## Actuarial Committee

## Meeting Agenda

| Date | Time | Location | Staff Contact |
| :--- | :--- | :--- | :--- |
| August 2, 2017 | 9:30 AM | WCIRB California | David M. Bellusci |
|  |  | 1221 Broadway, Suite 900 |  |

Released: July 26, 2017

To Members of the Actuarial Committee, WCIRB Members and All Interested Parties:

## I. Approval of Minutes

Meeting held on June 16, 2017
II. Working Group Meeting Summaries

None
III. Unfinished Business
A. AC12-12-02: Review of WCIRB Trending Methodology
B. AC17-04-04: New Drug Formulary
C. AC17-06-01: 3/31/2017 Experience - Review of Methodologies

## IV. New Business

A. AC17-08-01: Third Quarter 2017 Review of Diagnostics
B. AC17-08-02: 1/1/2018 Filing - Loss Adjustment Expense Experience Review
C. AC17-08-03: 1/1/2018 Filing - Review of Alternative Loss Projection Methodologies
D. AC17-08-04: Study of Longer-Term Loss Development

## V. Matters Arising at Time of Meeting

VI. Next Meeting Date: September 5, 2017
VII. Adjournment

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## Item AC12-12-02 <br> Review of WCIRB Trending Methodology

In 2012, the Committee reviewed a comprehensive retrospective analysis of trending methodologies, with an emphasis on the appropriateness of trending frequency and severity separately relative to applying a combined loss ratio trend during varying claims environments. ${ }^{1}$ An update to this analysis to include the Senate Bill No. 863 (SB 863) transition environment was reviewed by the Committee in 2015. ${ }^{2}$ Staff has updated the analysis to further review the retrospective performance of trending methodologies in the post-SB 863 environment (through accident year 2016).

## Methods Reviewed

The trending methodologies reviewed in this analysis are generally consistent with those reviewed in the 2012 and 2015 studies. These methodologies fit into three broad categories: separate frequency and severity trends methods, combined loss ratio trend methods, and other trending methods. As with the prior studies, to approximate the trending period for WCIRB pure premium rate filings, the indemnity or medical loss ratio for each accident year was projected from two years prior (e.g., accident year 2016 loss ratios were projected using data from accident years 2014 and prior). Also as in prior studies, in order to focus on the accuracy of the trending projection rather than other aspects of the methodology, the onlevel loss ratios used in the projections are based on current estimates and reflect hindsight adjustments to loss development and on-level adjustment factors.

## Separate Frequency and Severity Trends Methods

Claim frequency and severity are affected by differing underlying forces. Separately trending for frequency and severity allows for separate assumptions for each component. These methods may be appropriate in environments in which historical loss ratios have been volatile or during periods of transition in which some judgment about future trends may be appropriate. These methods rely on accurate projections of frequency and severity and assume that frequency and severity changes are not highly correlated. While projections of ultimate claim severities rely on projections of loss development to some degree, these projections are not as affected by loss development as are loss ratio trend methods since some judgment is involved in selecting a severity trend projection.
A. Frequency and Severity Trends Applied to the Latest Two Years. Frequency projections were based on (a) the actual 12-month frequency change for the accident year where available ${ }^{3}$ and (b) the WCIRB's most recent econometric indemnity claim frequency model. ${ }^{4}$ Severity projections were based on average ultimate indemnity and medical claim severities based on March 31, 2017 experience. ${ }^{5}$ The selected annual severity trend was based on the average of the longer-term (post-2005) and shorter-term (five-year) rates of growth. These separate frequency and severity trends were applied to each of the latest two accident years, with the stated projection equal to the average of the projections of the two years.
B. Frequency and Severity Long-Term Severity Trends Applied to the Latest Two Years. Frequency projections were based on that described in Method A above. Severity projections were based on the average longer-term (post-2005) rate of growth in on-level indemnity and medical severities.

[^0]These separate frequency and severity trends were applied to each of the latest two accident years, with the stated projection equal to the average of the projections of the two years.
C. Frequency and Severity Trends Applied to the Latest Year. This method applies the selected frequency and severity trend projections using the average of the shorter-term and longer-term severity trend indications, as described in method A above, to the latest accident year only.

## Loss Ratio Trend Methods

Loss ratio trend methods typically fit a function to the historical on-level loss ratios. These methods may be appropriate when there is a stable trend in the historical loss ratios. They do not require knowledge or projection of separate frequency and severity components, but rely more heavily on the accuracy of loss development and on-leveling adjustments. ${ }^{6}$ For example, if loss development projections are understated, a trend based on the developed loss ratios is more likely to be understated inasmuch as the more recent year loss ratios will typically be more understated than those for earlier years. If on-level adjustments are not properly applied, one-time changes in cost levels may be projected as a future trend.
D. Longer-Term (Post-2005) Average Annual Loss Ratio Trend Applied to the Latest Two. An average annual exponential trend was selected based on the longer-term (post-2005) rate of growth in historical on-level loss ratios. This trend was applied to each of the latest two accident years, with the stated projection equal to the average of the projections of the two years.
E. Five-Year Average Annual Loss Ratio Trend Applied to the Latest Two Years. An average annual exponential trend was selected based on the rate of growth in historical on-level loss ratios for the latest five years. This trend was applied to each of the latest two accident years, with the stated projection equal to the average of the projections of the two years.
F. Five-Year Average Annual Loss Ratio Trend Applied to the Latest Year. This method applies the selected loss ratio trend based on the latest five years to the latest accident year only.

## Other Trending Methods

In some instances, such as periods of transition, a trend based solely on separate frequency and severity components or on the historical on-level loss ratios may not be the most appropriate. Selection of these methods, like all methods, requires judgment and knowledge of the current claims environment.
G. Average of Frequency and Severity Trends Applied to the Latest Two Years and Five-Year Loss Ratio Trend Applied to the Latest Two Years. Although separately projecting frequency and severity components allows for greater use of information and judgment about the current claims environment, oftentimes changes in frequency and severity are related. This method gives weight to both categories of methods by taking the average of the projections based on applying separate frequency and severity trends to the latest two years (as described in method A above) and applying the five-year loss ratio trend to the latest two years (as described in method E above).
H. Average of Latest Two Years (Flat Trend). During periods of uncertainty where trends may be changing direction, a flat trend selection may be appropriate. This method bases a projection on the average of the two most recent on-level loss ratios, with no additional trend applied.
I. Use of Latest Year (Flat Trend). This method bases a projection on the most recent on-level loss ratio, with no additional trend applied.

[^1]
## Results for the SB 863 Transition and Post-SB 863 Environments

Exhibits 1.1 through 1.5 show the results of each of the above trending methods to project accident year 2012 through 2016 loss ratios. For consistency of comparison across years, the cost of medical cost containment programs was included in all medical loss ratios and projections. Exhibits 2.1 through 2.9 show, graphically, the percentage differences from the actual loss ratios by method. For informational purposes, comparisons to accident years reviewed during the 2012 study for the comparable method are shown. Exhibit 3 summarizes the percentage differences and shows the ranks of the absolute percentage differences for indemnity and medical for each accident year. Exhibit 4 shows the average absolute difference and rank by claims environment, including the claims environments reviewed during the 2012 study.

During the SB 863 transition period (2012 through 2014), the steady overall cost level increases observed over the prior several years began to moderate and, in some cases, change direction. As a result, methods based on changes in on-level loss ratios, which projected the prior increases to continue, significantly overstated the projections for these years. Methods based on separate frequency and severity projections also overstated the projected loss ratios for these years but to a significantly less degree, as the separate selections of the components allowed for a quicker responsiveness to the changing environment. The flat trend methods generally performed the best during this period of transition as they did not project forward any of the pre-transition trends. The results of the methods tested during the SB 863 transition period were generally consistent with those for the transition period during the prior (2002 through 2004) reforms.

During the recent post-SB 863 period (2015 and 2016), some volatility continued to emerge in the onlevel loss ratios. As a result, the loss ratio trending methods continued to be somewhat less accurate than the separate frequency and severity trends methods, though by a much less significant degree than during the SB 863 transition period. The flat trending methods also performed relatively well during this period as post-SB 863 loss trends have been modest.

## Relationship between Frequency and Severity

Although frequency and severity are affected by differing underlying forces, changes in these components are oftentimes at least somewhat related. If changes in frequency and severity were perfectly correlated, independently projecting them would not improve the accuracy of the projection. Exhibit 5 shows a history of correlations between changes in frequency and severity. While there was significant negative correlation between changes in frequency and severity in the period following the 2002 through 2004 reforms, the relationships were positive or not significant in older claims environments. In the SB 863 period of 2012 through 2016, changes in frequency and severity appear to be somewhat negatively correlated. However, the frequency changes in 2013 through 2016 have been modest and it is likely that the recent declines in medical severities have been a result of various provisions of SB 863 reducing the utilization of medical services rather than an increase in smaller indemnity claims.

Given the limited evidence of strong correlation of freqeuncy and severity, the recent outperformance of separate frequency and secverity trends relative to the loss ratio trending method, and generally good performance of the separate frequency and severity methods in the recent post-SB 863 environment, staff does not see any reason to deviate from the current trending methodology at this time.

## Accident Year 2012 Loss Ratio Projections

Actual AY 2012 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 0.277 | 0.362 | 0.639 |

## Separate Frequency and Severity Trends Methods

A. Frequency and Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
B. Frequency and Long-Term Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
C. Frequency and Severity Trends Applied to the Latest Year

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios

## Loss Ratio Trend Methods

D. Post-2005 Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
E. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
F. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Year

Selected Average Annual Loss Ratio Trend
Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios

## Other Trending Methods

G. Average of Method A and Method E

Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
H. Average of Latest Two Years (Flat Trend)

Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios
I. Use of Latest Year (Flat Trend)

Projected AY 2012 Loss Ratios
Differences of Projections from Actual AY 2012 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 3.0\% | 7.5\% |  |
| 0.291 | 0.377 | 0.668 |
| 1.4\% | 1.5\% | 2.9\% |
| Indemnity | Medical | Total |
| 3.0\% | 7.5\% |  |
| 0.291 | 0.377 | 0.668 |
| 1.4\% | 1.5\% | 2.9\% |
| Indemnity | Medical | Total |
| 3.0\% | 7.5\% | ------ |
| 0.296 | 0.381 | 0.677 |
| 1.8\% | 1.9\% | 3.8\% |


| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 0.290 | 0.373 | 0.664 |
| 1.3\% | 1.2\% | 2.5\% |
| Indemnity | Medical | Total |
| 0.271 | 0.315 | 0.586 |
| -0.7\% | -4.6\% | -5.3\% |
| Indemnity | Medical | Total |
| 0.279 | 0.330 | 0.609 |
| 0.1\% | -3.2\% | -3.1\% |

## Accident Year 2013 Loss Ratio Projections

Actual AY 2013 On-Level Loss Ratios

| Indemnity | $\frac{\text { Medical }}{0.276} \quad \frac{\text { Total }}{0.361}$ | 0.638 |
| ---: | ---: | ---: |

## Separate Frequency and Severity Trends Methods

A. Frequency and Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
B. Frequency and Long-Term Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
C. Frequency and Severity Trends Applied to the Latest Year

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios

## Loss Ratio Trend Methods

D. Post-2005 Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
E. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
F. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Year

Selected Average Annual Loss Ratio Trend
Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios

## Other Trending Methods

G. Average of Method A and Method E

Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
H. Average of Latest Two Years (Flat Trend)

Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios
I. Use of Latest Year (Flat Trend)

Projected AY 2013 Loss Ratios
Differences of Projections from Actual AY 2013 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 3.0\% | 7.6\% | ------ |
| 0.301 | 0.411 | 0.712 |
| 2.5\% | 4.9\% | 7.5\% |
| Indemnity | Medical | Total |
| 3.4\% | 7.7\% | ------ |
| 0.304 | 0.411 | 0.716 |
| 2.8\% | 5.0\% | 7.8\% |
| Indemnity | Medical | Total |
| 3.4\% | 7.7\% | ------ |
| 0.300 | 0.411 | 0.711 |
| 2.4\% | 5.0\% | 7.4\% |


| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| ------ | ------ | -1.5\% |
| 1.7\% | 5.5\% | ------ |
| 0.281 | 0.377 | 0.658 |
| 0.5\% | 1.6\% | 2.0\% |
| Indemnity | Medical | Total |
| -- | ----- | -1.5\% |
| 1.9\% | 5.9\% | ------ |
| 0.282 | 0.380 | 0.662 |
| 0.6\% | 1.9\% | 2.5\% |
| Indemnity | Medical | Total |
| --- | ------ | -0.1\% |
| 1.7\% | 5.5\% | ------ |
| 0.290 | 0.394 | 0.684 |
| 1.4\% | 3.2\% | 4.6\% |

otal
0.712
7.5\%

Total
0.716
7.8\%

Total
7.4\%

| Indemnity | Medical | $\underline{\text { Total }}$ |
| ---: | ---: | ---: |
| 0.293 | 0.394 | 0.687 |
| $1.6 \%$ | $3.3 \%$ | $4.9 \%$ |
|  |  |  |
| Indemnity | $\underline{\text { Medical }}$ | $\underline{\text { Total }}$ |
| 0.280 | 0.342 | 0.622 |
| $0.3 \%$ | $-1.9 \%$ | $-1.6 \%$ |
|  |  |  |
| Indemnity | $\underline{\text { Medical }}$ | $\underline{\text { Total }}$ |
| 0.281 | 0.354 | 0.635 |
| $\mathbf{0 . 5 \%}$ | $-\mathbf{0 . 7 \%}$ | $\mathbf{- 0 . 2 \%}$ |

## Accident Year 2014 Loss Ratio Projections

Actual AY 2014 On-Level Loss Ratios

| Indemnity | $\frac{\text { Medical }}{0.270} \quad \frac{\text { Total }}{0.361}$ | 0.630 |
| ---: | ---: | ---: |

## Separate Frequency and Severity Trends Methods

A. Frequency and Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
B. Frequency and Long-Term Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
C. Frequency and Severity Trends Applied to the Latest Year

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios

## Loss Ratio Trend Methods

D. Post-2005 Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
E. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
F. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Year

Selected Average Annual Loss Ratio Trend
Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios

## Other Trending Methods

G. Average of Method A and Method E

Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
H. Average of Latest Two Years (Flat Trend)

Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios
I. Use of Latest Year (Flat Trend)

Projected AY 2014 Loss Ratios
Differences of Projections from Actual AY 2014 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 2.7\% | 7.2\% | ------ |
| 0.298 | 0.426 | 0.724 |
| 2.9\% | 6.5\% | 9.4\% |
| Indemnity | Medical | Total |
| 2.8\% | 7.0\% | ------ |
| 0.299 | 0.424 | 0.723 |
| 2.9\% | 6.3\% | 9.3\% |
| Indemnity | Medical | Total |
| 2.8\% | 7.0\% | ------ |
| 0.293 | 0.414 | 0.707 |
| 2.4\% | 5.3\% | 7.7\% |


| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| ------ | ------ | 0.7\% |
| 0.2\% | 4.0\% | ----- |
| 0.286 | 0.403 | 0.688 |
| 1.6\% | 4.2\% | 5.8\% |
| Indemnity | Medical | Total |
| ------ | ------ | 0.7\% |
| 1.0\% | 5.0\% |  |
| 0.291 | 0.411 | 0.703 |
| 2.2\% | 5.1\% | 7.3\% |
| Indemnity | Medical | Total |
| ----- | --- | 0.2\% |
| 0.2\% | 4.0\% |  |
| 0.280 | 0.393 | 0.673 |
| 1.0\% | 3.3\% | 4.3\% |

## Accident Year 2015 Loss Ratio Projections

Actual AY 2015 On-Level Loss Ratios

| Indemnity | $\frac{\text { Medical }}{0.279}$ | $\underline{\text { Total }}$ |
| ---: | ---: | ---: |
| 0.373 | 0.62 |  |

## Separate Frequency and Severity Trends Methods

A. Frequency and Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
B. Frequency and Long-Term Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
C. Frequency and Severity Trends Applied to the Latest Year

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios

## Loss Ratio Trend Methods

D. Post-2005 Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
E. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
F. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Year

Selected Average Annual Loss Ratio Trend
Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios

## Other Trending Methods

G. Average of Method A and Method E

Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
H. Average of Latest Two Years (Flat Trend)

Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios
I. Use of Latest Year (Flat Trend)

Projected AY 2015 Loss Ratios
Differences of Projections from Actual AY 2015 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 2.3\% | 6.5\% |  |
| 0.293 | 0.423 | 0.716 |
| 1.4\% | 5.0\% | 6.4\% |
| Indemnity | Medical | Total |
| 2.0\% | 5.7\% | ------ |
| 0.291 | 0.415 | 0.707 |
| 1.2\% | 4.2\% | 5.5\% |
| Indemnity | Medical | Total |
| 2.0\% | 5.7\% | ------ |
| 0.288 | 0.404 | 0.691 |
| 0.9\% | 3.1\% | 3.9\% |


| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| ------ | ------ | 0.7\% |
| -0.8\% | 2.8\% | ----- |
| 0.276 | 0.394 | 0.671 |
| -0.3\% | 2.1\% | 1.9\% |
| Indemnity | Medical | Total |
| ------ | ------ | 0.7\% |
| 0.4\% | 4.1\% | ----- |
| 0.285 | 0.407 | 0.692 |
| 0.6\% | 3.4\% | 4.0\% |
| Indemnity | Medical | Total |
| ------ | ------ | -0.2\% |
| -0.8\% | 2.8\% |  |
| 0.271 | 0.380 | 0.650 |
| -0.8\% | 0.7\% | -0.2\% |


| Indemnity | Medical <br> 0.284 | 0.405 |
| ---: | ---: | ---: |
| $0.5 \%$ | $3.2 \%$ | $3.7 \%$ |
|  |  |  |
| Indemnity | $\underline{\text { Medical }}$ | $\underline{\text { Total }}$ |
| 0.277 | 0.361 | 0.638 |
| $-0.2 \%$ | $-1.2 \%$ | $-1.4 \%$ |
|  |  |  |
| $\frac{\text { Indemnity }}{}$ | $\underline{\text { Medical }}$ | $\underline{\text { Total }}$ |
| 0.276 | 0.361 | 0.638 |
| $-\mathbf{0 . 3 \%}$ | $-1.2 \%$ | $-1.4 \%$ |

## Accident Year 2016 Loss Ratio Projections

Actual AY 2016 On-Level Loss Ratios
arate Frequency and Severity Trends Methods
A. Frequency and Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
B. Frequency and Long-Term Severity Trends Applied to the Latest Two Years

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
C. Frequency and Severity Trends Applied to the Latest Year

Implied Average Annual Frequency Trend
Selected Average Annual Severity Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| ------ | ------ | 0.0\% |
| -1.2\% | 1.9\% | ------ |
| 0.264 | 0.378 | 0.642 |
| -0.8\% | 0.1\% | -0.6\% |
| Indemnity | Medical | Total |
| ---- | ---- | 0.0\% |
| 0.0\% | 3.5\% | ------ |
| 0.273 | 0.393 | 0.666 |
| 0.1\% | 1.6\% | 1.7\% |
| Indemnity | Medical | Total |
| ------ | --- | -0.4\% |
| -1.2\% | 1.9\% | ------ |
| 0.261 | 0.372 | 0.633 |
| -1.1\% | -0.5\% | -1.6\% |

Loss Ratio Trend Methods
D. Post-2005 Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
E. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Two Years

Selected Average Annual Loss Ratio Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
F. 5-Year Average Annual Exponential Loss Ratio Trend Applied to the Latest Year

Selected Average Annual Loss Ratio Trend
Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios

| Indemnity | Medical | Total |
| :---: | :---: | :---: |
| 1.9\% | 5.8\% | ------ |
| 0.286 | 0.415 | 0.701 |
| 1.4\% | 3.9\% | 5.3\% |
| Indemnity | Medical | Total |
| 0.3\% | 3.5\% | ------ |
| 0.275 | 0.393 | 0.668 |
| 0.3\% | 1.7\% | 2.0\% |
| Indemnity | Medical | Total |
| 0.3\% | 3.5\% | ------ |
| 0.271 | 0.386 | 0.657 |
| -0.1\% | 1.0\% | 0.9\% |

## Other Trending Methods

G. Average of Method A and Method E

Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
H. Average of Latest Two Years (Flat Trend)

Projected AY 2016 Loss Ratios
Differences of Projections from Actual AY 2016 On-Level Loss Ratios
I. Use of Latest Year (Flat Trend)

Projected AY 2016 Loss Ratios

| Indemnity | Medical | Total <br> 0.269 |
| ---: | ---: | ---: |
| $\mathbf{- 0 . 2 \%}$ | 0.386 | 0.655 |
|  |  | $\mathbf{0 . 7 \%}$ |
| Indemnity | $\underline{\text { Medical }}$ |  |
| 0.273 | 0.361 | $\underline{\text { Total }}$ |
| $0.1 \%$ | $\mathbf{- 1 . 6 \%}$ | $\mathbf{- 1 . 5 \%}$ |
|  |  |  |
| Indemnity | $\underline{\text { Medical }}$ | $\underline{\text { Total }}$ |
| 0.270 | 0.361 | 0.630 |
| $\mathbf{- 0 . 2 \%}$ | $\mathbf{- 1 . 6 \%}$ | $\mathbf{- 1 . 8 \%}$ |






[^2]













Results of Retrospective Tests of Trending Methods


Results of Retrospective Tests of Trending Methods by Claims Environment


## Correlations between Frequency and Severity

| Evaluated as of 3/31/2017 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Change in Indemnity | Change in Ultimate | Change in Ultimate |
| Accident | Claim | Indemnity | Medical |
| Year | Frequency | Severity | Severity* |
| 1994 | -12.8\% | 8.1\% | 10.5\% |
| 1995 | -4.5\% | 12.1\% | 14.3\% |
| 1996 | -7.9\% | 11.9\% | 7.4\% |
| 1997 | -4.5\% | 19.1\% | 19.1\% |
| 1998 | -4.3\% | 9.3\% | 22.5\% |
| 1999 | -0.1\% | 9.8\% | 13.7\% |
| 2000 | 1.0\% | 5.9\% | 12.7\% |
| 2001 | -6.8\% | 10.2\% | 19.0\% |
| 2002 | -1.5\% | -3.3\% | 1.3\% |
| 2003 | -3.0\% | -1.7\% | -4.4\% |
| 2004 | -17.0\% | -18.4\% | -7.4\% |
| 2005 | -13.9\% | -9.9\% | 3.1\% |
| 2006 | -6.5\% | 9.1\% | 9.8\% |
| 2007 | -2.3\% | 8.8\% | 12.3\% |
| 2008 | -3.9\% | 9.8\% | 9.3\% |
| 2009 | -2.0\% | 4.2\% | 5.6\% |
| 2010 | 6.8\% | -1.1\% | 0.9\% |
| 2011 | -0.2\% | -1.4\% | 0.6\% |
| 2012 | 3.6\% | -1.7\% | -4.9\% |
| 2013 | 0.5\% | 1.8\% | -4.7\% |
| 2014 | 1.1\% | 8.1\% | -1.4\% |
| 2015 | -0.8\% | 3.9\% | 1.2\% |
| 2016 | -1.0\% | 3.6\% | 6.1\% |


|  | Correlation w/ Change in <br> Indemnity Claim Frequency |  |
| :--- | ---: | ---: |
|  | Indemnity | Sedical |
| Environment | $\frac{\text { Severity }}{}$ | $\frac{\text { Severity }}{}$ |
| Pre-Reform (1994-2001) | -0.094 | 0.239 |
| Reform Transition (2002-2005) | 0.940 | 0.250 |
| Post-Reform (2006-2011) | -0.803 | -0.737 |
| SB 863 Period (2012-2016) | -0.531 | -0.763 |
| All Years (1994-2016) | 0.226 | -0.112 |

Actuarial Committee
Meeting Agenda for August 2, 2017

## Item AC17-04-04 <br> New Drug Formulary

Assembly Bill No. 1124 (AB 1124), which was signed by the Governor on October 7, 2015, requires the Division of Workers' Compensation (DWC) to implement a formulary for prescription medications by July 1, 2017. At the April 3, 2017 meeting, the Committee reviewed the proposed formulary under consideration at the time by the DWC.

On July 18, 2017, the DWC submitted modified proposed regulations for the new formulary with an effective date of January 1, 2018 and a 15-day public comment period ending August 2, 2017. The modified proposed regulations can be accessed through the following link (http://www.dir.ca.gov/dwc/DWCPropRegs/MTUS-Formulary/MTUS-Formulary.htm).

The DWC's updated proposed drug formulary and its potential cost impact will be discussed at the meeting.

## Item AC17-06-01 <br> 3/31/2017 Experience - Review of Methodologies

At the June 16, 2017 meeting, the Committee reviewed a preliminary analysis of statewide experience through March 31, 2017. The attached Exhibits 1 through 8 contain an updated analysis of March 31, 2017 experience. In total, almost $100 \%$ of the market is included. Wage and loss levels are projected to January 1, 2019-the approximate midpoint of experience on policies incepting in 2018, and premiums were adjusted to the industry average filed pure premium rate level as of January 1, 2017. ${ }^{1}$

The updated information differs from what was presented at the June 16, 2017 meeting in that this analysis reflects: (a) the inclusion of additional insurer data submissions and insurer data call corrections, (b) updates to the wage level and indemnity claim frequency projections based on UCLA's June 2017 forecasts, (c) updates to several other on-level adjustments and (d) an updated projected medical severity trend of $3.0 \%$ compared to the $2.5 \%$ reflected in the June 16, 2017 Agenda materials.

As shown on Exhibit 8, the projected policy year 2018 loss to the industry average filed pure premium ratio based on March 31, 2017 experience is 0.625 . (The projected loss ratio reflected in the analysis presented at the June 16, 2017 meeting was 0.612 and the projected loss ratio reflected in the July 1, 2017 Pure Premium Rate Filing was 0.626 .)

Additional supplemental information is included in Exhibits 9 through 12.

[^3]
## California Workers' Compensation

Accident Year Experience as of March 31, 2017

| Year | Earned <br> Premium | Paid <br> Indemnity | Indemnity Reserves | Paid Medica** | Medical Reserves | $\underline{\text { IBNR }}$ | Total Incurred** | Loss <br> Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 | 2,872,481,605 | 1,278,086,814 | 3,973,966 | 983,695,290 | 22,590,616 | 18,757,607 | 2,307,104,293 | 0.803 |
| 1986 | 3,506,609,097 | 1,381,255,968 | 5,855,419 | 1,132,304,843 | 33,162,777 | 58,336,912 | 2,610,915,919 | 0.745 |
| 1987 | 4,374,085,383 | 1,503,615,032 | 7,389,640 | 1,324,579,234 | 47,310,060 | 31,206,246 | 2,914,100,212 | 0.666 |
| 1988 | 5,173,049,472 | 1,700,316,904 | 8,491,392 | 1,528,416,565 | 49,497,510 | 43,062,900 | 3,329,785,271 | 0.644 |
| 1989 | 5,674,529,942 | 1,936,291,207 | 9,709,066 | 1,782,862,341 | 63,571,168 | 47,335,386 | 3,839,769,168 | 0.677 |
| 1990 | 5,698,665,461 | 2,253,771,978 | 9,144,370 | 2,028,066,464 | 65,081,616 | 69,102,040 | 4,425,166,468 | 0.777 |
| 1991 | 5,863,319,243 | 2,468,515,946 | 18,847,415 | 2,179,059,253 | 73,333,928 | 70,054,444 | 4,809,810,986 | 0.820 |
| 1992 | 5,681,466,382 | 1,969,803,631 | 15,549,585 | 1,739,280,285 | 72,684,361 | 64,810,930 | 3,862,128,792 | 0.680 |
| 1993 | 5,928,480,359 | 1,687,446,335 | 16,113,643 | 1,488,299,265 | 93,246,185 | 57,096,670 | 3,342,202,098 | 0.564 |
| 1994 | 5,022,749,028 | 1,619,400,671 | 24,437,02 | 1,445,923,964 | 107,814,387 | 58,161,681 | 3,255,737,730 | 0.648 |
| 1995 | 3,778,975,599 | 1,752,142,077 | 33,321,09 | 1,587,600,952 | 129,240,460 | 66,822,906 | 3,569,127,489 | 0.944 |
| 1996 | 3,736,857,547 | 1,936,093,457 | 40,505,66 | 1,677,585,544 | 143,879,964 | 76,386,816 | 3,874,451,441 | 1.037 |
| 1997 | 3,916,944,392 | 2,294,576,056 | 53,045,283 | 1,971,212,023 | 169,885,537 | 128,850,421 | 4,617,569,320 | 1.179 |
| 1998 | 4,322,051,27 | 2,744,695,739 | 65,516,53 | 2,579,359,552 | 273,299,109 | 214,899,520 | 5,877,770,454 | 1.360 |
| 1999 | 4,537,629,086 | 3,022,817,83 | 65 | 2,955,848,956 | 251,398,708 | 307,144,297 | 6,602,658,524 | 1.455 |
| 2000 | 5,905,419,052 | 3,381,857,450 | 89,074,38 | 3,479,838,371 | 299,768,794 | 455,373,701 | 7,705,912,705 | 1.305 |
| 2001 | 10,094,684,192 | 4,767,381,964 | 145,959,054 | 5,207,402,713 | 513,687,104 | 696,603,578 | 11,331,034,413 | 1.122 |
| 2002 | 13,405,893,679 | 4,695,678,561 | 131,409,05 | 5,322,948,517 | 462,507,234 | 985,177,269 | 11,597,720,635 | 0.865 |
| 2003 | 19,429,675,11 | 4,444,259,720 | 197,002,82 | 4,881,477,491 | 481,968,301 | 1,369,566,995 | 11,374,275,329 | 0.585 |
| 2004 | 23,043,963,090 | 3,128,850,607 | 170,864,847 | 3,901,481,106 | 426,537,443 | 1,431,263,592 | 9,058,997,595 | 0.393 |
| 2005 | 21,350,709,483 | 2,448,200,493 | 150,910,792 | 3,487,937,574 | 408,818,523 | 1,207,115,191 | 7,702,982,573 | 0.361 |
| 2006 | 17,209,009,327 | 2,521,877,986 | 172,793,760 | 3,580,636,584 | 438,502,885 | 867,821,946 | 7,581,633,161 | 0.441 |
| 2007 | 13,256,259,568 | 2,635,051,948 | 197,651,065 | 3,808,584,663 | 503,283,683 | 872,979,777 | 8,017,551,136 | 0.605 |
| 2008 | 10,748,217,184 | 2,661,438,578 | 223,223,941 | 3,789,690,639 | 519,515,594 | 741,658,577 | 7,935,527,329 | 0.738 |
| 2009 | 8,885,303,850 | 2,502,900,292 | 227,447,655 | 3,562,336,829 | 520,094,932 | 735,410,617 | 7,548,190,325 | 0.850 |
| 2010 | 9,411,101,176 | 2,494,739,633 | 244,693,433 | 3,594,595,159 | 520,250,067 | 865,819,927 | 7,720,098,219 | 0.820 |
| 2011 | 10,146,407,076 | 2,387,257,710 | 296,056,683 | 3,161,147,508 | 614,297,692 | 1,100,963,146 | 7,559,722,739 | 0.745 |
| 2012 | 11,718,349,189 | 2,326,647,816 | 369,494,465 | 2,944,847,369 | 682,345,669 | 2,016,263,545 | 8,339,598,864 | 0.712 |
| 2013 | 14,186,071,217 | 2,220,568,455 | 447,673,589 | 2,646,223,681 | 798,865,851 | 2,751,094,576 | 8,864,426,152 | 0.625 |
| 2014 | 16,014,478,353 | 1,975,811,249 | 651,593,331 | 2,249,502,436 | 973,283,988 | 3,834,515,019 | 9,684,706,023 | 0.605 |
| 2015 | 17,056,141,227 | 1,431,215,461 | 902,858,361 | 1,705,282,528 | 1,286,334,448 | 5,112,048,235 | 10,437,739,033 | 0.612 |
| 2016 | 17,954,399,988 | 615,595,757 | 856,991,482 | 943,528,415 | 1,430,965,932 | 6,641,967,593 | 10,489,049,179 | 0.584 |
| 2017* | 4,375,167,697 | 17,057,050 | 102,214,519 | 33,192,542 | 227,374,098 | 2,035,495,233 | 2,415,333,442 | 0.552 |

