from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item I.
(e) Each factor represents the change in age-to-age development factors from Item J to those in Item I.
(f) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item K)] and [the incurred indemnity age-to-age development factors from AC20-06-01, Exhibit 2.1.1].

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

Incurred Medical Loss Development Factors Adjusted for Changes in Case Reserve Adequacy
A. Medical Case Reserves Per Open Indemnity Claim

|  | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | 159 |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 92,697 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 88,010 | 90,184 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 80,483 | 84,303 | 87,581 |
| 2005 |  |  |  |  |  |  |  |  |  | 74,819 | 78,386 | 85,380 | 92,256 |
| 2006 |  |  |  |  |  |  |  |  | 67,165 | 71,624 | 78,305 | 83,616 | 92,128 |
| 2007 |  |  |  |  |  |  |  | 62,328 | 71,972 | 79,722 | 89,199 | 95,034 | 104,829 |
| 2008 |  |  |  |  |  |  | 53,610 | 63,114 | 71,491 | 78,921 | 87,748 | 98,810 |  |
| 2009 |  |  |  |  |  | 43,675 | 51,473 | 59,267 | 67,053 | 75,607 | 91,067 |  |  |
| 2010 |  |  |  |  | 35,915 | 41,737 | 47,918 | 53,877 | 64,096 | 68,649 |  |  |  |
| 2011 |  |  |  | 32,091 | 38,616 | 43,358 | 49,220 | 57,110 | 66,010 |  |  |  |  |
| 2012 |  |  | 24,989 | 29,067 | 34,583 | 40,826 | 47,770 | 58,068 |  |  |  |  |  |
| 2013 |  | 20,783 | 23,288 | 28,080 | 32,936 | 39,816 | 47,123 |  |  |  |  |  |  |
| 2014 | 16,130 | 19,249 | 22,718 | 27,195 | 32,564 | 38,635 |  |  |  |  |  |  |  |
| 2015 | 16,512 | 20,285 | 25,291 | 30,834 | 37,350 |  |  |  |  |  |  |  |  |
| 2016 | 16,976 | 21,271 | 26,010 | 31,254 |  |  |  |  |  |  |  |  |  |
| 2017 | 17,806 | 22,570 | 28,487 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 18,860 | 23,149 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 18,590 |  |  |  |  |  |  |  |  |  |  |  |  |

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

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 22,308 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 21,015 | 21,858 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 18,518 | 19,433 | 20,168 |
| 2005 |  |  |  |  |  |  |  |  |  | 18,334 | 19,440 | 20,266 | 20,927 |
| 2006 |  |  |  |  |  |  |  |  | 19,164 | 20,537 | 21,642 | 22,507 | 23,229 |
| 2007 |  |  |  |  |  |  |  | 20,364 | 22,052 | 23,411 | 24,507 | 25,381 | 26,258 |
| 2008 |  |  |  |  |  |  | 21,175 | 23,175 | 24,639 | 25,761 | 26,782 | 27,800 |  |
| 2009 |  |  |  |  |  | 20,779 | 23,255 | 25,071 | 26,538 | 27,880 | 28,848 |  |  |
| 2010 |  |  |  |  | 18,704 | 21,510 | 23,876 | 25,517 | 26,773 | 27,908 |  |  |  |
| 2011 |  |  |  | 14,662 | 18,058 | 20,750 | 22,796 | 24,348 | 25,372 |  |  |  |  |
| 2012 |  |  | 10,980 | 14,606 | 17,545 | 19,756 | 21,388 | 22,645 |  |  |  |  |  |
| 2013 |  | 6,695 | 10,912 | 14,304 | 16,973 | 18,828 | 20,096 |  |  |  |  |  |  |
| 2014 | 2,989 | 6,851 | 10,971 | 14,384 | 16,831 | 18,480 |  |  |  |  |  |  |  |
| 2015 | 3,231 | 7,263 | 11,333 | 14,566 | 16,561 |  |  |  |  |  |  |  |  |
| 2016 | 3,462 | 7,489 | 11,315 | 14,059 |  |  |  |  |  |  |  |  |  |
| 2017 | 3,565 | 7,704 | 11,398 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 3,665 | 7,988 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 3,912 |  |  |  |  |  |  |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 | $\underline{123}$ | $\underline{135}$ | 147 | $\underline{159}$ |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  |  | -2.0\% |
| 2004 |  |  |  |  |  |  |  |  |  |  |  | -7.5\% | -7.7\% |
| 2005 |  |  |  |  |  |  |  |  |  |  | 5.0\% | 4.3\% | 3.8\% |
| 2006 |  |  |  |  |  |  |  |  |  | 12.0\% | 11.3\% | 11.1\% | 11.0\% |
| 2007 |  |  |  |  |  |  |  |  | 15.1\% | 14.0\% | 13.2\% | 12.8\% | 13.0\% |
| 2008 |  |  |  |  |  |  |  | 13.8\% | 11.7\% | 10.0\% | 9.3\% | 9.5\% |  |
| 2009 |  |  |  |  |  |  | 9.8\% | 8.2\% | 7.7\% | 8.2\% | 7.7\% |  |  |
| 2010 |  |  |  |  |  | 5.1\% | 4.9\% | 4.7\% | 4.4\% | 4.6\% |  |  |  |
| 2011 |  |  |  |  | 3.7\% | 3.4\% | 2.9\% | 2.6\% | 2.5\% |  |  |  |  |
| 2012 |  |  |  | -2.4\% | -3.1\% | -3.9\% | -4.4\% | -4.6\% |  |  |  |  |  |
| 2013 |  |  | -0.6\% | -2.1\% | -3.3\% | -4.7\% | -6.0\% |  |  |  |  |  |  |
| 2014 |  | 2.3\% | 0.5\% | 0.6\% | -0.8\% | -1.8\% |  |  |  |  |  |  |  |
| 2015 | 8.1\% | 6.0\% | 3.3\% | 1.3\% | -1.6\% |  |  |  |  |  |  |  |  |
| 2016 | 7.2\% | 3.1\% | -0.2\% | -3.5\% |  |  |  |  |  |  |  |  |  |
| 2017 | 3.0\% | 2.9\% | 0.7\% |  |  |  |  |  |  |  |  |  |  |
| 2018 | 2.8\% | 3.7\% |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 6.7\% |  |  |  |  |  |  |  |  |  |  |  |  |

(a) Paid medical per closed claim severities for accident year 2010 and 2011 only reflect the paid cost of medical cost containment programs (MCCP) attributable to policies with effective dates prior to July 1, 2010.
(b) The annual changes for accident year 2010, 2011 and 2012 are based on paid medcial per total claim for consistency and do not compare to the severities in item B.
Source: Accident year experience of insurers with available claim count data

Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
D. Medical Case Reserves per Open Claim Adjusted by Paid Medical Severity Trend (c)

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 89,061 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 74,692 | 87,263 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 58,457 | 69,072 | 80,518 |
| 2005 |  |  |  |  |  |  |  |  |  | 43,142 | 61,368 | 72,031 | 83,546 |
| 2006 |  |  |  |  |  |  |  |  | 44,543 | 48,326 | 68,320 | 79,997 | 92,738 |
| 2007 |  |  |  |  |  |  |  | 46,055 | 51,256 | 55,089 | 77,364 | 90,213 | 104,829 |
| 2008 |  |  |  |  |  |  | 44,259 | 52,414 | 57,270 | 60,617 | 84,546 | 98,810 |  |
| 2009 |  |  |  |  |  | 39,571 | 48,607 | 56,703 | 61,684 | 65,604 | 91,067 |  |  |
| 2010 |  |  |  |  | 39,370 | 41,583 | 51,005 | 59,343 | 64,391 | 68,649 |  |  |  |
| 2011 |  |  |  | 33,278 | 40,837 | 42,985 | 52,461 | 60,894 | 66,010 |  |  |  |  |
| 2012 |  |  | 27,442 | 32,470 | 39,569 | 41,304 | 50,154 | 58,068 |  |  |  |  |  |
| 2013 |  | 19,403 | 27,271 | 31,800 | 38,279 | 39,364 | 47,123 |  |  |  |  |  |  |
| 2014 | 14,204 | 19,855 | 27,419 | 31,977 | 37,959 | 38,635 |  |  |  |  |  |  |  |
| 2015 | 15,352 | 21,050 | 28,324 | 32,382 | 37,350 |  |  |  |  |  |  |  |  |
| 2016 | 16,452 | 21,703 | 28,280 | 31,254 |  |  |  |  |  |  |  |  |  |
| 2017 | 16,942 | 22,329 | 28,487 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 17,418 | 23,149 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 18,590 |  |  |  |  |  |  |  |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 | $\underline{123}$ | $\underline{135}$ | 147 | 159 |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 599,842 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 547,588 | 547,983 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 410,937 | 410,723 | 396,770 |
| 2005 |  |  |  |  |  |  |  |  |  | 313,502 | 365,986 | 346,365 | 329,159 |
| 2006 |  |  |  |  |  |  |  |  | 390,613 | 342,849 | 383,368 | 363,010 | 338,585 |
| 2007 |  |  |  |  |  |  |  | 486,050 | 418,199 | 347,755 | 383,612 | 358,597 | 328,220 |
| 2008 |  |  |  |  |  |  | 564,814 | 501,540 | 418,584 | 345,347 | 371,918 | 345,441 |  |
| 2009 |  |  |  |  |  | 641,390 | 575,371 | 497,779 | 407,177 | 325,464 | 347,328 |  |  |
| 2010 |  |  |  |  | 827,259 | 624,566 | 547,544 | 464,091 | 370,954 | 296,768 |  |  |  |
| 2011 |  |  |  | 936,250 | 807,785 | 600,173 | 515,723 | 421,203 | 336,517 |  |  |  |  |
| 2012 |  |  | 1,121,994 | 920,567 | 768,671 | 547,123 | 457,258 | 376,220 |  |  |  |  |  |
| 2013 |  | 1,172,157 | 1,158,014 | 890,262 | 701,971 | 483,305 | 393,009 |  |  |  |  |  |  |
| 2014 | 1,139,734 | 1,244,463 | 1,163,529 | 865,201 | 663,644 | 451,416 |  |  |  |  |  |  |  |
| 2015 | 1,300,383 | 1,329,582 | 1,145,224 | 803,096 | 594,279 |  |  |  |  |  |  |  |  |
| 2016 | 1,382,249 | 1,312,373 | 1,059,290 | 719,159 |  |  |  |  |  |  |  |  |  |
| 2017 | 1,395,262 | 1,264,979 | 1,000,252 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1,444,565 | 1,340,212 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1,577,887 |  |  |  |  |  |  |  |  |  |  |  |  |

F. Paid Medical Loss on All Claims

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 | 123 | 135 | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 5,249,631 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 4,802,885 | 4,888,211 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 3,769,827 | 3,853,608 | 3,919,962 |
| 2005 |  |  |  |  |  |  |  |  |  | 3,338,869 | 3,434,805 | 3,503,674 | 3,563,719 |
| 2006 |  |  |  |  |  |  |  |  | 3,397,735 | 3,506,591 | 3,588,093 | 3,654,162 | 3,708,368 |
| 2007 |  |  |  |  |  |  |  | 3,575,454 | 3,711,036 | 3,816,388 | 3,895,775 | 3,971,332 | 4,032,297 |
| 2008 |  |  |  |  |  |  | 3,516,300 | 3,682,739 | 3,804,202 | 3,895,131 | 3,968,061 | 4,027,882 |  |
| 2009 |  |  |  |  |  | 3,227,583 | 3,427,497 | 3,571,636 | 3,675,980 | 3,759,619 | 3,825,777 |  |  |
| 2010 |  |  |  |  | 3,045,049 | 3,308,376 | 3,507,161 | 3,642,892 | 3,738,917 | 3,832,402 |  |  |  |
| 2011 |  |  |  | 2,534,277 | 2,870,664 | 3,112,755 | 3,286,765 | 3,410,488 | 3,500,134 |  |  |  |  |
| 2012 |  |  | 2,108,864 | 2,549,433 | 2,869,403 | 3,085,667 | 3,240,587 | 3,354,491 |  |  |  |  |  |
| 2013 |  | 1,545,451 | 2,146,505 | 2,583,513 | 2,867,688 | 3,060,989 | 3,191,171 |  |  |  |  |  |  |
| 2014 | 827,710 | 1,601,959 | 2,217,831 | 2,647,250 | 2,923,887 | 3,118,811 |  |  |  |  |  |  |  |
| 2015 | 865,225 | 1,691,718 | 2,298,960 | 2,723,512 | 2,986,014 |  |  |  |  |  |  |  |  |
| 2016 | 931,452 | 1,747,652 | 2,340,941 | 2,734,748 |  |  |  |  |  |  |  |  |  |
| 2017 | 985,875 | 1,812,175 | 2,391,939 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1,039,739 | 1,923,159 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 1,042,845 |  |  |  |  |  |  |  |  |  |  |  |  |

(c) Latest evaluation of each accident year is unadjusted. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average medical case reserves by a different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (Item C)
(d) Each amount is derived as the product of the indemnity open claim counts (Exhibit 3.2, Item E) and the adjusted average medical case reserves per open claim (Item D).
Source: Accident year experience of insurers with available claim count data

Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy
G. Adjusted Total Medical Incurred (in \$000) (e)

| AccidentYear | Evaluated as of (in months) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 | $\underline{123}$ | $\underline{135}$ | 147 | $\underline{159}$ |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  | 5,849,473 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 5,350,473 | 5,436,194 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 4,180,764 | 4,264,331 | 4,316,731 |
| 2005 |  |  |  |  |  |  |  |  |  | 3,652,371 | 3,800,792 | 3,850,039 | 3,892,878 |
| 2006 |  |  |  |  |  |  |  |  | 3,788,348 | 3,849,440 | 3,971,462 | 4,017,172 | 4,046,953 |
| 2007 |  |  |  |  |  |  |  | 4,061,504 | 4,129,235 | 4,164,143 | 4,279,386 | 4,329,929 | 4,360,517 |
| 2008 |  |  |  |  |  |  | 4,081,114 | 4,184,279 | 4,222,786 | 4,240,478 | 4,339,980 | 4,373,323 |  |
| 2009 |  |  |  |  |  | 3,868,972 | 4,002,868 | 4,069,415 | 4,083,156 | 4,085,082 | 4,173,105 |  |  |
| 2010 |  |  |  |  | 3,872,308 | 3,932,941 | 4,054,705 | 4,106,983 | 4,109,871 | 4,129,170 |  |  |  |
| 2011 |  |  |  | 3,470,527 | 3,678,449 | 3,712,928 | 3,802,489 | 3,831,691 | 3,836,651 |  |  |  |  |
| 2012 |  |  | 3,230,859 | 3,470,000 | 3,638,075 | 3,632,790 | 3,697,845 | 3,730,711 |  |  |  |  |  |
| 2013 |  | 2,717,607 | 3,304,519 | 3,473,776 | 3,569,659 | 3,544,294 | 3,584,181 |  |  |  |  |  |  |
| 2014 | 1,967,444 | 2,846,422 | 3,381,360 | 3,512,450 | 3,587,532 | 3,570,227 |  |  |  |  |  |  |  |
| 2015 | 2,165,607 | 3,021,300 | 3,444,184 | 3,526,608 | 3,580,293 |  |  |  |  |  |  |  |  |
| 2016 | 2,313,701 | 3,060,025 | 3,400,231 | 3,453,907 |  |  |  |  |  |  |  |  |  |
| 2017 | 2,381,137 | 3,077,153 | 3,392,192 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 2,484,304 | 3,263,371 |  |  |  |  |  |  |  |  |  |  |  |
| 2019 | 2,620,731 |  |  |  |  |  |  |  |  |  |  |  |  |