[^4]Not In (2.
Source: WCIRB quarterly experience calls

| Incurred Indemnity Loss Development Factors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accident Year | 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 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.002 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.002 | 0.999 | 0.999 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.002 | 1.003 | 1.001 | 1.002 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.002 | 1.002 | 1.000 | 0.999 | 1.002 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.005 | 1.003 | 1.002 | 1.003 | 1.002 | 1.001 |
| 1998 |  |  |  |  |  |  |  |  | 1.004 | 1.002 | 1.002 | 1.004 | 1.004 | 1.000 | 1.003 |
| 1999 |  |  |  |  |  |  |  | 1.003 | 1.007 | 1.004 | 1.002 | 1.004 | 1.003 | 1.002 | 1.002 |
| 2000 |  |  |  |  |  |  | 1.009 | 1.007 | 1.005 | 1.004 | 1.004 | 1.003 | 1.002 | 1.003 | 1.002 |
| 2001 |  |  |  |  |  | 1.018 | 1.014 | 1.007 | 1.008 | 1.007 | 1.005 | 1.005 | 1.003 | 1.001 | 1.002 |
| 2002 |  |  |  |  | 1.027 | 1.019 | 1.010 | 1.011 | 1.009 | 1.006 | 1.005 | 1.002 | 1.001 | 1.003 |  |
| 2003 |  |  |  | 1.047 | 1.030 | 1.018 | 1.020 | 1.016 | 1.012 | 1.008 | 1.008 | 1.002 | 1.003 |  |  |
| 2004 |  |  | 1.063 | 1.042 | 1.037 | 1.026 | 1.025 | 1.015 | 1.015 | 1.007 | 1.006 | 1.003 |  |  |  |
| 2005 |  | 1.168 | 1.085 | 1.063 | 1.049 | 1.039 | 1.022 | 1.016 | 1.010 | 1.005 | 1.006 |  |  |  |  |
| 2006 | 1.519 | 1.188 | 1.100 | 1.072 | 1.051 | 1.031 | 1.020 | 1.012 | 1.008 | 1.008 |  |  |  |  |  |
| 2007 | 1.562 | 1.216 | 1.104 | 1.066 | 1.045 | 1.030 | 1.022 | 1.012 | 1.009 |  |  |  |  |  |  |
| 2008 | 1.618 | 1.245 | 1.116 | 1.063 | 1.043 | 1.025 | 1.018 | 1.011 |  |  |  |  |  |  |  |
| 2009 | 1.670 | 1.233 | 1.124 | 1.067 | 1.043 | 1.021 | 1.016 |  |  |  |  |  |  |  |  |
| 2010 | 1.665 | 1.250 | 1.112 | 1.062 | 1.037 | 1.023 |  |  |  |  |  |  |  |  |  |
| 2011 | 1.657 | 1.225 | 1.109 | 1.053 | 1.032 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 1.662 | 1.218 | 1.094 | 1.059 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.604 | 1.202 | 1.092 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.626 | 1.224 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.630 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 1.630 | 1.224 | 1.092 | 1.059 | 1.032 | 1.023 | 1.016 | 1.011 | 1.009 | 1.007 | 1.007 | 1.002 | 1.002 | 1.002 | 1.002 |
| Cumulative | 2.601 | 1.596 | 1.304 | 1.194 | 1.127 | 1.092 | 1.068 | 1.051 | 1.040 | 1.030 | 1.024 | 1.017 | 1.014 | 1.012 | 1.010 |

(a) Selections are 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.

| Incurred Indemnity Loss Development Factors (Continued) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accident Year | 207/195 | 219/207 | 231/219 | 243/231 | 255/243 | 267/255 | 279/267 | 291/279 | 303/291 | 315/303 | 327/315 | 339/327 | 351/339 | 363/351 | 375/363 | 387/375 | ULT/387Inc (b) |
| 1982 |  |  |  |  |  |  |  |  |  | 1.001 | 1.001 | 1.000 | 1.002 |  |  |  |  |
| 1983 |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 |  |
| 1984 |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 0.999 | 1.000 |  |
| 1985 |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 |  |
| 1986 |  |  |  |  |  | 1.000 | 1.000 | 1.001 | 1.000 | 1.002 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |
| 1987 |  |  |  |  | 0.999 | 1.000 | 1.000 | 1.000 | 1.002 | 1.001 | 1.000 | 1.000 | 1.001 | 1.000 |  |  |  |
| 1988 |  |  |  | 1.000 | 1.001 | 1.000 | 1.002 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 |  |  |  |  |
| 1989 |  |  | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 |  |  |  |  |  |
| 1990 |  | 1.000 | 1.001 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |
| 1991 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |
| 1992 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |
| 1993 | 0.999 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |
| 1994 | 1.001 | 1.001 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 |  |  |  |  |  |  |  |  |  |  |
| 1995 | 1.001 | 1.002 | 0.999 | 0.999 | 1.001 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| 1996 | 1.001 | 1.002 | 1.001 | 1.000 | 1.001 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 | 1.001 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.001 | 1.002 | 1.002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 1.000 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 |  |
| Cumulative | 1.008 | 1.007 | 1.007 | 1.006 | 1.006 | 1.005 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 |

(b) The ULT/387Inc 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 and extrapolated to 80 development years
Incurred Medical Loss Development Factors

| Accident Year | Age-to-Age (in months) (b) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{27 / 15}$ | 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 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.012 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.019 | 1.013 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.006 | 1.008 | 1.021 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.020 | 1.027 | 1.016 | 1.005 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.017 | 1.020 | 1.015 | 1.013 | 1.012 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.024 | 1.023 | 1.018 | 1.009 | 1.010 | 1.005 |
| 1998 |  |  |  |  |  |  |  |  | 1.035 | 1.021 | 1.020 | 1.010 | 1.010 | 1.013 | 1.007 |
| 1999 |  |  |  |  |  |  |  | 1.035 | 1.028 | 1.018 | 1.017 | 1.014 | 1.009 | 1.012 | 1.003 |
| 2000 |  |  |  |  |  |  | 1.041 | 1.022 | 1.019 | 1.022 | 1.016 | 1.017 | 1.012 | 1.005 | 0.998 |
| 2001 |  |  |  |  |  | 1.045 | 1.039 | 1.035 | 1.030 | 1.020 | 1.018 | 1.018 | 1.006 | 0.997 | 0.999 |
| 2002 |  |  |  |  | 1.056 | 1.038 | 1.034 | 1.028 | 1.027 | 1.020 | 1.013 | 1.007 | 0.998 | 0.999 |  |
| 2003 |  |  |  | 1.060 | 1.051 | 1.043 | 1.040 | 1.036 | 1.025 | 1.019 | 1.009 | 1.001 | 0.999 |  |  |
| 2004 |  |  | 1.094 | 1.078 | 1.056 | 1.062 | 1.038 | 1.032 | 1.026 | 1.008 | 1.004 | 0.999 |  |  |  |
| 2005 |  | 1.141 | 1.077 | 1.080 | 1.074 | 1.057 | 1.040 | 1.027 | 1.018 | 1.005 | 1.003 |  |  |  |  |
| 2006 | 1.333 | 1.164 | 1.095 | 1.076 | 1.061 | 1.049 | 1.037 | 1.018 | 1.007 | 1.003 |  |  |  |  |  |
| 2007 | 1.357 | 1.171 | 1.114 | 1.078 | 1.069 | 1.041 | 1.028 | 1.015 | 1.005 |  |  |  |  |  |  |
| 2008 | 1.378 | 1.189 | 1.116 | 1.087 | 1.058 | 1.035 | 1.020 | 1.009 |  |  |  |  |  |  |  |
| 2009 | 1.431 | 1.182 | 1.133 | 1.080 | 1.049 | 1.025 | 1.014 |  |  |  |  |  |  |  |  |
| 2010 | 1.431 | 1.212 | 1.117 | 1.068 | 1.036 | 1.022 |  |  |  |  |  |  |  |  |  |
| 2011 | 1.452 | 1.185 | 1.103 | 1.060 | 1.025 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 1.391 | 1.153 | 1.079 | 1.051 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.353 | 1.120 | 1.076 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.326 | 1.135 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.314 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 1.314 | 1.135 | 1.076 | 1.051 | 1.025 | 1.022 | 1.014 | 1.009 | 1.010 | 1.005 | 1.005 | 1.002 | 1.001 | 1.000 | 1.000 |
| Cumulative | 1.895 | 1.442 | 1.270 | 1.181 | 1.123 | 1.096 | 1.072 | 1.058 | 1.048 | 1.038 | 1.032 | 1.027 | 1.024 | 1.023 | 1.023 |

Incurred Medical Loss Development Factors (Continued)

|  | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | $\underline{207 / 195}$ | $\underline{\text { 219/207 }}$ | $\underline{231 / 219}$ | 243/231 | 255/243 | $\underline{267 / 255}$ | $\underline{\text { 279/267 }}$ | $\underline{\text { 291/279 }}$ | 303/291 | 315/303 | $\frac{327 / 315}{1.011}$ | 339/327 | 351/339 | 363/351 | 375/363 | 387/375 | ULT/387Inc (c) |
| 1982 |  |  |  |  |  |  |  |  |  | 1.007 | 1.011 | 1.002 | 1.005 |  |  |  |  |
| 1983 |  |  |  |  |  |  |  |  | 1.004 | 1.004 | 1.003 | 1.003 | 1.005 | 1.003 | 1.003 | 1.002 |  |
| 1984 |  |  |  |  |  |  |  | 1.001 | 1.004 | 1.002 | 1.004 | 1.003 | 1.000 | 1.004 | 0.999 | 0.999 |  |
| 1985 |  |  |  |  |  |  | 1.001 | 1.001 | 1.002 | 1.004 | 1.004 | 1.003 | 1.004 | 1.000 | 0.999 | 0.999 |  |
| 1986 |  |  |  |  |  | 1.005 | 1.003 | 1.006 | 1.006 | 1.005 | 1.005 | 1.004 | 1.002 | 1.001 | 0.998 |  |  |
| 1987 |  |  |  |  | 1.001 | 1.005 | 1.010 | 0.999 | 1.006 | 1.003 | 1.005 | 1.003 | 1.001 | 0.999 |  |  |  |
| 1988 |  |  |  | 1.002 | 1.006 | 1.005 | 1.005 | 1.001 | 1.005 | 1.002 | 1.003 | 1.002 | 1.000 |  |  |  |  |
| 1989 |  |  | 1.006 | 1.005 | 1.008 | 1.005 | 1.006 | 1.007 | 1.000 | 1.002 | 0.999 | 0.999 |  |  |  |  |  |
| 1990 |  | 1.003 | 1.006 | 1.008 | 1.005 | 1.003 | 1.002 | 1.004 | 0.997 | 1.001 | 1.001 |  |  |  |  |  |  |
| 1991 | 1.005 | 1.007 | 1.006 | 1.005 | 1.002 | 1.004 | 1.001 | 1.003 | 1.001 | 0.999 |  |  |  |  |  |  |  |
| 1992 | 1.006 | 1.009 | 1.001 | 1.003 | 1.005 | 1.003 | 1.003 | 0.999 | 1.000 |  |  |  |  |  |  |  |  |
| 1993 | 1.008 | 1.005 | 1.013 | 1.013 | 1.001 | 1.001 | 0.999 | 0.996 |  |  |  |  |  |  |  |  |  |
| 1994 | 1.011 | 1.011 | 1.005 | 1.006 | 1.004 | 1.001 | 0.996 |  |  |  |  |  |  |  |  |  |  |
| 1995 | 1.010 | 1.012 | 0.996 | 1.007 | 1.000 | 0.997 |  |  |  |  |  |  |  |  |  |  |  |
| 1996 | 1.008 | 1.007 | 1.003 | 1.000 | 1.001 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 | 1.004 | 1.000 | 0.995 | 0.997 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.012 | 0.999 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.000 | 0.998 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 0.995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 1.002 | 0.999 | 0.999 | 1.001 | 1.002 | 1.000 | 0.999 | 0.999 | 0.999 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 0.999 | 1.000 |  |
| Cumulative | 1.023 | 1.021 | 1.022 | 1.022 | 1.021 | 1.019 | 1.020 | 1.020 | 1.021 | 1.022 | 1.021 | 1.020 | 1.019 | 1.018 | 1.018 | 1.019 | 1.019 |
| (c) | The ULT/3 developme | 7Inc tail t years. | actor was | calculated | based on | n invers | power cu | e fit to a | six-year a | verage of | he 111-to | 23 throu | gh 339-to- | 351 factor | and extr | apolated |  |


| Accident Year | Paid Indemnity Loss Development Factors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.003 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.004 | 1.004 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.006 | 1.005 | 1.003 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.008 | 1.007 | 1.006 | 1.004 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.011 | 1.009 | 1.007 | 1.004 | 1.005 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.015 | 1.011 | 1.007 | 1.007 | 1.006 | 1.005 |
| 1998 |  |  |  |  |  |  |  |  | 1.018 | 1.016 | 1.009 | 1.009 | 1.008 | 1.007 | 1.006 |
| 1999 |  |  |  |  |  |  |  | 1.021 | 1.018 | 1.014 | 1.010 | 1.009 | 1.008 | 1.006 | 1.006 |
| 2000 |  |  |  |  |  |  | 1.030 | 1.022 | 1.015 | 1.012 | 1.010 | 1.009 | 1.007 | 1.007 | 1.004 |
| 2001 |  |  |  |  |  | 1.045 | 1.030 | 1.022 | 1.016 | 1.014 | 1.011 | 1.011 | 1.008 | 1.007 | 1.006 |
| 2002 |  |  |  |  | 1.065 | 1.043 | 1.028 | 1.019 | 1.018 | 1.014 | 1.012 | 1.009 | 1.007 | 1.006 |  |
| 2003 |  |  |  | 1.109 | 1.064 | 1.039 | 1.029 | 1.025 | 1.022 | 1.020 | 1.015 | 1.010 | 1.009 |  |  |
| 2004 |  |  | 1.191 | 1.102 | 1.067 | 1.045 | 1.041 | 1.034 | 1.026 | 1.018 | 1.014 | 1.011 |  |  |  |
| 2005 |  | 1.410 | 1.200 | 1.104 | 1.073 | 1.057 | 1.048 | 1.037 | 1.025 | 1.019 | 1.014 |  |  |  |  |
| 2006 | 2.211 | 1.423 | 1.197 | 1.121 | 1.085 | 1.062 | 1.045 | 1.032 | 1.026 | 1.017 |  |  |  |  |  |
| 2007 | 2.243 | 1.436 | 1.211 | 1.127 | 1.085 | 1.061 | 1.042 | 1.032 | 1.025 |  |  |  |  |  |  |
| 2008 | 2.279 | 1.468 | 1.234 | 1.132 | 1.083 | 1.054 | 1.040 | 1.025 |  |  |  |  |  |  |  |
| 2009 | 2.369 | 1.499 | 1.238 | 1.135 | 1.084 | 1.056 | 1.039 |  |  |  |  |  |  |  |  |
| 2010 | 2.399 | 1.505 | 1.240 | 1.129 | 1.081 | 1.053 |  |  |  |  |  |  |  |  |  |
| 2011 | 2.433 | 1.481 | 1.227 | 1.129 | 1.076 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 2.424 | 1.477 | 1.220 | 1.122 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 2.385 | 1.491 | 1.215 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 2.457 | 1.502 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 2.471 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Selected (a) | 2.471 | 1.502 | 1.215 | 1.122 | 1.076 | 1.053 | 1.039 | 1.025 | 1.025 | 1.018 | 1.014 | 1.010 | 1.008 | 1.007 | 1.005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cumulative Unadjusted for |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Impact of SB 863 | 6.904 | 2.794 | 1.860 | 1.531 | 1.364 | 1.268 | 1.204 | 1.159 | 1.131 | 1.103 | 1.083 | 1.068 | 1.057 | 1.049 | 1.042 |
| Cumulative Adjusted for Impact of SB 863 (b) | 7.351 | 2.975 | 1.981 | 1.562 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (b) | electio <br> he 39- <br> espectiv <br> ugust | are late ltimate , for th 2013.) | year for ctor for mpacts | 15-to cident SB 86 | $\begin{aligned} & \text { month } \\ & 2014 \end{aligned}$ indem | ough 9 <br> dhe 51 <br> loss d | o-111 -ultima elopme | th facto actor for (See Im | and thr accident act of S | -year av ear 201 ate Bill | rage for have bee 863 on | e subs adjuste oss De | ent age y $6.5 \%$ opment | -age fa <br> d 2.0\% <br> atterns | rs. <br> CIRB, |



[^5]Selected (a)
Cumulative
Unadjusted (a)
Accident Year

| Unadjusted (a) | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | 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 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.017 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.013 | 1.012 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.015 | 1.016 | 1.012 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.023 | 1.019 | 1.018 | 1.017 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.025 | 1.023 | 1.022 | 1.014 | 1.014 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.028 | 1.025 | 1.020 | 1.019 | 1.014 | 1.014 |
| 1998 |  |  |  |  |  |  |  |  | 1.033 | 1.032 | 1.027 | 1.021 | 1.017 | 1.019 | 1.018 |
| 1999 |  |  |  |  |  |  |  | 1.031 | 1.035 | 1.030 | 1.025 | 1.020 | 1.016 | 1.018 | 1.018 |
| 2000 |  |  |  |  |  |  | 1.039 | 1.037 | 1.030 | 1.026 | 1.022 | 1.020 | 1.021 | 1.016 | 1.012 |
| 2001 |  |  |  |  |  | 1.054 | 1.046 | 1.037 | 1.033 | 1.026 | 1.022 | 1.026 | 1.019 | 1.016 | 1.012 |
| 2002 |  |  |  |  | 1.068 | 1.053 | 1.043 | 1.032 | 1.027 | 1.024 | 1.026 | 1.018 | 1.015 | 1.011 |  |
| 2003 |  |  |  | 1.100 | 1.070 | 1.055 | 1.045 | 1.033 | 1.029 | 1.033 | 1.025 | 1.018 | 1.015 |  |  |
| 2004 |  |  | 1.165 | 1.121 | 1.086 | 1.066 | 1.047 | 1.039 | 1.041 | 1.031 | 1.022 | 1.017 |  |  |  |
| 2005 |  | 1.292 | 1.193 | 1.123 | 1.091 | 1.063 | 1.053 | 1.051 | 1.037 | 1.029 | 1.020 |  |  |  |  |
| 2006 | 1.773 | 1.342 | 1.195 | 1.126 | 1.085 | 1.064 | 1.057 | 1.040 | 1.032 | 1.023 |  |  |  |  |  |
| 2007 | 1.851 | 1.352 | 1.203 | 1.120 | 1.092 | 1.079 | 1.051 | 1.038 | 1.028 |  |  |  |  |  |  |
| 2008 | 1.826 | 1.359 | 1.208 | 1.134 | 1.098 | 1.067 | 1.047 | 1.033 |  |  |  |  |  |  |  |
| 2009 | 1.876 | 1.385 | 1.221 | 1.150 | 1.095 | 1.062 | 1.042 |  |  |  |  |  |  |  |  |
| 2010 | 1.926 | 1.402 | 1.237 | 1.133 | 1.087 | 1.060 |  |  |  |  |  |  |  |  |  |
| 2011 | 1.957 | 1.401 | 1.217 | 1.131 | 1.082 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 1.983 | 1.398 | 1.214 | 1.127 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.939 | 1.391 | 1.205 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.938 | 1.387 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.957 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Adjusted (b) | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | 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 |
| 1999 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.019 |
| 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.017 | 1.013 |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  | 1.020 | 1.018 | 1.013 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  | 1.019 | 1.016 | 1.012 |  |
| 2003 |  |  |  |  |  |  |  |  |  |  | 1.027 | 1.019 | 1.016 |  |  |
| 2004 |  |  |  |  |  |  |  |  |  | 1.033 | 1.024 | 1.019 |  |  |  |
| 2005 |  |  |  |  |  |  |  |  | 1.039 | 1.031 | 1.022 |  |  |  |  |
| 2006 |  |  |  |  |  |  |  | 1.043 | 1.034 | 1.025 |  |  |  |  |  |
| 2007 |  |  |  |  |  |  | 1.054 | 1.041 | 1.030 |  |  |  |  |  |  |
| 2008 |  |  |  |  |  | 1.071 | 1.051 | 1.035 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  | 1.100 | 1.066 | 1.045 |  |  |  |  |  |  |  |  |
| 2010 |  |  |  | 1.141 | 1.093 | 1.064 |  |  |  |  |  |  |  |  |  |
| 2011 |  |  | 1.228 | 1.139 | 1.086 |  |  |  |  |  |  |  |  |  |  |
| 2012 |  | 1.413 | 1.223 | 1.131 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.957 | 1.400 | 1.208 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.949 | 1.389 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.957 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (c) | 1.957 | 1.389 | 1.208 | 1.131 | 1.086 | 1.064 | 1.045 | 1.035 | 1.034 | 1.030 | 1.024 | 1.019 | 1.017 | 1.016 | 1.015 |
| Cumulative | 6.375 | 3.257 | 2.345 | 1.941 | 1.716 | 1.581 | 1.485 | 1.421 | 1.373 | 1.328 | 1.290 | 1.259 | 1.235 | 1.214 | 1.196 | These factors are adjusted for the following impacts: (i) reduction of historical outstanding medical losses paid prior to January 1 , 2013 by the estimated $4.2 \%$ cost savings losses paid prior to January 1,2015 by an estimated $1.7 \%$ decrease in costs due to RBRVS.


Paid Medical Loss Development Factors (Continued)

| adjusted (a) | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cident Year | 207/195 | 219/207 | $\underline{231 / 219}$ | 243/231 | 255/243 | 267/255 | 279/267 | $\underline{291 / 279}$ | 303/291 | 315/303 | 327/315 | 339/327 | 351/339 | 363/351 | 375/363 | 387/375 | $387 \mathrm{lnc} / 387 \mathrm{Pd}$ (d) | ULT/387Inc (e) |
| 1982 |  |  |  |  |  |  |  |  |  | 1.007 | 1.010 | 1.005 | 1.006 |  |  |  | 1.030 |  |
| 1983 |  |  |  |  |  |  |  |  | 1.004 | 1.004 | 1.005 | 1.004 | 1.004 | 1.004 | 1.004 | 1.003 | 1.032 |  |
| 1984 |  |  |  |  |  |  |  | 1.003 | 1.003 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.002 | 1.003 | 1.036 |  |
| 1985 |  |  |  |  |  |  | 1.006 | 1.004 | 1.004 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.002 | 1.003 | 1.038 |  |
| 1986 |  |  |  |  |  | 1.004 | 1.004 | 1.005 | 1.005 | 1.005 | 1.005 | 1.005 | 1.006 | 1.004 | 1.006 |  | 1.022 |  |
| 1987 |  |  |  |  | 1.008 | 1.005 | 1.005 | 1.005 | 1.005 | 1.005 | 1.006 | 1.005 | 1.003 | 1.003 |  |  | 1.022 |  |
| 1988 |  |  |  | 1.008 | 1.005 | 1.005 | 1.006 | 1.006 | 1.004 | 1.005 | 1.004 | 1.003 | 1.003 |  |  |  |  |  |
| 1989 |  |  | 1.006 | 1.006 | 1.005 | 1.005 | 1.008 | 1.006 | 1.006 | 1.005 | 1.003 | 1.003 |  |  |  |  |  |  |
| 1990 |  | 1.005 | 1.005 | 1.005 | 1.005 | 1.006 | 1.004 | 1.004 | 1.004 | 1.003 | 1.002 |  |  |  |  |  |  |  |
| 1991 | 1.008 | 1.006 | 1.006 | 1.006 | 1.005 | 1.006 | 1.006 | 1.005 | 1.004 | 1.003 |  |  |  |  |  |  |  |  |
| 1992 | 1.010 | 1.007 | 1.007 | 1.000 | 1.007 | 1.007 | 1.005 | 1.005 | 1.005 |  |  |  |  |  |  |  |  |  |
| 1993 | 1.011 | 1.011 | 1.011 | 1.009 | 1.013 | 1.010 | 1.008 | 1.005 |  |  |  |  |  |  |  |  |  |  |
| 1994 | 1.013 | 1.009 | 1.009 | 1.012 | 1.010 | 1.008 | 1.008 |  |  |  |  |  |  |  |  |  |  |  |
| 1995 | 1.013 | 1.012 | 1.016 | 1.013 | 1.011 | 1.013 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 | 1.014 | 1.014 | 1.014 | 1.010 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 | 1.015 | 1.013 | 1.010 | 1.006 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.017 | 1.013 | 1.010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.014 | 1.012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Adjusted (b) | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | 207/195 | 219/207 | 231/219 | 243/231 | 255/243 | 267/255 | $\underline{\text { 279/267 }}$ | 291/279 | 303/291 | 315/303 | 327/315 | 339/327 | 351/339 | 363/351 | 375/363 | 387/375 | $387 \mathrm{lnc} / 387 \mathrm{Pd}$ (d) | ULT/387Inc (e) |
| 1982 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.030 |  |
| 1983 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.003 | 1.032 |  |
| 1984 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.002 | 1.003 | 1.036 |  |
| 1985 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.003 | 1.002 | 1.003 | 1.038 |  |
| 1986 |  |  |  |  |  |  |  |  |  |  |  |  | 1.007 | 1.004 | 1.006 |  | 1.022 |  |
| 1987 |  |  |  |  |  |  |  |  |  |  |  | 1.005 | 1.003 | 1.003 |  |  | 1.022 |  |
| 1988 |  |  |  |  |  |  |  |  |  |  | 1.004 | 1.003 | 1.003 |  |  |  |  |  |
| 1989 |  |  |  |  |  |  |  |  |  | 1.006 | 1.003 | 1.003 |  |  |  |  |  |  |
| 1990 |  |  |  |  |  |  |  |  | 1.004 | 1.003 | 1.002 |  |  |  |  |  |  |  |
| 1991 |  |  |  |  |  |  |  | 1.006 | 1.004 | 1.004 |  |  |  |  |  |  |  |  |
| 1992 |  |  |  |  |  |  | 1.006 | 1.005 | 1.005 |  |  |  |  |  |  |  |  |  |
| 1993 |  |  |  |  |  | 1.011 | 1.009 | 1.006 |  |  |  |  |  |  |  |  |  |  |
| 1994 |  |  |  |  | 1.011 | 1.009 | 1.009 |  |  |  |  |  |  |  |  |  |  |  |
| 1995 |  |  |  | 1.014 | 1.012 | 1.014 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  | 1.015 | 1.011 | 1.008 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 |  | 1.014 | 1.011 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.018 | 1.014 | 1.010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.015 | 1.013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (c) | 1.015 | 1.014 | 1.012 | 1.011 | 1.010 | 1.011 | 1.008 | 1.006 | 1.004 | 1.004 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 | 1.030 |  |
| Cumulative | 1.178 | 1.161 | 1.145 | 1.131 | 1.119 | 1.108 | 1.096 | 1.087 | 1.081 | 1.076 | 1.071 | 1.068 | 1.064 | 1.060 | 1.056 | 1.053 |  | 1.019 |
| (d) <br> (e) | Six-year a The ULT/38 | ges of the c tail factor | Inc/387Pd as calculated | actors are d based on | lected. | power curv | fit to a six | ear avera | e of the 1 | -to-123 th | ough 339-t | 351 facto | and extra | lated to | 0 developm | ent years. |  |  |


| Selected Indemnity Development Factors - Paid to Age 231, Incurred from Age 231 to Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age-to-Age (in months) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 207/195 | 219/207 | $\underline{231 / 219}$ | $231 \mathrm{lnc} / 231 \mathrm{Pd}$ (c) |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.003 | 1.003 | 1.001 | 1.002 | 1.015 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.004 | 1.004 | 1.002 | 1.002 | 1.003 | 1.016 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.006 | 1.005 | 1.003 | 1.003 | 1.004 | 1.002 | 1.022 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.008 | 1.007 | 1.006 | 1.004 | 1.004 | 1.005 | 1.004 | 1.027 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.011 | 1.009 | 1.007 | 1.004 | 1.005 | 1.004 | 1.005 | 1.004 | 1.026 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.015 | 1.011 | 1.007 | 1.007 | 1.006 | 1.005 | 1.005 | 1.004 | 1.003 | 1.025 |
| 1998 |  |  |  |  |  |  |  |  | 1.018 | 1.016 | 1.009 | 1.009 | 1.008 | 1.007 | 1.006 | 1.006 | 1.005 | 1.004 | 1.024 |
| 1999 |  |  |  |  |  |  |  | 1.021 | 1.018 | 1.014 | 1.010 | 1.009 | 1.008 | 1.006 | 1.006 | 1.005 | 1.004 |  |  |
| 2000 |  |  |  |  |  |  | 1.030 | 1.022 | 1.015 | 1.012 | 1.010 | 1.009 | 1.007 | 1.007 | 1.004 | 1.004 |  |  |  |
| 2001 |  |  |  |  |  | 1.045 | 1.030 | 1.022 | 1.016 | 1.014 | 1.011 | 1.011 | 1.008 | 1.007 | 1.006 |  |  |  |  |
| 2002 |  |  |  |  | 1.065 | 1.043 | 1.028 | 1.019 | 1.018 | 1.014 | 1.012 | 1.009 | 1.007 | 1.006 |  |  |  |  |  |
| 2003 |  |  |  | 1.109 | 1.064 | 1.039 | 1.029 | 1.025 | 1.022 | 1.020 | 1.015 | 1.010 | 1.009 |  |  |  |  |  |  |
| 2004 |  |  | 1.191 | 1.102 | 1.067 | 1.045 | 1.041 | 1.034 | 1.026 | 1.018 | 1.014 | 1.011 |  |  |  |  |  |  |  |
| 2005 |  | 1.410 | 1.200 | 1.104 | 1.073 | 1.057 | 1.048 | 1.037 | 1.025 | 1.019 | 1.014 |  |  |  |  |  |  |  |  |
| 2006 | 2.211 | 1.423 | 1.197 | 1.121 | 1.085 | 1.062 | 1.045 | 1.032 | 1.026 | 1.017 |  |  |  |  |  |  |  |  |  |
| 2007 | 2.243 | 1.436 | 1.211 | 1.127 | 1.085 | 1.061 | 1.042 | 1.032 | 1.025 |  |  |  |  |  |  |  |  |  |  |
| 2008 | 2.279 | 1.468 | 1.234 | 1.132 | 1.083 | 1.054 | 1.040 | 1.025 |  |  |  |  |  |  |  |  |  |  |  |
| 2009 | 2.369 | 1.499 | 1.238 | 1.135 | 1.084 | 1.056 | 1.039 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 | 2.399 | 1.505 | 1.240 | 1.129 | 1.081 | 1.053 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 2.433 | 1.481 | 1.227 | 1.129 | 1.076 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | 2.424 | 1.477 | 1.220 | 1.122 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 2.385 | 1.491 | 1.215 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 2.457 | 1.502 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 2.471 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (a) | 2.456(d) | 1.489(d) | 1.207(d) | 1.112(d) | 1.068(d) | 1.053 | 1.039 | 1.025 | 1.025 | 1.018 | 1.014 | 1.010 | 1.008 | 1.007 | 1.005 | 1.005 | 1.004 | 1.004 | 1.025 |
| Cumulative Unadjusted for Impact of SB 863 | 6.700 | 2.728 | 1.832 | 1.518 | 1.365 | 1.277 | 1.213 | 1.168 | 1.139 | 1.111 | 1.091 | 1.076 | 1.065 | 1.057 | 1.050 | 1.044 | 1.039 | 1.035 |  |
| Cumulative Adjusted for Impact of SB 863 (b) | 7.135 | 2.905 | 1.951 | 1.548 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |  |  |  |  | a) Selections are 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. Paid development factors are selected to age 231 , where an

incurred-to-paid ratio is chosen, and subsequently, incurred loss development factors are selected until ultimate.
(b) The 39-to-ultimate factor for accident year 2014 and the 51 -to-ultimate factor for accident year 2013 have been adjusted by $6.5 \%$ and $2.0 \%$, respectively, for the impacts of SB 863 on indemnity loss
development. (See Impact of Senate Bill No. 863 on Loss Development Patterns, WCIRB, August 13,2013 .) (b) The 39 -to-uttimate factor for accident Bill 2014 and the 51 -to-uttimate factortor accident year 2613 have been adjusted by $6.5 \%$ and $2.0 \%$, respectively, for the impacts of SB 863 on indemnity loss (c) A three-year average of the $231 \mathrm{Inc} / 231 \mathrm{Pd}$ factor is selected. (d) Based
rates.
ident Year
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997

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

## A. Total Reported Indemnity Claim Counts

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 118,144 |
| 2009 |  |  |  |  | 112,428 | 112,740 |
| 2010 |  |  |  | 115,543 | 116,134 | 116,466 |
| 2011 |  |  | 115,877 | 117,092 | 117,782 | 118,150 |
| 2012 |  | 119,843 | 122,845 | 124,144 | 124,921 |  |
| 2013 | 116,550 | 128,262 | 131,489 | 132,794 |  |  |
| 2014 | 121,326 | 134,394 | 137,527 |  |  |  |
| 2015 | 126,704 | 140,302 |  |  |  |  |
| 2016 | 129,131 |  |  |  |  |  |

## B. Development of Total Reported Indemnity Claim Counts

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-Ultimate |
| 2009 |  |  |  |  | 1.003 |  |
| 2010 |  |  |  | 1.005 | 1.003 |  |
| 2011 |  |  | 1.010 | 1.006 | 1.003 |  |
| 2012 |  | 1.025 | 1.011 | 1.006 |  |  |
| 2013 | 1.100 | 1.025 | 1.010 |  |  |  |
| 2014 | 1.108 | 1.023 |  |  |  |  |
| 2015 | 1.107 |  |  |  |  |  |
| Latest Year | 1.107 | 1.023 | 1.010 | 1.006 | 1.003 |  |
| Cumulative | 1.163 | 1.050 | 1.026 | 1.016 | 1.010 | 1.006 |
| Acc. Year | $\underline{2016}$ | $\underline{2015}$ | 2014 | 2013 | 2012 | $\underline{2011}$ |
| Ult. Claim Counts | 150,132 | 147,311 | 141,108 | 134,912 | 126,124 | 118,917 |