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

| AccidentYear | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.016 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.020 | 1.012 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.041 | 1.013 | 1.011 |
| 2006 |  |  |  |  |  |  |  |  | 1.016 | 1.032 | 1.012 | 1.007 |
| 2007 |  |  |  |  |  |  |  | 1.017 | 1.008 | 1.028 | 1.012 | 1.007 |
| 2008 |  |  |  |  |  |  | 1.025 | 1.009 | 1.004 | 1.023 | 1.008 |  |
| 2009 |  |  |  |  |  | 1.035 | 1.017 | 1.003 | 1.000 | 1.022 |  |  |
| 2010 |  |  |  |  | 1.016 | 1.031 | 1.013 | 1.001 | 1.005 |  |  |  |
| 2011 |  |  |  | 1.060 | 1.009 | 1.024 | 1.008 | 1.001 |  |  |  |  |
| 2012 |  |  | 1.074 | 1.048 | 0.999 | 1.018 | 1.009 |  |  |  |  |  |
| 2013 |  | 1.216 | 1.051 | 1.028 | 0.993 | 1.011 |  |  |  |  |  |  |
| 2014 | 1.447 | 1.188 | 1.039 | 1.021 | 0.995 |  |  |  |  |  |  |  |
| 2015 | 1.395 | 1.140 | 1.024 | 1.015 |  |  |  |  |  |  |  |  |
| 2016 | 1.323 | 1.111 | 1.016 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.292 | 1.102 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.314 |  |  |  |  |  |  |  |  |  |  |  |
| Latest Yes | 1.314 | 1.102 | 1.016 | 1.015 | 0.995 | 1.011 | 1.009 | 1.001 | 1.005 | 1.022 | 1.008 | 1.007 |
| 3-Yr Avere | 1.309 | 1.118 | 1.026 | 1.021 | 0.996 | 1.018 | 1.010 | 1.002 | 1.003 | 1.024 | 1.010 | 1.009 |

I. Medical Incurred Loss Development Factors (f)

| Accident |  |  |  |  | ge-to-A | Develo | nt (in | ths): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.004 | 0.999 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.005 | 1.003 | 1.003 |
| 2006 |  |  |  |  |  |  |  |  | 1.007 | 1.003 | 1.002 | 1.003 |
| 2007 |  |  |  |  |  |  |  | 1.015 | 1.005 | 1.004 | 1.003 | 1.003 |
| 2008 |  |  |  |  |  |  | 1.021 | 1.009 | 1.004 | 1.002 | 1.004 |  |
| 2009 |  |  |  |  |  | 1.026 | 1.014 | 1.007 | 1.004 | 1.009 |  |  |
| 2010 |  |  |  |  | 1.036 | 1.022 | 1.011 | 1.011 | 1.005 |  |  |  |
| 2011 |  |  |  | 1.057 | 1.023 | 1.014 | 1.009 | 1.008 |  |  |  |  |
| 2012 |  |  | 1.078 | 1.050 | 1.024 | 1.014 | 1.015 |  |  |  |  |  |
| 2013 |  | 1.119 | 1.075 | 1.030 | 1.023 | 1.010 |  |  |  |  |  |  |
| 2014 | 1.323 | 1.133 | 1.063 | 1.033 | 1.022 |  |  |  |  |  |  |  |
| 2015 | 1.313 | 1.117 | 1.050 | 1.026 |  |  |  |  |  |  |  |  |
| 2016 | 1.287 | 1.093 | 1.042 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.260 | 1.098 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.253 |  |  |  |  |  |  |  |  |  |  |  |

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

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

Incurred Medical Loss Development Factors Adjusted for Changes in Case Reserve Adequacy
J. Impact of Adjustments to Common Case Reserve Level (g)

| Accident |  |  |  |  | Age-to-A | Develo | ent (in | ths): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.48\% |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.55\% | 1.31\% |
| 2005 |  |  |  |  |  |  |  |  |  | 3.54\% | 0.99\% | 0.78\% |
| 2006 |  |  |  |  |  |  |  |  | 0.90\% | 2.84\% | 1.00\% | 0.46\% |
| 2007 |  |  |  |  |  |  |  | 0.13\% | 0.35\% | 2.33\% | 0.92\% | 0.44\% |
| 2008 |  |  |  |  |  |  | 0.47\% | -0.01\% | 0.00\% | 2.13\% | 0.32\% |  |
| 2009 |  |  |  |  |  | 0.86\% | 0.29\% | -0.31\% | -0.34\% | 1.21\% |  |  |
| 2010 |  |  |  |  | -1.93\% | 0.88\% | 0.23\% | -1.00\% | -0.04\% |  |  |  |
| 2011 |  |  |  | 0.23\% | -1.33\% | 0.99\% | -0.16\% | -0.68\% |  |  |  |  |
| 2012 |  |  | -0.33\% | -0.12\% | -2.49\% | 0.42\% | -0.59\% |  |  |  |  |  |
| 2013 |  | 8.63\% | -2.19\% | -0.26\% | -2.90\% | 0.16\% |  |  |  |  |  |  |
| 2014 | 9.32\% | 4.85\% | -2.30\% | -1.08\% | -2.63\% |  |  |  |  |  |  |  |
| 2015 | 6.24\% | 2.03\% | -2.50\% | -1.09\% |  |  |  |  |  |  |  |  |
| 2016 | 2.78\% | 1.69\% | -2.50\% |  |  |  |  |  |  |  |  |  |
| 2017 | 2.53\% | 0.44\% |  |  |  |  |  |  |  |  |  |  |
| 2018 | 4.82\% |  |  |  |  |  |  |  |  |  |  |  |

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

| AccidentYear | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 111-123 | 123-135 | 135-147 | 147-159 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  |  | 1.016 |
| 2004 |  |  |  |  |  |  |  |  |  |  | 1.020 | 1.012 |
| 2005 |  |  |  |  |  |  |  |  |  | 1.041 | 1.013 | 1.011 |
| 2006 |  |  |  |  |  |  |  |  | 1.016 | 1.032 | 1.012 | 1.008 |
| 2007 |  |  |  |  |  |  |  | 1.016 | 1.008 | 1.027 | 1.012 | 1.007 |
| 2008 |  |  |  |  |  |  | 1.025 | 1.009 | 1.004 | 1.023 | 1.007 |  |
| 2009 |  |  |  |  |  | 1.034 | 1.017 | 1.004 | 1.001 | 1.021 |  |  |
| 2010 |  |  |  |  | 1.016 | 1.032 | 1.013 | 1.001 | 1.005 |  |  |  |
| 2011 |  |  |  | 1.061 | 1.012 | 1.026 | 1.009 | 1.002 |  |  |  |  |
| 2012 |  |  | 1.074 | 1.050 | 0.999 | 1.018 | 1.009 |  |  |  |  |  |
| 2013 |  | 1.216 | 1.053 | 1.028 | 0.993 | 1.012 |  |  |  |  |  |  |
| 2014 | 1.448 | 1.190 | 1.040 | 1.022 | 0.995 |  |  |  |  |  |  |  |
| 2015 | 1.395 | 1.140 | 1.024 | 1.016 |  |  |  |  |  |  |  |  |
| 2016 | 1.323 | 1.111 | 1.016 |  |  |  |  |  |  |  |  |  |
| 2017 | 1.292 | 1.103 |  |  |  |  |  |  |  |  |  |  |
| 2018 | 1.313 |  |  |  |  |  |  |  |  |  |  |  |
| 3-Year Average | 1.309 | 1.118 | 1.026 | 1.022 | 0.996 | 1.019 | 1.011 | 1.002 | 1.003 | 1.024 | 1.011 | 1.009 |

(g) Each factor represents the change in age-to-age development factors from Item I to those in Item H .
(h) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item J )] and [the incurred Medical age-to-age development factors from AC20-06-01, Exhibit 2.2.1].

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

|  | Developed Loss Ratio 3-Year Average Incurred Development Factors Adjusted for Changes in Average Case Reserve Levels Based on Experience as of March 31, 2020 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|  | Indemnity |  |  |  | Medical |  |  |  |  |
|  | Reported Incurred | Annual | Cumulative |  | Reported Incurred | Annual | Cumulative |  | Total |
| Accident | Loss Ratio | Development | Development | Developed | Loss Ratio | Development | Development | Developed | Developed |
| Year | Ex IBNR (a) | Factor (b) | Factor | Loss Ratio | Ex IBNR (a) | Factor (c) | Factor | Loss Ratio | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times$ (7) | (4) + (8) |
| 2008 | 0.274 | 1.006 | 1.029 | 0.282 | 0.406 | 1.009 | 1.033 | 0.419 | 0.701 |
| 2009 | 0.317 | 1.010 | 1.039 | 0.330 | 0.469 | 1.011 | 1.044 | 0.490 | 0.820 |
| 2010 | 0.302 | 1.011 | 1.051 | 0.317 | 0.450 | 1.024 | 1.069 | 0.481 | 0.798 |
| 2011 | 0.278 | 1.008 | 1.059 | 0.294 | 0.384 | 1.003 | 1.072 | 0.411 | 0.705 |
| 2012 | 0.246 | 1.002 | 1.061 | 0.261 | 0.326 | 1.002 | 1.074 | 0.350 | 0.611 |
| 2013 | 0.206 | 1.017 | 1.080 | 0.223 | 0.258 | 1.011 | 1.086 | 0.280 | 0.503 |
| 2014 | 0.193 | 1.020 | 1.101 | 0.212 | 0.226 | 1.019 | 1.106 | 0.250 | 0.462 |
| 2015 | 0.184 | 1.019 | 1.122 | 0.207 | 0.211 | 0.996 | 1.101 | 0.232 | 0.439 |
| 2016 | 0.168 | 1.034 | 1.160 | 0.195 | 0.193 | 1.022 | 1.126 | 0.217 | 0.413 |
| 2017 | 0.162 | 1.056 | 1.226 | 0.199 | 0.193 | 1.026 | 1.155 | 0.223 | 0.421 |
| 2018 | 0.148 | 1.194 | 1.464 | 0.217 | 0.188 | 1.118 | 1.292 | 0.243 | 0.459 |
| 2019 | 0.108 | 1.616 | 2.366 | 0.256 | 0.163 | 1.309 | 1.691 | 0.276 | 0.532 |

(a) Based on AC20-06-01, 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) Age-to-age factors for developing accident years 2008 to 2019 were adjusted for changes in indemnity case reserve levels based on 3-year average selections (see Exhibit 3.4, Item L).
(c) Age-to-age factors for developing accident years 2008 to 2019 were adjusted for changes in medical case reserve levels based on 3-year average selections (see Exhibit 3.8, Item K).

## Projected On-Level Accident Year

## Indemnity Loss to Industry Average Filed Pure Premium Ratios

Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of March 31, 2020
(1)

| Accident <br> Year | Developed Indemnity <br> Loss Ratio (a) | Composite Indemnity <br> Adjustment Factor (b) | Composite Premium <br> Adjustment Factor (c) | On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2008 | 0.282 |  |  | $(1.381 \times(2) \div(3)$ |
| 2009 | 0.330 | 1.354 | 1.265 | 0.308 |
| 2010 | 0.317 | 1.328 | 1.364 | 0.327 |
| 2011 | 0.294 | 1.310 | 1.240 | 0.340 |
| 2012 | 0.261 | 1.294 | 1.133 | 0.340 |
| 2013 | 0.223 | 1.265 | 1.009 | 0.335 |
| 2014 | 0.212 | 1.159 | 0.881 | 0.320 |
| 2015 | 0.207 | 1.142 | 0.812 | 0.303 |
| 2016 | 0.195 | 1.128 | 0.776 | 0.304 |
| 2017 | 0.199 | 1.098 | 0.803 | 0.275 |
| 2018 | 0.217 | 1.070 | 0.841 | 0.260 |
| 2019 | 0.256 | 1.041 | 0.882 | 0.263 |


| 2020 | 0.262 |
| :---: | :---: |
| 2021 | 0.256 |
| $11 / 1 / 2021$ | 0.255 |

(a) See Exhibit 3.9.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

## Projected On-Level Accident Year

## Medical Loss to Industry Average Filed Pure Premium Ratios <br> Using 3-Year Average Incurred Development Factors <br> Adjusted for Changes in Average Case Reserve Levels <br> Based on Experience as of March 31, 2020

(1)

| Accident <br> Year | Developed Medical <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.419 |
| 2009 | 0.490 |
| 2010 | 0.481 |
| 2011 | 0.411 |
| 2012 | 0.350 |
| 2013 | 0.280 |
| 2014 | 0.250 |
| 2015 | 0.232 |
| 2016 | 0.217 |
| 2017 | 0.223 |
| 2018 | 0.243 |
| 2019 | 0.276 |

(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) $\times(2) \div(3)$
0.266
0.284
0.306
0.294
0.294
0.295
0.299
0.298
0.269
0.262
0.279
0.285

Projected (d)
2020
2021
0.282
0.280

11/1/2021
0.280
(a) See Exhibit 3.9.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 Using Latest Incurred Loss Development Factors Adjusted for Insurer Mix
Based on Experience as of March 31, 2020

(a) Based on AC20-06-01, 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) Column (4) divided by Column (1).
(c) Developed loss ratios were derived by averaing the loss ratios developed using the latest year incurred methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2019 earned premium at the advisory pure premium rate level.
(d) Column (8) divided by Column (5).

## Projected On-Level Accident Year

Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Incurred Development Factors

Adjusted for Insurer Mix
Based on Experience as of March 31, 2020
(1)

| Accident <br> Year | Developed Indemnity <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.278 |
| 2009 | 0.328 |
| 2010 | 0.318 |
| 2011 | 0.294 |
| 2012 | 0.262 |
| 2013 | 0.222 |
| 2014 | 0.211 |
| 2015 | 0.205 |
| 2016 | 0.196 |
| 2017 | 0.203 |
| 2018 | 0.219 |
| 2019 | 0.249 |

(2)

Composite Indemnity
Adjustment Factor (b) Composite Premium
Adjustment Factor (c)
(3)

| 1.381 |
| :--- |
| 1.354 |
| 1.328 |
| 1.30 |
| 1.294 |
| 1.265 |
| 1.159 |
| 1.142 |
| 1.128 |
| 1.098 |
| 1.070 |
| 1.041 |


|  | 0.304 |
| :--- | ---: |
| 1.265 | 0.325 |
| 1.364 | 0.340 |
| 1.240 | 0.339 |
| 1.133 | 0.336 |
| 1.009 | 0.318 |
| 0.881 | 0.302 |
| 0.812 | 0.302 |
| 0.776 | 0.276 |
| 0.803 | 0.265 |
| 0.841 | 0.265 |
| 0.882 | 0.265 |


| 2020 | 0.259 |
| :---: | :---: |
| 2021 | 0.254 |
| $11 / 1 / 2021$ | 0.252 |

(a) See Exhibit 4.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Incurred Development Factors Adjusted for Insurer Mix
Based on Experience as of March 31, 2020
(1)

| Accident <br> Year | Developed Medical <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.413 |
| 2009 | 0.482 |
| 2010 | 0.470 |
| 2011 | 0.398 |
| 2012 | 0.340 |
| 2013 | 0.273 |
| 2014 | 0.241 |
| 2015 | 0.230 |
| 2016 | 0.216 |
| 2017 | 0.223 |
| 2018 | 0.239 |
| 2019 | 0.257 |

(2)
(3)

Composite Medical Composite Premium Adjustment Factor (b)
0.802
0.791
0.789
0.811
0.846
0.928
0.974
0.995
0.993
0.991
1.015
1.011
(4)

On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) $\times(2) \div(3)$
0.262
0.280
0.299
0.285
0.286
0.287
0.289
0.295
0.267
0.263
0.274
0.267

|  | Projected (d) |
| :---: | :---: |
| 2020 | 0.270 |
| 2021 | 0.269 |
| $11 / 1 / 2021$ | 0.268 |

(a) See Exhibit 4.1.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 March 31, 2020

|  | Indemnity |  |  |  | Medical |  |  |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Reported Paid | Annual Development | Cumulative Development | Developed | Reported Paid | Annual Development | Cumulative Development | Developed | Total Developed |
| Year | Loss Ratio (a) | Factor (b) | Factor | Loss Ratio | Loss Ratio (a) | Factor (c) | Factor | Loss Ratio | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times(7)$ | (4) + (8) |
| 2008 | 0.261 | 1.012 | 1.090 | 0.284 | 0.374 | 1.016 | 1.215 | 0.454 | 0.739 |
| 2009 | 0.301 | 1.015 | 1.106 | 0.333 | 0.430 | 1.017 | 1.236 | 0.532 | 0.865 |
| 2010 | 0.287 | 1.017 | 1.125 | 0.323 | 0.418 | 1.019 | 1.260 | 0.527 | 0.850 |
| 2011 | 0.263 | 1.022 | 1.149 | 0.302 | 0.350 | 1.024 | 1.290 | 0.452 | 0.754 |
| 2012 | 0.230 | 1.025 | 1.178 | 0.271 | 0.294 | 1.027 | 1.325 | 0.389 | 0.660 |
| 2013 | 0.192 | 1.035 | 1.220 | 0.234 | 0.230 | 1.037 | 1.375 | 0.317 | 0.551 |
| 2014 | 0.176 | 1.046 | 1.276 | 0.225 | 0.197 | 1.050 | 1.443 | 0.285 | 0.510 |
| 2015 | 0.163 | 1.067 | 1.361 | 0.222 | 0.176 | 1.070 | 1.545 | 0.272 | 0.494 |
| 2016 | 0.142 | 1.107 | 1.506 | 0.214 | 0.153 | 1.105 | 1.706 | 0.261 | 0.475 |
| 2017 | 0.123 | 1.202 | 1.810 | 0.223 | 0.136 | 1.182 | 2.017 | 0.274 | 0.497 |
| 2018 | 0.092 | 1.459 | 2.640 | 0.242 | 0.111 | 1.339 | 2.702 | 0.299 | 0.542 |
| 2019 | 0.045 | 2.379 | 6.281 | 0.282 | 0.065 | 1.854 | 5.010 | 0.325 | 0.607 |

(a) Based on AC20-06-01, 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 AC20-06-01, Exhibit 2.5.
(c) Age-to-age factors are selected as three-year averages based on AC20-06-01, 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 March 31, 2020

| Accident <br> Year | (1) | $(2)$ <br> Developed Indemnity <br> Loss Ratio (a) | Composite Indemnity <br> Adjustment Factor (b) | $(3)$ <br> Composite Premium <br> Adjustment Factor (c) |
| :---: | :---: | :---: | :---: | :---: | | (4) <br> On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: |
| 2008 |

(a) See Exhibit 5.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

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 March 31, 2020

| Accident Year | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Medical Loss Ratio (a) | Composite Medical Adjustment Factor (b) | Composite Premium Adjustment Factor (c) | On-Level Medical to Industry Average Filed Pure Premium Ratio(e) |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2008 | 0.454 | 0.802 | 1.265 | 0.288 |
| 2009 | 0.532 | 0.791 | 1.364 | 0.308 |
| 2010 | 0.527 | 0.789 | 1.240 | 0.335 |
| 2011 | 0.452 | 0.811 | 1.133 | 0.323 |
| 2012 | 0.389 | 0.846 | 1.009 | 0.327 |
| 2013 | 0.317 | 0.928 | 0.881 | 0.333 |
| 2014 | 0.285 | 0.974 | 0.812 | 0.341 |
| 2015 | 0.272 | 0.995 | 0.776 | 0.348 |
| 2016 | 0.261 | 0.993 | 0.803 | 0.323 |
| 2017 | 0.274 | 0.991 | 0.841 | 0.323 |
| 2018 | 0.299 | 1.015 | 0.882 | 0.344 |
| 2019 | 0.325 | 1.011 | 0.976 | 0.337 |


| 2020 | 0.340 |
| :--- | :--- |
| 2021 | 0.338 |
| $1 / 1 / 2021$ | 0.338 |

(a) See Exhibit 5.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 March 31, 2020

|  | Indemnity |  |  |  | Medical |  |  |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Reported Paid | Annual Development | Cumulative Development | Developed | Reported Paid | Annual Development | Cumulative Development | Developed | Total Developed |
| Year | Loss Ratio (a) | Factor (b) | Factor | Loss Ratio | Loss Ratio (a) | Factor (c) | Factor | Loss Ratio | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times$ (7) | (4) + (8) |
| 2008 | 0.261 | 1.012 | 1.090 | 0.284 | 0.374 | 1.016 | 1.215 | 0.454 | 0.739 |
| 2009 | 0.301 | 1.015 | 1.106 | 0.333 | 0.430 | 1.017 | 1.236 | 0.532 | 0.865 |
| 2010 | 0.287 | 1.017 | 1.125 | 0.323 | 0.418 | 1.019 | 1.260 | 0.527 | 0.850 |
| 2011 | 0.263 | 1.022 | 1.149 | 0.302 | 0.350 | 1.024 | 1.290 | 0.452 | 0.754 |
| 2012 | 0.230 | 1.023 | 1.176 | 0.271 | 0.294 | 1.026 | 1.324 | 0.389 | 0.659 |
| 2013 | 0.192 | 1.031 | 1.212 | 0.232 | 0.230 | 1.036 | 1.371 | 0.316 | 0.548 |
| 2014 | 0.176 | 1.038 | 1.258 | 0.222 | 0.197 | 1.043 | 1.430 | 0.282 | 0.504 |
| 2015 | 0.163 | 1.062 | 1.336 | 0.218 | 0.176 | 1.067 | 1.526 | 0.268 | 0.487 |
| 2016 | 0.142 | 1.100 | 1.470 | 0.209 | 0.153 | 1.097 | 1.674 | 0.256 | 0.465 |
| 2017 | 0.123 | 1.188 | 1.746 | 0.215 | 0.136 | 1.168 | 1.955 | 0.266 | 0.481 |
| 2018 | 0.092 | 1.441 | 2.516 | 0.231 | 0.111 | 1.320 | 2.581 | 0.286 | 0.517 |
| 2019 | 0.045 | 2.345 | 5.901 | 0.265 | 0.065 | 1.849 | 4.772 | 0.310 | 0.574 |

(a) Based on AC20-06-01, 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 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC20-06-01, Exhibit 2.5 .
(c) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC20-06-01, Exhibit 2.6.

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 March 31, 2020

| Accident Year | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Indemnity Loss Ratio (a) | Composite Indemnity <br> Adjustment Factor (b) | Composite Premium Adjustment Factor (c) | On-Level Indemnity to Industry Average Filed Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2008 | 0.284 | 1.381 | 1.265 | 0.310 |
| 2009 | 0.333 | 1.354 | 1.364 | 0.331 |
| 2010 | 0.323 | 1.328 | 1.240 | 0.346 |
| 2011 | 0.302 | 1.310 | 1.133 | 0.349 |
| 2012 | 0.271 | 1.294 | 1.009 | 0.347 |
| 2013 | 0.232 | 1.265 | 0.881 | 0.334 |
| 2014 | 0.222 | 1.159 | 0.812 | 0.317 |
| 2015 | 0.218 | 1.142 | 0.776 | 0.321 |
| 2016 | 0.209 | 1.128 | 0.803 | 0.294 |
| 2017 | 0.215 | 1.098 | 0.841 | 0.281 |
| 2018 | 0.231 | 1.070 | 0.882 | 0.280 |
| 2019 | 0.265 | 1.041 | 0.976 | 0.282 |
|  |  |  |  | Projected (d) |
| 2020 |  |  |  | 0.275 |
| 2021 |  |  |  | 0.269 |
| 11/1/2021 |  |  |  | 0.267 |

(a) See Exhibit 6.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

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 March 31, 2020

| Accident <br> Year | (1) <br> Developed Medical <br> Loss Ratio (a) | Composite Medical <br> Adjustment Factor (b) | $(3)$ <br> Composite Premium <br> Adjustment Factor (c) | $(4)$ <br> On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: |
| 2008 |  |  |  | $(1) \times(2) \div(3)$ |
| 2009 | 0.454 | 0.802 | 1.265 | 0.288 |
| 2010 | 0.532 | 0.791 | 1.364 | 0.308 |
| 2011 | 0.527 | 0.789 | 1.240 | 0.335 |
| 2012 | 0.452 | 0.811 | 1.133 | 0.323 |
| 2013 | 0.389 | 0.846 | 1.009 | 0.326 |
| 2014 | 0.316 | 0.928 | 0.881 | 0.333 |
| 2015 | 0.282 | 0.974 | 0.812 | 0.338 |
| 2016 | 0.268 | 0.995 | 0.776 | 0.344 |
| 2017 | 0.256 | 0.991 | 0.803 | 0.317 |
| 2018 | 0.266 | 1.015 | 0.841 | 0.313 |
| 2019 | 0.310 |  |  | 0.976 |
|  |  |  |  | 0.329 |
| 2020 |  |  |  |  |
| 2021 |  |  |  |  |
| $11 / 1 / 2021$ |  |  |  |  |
|  |  |  |  |  |

(a) See Exhibit 6.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 March 31, 2020 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
|  |  | Medical |  |  |
|  |  | Adjusted |  |  |
| Accident | Paid | Development Factors |  | Developed |
| Year | Loss Ratio (a) | Annual (b) | Cumulative (b) | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |
| 2008 | 0.343 | 1.017 | 1.229 | 0.421 |
| 2009 | 0.397 | 1.019 | 1.253 | 0.497 |
| 2010 | 0.388 | 1.020 | 1.278 | 0.496 |
| 2011 | 0.328 | 1.026 | 1.311 | 0.431 |
| 2012 | 0.278 | 1.029 | 1.349 | 0.375 |
| 2013 | 0.220 | 1.039 | 1.402 | 0.308 |
| 2014 | 0.192 | 1.039 | 1.456 | 0.279 |
| 2015 | 0.173 | 1.062 | 1.546 | 0.267 |
| 2016 | 0.152 | 1.088 | 1.682 | 0.255 |
| 2017 | 0.135 | 1.155 | 1.943 | 0.263 |
| 2018 | 0.111 | 1.321 | 2.567 | 0.284 |
| 2019 | 0.065 | 1.849 | 4.746 | 0.308 |

(a) Based on AC20-06-01, 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) Based on AC20-06-01, Exhibit 2.6.1 and includes adjustments for SB 1160 and pharmaceutical costs. Does not reflect any adjustment for changes in claim settlement rates

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

| Accident <br> Year | (1) <br> Developed Medical <br> Loss Ratio (a) | Composite Medical <br> Adjustment Factor (b) | $(3)$ <br> Composite Premium <br> Adjustment Factor (c) | $(4)$ <br> On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: |
| 2008 |  |  |  | $(1) \times(2) \div(3)$ |
| 2009 | 0.421 | 0.836 | 1.265 | 0.278 |
| 2010 | 0.497 | 0.825 | 1.364 | 0.301 |
| 2011 | 0.496 | 0.822 | 1.240 | 0.328 |
| 2012 | 0.431 | 0.836 | 1.133 | 0.318 |
| 2013 | 0.375 | 0.874 | 1.009 | 0.325 |
| 2014 | 0.308 | 0.949 | 0.881 | 0.332 |
| 2015 | 0.279 | 0.993 | 0.812 | 0.341 |
| 2016 | 0.267 | 1.011 | 0.776 | 0.348 |
| 2017 | 0.255 | 1.014 | 0.803 | 0.321 |
| 2018 | 0.263 | 1.015 | 0.841 | 0.317 |
| 2019 | 0.384 |  |  | 0.976 |
|  |  |  |  | 0.327 |
|  |  |  |  |  |
| 2020 |  |  |  |  |
| 2021 |  |  |  |  |
| $11 / 1 / 2021$ |  |  |  |  |
|  |  |  |  |  |

(a) See Exhibit 7.1.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect 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 March 31, 2020 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) |  | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|  | Indemnity |  |  |  | Medical |  |  |  |  |  |
|  |  |  |  |  | Adjusted |  |  |  |  |  |
|  | Reported | Annual | Cumulative |  |  |  | Annual | Cumulative |  | Total |
| Accident | Paid | Development | Development | Developed | Paid | Paid | Development | Development | Developed | Developed |
| Year | Loss Ratio (a) | Factor (b) | Factor | Loss Ratio | Loss Ratio (a) | Loss Ratio (c) | Factor (d) | Factor | Loss Ratio | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  |  | (6) $\times$ (8) | (4) + (9) |
| 2008 | 0.261 | 1.012 | 1.090 | 0.284 | 0.374 | 0.343 | 1.017 | 1.229 | 0.421 | 0.705 |
| 2009 | 0.301 | 1.015 | 1.106 | 0.333 | 0.430 | 0.397 | 1.019 | 1.253 | 0.497 | 0.831 |
| 2010 | 0.287 | 1.017 | 1.125 | 0.323 | 0.418 | 0.388 | 1.020 | 1.278 | 0.496 | 0.818 |
| 2011 | 0.263 | 1.022 | 1.149 | 0.302 | 0.350 | 0.328 | 1.026 | 1.311 | 0.431 | 0.733 |
| 2012 | 0.230 | 1.023 | 1.176 | 0.271 | 0.294 | 0.278 | 1.029 | 1.349 | 0.375 | 0.645 |
| 2013 | 0.192 | 1.031 | 1.212 | 0.232 | 0.230 | 0.220 | 1.039 | 1.402 | 0.308 | 0.541 |
| 2014 | 0.176 | 1.038 | 1.258 | 0.222 | 0.197 | 0.192 | 1.039 | 1.456 | 0.279 | 0.501 |
| 2015 | 0.163 | 1.052 | 1.323 | 0.216 | 0.176 | 0.173 | 1.053 | 1.533 | 0.265 | 0.481 |
| 2016 | 0.142 | 1.090 | 1.442 | 0.205 | 0.153 | 0.152 | 1.084 | 1.662 | 0.252 | 0.457 |
| 2017 | 0.123 | 1.179 | 1.700 | 0.210 | 0.136 | 0.135 | 1.157 | 1.923 | 0.261 | 0.470 |
| 2018 | 0.092 | 1.453 | 2.470 | 0.227 | 0.111 | 0.111 | 1.343 | 2.583 | 0.286 | 0.513 |
| 2019 | 0.045 | 2.380 | 5.879 | 0.264 | 0.065 | 0.065 | 1.862 | 4.809 | 0.312 | 0.576 |