## C. Closed Indemnity Claim Counts

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 101,531 |
| 2009 |  |  |  |  | 90,535 | 96,584 |
| 2010 |  |  |  | 86,390 | 95,260 | 101,568 |
| 2011 |  |  | 75,627 | 88,983 | 98,136 | 104,174 |
| 2012 |  | 62,104 | 81,994 | 96,094 | 105,545 |  |
| 2013 | 38,950 | 67,874 | 89,572 | 105,005 |  |  |
| 2014 | 41,091 | 72,635 | 95,523 |  |  |  |
| 2015 | 43,814 | 78,256 |  |  |  |  |
| 2016 | 47,216 |  |  |  |  |  |

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

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{\underline{27}}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 85.3\% |
| 2009 |  |  |  |  | 79.7\% | 85.0\% |
| 2010 |  |  |  | 73.7\% | 81.3\% | 86.6\% |
| 2011 |  |  | 63.6\% | 74.8\% | 82.5\% | 87.6\% |
| 2012 |  | 49.2\% | 65.0\% | 76.2\% | 83.7\% |  |
| 2013 | 28.9\% | 50.3\% | 66.4\% | 77.8\% |  |  |
| 2014 | 29.1\% | 51.5\% | 67.7\% |  |  |  |
| 2015 | 29.7\% | 53.1\% |  |  |  |  |
| 2016 | 31.4\% |  |  |  |  |  |

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 | 63 | 75 |
| 2008 |  |  |  |  |  | 104,226 |
| 2009 |  |  |  |  | 95,108 | 99,562 |
| 2010 |  |  |  | 91,236 | 98,095 | 102,689 |
| 2011 |  |  | 80,501 | 92,555 | 99,513 | 104,174 |
| 2012 |  | 67,001 | 85,380 | 98,165 | 105,545 |  |
| 2013 | 42,429 | 71,670 | 91,329 | 105,005 |  |  |
| 2014 | 44,378 | 74,961 | 95,523 |  |  |  |
| 2015 | 46,329 | 78,256 |  |  |  |  |
| 2016 | 47,216 |  |  |  |  |  |

F. Average Paid Indemnity per Closed Claim

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{\text { Year }}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 15,950 |
| 2009 |  |  |  |  | 12,556 | 14,825 |
| 2010 |  |  | 9,471 | 12,907 | 16,821 |  |
| 2011 |  | 5,922 | 10,054 | 13,298 | 15,597 | 17,247 |
| 2012 |  |  |  |  |  |  |
| 2013 | 2,718 | 6,340 | 10,498 | 13,647 |  |  |
| 2014 | 3,012 | 7,390 | 11,147 |  |  |  |
| 2015 | 3,259 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |

(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 | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 16,811 |
| 2009 |  |  |  |  | 13,943 | 16,094 |
| 2010 |  |  | 10,604 | 13,880 | 15,934 | 17,644 |
| 2011 |  |  |  |  | 1746 | 10,753 |
| 2012 | 2,928 | 6,925 | 10,816 | 13,771 | 15,597 |  |
| 2013 | 2,987 | 7,078 | 11,147 |  |  |  |
| 2014 | 3,216 | 7,390 |  |  |  |  |
| 2015 | 3,259 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | $1,752,103$ |
| 2009 |  |  |  |  | $1,272,120$ | $1,551,242$ |
| 2010 |  |  | 853,632 | $1,284,636$ | $1,585,674$ | $1,811,890$ |
| 2011 |  | 452,015 | 918,067 | $1,351,865$ | $1,646,166$ | $1,803,871$ |
| 2012 |  |  |  |  |  |  |
| 2013 | 124,244 | 496,304 | 987,859 | $1,432,983$ |  |  |
| 2014 | 132,569 | 530,563 | $1,064,821$ |  |  |  |
| 2015 | 149,013 | 578,297 |  |  |  |  |
| 2016 | 153,872 |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{\underline{27}}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 682,930 |
| 2009 |  |  |  |  | 759,011 | 654,527 |
| 2010 |  |  |  | 834,297 | 716,745 | 588,940 |
| 2011 |  |  | 850,428 | 773,336 | 639,826 | 526,053 |
| 2012 |  | 760,449 | 840,851 | 750,231 | 628,559 |  |
| 2013 | 402,274 | 774,875 | 855,512 | 748,285 |  |  |
| 2014 | 418,425 | 815,983 | 892,485 |  |  |  |
| 2015 | 445,728 | 849,352 |  |  |  |  |
| 2016 | 459,791 |  |  |  |  |  |

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

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

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

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2008 |  |  |  |  |  | 41,108 |  |
| 2009 |  |  |  |  | 34,669 | 40,513 |  |
| 2010 |  |  |  | 28,618 | 34,337 | 39,531 |  |
| 2011 |  |  | 21,129 | 27,512 | 32,568 | 37,640 |  |
| 2012 |  | 13,170 | 20,583 | 26,746 | 32,440 |  |  |
| 2013 | 5,184 | 12,832 | 20,410 | 26,927 |  |  |  |
| 2014 | 5,215 | 13,212 | 21,248 |  |  |  |  |
| 2015 | 5,377 | 13,689 |  |  |  |  |  |
| 2016 | 5,613 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | -110,787 |
| 2009 |  |  |  |  | -158,542 | -120,648 |
| 2010 |  |  |  | -138,682 | -97,345 | -44,315 |
| 2011 |  |  | -102,981 | -98,273 | -44,846 |  |
| 2012 |  | -64,496 | -69,695 | -55,391 |  |  |
| 2013 | -18,035 | -48,709 | -35,860 |  |  |  |
| 2014 | -17,142 | -30,732 |  |  |  |  |
| 2015 | -13,524 |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{\underline{27}}$ | 39 | 51 | 63 | 75 |
| 2008 |  |  |  |  |  | 572,144 |
| 2009 |  |  |  |  | 600,469 | 533,880 |
| 2010 |  |  |  | 695,614 | 619,400 | 544,625 |
| 2011 |  |  | 747,447 | 675,063 | 594,980 | 526,053 |
| 2012 |  | 695,953 | 771,156 | 694,840 | 628,559 |  |
| 2013 | 384,239 | 726,166 | 819,653 | 748,285 |  |  |
| 2014 | 401,283 | 785,251 | 892,485 |  |  |  |
| 2015 | 432,204 | 849,352 |  |  |  |  |
| 2016 | 459,791 |  |  |  |  |  |

(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 | $\underline{\underline{27}}$ | 39 | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 2,324,247 |
| 2009 |  |  |  |  | 2,151,711 | 2,316,031 |
| 2010 |  |  |  | 1,967,734 | 2,198,145 | 2,356,515 |
| 2011 |  |  | 1,601,080 | 1,959,699 | 2,180,656 | 2,329,924 |
| 2012 |  | 1,147,969 | 1,689,222 | 2,046,705 | 2,274,726 |  |
| 2013 | 508,483 | 1,222,471 | 1,807,512 | 2,181,268 |  |  |
| 2014 | 533,852 | 1,315,814 | 1,957,305 |  |  |  |
| 2015 | 581,217 | 1,427,649 |  |  |  |  |
| 2016 | 613,663 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> 2008 | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2009 |  |  |  |  |  |
| 2010 |  |  |  | 1.117 | 1.076 |
| 2011 |  |  | 1.224 | 1.113 | 1.068 |
| 2012 |  | 1.471 | 1.212 | 1.111 |  |
| 2013 | 2.404 | 1.479 | 1.207 |  |  |
| 2014 | 2.465 | 1.488 |  |  |  |
| 2015 | 2.456 |  |  |  |  |
|  |  |  |  |  |  |
| Latest Year | 2.456 | 1.488 | 1.207 | 1.111 | 1.068 |
| 3-Year Average | 2.442 | 1.479 | 1.214 | 1.114 | 1.072 |

O. Paid Indemnity Loss Development Factors (i)

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2009 |  |  |  |  | 1.085 |
| 2010 |  |  |  | 1.129 | 1.081 |
| 2011 |  | 1.476 | 1.218 | 1.122 | 1.076 |
| 2012 | 2.387 | 1.490 | 1.215 |  |  |
| 2013 | 2.460 | 1.501 |  |  |  |
| 2014 | 2.471 |  |  |  |  |
| 2015 |  |  |  |  |  |

(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 | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |  |
| 2009 |  |  |  |  | $-0.77 \%$ |  |
| 2010 |  |  | $-0.22 \%$ | $-1.01 \%$ | $-0.81 \%$ |  |
| 2011 |  | $-0.30 \%$ | $-0.52 \%$ | $-0.91 \%$ | $-0.69 \%$ |  |
| 2012 |  | $-0.72 \%$ | $-0.77 \%$ | $-0.65 \%$ |  |  |
| 2013 | $0.18 \%$ | $-0.87 \%$ |  |  |  |  |
| 2014 | $-0.60 \%$ |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |

Q. Paid Indemnity Loss Development Factors Adjusted for Changes in Indemnity

Claim Settlement Rates (k)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |  |
| 2009 |  |  |  | 1.118 | 1.076 |  |
| 2010 |  |  | 1.224 | 1.115 | 1.069 |  |
| 2011 |  | 1.473 | 1.214 | 1.112 |  |  |
| 2012 | 2.402 | 1.479 | 1.207 |  |  |  |
| 2013 | 2.460 | 1.489 |  |  |  |  |
| 2014 | 2.456 |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |
|  | 2.456 | 1.489 | 1.207 | 1.112 | 1.069 |  |
| Latest Year | 2.440 | 1.480 | 1.215 | 1.115 | 1.072 |  |

(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
Unadjusted (a)


| djusted (b) |  |  |  |  |  |  |  |  |  | e-to-Age | months) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | $\underline{\text { 207/195 }}$ | 219/207 | 231/219 | 231/nc/231Pd (d) |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.015 | 1.103 |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.014 | 1.011 | 1.096 |
| 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.018 | 1.014 | 1.010 | 1.103 |
| 1999 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.019 | 1.015 | 1.013 |  |  |
| 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.017 | 1.013 | 1.012 |  |  |  |
| 2001 |  |  |  |  |  |  |  |  |  |  |  |  | 1.020 | 1.018 | 1.013 |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  | 1.019 | 1.016 | 1.012 |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |  | 1.027 | 1.019 | 1.016 |  |  |  |  |  |  |
| 2004 |  |  |  |  |  |  |  |  |  | 1.033 | 1.024 | 1.019 |  |  |  |  |  |  |  |
| 2005 |  |  |  |  |  |  |  |  | 1.039 | 1.031 | 1.022 |  |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  | 1.043 | 1.034 | 1.025 |  |  |  |  |  |  |  |  |  |
| 2007 |  |  |  |  |  |  | 1.054 | 1.041 | 1.030 |  |  |  |  |  |  |  |  |  |  |
| 2008 |  |  |  |  |  | 1.071 | 1.051 | 1.035 |  |  |  |  |  |  |  |  |  |  |  |
| 2009 |  |  |  |  | 1.100 | 1.066 | 1.045 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 |  |  |  | 1.141 | 1.093 | 1.064 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 |  |  | 1.228 | 1.139 | 1.086 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 |  | 1.413 | 1.223 | 1.131 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.957 | 1.400 | 1.208 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.949 | 1.389 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.957 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selected (c) | 1.954(e) | 1.382(e) | 1.202(e) | 1.122(e) | 1.079(e) | 1.064 | 1.045 | 1.035 | 1.034 | 1.030 | 1.024 | 1.019 | 1.017 | 1.016 | 1.015 | 1.015 | 1.014 | 1.012 | 1.101 |
| Cumulative | 6.181 | 3.164 | 2.289 | 1.904 | 1.696 | 1.572 | 1.477 | 1.414 | 1.366 | 1.321 | 1.283 | 1.252 | 1.229 | 1.208 | 1.189 | 1.172 | 1.154 | 1.139 |  |



 A three-year average of the $231 \mathrm{Inc} / 231 \mathrm{Pd}$ factor is selected.
Based on calculations shown on Exhibits 2.6 .3 to 2.6.8. Each


## Actuarial Committee

Meeting Agenda for August 2, 2017
Selected Medical Development Factors - Paid to Age 231, Incurred from Age 231 to Ultimate (Continued)


80 development years.

[^6]Selected (c)
Cumulative

## 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 | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 116,431 |
| 2009 |  |  |  |  | 114,140 | 114,734 |
| 2010 |  |  | 115,877 | 117,092 | 117,782 | 115,066 |
| 2011 |  |  |  |  | 119,843 | 122,845 |
| 2012 | 116,550 | 128,262 | 131,489 | 124,144 | 124,921 |  |
| 2013 | 121,326 | 134,394 | 137,527 |  |  |  |
| 2014 | 126,704 | 140,302 |  |  |  |  |
| 2015 | 129,131 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |

## B. Development of Total Reported Indemnity Claim Counts

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-Ultimate |
| 2009 |  |  |  |  | 1.003 |  |
| 2010 |  |  |  | 1.005 | 1.003 |  |
| 2011 |  |  | 1.010 | 1.006 | 1.003 |  |
| 2012 |  | 1.025 | 1.011 | 1.006 |  |  |
| 2013 | 1.100 | 1.025 | 1.010 |  |  |  |
| 2014 | 1.108 | 1.023 |  |  |  |  |
| 2015 | 1.107 |  |  |  |  |  |
| Latest Year | 1.107 | 1.023 | 1.010 | 1.006 | 1.003 |  |
| Cumulative | 1.162 | 1.050 | 1.026 | 1.016 | 1.010 | 1.006 |
| Acc. Year | $\underline{2016}$ | 2015 | 2014 | 2013 | $\underline{2012}$ | $\underline{2011}$ |
| Ult. Claim Counts | 150,114 | 147,292 | 141,090 | 134,896 | 126,109 | 118,902 |

## C. Closed Indemnity Claim Counts

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | $\underline{51}$ | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 99,963 |
| 2009 |  |  |  |  | 89,342 | 95,340 |
| 2010 |  |  |  | 85,218 | 94,012 | 100,276 |
| 2011 |  |  | 75,627 | 88,983 | 98,136 | 104,174 |
| 2012 |  | 62,104 | 81,994 | 96,094 | 105,545 |  |
| 2013 | 38,950 | 67,874 | 89,572 | 105,005 |  |  |
| 2014 | 41,091 | 72,635 | 95,523 |  |  |  |
| 2015 | 43,814 | 78,256 |  |  |  |  |
| 2016 | 47,216 |  |  |  |  |  |

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 | $\underline{\underline{27}}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 85.3\% |
| 2009 |  |  |  |  | 79.6\% | 84.9\% |
| 2010 |  |  |  | 73.6\% | 81.2\% | 86.6\% |
| 2011 |  |  | 63.6\% | 74.8\% | 82.5\% | 87.6\% |
| 2012 |  | 49.2\% | 65.0\% | 76.2\% | 83.7\% |  |
| 2013 | 28.9\% | 50.3\% | 66.4\% | 77.8\% |  |  |
| 2014 | 29.1\% | 51.5\% | 67.7\% |  |  |  |
| 2015 | 29.7\% | 53.1\% |  |  |  |  |
| 2016 | 31.5\% |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 102,726 |
| 2009 |  |  |  |  | 90,139 | 96,916 |
| 2010 |  |  | 80,501 | 92,555 | 99,513 | 101,455 |
| 2011 |  | 67,001 | 85,380 | 98,165 | 105,545 |  |
| 2012 |  |  |  |  |  |  |
| 2013 | 42,429 | 71,670 | 91,329 | 105,005 |  |  |
| 2014 | 44,378 | 74,961 | 95,523 |  |  |  |
| 2015 | 46,329 | 78,256 |  |  |  |  |
| 2016 | 47,216 |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

F. Average Paid Medical per Closed Indemnity Claim

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 19,149 |
| 2009 |  |  |  |  | 18,015 | 20,826 |
| 2010 |  |  |  | 15,156 | 18,745 | 21,612 |
| 2011 |  |  | 10,647 | 14,689 | 18,122 | 20,812 |
| 2012 |  | 6,569 | 11,011 | 14,672 | 17,598 |  |
| 2013 | 2,981 | 6,712 | 10,976 | 14,334 |  |  |
| 2014 | 2,998 | 6,886 | 11,010 |  |  |  |
| 2015 | 3,250 | 7,317 |  |  |  |  |
| 2016 | 3,504 |  |  |  |  |  |

(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 <br> 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 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 18,353 |
| 2009 |  |  |  |  | 20,146 | 22,421 |
| 2010 |  |  |  | 17,070 | 20,024 | 22,265 |
| 2011 |  |  | 11,974 | 15,944 | 18,704 | 20,812 |
| 2012 |  | 7,460 | 11,797 | 15,269 | 17,598 |  |
| 2013 | 3,287 | 7,315 | 11,314 | 14,334 |  |  |
| 2014 | 3,270 | 7,223 | 11,010 |  |  |  |
| 2015 | 3,449 | 7,317 |  |  |  |  |
| 2016 | 3,504 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2008 |  |  |  |  |  | $1,885,378$ |  |
| 2009 |  |  |  |  | $1,538,714$ | $1,940,606$ |  |
| 2010 |  |  |  | 963,901 | $1,475,734$ | $1,861,292$ |  |
| 2011 |  | 499,825 | $1,007,242$ | $1,498,876$ | $1,857,330$ |  |  |
| 2012 |  |  |  | $1,033,043$ |  |  |  |
| 2013 | 139,447 | 524,268 | $1,033,337$ | $1,505,142$ |  |  |  |
| 2014 | 145,096 | 541,431 | $1,051,726$ |  |  |  |  |
| 2015 | 159,777 | 572,589 |  |  |  |  |  |
| 2016 | 165,464 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{\underline{27}}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 1,002,964 |
| 2009 |  |  |  |  | 1,078,558 | 976,892 |
| 2010 |  |  |  | 1,140,709 | 1,020,754 | 873,963 |
| 2011 |  |  | 1,071,922 | 1,027,103 | 891,617 | 741,766 |
| 2012 |  | 906,606 | 1,004,809 | 937,687 | 805,266 |  |
| 2013 | 510,592 | 888,863 | 958,302 | 868,650 |  |  |
| 2014 | 512,845 | 880,224 | 937,502 |  |  |  |
| 2015 | 522,717 | 887,340 |  |  |  |  |
| 2016 | 557,119 |  |  |  |  |  |

(c) Adjusted based on ultimate indemnity claim settlement ratios (Item D) and assuming a loglinear 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 | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2008 |  |  |  |  |  | 60,904 |  |
| 2009 |  |  |  | 39,441 | 49,253 | 60,919 |  |
| 2010 |  |  |  | 59,091 |  |  |  |
| 2011 |  |  | 26,632 | 36,540 | 45,384 | 54,029 |  |
| 2012 |  | 15,702 | 24,597 | 33,429 | 41,295 |  |  |
| 2013 | 6,580 | 14,719 | 22,862 | 29,896 |  |  |  |
| 2014 | 6,392 | 14,253 | 20,587 |  |  |  |  |
| 2015 | 6,306 | 11,351 |  |  |  |  |  |
| 2016 | 4,614 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2008 |  |  |  |  |  | $-168,277$ |  |
| 2009 |  |  |  |  | $-194,089$ | $-143,595$ |  |
| 2010 |  |  | $-184,401$ |  |  |  |  |
| 2011 |  |  | $-129,802$ | $-130,521$ | $-62,494$ | $-69,669$ |  |
| 2012 | $-22,891$ | $-56,892$ | $-83,874$ | $-40,168$ | $-69,232$ |  |  |
| 2013 | $-21,010$ | $-33,151$ |  |  |  |  |  |
| 2014 | $-15,860$ |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{\underline{27}}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2008 |  |  |  |  |  | 834,687 |
| 2009 |  |  |  |  | 848,964 | 792,491 |
| 2010 |  |  |  | 946,620 | 877,705 | 804,294 |
| 2011 |  |  | 942,120 | 896,582 | 829,123 | 741,766 |
| 2012 |  | 829,714 | 921,524 | 868,455 | 805,266 |  |
| 2013 | 487,701 | 832,989 | 918,134 | 868,650 |  |  |
| 2014 | 491,835 | 847,073 | 937,502 |  |  |  |
| 2015 | 506,857 | 887,340 |  |  |  |  |
| 2016 | 557,119 |  |  |  |  |  |

(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) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{\text { Year }}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2008 |  |  |  |  |  | 236,736 |
| 2009 |  |  |  |  | 215,365 | 218,863 |
| 2010 |  |  | 202,616 | 210,818 | 216,310 | 220,935 |
| 2011 |  |  |  | 208,401 |  |  |
| 2012 | 173,466 | 207,084 | 215,881 | 221,735 |  |  |
| 2013 | 195,050 | 229,611 | 239,258 |  |  |  |
| 2014 | 203,866 | 241,385 |  |  |  |  |
| 2015 | 218,710 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |

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

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 27 | 39 | 51 | 63 | 75 |
| 2008 |  |  |  |  |  | 2,956,801 |
| 2009 |  |  |  |  | 2,961,572 | 3,220,665 |
| 2010 |  |  |  | 2,737,282 | 3,077,467 | 3,327,852 |
| 2011 |  |  | 2,304,406 | 2,804,712 | 3,147,555 | 3,382,671 |
| 2012 |  | 1,532,155 | 2,139,584 | 2,583,641 | 2,883,529 |  |
| 2013 | 800,614 | 1,564,342 | 2,167,351 | 2,595,526 |  |  |
| 2014 | 831,981 | 1,618,115 | 2,228,486 |  |  |  |
| 2015 | 870,500 | 1,701,315 |  |  |  |  |
| 2016 | 941,294 |  |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> 2009 | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2010 |  |  |  | 1.124 | 1.081 |
| 2011 |  |  | 1.217 | 1.122 | 1.075 |
| 2012 |  | 1.396 | 1.208 | 1.116 |  |
| 2013 | 1.954 | 1.385 | 1.198 |  |  |
| 2014 | 1.954 | 1.377 |  |  |  |
| 2015 |  |  |  |  | 1.075 |

(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 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 |
| 2009 |  |  |  |  | 1.095 |
| 2010 |  |  |  | 1.133 | 1.087 |
| 2011 |  |  | 1.216 | 1.130 | 1.082 |
| 2012 |  | 1.396 | 1.210 | 1.125 |  |
| 2013 | 1.939 | 1.390 | 1.203 |  |  |
| 2014 | 1.937 | 1.384 |  |  |  |
| 2015 | 1.958 |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 |
| 2009 |  |  |  |  | -0.73\% |
| 2010 |  |  |  | -0.80\% | -0.49\% |
| 2011 |  |  | 0.11\% | -0.72\% | -0.65\% |
| 2012 |  | 0.01\% | -0.23\% | -0.76\% |  |
| 2013 | 0.77\% | -0.36\% | -0.46\% |  |  |
| 2014 | 0.39\% | -0.50\% |  |  |  |
| 2015 | -0.17\% |  |  |  |  |

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

| Accident | Evaluated as of (in months) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2009 |  |  |  | 1.132 | 1.092 |
| 2010 |  |  | 1.229 | 1.131 | 1.079 |
| 2011 |  | 1.413 | 1.220 | 1.122 |  |
| 2012 | 1.952 | 1.395 | 1.202 |  |  |
| 2013 | 1.954 | 1.382 |  |  |  |
| 2014 |  |  |  |  |  |
| 2015 | 1.954 | 1.382 | 1.202 | 1.122 | 1.079 |
|  | 1.961 | 1.397 | 1.217 | 1.128 | 1.086 |

(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, 2017

|  | (1) | Development Factors |  |  | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cumulative |  |  |
|  |  | (2) | (3) | (4) |  |
| Accident Year | Paid or Incurred Loss Ratio (a) | Annual (b) | Unadjusted for Impact of SB 863 (b) | Adjusted for Impact of SB 863 (b) | Projected Ultimate Loss Ratio |
|  |  |  |  |  | (5) $=(1) \times(4)$ |
| 1985 | 0.446 | 1.001 | 1.003 | 1.003 | 0.448 |
| 1986 | 0.396 | 1.000 | 1.003 | 1.003 | 0.397 |
| 1987 | 0.345 | 1.000 | 1.003 | 1.003 | 0.346 |
| 1988 | 0.330 | 1.000 | 1.003 | 1.003 | 0.331 |
| 1989 | 0.343 | 1.001 | 1.003 | 1.003 | 0.344 |
| 1990 | 0.397 | 1.000 | 1.004 | 1.004 | 0.399 |
| 1991 | 0.424 | 1.000 | 1.004 | 1.004 | 0.426 |
| 1992 | 0.349 | 1.000 | 1.004 | 1.004 | 0.351 |
| 1993 | 0.287 | 1.000 | 1.004 | 1.004 | 0.289 |
| 1994 | 0.327 | 1.000 | 1.004 | 1.004 | 0.329 |
| 1995 | 0.472 | 1.000 | 1.004 | 1.004 | 0.475 |
| 1996 | 0.529 | 1.001 | 1.005 | 1.005 | 0.532 |
| 1997 | 0.599 | 1.001 | 1.006 | 1.006 | 0.603 |
| 1998 | 0.650 | 1.000 | 1.006 | 1.006 | 0.654 |
| 1999 | 0.666 | 1.004 | 1.035 | 1.035 | 0.689 |
| 2000 | 0.573 | 1.004 | 1.039 | 1.039 | 0.595 |
| 2001 | 0.472 | 1.005 | 1.044 | 1.044 | 0.493 |
| 2002 | 0.350 | 1.005 | 1.050 | 1.050 | 0.368 |
| 2003 | 0.229 | 1.007 | 1.057 | 1.057 | 0.242 |
| 2004 | 0.136 | 1.008 | 1.065 | 1.065 | 0.145 |
| 2005 | 0.115 | 1.010 | 1.076 | 1.076 | 0.123 |
| 2006 | 0.147 | 1.014 | 1.091 | 1.091 | 0.160 |
| 2007 | 0.199 | 1.018 | 1.111 | 1.111 | 0.221 |
| 2008 | 0.248 | 1.025 | 1.139 | 1.139 | 0.282 |
| 2009 | 0.282 | 1.025 | 1.168 | 1.168 | 0.329 |
| 2010 | 0.265 | 1.039 | 1.213 | 1.213 | 0.322 |
| 2011 | 0.235 | 1.053 | 1.277 | 1.277 | 0.301 |
| 2012 | 0.199 | 1.068 | 1.365 | 1.365 | 0.271 |
| 2013 | 0.157 | 1.112 | 1.518 | 1.548 | 0.242 |
| 2014 | 0.123 | 1.207 | 1.832 | 1.951 | 0.241 |
| 2015 | 0.084 | 1.489 | 2.728 | 2.905 | 0.244 |
| 2016 | 0.034 | 2.456 | 6.700 | 7.135 | 0.245 |

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

## Developed Medical Loss Ratios Using Selected Loss Development Factors Adjusted for Changes in Claim Settlement Rates with Adjustment for SB 863 Based on Experience as of March 31, 2017

| Accident Year | (1) <br> Unadjusted Paid or Incurred Loss Ratio (a) | Adjusted for SB 863 |  |  |  | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Adjusted Paid or Incurred | Developm | ent Factors | Adjusted Developed | Projected Ultimate |
|  |  | Loss Ratio (b) | Annual (c) | Cumulative | Loss Ratio (d) | Loss Ratio |
|  |  |  |  |  | (2) $\times(4)$ | (1) + ((5) - (2)) |
| 1985 | 0.350 | 0.350 | 0.999 | 1.019 | 0.357 | 0.357 |
| 1986 | 0.332 | 0.332 | 1.000 | 1.019 | 0.339 | 0.339 |
| 1987 | 0.314 | 0.314 | 0.999 | 1.018 | 0.319 | 0.319 |
| 1988 | 0.305 | 0.305 | 1.000 | 1.018 | 0.310 | 0.310 |
| 1989 | 0.325 | 0.325 | 1.001 | 1.019 | 0.331 | 0.331 |
| 1990 | 0.367 | 0.367 | 1.001 | 1.020 | 0.375 | 0.375 |
| 1991 | 0.384 | 0.384 | 1.001 | 1.021 | 0.392 | 0.392 |
| 1992 | 0.319 | 0.319 | 1.001 | 1.022 | 0.326 | 0.326 |
| 1993 | 0.267 | 0.267 | 0.999 | 1.021 | 0.272 | 0.272 |
| 1994 | 0.309 | 0.309 | 0.999 | 1.020 | 0.316 | 0.316 |
| 1995 | 0.454 | 0.454 | 0.999 | 1.020 | 0.463 | 0.463 |
| 1996 | 0.487 | 0.487 | 1.000 | 1.019 | 0.497 | 0.497 |
| 1997 | 0.547 | 0.547 | 1.002 | 1.021 | 0.558 | 0.558 |
| 1998 | 0.660 | 0.660 | 1.001 | 1.022 | 0.675 | 0.675 |
| 1999 | 0.651 | 0.603 | 1.012 | 1.139 | 0.687 | 0.735 |
| 2000 | 0.589 | 0.546 | 1.014 | 1.154 | 0.630 | 0.673 |
| 2001 | 0.516 | 0.478 | 1.015 | 1.172 | 0.560 | 0.598 |
| 2002 | 0.397 | 0.368 | 1.015 | 1.189 | 0.437 | 0.467 |
| 2003 | 0.251 | 0.233 | 1.016 | 1.208 | 0.282 | 0.300 |
| 2004 | 0.169 | 0.157 | 1.017 | 1.229 | 0.193 | 0.205 |
| 2005 | 0.163 | 0.152 | 1.019 | 1.252 | 0.190 | 0.202 |
| 2006 | 0.208 | 0.194 | 1.024 | 1.283 | 0.249 | 0.263 |
| 2007 | 0.287 | 0.268 | 1.030 | 1.321 | 0.354 | 0.373 |
| 2008 | 0.353 | 0.330 | 1.034 | 1.366 | 0.451 | 0.473 |
| 2009 | 0.401 | 0.377 | 1.035 | 1.414 | 0.533 | 0.557 |
| 2010 | 0.382 | 0.362 | 1.045 | 1.477 | 0.534 | 0.555 |
| 2011 | 0.312 | 0.298 | 1.064 | 1.572 | 0.469 | 0.482 |
| 2012 | 0.251 | 0.244 | 1.079 | 1.696 | 0.414 | 0.421 |
| 2013 | 0.187 | 0.184 | 1.122 | 1.904 | 0.350 | 0.353 |
| 2014 | 0.140 | 0.140 | 1.202 | 2.289 | 0.320 | 0.321 |
| 2015 | 0.100 | 0.100 | 1.382 | 3.164 | 0.316 | 0.316 |
| 2016 | 0.053 | 0.053 | 1.954 | 6.181 | 0.325 | 0.325 |

(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, 2017. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and $-1.7 \%$ applied to payments made before January 1, 2015. No adjustments are applied to the incurred loss ratios.
(c) Based on Exhibits 2.6.1 and 2.6.2. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and -1.7\% applied to payments made before January 1, 2015.
(d) The developed medical loss ratios shown were derived based on an adjustment for SB 863 and RBRVS. 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, including SB 863 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 of injured workers and the legislatively scheduled benefits for that year.
(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 $1 / 1 / 2019$ 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.