(a) Based on AC20-06-01, 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 2019 were adjusted for changes in claim settlement rates based on 3 -year average selections (see AC20-06-01, Exhibit 2.5.8, Item Q).
(c) See AC20-06-01, Exhibit 3.2, Column (2).
(d) Based on AC20-06-01, Exhibits 2.6.1 and includes adjustments for SB 1160. Age-to-age factors for developing accident years 2015 to 2019 were adjusted for changes in claim settlement rates based on 3 -year average selections (see AC20-06-01, 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 March 31, 2020


Projected (d)

| 2020 | 0.272 |
| :--- | :--- |
| 2021 | 0.266 |
| $11 / 1 / 2021$ | 0.264 |

(a) See Exhibit 8.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

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 March 31, 2020

| Accident <br> Year | (1) | (2) <br> Composite Medical Adjustment Factor (b) | (3) | (4) <br> On-Level Medical to Industry Average Filed Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Medical Loss Ratio (a) |  | Composite Premium Adjustment Factor (c) |  |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2008 | 0.421 | 0.836 | 1.265 | 0.278 |
| 2009 | 0.497 | 0.825 | 1.364 | 0.301 |
| 2010 | 0.496 | 0.822 | 1.240 | 0.328 |
| 2011 | 0.431 | 0.836 | 1.133 | 0.318 |
| 2012 | 0.375 | 0.874 | 1.009 | 0.325 |
| 2013 | 0.308 | 0.949 | 0.881 | 0.332 |
| 2014 | 0.279 | 0.993 | 0.812 | 0.341 |
| 2015 | 0.265 | 1.011 | 0.776 | 0.345 |
| 2016 | 0.252 | 1.012 | 0.803 | 0.318 |
| 2017 | 0.261 | 1.014 | 0.841 | 0.314 |
| 2018 | 0.286 | 1.015 | 0.882 | 0.329 |
| 2019 | 0.312 | 1.011 | 0.976 | 0.323 |

Projected (d)
2020
2021
0.326
0.324

11/1/2021
0.324
(a) See Exhibit 8.1.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

## Developed Loss Ratio Using Latest Paid Loss Development Factors Adjusted for Insurer Mix

Based on Experience as of March 31, 2020

|  | (1) | (2) Inde | mnity ${ }^{(3)}$ | (4) | (5) | (6) Med | dical ${ }^{(7)}$ | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Paid | Annual Development | Cumulative Development | Developed | Paid | Annual Development | Cumulative Development | Developed | Total Developed |
| Year | Loss Ratio (a) | Factor | Factor (b) | Loss Ratio (c) | Loss Ratio (a) | Factor | Factor (d) | Loss Ratio (c) | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times(7)$ | (4) + (8) |
| 2008 | 0.261 | -- | 1.071 | 0.279 | 0.374 | -- | 1.189 | 0.445 | 0.724 |
| 2009 | 0.301 | -- | 1.094 | 0.330 | 0.430 | -- | 1.215 | 0.523 | 0.852 |
| 2010 | 0.287 | -- | 1.122 | 0.322 | 0.418 | -- | 1.243 | 0.520 | 0.842 |
| 2011 | 0.263 | -- | 1.136 | 0.299 | 0.350 | -- | 1.256 | 0.440 | 0.739 |
| 2012 | 0.230 | -- | 1.158 | 0.267 | 0.294 | -- | 1.289 | 0.379 | 0.645 |
| 2013 | 0.192 | -- | 1.189 | 0.228 | 0.230 | -- | 1.329 | 0.306 | 0.534 |
| 2014 | 0.176 | -- | 1.238 | 0.218 | 0.197 | -- | 1.388 | 0.274 | 0.492 |
| 2015 | 0.163 | -- | 1.308 | 0.214 | 0.176 | -- | 1.474 | 0.259 | 0.473 |
| 2016 | 0.142 | -- | 1.441 | 0.205 | 0.153 | -- | 1.617 | 0.247 | 0.452 |
| 2017 | 0.123 | -- | 1.706 | 0.210 | 0.136 | -- | 1.884 | 0.256 | 0.467 |
| 2018 | 0.092 | -- | 2.459 | 0.226 | 0.111 | -- | 2.487 | 0.276 | 0.502 |
| 2019 | 0.045 | -- | 5.764 | 0.258 | 0.065 | -- | 4.600 | 0.298 | 0.557 |

(a) Based on AC20-06-01, 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) Column (4) divided by Column (1).
(c) Developed loss ratios were derived by averaing the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2019 earned premium at the advisory pure premium rate level.
(d) Column (8) divided by Column (5).

Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Paid Development Factors Adjusted for Insurer Mix
Based on Experience as of March 31, 2020
(1)

| Accident <br> Year | Developed Indemnity <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.279 |
| 2009 | 0.330 |
| 2010 | 0.322 |
| 2011 | 0.299 |
| 2012 | 0.267 |
| 2013 | 0.228 |
| 2014 | 0.218 |
| 2015 | 0.214 |
| 2016 | 0.205 |
| 2017 | 0.210 |
| 2018 | 0.226 |
| 2019 | 0.258 |

(3)
$\begin{array}{lr}\text { Composite Indemnity } & \begin{array}{c}\text { Composite Premium } \\ \text { Adjustment Factor (b) }\end{array} \quad \underline{\text { Adjustment Factor (c) }}\end{array}$
(4)

On-Level Indemnity to Industry Average Filed Pure Premium Ratio

$$
(1) \times(2) \div(3)
$$

0.305
0.327
0.345
0.345
0.342
0.342
0.327
0.312
0.315
0.288
0.275
0.274
0.276

> Projected (d)

| 2020 | 0.269 |
| :---: | :--- |
| 2021 | 0.263 |
| $11 / 1 / 2021$ | 0.261 |

(a) See Exhibit 9.1.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Paid Development Factors Adjusted for Insurer Mix
Based on Experience as of March 31, 2020
(1)

| Accident <br> Year | Developed Medical <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.445 |
| 2009 | 0.523 |
| 2010 | 0.520 |
| 2011 | 0.440 |
| 2012 | 0.379 |
| 2013 | 0.306 |
| 2014 | 0.274 |
| 2015 | 0.259 |
| 2016 | 0.247 |
| 2017 | 0.256 |
| 2018 | 0.276 |
| 2019 | 0.298 |

(2)

Composite Medical Adjustment Factor (b)
(3)

Composite Premium Adjustment Factor (c)

|  |  | $(1) \times(2) \div(3)$ |
| :--- | :--- | :---: |
| 0.802 | 1.265 | 0.282 |
| 0.791 | 1.364 | 0.303 |
| 0.789 | 1.240 | 0.331 |
| 0.811 | 1.133 | 0.315 |
| 0.846 | 1.009 | 0.318 |
| 0.928 | 0.881 | 0.322 |
| 0.974 | 0.812 | 0.328 |
| 0.995 | 0.776 | 0.333 |
| 0.993 | 0.803 | 0.306 |
| 0.991 | 0.841 | 0.301 |
| 1.015 | 0.882 | 0.317 |
| 1.011 | 0.976 | 0.309 |

(4)

On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) $\times(2) \div(3)$
0.282
0.303
0.331

0
. 333
0.301
0.309

Projected (d)

2020
0.313

2021
0.311

11/1/2021
0.311
(a) See Exhibit 9.1.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

# Projected Indemnity Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method 

 Accident Year 2019 Indemnity Projected from 15 Months to 27 Months1. AY 2019 Reported Paid Indemnity Loss Ratio at 15 Months ..... 0.045
(Based on Exhibit 1 of AC20-06-01)
2. Reported Paid Indemnity Loss Ratios at 27 Months for ELR
a) AY 2017 (Based on March 31, 2019 Experience ..... 0.086
b) AY 2018 (Based on Exhibit 1 of AC20-06-01)
b) AY 2018 (Based on Exhibit 1 of AC20-06-01) ..... 0.092 ..... 0.092
3. Frequency Adjustments to AY 2019
(Based on AC20-06-01, Exhibit 12)
a) AY 2017-2018 Frequency Change ..... -1.6\%
b) AY 2018-2019 Frequency Change ..... 0.9\%
4. Average Indemnity Severity Change, AY 2013-2018 ..... $-2.2 \%$
(Based on Exhibit 6.2 of AC20-06-01)
5. Composite Indemnity On-Level Adjustment Factors
(Based on Exhibit 4.1 of AC20-06-01)
a) AY 2017 to Current ..... 1.098
b) AY 2018 to Current ..... 1.070
c) AY 2019 to Current ..... 1.0416. Composite Premium On-Level Adjustment Factors(Based on Exhibit 5.2 of AC20-06-01)
a) AY 2017 to Current ..... 0.841
b) AY 2018 to Current ..... 0.882
c) AY 2019 to Current ..... 0.976
6. AY 2019 Expected Paid Indemnity Loss Ratio at 27 Months
a) Projected from 2017
$=(2 a) \times[1+(3 a)] \times[1+(3 b)] \times[1+(4)]^{\wedge} 2 \times[(5 a) /(5 c)] /[(6 a) /(6 c)]$ ..... 0.100
b) Projected from 2018
$=(2 b) \times[1+(3 b)] \times[1+(4)] \times[(5 b) /(5 c)] /[(6 b) /(6 c)]$ ..... 0.103
c) Average of 2017 and 2018 Projections $=[(7 a)+(7 b)] / 2$ ..... 0.101
7. Projected Indemnity 15-to-27 Paid Development Factor ..... 2.345
(Based on Exhibit 2.5.1 of AC20-06-01)
8. Projected AY 2019 Paid Indemnity Loss Ratio at 27 Months$=(1)+(7 c) \times[1-1 /(8)]$0.103

# Projected Medical Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method Accident Year 2019 Medical Projected from 15 Months to 27 Months 

|  | Adjusted for <br> Reforms (*) |
| :--- | :---: |
| 1. AY 2019 Reported Paid Medical Loss Ratio at 15 Months <br> (Based on Exhibit 1 of AC20-06-01) | 0.065 |
| 2. Reported Paid Medical Loss Ratios at 27 Months for ELR |  |
| a) AY 2017 (Based on March 31, 2019 Experience) |  |
| b) AY 2018 (Based on Exhibit 1 of AC20-06-01) | 0.103 |
| 3. Frequency Adjustments to AY 2019 | 0.111 |
| (Based on AC20-06-01, Exhibit 12) |  |
| a) AY 2017-2018 Frequency Change | $-1.6 \%$ |
| b) AY 2018-2019 Frequency Change | $0.9 \%$ |
| 4. Average Medical Severity Change, AY 2013-2018 | $-0.2 \%$ |
| (Based on Exhibit 6.4 of AC20-06-01) |  |
| 5. Composite Medical On-Level Adjustment Factors |  |
| (Based on Exhibit 4.4 of AC20-06-01) | 1.014 |
| a) AY 2017 to Current | 1.015 |
| b) AY 2018 to Current | 1.011 |
| c) AY 2019 to Current |  |
| 6. Composite Premium On-Level Adjustment Factors |  |
| (Based on Exhibit 5.2 of AC20-06-01) |  |
| a) AY 2017 to Current | 0.841 |
| b) AY 2018 to Current | 0.882 |
| c) AY 2019 to Current |  |

7. AY 2019 Expected Paid Medical Loss Ratio at 27 Months
a) Projected from 2017
$=(2 a) \times[1+(3 a)] \times[1+(3 b)] \times[1+(4)]^{\wedge} 2 \times[(5 a) /(5 c)] /[(6 a) /(6 c)] \quad 0.118$
b) Projected from 2018
$=(2 \mathrm{~b}) \times[1+(3 \mathrm{~b})] \times[1+(4)] \times[(5 \mathrm{~b}) /(5 \mathrm{c})] /[(6 \mathrm{~b}) /(6 \mathrm{c})] \quad 0.124$
c) Average of 2017 and 2018 Projections $=[(7 a)+(7 b)] / 20.121$
8. Projected Medical 15-to-27 Paid Development Factor 1.849 (Based on Exhibit 2.6.1 of AC20-06-01)
9. Projected AY 2019 Paid Medical Loss Ratio at 27 Months $=(1)+(7 c) \times[1-1 /(8)]$ 0.120
(*) Based on experience evaluated as of March 31, 2020. Reflects adjustments for SB 1160 and impact of pharmaceutical cost reductions.

Developed Loss Ratios Using Latest Year Reform Adjusted Development Factors - BF Adjusted Age 15 Loss Ratio

| Based on Experience as of March 31, 2020 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|  | Indemnity |  |  |  | Medical |  |  |  |  |
|  |  |  |  |  |  |  | Adjusted |  |  |
|  | Reported | Annual | Cumulative |  |  | Annual | Cumulative |  | Total |
| Accident | Paid | Development | Development | Developed | Paid | Development | Development | Developed | Developed |
| Year | Loss Ratio (a) | Factor (b) | Factor | Loss Ratio | Loss Ratio (a) | Factor (d) | Factor | Loss Ratio | Loss Ratio |
|  |  |  |  | (1) $\times$ (3) |  |  |  | (5) $\times$ (7) | (4) + (8) |
| 2008 | 0.261 | 1.012 | 1.090 | 0.284 | 0.374 | 1.017 | 1.229 | 0.460 | 0.744 |
| 2009 | 0.301 | 1.015 | 1.106 | 0.333 | 0.430 | 1.019 | 1.253 | 0.539 | 0.872 |
| 2010 | 0.287 | 1.017 | 1.125 | 0.323 | 0.418 | 1.020 | 1.278 | 0.535 | 0.857 |
| 2011 | 0.263 | 1.022 | 1.149 | 0.302 | 0.350 | 1.026 | 1.311 | 0.460 | 0.762 |
| 2012 | 0.230 | 1.023 | 1.176 | 0.271 | 0.294 | 1.029 | 1.349 | 0.396 | 0.667 |
| 2013 | 0.192 | 1.031 | 1.212 | 0.232 | 0.230 | 1.039 | 1.402 | 0.323 | 0.556 |
| 2014 | 0.176 | 1.038 | 1.258 | 0.222 | 0.197 | 1.039 | 1.456 | 0.287 | 0.509 |
| 2015 | 0.163 | 1.051 | 1.322 | 0.216 | 0.176 | 1.051 | 1.530 | 0.269 | 0.485 |
| 2016 | 0.142 | 1.088 | 1.439 | 0.204 | 0.153 | 1.079 | 1.651 | 0.252 | 0.457 |
| 2017 | 0.123 | 1.174 | 1.689 | 0.208 | 0.136 | 1.146 | 1.892 | 0.257 | 0.465 |
| 2018 | 0.092 | 1.441 | 2.434 | 0.224 | 0.111 | 1.321 | 2.500 | 0.277 | 0.501 |
| 2019 | 0.103 |  | 2.434 | 0.251 | 0.120 |  | 2.500 | 0.301 | 0.552 |

(a) Based on AC20-06-01, Exhibit 1. The 2019 indemnity loss ratio is based on Exhibit 10.1.
(b) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC20-06-01, Exhibit 2.5. Includes adjustments for claim settlement rates.
(c) Based on experience evaluated as of March 31, 2020. Reflects adjustments of SB 1160 and impact of pharmaceutical cost reductions. The 2019 medical loss ratio is based on Exhibit 10.2.
(d) Age-to-age factors are selected as latest year for for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC20-06-01, Exhibit 2.6. Reflects an adjustment for SB 1160 and impact of pharmaceutical cost reductions. Includes adjustments for claim settlement rates.

Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months
Based on Experience as of March 31, 2020
(1)
(2)
(3)

| Accident <br> Year | Developed Indemnity <br> Loss Ratio (a) |
| :---: | :---: |
| 2008 | 0.284 |
| 2009 | 0.333 |
| 2010 | 0.323 |
| 2011 | 0.302 |
| 2012 | 0.271 |
| 2013 | 0.232 |
| 2014 | 0.222 |
| 2015 | 0.216 |
| 2016 | 0.204 |
| 2017 | 0.208 |
| 2018 | 0.224 |
| 2019 | 0.251 |


| Composite Indemnity <br> Adjustment Factor (b) | Composite Premium <br> Adjustment Factor (c) | On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: | :---: | :---: |
|  |  | $(1) \times(2) \div(3)$ |
| 1.381 | 1.265 | 0.310 |
| 1.354 | 1.364 | 0.331 |
| 1.328 | 1.240 | 0.346 |
| 1.310 | 1.133 | 0.349 |
| 1.294 | 1.009 | 0.347 |
| 1.265 | 0.881 | 0.334 |
| 1.159 | 0.812 | 0.317 |
| 1.142 | 0.776 | 0.318 |
| 1.128 | 0.803 | 0.287 |
| 1.098 | 0.841 | 0.272 |
| 1.070 | 0.882 | 0.271 |
| 1.041 | 0.976 |  |
|  |  |  |

Projected (d)

| 2020 | 0.263 |
| :--- | :--- |
| 2021 | 0.258 |
| $11 / 1 / 2021$ | 0.256 |

(a) See Exhibit 10.3.
(b) Based on AC20-06-01, Exhibit 4.1.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC20-06-01, Exhibit 6.2, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months Based on Experience as of March 31, 2020

|  |  | (2) | (3) | (4) <br> On-Level Medical to Industry Average Filed Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Accident Year | Developed Medical | Composite Medical | Composite Premium |  |
|  | Loss Ratio (a) | Adjustment Factor (b) | Adjustment Factor (c) |  |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2008 | 0.460 | 0.836 | 1.265 | 0.304 |
| 2009 | 0.539 | 0.825 | 1.364 | 0.326 |
| 2010 | 0.535 | 0.822 | 1.240 | 0.354 |
| 2011 | 0.460 | 0.836 | 1.133 | 0.339 |
| 2012 | 0.396 | 0.874 | 1.009 | 0.343 |
| 2013 | 0.323 | 0.949 | 0.881 | 0.348 |
| 2014 | 0.287 | 0.993 | 0.812 | 0.351 |
| 2015 | 0.269 | 1.011 | 0.776 | 0.351 |
| 2016 | 0.252 | 1.012 | 0.803 | 0.318 |
| 2017 | 0.257 | 1.014 | 0.841 | 0.310 |
| 2018 | 0.277 | 1.015 | 0.882 | 0.319 |
| 2019 | 0.301 | 1.011 | 0.976 | 0.312 |

Projected (d)

| 2020 | 0.315 |
| :---: | :---: |
| 2021 | 0.313 |
| $11 / 1 / 2021$ | 0.313 |

(a) See Exhibit 10.3.
(b) Based on AC20-06-01, Exhibit 4.4.
(c) See AC20-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC20-06-01, Exhibit 6.4, the actual frequency trend for accident year 2019 from AC20-06-01, Exhibit 12, and projected frequency trends for accident years 2020 to 2022 from AC20-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

## Item AC20-08-04 <br> Impact of Economic Slowdown on Pure Premium Rate Indications

Economic changes related to the COVID-19 pandemic will have many direct and indirect impacts on the proposed 2021 pure premium rates. Staff has examined potential adjustments to several economic components of the January 1, 2021 Pure Premium Rate Filing for which data-based adjustments may be appropriate.

## Statewide Average Wage

Changes in the statewide average wage flow directly into the proposed pure premium rates and are also used for benefit on-leveling. Historical changes from the Bureau of Labor Statistics (BLS) are used for past years. For future years, projections are made as an average of forecasts made by the California Department of Finance (CDOF) and the UCLA Anderson School of Business (UCLA). (See Exhibit 5.1 of Item AC20-06-01 of this Agenda.)

The most current forecast from CDOF is from April 2020. The wage variable was (potentially temporarily) discontinued from the UCLA June 2020 forecast as they are reassessing their wage forecasting model, leaving the most recent forecast from March 2020. Current wage growth projections based on the average of these two projections are $1.5 \%$ for $2020,2.6 \%$ for 2021 and $3.8 \%$ for 2022.

Both forecasts show an average wage calculated as total wages divided by total employment. Given the extreme changes in the employment mix, the use of an average wage would be artificially inflated as lower wage industries and employees were more likely to suffer employment declines. Staff has derived two potential adjustments to an average wage change to account for the changing industrial mix.

The first adjustment uses data through June 2020 from the BLS Current Employment Statistics data set. This method calculates overall average wages at the industrial mix from the current and previous year to determine the amount of change due to the industrial mix. The largest change due to mix from 2007 through 2019 was $-0.5 \%$ in 2009. The change due to mix in 2020 is $1.9 \%$, i.e., the overall statewide average wage will be artificially inflated by $1.9 \%$ due solely to the change industrial mix. This data series does not include agriculture and no forecasts are available. The derivation of this index is shown in Exhibit 1.

The second adjustment combines historical annual industrial wage relativities through 2019 from the BLS Quarterly Census of Employment and Wages (QCEW) data series with industrial employment forecasts from UCLA. Staff calculated estimates via this methodology for 2020 through 2022 assuming future industry relativities remained equal to either the latest $1-, 3-$, or 5 -year average. The timeframe used to select the industry relativities was immaterial. This method shows about $2.5 \%$ inflation due to mix in 2020, $0.1 \%$ in 2021 and $-0.5 \%$ in 2022. These calculations are shown in Exhibit 2.

Committee members are asked for feedback regarding the appropriateness of these adjustments as well as any other thoughts regarding adjustments to the average wage, given the timeframe of the forecasts and the rapidly changing environment.

## Indemnity Claim Frequency

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

The economic variable used in the model are the first principal component decomposition of the changes in aggregate employment and the unemployment rate. The magnitude of the change in 2020 is more than twice as much as the next most extreme observation going back to the 1960's, which occurred during the Great Recession in 2009 and is greater in magnitude than 2007 through 2010 combined. The economic variable series is shown in Exhibit 3.

Staff investigated several alternative specifications of the economic variables to evaluate if they could simultaneously improve the model fit while resulting in a 2020 value that was closer to observed values. These alternatives included using the change in the employment rate, the point change (as opposed to log difference) of either the unemployment or employment rate, and the change in unemployed workers. Some of these specifications led to a less extreme 2020 value, but all of them caused the economic variables to be insignificant in the model and sometimes other variables as well. For this reason, these alternatives were abandoned.

Staff then investigated the potential of explicitly capping the magnitude of the economic variables. The rationale was that at some level of magnitude, the economic variables would begin over-predicting frequency changes and capping would lead to a better model fit. This was not the case. Exhibit 4 shows the number of observations capped, the R-squared, and the significance of the economic variable coefficient using various caps. The smallest values are shown only for comparison and in fact make the economic variables insignificant. Exhibit 5 shows the model error by the size of the economic variables. The errors are not correlated with the magnitude of the variables and the error is very small for the most extreme observation, causing reduced model performance at any cap.

Given that the 2020 economic variables are so far outside the range of observations used to fit the model, model projections using caps equal to or greater than the most extreme observation are shown in Exhibit 6. None of these caps impact the model fit as all the observed data would be uncapped. The Accident Year (AY) 2020 projection would be very sensitive to any potential cap. Later years would not be affected.

In the WCIRB frequency model, the cumulative injury index is calculated as the ratio of cumulative frequency to non-cumulative frequency. This variable is thought of internally as a proxy for the level of discretionary claim filing and is the most predictive explanatory variable in the model. To date, staff has not been able to produce a reliable projection of this variable and no change forecast is used in the model. As shown in the WCIRB's recent study of the impact of economic changes on claim frequency, ${ }^{1}$ during the prior recession, there was a large uptick in the cumulative injury index. Alternate frequency projections using observed values of the change in the index from the prior recession are shown in Exhibit 7.

The final frequency-related adjustment is for industrial mix. Exhibit 8 shows a contracted version of Exhibit C7.2 of the standard set of diagnostic exhibits reviewed by the Committee twice a year, which shows the history and projections of the frequency model. Changes in inter-class frequency show the change in overall frequency due to changes in industrial mix. Accident years up to 2018 use USR data at a class level to calculate the change. For AYs 2019 through 2022, inter-class changes use observed industry frequency relativities with industry exposure distributions adjusted for forecast employment changes from UCLA. The $-3.26 \%$ change for 2020 due to shifting class mix is the largest in magnitude during the duration of the series.

## Indemnity Claim Severity

The WCIRB tracks changes in indemnity claim severity due to shifting class mix in Exhibit S15 of the standard set of diagnostic exhibits reviewed by the Committee twice a year. These changes have been very modest over time and have not historically been reflected in pure premium rate filing projections. Given the magnitude of current economic changes, staff has calculated a projected change in indemnity

[^22]IV-D-2

Actuarial Committee
Meeting Agenda for August 4, 2020
claim severity due to changes in the industrial mix. This method uses historic industry severity relativities from USR data and estimated future indemnity count distributions based on forecast changes in employment mix.

Exhibit 9 shows the derivation of projected indemnity count distributions by industry. Standard exception data has been allocated to industry using previous WCIRB studies. Some industries shown are collapsed in the forecast data and will have the same projected employment changes.

Calculations of change in indemnity and medical severity due to industry mix are shown in Exhibits 10.1 and 10.2. Neither is impacted significantly by the selection of the severity relativity. Both severities show increases due to industry mix in 2020 and decreases in 2022. Changes in 2019 and 2021 are modest. Total claim severity is shown for reference in Exhibit 10.3. This calculation implicitly assumes that industry frequency and severity relativities are stable.

## Pure Premium

Staff has developed a hazardousness adjustment for pure premium that is similar to the adjustment used for claim frequency. Exposures are aggregated at a class level and extended by the approved pure premium rates. Exposure data is available through policy year 2017, pure premium rates are available through policy year 2020, and proposed classification relativities are available for policy year 2021. For policy years 2018 through 2021, the classification exposure distribution is estimated using the policy year 2017 observed distribution and historic and forecast changes in employment at an industry level. For policy year 2021, the pure premium rate used in this index is calculated as the approved 2020 pure premium rate adjusted for the proposed policy year change in the classification relativity. This estimate excludes changes in the overall pure premium rate level. However, the overall change will impact all classes and is irrelevant for this index. This index is shown in Exhibit 11.

| 610\％ | 100\％ | $100 \%$ | 666.0 | 000\％ | 000\％ | 666.0 | 666.0 | 000\％ | 000\％ | 666.0 | S66\％ | L66\％ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810＇し | 100＇レ | 200＇レ | $666{ }^{\circ} 0$ | 000＇レ | 000\％ | 866.0 | 000\％ | 000＇！ | 000＇$\downarrow$ | $666{ }^{\circ} 0$ | S66＇0 | L66＇0 | хәри әуэseed $_{\text {d }}$ |
| ガヤら1＇レ | ガSレレ＇レ | 1．120＇1 | 6．8E0＇1 | G． 266 | 8．EL6 | 8．$\angle 76$ | 8．086 | でGZ6 | ガヤて6 | で268 | ¢＇998 | ガくヤ8 | sə6̂eM MəN X X！W Kıysnpui PIO |
| S＇SLl＇レ | で9しレ＇レ | L＇ZLO＇レ | $6^{\circ} \mathrm{LE} 0^{\prime}$＇ | －＇266 | 8．EL6 | ع＇9t6 | ナ0¢6 | ع＇GZ6 | 9 －$\downarrow$ て6 | l＇968 | ガ198 | 0＇Gt8 | sə6em MəN X X！W Kıısnpui məN |
| 610\％ | 100\％ | 100\％ | 666.0 | 000\％ | 000\％ | 666.0 | $666{ }^{\circ} 0$ | 000\％ | 000\％ | 666.0 | 966.0 | 966.0 | хәриц səıイədseך |
| で9しい＇ | L＇ZLO＇ |  | 1．266 | 8．$£ 26$ | ع．9ャ6 | カ0と6 | ع＇¢ ${ }^{\text {c }}$ | 9 －$\downarrow$ Z6 | ᄂ．968 | －198 | $0 \cdot \mathrm{St8}$ | G＇IS8 | səద匕ем PIO $\times$ x！W Kısnpul PIO |
| どLEレ＇レ | ナ¢LO＇レ | カ＇680＇レ | て＇966 | S＇EL6 | カ9ャ6 | －6Z6 | 8 † Z6 | 8＇ゅて6 | l＇968 | で098 | どレヤ8 | で8ヤ8 | sə6em PIO X X！W Kılsnpul MəN |

New Industry Mix x Old Wages
Old Industry Mix x Old Wages 6u！̣6боา pue 6u！u！w
 Education and Health Services
Leisure and Hospitality Financial Activities
Professional and Business Services Information
Financial Activities
 әбем Кןуәәм әбеләл