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## Annual Medical Cost Level Change - Non-Legislative

| Accident Year | (1) <br> Proportion of Medical Subject to Fee Schedule (a) | (2) <br> Proportion of Medical Not Subject to Fee Schedule (a) |  | (4) <br> Change in Medical $\mathrm{CPI}(\mathrm{c})$ | (5) <br> Impact of CPI Change on Total Medical (d) | (6) <br> Annual <br> Non-Legislative Cost Impact on Total Medical (e) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 | 0.665 | 0.335 | 2.3\% | 6.5\% | 2.2\% | 4.5\% |
| 1986 | 0.604 | 0.396 | 0.0\% | 9.1\% | 3.0\% | 3.0\% |
| 1987 | 0.610 | 0.390 | 0.9\% | 7.4\% | 2.9\% | 3.8\% |
| 1988 | 0.649 | 0.351 | 0.8\% | 7.7\% | 3.0\% | 3.8\% |
| 1989 | 0.647 | 0.353 | 0.0\% | 8.6\% | 3.0\% | 3.0\% |
| 1990 | 0.661 | 0.339 | 0.0\% | 10.4\% | 3.7\% | 3.7\% |
| 1991 | 0.631 | 0.369 | 0.0\% | 10.6\% | 3.6\% | 3.6\% |
| 1992 | 0.628 | 0.372 | 0.0\% | 8.1\% | 3.0\% | 3.0\% |
| 1993 | 0.565 | 0.435 | 0.0\% | 7.3\% | 2.7\% | 2.7\% |
| 1994 | 0.691 | 0.309 | -3.6\% | 4.3\% | 1.3\% (i) | -2.3\% |
| 1995 | 0.681 | 0.319 | 0.0\% | 3.0\% | 0.9\% | 0.9\% |
| 1996 | 0.663 | 0.337 | 0.0\% | 3.0\% | 1.0\% | 1.0\% |
| 1997 | 0.643 | 0.357 | 0.0\% | 2.2\% | 0.7\% | 0.7\% |
| 1998 | 0.658 | 0.342 | 0.0\% | 2.2\% | 0.8\% | 0.8\% |
| 1999 | 0.728 | 0.272 | 1.6\% | 3.3\% | 0.9\% (ii) | 2.5\% |
| 2000 | 0.715 | 0.285 | 0.5\% | 4.3\% | 1.2\% | 1.7\% |
| 2001 | 0.722 | 0.278 | 1.5\% | 4.8\% | 1.4\% | 2.9\% |
| 2002 | 0.635 | 0.365 | 0.6\% | 5.1\% | 1.4\% | 2.0\% |
| 2003 | 0.786 | 0.214 | 0.0\% | 4.8\% | 1.4\% (iii) | 1.4\% |
| 2004 | 0.952 | 0.048 | 0.0\% | 5.0\% | 0.0\% (iv),(v) | 0.0\% |
| 2005 | 0.936 | 0.064 | 0.0\% | 4.8\% | 0.0\% (v) | 0.0\% |
| 2006 | 0.926 | 0.074 | 0.0\% | 4.1\% | 0.3\% | 0.3\% |
| 2007 | 0.923 | 0.077 | 1.4\% | 5.3\% | 0.4\% | 1.8\% |
| 2008 | 0.896 | 0.104 | -0.1\% | 4.2\% | 0.3\% | 0.2\% |
| 2009 | 0.894 | 0.106 | 0.0\% | 3.6\% | 0.4\% | 0.4\% |
| 2010 | 0.895 | 0.105 | 0.0\% | 2.8\% | 0.3\% | 0.3\% |
| 2011 | 0.969 | 0.031 | 0.0\% | 3.2\% | 0.3\% | 0.3\% |
| 2012 | 0.969 | 0.031 | 0.0\% | 2.7\% | 0.1\% | 0.1\% |
| 2013 | 0.938 | 0.062 | 0.0\% | 2.6\% | 0.1\% | 0.1\% |
| 2014 | 0.928 | 0.072 | 0.5\% | 4.2\% | 0.3\% | 0.8\% |
| 2015 | 0.934 | 0.066 | 0.1\% | 3.1\% | 0.2\% | 0.3\% |
| 2016 | 0.919 | 0.081 | 0.1\% | 5.4\% | 0.4\% | 0.5\% |
| 2017 | 0.919 | 0.081 | 0.1\% | 2.9\% | 0.2\% | 0.3\% |
| 2018 | 0.919 | 0.081 | 0.0\% | 3.3\% | 0.3\% | 0.3\% |
| 1/1/2019 | 0.919 | 0.081 | 0.0\% (Annual 0.0\%) | 1.5\% (Annual 3.0\%) | 0.1\% | 0.1\% |

(a) From a Special Carrier Study through 1990. Based on WCIRB's Aggregate Indemnity and Medical Costs Calls for years 1991 through 2012. Based on WCIRB medical transaction data from 2013 onwards. Accident years 2011 and subsequent do not include MCCP costs.
(b) Based on the WCIRB's evaluation of the cost impact of changes in the medical fee schedules. Includes the 1/1/2014 changes to the physician fee schedule to a resource-based relative value scale (RBRVS) except for the proportion reflected in loss development (See Exhibit 2.4).
(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
(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) | $\begin{gathered} (3) \\ \text { Annual Total } \\ \text { Legislative Cost } \\ \text { Impact on Medical(c) } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 1985 | 0.0\% | 0.0\% | 0.0\% |
| 1986 | 0.0\% | 0.0\% | 0.0\% |
| 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 | -3.0\% | 0.0\% | -3.0\% |
| 2013 | -3.0\% | 0.2\% | -2.8\% |
| 2014 | -2.0\% | 1.3\% | -0.7\% |
| 2015 | 0.0\% | 0.0\% | 0.0\% |
| 2016 | 0.0\% | 0.0\% | 0.0\% |
| 2017 | 0.0\% | 0.0\% | 0.0\% |
| 2018 | 0.0\% | 0.0\% | 0.0\% |
| 1/1/2019 | 0.0\% | 0.0\% | 0.0\% |

(a) These annual cost impacts reflect the WCIRB's retrospective estimates of the cost impact of legislation based on WCIRB cost monitoring results. These factors do not include the estimated - $4.2 \%$ impact of $1 / 1 / 2013$ medical provisions in SB 863, which was reflected in loss development projections.
(b) This reflects the annual percentage impact on medical costs due to changes in the frequency of
(c) [Column (1) + 1.0] $\times[$ Column (2) +1.0$]-1.0$

## Total Medical Cost Level Factors

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | Annual | Annual | Total | Composite |
|  | Non-Legislative | Legislative | Annual Cost | Medical |
| Accident | Cost Impact on | Cost Impact on | Impact on | On-level |
| Year | Medical (a) | Medical(b) | Medical(c) | Factor(d) |
| 1985 | 4.5\% | 0.0\% | 4.5\% | 0.991 |
| 1986 | 3.0\% | 0.0\% | 3.0\% | 0.962 |
| 1987 | 3.8\% | 0.0\% | 3.8\% | 0.927 |
| 1988 | 3.8\% | 0.0\% | 3.8\% | 0.893 |
| 1989 | 3.0\% | 0.0\% | 3.0\% | 0.867 |
| 1990 | 3.7\% | 19.1\% | 23.5\% | 0.702 |
| 1991 | 3.6\% | 12.9\% | 16.9\% | 0.601 |
| 1992 | 3.0\% | -7.9\% | -5.2\% | 0.633 |
| 1993 | 2.7\% | -18.7\% | -16.5\% | 0.758 |
| 1994 | -2.3\% | -2.3\% | -4.6\% | 0.795 |
| 1995 | 0.9\% | 0.5\% | 1.4\% | 0.784 |
| 1996 | 1.0\% | 0.4\% | 1.4\% | 0.773 |
| 1997 | 0.7\% | 0.2\% | 0.9\% | 0.766 |
| 1998 | 0.8\% | 12.6\% | 13.5\% | 0.675 |
| 1999 | 2.5\% | 12.6\% | 15.4\% | 0.585 |
| 2000 | 1.7\% | 7.0\% | 8.8\% | 0.537 |
| 2001 | 2.9\% | 6.6\% | 9.7\% | 0.490 |
| 2002 | 2.0\% | -5.6\% | -3.7\% | 0.509 |
| 2003 | 1.4\% | -6.0\% | -4.7\% | 0.534 |
| 2004 | 0.0\% | -33.9\% | -33.9\% | 0.807 |
| 2005 | 0.0\% | -13.9\% | -13.9\% | 0.937 |
| 2006 | 0.3\% | -5.1\% | -4.8\% | 0.984 |
| 2007 | 1.8\% | 0.1\% | 1.9\% | 0.966 |
| 2008 | 0.2\% | 0.5\% | 0.7\% | 0.959 |
| 2009 | 0.4\% | 1.0\% | 1.4\% | 0.946 |
| 2010 | 0.3\% | 0.0\% | 0.3\% | 0.943 |
| 2011 | 0.3\% | -2.0\% | -1.7\% | 0.960 |
| 2012 | 0.1\% | -3.0\% | -2.9\% | 0.988 |
| 2013 | 0.1\% | -2.8\% | -2.7\% | 1.016 |
| 2014 | 0.8\% | -0.7\% | 0.1\% | 1.020 (e) |
| 2015 | 0.3\% | 0.0\% | 0.3\% | 1.018 (e) |
| 2016 | 0.5\% | 0.0\% | 0.5\% | 1.014 (e) |
| 2017 | 0.3\% | 0.0\% | 0.3\% |  |
| 2018 | 0.3\% | 0.0\% | 0.3\% |  |
| 1/1/2019 | 0.1\% | 0.0\% | 0.1\% |  |

(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 $1 / 1 / 2019$ level.
(e) The on-level factors for accident years 2014, 2015, and 2016 include the estimated impact of the January 1, 2014 physician fee schedule for the service year 2017.

## Annual Wage Level Changes

| Year | Annual Wage Level Change | Factor to a 1/1/2019 Wage Level |
| :---: | :---: | :---: |
| 1985 | 5.7 | 3.286 |
| 1986 | 4.7 | 3.138 |
| 1987 | 5.6 | 2.972 |
| 1988 | 4.4 | 2.846 |
| 1989 | 4.3 | 2.729 |
| 1990 | 5.0 | 2.599 |
| 1991 | 2.3 | 2.541 |
| 1992 | 4.7 | 2.427 |
| 1993 | 1.2 | 2.398 |
| 1994 | 1.8 | 2.356 |
| 1995 | 2.9 | 2.289 |
| 1996 | 3.4 | 2.214 |
| 1997 | 4.7 | 2.114 |
| 1998 | 5.2 | 2.010 |
| 1999 | 6.2 | 1.893 |
| 2000 | 9.0 | 1.736 |
| 2001 | 0.6 | 1.726 |
| 2002 | 0.5 | 1.717 |
| 2003 | 3.3 | 1.663 |
| 2004 | 4.7 | 1.588 |
| 2005 | 3.1 | 1.540 |
| 2006 | 4.6 | 1.472 |
| 2007 | 4.5 | 1.409 |
| 2008 | 2.1 | 1.380 |
| 2009 | 0.5 | 1.373 |
| 2010 | 3.0 | 1.333 |
| 2011 | 3.1 | 1.293 |
| 2012 | 4.1 | 1.242 |
| 2013 | 0.7 | 1.234 |
| 2014 | 3.3 | 1.194 |
| 2015 | 4.3 | 1.145 |
| 2016 | 3.2 | 1.109 |
| Projected: |  |  |
| 2017 | 4.1 |  |
| 2018 | 4.2 |  |
| 1/1/2019 | 2.3 |  |

Source: California average annual wage level changes for 1985 to 2019 derived from information published by the UCLA Anderson School of Business as of June 2017.

|  | (1) | (2a) | (2b) | (2c) | (3) | (4) | (5) | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calendar Year | Factor to a $1 / 1 / 2019$ Wage Level (a) | Ratio of Industry Average Charged Rates to Advisory Pure Premium <br> (a) Rates (b) | Factor to Industry Average Filed Pure Premium Rate Level as of January 1, 2017 (c) | Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of January 1, 2017 (d) | Adjustment to Remove Surcharge Premium (e) | Average <br> Experience Modification ( f ) | Off-Balance Correction in Advisory January 1, 2017 Pure Premium Rates | Factor to Adjust for Impact of Premium Resulting from Audits (g) | Composite Premium Adjustment Factor (h) |
| 1985 | 3.286 | --- | --- | 0.998 | 0.991 | 0.984 | 1.026 | --- | 3.218 |
| 1986 | 3.138 | --- | --- | 0.911 | 0.991 | 0.983 | 1.026 | --- | 2.811 |
| 1987 | 2.972 | --- | --- | 0.801 | 0.992 | 0.983 | 1.026 | --- | 2.342 |
| 1988 | 2.846 | --- | --- | 0.717 | 0.993 | 0.963 | 1.026 | --- | 2.050 |
| 1989 | 2.729 | --- | --- | 0.705 | 0.993 | 0.945 | 1.026 | --- | 1.972 |
| 1990 | 2.599 | --- | --- | 0.688 | 0.991 | 0.942 | 1.026 | --- | 1.834 |
| 1991 | 2.541 | --- | --- | 0.637 | 0.987 | 0.939 | 1.026 | --- | 1.658 |
| 1992 | 2.427 | --- | --- | 0.611 | 0.982 | 0.940 | 1.026 | --- | 1.511 |
| 1993 | 2.398 | --- | --- | 0.603 | 0.981 | 0.949 | 1.026 | --- | 1.458 |
| 1994 | 2.356 | --- | --- | 0.691 | 0.986 | 0.948 | 1.026 | --- | 1.650 |
| 1995 | 2.289 | --- | --- | 0.935 | 0.995 | 0.958 | 1.026 | --- | 2.168 |
| 1996 | 2.214 | 1.024 | 0.994 | 0.971 | 1.000 | 0.935 | 1.026 | --- | 2.240 |
| 1997 | 2.114 | 0.989 | 0.991 | 1.002 | 1.000 | 0.949 | 1.026 | --- | 2.176 |
| 1998 | 2.010 | 0.965 | 1.033 | 1.070 | 1.000 | 0.959 | 1.026 | --- | 2.187 |
| 1999 | 1.893 | 0.972 | 1.044 | 1.074 | 1.000 | 0.954 | 1.026 | --- | 2.077 |
| 2000 | 1.736 | 1.006 | 0.946 | 0.940 | 1.000 | 0.970 | 1.026 | --- | 1.641 |
| 2001 | 1.726 | 1.029 | 0.834 | 0.810 | 1.000 | 0.969 | 1.026 | --- | 1.407 |
| 2002 | 1.717 | 1.157 | 0.746 | 0.645 | 1.000 | 0.991 | 1.026 | --- | 1.089 |
| 2003 | 1.663 | 1.267 | 0.611 | 0.482 | 1.000 | 1.005 | 1.026 | --- | 0.778 |
| 2004 | 1.588 | 1.397 | 0.621 | 0.445 | 1.000 | 0.981 | 1.026 | --- | 0.701 |
| 2005 | 1.540 | 1.470 | 0.747 | 0.508 | 1.000 | 0.982 | 1.026 | --- | 0.777 |
| 2006 | 1.472 | 1.447 | 0.963 | 0.666 | 1.000 | 0.956 | 1.026 | --- | 0.999 |
| 2007 | 1.409 | 1.493 | 1.312 | 0.879 | 1.000 | 0.931 | 1.026 | 0.985 | 1.277 |
| 2008 | 1.380 | 1.426 | 1.561 | 1.095 | 1.000 | 0.946 | 1.026 | 0.991 | 1.543 |
| 2009 | 1.373 | 1.366 | 1.539 | 1.127 | 1.000 | 0.937 | 1.026 | 1.034 | 1.664 |
| 2010 | 1.333 | 1.383 | 1.508 | 1.090 | 1.000 | 0.941 | 1.026 | 1.005 | 1.513 |
| 2011 | 1.293 | 1.401 | 1.507 | 1.076 | 1.000 | 0.982 | 1.026 | --- | 1.381 |
| 2012 | 1.242 | 1.222 | 1.242 | 1.016 | 1.000 | 1.000 | 1.026 | --- | 1.231 |
| 2013 | 1.234 | 1.138 | 1.000 | 0.879 | 1.000 | 0.983 | 1.026 | --- | 1.075 |
| 2014 | 1.194 | 1.126 | 0.921 | 0.818 | 1.000 | 0.961 | 1.026 | --- | 0.991 |
| 2015 | 1.145 | 1.108 | 0.895 | 0.808 | 1.000 | 0.952 | 1.026 | --- | 0.947 |
| 2016 | 1.109 | 1.147 | 0.964 | 0.840 | 1.000 | 0.952 | 1.026 | --- | 0.955 |

(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, 2017 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2017 pure premium rate ( $\$ 2.19$ ) to the industry average filed pure premium rate as of January 1, 2017 (\$2.42).
(d) (2b) $\div(2 \mathrm{a})$. This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of January 1, 2017.
(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) $) \times(2 \mathrm{c}) \times(3) \div[(4) \times(5)]$ for all other calendar years.

## 2016 Accident Year Indemnity Claim Frequency Model As of PY 2014 1st Set \& June 2017 UCLA



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 2016; June 2017 UCLA Anderson Forecasts for 2017 on.
Regression is over AY 1979 through AY 2015. AY 2016 through AY 2019 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 2015 change is based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 policies

## Projection of Indemnity Severity Trends by Accident Year Based on Experience as of March 31, 2017

|  | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated |  | Indemnity | Ultimate |  |
| Accident | Ultimate | Annual | Adjustment | On-level | Annual |
| Year | Severity | \% Change | Factor(a) | Severity | \% Change |
|  |  |  |  | (1) $\times$ (3) |  |
| 1990 | 9,957 | --- | 1.848 | 18,401 | --- |
| 1991 | 10,894 | 9.4\% | 1.748 | 19,041 | 3.5\% |
| 1992 | 10,992 | 0.9\% | 1.690 | 18,575 | -2.4\% |
| 1993 | 11,971 | 8.9\% | 1.680 | 20,108 | 8.3\% |
| 1994 | 12,939 | 8.1\% | 1.759 | 22,765 | 13.2\% |
| 1995 | 14,503 | 12.1\% | 1.639 | 23,768 | 4.4\% |
| 1996 | 16,235 | 11.9\% | 1.538 | 24,967 | 5.0\% |
| 1997 | 19,331 | 19.1\% | 1.380 | 26,673 | 6.8\% |
| 1998 | 21,121 | 9.3\% | 1.273 | 26,880 | 0.8\% |
| 1999 | 23,191 | 9.8\% | 1.179 | 27,349 | 1.7\% |
| 2000 | 24,555 | 5.9\% | 1.101 | 27,033 | -1.2\% |
| 2001 | 27,049 | 10.2\% | 1.102 | 29,809 | 10.3\% |
| 2002 | 26,170 | -3.3\% | 1.131 | 29,609 | -0.7\% |
| 2003 | 25,731 | -1.7\% | 1.130 | 29,088 | -1.8\% |
| 2004 | 21,003 | -18.4\% | 1.344 | 28,236 | -2.9\% |
| 2005 | 18,925 | -9.9\% | 1.546 | 29,253 | 3.6\% |
| 2006 | 20,650 | 9.1\% | 1.441 | 29,750 | 1.7\% |
| 2007 | 22,475 | 8.8\% | 1.396 | 31,368 | 5.4\% |
| 2008 | 24,674 | 9.8\% | 1.323 | 32,632 | 4.0\% |
| 2009 | 25,718 | 4.2\% | 1.315 | 33,810 | 3.6\% |
| 2010 | 25,426 | -1.1\% | 1.296 | 32,962 | -2.5\% |
| 2011 | 25,077 | -1.4\% | 1.276 | 31,998 | -2.9\% |
| 2012 | 24,652 | -1.7\% | 1.246 | 30,716 | -4.0\% |
| 2013 | 25,086 | 1.8\% | 1.214 | 30,463 | -0.8\% |
| 2014 | 27,127 | 8.1\% | 1.116 | 30,276 | -0.6\% |
| 2015 | 28,186 | 3.9\% | 1.089 | 30,692 | 1.4\% |
| 2016 | 29,214 | 3.6\% | 1.068 | 31,195 | 1.6\% |
| (6) Estimated Annual Exponential Trend Based on 2005 to 2016: |  |  |  |  | 0.0\% |
| (7) Estimated Annual Exponential Trend Based on 2011 to 2016: |  |  |  |  | -0.4\% |
| 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, 2017

|  | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated |  | Medical | Ultimate |  |
| Accident | Ultimate | Annual | Adjustment | On-level | Annual |
| Year | Severity(a) | \% Change | Factor(b) | Severity | \% Change |
|  |  |  |  | (1) $\times(3)$ |  |
| 1990 | 8,721 | --- | 1.016 | 8,856 | --- |
| 1991 | 9,363 | 7.4\% | 0.997 | 9,331 | 5.4\% |
| 1992 | 9,439 | 0.8\% | 0.964 | 9,097 | -2.5\% |
| 1993 | 10,455 | 10.8\% | 0.947 | 9,904 | 8.9\% |
| 1994 | 11,554 | 10.5\% | 0.996 | 11,513 | 16.2\% |
| 1995 | 13,207 | 14.3\% | 0.989 | 13,061 | 13.4\% |
| 1996 | 14,178 | 7.4\% | 0.979 | 13,880 | 6.3\% |
| 1997 | 16,879 | 19.1\% | 0.972 | 16,408 | 18.2\% |
| 1998 | 20,685 | 22.5\% | 0.858 | 17,750 | 8.2\% |
| 1999 | 23,511 | 13.7\% | 0.744 | 17,489 | -1.5\% |
| 2000 | 26,490 | 12.7\% | 0.684 | 18,120 | 3.6\% |
| 2001 | 31,529 | 19.0\% | 0.625 | 19,698 | 8.7\% |
| 2002 | 31,948 | 1.3\% | 0.649 | 20,743 | 5.3\% |
| 2003 | 30,529 | -4.4\% | 0.683 | 20,840 | 0.5\% |
| 2004 | 28,285 | -7.4\% | 0.905 | 25,593 | 22.8\% |
| 2005 | 29,150 | 3.1\% | 0.907 | 26,440 | 3.3\% |
| 2006 | 32,001 | 9.8\% | 0.905 | 28,968 | 9.6\% |
| 2007 | 35,925 | 12.3\% | 0.891 | 32,022 | 10.5\% |
| 2008 | 39,270 | 9.3\% | 0.891 | 34,995 | 9.3\% |
| 2009 | 41,454 | 5.6\% | 0.892 | 36,981 | 5.7\% |
| 2010 | 41,839 | 0.9\% | 0.895 | 37,459 | 1.3\% |
| 2011 | 38,316 (c) | --- | 0.919 | 35,220 (c) | --- |
| 2012 | 36,441 | -4.9\% | 0.957 | 34,873 | -1.0\% |
| 2013 | 34,731 | -4.7\% | 0.996 | 34,578 | -0.8\% |
| 2014 | 34,238 | -1.4\% | 1.018 | 34,859 | 0.8\% |
| 2015 | 34,647 | 1.2\% | 1.018 | 35,265 | 1.2\% |
| 2016 | 36,756 | 6.1\% | 1.014 | 37,266 | 5.7\% |
|  |  | Selected | Severity Tre |  | 3.0\% |

(a) Estimated ultimate severities for all accident years are derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts. The estimated ultimate medical severities were derived from the projected ultimate loss ratios shown in Exhibit 3.2, column (6).
(b) These adjustment factors are based on Exhibit 4.4, excluding the impact of frequency, and including the impact of SB 863 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.
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, 2017

Selected Medical Severity Trend:
(a) Estimated ultimate severities for all accident years were derived by dividing ultimate medical losses on indemnity
claims by ultimate indemnity claim counts.
(b) Adjustments to accident years 2005 through 2010 based on WCIRB's Annual Calls for Direct California Workers'

Source: WCIRB experience calls

Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Based on Experience as of March 31, 2017

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident Year | 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) $\times(2) \div(3)$ |
| 1985 | 0.448 | 1.537 | 3.218 | 0.214 |
| 1986 | 0.397 | 1.513 | 2.811 | 0.214 |
| 1987 | 0.346 | 1.485 | 2.342 | 0.220 |
| 1988 | 0.331 | 1.463 | 2.050 | 0.236 |
| 1989 | 0.344 | 1.441 | 1.972 | 0.251 |
| 1990 | 0.399 | 1.155 | 1.834 | 0.251 |
| 1991 | 0.426 | 0.952 | 1.658 | 0.245 |
| 1992 | 0.351 | 1.004 | 1.511 | 0.233 |
| 1993 | 0.289 | 1.218 | 1.458 | 0.241 |
| 1994 | 0.329 | 1.273 | 1.650 | 0.254 |
| 1995 | 0.475 | 1.179 | 2.168 | 0.258 |
| 1996 | 0.532 | 1.102 | 2.240 | 0.261 |
| 1997 | 0.603 | 0.987 | 2.176 | 0.273 |
| 1998 | 0.654 | 0.910 | 2.187 | 0.272 |
| 1999 | 0.689 | 0.843 | 2.077 | 0.280 |
| 2000 | 0.595 | 0.787 | 1.641 | 0.286 |
| 2001 | 0.493 | 0.788 | 1.407 | 0.276 |
| 2002 | 0.368 | 0.809 | 1.089 | 0.273 |
| 2003 | 0.242 | 0.808 | 0.778 | 0.251 |
| 2004 | 0.145 | 1.114 | 0.701 | 0.230 |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.271 | 1.267 | 1.231 | 0.279 |
| 2013 | 0.242 | 1.233 | 1.075 | 0.278 |
| 2014 | 0.241 | 1.116 | 0.991 | 0.271 |
| 2015 | 0.244 | 1.089 | 0.947 | 0.280 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.271 |
| 2018 |  |  |  | 0.268 |
| 1/1/2019 |  |  |  | 0.266 |

(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 2016 from Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios Based on Experience as of March 31, 2017


* On-level indemnity to industry average filed pure premium ratios (see Exhibit 7.1)
** The $1 / 1 / 2019$ indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2015 and 2016 years.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios Based on Experience as of March 31, 2017

| Accident <br> Year | (1) <br> Developed Medical Loss Ratio(a) | (2) | (3) | (4) <br> On-Level Medical to Industry Average Filed Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  | Composite Medical On-Level Factor(b) | Composite Premium Adjustment Factor(c) |  |
|  |  |  |  |  |
| 1985 | 0.357 | 0.991 | 3.218 | 0.110 |
| 1986 | 0.339 | 0.962 | 2.811 | 0.116 |
| 1987 | 0.319 | 0.927 | 2.342 | 0.126 |
| 1988 | 0.310 | 0.893 | 2.050 | 0.135 |
| 1989 | 0.331 | 0.867 | 1.972 | 0.146 |
| 1990 | 0.375 | 0.702 | 1.834 | 0.144 |
| 1991 | 0.392 | 0.601 | 1.658 | 0.142 |
| 1992 | 0.326 | 0.633 | 1.511 | 0.137 |
| 1993 | 0.272 | 0.758 | 1.458 | 0.142 |
| 1994 | 0.316 | 0.795 | 1.650 | 0.152 |
| 1995 | 0.463 | 0.784 | 2.168 | 0.167 |
| 1996 | 0.497 | 0.773 | 2.240 | 0.171 |
| 1997 | 0.558 | 0.766 | 2.176 | 0.196 |
| 1998 | 0.675 | 0.675 | 2.187 | 0.208 |
| 1999 | 0.687 | 0.585 | 2.077 | 0.193 |
| 2000 | 0.630 | 0.537 | 1.641 | 0.206 |
| 2001 | 0.560 | 0.490 | 1.407 | 0.195 |
| 2002 | 0.437 | 0.509 | 1.089 | 0.204 |
| 2003 | 0.282 | 0.534 | 0.778 | 0.193 |
| 2004 | 0.193 | 0.807 | 0.701 | 0.222 |
| 2005 | 0.190 | 0.937 | 0.777 | 0.230 |
| 2006 | 0.249 | 0.984 | 0.999 | 0.245 |
| 2007 | 0.354 | 0.966 | 1.277 | 0.268 |
| 2008 | 0.451 | 0.959 | 1.543 | 0.280 |
| 2009 | 0.533 | 0.946 | 1.664 | 0.303 |
| 2010 | 0.534 | 0.943 | 1.513 | 0.333 |
| 2011 | 0.469 | 0.960 | 1.381 | 0.326 |
| 2012 | 0.414 | 0.988 | 1.231 | 0.332 |
| 2013 | 0.350 | 1.016 | 1.075 | 0.331 |
| 2014 | 0.320 | 1.020 | 0.991 | 0.330 |
| 2015 | 0.316 | 1.018 | 0.947 | 0.340 |
| 2016 | 0.325 | 1.014 | 0.955 | 0.345 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.351 |
| 2018 |  |  |  | 0.356 |
| 1/1/2019 |  |  |  | 0.359 |
| (a) | See Exhibit 3.2. |  |  |  |
| (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 2016 from Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios. |  |  |  |
| (e) | 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. |  |  |  |

# On-Level Medical Loss to Industry Average Filed Pure Premium Ratios 

Based on Experience as of March 31, 2017


* On-level medical to industry average filed pure premium ratios (see Exhibit 7.3)
** The 1/1/2019 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2015 and 2016 years.

Indicated Loss to Industry Average Filed Pure Premium Ratios For Policies with Effective Dates between July 1, 2017 and December 31, 2017

Based on Experience as of March 31, 2017

|  | Indemnity | Medical | Total |
| :--- | :--- | :--- | :--- |
| 1. Projected Loss to Industry Average Filed Pure Premium Ratio <br> (See Exhibits 7.1 and 7.3) | 0.266 | 0.359 | 0.625 |

## Quarterly Incurred Indemnity Loss Development Factors

Through March 31, 2017

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | $\underline{2000}$ | 2001 | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | 2011 | 2012 | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| 6/3 |  |  |  |  |  |  |  |  | 2.417 | 2.724 | 2.785 | 3.031 | 3.116 | 3.052 | 3.238 | 3.344 | 3.303 | 3.209 | 3.201 |
| 9/6 |  |  |  |  |  |  |  |  | 1.656 | 1.776 | 1.820 | 1.848 | 1.904 | 2.001 | 1.966 | 1.940 | 1.960 | 1.948 | 1.945 |
| 12/9 |  |  |  |  |  |  |  |  | 1.448 | 1.511 | 1.510 | 1.530 | 1.564 | 1.632 | 1.587 | 1.585 | 1.570 | 1.578 | 1.578 |
| 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 |
| 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 |  |
| 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 |  |
| 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 |  |
| 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 |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |  |
| 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 |  |  |  |  |
| 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 |  |  |  |  |
| 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 |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 81/78 | 1.005 | 1.002 | 1.003 | 1.004 | 1.004 | 1.005 | 1.006 | 1.010 | 1.009 | 1.007 | 1.007 | 1.006 | 1.006 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |

Source: WCIRB acident year experience calls

## Quarterly Incurred Medical Loss Development Factors * Through March 31, 2017

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | $\underline{1998}$ | 1999 | $\underline{2000}$ | $\underline{2001}$ | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| 6/3 |  |  |  |  |  |  |  |  | 2.584 | 2.662 | 2.782 | 2.892 | 2.992 | 2.757 | 2.853 | 2.843 | 2.921 | 2.863 | 3.019 |
| 9/6 |  |  |  |  |  |  |  |  | 1.650 | 1.744 | 1.717 | 1.807 | 1.800 | 1.827 | 1.833 | 1.819 | 1.840 | 1.884 | 1.755 |
| 12/9 |  |  |  |  |  |  |  |  | 1.453 | 1.443 | 1.466 | 1.454 | 1.488 | 1.521 | 1.484 | 1.500 | 1.482 | 1.451 | 1.487 |
| 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 |
| 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 |  |
| 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 |  |
| 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 |  |
| 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 |  |
| 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 |  |  |
| 33/30 | 1.035 | 1.047 | 1.051 | 1.059 | 1.035 | 1.018 | 1.032 | 1.030 | 1.041 | 1.045 | 1.045 | 1.051 | 1.055 | 1.045 | 1.046 | 1.031 | 1.033 |  |  |
| 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 |  |  |
| 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 | 1.024 |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 48/45 | 1.028 | 1.023 | 1.026 | 1.017 | 1.008 | 1.013 | 1.025 | 1.018 | 1.022 | 1.025 | 1.029 | 1.034 | 1.022 | 1.023 | 1.020 | 1.018 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |  |
| 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 |  |  |  |  |
| 60/57 | 1.021 | 1.021 | 1.015 | 1.009 | 1.008 | 1.014 | 1.020 | 1.019 | 1.018 | 1.017 | 1.019 | 1.016 | 1.015 | 1.014 | 1.012 |  |  |  |  |
| 63/60 | 1.014 | 1.020 | 1.013 | 1.012 | 1.008 | 1.016 | 1.015 | 1.021 | 1.015 | 1.018 | 1.016 | 1.020 | 1.015 | 1.010 | 1.010 |  |  |  |  |
| 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 | 1.009 |  |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 |  |  |  |  |  |
| 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 | 1.002 |  |  |  |  |  |
| 78/75 | 1.012 | 1.012 | 1.008 | 1.012 | 1.010 | 1.011 | 1.018 | 1.013 | 1.012 | 1.012 | 1.010 | 1.008 | 1.008 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 87/84 | 1.005 | 1.008 | 1.008 | 1.010 | 1.009 | 1.010 | 1.012 | 1.014 | 1.012 | 1.008 | 1.007 | 1.004 | 1.003 |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |

Source: WCIRB acident year experience calls

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


## Quarterly Paid Indemnity Loss Development Factors

Through March 31, 2017

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | $\underline{2000}$ | $\underline{2001}$ | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| 6/3 |  |  |  |  |  |  |  |  | 4.376 | 4.495 | 4.553 | 4.807 | 4.911 | 4.722 | 4.854 | 5.099 | 5.076 | 5.056 | 5.087 |
| 9/6 |  |  |  |  |  |  |  |  | 2.259 | 2.375 | 2.377 | 2.398 | 2.452 | 2.432 | 2.484 | 2.462 | 2.462 | 2.484 | 2.456 |
| 12/9 |  |  |  |  |  |  |  |  | 1.812 | 1.834 | 1.810 | 1.825 | 1.861 | 1.869 | 1.877 | 1.866 | 1.879 | 1.910 | 1.882 |
| 15/12 | 1.499 | 1.536 | 1.538 | 1.552 | 1.550 | 1.516 | 1.491 | 1.456 | 1.482 | 1.488 | 1.481 | 1.507 | 1.532 | 1.539 | 1.506 | 1.539 | 1.540 | 1.559 | 1.571 |
| 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 |  |
| 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 |  |
| 24/21 | 1.259 | 1.257 | 1.256 | 1.258 | 1.260 | 1.244 | 1.183 | 1.181 | 1.195 | 1.191 | 1.194 | 1.206 | 1.209 | 1.215 | 1.213 | 1.204 | 1.216 | 1.211 |  |
| 27/24 | 1.186 | 1.199 | 1.203 | 1.200 | 1.205 | 1.186 | 1.140 | 1.142 | 1.151 | 1.149 | 1.153 | 1.162 | 1.165 | 1.168 | 1.164 | 1.159 | 1.170 | 1.176 |  |
| 30/27 | 1.157 | 1.161 | 1.165 | 1.175 | 1.172 | 1.161 | 1.122 | 1.117 | 1.126 | 1.129 | 1.130 | 1.141 | 1.141 | 1.137 | 1.134 | 1.141 | 1.147 |  |  |
| 33/30 | 1.118 | 1.125 | 1.130 | 1.142 | 1.136 | 1.123 | 1.097 | 1.096 | 1.100 | 1.101 | 1.108 | 1.114 | 1.116 | 1.112 | 1.111 | 1.111 | 1.115 |  |  |
| 36/33 | 1.102 | 1.103 | 1.103 | 1.115 | 1.111 | 1.097 | 1.085 | 1.081 | 1.080 | 1.084 | 1.092 | 1.094 | 1.098 | 1.091 | 1.091 | 1.096 | 1.092 |  |  |
| 39/36 | 1.074 | 1.081 | 1.081 | 1.092 | 1.087 | 1.072 | 1.070 | 1.066 | 1.064 | 1.067 | 1.074 | 1.078 | 1.077 | 1.073 | 1.075 | 1.074 | 1.075 |  |  |
| 42/39 | 1.067 | 1.071 | 1.077 | 1.080 | 1.073 | 1.063 | 1.059 | 1.058 | 1.058 | 1.062 | 1.067 | 1.067 | 1.071 | 1.070 | 1.065 | 1.064 |  |  |  |
| 45/42 | 1.057 | 1.054 | 1.063 | 1.064 | 1.056 | 1.049 | 1.047 | 1.049 | 1.047 | 1.051 | 1.058 | 1.059 | 1.057 | 1.055 | 1.054 | 1.052 |  |  |  |
| 48/45 | 1.049 | 1.050 | 1.055 | 1.053 | 1.046 | 1.044 | 1.041 | 1.044 | 1.043 | 1.047 | 1.049 | 1.051 | 1.050 | 1.048 | 1.048 | 1.048 |  |  |  |
| 51/48 | 1.039 | 1.038 | 1.043 | 1.044 | 1.036 | 1.035 | 1.033 | 1.036 | 1.036 | 1.037 | 1.042 | 1.042 | 1.043 | 1.039 | 1.038 | 1.038 |  |  |  |
| 54/51 | 1.035 | 1.038 | 1.036 | 1.037 | 1.034 | 1.035 | 1.030 | 1.028 | 1.035 | 1.036 | 1.038 | 1.041 | 1.038 | 1.036 | 1.036 |  |  |  |  |
| 57/54 | 1.029 | 1.033 | 1.037 | 1.030 | 1.028 | 1.026 | 1.025 | 1.028 | 1.030 | 1.032 | 1.033 | 1.033 | 1.032 | 1.033 | 1.028 |  |  |  |  |
| 60/57 | 1.025 | 1.030 | 1.027 | 1.026 | 1.024 | 1.024 | 1.024 | 1.024 | 1.028 | 1.029 | 1.029 | 1.032 | 1.027 | 1.030 | 1.028 |  |  |  |  |
| 63/60 | 1.023 | 1.026 | 1.024 | 1.021 | 1.022 | 1.019 | 1.019 | 1.021 | 1.023 | 1.025 | 1.025 | 1.024 | 1.026 | 1.025 | 1.025 |  |  |  |  |
| 66/63 | 1.023 | 1.023 | 1.023 | 1.021 | 1.019 | 1.019 | 1.019 | 1.020 | 1.025 | 1.025 | 1.025 | 1.025 | 1.023 | 1.022 |  |  |  |  |  |
| 69/66 | 1.019 | 1.021 | 1.020 | 1.017 | 1.016 | 1.017 | 1.016 | 1.021 | 1.020 | 1.020 | 1.020 | 1.022 | 1.020 | 1.019 |  |  |  |  |  |
| 72/69 | 1.018 | 1.016 | 1.018 | 1.016 | 1.016 | 1.015 | 1.017 | 1.015 | 1.020 | 1.019 | 1.019 | 1.019 | 1.019 | 1.018 |  |  |  |  |  |
| 75/72 | 1.015 | 1.016 | 1.015 | 1.014 | 1.012 | 1.012 | 1.013 | 1.015 | 1.019 | 1.018 | 1.016 | 1.016 | 1.017 | 1.015 |  |  |  |  |  |
| 78/75 | 1.014 | 1.014 | 1.012 | 1.013 | 1.012 | 1.011 | 1.012 | 1.015 | 1.017 | 1.016 | 1.015 | 1.016 | 1.016 |  |  |  |  |  |  |
| 81/78 | 1.013 | 1.013 | 1.011 | 1.012 | 1.011 | 1.010 | 1.012 | 1.015 | 1.015 | 1.016 | 1.015 | 1.015 | 1.013 |  |  |  |  |  |  |
| 84/81 | 1.011 | 1.011 | 1.013 | 1.010 | 1.010 | 1.009 | 1.011 | 1.013 | 1.015 | 1.014 | 1.013 | 1.012 | 1.013 |  |  |  |  |  |  |
| 87/84 | 1.012 | 1.010 | 1.008 | 1.010 | 1.009 | 1.008 | 1.009 | 1.012 | 1.014 | 1.013 | 1.010 | 1.012 | 1.010 |  |  |  |  |  |  |
| 90/87 | 1.008 | 1.009 | 1.010 | 1.009 | 1.008 | 1.008 | 1.011 | 1.012 | 1.013 | 1.012 | 1.011 | 1.010 |  |  |  |  |  |  |  |
| 93/90 | 1.009 | 1.009 | 1.008 | 1.008 | 1.007 | 1.008 | 1.012 | 1.011 | 1.011 | 1.012 | 1.010 | 1.010 |  |  |  |  |  |  |  |
| 96/93 | 1.008 | 1.009 | 1.006 | 1.007 | 1.007 | 1.007 | 1.008 | 1.011 | 1.011 | 1.008 | 1.010 | 1.010 |  |  |  |  |  |  |  |

Source: WCIRB acident year experience calls

## Quarterly Paid Medical Loss Development Factors *

Through March 31, 2017

| Age in | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Months | 1998 | 1999 | 2000 | $\underline{2001}$ | 2002 | $\underline{2003}$ | $\underline{2004}$ | 2005 | 2006 | 2007 | $\underline{2008}$ | 2009 | 2010 | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| 6/3 |  |  |  |  |  |  |  |  | 5.308 | 5.615 | 6.579 | 6.101 | 6.048 | 5.854 | 5.989 | 6.284 | 5.604 | 5.720 | 5.897 |
| 9/6 |  |  |  |  |  |  |  |  | 2.348 | 2.381 | 2.348 | 2.375 | 2.361 | 2.327 | 2.398 | 2.498 | 2.428 | 2.287 | 2.326 |
| 12/9 |  |  |  |  |  |  |  |  | 1.716 | 1.765 | 1.731 | 1.723 | 1.756 | 1.746 | 1.763 | 1.736 | 1.750 | 1.705 | 1.752 |
| 15/12 | 1.453 | 1.490 | 1.514 | 1.547 | 1.554 | 1.510 | 1.437 | 1.423 | 1.429 | 1.444 | 1.413 | 1.429 | 1.445 | 1.472 | 1.446 | 1.443 | 1.460 | 1.454 | 1.479 |
| 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 |  |
| 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 |  |
| 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 |  |
| 27/24 | 1.096 | 1.108 | 1.121 | 1.128 | 1.123 | 1.093 | 1.090 | 1.093 | 1.106 | 1.107 | 1.110 | 1.112 | 1.119 | 1.120 | 1.123 | 1.122 | 1.122 | 1.124 |  |
| 30/27 | 1.077 | 1.088 | 1.101 | 1.108 | 1.103 | 1.077 | 1.084 | 1.087 | 1.097 | 1.100 | 1.100 | 1.106 | 1.107 | 1.111 | 1.109 | 1.111 | 1.111 |  |  |
| 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 |  |  |
| 36/33 | 1.055 | 1.066 | 1.069 | 1.076 | 1.061 | 1.055 | 1.062 | 1.062 | 1.071 | 1.072 | 1.072 | 1.077 | 1.083 | 1.082 | 1.078 | 1.080 | 1.076 |  |  |
| 39/36 | 1.051 | 1.059 | 1.060 | 1.061 | 1.049 | 1.044 | 1.053 | 1.056 | 1.057 | 1.059 | 1.061 | 1.066 | 1.071 | 1.066 | 1.069 | 1.065 | 1.064 |  |  |
| 42/39 | 1.044 | 1.049 | 1.055 | 1.054 | 1.041 | 1.044 | 1.049 | 1.054 | 1.055 | 1.058 | 1.059 | 1.061 | 1.068 | 1.063 | 1.062 | 1.057 |  |  |  |
| 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 |  |  |  |
| 48/45 | 1.035 | 1.039 | 1.044 | 1.037 | 1.032 | 1.035 | 1.037 | 1.043 | 1.043 | 1.046 | 1.047 | 1.050 | 1.051 | 1.046 | 1.045 | 1.046 |  |  |  |
| 51/48 | 1.030 | 1.035 | 1.037 | 1.034 | 1.031 | 1.030 | 1.033 | 1.037 | 1.036 | 1.036 | 1.039 | 1.041 | 1.043 | 1.040 | 1.039 | 1.038 |  |  |  |
| 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 |  |  |  |  |
| 57/54 | 1.026 | 1.030 | 1.027 | 1.024 | 1.024 | 1.024 | 1.029 | 1.031 | 1.034 | 1.031 | 1.033 | 1.038 | 1.034 | 1.034 | 1.031 |  |  |  |  |
| 60/57 | 1.026 | 1.028 | 1.026 | 1.021 | 1.023 | 1.026 | 1.028 | 1.029 | 1.028 | 1.032 | 1.032 | 1.035 | 1.030 | 1.030 | 1.030 |  |  |  |  |
| 63/60 | 1.023 | 1.025 | 1.022 | 1.019 | 1.019 | 1.020 | 1.024 | 1.024 | 1.024 | 1.024 | 1.027 | 1.027 | 1.026 | 1.026 | 1.025 |  |  |  |  |
| 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 | 1.027 |  |  |  |  |  |
| 69/66 | 1.021 | 1.022 | 1.019 | 1.018 | 1.016 | 1.019 | 1.021 | 1.023 | 1.023 | 1.021 | 1.024 | 1.024 | 1.022 | 1.020 |  |  |  |  |  |
| 72/69 | 1.022 | 1.018 | 1.016 | 1.017 | 1.018 | 1.016 | 1.021 | 1.021 | 1.022 | 1.022 | 1.023 | 1.021 | 1.020 | 1.019 |  |  |  |  |  |
| 75/72 | 1.017 | 1.016 | 1.014 | 1.015 | 1.015 | 1.014 | 1.018 | 1.020 | 1.019 | 1.019 | 1.018 | 1.018 | 1.018 | 1.015 |  |  |  |  |  |
| 78/75 | 1.018 | 1.015 | 1.014 | 1.015 | 1.016 | 1.015 | 1.016 | 1.018 | 1.017 | 1.022 | 1.019 | 1.018 | 1.017 |  |  |  |  |  |  |
| 81/78 | 1.015 | 1.014 | 1.013 | 1.014 | 1.013 | 1.014 | 1.018 | 1.018 | 1.015 | 1.019 | 1.018 | 1.015 | 1.015 |  |  |  |  |  |  |
| 84/81 | 1.013 | 1.012 | 1.013 | 1.012 | 1.012 | 1.013 | 1.016 | 1.016 | 1.015 | 1.018 | 1.015 | 1.015 | 1.015 |  |  |  |  |  |  |
| 87/84 | 1.013 | 1.011 | 1.010 | 1.012 | 1.012 | 1.012 | 1.014 | 1.013 | 1.015 | 1.017 | 1.013 | 1.013 | 1.012 |  |  |  |  |  |  |
| 90/87 | 1.013 | 1.012 | 1.011 | 1.013 | 1.012 | 1.013 | 1.015 | 1.013 | 1.015 | 1.013 | 1.013 | 1.012 |  |  |  |  |  |  |  |
| 93/90 | 1.011 | 1.010 | 1.011 | 1.012 | 1.011 | 1.013 | 1.013 | 1.012 | 1.014 | 1.014 | 1.013 | 1.011 |  |  |  |  |  |  |  |
| 96/93 | 1.010 | 1.010 | 1.008 | 1.010 | 1.010 | 1.009 | 1.013 | 1.015 | 1.016 | 1.011 | 1.012 | 1.010 |  |  |  |  |  |  |  |

Source: WCIRB acident year experience calls

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

Reported Indemnity Claim Count Development

| Accident | Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 | 11-123 | 123-135 | 135-147 | 147-159 | 159-171 | 171-183 | 183-195 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.001 | 1.001 |
| 1996 |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 |
| 1997 |  |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1998 |  |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1999 |  |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2000 |  |  |  |  |  |  |  | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2001 |  |  |  |  |  |  | 0.999 | 0.999 | 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 |  |
| 2003 |  |  |  |  | 1.000 | 0.998 | 0.999 | 0.999 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 |  |  |
| 2004 |  |  |  | 1.000 | 0.999 | 0.999 | 0.999 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 1.000 |  |  |  |
| 2005 |  |  | 1.004 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |
| 2006 |  | 1.022 | 1.006 | 1.004 | 1.001 | 1.000 | 1.001 | 1.000 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |
| 2007 | 6.458 | 1.038 | 1.012 | 1.005 | 1.003 | 1.002 | 1.000 | 1.001 | 1.001 | 1.000 |  |  |  |  |  |  |
| 2008 | 6.136 | 1.060 | 1.017 | 1.009 | 1.004 | 1.003 | 1.002 | 1.001 | 1.001 |  |  |  |  |  |  |  |
| 2009 | 6.983 | 1.080 | 1.023 | 1.008 | 1.005 | 1.003 | 1.002 | 1.002 |  |  |  |  |  |  |  |  |
| 2010 | 7.356 | 1.090 | 1.021 | 1.010 | 1.006 | 1.003 | 1.000 |  |  |  |  |  |  |  |  |  |
| 2011 | 7.501 | 1.100 | 1.026 | 1.011 | 1.006 | 1.003 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 7.668 | 1.118 | 1.025 | 1.011 | 1.006 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 8.112 | 1.101 | 1.025 | 1.009 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 7.825 | 1.108 | 1.023 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 8.036 | 1.107 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 7.743 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Latest |  |  |  |  |  |  |  |  |
|  | -to-Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 7.743 | 1.107 | 1.023 | 1.009 | 1.006 | 1.003 | 1.000 | 1.002 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
|  | -to-Ultim |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 8.969 | 1.158 | 1.046 | 1.023 | 1.014 | 1.008 | 1.005 | 1.005 | 1.004 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 |

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 $75 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

# Actuarial Committee 

Meeting Agenda for August 2, 2017

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 | 27-30 | 30-33 | 33-36 | 36-39 | 39-42 | 42-45 | 45-48 |
| 2008 | 2.539 | 1.649 | 1.338 | 1.094 | 1.025 | 1.015 | 1.010 | 1.008 | 1.007 | 1.004 | 1.003 | 1.003 | 1.002 | 1.003 | 1.002 |
| 2009 | 2.668 | 1.680 | 1.381 | 1.109 | 1.036 | 1.021 | 1.012 | 1.009 | 1.007 | 1.007 | 1.005 | 1.004 | 1.003 | 1.003 | 1.002 |
| 2010 | 2.667 | 1.711 | 1.402 | 1.126 | 1.039 | 1.023 | 1.016 | 1.011 | 1.008 | 1.006 | 1.005 | 1.003 | 1.004 | 1.003 | 1.001 |
| 2011 | 2.666 | 1.729 | 1.417 | 1.128 | 1.042 | 1.028 | 1.019 | 1.010 | 1.011 | 1.006 | 1.005 | 1.004 | 1.003 | 1.003 | 1.002 |
| 2012 | 2.710 | 1.744 | 1.420 | 1.125 | 1.053 | 1.029 | 1.020 | 1.013 | 1.009 | 1.007 | 1.004 | 1.005 | 1.004 | 1.003 | 1.003 |
| 2013 | 2.819 | 1.744 | 1.426 | 1.136 | 1.044 | 1.028 | 1.017 | 1.011 | 1.010 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.002 |
| 2014 | 2.754 | 1.732 | 1.430 | 1.136 | 1.048 | 1.026 | 1.018 | 1.012 | 1.010 | 1.005 | 1.004 | 1.004 |  |  |  |
| 2015 | 2.828 | 1.740 | 1.419 | 1.140 | 1.048 | 1.026 | 1.017 | 1.014 |  |  |  |  |  |  |  |
| 2016 | 2.758 | 1.705 | 1.421 | 1.148 |  |  |  |  |  |  |  |  |  |  |  |


| 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 | $\underline{195}$ |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.1\% |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.8\% | 98.9\% |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.4\% | 98.6\% | 98.8\% |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.8\% | 98.2\% | 98.4\% | 98.5\% |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  | 97.3\% | 97.7\% | 98.0\% | 98.2\% | 98.4\% |
| 1997 |  |  |  |  |  |  |  |  |  |  |  | 96.7\% | 97.2\% | 97.6\% | 97.8\% | 98.1\% | 98.2\% |
| 1998 |  |  |  |  |  |  |  |  |  |  | 95.5\% | 96.3\% | 96.8\% | 97.2\% | 97.5\% | 97.8\% | 98.1\% |
| 1999 |  |  |  |  |  |  |  |  |  | 94.3\% | 95.3\% | 96.0\% | 96.5\% | 97.0\% | 97.3\% | 97.7\% | 97.9\% |
| 2000 |  |  |  |  |  |  |  |  | 92.1\% | 93.7\% | 94.8\% | 95.6\% | 96.2\% | 96.7\% | 97.2\% | 97.6\% | 97.8\% |
| 2001 |  |  |  |  |  |  |  | 88.4\% | 90.8\% | 92.5\% | 93.7\% | 94.6\% | 95.4\% | 96.1\% | 96.6\% | 97.0\% | 97.4\% |
| 2002 |  |  |  |  |  |  | 85.3\% | 88.7\% | 91.1\% | 92.6\% | 94.0\% | 94.9\% | 95.9\% | 96.5\% | 97.0\% | 97.4\% |  |
| 2003 |  |  |  |  |  | 80.4\% | 85.5\% | 88.7\% | 90.8\% | 92.6\% | 94.0\% | 95.3\% | 95.9\% | 96.5\% | 97.1\% |  |  |
| 2004 |  |  |  |  | 74.5\% | 81.5\% | 85.6\% | 88.4\% | 90.7\% | 92.5\% | 94.3\% | 95.4\% | 96.1\% | 96.8\% |  |  |  |
| 2005 |  |  |  | 66.3\% | 76.4\% | 82.1\% | 86.1\% | 89.0\% | 91.1\% | 93.3\% | 94.7\% | 95.7\% | 96.5\% |  |  |  |  |
| 2006 |  |  | 53.9\% | 67.6\% | 76.3\% | 82.4\% | 86.2\% | 89.1\% | 91.9\% | 93.5\% | 94.8\% | 95.9\% |  |  |  |  |  |
| 2007 |  | 35.0\% | 53.1\% | 66.2\% | 75.3\% | 81.2\% | 85.5\% | 89.4\% | 91.8\% | 93.6\% | 95.0\% |  |  |  |  |  |  |
| 2008 | 5.7\% | 34.7\% | 51.5\% | 64.6\% | 73.9\% | 80.6\% | 85.9\% | 89.5\% | 92.1\% | 94.0\% |  |  |  |  |  |  |  |
| 2009 | 5.8\% | 33.3\% | 49.7\% | 62.9\% | 72.8\% | 80.5\% | 85.7\% | 89.6\% | 92.2\% |  |  |  |  |  |  |  |  |
| 2010 | 5.6\% | 33.7\% | 50.3\% | 63.7\% | 74.8\% | 82.0\% | 87.2\% | 90.8\% |  |  |  |  |  |  |  |  |  |
| 2011 | 7.2\% | 34.1\% | 50.8\% | 65.3\% | 76.0\% | 83.3\% | 88.2\% |  |  |  |  |  |  |  |  |  |  |
| 2012 | 7.2\% | 34.0\% | 51.8\% | 66.7\% | 77.4\% | 84.5\% |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 8.6\% | 33.4\% | 52.9\% | 68.1\% | 79.0\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 6.6\% | 33.9\% | 54.0\% | 69.4\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 7.5\% | 34.6\% | 55.7\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 7.3\% | 36.5\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 7.4\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Notes | ures <br> ent ye <br> ed ma | each accid <br> r. Ther ket meas | ident year ore, each red usin | contain accident 2016 ea | informatio year ma ned pre | from th contain ium leve | same differen s). | mbinatio mix of in | of insur urers (ra | rs, all of ging fro | whom su $75 \%$ to | mitted c $100 \%$ of | mplete d e total C | ta for all alifornia | evaluatio orkers' | s for tha mpensa |  |

Estimated Ultimate Indemnity Claim Settlement Ratios

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 | 123 | 135 | 147 | 159 | $\underline{171}$ | $\underline{183}$ | $\underline{195}$ |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.0\% |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.6\% | 98.8\% |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 98.1\% | 98.4\% | 98.6\% |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  | 97.4\% | 97.8\% | 98.1\% | 98.3\% |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  | 97.0\% | 97.4\% | 97.8\% | 98.0\% | 98.2\% |
| 1997 |  |  |  |  |  |  |  |  |  |  |  | 96.4\% | 96.9\% | 97.3\% | 97.6\% | 97.8\% | 98.0\% |
| 1998 |  |  |  |  |  |  |  |  |  |  | 95.2\% | 96.0\% | 96.5\% | 96.9\% | 97.3\% | 97.6\% | 97.9\% |
| 1999 |  |  |  |  |  |  |  |  |  | 94.0\% | 95.0\% | 95.8\% | 96.3\% | 96.7\% | 97.1\% | 97.5\% | 97.7\% |
| 2000 |  |  |  |  |  |  |  |  | 91.9\% | 93.4\% | 94.5\% | 95.3\% | 95.9\% | 96.4\% | 97.0\% | 97.3\% | 97.6\% |
| 2001 |  |  |  |  |  |  |  | 88.3\% | 90.7\% | 92.3\% | 93.4\% | 94.4\% | 95.1\% | 95.9\% | 96.4\% | 96.8\% | 97.2\% |
| 2002 |  |  |  |  |  |  | 85.4\% | 88.7\% | 91.0\% | 92.5\% | 93.8\% | 94.7\% | 95.7\% | 96.3\% | 96.8\% | 97.2\% |  |
| 2003 |  |  |  |  |  | 80.7\% | 85.7\% | 88.8\% | 90.8\% | 92.5\% | 93.8\% | 95.0\% | 95.7\% | 96.3\% | 96.9\% |  |  |
| 2004 |  |  |  |  | 74.7\% | 81.7\% | 85.7\% | 88.5\% | 90.6\% | 92.4\% | 94.1\% | 95.2\% | 95.9\% | 96.6\% |  |  |  |
| 2005 |  |  |  | 66.0\% | 76.1\% | 81.9\% | 85.9\% | 88.8\% | 91.0\% | 93.1\% | 94.5\% | 95.5\% | 96.3\% |  |  |  |  |
| 2006 |  |  | 53.2\% | 67.0\% | 75.9\% | 82.1\% | 85.8\% | 88.8\% | 91.6\% | 93.3\% | 94.6\% | 95.7\% |  |  |  |  |  |
| 2007 |  | 32.9\% | 51.7\% | 65.3\% | 74.7\% | 80.7\% | 85.1\% | 89.1\% | 91.5\% | 93.4\% | 94.9\% |  |  |  |  |  |  |
| 2008 | 0.8\% | 31.5\% | 49.5\% | 63.2\% | 72.9\% | 79.8\% | 85.4\% | 89.1\% | 91.8\% | 93.8\% |  |  |  |  |  |  |  |
| 2009 | 0.7\% | 29.5\% | 47.4\% | 61.4\% | 71.7\% | 79.7\% | 85.1\% | 89.1\% | 91.9\% |  |  |  |  |  |  |  |  |
| 2010 | 0.7\% | 29.6\% | 48.1\% | 62.2\% | 73.8\% | 81.4\% | 86.8\% | 90.3\% |  |  |  |  |  |  |  |  |  |
| 2011 | 0.8\% | 29.5\% | 48.3\% | 63.7\% | 75.0\% | 82.7\% | 87.8\% |  |  |  |  |  |  |  |  |  |  |
| 2012 | 0.8\% | 29.0\% | 49.3\% | 65.2\% | 76.4\% | 83.8\% |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 0.9\% | 28.9\% | 50.4\% | 66.6\% | 78.0\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 0.7\% | 29.2\% | 51.6\% | 67.9\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 0.8\% | 29.8\% | 53.3\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 | 0.8\% | 31.5\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 0.8\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Notes | ures in <br> ent ye ed ma | each ac There meas | dent yea re, each ed using | contain accident 2016 | informatio year may ned prem | from th contain ium leve | same c different ). | mbinatio mix of ins | of insure urers (ran | rs, all of ging from | whom sub $75 \%$ to | mitted co 00\% of th | mplete e total | ta for all alifornia | evaluation orkers' | s for that mpensat |  |

## 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 | 42 | 45 | 48 |
| 2008 | 0.9\% | 5.5\% | 13.3\% | 23.0\% | 31.5\% | 37.7\% | 42.0\% | 46.0\% | 49.6\% | 53.2\% | 56.8\% | 60.3\% | 63.2\% | 66.0\% | 68.6\% | 71.0\% |
| 2009 | 0.7\% | 4.8\% | 12.4\% | 21.4\% | 29.6\% | 35.6\% | 39.9\% | 43.9\% | 47.5\% | 51.2\% | 54.9\% | 58.5\% | 61.5\% | 64.5\% | 67.0\% | 69.6\% |
| 2010 | 0.7\% | 4.8\% | 11.9\% | 21.0\% | 29.6\% | 35.6\% | 39.9\% | 44.2\% | 48.1\% | 52.0\% | 55.6\% | 59.1\% | 62.2\% | 65.4\% | 68.4\% | 71.3\% |
| 2011 | 0.8\% | 5.2\% | 12.0\% | 21.2\% | 29.5\% | 35.5\% | 40.0\% | 44.4\% | 48.2\% | 52.5\% | 56.3\% | 60.3\% | 63.5\% | 66.6\% | 69.6\% | 72.4\% |
| 2012 | 0.8\% | 4.9\% | 11.9\% | 20.9\% | 29.0\% | 35.5\% | 40.3\% | 45.2\% | 49.3\% | 53.5\% | 57.8\% | 61.6\% | 65.0\% | 68.3\% | 71.2\% | 73.9\% |
| 2013 | 0.9\% | 5.0\% | 11.5\% | 20.5\% | 28.9\% | 35.4\% | 40.8\% | 45.7\% | 50.4\% | 54.8\% | 58.9\% | 62.9\% | 66.5\% | 69.8\% | 72.8\% | 75.6\% |
| 2014 | 0.7\% | 4.7\% | 11.5\% | 20.4\% | 29.3\% | 36.1\% | 41.8\% | 46.9\% | 51.7\% | 56.2\% | 60.5\% | 64.5\% | 67.9\% |  |  |  |
| 2015 | 0.8\% | 4.7\% | 11.8\% | 20.7\% | 29.8\% | 37.1\% | 42.8\% | 48.1\% | 53.2\% |  |  |  |  |  |  |  |
| 2016 | 0.8\% | 5.0\% | 12.1\% | 21.6\% | 31.5\% |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 0.8\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accident |  |  |  |  |  |  | uarterly | emental | ange |  |  |  |  |  |  |  |
| 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 | 4.6\% | 7.8\% | 9.7\% | 8.5\% | 6.2\% | 4.4\% | 3.9\% | 3.6\% | 3.7\% | 3.5\% | 3.5\% | 2.9\% | 2.8\% | 2.6\% | 2.4\% |  |
| 2009 | 4.1\% | 7.6\% | 9.1\% | 8.2\% | 6.0\% | 4.3\% | 4.0\% | 3.6\% | 3.7\% | 3.7\% | 3.5\% | 3.0\% | 3.0\% | 2.5\% | 2.5\% |  |
| 2010 | 4.1\% | 7.1\% | 9.2\% | 8.6\% | 5.9\% | 4.3\% | 4.3\% | 3.8\% | 3.9\% | 3.6\% | 3.5\% | 3.1\% | 3.3\% | 3.0\% | 2.8\% |  |
| 2011 | 4.3\% | 6.8\% | 9.2\% | 8.3\% | 6.0\% | 4.5\% | 4.3\% | 3.8\% | 4.3\% | 3.9\% | 4.0\% | 3.2\% | 3.0\% | 3.0\% | 2.8\% |  |
| 2012 | 4.1\% | 7.0\% | 9.0\% | 8.1\% | 6.5\% | 4.9\% | 4.8\% | 4.1\% | 4.2\% | 4.2\% | 3.9\% | 3.4\% | 3.2\% | 2.9\% | 2.8\% |  |
| 2013 | 4.0\% | 6.5\% | 9.0\% | 8.5\% | 6.5\% | 5.4\% | 4.9\% | 4.7\% | 4.5\% | 4.1\% | 4.0\% | 3.6\% | 3.3\% | 3.0\% | 2.7\% |  |
| 2014 | 3.9\% | 6.8\% | 9.0\% | 8.8\% | 6.8\% | 5.7\% | 5.1\% | 4.8\% | 4.5\% | 4.3\% | 3.9\% | 3.4\% |  |  |  |  |
| 2015 | 3.9\% | 7.1\% | 8.9\% | 9.1\% | 7.3\% | 5.7\% | 5.3\% | 5.2\% |  |  |  |  |  |  |  |  |
| 2016 | 4.2\% | 7.1\% | 9.5\% | 9.9\% |  |  |  |  |  |  |  |  |  |  |  |  |

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


${ }^{[1]}$ The 2014-2015 estimate is based on partial year unit statistical data. The 2015-2016 and 2016-2017 estimates are based on comparison of claim counts based on WCIRB accident year experience as of March 31, 2017 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

## Item AC17-08-01 <br> Third Quarter 2017 Review of Diagnostics

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

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

Please note the following:

1. Permanent disability claims continue to close at a faster rate, while the rate at which temporary disability claims close has remained relatively steady (Exhibit M5).
2. The number of expedited hearings remained stable in the first quarter of 2017, continuing the trend from the previous three quarters, after a large increase in the second quarter of 2016 (Exhibit M8.2.1). The distribution of expedited hearings by type of hearing have also remained relatively stable (Exhibit M8.2.2).
3. Lien filings decreased significantly in the first quarter of 2017 after rising sharply in the fourth quarter of 2016. These changes are likely due to Senate Bill No. 1160, which places additional restrictions on lien filings and became effective on January 1, 2017 (Exhibit M9.2).
4. The number of independent medical review (IMR) applications filed remained steady in the first quarter of 2017 (Exhibit M14).
5. Indemnity claim settlement ratios continued to increase through the first quarter of calendar year 2017 (Exhibit C2.1). Settlement rates on permanent disability claims continue to rise, while settlement rates on temporary disability claims are fairly stable (Exhibit C2.2).
6. The number of quarterly incremental indemnity and medical-only claims increased at a similar rate in the first quarter of 2017. This continues a pattern of similar increases over the past three quarters after a period from 2015 through the second quarter of 2016 with medical-only claims increasing faster than indemnity claims (Exhibit C11).
7. The proportion of indemnity claims involving cumulative trauma in the Los Angeles Basin and San Diego areas continue to increase sharply. The percent of first unit statistical report claims for accident year 2015 that were reported as involving cumulative injury was $14 \%$ for the Los Angeles Basin area, almost $11 \%$ for the San Diego area and $6 \%$ for the remainder of the state (Exhibit C17).
8. Medical severity showed signs of continuing increase in the first quarter of 2017. Accident year 2016 paid medical per indemnity claim severity as of the first quarter of 2017 increased $6.6 \%$ over accident year 2015 (Exhibit S4.2). Incremental paid medical severity growth for recent accident years in the first quarter of 2017 was also up significantly (Exhibit S7).
9. The number of medical-legal reports per claim and the cost per report increased in service year 2016 by $9 \%$ and $1 \%$, respectively (Exhibit E13).