Bureau of Labor Statistics Quarterly Census of Employment and Wages Data Series/UCLA Anderson Forecas:

| $766^{\circ} 0$ | 1001 | 970 1 | 1人－G |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S66 0 | L00＇レ | 970 $\downarrow$ | 1入－ $\boldsymbol{1}$ |  |  |  |  |  |  |  |  |  |  |
| G66．0 | 1001 | GZO＊ | 1入－1 |  |  |  |  |  |  |  |  |  |  |
| 乙て0乙 | LてOZ | OZOZ | ＇ךə＞y＇6＾＊ |  |  |  | solud əut O | əəıduos | 人 pəıeıs əu | $!$ K！！＾！ұеןə」 |  |  |  |
| ＊ X ！ | N ol ənの əбu | ૫つ |  |  | әбелəл | рәృцర！əм $\downarrow$ | uরo｜dwə | ¢7 se pəృеןnэ | eo s！x！w ot | рр əбueцว＊ |  |  |  |
|  |  |  | Z00＇レ | 100＇1 | 866.0 | 000\％ | 666．0 | $266^{\circ} 0$ | 866.0 | 666．0 | 666.0 | хәри｜иеә |  |
|  |  |  | 200＇レ | 100＇レ | 8660 | 000＇レ | $666{ }^{\circ}$ | $266{ }^{\circ}$ | 866 0 | 666＊ | 666＊0 | хәрuן səıк |  |
|  |  |  | 967＇89 | 816＇99 | 8ャ6＇乙9 | ZS9＇19 | 980＇6G | Z60＇ 29 | 88¢＇$\angle 9$ | てレヤ＇G9 | 00L＇EG | pIO | pIO |
|  |  |  | 6て9＇89 | L96＇G9 | $678 \times$ ¢ | LE9＇19 | Z96＇89 | 906‘99 | GGて＇LG | 8\＆ع＇S | Lt9＇EG | plO | MəN |
|  |  |  | 200 1 | 100＇1 | 866.0 | 000 1 | 666.0 | L66．0 | L66 0 | $666{ }^{\circ}$ | $666{ }^{\circ} 0$ | хәриן əчэง |  |
|  |  |  | 661＇L | Oヤナ＇89 | 980＇99 | て96＇Z9 | 8\＆L＇レ9 | Lعて＇6G | 8Eて＇ 19 | レSt＇ 29 | G97＇G9 | MəN | pIO |
|  |  |  | レカ¢＇レL | 967＇89 | 8レ6＇99 | 8ャ6＇乙9 | ZG9＇19 | 9E0،6G | て60＇ 29 | 88¢＇ 29 | てレヤ＇G9 | MəN | MəN |
|  |  |  | 610Z | 810Z | LLOZ | 910Z | GLOZ | ヤレOZ | عLOZ | てLOZ | LIOZ | səбем | X！W |
|  |  |  |  |  |  |  |  |  |  |  |  | м әбеләл | р！мәұеıS |
| 6G0＇\＆E\＆＇Lレ | ャ8て＇99て＇91 | 8tG＇6GL＇91 | で¢＇tG8＇Lレ | ع89＇ャ69＇LL | てカナ＇6ヵでくレ | ع8G＇t06＇91 | 000＇レレカ＇91 | LLL＇レ66＇Gレ | てヤ9＇\＆9G＇G1 | عと0＇เ91＇Sレ | てヤ0＇9て8＇ャレ | LLG「カ99「ャレ | $\|\mathrm{P}\| \mathrm{O} \mid$ |
| 08レ＇レ8ヤ＇乙 | L てで6レヤ＇て | 9ャ9＇96ヤ＇乙 | 098＇L09＇乙 | 261＇レ8G＇乙 | 8Gع＇ャĢ＇乙 | 809＇SLG＇乙 | て6て＇て9t＇乙 | 8G6＇Zレヤ＇て | عย0＇tLE＇乙 | OGO＇9LE＇乙 | て6ヤ＇90t＇乙 | Lレで8カヤ＇て | 乙6 |
| 0ヤレ＇8カG | と6と＇てLt | LGO＇99t | てカヤ＇9くG | てヤ8＇レLG | GLL＇E9G | ع8t＇EGG | てカカ＇とカG | てヤ8‘ャ¢G | 8G9＇GLG | OGS＇EOG | L9E＇て6〉 | てカカ＇と8カ | 18 |
| 99L＇9カて＇レ | 6E0‘SLて＇レ | 60カ＇ャ0でレ | L9E＇G0L＇レ | ع98＇LL9＇レ | 6Lレ＇Lカ9＇レ | SE6‘Z09＇レ | 88L＇とャG＇レ | 860＇Z8ヤ＇レ | ャGと「0レヤ＇レ | レ99＇てヤモ゙レ | カGl＇68でレ | カ0G＇8Gでし | ZL |
| E89＇LLZ | 90て＇とを乙 | 991＇レを乙 | LレE＇LてE | L8て＇91を | レL8＇90E | L00＇00E | L8L＇ゅ8て | カヤ9＇ャレて | 6て6＇ャ9て | レヒ6＇ャGて | 6て8＇Gカて | て90＇乙ヵて | LL |
| EG6＇レ8カ＇乙 | ヤレ6＇S\＆どて | 899＇てレヒ＇て | レ8ガレてヤ＇て | 099＇8ャ¢＇乙 | Lع8＇98て＇乙 | 0ヶ9＇ $261 \times 乙$ | 000＇Lレレ＇て | 6んカ＇8\＆0＇乙 | 98て＇し86＇レ | LGて＇Gレ6＇レ | LOL＇†G8＇レ | 6ヤ0＇6と8＇レ | 乙9 |
| 960＇\＆6を | L96＇698 | 69て＇99を | 6レG＇E8を | 809＇ELE | てZ9＇と9を | 019＇ャG\＆ | L9と＇$\angle$ ¢ع | 0ع9＇6をย | ャレヤ＇Lてを | 9んし＇LレE | LGL＇LOE | 929＇て6乙 | 19 |
| 908‘てヤレ＇レ | ع88＇8ャ0＇レ | SEL＇レャ0＇レ | GS8＇EยL＇レ | G9E＇レヒレ＇レ | て68＇960＇レ | GL8‘Z80＇レ | G06‘090＇レ | EG8＇EZ0＇レ | と9カ＇6L6 | レャ9「0と6 | 998＇レ88 | 00と＇198 | 9 G |
| て80＇8Gて | レL8‘9とて | てレ9「9とて | 190＇99て | て6L＇GGZ | LE6‘9力て | ELL＇9とて | 999＇LE乙 | てレ0＇9とて | 6\＆G＇レع乙 | 98L＇6して | G97＇として | LてL＇80て | GG |
| 06カ＇カャ¢＇レ | レ66＇とをて＇レ | 0ヶ9＇てとでレ | 6S6＇عยย＇レ | 09て＇て8て＇レ | てG8＇LEて＇レ | 09L＇レレて＇レ | 188＇レ6レ＇レ | 098＇L91＇レ | 066＇9とし＇レ | レعレ＇660＇レ | 6て6＇9ャ0＇レ | LヤG＇ELO＇レ | ヤG |
| レ0L゙OLE | ع8E＇G0¢ | GGZ＇00E | GLE＇乙0ย | 999＇ャ6て | レヒて＇G8て | 988＇LLて | して6＇レLて | 68t＇99て | 8て0＇6Gて | 916‘0Gて | カGレ＇Lヵて | 9ヤع＇8ヵて | EG |
| 9L8＇EGS | 96と＇カヤG | GGZ＇SEG | عと0＇6ES | E0G＇EャG | 099＇レヤG | ヤL0＇GヤG | 9カナ＇0とG | 8LでLLG | 990＇tてG | ャ\＆8＇てZG | カ00＇GLG | 88\＆゙てしG | 乙G |
| OZG＇8\＆9 | 867＇68G | Z09＇GGG | LLG＇Z9G | GZG＇EャG | \＆と6＇6てG | 809＇97S | L9 1＇88t | Gレヤ＇と9ヤ | 00て＇09ヵ | とย9＇9をャ | と8E＇レยャ | てヤ¢＇8てヤ | LG |
| 0G6‘0ヶ9 | Lレ8‘てZ9 | 0LE＇乙て9 | 90て＇七ャ9 | 0ع0＇809 | てE6＇ELG | 001＇GEG | GL6＇86t | ع9と＇99ヤ | 8LG＇カヤナ | 08と＇8てヤ | ててし「9レも | てレ6‘80t | $8 \nabla$ |
| てعと＇909＇レ | レG6＇Z9จ＇レ | 96ャ＇と97＇レ | て69＇999＇レ | 8GL＇E89＇レ | 00ヤ＇889＇レ | L9L＇6L9＇レ | て6て＇099＇レ | L99＇ 279 ＇ | GてZ＇E6G＇レ | GL8＇899＇レ | 8Gて＇GtG＇レ | GL9＇91G＇レ | カワ |
| 690＇G99 | カヤヤ＇6ャ9 | 999＇8ャ9 | L9カ＇カ69 | GL6＇869 | 0G6＇G69 | OG L＇E69 | 098＇069 | ع8て＇と89 | 0Gて＇しL9 | GLt＇9G9 | 0Gでてヤ9 | てャ9＇6て9 | てヤ |
| G8L＇8Lて＇し | ヤ68‘てとて＇レ | 08G＇9して＇し | LレO＇とてE＇レ | と86＇乙てE＇レ | て69しレE＇レ | L90＇60ع＇レ | OSE＇Z0E＇レ | 099＇6Lて＇レ | ع89＇レ9て＇レ | 809＇6Gでし | 801＇ャGで | てヤヤ＇レヤでし | LE |
| レLレ＇028 | 666＇9て8 | LS8＇018 | ع8L＇と88 | と8て＇098 | 291＇018 | L9E＇GLL | 8GL＇レヒL | OGG＇ャL9 | LLL＇LE9 | 8Gで06G | 809＇レ99 | LL6＇69S | \＆乙 |
| OGL＇9G | て99＇ャG | \＆ZG＇ャG | 9عヤ＇9G | E09＇99 | ع60＇8S | L9E＇6G | OGて＇8G | 0LL＇8G | L60＇6G | レレ9‘6G | ع09＇89 | 88L＇LG | て乙 |
| 8ع6＇8レ | GG8＇LL | してO＇レて | LIG＇てて | Gで＇てて | L98＇レ乙 | て6て＇て乙 | Gで＇9て | てヤで6て | 80と＇8乙 | عยと＇8乙 | 00L＇9乙 | L19＇ャて | して |
| 02E＇6レヤ | EL6＇て6E | ャて6＇9ャを | 0G6＇とてャ | E8G＇レてカ | 00どててャ | LLE＇Gで | 0Gガてで | GL9‘91ヵ | とと8「てレヤ | Gて6‘66を | 008＇688 | Gて6＇て8\＆ | レレ |
| 乙てOZ | してOZ | OZOZ | 6し0Z | 810Z | LLOZ | 910Z | G10Z | ヤレOて | とLOZ | てLOZ | レレOZ | OLOZ | SOIVN |
|  |  |  |  |  |  | イoıduョ $\forall$ |  |  |  |  |  |  |  |

Exhibit 3: Economic Variables

| CY | Aggregate Employment | Unemployment Rate | Annual Log Differences |  | Economic <br> Variables 1st Prin. Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Aggregate <br> Employment | Unemployment Rate |  |
| 1961 | 3,963,242 | 6.90 |  |  |  |
| 1962 | 4,146,749 | 5.80 | 0.045 | -0.174 | 0.178 |
| 1963 | 4,293,966 | 6.00 | 0.035 | 0.034 | -0.029 |
| 1964 | 4,426,369 | 6.00 | 0.030 | 0.000 | 0.004 |
| 1965 | 4,546,719 | 5.90 | 0.027 | -0.017 | 0.020 |
| 1966 | 4,793,964 | 4.90 | 0.053 | -0.186 | 0.191 |
| 1967 | 4,929,157 | 5.70 | 0.028 | 0.151 | -0.146 |
| 1968 | 5,134,603 | 5.40 | 0.041 | -0.054 | 0.059 |
| 1969 | 5,369,271 | 5.20 | 0.045 | -0.038 | 0.044 |
| 1970 | 5,336,545 | 7.30 | -0.006 | 0.339 | -0.337 |
| 1971 | 5,285,062 | 8.79 | -0.010 | 0.186 | -0.186 |
| 1972 | 6,022,635 | 7.61 | 0.131 | -0.145 | 0.161 |
| 1973 | 6,500,706 | 7.02 | 0.076 | -0.081 | 0.090 |
| 1974 | 6,709,500 | 7.30 | 0.032 | 0.040 | -0.035 |
| 1975 | 6,685,230 | 9.88 | -0.004 | 0.302 | -0.300 |
| 1976 | 7,261,209 | 9.17 | 0.083 | -0.075 | 0.085 |
| 1977 | 7,681,971 | 8.25 | 0.056 | -0.105 | 0.112 |
| 1978 | 9,203,099 | 7.11 | 0.181 | -0.149 | 0.173 |
| 1979 | 9,621,815 | 6.24 | 0.044 | -0.130 | 0.134 |
| 1980 | 10,269,331 | 6.83 | 0.065 | 0.090 | -0.080 |
| 1981 | 10,408,249 | 7.41 | 0.013 | 0.081 | -0.079 |
| 1982 | 10,235,071 | 9.95 | -0.017 | 0.294 | -0.294 |
| 1983 | 10,334,786 | 9.68 | 0.010 | -0.028 | 0.029 |
| 1984 | 10,826,006 | 7.79 | 0.046 | -0.218 | 0.222 |
| 1985 | 11,178,336 | 7.21 | 0.032 | -0.077 | 0.081 |
| 1986 | 11,489,283 | 6.69 | 0.027 | -0.075 | 0.078 |
| 1987 | 11,893,711 | 5.77 | 0.035 | -0.148 | 0.151 |
| 1988 | 12,361,079 | 5.31 | 0.039 | -0.084 | 0.088 |
| 1989 | 12,692,805 | 5.09 | 0.026 | -0.042 | 0.045 |
| 1990 | 12,946,887 | 5.77 | 0.020 | 0.125 | -0.121 |
| 1991 | 12,782,341 | 7.74 | -0.013 | 0.294 | -0.293 |
| 1992 | 12,582,274 | 9.32 | -0.016 | 0.186 | -0.186 |
| 1993 | 12,483,226 | 9.52 | -0.008 | 0.021 | -0.022 |
| 1994 | 12,615,828 | 8.56 | 0.011 | -0.106 | 0.106 |
| 1995 | 12,873,417 | 7.82 | 0.020 | -0.090 | 0.092 |
| 1996 | 13,231,630 | 7.28 | 0.027 | -0.072 | 0.075 |
| 1997 | 13,619,654 | 6.37 | 0.029 | -0.135 | 0.137 |
| 1998 | 14,082,965 | 5.91 | 0.033 | -0.075 | 0.079 |
| 1999 | 14,479,767 | 5.21 | 0.028 | -0.125 | 0.128 |
| 2000 | 14,992,265 | 4.90 | 0.035 | -0.062 | 0.066 |
| 2001 | 15,098,050 | 5.43 | 0.007 | 0.103 | -0.101 |
| 2002 | 14,972,541 | 6.65 | -0.008 | 0.203 | -0.202 |
| 2003 | 14,950,702 | 6.81 | -0.001 | 0.023 | -0.023 |
| 2004 | 15,130,469 | 6.20 | 0.012 | -0.093 | 0.093 |
| 2005 | 15,422,217 | 5.40 | 0.019 | -0.139 | 0.141 |
| 2006 | 15,697,957 | 4.92 | 0.018 | -0.093 | 0.095 |
| 2007 | 15,844,029 | 5.36 | 0.009 | 0.087 | -0.084 |
| 2008 | 15,689,423 | 7.31 | -0.010 | 0.310 | -0.308 |
| 2009 | 14,807,953 | 11.15 | -0.058 | 0.423 | -0.427 |
| 2010 | 14,664,517 | 12.22 | -0.010 | 0.091 | -0.092 |
| 2011 | 14,826,042 | 11.72 | 0.011 | -0.042 | 0.043 |
| 2012 | 15,161,033 | 10.38 | 0.022 | -0.121 | 0.123 |
| 2013 | 15,563,642 | 8.94 | 0.026 | -0.149 | 0.151 |
| 2014 | 15,991,717 | 7.50 | 0.027 | -0.176 | 0.178 |
| 2015 | 16,471,000 | 6.19 | 0.030 | -0.191 | 0.193 |
| 2016 | 16,904,583 | 5.49 | 0.026 | -0.122 | 0.124 |
| 2017 | 17,249,442 | 4.79 | 0.020 | -0.135 | 0.137 |
| 2018 | 17,594,683 | 4.26 | 0.020 | -0.118 | 0.120 |
| 2019 | 17,854,342 | 4.04 | 0.015 | -0.052 | 0.054 |
| 2020 | 16,159,548 | 10.49 | -0.100 | 0.953 | -0.958 |
| 2021 | 16,265,283 | 8.16 | 0.007 | -0.250 | 0.249 |
| 2022 | 17,333,060 | 6.84 | 0.064 | -0.178 | 0.185 |
| Notes: | The first principal component of the annual log difference of the economic variables is: 1st PC of Econ Variables $=-0.1373546 \times$ Aggregate Employment $+0.9905219 \times$ Unemployment Rate |  |  |  |  |
| Sources: | Government historical labor statistics through 2019 <br> UCLA Anderson forecasts through 2022 are as of June 2020 |  |  |  |  |


| 乙てO＊ | 乙てO＊ | \＆ZO＊o | \＆zo＇o | $080 \cdot 0$ | $970 \cdot 0$ | 620＇0 | $1 \varepsilon 10$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \％0＇0 | \％000 | \％${ }^{-}{ }^{-}$ | \％で0－ | \％ドレ－ | \％6＇${ }^{-}$ | \％6 ${ }^{\text {－}}$ | \％8＇9－ | ио！̣эnpәу |
| 9990 | 9990 | s99＇0 | s99＇0 | 6Sc＇0 | OSs＇0 | 8¢9＇0 | LZSO | posenbs－y |
| 8 S 〕o ıno | 89 ！¢ ¥no | 89 10 $\ddagger$ no | 8 S 10 $\ddagger$ no | 89 ¢0 ¢no | 89 $\ddagger 0$ ¢no | 89.10 no | 89 $\ddagger$ ¢ | 6102－2961 |
| 0 | 1 | 1 | $\varepsilon$ | 9 | 8 | $\angle 1$ | $0 \varepsilon$ | pəddej sqo \＃ |
| 99Zヤ＊0 | 0ャ＊ | S $\varepsilon^{\circ} 0$ | $0 \varepsilon^{\circ} 0$ | Sで0 | 02＇0 | Sl＇0 | $0{ }^{\circ} \mathrm{O}$ | dej |