| Exhibit \# | Exhibit Name |
| :--- | :--- |
| $\quad$ Market/Claim Characteristics |  |
| M3 | Total Incurred Loss Distribution by Insurer |
| M4 | Distribution of Estimated Ultimate Number of Claims by Injury Type |
| M5 | Percentage of Claims Open by Injury Type and Region - First through Third Report Level |
| M6 | Percentage of Claim Count and Average Severity by Method of Settlement |
| M7 | Division of Workers' Compensation (DWC) Distribution of Decisions by Type |
| M8 | Statewide Number of Division of Workers' Compensation (DWC) Quartery Expedited Hearings |
| M9 | Number of Division of Workers' Compensation (DWC) Quarterly Lien Filed Counts |
| M10 | Medicare Set-aside Costs by Age Interval \& Permanent Disability Rating Interval |
| M11 | Percentage of Permanent Partial Claims with Qualified Offer of Permanent Return-to-work |
| M14 | IMR Filed Counts |
|  | $\quad$ Claim Count |
| C1 | Reported Indemnity and Total Claim Count Development - Statewide |
| C2 |  |
|  | Quarterly Ultimate Settlement Ratios |
| 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 |
| C6 | California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year as of September 30, |
|  | 2016 |
| C7 | 2016 Accident Year Indemnity Claim Frequency Model \& Indemnity Claim Frequency History and Projections |
| 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 |
| C13 | California Workers' Compensation Fraud Statistics |
| C14 | California Courts' Civil Filings Summary |
| C15 | Partial 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 |
| C21 | Indemnity Claim Frequency by Geographic Region |
| C22 | Top 20 Part of Body Codes for Cumulative and Non-Cumulative Injury Indemnity Claims Based on Accident Year |
|  | 2013 Shares |


| Exhibit \# | Exhibit Name |
| :---: | :---: |
| Loss Development |  |
| D4 | Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year |
| D6 | Comparison of Projected Ultimate Loss Ratios - Accident Year 2011-2015 |
| Claim Severity |  |
| S2 | Average Incurred Indemnity Loss Per Reported Indemnity Claim \& Incurred Medical Loss per Reported Claim |
| S3 | Average Indemnity Case Outstanding \& Outstanding Medical Loss Per Open Indemnity Claim |
| S4 | Average Paid Indemnity \& Medical Loss per Indemnity Claim \& Average Paid Medical Loss Per Claim |
| S5 | Average Paid Indemnity Loss \& Medical Loss 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 Through March 31, 2017 |
| S8 | Estimated Ultimate Indemnity \& Medical Severities by Injury Type |
| S9 | Average and Median Indemnity Claim Severities at USR 1st |
| S10 | Temporary Disability Benefits Paid at 12 and 24 Months \& Changes in the Number of Weeks of Temporary Disability Benefits |
| S11 | Average Permanent Disability Ratings by Type of Loss |
| 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 |
| S17 | Change in Claims Mix by Injury Description by Policy Year by Part of Body \& Nature of Injury \& Cause of Injury |
| Loss Adjustment Expense |  |
| E1 | Summary of LAE Ratios by Insurer Type |
| E5 | Average Paid ALAE Per Reported Indemnity Claim - Private Insurers |
| E7 | Percentage of Represented and Unrepresented Permanent Disability Claims by Region - First/Second Survey Level |
| E8 | Distribution of Total ALAE \& MCCP Components |
| E9 | Applicant Attorney Expense Paid |
| E10 | Average Expense Costs per Represented PD Claim - Private Insurers Only |
| E13 | Changes in the Number and Cost of Medical-Legal Reports |
| Discontinued/Moved Exhibits |  |
| D1 | Quarterly Incurred \& Paid Indemnity \& Medical Loss Development Factors |
| S1 | Projection of Indemnity \& Medical Severity Trends by Accident Year |

## Total Incurred Loss Distribution by Insurer*

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

| Group | $\begin{gathered} \text { AY } 2012 \\ @ 12 / 31 / 2012 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY } 2013 \\ @ 12 / 31 / 2013 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY } 2014 \\ @ 12 / 31 / 2014 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY } 2015 \\ @ 12 / 31 / 2015 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY } 2016 \\ @ 12 / 31 / 2016 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Fund | 7.3\% | 8.7\% | 10.2\% | 12.0\% | 9.5\% |
| 1 | 6.8\% | 6.9\% | 7.6\% | 8.0\% | 8.0\% |
| 2 | 8.6\% | 8.6\% | 8.0\% | 7.8\% | 7.6\% |
| 3 | 5.9\% | 7.5\% | 6.6\% | 7.8\% | 7.4\% |
| 4 | 8.0\% | 7.9\% | 7.7\% | 6.9\% | 6.8\% |
| 5 | 2.2\% | 3.2\% | 3.6\% | 4.3\% | 4.7\% |
| 6 | 4.6\% | 3.8\% | 3.8\% | 3.6\% | 3.6\% |
| 7 | 5.6\% | 5.6\% | 3.8\% | 3.6\% | 3.6\% |
| 8 | 6.3\% | 4.8\% | 4.2\% | 3.4\% | 3.2\% |
| 9 | 1.2\% | 1.6\% | 2.3\% | 2.7\% | 2.9\% |
| 10 | 2.5\% | 3.3\% | 3.2\% | 2.7\% | 2.8\% |
| All Other | 41.0\% | 38.1\% | 39.1\% | 37.4\% | 40.0\% |

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

| Group | AY 2012 <br> @ 12/31/2012 | $\begin{gathered} \text { AY } 2013 \\ @ 12 / 31 / 2013 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY } 2014 \\ @ 12 / 31 / 2014 \end{gathered}$ | $\begin{gathered} \text { AY } 2015 \\ @ 12 / 31 / 2015 \\ \hline \end{gathered}$ | $\begin{gathered} \text { AY 2016 } \\ @ 12 / 31 / 2016 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 7.3\% | 7.5\% | 8.5\% | 9.1\% | 8.9\% |
| 2 | 9.3\% | 9.4\% | 9.0\% | 8.8\% | 8.4\% |
| 3 | 6.4\% | 8.2\% | 7.4\% | 8.8\% | 8.2\% |
| 4 | 8.6\% | 8.7\% | 8.6\% | 7.9\% | 7.5\% |
| 5 | 2.4\% | 3.5\% | 4.0\% | 4.9\% | 5.2\% |
| 6 | 5.0\% | 4.2\% | 4.2\% | 4.1\% | 4.0\% |
| 7 | 6.1\% | 6.1\% | 4.3\% | 4.0\% | 4.0\% |
| 8 | 6.8\% | 5.3\% | 4.6\% | 3.8\% | 3.5\% |
| 9 | 1.2\% | 1.8\% | 2.5\% | 3.0\% | 3.2\% |
| 10 | 2.7\% | 3.6\% | 3.5\% | 3.0\% | 3.0\% |
| All Other | 44.2\% | 41.7\% | 43.5\% | 42.5\% | 44.1\% |

*Total incurred losses reflect the sum of paid indemnity and medical losses and indemnity and medical case reserves. All entries reflect the paid cost of medical cost containment programs reported for policies with effective dates prior to July 1, 2010.
**Groups are ranked according to accident year 2016 incurred losses.
State Fund is State Compensation Insurance Fund.
Source: WCIRB quarterly calls for experience
I. Distribution of Ultimate Number of Indemnity Claims

| Accident <br> Year | Permanent <br> Indemnity** | Temporary <br> Indemnity | Total <br> 2001 |
| :---: | :---: | :---: | :---: |
| 2002 | $52.9 \%$ | $47.1 \%$ | $100 \%$ |
| 2003 | $53.3 \%$ | $45.7 \%$ | $100 \%$ |
| 2004 | $49.8 \%$ | $46.2 \%$ | $100 \%$ |
| 2005 | $46.3 \%$ | $50.2 \%$ | $100 \%$ |
| 2006 | $47.2 \%$ | $53.7 \%$ | $100 \%$ |
| 2007 | $48.3 \%$ | $52.8 \%$ | $100 \%$ |
| 2008 | $50.5 \%$ | $49.5 \%$ | $100 \%$ |
| 2009 | $51.8 \%$ | $48.2 \%$ | $100 \%$ |
| 2010 | $51.5 \%$ | $48.5 \%$ | $100 \%$ |
| 2011 | $51.1 \%$ | $48.9 \%$ | $100 \%$ |
| 2012 | $50.3 \%$ | $49.7 \%$ | $100 \%$ |
| 2013 | $49.7 \%$ | $50.3 \%$ | $100 \%$ |
| 2014 | $49.6 \%$ | $50.4 \%$ | $100 \%$ |
| $2015 *$ | $50.3 \%$ | $49.7 \%$ | $100 \%$ |
|  |  |  | $100 \%$ |

II. Distribution of Ultimate Number of All Claims

| Accident <br> Year <br> 2001 | Permanent <br> Indemnity** | Temporary <br> Indemnity | Medical <br> Only | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2002 | $17.9 \%$ | $16.0 \%$ | $66.1 \%$ | $100 \%$ |
| 2003 | $18.9 \%$ | $15.9 \%$ | $65.2 \%$ | $100 \%$ |
| 2004 | $15.6 \%$ | $16.1 \%$ | $65.2 \%$ | $100 \%$ |
| 2005 | $13.5 \%$ | $15.7 \%$ | $68.7 \%$ | $100 \%$ |
| 2006 | $13.6 \%$ | $15.6 \%$ | $70.9 \%$ | $100 \%$ |
| 2007 | $14.3 \%$ | $15.2 \%$ | $71.2 \%$ | $100 \%$ |
| 2008 | $15.5 \%$ | $15.2 \%$ | $70.4 \%$ | $100 \%$ |
| 2009 | $17.1 \%$ | $15.9 \%$ | $69.3 \%$ | $100 \%$ |
| 2010 | $17.8 \%$ | $16.8 \%$ | $67.0 \%$ | $100 \%$ |
| 2011 | $18.2 \%$ | $17.4 \%$ | $65.4 \%$ | $100 \%$ |
| 2012 | $18.3 \%$ | $18.0 \%$ | $63.4 \%$ | $100 \%$ |
| 2013 | $18.6 \%$ | $18.9 \%$ | $62.5 \%$ | $100 \%$ |
| 2014 | $18.6 \%$ | $18.9 \%$ | $62.5 \%$ | $100 \%$ |
| $2015^{*}$ | $19.0 \%$ | $18.8 \%$ | $62.2 \%$ | $100 \%$ |
|  |  |  |  | $100 \%$ |

* Accident year 2015 experience is partial in that it only reflects experience from policy year 2014.
** Permanent indemnity consists of the death, permanent total, and permanent partial injury types.

Source: WCIRB unit statistical data

## Percentage of Claims Open by Injury Type and Region <br> Permanent Partial \& Temporary

| Injury Type | Report Level | Region* | Policy Year |  |  |  |  |  |  | Latest Year <br> Reported Claim <br> Distribution |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ |  |
| Permanent Partial | 1 | Bay Area | 91\% | 91\% | 90\% | 88\% | 86\% | 85\% | 84\% | 14\% |
| Permanent Partial | 1 | Los Angeles | 91\% | 91\% | 89\% | 88\% | 85\% | 84\% | 83\% | 55\% |
| Permanent Partial | 1 | Remainder of CA | 91\% | 89\% | 88\% | 87\% | 84\% | 82\% | 82\% | 31\% |
|  |  | ALL REGIONS COMBINED | 91\% | 90\% | 89\% | 88\% | 85\% | 84\% | 83\% | 100\% |
| Permanent Partial | 2 | Bay Area | 69\% | 70\% | 68\% | 65\% | 62\% | 62\% |  | 14\% |
| Permanent Partial | 2 | Los Angeles | 74\% | 74\% | 72\% | 68\% | 63\% | 63\% |  | 55\% |
| Permanent Partial | 2 | Remainder of CA | 70\% | 69\% | 67\% | 63\% | 61\% | 60\% |  | 31\% |
|  |  | ALL REGIONS COMBINED | 72\% | 72\% | 70\% | 66\% | 62\% | 62\% |  | 100\% |
| Permanent Partial | 3 | Bay Area | 50\% | 50\% | 47\% | 45\% | 42\% |  |  | 15\% |
| Permanent Partial | 3 | Los Angeles | 58\% | 57\% | 52\% | 49\% | 45\% |  |  | 55\% |
| Permanent Partial | 3 | Remainder of CA | 51\% | 50\% | 46\% | 43\% | 41\% |  |  | 30\% |
|  |  | ALL REGIONS COMBINED | 54\% | 54\% | 50\% | 47\% | 44\% |  |  | 100\% |
|  |  |  |  |  |  | licy Ye |  |  |  | Latest Year Reported Claim |
| Injury Type | $\underline{\text { Report Level }}$ | $\underline{\text { Region* }}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | Distribution |
| Temporary | 1 | Bay Area | 41\% | 44\% | 44\% | 44\% | 46\% | 44\% | 41\% | 17\% |
| Temporary | 1 | Los Angeles | 44\% | 49\% | 50\% | 49\% | 51\% | 53\% | 50\% | 47\% |
| Temporary | 1 | Remainder of CA | 38\% | 40\% | 41\% | 42\% | 43\% | 45\% | 42\% | 36\% |
|  |  | ALL REGIONS COMBINED | 41\% | 45\% | 46\% | 45\% | 47\% | 48\% | 45\% | 100\% |
| Temporary | 2 | Bay Area | 23\% | 23\% | 26\% | 26\% | 27\% | 23\% |  | 17\% |
| Temporary | 2 | Los Angeles | 28\% | 31\% | 32\% | 32\% | 33\% | 32\% |  | 47\% |
| Temporary | 2 | Remainder of CA | 21\% | 23\% | 24\% | 26\% | 26\% | 26\% |  | 37\% |
|  |  | ALL REGIONS COMBINED | 24\% | 27\% | 28\% | 29\% | 29\% | 28\% |  | 100\% |
| Temporary | 3 | Bay Area | 12\% | 14\% | 14\% | 15\% | 15\% |  |  | 17\% |
| Temporary | 3 | Los Angeles | 18\% | 21\% | 22\% | 21\% | 20\% |  |  | 45\% |
| Temporary | 3 | Remainder of CA | 12\% | 14\% | 15\% | 16\% | 15\% |  |  | 37\% |
|  |  | ALL REGIONS COMBINED | 15\% | 17\% | 18\% | 18\% | 17\% |  |  | 100\% |

*Los Angeles Includes Los Angeles County and remainder of Los Angeles Basin
Source: WCIRB unit statistical data

Percentage of Claim Count and Average Severity by Method of Settlement Geographic Region: All Regions Combined

|  | Policy Year 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim <br> Distribution | Average <br> Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 30.1\% | 26,678 | 31,283 | 57,962 |
| Stipulated Award | 6.1\% | 21,084 | 22,944 | 44,028 |
| All Other Settlements | 11.1\% | 18,193 | 18,056 | 36,248 |
| Not Subject to Settlement | 52.7\% | ---- | ------- | ------- |
| Total/Average | 100.0\% | 23,963 | 27,100 | 51,063 |


|  | Policy Year 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 29.9\% | 25,707 | 31,015 | 56,722 |
| Stipulated Award | 5.4\% | 20,852 | 21,494 | 42,347 |
| All Other Settlements | 13.0\% | 19,666 | 18,602 | 38,268 |
| Not Subject to Settlement | 51.8\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 23,540 | 26,614 | 50,154 |


|  | Policy Year 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim | Average | Average | Average |
|  | Distribution | Indemnity | Medical | Incurred |
| Compromise \& Release | 33.3\% | 25,092 | 29,425 | 54,518 |
| Stipulated Award | 6.4\% | 20,044 | 19,562 | 39,606 |
| All Other Settlements | 17.2\% | 21,370 | 20,599 | 41,968 |
| Not Subject to Settlement | 43.1\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 23,400 | 25,648 | 49,047 |


|  | Policy Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim | Average | Average | Average |
|  | Distribution | Indemnity | Medical | Incurred |
| Compromise \& Release | 38.8\% | 23,576 | 27,291 | 50,867 |
| Stipulated Award | 7.4\% | 18,750 | 17,441 | 36,191 |
| All Other Settlements | 19.9\% | 20,920 | 20,029 | 40,949 |
| Not Subject to Settlement | 33.9\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 22,236 | 24,002 | 46,238 |

Percentage of Claim Count and Average Severity by Method of Settlement Geographic Region: Bay Area

|  | Policy Year 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average <br> Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 26.6\% | 33,431 | 36,584 | 70,015 |
| Stipulated Award | 8.8\% | 22,922 | 20,063 | 42,985 |
| All Other Settlements | 10.1\% | 20,673 | 16,422 | 37,095 |
| Not Subject to Settlement | 54.5\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 28,569 | 28,918 | 57,487 |


|  | Policy Year 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim <br> Distribution | Average <br> Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 25.5\% | 29,113 | 30,832 | 59,945 |
| Stipulated Award | 8.2\% | 20,178 | 15,996 | 36,174 |
| All Other Settlements | 12.6\% | 21,431 | 20,040 | 41,472 |
| Not Subject to Settlement | 53.7\% | --- | ------- | ------- |
| Total/Average | 100.0\% | 25,440 | 25,269 | 50,709 |


|  | Policy Year 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 28.7\% | 29,250 | 30,539 | 59,789 |
| Stipulated Award | 7.2\% | 19,678 | 20,236 | 39,914 |
| All Other Settlements | 16.9\% | 23,257 | 20,713 | 43,969 |
| Not Subject to Settlement | 47.3\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 26,026 | 25,989 | 52,015 |


|  | Policy Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 33.3\% | 28,166 | 29,930 | 58,096 |
| Stipulated Award | 9.2\% | 20,375 | 18,166 | 38,541 |
| All Other Settlements | 19.8\% | 23,899 | 20,488 | 44,387 |
| Not Subject to Settlement | 37.6\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 25,658 | 25,191 | 50,849 |

Percentage of Claim Count and Average Severity by Method of Settlement
Geographic Region: Los Angeles**

|  | Policy Year 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim | Average | Average | Average |
|  | Distribution | Indemnity | Medical | Incurred |
| Compromise \& Release | 31.8\% | 24,943 | 29,327 | 54,271 |
| Stipulated Award | 4.6\% | 21,914 | 22,793 | 44,707 |
| All Other Settlements | 12.8\% | 17,880 | 19,319 | 37,199 |
| Not Subject to Settlement | 50.8\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 22,825 | 26,115 | 48,940 |


|  | Policy Year 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 31.9\% | 25,186 | 31,028 | 56,214 |
| Stipulated Award | 4.2\% | 20,226 | 21,304 | 41,531 |
| All Other Settlements | 13.7\% | 18,556 | 18,030 | 36,586 |
| Not Subject to Settlement | 50.2\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 22,942 | 26,630 | 49,572 |


|  | Policy Year 2011 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | Claim |  |  |  | | Average |
| :---: |
| Average |$\quad$ Average

Policy Year 2012

|  | Claim <br> Distribution | Average <br> Indemnity | Average <br> Medical | Average <br> Incurred |
| :--- | ---: | :---: | :---: | :---: |
| Compromise \& Release | $40.0 \%$ | 21,892 | 24,983 | 46,875 |
| Stipulated Award | $6.5 \%$ | 18,432 | 16,726 | 35,158 |
| All Other Settlements | $20.4 \%$ | 20,222 | 19,921 | 40,143 |
| Not Subject to Settlement | $\underline{33.1 \%}$ | $\underline{------}$ | $\underline{------}$ | $\overline{------}$ |
| Total/Average | $100.0 \%$ | 21,047 | 22,640 | 43,687 |

**Includes Los Angeles County and remainder of Los Angeles Basin
Source: closed and resolved permanent disability claims from third report level unit statistical data

Percentage of Claim Count and Average Severity by Method of Settlement Geographic Region: Other

|  | Policy Year 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim <br> Distribution | Average <br> Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 29.1\% | 26,566 | 32,177 | 58,744 |
| Stipulated Award | 7.1\% | 19,169 | 24,810 | 43,979 |
| All Other Settlements | 9.0\% | 17,520 | 16,238 | 33,758 |
| Not Subject to Settlement | 54.8\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 23,599 | 27,839 | 51,438 |


|  | Policy Year 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim | Average | Average | Average |
|  | Distribution | Indemnity | Medical | Incurred |
| Compromise \& Release | 28.9\% | 25,085 | 31,073 | 56,158 |
| Stipulated Award | 5.8\% | 22,046 | 25,642 | 47,688 |
| All Other Settlements | 12.0\% | 20,701 | 18,855 | 39,556 |
| Not Subject to Settlement | 53.3\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 23,582 | 27,261 | 50,843 |


|  | Policy Year 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 33.7\% | 25,434 | 30,794 | 56,228 |
| Stipulated Award | 7.2\% | 20,055 | 19,225 | 39,279 |
| All Other Settlements | 16.4\% | 22,134 | 19,582 | 41,715 |
| Not Subject to Settlement | 42.7\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 23,810 | 26,125 | 49,935 |


|  | Policy Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Claim Distribution | Average Indemnity | Average Medical | Average Incurred |
| Compromise \& Release | 39.3\% | 24,606 | 30,217 | 54,823 |
| Stipulated Award | 8.0\% | 18,277 | 18,025 | 36,302 |
| All Other Settlements | 19.2\% | 20,682 | 19,994 | 40,676 |
| Not Subject to Settlement | 33.5\% | ------- | ------- | ------- |
| Total/Average | 100.0\% | 22,713 | 25,802 | 48,515 |

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

|  |  <br> Calendar Year <br> Release |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| Stipulations |  |  |  |  |
| Others |  |  |  |  |

*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 2016 Annual Report

## Elapsed Time in Days from Request to DWC Hearing

| Time Period | First 5502* <br> Conference | Year-to-Year Change | First 5502* Trial | Year-to-Year Change | Expedited Hearing | Year-to-Year Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4th Qtr 1995 | 81 | --- | 199 | --- | 36 | --- |
| 4th Qtr 1996 | 78 | -3.7\% | 184 | -7.5\% | 32 | -11.1\% |
| 4th Qtr 1997 | 70 | -10.3\% | 148 | -19.6\% | 34 | 6.3\% |
| 4th Qtr 1998 | 62 | -11.4\% | 121 | -18.2\% | 31 | -8.8\% |
| 4th Qtr 1999 | 68 | 9.7\% | 117 | -3.3\% | 31 | 0.0\% |
| 4th Qtr 2000 | 62 | -8.8\% | 114 | -2.6\% | 35 | 12.9\% |
| 4th Qtr 2001 | 71 | 14.5\% | 125 | 9.6\% | 37 | 5.7\% |
| 4th Qtr 2002 | 79 | 11.3\% | 140 | 12.0\% | 40 | 8.1\% |
| 4th Qtr 2003 | 102 | 29.1\% | 171 | 22.1\% | 48 | 20.0\% |
| 4th Qtr 2004 | 118 | 15.7\% | 211 | 23.4\% | 57 | 18.8\% |
| 4th Qtr 2005 | 113 | -4.2\% | 218 | 3.3\% | 40 | -29.8\% |
| 4th Qtr 2006 | 67 | -40.7\% | 163 | -25.2\% | 41 | 2.5\% |
| 4th Qtr 2007 | 63 | -6.0\% | 117 | -28.2\% | 34 | -17.1\% |
| 4th Qtr 2008** | 55 | -12.7\% | 130 | 11.1\% | 45 | 32.4\% |
| 4th Qtr 2009 | 68 | 23.6\% | 135 | 3.8\% | 41 | -8.9\% |
| 4th Qtr 2010 | 70 | 2.9\% | 167 | 23.7\% | 42 | 2.4\% |
| 4th Qtr 2011 | 64 | -8.6\% | 169 | 1.2\% | 34 | -19.0\% |
| 4th Qtr 2012 | 71 | 10.9\% | 161 | -4.7\% | 40 | 17.6\% |
| 4th Qtr 2013 | 65 | -8.5\% | 164 | 1.9\% | 34 | -15.0\% |
| 4th Qtr 2014 | 67 | 3.1\% | 161 | -1.8\% | 34 | 0.0\% |
| 4th Qtr 2015 | 62 | -7.5\% | 160 | -0.6\% | 37 | 8.8\% |

* See California Labor Code, Sec. 5502
** 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 2016 Annual Report

Quarterly Expedited Hearings by Region

| Time Period | Northern California | Central California | Southern California | Expedited Hearing | Change from Same Quarte 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\% | 24.5\% | 61.1\% | 4,463 | 23.5\% |
| 3rd Qtr 2014 | 16.8\% | 23.6\% | 59.7\% | 4,404 | 7.2\% |
| 4th Qtr 2014 | 17.0\% | 16.8\% | 66.2\% | 3,926 | -2.2\% |
| 1st Qtr 2015 | 16.0\% | 18.1\% | 65.9\% | 4,062 | 6.5\% |
| 2nd Qtr 2015 | 17.4\% | 15.3\% | 67.3\% | 4,350 | -2.5\% |
| 3rd Qtr 2015 | 17.6\% | 20.0\% | 62.4\% | 3,698 | -16.0\% |
| 4th Qtr 2015 | 19.0\% | 20.2\% | 60.7\% | 4,133 | 5.3\% |
| 1st Qtr 2016 | 18.3\% | 20.8\% | 60.9\% | 4,622 | 13.8\% |
| 2nd Qtr 2016 | 16.8\% | 20.2\% | 63.0\% | 6,283 | 44.4\% |
| 3rd Qtr 2016 | 16.9\% | 20.4\% | 62.7\% | 6,403 | 73.1\% |
| 4th Qtr 2016 | 18.1\% | 20.7\% | 61.2\% | 6,404 | 54.9\% |
| 1st Qtr 2017 | 19.0\% | 20.8\% | 60.2\% | 6,405 | 38.6\% |

Quarterly Expedited Hearings - DOR Reasons by Region

|  | Northern California |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Time Period | Medical <br> Treatment | $\underline{T D}$ | Other | TD <br> Expedited <br> Hearing | | Change from <br> Sam Prior Year <br> in Prer |
| :---: |
| 1st Qtr 2014 |

## Central California

| Time Period | Medical <br> Treatment | TD | Other | Expedited Hearing | Change from Same Quarter in Prior Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Qtr 2014 | --- | --- | --- | --- | --- |
| 2nd Qtr 2014 | 86.6\% | 12.1\% | 1.4\% | 1,092 | --- |
| 3rd Qtr 2014 | 85.1\% | 13.0\% | 1.9\% | 1,037 | --- |
| 4th Qtr 2014 | 85.9\% | 12.3\% | 1.8\% | 661 | --- |
| 1st Qtr 2015 | 81.7\% | 17.4\% | 0.9\% | 734 | --- |
| 2nd Qtr 2015 | 90.5\% | 7.9\% | 1.6\% | 667 | -38.9\% |
| 3rd Qtr 2015 | 84.6\% | 13.6\% | 1.8\% | 738 | -28.8\% |
| 4th Qtr 2015 | 85.5\% | 12.4\% | 2.1\% | 835 | 26.3\% |
| 1st Qtr 2016 | 84.5\% | 13.4\% | 2.1\% | 963 | 31.2\% |
| 2nd Qtr 2016 | 85.1\% | 13.0\% | 1.9\% | 1,272 | 90.8\% |
| 3rd Qtr 2016 | 86.5\% | 12.2\% | 1.3\% | 1,306 | 76.9\% |
| 4th Qtr 2016 | 87.8\% | 11.2\% | 0.9\% | 1,328 | 59.0\% |
| 1st Qtr 2017 | 86.6\% | 12.3\% | 1.1\% | 1,332 | 38.3\% |

Southern California

| Medical <br> Treatment |  |  |  | Change from Same Quarter in Prior Year |
| :---: | :---: | :---: | :---: | :---: |
|  | TD | Other | Expedited Hearing |  |
| --- | --- | --- | --- | --- |
| 69.3\% | 22.6\% | 8.1\% | 2,728 | --- |
| 69.0\% | 18.7\% | 12.3\% | 2,629 | --- |
| 68.7\% | 19.5\% | 11.9\% | 2,599 | --- |
| 63.6\% | 22.2\% | 14.2\% | 2,677 | --- |
| 66.9\% | 20.6\% | 12.5\% | 2,926 | 7.3\% |
| 65.1\% | 20.0\% | 14.9\% | 2,307 | -12.2\% |
| 64.4\% | 20.8\% | 14.8\% | 2,511 | -3.4\% |
| 66.4\% | 18.8\% | 14.8\% | 2,813 | 5.1\% |
| 67.2\% | 19.4\% | 13.3\% | 3,956 | 35.2\% |
| 66.3\% | 20.6\% | 13.2\% | 4,012 | 73.9\% |
| 68.0\% | 20.0\% | 12.0\% | 3,919 | 56.1\% |
| 68.9\% | 18.9\% | 12.2\% | 3,855 | 37.0\% |

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WCIRB California ${ }^{\circledR}$

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

|  | Number of <br> Cien Decisions <br> (in 000s) | Year-to-Year <br> Change |
| :---: | :---: | :---: |
|  |  |  |
| 1993 | 18.4 | --- |
| 1994 | 26.3 | $42.9 \%$ |
| 1995 | 33.6 | $27.8 \%$ |
| 1996 | 33.9 | $0.9 \%$ |
| 1997 | 27.1 | $-20.1 \%$ |
| 1998 | 19.3 | $-28.8 \%$ |
| 1999 | 17.6 | $-8.8 \%$ |
| 2000 | 15.1 | $-14.2 \%$ |
| 2001 | 14.8 | $-2.0 \%$ |
| 2002 | 16.6 | $12.2 \%$ |
| 2003 | 16.5 | $-0.6 \%$ |
| 2004 | 21.2 | $28.5 \%$ |
| 2005 | 24.3 | $14.6 \%$ |
| 2006 | 28.3 | $16.5 \%$ |
| 2007 | 35.2 | $24.4 \%$ |
| $2008^{*}$ | 34.5 | $-2.0 \%$ |
| 2009 | 28.5 | $-17.4 \%$ |
| 2010 | 37.1 | $30.2 \%$ |
| 2011 | 41.4 | $11.6 \%$ |
| 2012 | 64.3 | $55.3 \%$ |
| 2013 | 65.8 | $2.3 \%$ |
| 2014 | 58.3 | $-11.4 \%$ |
| 2015 | 64.4 | $10.5 \%$ |
| 2016 | 56.0 | $-13.0 \%$ |

*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.

## Liens Filed Counts*

| Counts by Region |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Period | Bay Area | Central Coast/ Valley | Los Angeles County | Remainder of LA Basin | Remaining CA Zip Codes | Sacramento | San Diego County | Total |
| 2011 | 18,723 | 24,414 | 283,774 | 114,554 | 2,535 | 3,934 | 15,922 | 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 |
| Counts by Type |  |  |  |  |  |  |  |  |
| Time Period | Interpreter | Medical | MedicalLegal | Copy Service | Other*** | 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 |  |  |

[^7]Medicare Set-aside Costs by Age Interval


$\stackrel{\sim}{\top} \mid \aleph$
Second Survey Level







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Medicare Set-aside Costs By Permanent Disability Rating Interval
Average Set-aside Amount
AY2011 AY2012 AY2013 AY2014


| Percentage of PD Claims Involving <br> Set-aside |  |  |  |
| :--- | :---: | :---: | :---: |
| AY2011 $\underline{\text { AY2012 }}$ $\underline{\text { AY2013 }}$  AY2014 <br>      <br> $1.0 \%$ $0.3 \%$ $1.0 \%$ $0.5 \%$  <br> $4.1 \%$ $3.2 \%$ $3.8 \%$ $4.0 \%$  <br> $\frac{5.3 \%}{1.9 \%}$ $\frac{7.4 \%}{1.1 \%}$ $\underline{9.1 \%}$ $\frac{10.0 \%}{1.0 \%}$ $1.7 \%$ |  |  |  |

First Survey Level

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| Percentage of PD Claims Involving Set-aside |  |  |  |
| :---: | :---: | :---: | :---: |
| AY2010 | AY2011 | AY2012 | AY2013 |
| 1.6\% | 1.5\% | 1.0\% | 1.3\% |
| 5.4\% | 6.7\% | 6.4\% | 6.2\% |
| 17.1\% | 9.1\% | 21.1\% | 14.8\% |
| 2.9\% | 3.1\% | 2.7\% | 3.1\% |



 $\stackrel{\stackrel{\infty}{*}}{\stackrel{\sim}{<}}$

|  |  |
| :---: | :---: |
| $\begin{aligned} & \stackrel{\rightharpoonup}{ } \\ & \stackrel{\sim}{2} \end{aligned}$ | ¢ ¢ ¢ Nō |

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Figures in italics are based ond five orility Claim Survey - approximately 3,500 PD claims were surveyed for each accident year

## Percentage of Permanent Partial Claims with Qualified Offer of Permanent Return-to-work

First Survey Level

| Accident <br> Year | \% With <br> Qualified Offer |
| :---: | :---: |
| $\frac{2011}{2012}$ | $21.2 \%$ |
| 2013 | $16.0 \%$ |
| 2014 | $16.7 \%$ |

Second Survey Level

| Accident <br> Year | \% With <br> Qualified Offer |
| :---: | :---: |
| 2010 | $21.0 \%$ |
| 2011 | $20.4 \%$ |
| 2012 | $21.3 \%$ |
| 2013 | $15.2 \%$ |

Source: WCIRB Permanent Disability Claim Survey
Note: Accident Years 2014 at First Survey Level and 2013 at Second Survey Level are preliminary.

## IMR Filed Counts

Quarterly IMRs filed

| Year \& Quarter | IMRs Filed | Change from <br> Same Quarter in |
| :---: | :---: | :---: |
| 2013 1Q \& 2Q | 878 | --- |
| 2013 3Q | 31,950 | -- |
| 2013 4Q | 51,092 | --- |
| 2014 1Q | 49,928 | --- |
| 2014 2Q | 59,983 | -- |
| 2014 3Q | 59,606 | $86.6 \%$ |
| 2014 4Q | 58,567 | $14.6 \%$ |
| 2015 1Q | 61,142 | $22.5 \%$ |
| 2015 2Q | 65,418 | $9.1 \%$ |
| 2015 3Q | 65,889 | $10.5 \%$ |
| $20154 Q$ | 61,327 | $4.7 \%$ |
| 2016 1Q | 60,772 | $-0.6 \%$ |
| 2016 2Q | 64,852 | $-0.9 \%$ |
| 2016 3Q | 62,411 | $-5.3 \%$ |
| $20164 Q$ | 61,318 | $0.0 \%$ |
| 2017 1Q | 61,968 | $2.0 \%$ |

Yearly IMR Counts

|  | Original IMR Applications | Duplicates | Ineligible | Total Rejected | Eligible IMRs | Elibigle IMR Yearly Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2013 IMR Counts | 83,920 | 15,560 | 15,516 | 31,076 | 52,844 | --- |
| 2014 IMR Counts | 228,084 | 55,503 | 29,269 | 84,772 | 143,312 | 171.2\% |
| 2015 IMR Counts | 253,776 | 58,088 | 30,079 | 88,167 | 165,609 | 15.6\% |
| 2016 IMR Counts | 249,353 | 53,314 | 23,219 | 76,533 | 172,820 | 4.4\% |

Reported Indemnity Claim Count Development - Statewide

| Accident |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1999 |  |  |  |  |  |  |  |  | 1.000 |
| 2000 |  |  |  |  |  |  |  | 1.000 | 1.000 |
| 2001 |  |  |  |  |  |  | 0.999 | 0.999 | 0.999 |
| 2002 |  |  |  |  |  | 1.000 | 1.000 | 0.999 | 1.000 |
| 2003 |  |  |  |  | 1.000 | 0.998 | 0.999 | 0.999 | 0.999 |
| 2004 |  |  |  | 1.000 | 0.999 | 0.999 | 0.999 | 0.999 | 1.000 |
| 2005 |  |  | 1.004 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2006 |  | 1.022 | 1.006 | 1.004 | 1.001 | 1.000 | 1.001 | 1.000 | 1.001 |
| 2007 | 6.455 | 1.038 | 1.012 | 1.005 | 1.003 | 1.002 | 1.000 | 1.001 | 1.001 |
| 2008 | 6.153 | 1.061 | 1.018 | 1.009 | 1.004 | 1.003 | 1.002 | 1.001 | 1.001 |
| 2009 | 6.999 | 1.082 | 1.023 | 1.008 | 1.005 | 1.003 | 1.002 | 1.002 |  |
| 2010 | 7.389 | 1.090 | 1.022 | 1.010 | 1.006 | 1.003 | 1.000 |  |  |
| 2011 | 7.535 | 1.102 | 1.026 | 1.011 | 1.006 | 1.003 |  |  |  |
| 2012 | 7.678 | 1.119 | 1.026 | 1.011 | 1.006 |  |  |  |  |
| 2013 | 8.075 | 1.102 | 1.025 | 1.009 |  |  |  |  |  |
| 2014 | 7.808 | 1.108 | 1.023 |  |  |  |  |  |  |
| 2015 | 8.028 | 1.107 |  |  |  |  |  |  |  |
| 2016 | 7.739 |  |  |  |  |  |  |  |  |


| Latest Year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Age-to-Age |  |  |  |  |  |  |  |  |
| 7.7391 .107 | 1.023 | 1.009 | 1.006 | 1.003 | 1.000 | 1.002 | 1.001 |  |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |
| 8.9661 .159 | 1.047 | 1.023 | 1.014 | 1.008 | 1.005 | 1.006 | 1.004 | 1.002 |
| III. Estimated Percent of Ulitimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |
| 11.2\% 86.3\% | 95.5\% | 97.7\% | 98.6\% | 99.2\% | 99.5\% | 99.4\% | 99.6\% | 99.8\% |

Reported Total Claim Count Development - Statewide


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 $68 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

Source: WCIRB quarterly calls for experience

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 94.3\% |
| 1999 |  |  |  |  |  |  |  |  | 92.6\% | 94.0\% |
| 2000 |  |  |  |  |  |  |  | 89.9\% | 91.9\% | 93.4\% |
| 2001 |  |  |  |  |  |  | 85.0\% | 88.3\% | 90.6\% | 92.3\% |
| 2002 |  |  |  |  |  | 80.5\% | 85.4\% | 88.7\% | 91.0\% | 92.5\% |
| 2003 |  |  |  |  | 73.1\% | 80.7\% | 85.6\% | 88.8\% | 90.8\% | 92.5\% |
| 2004 |  |  |  | 63.7\% | 74.7\% | 81.6\% | 85.7\% | 88.5\% | 90.6\% | 92.4\% |
| 2005 |  |  | 51.9\% | 66.0\% | 76.1\% | 81.9\% | 85.8\% | 88.7\% | 90.9\% | 93.1\% |
| 2006 |  | 33.7\% | 53.3\% | 67.0\% | 76.0\% | 82.0\% | 85.8\% | 88.8\% | 91.5\% | 93.3\% |
| 2007 | 0.8\% | 32.9\% | 51.7\% | 65.3\% | 74.7\% | 80.7\% | 85.1\% | 89.1\% | 91.4\% | 93.3\% |
| 2008 | 0.8\% | 31.5\% | 49.5\% | 63.1\% | 72.9\% | 79.8\% | 85.3\% | 89.0\% | 91.7\% | 93.7\% |
| 2009 | 0.7\% | 29.5\% | 47.4\% | 61.4\% | 71.7\% | 79.7\% | 85.0\% | 89.0\% | 91.8\% |  |
| 2010 | 0.7\% | 29.6\% | 48.1\% | 62.2\% | 73.7\% | 81.3\% | 86.6\% | 90.2\% |  |  |
| 2011 | 0.8\% | 29.4\% | 48.2\% | 63.6\% | 74.8\% | 82.5\% | 87.6\% |  |  |  |
| 2012 | 0.8\% | 29.0\% | 49.2\% | 65.0\% | 76.2\% | 83.7\% |  |  |  |  |
| 2013 | 0.9\% | 28.9\% | 50.3\% | 66.4\% | 77.8\% |  |  |  |  |  |
| 2014 | 0.7\% | 29.1\% | 51.5\% | 67.7\% |  |  |  |  |  |  |
| 2015 | 0.8\% | 29.7\% | 53.1\% |  |  |  |  |  |  |  |
| 2016 | 0.8\% | 31.4\% |  |  |  |  |  |  |  |  |
| 2017 | 0.8\% |  |  |  |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

Source: WCIRB quarterly calls for experience

Indemnity Claim Settlement Ratios by Injury Type

| Permanent Partial |  |  |  |  |  | Temporary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1996 | 11.3\% | 34.6\% | 57.3\% | 71.5\% | 79.4\% | 1996 | 78.5\% | 85.8\% | 90.7\% | 92.7\% | 97.5\% |
| 1997 | 9.7\% | 33.2\% | 55.7\% | 69.7\% | 77.5\% | 1997 | 74.8\% | 88.9\% | 93.1\% | 98.1\% | 97.4\% |
| 1998 | 8.9\% | 30.8\% | 53.7\% | 67.5\% | 74.4\% | 1998 | 78.0\% | 90.1\% | 95.4\% | 95.4\% | 96.6\% |
| 1999 | 8.7\% | 29.3\% | 50.4\% | 62.5\% | 69.2\% | 1999 | 75.1\% | 88.4\% | 92.3\% | 94.5\% | 95.6\% |
| 2000 | 8.0\% | 26.8\% | 45.2\% | 57.3\% | 66.2\% | 2000 | 70.6\% | 84.3\% | 89.3\% | 92.1\% | 93.4\% |
| 2001 | 7.1\% | 22.2\% | 41.2\% | 57.7\% | 69.5\% | 2001 | 66.1\% | 79.4\% | 87.1\% | 89.7\% | 91.5\% |
| 2002 | 5.2\% | 19.3\% | 41.7\% | 60.3\% | 71.7\% | 2002 | 64.7\% | 80.9\% | 87.0\% | 90.7\% | 93.1\% |
| 2003 | 4.1\% | 20.8\% | 44.3\% | 61.3\% | 72.5\% | 2003 | 67.9\% | 81.6\% | 88.5\% | 92.6\% | 94.8\% |
| 2004 | 5.2\% | 22.5\% | 44.0\% | 60.0\% | 71.4\% | 2004 | 70.1\% | 84.8\% | 91.6\% | 95.6\% | 95.6\% |
| 2005 | 5.9\% | 22.6\% | 43.1\% | 59.4\% | 69.7\% | 2005 | 69.8\% | 84.0\% | 90.7\% | 92.7\% | 95.5\% |
| 2006 | 6.5\% | 23.6\% | 44.3\% | 59.5\% | 69.1\% | 2006 | 71.4\% | 86.8\% | 91.9\% | 95.0\% | 95.5\% |
| 2007 | 6.0\% | 23.9\% | 43.6\% | 58.1\% | 68.2\% | 2007 | 71.3\% | 85.3\% | 91.7\% | 93.8\% | 95.0\% |
| 2008 | 6.1\% | 24.0\% | 43.3\% | 58.0\% | 69.9\% | 2008 | 70.0\% | 84.2\% | 89.3\% | 92.2\% | 94.3\% |
| 2009 | 6.0\% | 23.5\% | 42.5\% | 58.5\% | 70.7\% | 2009 | 67.9\% | 81.0\% | 87.0\% | 91.0\% | 93.2\% |
| 2010 | 7.2\% | 25.3\% | 45.8\% | 62.3\% | 73.6\% | 2010 | 64.9\% | 78.3\% | 85.5\% | 89.8\% | 92.5\% |
| 2011 | 7.9\% | 27.4\% | 48.7\% | 64.5\% | 76.5\% | 2011 | 63.4\% | 77.4\% | 84.9\% | 89.5\% | 91.1\% |
| 2012 | 9.2\% | 30.7\% | 51.7\% | 66.1\% |  | 2012 | 62.6\% | 77.4\% | 85.4\% | 89.8\% |  |
| 2013 | 10.3\% | 32.4\% | 55.0\% |  |  | 2013 | 61.6\% | 77.9\% | 85.8\% |  |  |
| 2014 | 10.9\% | 33.3\% |  |  |  | 2014 | 62.9\% | 77.1\% |  |  |  |
| 2015 | 12.5\% |  |  |  |  | 2015 | 63.9\% |  |  |  |  |
| Cumulative Injury* |  |  |  |  |  | Non-Cumulative Injury |  |  |  |  |  |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1996 | 14.5\% | 35.7\% | 56.9\% | 71.2\% | 79.2\% | 1996 | 51.3\% | 65.1\% | 77.2\% | 84.1\% | 90.1\% |
| 1997 | 16.6\% | 36.9\% | 54.8\% | 67.2\% | 76.0\% | 1997 | 46.5\% | 64.7\% | 77.0\% | 86.0\% | 88.8\% |
| 1998 | 17.2\% | 33.5\% | 51.3\% | 64.1\% | 72.0\% | 1998 | 47.4\% | 64.0\% | 77.2\% | 83.2\% | 86.9\% |
| 1999 | 16.3\% | 31.7\% | 48.6\% | 60.7\% | 68.7\% | 1999 | 45.2\% | 62.0\% | 73.8\% | 80.3\% | 83.8\% |
| 2000 | 13.5\% | 29.7\% | 45.3\% | 57.1\% | 66.5\% | 2000 | 42.5\% | 58.5\% | 69.6\% | 76.5\% | 81.1\% |
| 2001 | 12.8\% | 26.8\% | 43.6\% | 57.3\% | 67.8\% | 2001 | 38.1\% | 52.2\% | 65.2\% | 74.5\% | 81.0\% |
| 2002 | 12.4\% | 26.8\% | 43.9\% | 59.4\% | 70.1\% | 2002 | 35.3\% | 50.3\% | 64.6\% | 75.7\% | 82.5\% |
| 2003 | 12.5\% | 27.6\% | 45.6\% | 59.9\% | 69.5\% | 2003 | 36.7\% | 51.9\% | 67.1\% | 77.6\% | 84.2\% |
| 2004 | 15.6\% | 30.3\% | 46.8\% | 60.5\% | 69.8\% | 2004 | 40.3\% | 56.3\% | 70.1\% | 79.6\% | 84.8\% |
| 2005 | 13.2\% | 27.6\% | 42.5\% | 55.1\% | 64.7\% | 2005 | 43.3\% | 58.6\% | 71.4\% | 79.5\% | 85.3\% |
| 2006 | 13.1\% | 27.7\% | 42.7\% | 54.8\% | 64.2\% | 2006 | 43.6\% | 59.9\% | 72.1\% | 80.4\% | 84.7\% |
| 2007 | 13.5\% | 28.4\% | 42.9\% | 55.0\% | 65.0\% | 2007 | 42.7\% | 58.6\% | 71.1\% | 78.7\% | 83.7\% |
| 2008 | 12.0\% | 26.9\% | 41.4\% | 54.1\% | 65.4\% | 2008 | 40.8\% | 56.9\% | 68.7\% | 77.1\% | 83.6\% |
| 2009 | 10.9\% | 24.3\% | 39.2\% | 54.0\% | 66.7\% | 2009 | 39.3\% | 54.8\% | 67.1\% | 76.7\% | 83.3\% |
| 2010 | 13.0\% | 26.3\% | 43.0\% | 59.1\% | 71.1\% | 2010 | 38.4\% | 54.4\% | 68.0\% | 77.8\% | 84.3\% |
| 2011 | 10.7\% | 26.8\% | 45.6\% | 61.0\% | 72.3\% | 2011 | 38.5\% | 55.3\% | 69.2\% | 78.7\% | 85.1\% |
| 2012 | 11.5\% | 29.7\% | 47.2\% | 61.2\% |  | 2012 | 39.3\% | 57.3\% | 71.3\% | 80.2\% |  |
| 2013 | 13.8\% | 31.8\% | 50.6\% |  |  | 2013 | 39.8\% | 58.8\% | 73.4\% |  |  |
| 2014 | 13.8\% | 32.2\% |  |  |  | $2014$ | 41.0\% | 59.2\% |  |  |  |
| 2015 | 14.4\% |  |  |  |  | $2015$ | 42.1\% |  |  |  |  |
| All Indemnity |  |  |  |  |  |  |  |  |  |  |  |
| AY/RL | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  |  |
| 1996 | 48.8\% | 63.1\% | 75.8\% | 83.2\% | 89.4\% |  |  |  |  |  |  |
| 1997 | 44.5\% | 62.8\% | 75.5\% | 84.7\% | 87.9\% |  |  |  |  |  |  |
| 1998 | 45.3\% | 61.9\% | 75.4\% | 81.9\% | 85.9\% |  |  |  |  |  |  |
| 1999 | 43.1\% | 59.8\% | 71.9\% | 78.8\% | 82.7\% |  |  |  |  |  |  |
| 2000 | 40.2\% | 56.3\% | 67.7\% | 75.0\% | 80.0\% |  |  |  |  |  |  |
| 2001 | 36.0\% | 50.2\% | 63.5\% | 73.1\% | 79.9\% |  |  |  |  |  |  |
| 2002 | 33.3\% | 48.3\% | 62.8\% | 74.3\% | 81.5\% |  |  |  |  |  |  |
| 2003 | 34.6\% | 49.8\% | 65.3\% | 76.1\% | 82.9\% |  |  |  |  |  |  |
| 2004 | 38.2\% | 54.1\% | 68.2\% | 78.0\% | 83.6\% |  |  |  |  |  |  |
| 2005 | 41.1\% | 56.4\% | 69.4\% | 77.7\% | 83.8\% |  |  |  |  |  |  |
| 2006 | 41.4\% | 57.6\% | 69.9\% | 78.5\% | 83.2\% |  |  |  |  |  |  |
| 2007 | 40.5\% | 56.3\% | 69.0\% | 76.9\% | 82.3\% |  |  |  |  |  |  |
| 2008 | 38.4\% | 54.5\% | 66.5\% | 75.3\% | 82.2\% |  |  |  |  |  |  |
| 2009 | 36.6\% | 51.9\% | 64.5\% | 74.5\% | 81.8\% |  |  |  |  |  |  |
| 2010 | 35.9\% | 51.6\% | 65.4\% | 76.0\% | 83.0\% |  |  |  |  |  |  |
| 2011 | 35.6\% | 52.4\% | 66.8\% | 76.9\% | 83.8\% |  |  |  |  |  |  |
| 2012 | 36.3\% | 54.3\% | 68.7\% | 78.1\% |  |  |  |  |  |  |  |
| 2013 | 36.6\% | 55.6\% | 70.6\% |  |  |  |  |  |  |  |  |
| 2014 | 37.5\% | 55.8\% |  |  |  |  |  |  |  |  |  |
| 2015 | 38.6\% |  |  |  |  |  |  |  |  |  |  |

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

| Accident <br> Year | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | $\underline{6}$ | $\underline{9}$ | 12 | 15 | 18 | $\underline{21}$ | $\underline{24}$ | $\underline{27}$ | 30 | $\underline{33}$ | $\underline{36}$ | 39 | 42 | 45 | $\underline{48}$ |
| 2008 | 0.9\% | 5.6\% | 13.4\% | 23.1\% | 31.7\% | 37.9\% | 42.2\% | 46.0\% | 49.6\% | 53.2\% | 56.7\% | 60.1\% | 63.0\% | 65.7\% | 68.3\% | 70.7\% |
| 2009 | 0.7\% | 4.7\% | 12.3\% | 21.5\% | 29.8\% | 35.8\% | 40.1\% | 43.9\% | 47.5\% | 51.1\% | 54.8\% | 58.3\% | 61.3\% | 64.3\% | 66.9\% | 69.4\% |
| 2010 | 0.7\% | 4.8\% | 11.9\% | 21.1\% | 29.8\% | 35.8\% | 40.2\% | 44.4\% | 48.2\% | 52.1\% | 55.6\% | 59.1\% | 62.3\% | 65.6\% | 68.6\% | 71.3\% |
| 2011 | 0.8\% | 5.1\% | 12.0\% | 21.2\% | 29.7\% | 35.8\% | 40.4\% | 44.7\% | 48.6\% | 52.8\% | 56.6\% | 60.5\% | 63.8\% | 66.9\% | 69.8\% | 72.6\% |
| 2012 | 0.8\% | 4.9\% | 11.9\% | 20.8\% | 29.0\% | 35.5\% | 40.3\% | 45.1\% | 49.3\% | 53.5\% | 57.8\% | 61.7\% | 65.1\% | 68.3\% | 71.2\% | 73.9\% |
| 2013 | 0.9\% | 4.9\% | 11.4\% | 20.3\% | 28.9\% | 35.4\% | 40.8\% | 45.7\% | 50.3\% | 54.8\% | 58.9\% | 62.9\% | 66.4\% | 69.8\% | 72.7\% | 75.5\% |
| 2014 | 0.7\% | 4.6\% | 11.4\% | 20.3\% | 29.1\% | 35.9\% | 41.6\% | 46.8\% | 51.5\% | 56.0\% | 60.4\% | 64.3\% | 67.7\% |  |  |  |
| 2015 | 0.8\% | 4.6\% | 11.8\% | 20.7\% | 29.8\% | 37.1\% | 42.7\% | 48.0\% | 53.2\% |  |  |  |  |  |  |  |
| 2016 | 0.8\% | 5.0\% | 12.1\% | 21.6\% | 31.5\% |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | 0.8\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |
| 2008 | 4.7\% | 7.8\% | 9.7\% | 8.5\% | 6.2\% | 4.3\% | 3.8\% | 3.6\% | 3.6\% | 3.5\% | 3.4\% | 2.9\% | 2.7\% | 2.6\% | 2.4\% |  |
| 2009 | 4.0\% | 7.6\% | 9.1\% | 8.3\% | 6.0\% | 4.3\% | 3.8\% | 3.6\% | 3.6\% | 3.7\% | 3.5\% | 3.0\% | 3.1\% | 2.5\% | 2.5\% |  |
| 2010 | 4.1\% | 7.1\% | 9.2\% | 8.7\% | 6.0\% | 4.3\% | 4.2\% | 3.8\% | 4.0\% | 3.5\% | 3.5\% | 3.2\% | 3.3\% | 3.0\% | 2.8\% |  |
| 2011 | 4.3\% | 6.8\% | 9.3\% | 8.4\% | 6.2\% | 4.6\% | 4.3\% | 3.8\% | 4.2\% | 3.8\% | 3.9\% | 3.3\% | 3.0\% | 3.0\% | 2.7\% |  |
| 2012 | 4.1\% | 7.0\% | 8.9\% | 8.2\% | 6.5\% | 4.9\% | 4.8\% | 4.2\% | 4.3\% | 4.3\% | 3.9\% | 3.4\% | 3.2\% | 2.9\% | 2.8\% |  |
| 2013 | 4.0\% | 6.5\% | 8.9\% | 8.5\% | 6.5\% | 5.4\% | 4.9\% | 4.6\% | 4.5\% | 4.1\% | 4.0\% | 3.6\% | 3.3\% | 3.0\% | 2.7\% |  |
| 2014 | 3.9\% | 6.8\% | 8.9\% | 8.8\% | 6.8\% | 5.7\% | 5.1\% | 4.7\% | 4.5\% | 4.3\% | 3.9\% | 3.4\% |  |  |  |  |
| 2015 | 3.8\% | 7.1\% | 8.9\% | 9.1\% | 7.3\% | 5.7\% | 5.2\% | 5.2\% |  |  |  |  |  |  |  |  |
| 2016 | 4.2\% | 7.1\% | 9.5\% | 9.9\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 $88 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Source: | RB qua | y calls | experien |  |  |  |  |  |  |  |  |  |  |  |  |  |

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

| Accident | Development |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1999 |  |  |  |  |  |  |  |  | 19.4\% |
| 2000 |  |  |  |  |  |  |  | 20.0\% | 18.3\% |
| 2001 |  |  |  |  |  |  | 22.3\% | 19.7\% | 17.6\% |
| 2002 |  |  |  |  |  | 25.1\% | 22.8\% | 20.5\% | 16.7\% |
| 2003 |  |  |  |  | 28.2\% | 25.7\% | 22.0\% | 17.8\% | 18.1\% |
| 2004 |  |  |  | 30.3\% | 27.4\% | 21.8\% | 19.7\% | 18.5\% | 18.8\% |
| 2005 |  |  | 29.3\% | 29.7\% | 24.2\% | 21.8\% | 20.7\% | 19.5\% | 23.8\% |
| 2006 |  | 29.6\% | 29.5\% | 27.2\% | 25.2\% | 21.1\% | 21.1\% | 24.7\% | 20.5\% |
| 2007 | 32.4\% | 28.1\% | 28.2\% | 27.0\% | 23.9\% | 22.8\% | 26.6\% | 22.0\% | 22.3\% |
| 2008 | 30.9\% | 26.3\% | 27.0\% | 26.5\% | 25.6\% | 27.5\% | 25.4\% | 24.9\% | 24.2\% |
| 2009 | 29.0\% | 25.5\% | 26.6\% | 26.8\% | 28.2\% | 26.4\% | 27.0\% | 25.6\% |  |
| 2010 | 29.1\% | 26.3\% | 27.2\% | 30.6\% | 29.1\% | 29.0\% | 26.6\% |  |  |
| 2011 | 28.9\% | 26.7\% | 29.8\% | 31.1\% | 30.8\% | 29.2\% |  |  |  |
| 2012 | 28.4\% | 28.6\% | 31.3\% | 32.2\% | 31.6\% |  |  |  |  |
| 2013 | 28.2\% | 30.3\% | 32.6\% | 34.1\% |  |  |  |  |  |
| 2014 | 28.7\% | 31.7\% | 33.6\% |  |  |  |  |  |  |
| 2015 | 29.3\% | 33.4\% |  |  |  |  |  |  |  |
| 2016 | 31.0\% |  |  |  |  |  |  |  |  |

Note: All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from $77 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

Source: WCIRB quarterly calls for experience
Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

| cident | 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 |
| 2007 | 4.5\% | 8.5\% | 11.8\% | 12.6\% | 9.8\% | 7.4\% | 7.6\% | 6.8\% | 7.9\% | 6.9\% | 9.0\% | 7.4\% | 7.4\% | 7.5\% | 7.9\% |
| 2008 | 4.7\% | 8.3\% | 11.2\% | 11.1\% | 9.1\% | 7.0\% | 6.6\% | 6.6\% | 7.2\% | 7.4\% | 7.9\% | 7.2\% | 7.3\% | 7.6\% | 7.6\% |
| 2009 | 4.0\% | 8.0\% | 10.4\% | 10.6\% | 8.5\% | 6.7\% | 6.4\% | 6.4\% | 6.9\% | 7.5\% | 7.8\% | 7.1\% | 8.0\% | 7.1\% | 7.7\% |
| 2010 | 4.2\% | 7.4\% | 10.4\% | 11.1\% | 8.6\% | 6.7\% | 7.0\% | 6.8\% | 7.6\% | 7.3\% | 7.8\% | 7.8\% | 8.7\% | 8.6\% | 8.8\% |
| 2011 | 4.3\% | 7.2\% | 10.5\% | 10.7\% | 8.8\% | 7.1\% | 7.2\% | 7.0\% | 8.2\% | 8.1\% | 8.9\% | 8.5\% | 8.4\% | 8.9\% | 9.1\% |
| 2012 | 4.1\% | 7.4\% | 10.1\% | 10.3\% | 9.1\% | 7.5\% | 8.0\% | 7.6\% | 8.4\% | 9.2\% | 9.2\% | 8.9\% | 9.2\% | 9.1\% | 9.6\% |
| 2013 | 4.1\% | 6.8\% | 10.1\% | 10.7\% | 9.1\% | 8.3\% | 8.3\% | 8.6\% | 9.0\% | 9.0\% | 9.6\% | 9.6\% | 9.9\% | 9.9\% | 10.0\% |
| 2014 | 3.9\% | 7.1\% | 10.1\% | 11.1\% | 9.6\% | 8.9\% | 8.8\% | 8.9\% | 9.3\% | 9.8\% | 10.0\% | 9.7\% |  |  |  |
| 2015 | 3.9\% | 7.5\% | 10.1\% | 11.5\% | 10.4\% | 9.0\% | 9.2\% | 10.0\% |  |  |  |  |  |  |  |
| 2016 | 4.2\% | 7.4\% | 10.8\% | 12.6\% |  |  |  |  |  |  |  |  |  |  |  |

[^8]
## 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 |
| 2001 | $0.84 \%$ | $0.50 \%$ | $0.34 \%$ | $0.30 \%$ | --- | --- | -- |
| 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 | $1.24 \%$ | $0.80 \%$ | $0.38 \%$ | $0.32 \%$ | $0.27 \%$ | $0.17 \%$ |  |
| 2009 | $1.22 \%$ | $0.48 \%$ | $0.40 \%$ | $0.38 \%$ | $0.26 \%$ |  |  |
| 2010 | $0.74 \%$ | $0.53 \%$ | $0.45 \%$ | $0.35 \%$ |  |  |  |
| 2011 | $0.86 \%$ | $0.60 \%$ | $0.48 \%$ |  |  |  |  |
| 2012 | $0.92 \%$ | $0.60 \%$ |  |  |  |  |  |
| 2013 | $0.89 \%$ |  |  |  |  |  |  |

Average Incurred for Reopened Claims

| PY/RL | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2001 | 27,368 | 34,714 | 44,371 | 52,850 | --- | --- | --- |
| 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 |  |
| 2009 | 19,985 | 32,723 | 43,640 | 56,804 | 67,492 |  |  |
| 2010 | 25,513 | 33,258 | 47,060 | 56,399 |  |  |  |
| 2011 | 26,482 | 34,265 | 45,437 |  |  |  |  |
| 2012 | 26,314 | 34,862 |  |  |  |  |  |
| 2013 | 26,914 |  |  |  |  |  |  |

Source: WCIRB unit statistical data

## Reopening Rates by Injury Type

| Permanent Indemnity |  |  |  |  |  |  |  | Temporary Indemnity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 6 | 6 to 7 | 7 to 8 | PY/RL | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 6 | 6 to 7 | 7 to 8 |
| 2001 | 3.10\% | 2.54\% | 1.65\% | 1.49\% | --- | --- | --- | 2001 | 1.55\% | 0.92\% | 0.66\% | 0.43\% | --- | --- | --- |
| 2002 | 6.37\% | 1.93\% | 1.74\% | 1.60\% | 1.13\% | 0.92\% | 0.76\% | 2002 | 1.63\% | 0.92\% | 0.55\% | 0.44\% | 0.25\% | 0.15\% | 0.13\% |
| 2003 | 2.51\% | 2.15\% | 1.96\% | 1.66\% | 1.23\% | 1.15\% | 0.86\% | 2003 | 1.24\% | 0.81\% | 0.62\% | 0.40\% | 0.26\% | 0.16\% | 0.14\% |
| 2004 | 2.08\% | 2.33\% | 1.75\% | 1.72\% | 1.57\% | 1.01\% | 0.71\% | 2004 | 1.11\% | 0.80\% | 0.60\% | 0.34\% | 0.30\% | 0.20\% | 0.10\% |
| 2005 | 2.73\% | 1.94\% | 2.00\% | 1.94\% | 1.60\% | 0.87\% | 0.65\% | 2005 | 1.17\% | 0.67\% | 0.48\% | 0.36\% | 0.28\% | 0.14\% | 0.11\% |
| 2006 | 2.34\% | 2.23\% | 2.30\% | 2.27\% | 1.47\% | 0.92\% | 0.77\% | 2006 | 1.14\% | 0.82\% | 0.57\% | 0.46\% | 0.28\% | 0.18\% | 0.14\% |
| 2007 | 2.47\% | 3.03\% | 2.82\% | 1.86\% | 1.32\% | 0.98\% | 0.77\% | 2007 | 1.20\% | 0.94\% | 0.71\% | 0.40\% | 0.28\% | 0.16\% | 0.13\% |
| 2008 | 4.02\% | 3.54\% | 2.17\% | 1.87\% | 1.44\% | 0.86\% |  | 2008 | 1.67\% | 1.12\% | 0.57\% | 0.40\% | 0.29\% | 0.18\% |  |
| 2009 | 3.81\% | 2.42\% | 1.91\% | 1.80\% | 1.26\% |  |  | 2009 | 1.80\% | 0.81\% | 0.60\% | 0.47\% | 0.27\% |  |  |
| 2010 | 2.15\% | 2.23\% | 2.09\% | 1.56\% |  |  |  | 2010 | 1.23\% | 0.91\% | 0.64\% | 0.50\% |  |  |  |
| 2011 | 2.68\% | 2.38\% | 2.20\% |  |  |  |  | 2011 | 1.55\% | 1.04\% | 0.71\% |  |  |  |  |
| 2012 | 2.68\% | 2.85\% |  |  |  |  |  | 2012 | 1.51\% | 0.98\% |  |  |  |  |  |
| 2013 | 3.35\% |  |  |  |  |  |  | 2013 | 1.47\% |  |  |  |  |  |  |
|  | All Indemnity |  |  |  |  |  |  | Medical Only |  |  |  |  |  |  |  |
| PY/RL | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 6 | 6 to 7 | 7 to 8 | PY/RL | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 6 | 6 to 7 | 7 to 8 |
| 2001 | 1.70\% | 1.26\% | 0.99\% | 0.86\% | --- | --- | --- | 2001 | 0.66\% | 0.30\% | 0.13\% | 0.08\% | --- | --- | --- |
| 2002 | 1.97\% | 1.13\% | 0.97\% | 0.93\% | 0.66\% | 0.52\% | 0.44\% | 2002 | 0.70\% | 0.26\% | 0.13\% | 0.08\% | 0.05\% | 0.04\% | 0.03\% |
| 2003 | 1.32\% | 1.10\% | 1.08\% | 0.91\% | 0.69\% | 0.63\% | 0.48\% | 2003 | 0.56\% | 0.26\% | 0.14\% | 0.08\% | 0.05\% | 0.05\% | 0.05\% |
| 2004 | 1.17\% | 1.09\% | 0.94\% | 0.83\% | 0.81\% | 0.54\% | 0.36\% | 2004 | 0.49\% | 0.23\% | 0.13\% | 0.08\% | 0.08\% | 0.04\% | 0.03\% |
| 2005 | 1.28\% | 0.90\% | 0.91\% | 0.91\% | 0.78\% | 0.43\% | 0.33\% | 2005 | 0.51\% | 0.21\% | 0.11\% | 0.10\% | 0.07\% | 0.03\% | 0.03\% |
| 2006 | 1.23\% | 1.09\% | 1.08\% | 1.10\% | 0.74\% | 0.48\% | 0.41\% | 2006 | 0.50\% | 0.21\% | 0.19\% | 0.14\% | 0.04\% | 0.03\% | 0.03\% |
| 2007 | 1.29\% | 1.37\% | 1.35\% | 0.93\% | 0.70\% | 0.51\% | 0.42\% | 2007 | 0.53\% | 0.42\% | 0.29\% | 0.09\% | 0.06\% | 0.04\% | 0.03\% |
| 2008 | 1.86\% | 1.66\% | 1.09\% | 0.97\% | 0.79\% | 0.49\% |  | 2008 | 1.12\% | 0.58\% | 0.16\% | 0.10\% | 0.07\% | 0.04\% |  |
| 2009 | 1.98\% | 1.19\% | 1.05\% | 1.01\% | 0.71\% |  |  | 2009 | 1.07\% | 0.29\% | 0.18\% | 0.14\% | 0.07\% |  |  |
| 2010 | 1.32\% | 1.24\% | 1.16\% | 0.94\% |  |  |  | 2010 | 0.62\% | 0.33\% | 0.19\% | 0.10\% |  |  |  |
| 2011 | 1.68\% | 1.40\% | 1.25\% |  |  |  |  | 2011 | 0.68\% | 0.36\% | 0.18\% |  |  |  |  |
| 2012 | 1.67\% | 1.50\% |  |  |  |  |  | 2012 | 0.75\% | 0.30\% |  |  |  |  |  |
| 2013 | 1.73\% |  |  |  |  |  |  | 2013 | 0.68\% |  |  |  |  |  |  |


| 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 |
| 2001 | $0.84 \%$ | $0.50 \%$ | $0.34 \%$ | $0.30 \%$ | --- | --- | --- |
| 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 | $1.24 \%$ | $0.80 \%$ | $0.38 \%$ | $0.32 \%$ | $0.27 \%$ | $0.17 \%$ |  |
| 2009 | $1.22 \%$ | $0.48 \%$ | $0.40 \%$ | $0.38 \%$ | $0.26 \%$ |  |  |
| 2010 | $0.74 \%$ | $0.53 \%$ | $0.45 \%$ | $0.35 \%$ |  |  |  |
| 2011 | $0.86 \%$ | $0.60 \%$ | $0.48 \%$ |  |  |  |  |
| 2012 | $0.92 \%$ | $0.60 \%$ |  |  |  |  |  |
| 2013 | $0.89 \%$ |  |  |  |  |  |  |

## All Claims

Note: Injury types are fixed at denominator age.