IV－D－8
WCIRB California



IV-D-9
WCIRB California ${ }^{\circledR}$

## Exhibit 6: Modeled Frequency Changes with Capped Economic Variables

|  | Projected Frequency Change by Econ Variable Cap |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| AY Obs. | 0.4266 | 0.50 | 0.60 | 0.70 | 0.80 | 0.90 | None |  |
| 2020 | $-6.1 \%$ | $-6.8 \%$ | $-7.8 \%$ | $-8.8 \%$ | $-9.7 \%$ | $-10.6 \%$ | $-11.1 \%$ |  |
| 2021 | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ |  |
| 2022 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |  |
|  |  |  |  |  |  |  |  |  |
|  | Current model projections |  |  |  |  |  |  |  |

Exhibit 7: Modeled Frequency Changes with Assumed Changes in Cumulative Claim Filing

|  | Assumed |  | Frequency Change |  |
| :---: | :---: | :---: | ---: | :---: |
|  | Cumulative | with | without |  |
| AY | Inj. Index | Change | Change |  |
| 2020 | 0.186 | $-6.5 \%$ | $-11.1 \%$ |  |
| 2021 | 0.060 | $2.3 \%$ | $0.6 \%$ |  |
| 2022 | 0.000 | $0.0 \%$ | $0.0 \%$ |  |
|  |  |  |  |  |

Exhibit 8: Indemnity Claim Frequency History and Projections

|  | Intra-Class Indemnity Claim | Inter-Class Indemnity Claim Frequency | Overall Indemnity Claim | Annual Percent Changes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY | Frequency(a) | Index(b) | Frequency | Intra-Class | Inter-Class | Overall |
| 1979 | 0.510 | 0.921 | 0.614 | --- | --- | --- |
| 1980 | 0.476 | 0.914 | 0.570 | -6.54\% | -0.75\% | -7.24\% |
| 1981 | 0.460 | 0.900 | 0.541 | -3.54\% | -1.56\% | -5.04\% |
| 1982 | 0.452 | 0.882 | 0.522 | -1.59\% | -2.00\% | -3.56\% |
| 1983 | 0.480 | 0.873 | 0.549 | 6.20\% | -0.98\% | 5.17\% |
| 1984 | 0.526 | 0.871 | 0.600 | 9.53\% | -0.18\% | 9.32\% |
| 1985 | 0.537 | 0.867 | 0.609 | 2.05\% | -0.51\% | 1.52\% |
| 1986 | 0.524 | 0.859 | 0.589 | -2.39\% | -0.92\% | -3.28\% |
| 1987 | 0.532 | 0.854 | 0.595 | 1.53\% | -0.56\% | 0.97\% |
| 1988 | 0.536 | 0.854 | 0.598 | 0.69\% | -0.06\% | 0.64\% |
| 1989 | 0.549 | 0.853 | 0.613 | 2.47\% | -0.08\% | 2.39\% |
| 1990 | 0.599 | 0.845 | 0.662 | 9.04\% | -0.89\% | 8.07\% |
| 1991 | 0.600 | 0.832 | 0.654 | 0.28\% | -1.58\% | -1.30\% |
| 1992 | 0.534 | 0.820 | 0.573 | -11.09\% | -1.45\% | -12.37\% |
| 1993 | 0.454 | 0.810 | 0.481 | -14.91\% | -1.25\% | -15.98\% |
| 1994 | 0.396 | 0.809 | 0.420 | -12.76\% | -0.06\% | -12.81\% |
| 1995 | 0.378 | 0.811 | 0.401 | -4.64\% | 0.16\% | -4.49\% |
| 1996 | 0.352 | 0.800 | 0.369 | -6.78\% | -1.25\% | -7.94\% |
| 1997 | 0.341 | 0.791 | 0.352 | -3.27\% | -1.23\% | -4.46\% |
| 1998 | 0.328 | 0.786 | 0.337 | -3.76\% | -0.60\% | -4.34\% |
| 1999 | 0.333 | 0.774 | 0.337 | 1.45\% | -1.48\% | -0.05\% |
| 2000 | 0.346 | 0.752 | 0.340 | 4.02\% | -2.91\% | 0.99\% |
| 2001 | 0.322 | 0.753 | 0.317 | -6.91\% | 0.13\% | -6.79\% |
| 2002 | 0.315 | 0.763 | 0.314 | -2.31\% | 1.34\% | -1.00\% |
| 2003 | 0.306 | 0.764 | 0.306 | -2.86\% | 0.20\% | -2.67\% |
| 2004 | 0.255 | 0.763 | 0.254 | -16.65\% | -0.21\% | -16.82\% |
| 2005 | 0.220 | 0.760 | 0.219 | -13.59\% | -0.31\% | -13.85\% |
| 2006 | 0.208 | 0.754 | 0.205 | -5.69\% | -0.81\% | -6.46\% |
| 2007 | 0.204 | 0.749 | 0.200 | -1.64\% | -0.68\% | -2.31\% |
| 2008 | 0.199 | 0.740 | 0.192 | -2.71\% | -1.18\% | -3.86\% |
| 2009 | 0.198 | 0.727 | 0.189 | -0.20\% | -1.82\% | -2.02\% |
| 2010 | 0.216 | 0.713 | 0.201 | 8.87\% | -1.87\% | 6.83\% |
| 2011 | 0.219 | 0.703 | 0.201 | 1.22\% | -1.42\% | -0.22\% |
| 2012 | 0.229 | 0.694 | 0.208 | 4.71\% | -1.20\% | 3.46\% |
| 2013 | 0.230 | 0.692 | 0.208 | 0.36\% | -0.36\% | 0.00\% |
| 2014 | 0.230 | 0.693 | 0.209 | 0.16\% | 0.21\% | 0.37\% |
| 2015 | 0.227 | 0.689 | 0.205 | -1.26\% | -0.60\% | -1.85\% |
| 2016 | 0.221 | 0.684 | 0.198 | -2.53\% | -0.73\% | -3.25\% |
| 2017(c) | 0.217 | 0.679 | 0.192 | -2.14\% | -0.76\% | -2.88\% |
| 2017(d) | 0.215 | 0.679 | 0.191 | --- | --- | --- |
| 2018(e) | 0.213 | 0.676 | 0.189 | -0.98\% | -0.47\% | -1.45\% |
| 2019 | 0.210 | 0.676 | 0.186 | -1.37\% | -0.04\% | -1.41\% |
| 2020 | 0.187 | 0.654 | 0.160 | -11.15\% | -3.26\% | -14.04\% |
| 2021 | 0.188 | 0.656 | 0.161 | 0.63\% | 0.39\% | 1.03\% |
| 2022 | 0.188 | 0.658 | 0.162 | -0.03\% | 0.25\% | 0.22\% |

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

Source: WCIRB Indemnity Frequency Model



Exhibit 9: Devivation of Projected Indemnity Count Distribution

| $\stackrel{\rightharpoonup}{\underline{+}}$ |  | $\frac{\Sigma}{\infty}$ |
| :---: | :---: | :---: |
| $\stackrel{N}{0}$ |  |  |
| $\underset{\stackrel{N}{N}}{\stackrel{N}{\omega}}$ |  |  |
| $\begin{aligned} & \text { N } \\ & \text { or } \\ & \text { N } \end{aligned}$ |  |  |
| 8 |  <br>  |  |
| $\underset{\omega}{\omega}$ | 苑 | $\checkmark$ |




|  |  |  |  |  | 000＇ | 000＇ | 000＇ | 乙乙®＇して | ャ99＇と乙 | 乙9て＇દ乙 | £9G｀と乙 | ZZL＇とZ | ¢¢łO¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | LZO＊ | SZO＊ | 8¢6．0 | LZ9＇¢Z | くカー＇もて | G0L＇GZ | 996‘てZ | LL6＇tて | 18 |
|  |  |  |  |  | $\angle \downarrow L^{\prime} 0$ | 0عL＇0 | $\angle 89{ }^{\circ}$ | 994＇81 | 108＇L1 | 99t＇Ll | 816＇L1 | 029「81 | ZL |
|  |  |  |  |  | 800＇ | 601．し | ع8t＇レ | \＆ZS＇0t | てZ6＇レて | レセどレて | てしく「6レ | 09L＇0Z | LL |
|  |  |  |  |  | LS800 | 0ヶ8＇0 | 6SL＇0 | عとL＇oz | 七\＆G「0Z | 818‘0Z | 0عと‘0Z | 199「0Z | Z9 |
|  |  |  |  |  | \＆ャ6．0 | SS6．0 | OLO＇L | 68S＇LZ | 91E＇0Z | عLl＇とZ | レLでして | くもカ「てZ | 19 |
|  |  |  |  |  | S10＇1 | 996.0 | 0680 | 80と＇七乙 | $6 \varepsilon 6$＇七乙 | 18レ＇てて | 60ع＇¢ | てャで9て | 9 g |
|  |  |  | ， |  | てEO＇ | 0ع0＇ 1 | ¢ $80 \cdot 1$ | 99て＇8Z | Gع8＇とZ | LLE＇もて | GZL＇けて | 161＇もて | ¢G |
|  |  | （8x |  |  | S86．0 | Z96．0 | ع86．0 | ZG8＇9Z | て66＇てZ | 6S9＇レて | 69ぐ七て | 6レナ「とて | $\varepsilon G$ |
|  |  |  | 7 | ＝\％08 | 七てじレ | 沏じレ | 261： | 6L9＇乙を | 06L＇9Z | 0LL＇gZ | 0LG‘GZ | 8ヤレ「9て | 乙¢ |
|  |  | （ $0 \times 0$ | $\pm$ |  | ES6．0 | 096．0 | ZS6．0 | 900＇92 | Z80＇とて | 8GL＇てZ | LOL＇レて | 9て8‘てZ | 19 |
|  |  |  |  |  | Z00＇ | SL6＇0 | 9860 | とも6‘9て | 9Zし「てZ | $\angle \triangleright \varepsilon^{\prime}$ ¢ | 七98＇¢乙 | 8\＆6‘とて | 87 |
|  |  |  |  |  | 七＜8＇0 | Z98＇0 | Sl80 | \＆Lて＇乙乙 | 0＜9＇して | 688‘61 | 988‘0Z | $9 \downarrow \varepsilon^{\prime} \downarrow$ | カt |
|  |  |  |  |  | OS6．0 | L৮6＇0 | レヤ8＇0 | ヤ86＇てZ | 8tt＇とて | て6t＇とZ | 0Z0‘と乙 | て80‘て乙 | てヵ |
| \％て\＆＇0－ | \％$+0 \cdot 0$ | \％820 | \％ 200 | 1人－9 | $1+0^{\circ}$ | 980＇レ | ع60＇ | LG8＇62 | 0ヤL＇てZ | ヤレS＇ヤて | しくガわて | ¢91＇¢Z | $1 \varepsilon$ |
| \％عと＇0－ | \％EOO | \％080 | \％800 | $1 \lambda-\varepsilon$ | $8 \mathrm{tS}^{\prime} 1$ | 059＇レ | 291．1 | てカレ「8カ | 989＇6を | 88レ＇G\＆ | 6くガカを | O1G＇しを | \＆て૪て乙 |
| \％98＇0－ | \％LO＇0 | \％ 18.0 | \％で「0 | 1人－1 | 996．0 | 8レ6＂0 | St6．0 | 908＇GZ | 169＇レて | 06L＇0Z | てャ9「てて | 8Lて＇SZ | して8し1 |
| ZZOZ | IZOZ | OZOZ | 610Z | K！！！！！e｜ə | 1人－9 | 1人－$\varepsilon$ | 1人－1 | LLOZ | 910Z | SlOZ | †10Z | ع10Z | SJIVN |
| x！W | snpul Ol | －əбиеч | Кұ！ıәләS | К！！ | K！ | ерәу K | нәләS |  | イq ¢ ¢7¢ | pədoəл | イ！ıлләS | pəw |  |



|  |  |  |  |  | 000＇ | 000 1 | 000 1 | z99＇$\dagger$ G | 098، 9 t | カレ8‘¢ | 969＇st | レー6「カカ | ¢¢O¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | OLO＇L | SLO＇L | 9960 | LLL＇ZG | て0L＇ 2 ¢ | 199＇8t | 9Gガカt | 9てを＇9ヵ | 18 |
|  |  |  |  |  | 9890 | 七L9＇0 | 0ヶ9 0 | 000＇s $\varepsilon^{\text {c }}$ | て09＇ても | 68 ¢＇V $^{\text {l }}$ | と6カ＇レヒ | L®て＇ても | ZL |
|  |  |  |  |  | ¢ $66^{\circ} 0$ | 800\％ | 8てて＇ | 6とレ＇29 | と6でレt | 8t8「レ | 6とて＇8¢ | LZS＇8\＆ | 12 |
|  |  |  |  |  | 6980 | z98＊ 0 | 0080 | カレく＇ど | ャGS＇レا | とカレ＇レ | 8\＆6＇6£ | เعL＇6¢ | て9 |
|  |  |  |  |  | － $28^{\circ} 0$ | LL8＇0 | 1680 | 10L＇8t | LL6＇88 | ZSS＇レナ | 0ع6＇8\＆ | S96＇68 | 19 |
|  |  |  |  |  | 810＇1 | $\angle 86{ }^{\circ}$ | 0ع6\％ 0 | \＆t8＇09 | 66と＇6t | S8L＇tナ | とてし「8t | 80て＇8t | 9 g |
|  |  |  |  |  | 680＇L | $180 \cdot 1$ | LZO． 1 | 七6L＇SG | 880＇8t | 066＇$\angle \downarrow$ | てLL＇6t |  | ¢G |
|  |  | （ $9 \times 0$ | $\Delta$ |  | E10＇L | $166^{\circ} 0$ | 0860 | LLS＇$¢$ G | 819＇L $\downarrow$ | 8L9＇tb | 619＇6t | 6Lて＇St | $\varepsilon \varsigma$ |
|  |  |  |  | ＝\％で・レ | LLL＇し | 902＊ | 0Lでし | Sعt＇69 | 8七¢＇99 | SLS＇ZS | LS9＇LS | 666＇09 | ZS |
|  |  |  | $\Delta$ |  | 6で＇し | LSレ゙レ | SEL＇ | ヤてO＇て9 | CL8＇$\dagger$ S | 88S＇ZS | LZO＇OG | SOZ＇6t | LS |
|  |  |  |  |  | 640＇ | ESO＇レ | เ¢0 1 | S6t＇99 | Gてて＇8t | Z8て＇09 | 098＇LS | 998＇6t | 87 |
|  |  |  |  |  | 1880 | 七L8＇0 | ち七80 | レレレ＇9t | LEL＇で | 979‘6E | 889＇0t | عLて＇0t | 七t |
|  |  |  |  |  | てヤ6．0 | $\varepsilon \triangleright 6{ }^{\circ} 0$ | EL8＇0 | EOL＇Lt | 9St＇St | LSL＇St | 960＇$¢ t$ | 880「で | で |
| \％とャ＊－ | \％LO 0 | \％レレし | \％OL＇0 | 1人－9 | 090＇ | 190＇レ | 6て1．1 | LOL＇19 | て0t「9t | Z0L＇8t | 09で8t | 999＇くt | $1 \varepsilon$ |
| \％カャワ 0 | \％ 100 | \％てじ | \％01＊ | 入入－$¢$ | 98¢＇1 | Z6S＇レ | LS9－ | G6S＇06 | SEE‘SL | G81＇69 | S9て＇89 | レレでと9 | \＆てヌてて |
| \％くヤ゙0－ | \％EO＇0 | \％カレ・ | \％01＇0 | 1人－1 | S880 | 698＊0 | S980 | $89 z^{\prime} \angle t$ | カ七8＇0巾 | 88t＇88 | ILS＇0t | 8ャて＇とt | して8し1 |
|  | lZOZ |  | 6102 | K！ | 入入－9 | 1人－$\varepsilon$ | 1 $\boldsymbol{\lambda}$－1 | L1OZ | 910Z | SlOZ | †10Z | عしOZ | SJIVN |
| x！$W$ | snpul 07 | の әбueu | Кұ！ләләS | К市əəләS | К！！ | еəәy | нәләs |  | Kq 7 ¢ | pedolo | кıиəлә | $\bigcirc$ |  |

## Exhibit 11: Change in Pure Premium Rate Due to Classification Mix

| Policy <br> Year | Change in Index | Index | Change in PPR Due to Class Mix |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1997 |  | 1.0000 |  |
| 1998 | 0.9977 | 0.9977 | -0.23\% |
| 1999 | 0.9806 | 0.9783 | -1.94\% |
| 2000 | 0.9695 | 0.9485 | -3.05\% |
| 2001 | 1.0330 | 0.9798 | 3.30\% |
| 2002 | 1.0036 | 0.9833 | 0.36\% |
| 2003 | 1.0011 | 0.9844 | 0.11\% |
| 2004 | 0.9988 | 0.9832 | -0.12\% |
| 2005 | 0.9984 | 0.9816 | -0.16\% |
| 2006 | 0.9897 | 0.9716 | -1.03\% |
| 2007 | 0.9967 | 0.9684 | -0.33\% |
| 2008 | 0.9796 | 0.9486 | -2.04\% |
| 2009 | 0.9784 | 0.9281 | -2.16\% |
| 2010 | 0.9782 | 0.9079 | -2.18\% |
| 2011 | 0.9935 | 0.9020 | -0.65\% |
| 2012 | 0.9909 | 0.8938 | -0.91\% |
| 2013 | 1.0027 | 0.8962 | 0.27\% |
| 2014 | 1.0010 | 0.8971 | 0.10\% |
| 2015 | 0.9906 | 0.8887 | -0.94\% |
| 2016 | 0.9948 | 0.8841 | -0.52\% |
| 2017 | 0.9964 | 0.8809 | -0.36\% |
| 2018 | 1.0024 | 0.8831 | 0.24\% |
| 2019 | 0.9969 | 0.8803 | -0.31\% |
| 2020 | 0.9772 | 0.8603 | -2.28\% |
| 2021 | 1.0034 | 0.8632 | 0.34\% |

Uses actual exposures and approved rates.
Uses estimated exposures and approved rates.
Uses estimated exposures and filed relativities.

## Item AC20-08-05 <br> Potential Impact of Medical Care Delays

As discussed at the June 12, 2020 meeting, in the early months of the COVID-19 pandemic and resultant stay-at-home orders, delays in medical care may have arisen as medical treatment was largely limited to COVID-19 and emergency care in some areas. The WCIRB is undertaking an analysis of the potential impact of medical treatment delays on claims. A summary of preliminary findings will be presented at the meeting.

# Item AC20-08-06 <br> 1/1/2021 Filing - Telecommuting Advisory Pure Premium Rate 

In the January 1, 2021 Regulatory Filing, the WCIRB proposed that Classification 8871, Clerical Telecommuter Employees - N.O.C., be established as a Standard Exception classification applicable to clerical employees who work more than $50 \%$ of their time at their home or other office space away from any location of their employer. This proposed new Standard Exception classification will not apply to the 41 classifications that specifically include Clerical Office Employees and the 2 classifications that specifically exclude Clerical Office Employees. ${ }^{1}$ This new classification was proposed in order to enable the collection of payroll and loss data for these telecommuting employees to determine if their exposure differs from that of other clerical employees who work primarily at their employer's office location and will also align California with other jurisdictions that assign clerical telecommuters to Classification 8871.

No loss and payroll information underlying 2021 experience modifications will be reported in the new classification (if adopted by the Commissioner). As a result, the 2021 experience rating values (e.g., expected loss rates and D-ratios) for Classification 8871 are not used in 2021 experience modifications and there was no need to differentiate between the proposed experience rating values for Classification 8810 and those for Classification 8871. In discussing the proposed January 1, 2021 advisory pure premium rates for Classification 8871 with the Classification and Rating Committee, staff suggested proposing an advisory pure premium rate for Classification 8871 equal to that of Classification 8810 until such time as California-based experience for the new classification is available that supports a differentiation in advisory pure premium rates. At the June 11, 2020 Governing Committee and June 12, 2020 Actuarial Committee meetings, Committee members recommended that since the rate for the telecommuting classification in most jurisdictions is well below that of the clerical classification, consideration be given to basing a differential in proposed 2021 advisory pure premium rates on information from other jurisdictions.

New York and a number of NCCI states have established Classification 8871 to be applicable to telecommuter employees. The rate for Classification 8871 in New York is significantly higher than that for Classification 8810 . Conversely, in NCCI states, the rate for Classification 8871 is significantly lower than for Classification 8810 . However, in each of these states, reported Classification 8871 payroll is small relative to that for Classification 8810 . For example, in New York, reported 8871 payroll for policy year 2016 was only $\$ 700$ million compared to approximately $\$ 190$ billion in Classification 8810. In Florida, the NCCI state with the largest payroll in Classification 8871, $\$ 1.2$ billion of payroll was reported in Classification 8871 for policy year 2016 compared to $\$ 80$ billion in Classification 8810. Exhibit 1 shows the ratio of Classification 8871 reported payroll compared to Classification 8810 reported payroll over the latest five policy years of available information as well as the latest year for New York, all NCCI states for which the telecommuting classification is applicable, and each of the five largest NCCI states in telecommuting payroll. As shown in Exhibit 1, while the relative payroll share of Classification 8871 is growing, it remains small.

Given the modest level of payroll reported, the loss and payroll information reported in Classification 8871 has relatively limited statistical credibility in the computation of the Classification 8871 pure premiums. In addition, the year-to-year loss to payroll ratios shown in Exhibit 2 for New York and for all NCCI states and in Exhibit 3 for each of the five largest NCCI states fluctuate somewhat from year to year. However, as shown in Exhibits 2 and 3, for most years in most states the loss-to-payroll ratio for Classification 8871 is well below that of Classification 8810.

[^23]As mentioned above, Classification 8871 is proposed to be applicable in California as a Standard Exception classification to telecommuting employees only if the classification that they would otherwise be assigned to does not explicitly include clerical (some of these classifications have lower advisory pure premium rates than Classification 8810). Exhibit 4 shows the distribution of policy year 2017 payroll by geographical region within California for (1) Classification 8810, (2) all classifications that include clerical within their definition and (3) all other classifications combined. As shown, in a number of regions, the payroll of classifications that include clerical and for which Classification 8871 would not apply is significantly greater than that reported in Classification 8810 and, as a result, the impact of the new classification may be somewhat muted.

Exhibits 5 and 6 show the leading "Cause of Injury" codes and "Nature of Injury" codes, respectively, for these classification groupings. As shown in Exhibit 5, claims with cumulative injury and repetitive motion cause of injury codes are relatively more common in Classification 8810 and in classifications that explicitly include clerical than in other classifications. Similarly, as shown in Exhibit 6, claims with mental stress, carpal tunnel syndrome and other cumulative injury nature of injury codes are relatively more common in Classification 8810 and in classifications that explicitly include clerical than in other classifications. It is not clear the extent to which the frequency of these types of claims would be different for an employee performing clerical duties at home rather than in the office. Also, with the COVID-19 pandemic, many workers have transitioned to working at home in non-optimal "home offices" virtually overnight creating additional uncertainty around these types of injuries.

Staff is seeking feedback on the extent to which it is appropriate to differentiate the proposed 2021 advisory pure premium rate for Classification 8871 relative to Classification 8810.

## Ratio of Classification 8871 Payroll to Classification 8810 Payroll



Source: NYCIRB through Policy Year 2016 and NCCI states through Policy Year 2017.

Loss to Payroll Ratio of 8871 Relative to Class 8810 by Year \& State New York and NCCI All State Total


Loss to Payroll Ratio of 8871 Relative to Class 8810 by Year \& State NCCI 5 Largest States for which 8871 Applies


## Payroll Distribution by Region in Select California Classifications (Dollars in Billions)

| Region | Class 8810 | Classes that <br> incl. clerical | Other <br> Classes | Total | Class 8810 | Classes that <br> incl. clerical | Other <br> Classes |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |

## Leading Causes of Injury in Select California Classifications



Source : Incurred losses are from Policy Year 2017 Unit Statistical Reporting data, at report level 1.

Leading Nature of Injury Codes in Select Classifications
$\square$ Class $8810 \square$ Classes that include clerical Other classes


Source: Incurred losses are from Policy Year 2017 Unit Statistical Reporting data, at report level 1.


[^0]:    ${ }^{1}$ See Item AC19-08-04 of the August 1, 2019 Actuarial Committee Agenda.
    ${ }^{2}$ See Exhibit 11.2 of Item AC20-06-01 of this Agenda.

[^1]:    ${ }^{3}$ See Item AC17-03-03 of the March 21, 2017 Actuarial Committee Agenda.
    ${ }^{4}$ Equal to [(1) * [Full Age-to-Age Adjustment from Table 2] +1.0] * (2) if settlement rate change is at least $1.5 \%$. Equal to (2) if settlement rate change is less than $1.5 \%$.

[^2]:    ${ }^{1}$ See Item AC19-08-05 of the March 16, 2020 Actuarial Committee Agenda.
    ${ }^{2}$ See Item AC19-08-05 of the August 1, 2019 Actuarial Committee Agenda.
    ${ }^{3}$ See Item AC19-12-05 of the December 5, 2019 Actuarial Committee Agenda for staff's initial review of incremental methods.

[^3]:    ${ }^{4}$ For comparison purposes, this method does not include any reform or claim settlement rate adjustments.

[^4]:    ${ }^{1}$ The WCIRB's next annual pure premium rate filing will be effective September 1, 2021.
    ${ }^{2}$ This projection differs from that presented at the June 12,2020 meeting in that it is based on trending to the midpoint of experience for January 1, 2021 to August 31, 2021 policies and also reflects a correction to the industry average filed pure premium rate as of January 1, 2020 that was discovered subsequent to the June 12, 2020 meeting.

[^5]:    * 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.

[^6]:    (c) Ultimate severities are on-leveled based on adjustment factors shown on Exhibit 6.3.

    Source: WCIRB experience calls.

[^7]:    * Incurred medical loss development factors include the paid cost of medical cost containment programs (MCCP) for accident years 2011 and prior.

[^8]:    * Paid medical loss development factors include the paid cost of medical cost containment programs (MCCP) for accident years 2011 and prior.

[^9]:    *Los Angeles Includes Los Angeles County and remainder of Los Angeles Basin

[^10]:    ** Expected paid medical losses are derived based on age-to-age paid medical development factors from the prior evaluation (see Exhibit 2.4 of the WCIRB's June 12, 2020 Actuarial Committee Agenda item AC20-06-01).

[^11]:    Source: WCIRB Unit Statistical Data

[^12]:    ${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
    ${ }^{[2]}$ Trend is based on exponential distribution.
    Source: WCIRB a WCIRB accident year experience calls.

[^13]:    ${ }^{1}$ See Item AC15-03-07 of the June 12, 2015 and August 6, 2015 Actuarial Committee Agendas for more information.
    ${ }^{2}$ See Item AC17-09-02 of the September 5, 2017 Actuarial Committee Agenda for more information.

[^14]:    ${ }^{3}$ The open claim count projections are prior to reflecting the impact of COVID-19 and the resulting economic downturn.

[^15]:    4 The indemnity claim frequency projections are prior to reflecting the impact of COVID-19 and the resulting economic downturn.

[^16]:    ${ }^{5}$ The projected ALAE severity trend reflected in the January 1, 2020 Premium Rate Filing was $2.5 \%$.
    ${ }^{6}$ This approach resulted in a $25 \%$ tempering in the January 1, 2020 Pure Premium Rate Filing based on March 31, 2019 ALAE experience and a $40 \%$ tempering in the April 2, 2020 Actuarial Committee Agenda based on December 31, 2019 ALAE experience.
    ${ }^{7}$ All projections shown in Table 2 also reflect the impact of SB 1160 and AB 1244 on ALAE costs.

[^17]:    ${ }^{8}$ See Exhibit 2.6.1 of Item AC20-06-01 of this Agenda.
    ${ }^{9}$ The indemnity claim frequency projections are prior to reflecting the impact of COVID-19 and the resulting economic downturn.

[^18]:    ${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
    ${ }^{[2]}$ Trend is based on exponential distribution.
    Source: WCIRB accident year experience calls.

[^19]:    ${ }^{[1]}$ All paid allocated loss adjustment expense exclude the paid cost of medical cost containment programs.
    Source: WCIRB quarterly calls for experience.

[^20]:    ${ }^{1}$ These includes adjustments for the provisions of Senate Bill No. 1160 (SB 1160) related to lien filings and adjustments for the recent decrease in pharmaceutical costs.
    ${ }^{2}$ All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect six-year average incurred loss development factors applied after 267 months.

[^21]:    ${ }^{3}$ All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect three-year average incurred loss development factors applied after 267 months.
    ${ }^{4}$ This loss development methodology was reflected in the California Department of Insurance (CDI) Decision on the January 1, 2020 Pure Premium Rate Filing for the medical projection.

[^22]:    ${ }^{1}$ Impact of Economic Downturn on California Workers' Compensation Claim Frequency, WCIRB, June 2020.

[^23]:    ${ }^{1}$ In addition, Classifications 9048(1), Camps, and 9048(2), Boy and Girl Scout Councils - all camp operations, include Clerical Office Employees, but only at camp locations.