Source: WCIRB unit statistical data

IV-A-27
WCIRB California ${ }^{\circledR}$

## 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 |
| 2001 | $16.66 \%$ | $12.58 \%$ | $9.61 \%$ | $7.86 \%$ | --- | --- | -- |
| 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 | $11.84 \%$ | $6.47 \%$ | $3.85 \%$ | $3.43 \%$ | $2.80 \%$ | $2.08 \%$ |  |
| 2009 | $11.69 \%$ | $5.58 \%$ | $4.72 \%$ | $3.83 \%$ | $2.93 \%$ |  |  |
| 2010 | $10.20 \%$ | $6.10 \%$ | $4.45 \%$ | $3.36 \%$ |  |  |  |
| 2011 | $10.88 \%$ | $5.43 \%$ | $3.76 \%$ |  |  |  |  |
| 2012 | $10.42 \%$ | $5.27 \%$ |  |  |  |  |  |
| 2013 | $9.95 \%$ |  |  |  |  |  |  |

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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2001 | $0.83 \%$ | $2.11 \%$ | $2.95 \%$ | $6.25 \%$ | --- | -- | -- |
| 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 | $0.99 \%$ | $1.62 \%$ | $2.32 \%$ | $3.81 \%$ | $4.41 \%$ | $6.09 \%$ |  |
| 2009 | $1.01 \%$ | $1.46 \%$ | $2.96 \%$ | $4.18 \%$ | $4.71 \%$ |  |  |
| 2010 | $0.87 \%$ | $1.94 \%$ | $3.53 \%$ | $5.35 \%$ |  |  |  |
| 2011 | $1.05 \%$ | $2.26 \%$ | $4.31 \%$ |  |  |  |  |
| 2012 | $1.32 \%$ | $3.07 \%$ |  |  |  |  |  |
| 2013 | $1.41 \%$ |  |  |  |  |  |  |

Source: WCIRB unit statistical data

## California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year As of March 31, 2017



${ }^{\text {[1] }}$ The 2015 estimate is based on partial year unit statistical data. The 2016 and 2017 estimates are based on comparison of claim counts based on WCIRB accident year experience as of March 31, 2017 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

2016 Accident Year Indemnity Claim Frequency Model
As of PY 2014 1st Set \& June 2017 UCLA

| AY | $\begin{gathered} \text { Annual \% } \\ \text { Changes Intra- } \\ \text { Class Ind Freq } \\ \hline \text { Total } \end{gathered}$ | Annual Log Differences |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Intra-Class Indemnity Frequency per \$M Exposure at PY 2015 Level |  |  | AY+1IndemnityBenefit Level | Cumulative Injury Index | EconomicVariables(1st Prin. Comp.) | $\begin{gathered} \hline \text { CaIOSHA } \\ \text { Dummy } \\ \text { Variable } \end{gathered}$ |
|  |  | 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 | -0.078 | 0.000 |
| 1982 | -1.6\% | -0.016 | 0.153 | -0.022 | 0.352 | 0.175 | -0.292 | 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 | 0.221 | 0.000 |
| 1985 | 2.0\% | 0.020 | 0.138 | 0.014 | 0.000 | 0.124 | 0.080 | 0.000 |
| 1986 | -2.4\% | -0.024 | 0.039 | -0.028 | 0.000 | 0.067 | 0.077 | 0.000 |
| 1987 | 1.5\% | 0.015 | 0.053 | 0.013 | 0.000 | 0.041 | 0.150 | 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 | -0.120 | 0.000 |
| 1991 | 0.3\% | 0.003 | 0.166 | -0.018 | 0.023 | 0.184 | -0.291 | 0.000 |
| 1992 | -11.1\% | -0.118 | -0.272 | -0.098 | 0.013 | -0.174 | -0.185 | 0.068 |
| 1993 | -14.9\% | -0.162 | -0.240 | -0.153 | -0.057 | -0.088 | -0.022 | 0.464 |
| 1994 | -12.8\% | -0.136 | -0.462 | -0.107 | 0.061 | -0.355 | 0.106 | 0.173 |
| 1995 | -4.6\% | -0.048 | -0.016 | -0.050 | 0.053 | 0.034 | 0.092 | 0.295 |
| 1996 | -6.8\% | -0.070 | -0.136 | -0.065 | 0.096 | -0.071 | 0.074 | 0.000 |
| 1997 | -3.3\% | -0.033 | -0.023 | -0.034 | 0.066 | 0.011 | 0.137 | 0.000 |
| 1998 | -3.8\% | -0.038 | -0.040 | -0.038 | 0.058 | -0.002 | 0.078 | 0.000 |
| 1999 | 1.5\% | 0.014 | 0.100 | 0.008 | 0.040 | 0.092 | 0.127 | 0.000 |
| 2000 | 4.0\% | 0.039 | 0.071 | 0.037 | -0.003 | 0.034 | 0.066 | 0.000 |
| 2001 | -6.9\% | -0.072 | -0.017 | -0.076 | -0.007 | 0.059 | -0.100 | 0.000 |
| 2002 | -2.8\% | -0.029 | 0.001 | -0.031 | 0.060 | 0.033 | -0.197 | 0.000 |
| 2003 | -3.2\% | -0.032 | -0.009 | -0.035 | -0.065 | 0.026 | -0.022 | 0.000 |
| 2004 | -16.9\% | -0.185 | -0.212 | -0.182 | -0.398 | -0.030 | 0.098 | 0.000 |
| 2005 | -13.6\% | -0.147 | -0.299 | -0.134 | 0.051 | -0.165 | 0.143 | 0.000 |
| 2006 | -5.7\% | -0.059 | -0.050 | -0.059 | 0.016 | 0.009 | 0.090 | 0.000 |
| 2007 | -1.6\% | -0.017 | 0.021 | -0.020 | 0.049 | 0.040 | -0.095 | 0.000 |
| 2008 | -2.7\% | -0.027 | 0.038 | -0.033 | 0.006 | 0.071 | -0.320 | 0.000 |
| 2009 | -0.2\% | -0.002 | 0.168 | -0.018 | 0.066 | 0.186 | -0.414 | 0.000 |
| 2010 | 8.9\% | 0.085 | 0.139 | 0.079 | 0.012 | 0.060 | -0.077 | 0.000 |
| 2011 | 1.2\% | 0.012 | 0.033 | 0.010 | 0.003 | 0.022 | 0.048 | 0.000 |
| 2012 | 4.9\% | 0.048 | 0.115 | 0.039 | -0.008 | 0.076 | 0.122 | 0.000 |
| 2013 | 0.9\% | 0.009 | 0.172 | -0.013 | 0.071 | 0.185 | 0.154 | 0.000 |
| 2014 | 0.8\% | 0.008 | 0.097 | -0.006 | 0.003 | 0.102 | 0.170 | 0.000 |
| 2015* | -0.8\% | -0.009 | 0.050 | -0.020 | 0.003 | 0.070 | 0.180 | 0.000 |
| 2016 | -0.5\% | -0.005 | -0.005 | -0.005 | 0.004 | 0.000 | 0.144 | 0.000 |
| 2017 | -1.5\% | -0.015 | -0.015 | -0.0.015 | 0.003 | 0.000 | 0.039 | 0.000 |
| 2018 | -1.4\% | -0.014 | -0.014 | -0.014 | 0.003 | 0.000 | 0.056 | 0.000 |
| 2019 | -1.2\% | -0.012 | -0.012 | -0.012 | 0.003 | 0.000 | 0.074 | 0.000 |
| $\mathbf{Y}=$ Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency |  |  |  |  |  |  |  |  |
|  |  | Constant |  | -0.020 |  |  |  |  |
|  |  | Std Err of Y Est |  | 0.041 |  |  |  |  |
|  |  | R Squared |  | 0.582 |  |  |  |  |
|  |  | No. of Observations |  | 37 |  |  |  |  |
|  |  | Degrees of Freedom |  | 32 |  |  |  |  |
|  |  | X Coefficient(s) |  |  | 0.174 | 0.285 | 0.101 | -0.135 |
|  |  | Std Err of Coef. |  |  | 0.074 | 0.063 | 0.045 | 0.078 |

Notes: Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency. The Indemnity Benefit Level change for Ogilvie \& Almaraz / Guzman in 2009-2010 is not leading.
The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits.
The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03.
For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda
Economic variables are historical through 2016; June 2017 UCLA Anderson Forecasts for 2017 on
Regression is over AY 1979 through AY 2015. AY 2016 through AY 2019 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 2015 change is based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 policies.

## Indemnity Claim Frequency History and Projections

| AY | Intra-Class Indemnity Claim | Inter-Class Indemnity Claim Frequency Index(b) | Overall Indemnity Claim Frequency | Annual Percent Changes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequency(a) |  |  | Intra-Class | Inter-Class | Overall |
| 1979 | 0.576 | 0.921 | 0.694 | --- | --- | --- |
| 1980 | 0.538 | 0.914 | 0.643 | -6.54\% | -0.75\% | -7.24\% |
| 1981 | 0.519 | 0.900 | 0.611 | -3.54\% | -1.56\% | -5.04\% |
| 1982 | 0.511 | 0.882 | 0.589 | -1.59\% | -2.00\% | -3.56\% |
| 1983 | 0.542 | 0.873 | 0.620 | 6.20\% | -0.98\% | 5.17\% |
| 1984 | 0.594 | 0.871 | 0.677 | 9.53\% | -0.18\% | 9.32\% |
| 1985 | 0.606 | 0.867 | 0.688 | 2.05\% | -0.51\% | 1.52\% |
| 1986 | 0.592 | 0.859 | 0.665 | -2.39\% | -0.92\% | -3.28\% |
| 1987 | 0.601 | 0.854 | 0.672 | 1.53\% | -0.56\% | 0.97\% |
| 1988 | 0.605 | 0.854 | 0.676 | 0.69\% | -0.06\% | 0.64\% |
| 1989 | 0.620 | 0.853 | 0.692 | 2.47\% | -0.08\% | 2.39\% |
| 1990 | 0.676 | 0.845 | 0.748 | 9.04\% | -0.89\% | 8.07\% |
| 1991 | 0.678 | 0.832 | 0.738 | 0.28\% | -1.58\% | -1.30\% |
| 1992 | 0.603 | 0.820 | 0.647 | -11.09\% | -1.45\% | -12.37\% |
| 1993 | 0.513 | 0.810 | 0.543 | -14.91\% | -1.25\% | -15.98\% |
| 1994 | 0.447 | 0.809 | 0.474 | -12.76\% | -0.06\% | -12.81\% |
| 1995 | 0.427 | 0.811 | 0.453 | -4.64\% | 0.16\% | -4.49\% |
| 1996 | 0.398 | 0.800 | 0.417 | -6.78\% | -1.25\% | -7.94\% |
| 1997 | 0.385 | 0.791 | 0.398 | -3.27\% | -1.23\% | -4.46\% |
| 1998 | 0.370 | 0.786 | 0.381 | -3.76\% | -0.60\% | -4.34\% |
| 1999 | 0.376 | 0.774 | 0.381 | 1.45\% | -1.48\% | -0.05\% |
| 2000 | 0.391 | 0.752 | 0.384 | 4.02\% | -2.91\% | 0.99\% |
| 2001 | 0.364 | 0.753 | 0.358 | -6.91\% | 0.13\% | -6.79\% |
| 2002 | 0.353 | 0.763 | 0.353 | -2.83\% | 1.34\% | -1.53\% |
| 2003 | 0.342 | 0.764 | 0.342 | -3.18\% | 0.20\% | -2.99\% |
| 2004 | 0.285 | 0.763 | 0.284 | -16.85\% | -0.21\% | -17.03\% |
| 2005 | 0.246 | 0.760 | 0.245 | -13.63\% | -0.31\% | -13.90\% |
| 2006 | 0.232 | 0.754 | 0.229 | -5.69\% | -0.81\% | -6.46\% |
| 2007 | 0.228 | 0.749 | 0.223 | -1.64\% | -0.68\% | -2.31\% |
| 2008 | 0.222 | 0.740 | 0.215 | -2.71\% | -1.18\% | -3.85\% |
| 2009 | 0.221 | 0.727 | 0.210 | -0.20\% | -1.82\% | -2.02\% |
| 2010 | 0.241 | 0.713 | 0.225 | 8.87\% | -1.87\% | 6.83\% |
| 2011 | 0.244 | 0.703 | 0.224 | 1.24\% | -1.42\% | -0.20\% |
| 2012 | 0.256 | 0.695 | 0.233 | 4.87\% | -1.19\% | 3.62\% |
| 2013 | 0.258 | 0.692 | 0.234 | 0.89\% | -0.36\% | 0.52\% |
| 2014(c) | 0.260 | 0.694 | 0.236 | 0.84\% | 0.22\% | 1.06\% |
| 2014(d) | 0.259 | 0.694 | 0.235 | --- | --- | --- |
| 2015(e) | 0.257 | 0.694 | 0.234 | -0.85\% | 0.01\% | -0.84\% |
| 2016 | 0.256 | 0.695 | 0.233 | -0.47\% | 0.21\% | -0.27\% |
| 2017 | 0.252 | 0.695 | 0.229 | -1.53\% | -0.01\% | -1.54\% |
| 2018 | 0.249 | 0.692 | 0.225 | -1.36\% | -0.39\% | -1.75\% |
| 2019 | 0.246 | 0.691 | 0.222 | -1.19\% | -0.15\% | -1.34\% |


| PY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | 0.222 | 0.734 | 0.213 |  |  |  |
| 2009 | 0.230 | 0.720 | 0.217 | $3.91 \%$ | $-1.84 \%$ | $1.95 \%$ |
| 2010 | 0.242 | 0.708 | 0.225 | $5.25 \%$ | $-1.67 \%$ | $3.53 \%$ |
| 2011 | 0.249 | 0.699 | 0.228 | $2.90 \%$ | $-1.32 \%$ | $1.53 \%$ |
| 2012 | 0.257 | 0.693 | 0.233 | $3.01 \%$ | $-0.82 \%$ | $2.19 \%$ |
| 2013 | 0.259 | 0.693 | 0.235 | $0.86 \%$ | $-0.10 \%$ | $0.77 \%$ |
| 2014 | 0.259 | 0.694 | 0.235 | $-0.07 \%$ | $0.13 \%$ | $0.05 \%$ |
| 2015 | 0.257 | 0.694 | 0.233 | $-0.85 \%$ | $0.10 \%$ | $-0.75 \%$ |
| 2016 | 0.254 | 0.695 | 0.231 | $-0.95 \%$ | $0.11 \%$ | $-0.85 \%$ |
| 2017 | 0.251 | 0.694 | 0.227 | $-1.46 \%$ | $-0.18 \%$ | $-1.64 \%$ |
| 2018 | 0.247 | 0.692 | 0.224 | $-1.29 \%$ | $-0.28 \%$ | $-1.56 \%$ |

Notes: (a) All frequencies are per \$M exposure at PY 2015 Level.
(b) Index is to AY 1961
(c) 2014 accidents on 2014 and 2013 policies.
(d) 2014 accidents on 2013 policies only.
(e) AY 2015 is preliminary and percent changes are based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 policies.
(f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

## 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 | y Rates | 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\% | -1.5\% |
| 2003 | 684.7 | 387.0 | 223.5 | 32.6\% | 14,301.3 | 47.9 | 15.6 | 0.7\% | -1.6\% | -3.0\% |
| 2004 | 645.1 | 367.3 | 201.4 | 31.2\% | 14,383.1 | 44.9 | 14.0 | -6.3\% | -10.4\% | -17.0\% |
| 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) | 3.6\% |
| 2013 | 468.4 | 265.0 | 146.8 | 31.3\% | 15,379.0 | 30.5 | 9.5 | 0.9\% | 1.9\% | 0.5\% |
| 2014 | 460.7 | 265.1 | 142.8 | 31.0\% | 15,809.1 | 29.1 | 9.0 | -4.3\% | -5.4\% | 1.1\% |
| 2015 | 470.6 | 273.5 | 144.0 | 30.6\% | 16,295.2 | 28.9 | 8.8 | -0.9\% | -2.2\% | -0.8\% |
|  | 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 2015 change is based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 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 Change | Private <br> Employees | Total Frequency | Total Freq. <br> Annual Change | Indemnity Frequency | Ind. Freq <br> Annual <br> 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\% |


| FY | Public Self-Insured Employers |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Cases Reported During Year |  |  | Indemnity /Total | Annual Change | Public <br> Employees | Total Frequency | Total Freq. <br> Annual Change | Indemnity <br> Frequency | Ind. Freq <br> Annual Change |
|  | Medical-Only | Indemnity | Total |  |  |  |  |  |  |  |
| 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\% |


| CY | All Self-Insured Employers |  |  |  |  |  |  |  |  |  | Insured System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Cases Reported During Year |  |  | Indemnity /Total | Annual Change | All Self-Ins. Employees | Total Frequency | Total Freq. <br> Annual Change | Indemnity 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 | -1.5\% |
| 2003 | 139,035 | 111,106 | 250,141 | 0.444 | 1.3\% | 4,199,255 | 0.060 | -15.2\% | 0.026 | -14.0\% | 2003 | -3.0\% |
| 2004 | 139,781 | 102,695 | 242,476 | 0.424 | -4.6\% | 4,379,772 | 0.055 | -7.1\% | 0.023 | -11.4\% | 2004 | -17.0\% |
| 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 | 3.6\% |
| 2013 | 105,725 | 86,201 | 191,926 | 0.449 | 3.2\% | 4,232,408 | 0.045 | -6.7\% | 0.020 | -3.7\% | 2013 | 0.5\% |
| 2014 | 103,545 | 87,841 | 191,385 | 0.459 | 2.2\% | 4,029,849 | 0.047 | 4.7\% | 0.022 | 7.0\% | 2014 | 1.1\% |
| 2015 | 101,940 | 89,057 | 190,997 | 0.466 | 1.6\% | 4,422,931 | 0.043 | -9.1\% | 0.020 | -7.6\% | 2015 | -0.8\% |

Notes: $\quad$ Fiscal Year Public data prorated to CYs 50\%/50\%. Insured System AY 2015 change is based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 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 <br> 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 | Proj to 5th | 0.990254 | 0.699351 | -0.9746 |
| 2012 | Proj to 5th | 0.986467 | 0.689887 | -1.3533 |
| 2013 | Proj to 5th | 1.004844 | 0.693229 | 0.4844 |
| 2014 | Proj to 5th | 0.994328 | 0.689297 | -0.5672 |

Source: WCIRB unit statistical data
Note: PY 2014 is preliminary

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Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts

|  | Change in Statewide Incremental Number of Indemnity Claims |  | Change in Statewide Incremental Number of$\qquad$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Calendar Quarter | Change in Quarterly Increment from Same Quarter at Prior | Change in 4-Quarter Increment from Same Quarter at Prior | Change in Quarterly Increment from Same Quarter at Prior | Change in 4-Quarter Increment from Same Quarter at Prior |
| Evaluation | Calendar Year | Calendar Year | Calendar Year | Calendar Year |
| 3/31/2007 | -2.4\% | ---- | ---- | ---- |
| 6/30/2007 | -10.2\% | --- | -13.5\% | --- |
| 9/30/2007 | 0.3\% | --- | 1.2\% | --- |
| 12/31/2007 | -13.4\% | -6.3\% | -19.4\% | --- |
| 3/31/2008 | -5.8\% | -7.2\% | -14.8\% | -11.6\% |
| 6/30/2008 | -3.9\% | -5.7\% | -2.8\% | -9.0\% |
| 9/30/2008 | -19.2\% | -10.7\% | -17.6\% | -13.9\% |
| 12/31/2008 | -16.7\% | -11.4\% | -3.8\% | -10.3\% |
| 3/31/2009 | -27.1\% | -16.8\% | -27.5\% | -13.2\% |
| 6/30/2009 | -14.2\% | -19.4\% | -27.0\% | -19.4\% |
| 9/30/2009 | -8.2\% | -16.8\% | -16.7\% | -19.2\% |
| 12/31/2009 | 2.5\% | -12.8\% | -15.8\% | -22.0\% |
| 3/31/2010 | 7.4\% | -4.1\% | -5.2\% | -17.1\% |
| 6/30/2010 | 3.9\% | 1.0\% | -1.9\% | -10.6\% |
| 9/30/2010 | 6.7\% | 5.1\% | -6.3\% | -7.6\% |
| 12/31/2010 | 7.2\% | 6.3\% | 3.3\% | -2.6\% |
| 3/31/2011 | 2.7\% | 5.1\% | -4.1\% | -2.3\% |
| 6/30/2011 | -1.2\% | 3.8\% | -8.9\% | -4.1\% |
| 9/30/2011 | 3.4\% | 2.9\% | -1.3\% | -2.7\% |
| 12/31/2011 | 4.5\% | 2.3\% | -7.8\% | -5.5\% |
| 3/31/2012 | -0.4\% | 1.5\% | -1.8\% | -4.6\% |
| 6/30/2012 | 8.1\% | 3.9\% | 0.1\% | -2.6\% |
| 9/30/2012 | 5.5\% | 4.5\% | 3.2\% | -1.5\% |
| 12/31/2012 | 6.7\% | 5.1\% | 5.5\% | 1.8\% |
| 3/31/2013 | 5.2\% | 6.4\% | -4.2\% | 1.3\% |
| 6/30/2013 | 10.9\% | 7.1\% | 9.0\% | 3.4\% |
| 9/30/2013 | 6.2\% | 7.3\% | -1.9\% | 2.0\% |
| 12/31/2013 | 5.4\% | 7.0\% | 0.5\% | 0.8\% |
| 3/31/2014 | 11.3\% | 8.4\% | 6.2\% | 3.1\% |
| 6/30/2014 | 0.9\% | 5.7\% | -3.0\% | 0.2\% |
| 9/30/2014 | 3.4\% | 5.0\% | 5.8\% | 2.2\% |
| 12/31/2014 | 2.6\% | 4.3\% | 6.2\% | 3.7\% |
| 3/31/2015 | 0.8\% | 1.9\% | 7.8\% | 4.1\% |
| 6/30/2015 | 5.3\% | 3.1\% | 4.6\% | 6.1\% |
| 9/30/2015 | 3.2\% | 3.0\% | 5.9\% | 6.1\% |
| 12/31/2015 | 3.6\% | 3.3\% | 2.6\% | 5.2\% |
| 3/31/2016 | 4.2\% | 4.1\% | 4.6\% | 4.4\% |
| 6/30/2016 | 1.9\% | 3.2\% | 4.7\% | 4.4\% |
| 9/30/2016 | -2.0\% | 1.8\% | -4.1\% | 1.7\% |
| 12/31/2016 | 0.7\% | 1.1\% | -0.2\% | 1.0\% |
| 3/31/2017 | 4.9\% | 1.3\% | 8.3\% | 1.9\% |

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 | 3,961,784 | 6.90 |  |  |  |
| 1962 | 4,145,224 | 5.80 | 0.045 | -0.174 | -0.178 |
| 1963 | 4,292,387 | 6.00 | 0.035 | 0.034 | 0.029 |
| 1964 | 4,424,741 | 6.00 | 0.030 | 0.000 | -0.004 |
| 1965 | 4,545,047 | 5.90 | 0.027 | -0.017 | -0.020 |
| 1966 | 4,792,201 | 4.90 | 0.053 | -0.186 | -0.191 |
| 1967 | 4,927,344 | 5.70 | 0.028 | 0.151 | 0.146 |
| 1968 | 5,132,714 | 5.40 | 0.041 | -0.054 | -0.059 |
| 1969 | 5,367,296 | 5.20 | 0.045 | -0.038 | -0.044 |
| 1970 | 5,334,582 | 7.30 | -0.006 | 0.339 | 0.337 |
| 1971 | 5,283,119 | 8.83 | -0.010 | 0.190 | 0.190 |
| 1972 | 6,020,420 | 7.65 | 0.131 | -0.144 | -0.161 |
| 1973 | 6,498,315 | 7.06 | 0.076 | -0.080 | -0.090 |
| 1974 | 6,707,033 | 7.34 | 0.032 | 0.039 | 0.035 |
| 1975 | 6,682,772 | 9.92 | -0.004 | 0.301 | 0.298 |
| 1976 | 7,258,539 | 9.21 | 0.083 | -0.074 | -0.085 |
| 1977 | 7,679,146 | 8.29 | 0.056 | -0.105 | -0.112 |
| 1978 | 9,199,715 | 7.15 | 0.181 | -0.148 | -0.173 |
| 1979 | 9,618,277 | 6.28 | 0.044 | -0.129 | -0.134 |
| 1980 | 10,265,554 | 6.87 | 0.065 | 0.090 | 0.080 |
| 1981 | 10,404,425 | 7.45 | 0.013 | 0.081 | 0.078 |
| 1982 | 10,231,288 | 9.99 | -0.017 | 0.293 | 0.292 |
| 1983 | 10,331,000 | 9.72 | 0.010 | -0.028 | -0.029 |
| 1984 | 10,822,039 | 7.82 | 0.046 | -0.217 | -0.221 |
| 1985 | 11,174,336 | 7.25 | 0.032 | -0.076 | -0.080 |
| 1986 | 11,485,209 | 6.73 | 0.027 | -0.074 | -0.077 |
| 1987 | 11,889,485 | 5.81 | 0.035 | -0.147 | -0.150 |
| 1988 | 12,356,659 | 5.35 | 0.039 | -0.083 | -0.088 |
| 1989 | 12,688,282 | 5.13 | 0.026 | -0.041 | -0.045 |
| 1990 | 12,942,313 | 5.81 | 0.020 | 0.124 | 0.120 |
| 1991 | 12,777,864 | 7.78 | -0.013 | 0.292 | 0.291 |
| 1992 | 12,577,834 | 9.36 | -0.016 | 0.185 | 0.185 |
| 1993 | 12,478,785 | 9.56 | -0.008 | 0.021 | 0.022 |
| 1994 | 12,611,312 | 8.60 | 0.011 | -0.105 | -0.106 |
| 1995 | 12,868,841 | 7.86 | 0.020 | -0.090 | -0.092 |
| 1996 | 13,226,872 | 7.32 | 0.027 | -0.071 | -0.074 |
| 1997 | 13,621,162 | 6.40 | 0.029 | -0.134 | -0.137 |
| 1998 | 14,084,575 | 5.95 | 0.033 | -0.074 | -0.078 |
| 1999 | 14,481,456 | 5.25 | 0.028 | -0.124 | -0.127 |
| 2000 | 14,994,037 | 4.94 | 0.035 | -0.062 | -0.066 |
| 2001 | 15,099,792 | 5.47 | 0.007 | 0.102 | 0.100 |
| 2002 | 14,973,333 | 6.66 | -0.008 | 0.197 | 0.197 |
| 2003 | 14,951,441 | 6.81 | -0.001 | 0.022 | 0.022 |
| 2004 | 15,133,743 | 6.18 | 0.012 | -0.098 | -0.098 |
| 2005 | 15,422,130 | 5.36 | 0.019 | -0.142 | -0.143 |
| 2006 | 15,700,802 | 4.90 | 0.018 | -0.089 | -0.090 |
| 2007 | 15,844,539 | 5.41 | 0.009 | 0.098 | 0.095 |
| 2008 | 15,689,587 | 7.46 | -0.010 | 0.322 | 0.320 |
| 2009 | 14,811,100 | 11.24 | -0.058 | 0.410 | 0.414 |
| 2010 | 14,664,677 | 12.14 | -0.010 | 0.076 | 0.077 |
| 2011 | 14,823,805 | 11.58 | 0.011 | -0.047 | -0.048 |
| 2012 | 15,160,395 | 10.27 | 0.022 | -0.120 | -0.122 |
| 2013 | 15,568,480 | 8.82 | 0.027 | -0.152 | -0.154 |
| 2014 | 15,997,810 | 7.46 | 0.027 | -0.168 | -0.170 |
| 2015 | 16,474,967 | 6.25 | 0.029 | -0.177 | -0.180 |
| 2016 | 16,892,906 | 5.42 | 0.025 | -0.142 | -0.144 |
| 2017 | 17,154,571 | 5.22 | 0.015 | -0.038 | -0.039 |
| 2018 | 17,391,941 | 4.94 | 0.014 | -0.055 | -0.056 |
| 2019 | 17,571,193 | 4.60 | 0.010 | -0.073 | -0.074 |
| Notes: | The first principal component is of the annual log difference data from 1962-2016. <br> The first principal component of the annual log difference of the economic variables is: 1st PC of Econ Variables $=-0.1418493 \times$ Aggregate Employment $+0.9898883 \times$ Unemployment Rate |  |  |  |  |
| Sources: | vernment histo <br> LA Anderson for | bor statistics thro ts through 2019 a | $016$ <br> of June 2017 |  |  |

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## California Workers' Compensation Fraud Statistics

| Fiscal Year | Suspected Fraud Claims | Cases | Arrests | Cases Submitted to Prosecutor |
| :---: | :---: | :---: | :---: | :---: |
| 1992 | 8,342 | 185 | 24 | ------ |
| 1993 | 7,284 | 452 | 116 | ------ |
| 1994 | 4,004 | 601 | 163 | --- |
| 1995 | 3,947 | 903 | 202 | ------ |
| 1996 | 3,281 | 598 | 209 | ----- |
| 1997 | 4,331 | 617 | 298 | 182 |
| 1998 | 3,363 | 567 | 216 | 195 |
| 1999 | 3,362 | 667 | 226 | 194 |
| 2000 | 3,548 | 476 | 170 | 164 |
| 2001 | 2,968 | 651 | 141 | ---- |
| 2002 | 3,544 | 827 | 199 | ------ |
| 2003 | 5,122 | 868 | 215 | ------ |
| 2004 | 6,492 | 677 | 178 | 219 |
| 2005 | 8,509 | 572 | 299 | 319 |
| 2006 | 5,933 | 724 | 401 | 483 |
| 2007 | 4,973 | 515 | 375 | 432 |
| 2008 | 5,174 | 539 | 218 | 327 |
| 2009 | 5,728 | 754 | 269 | 280 |
| 2010 | 5,741 | 501 | 254 | 272 |
| 2011 | 5,207 | 556 | 132 | 168 |
| 2012 | 5,151 | 847 | 268 | 309 |
| 2013 | 5,729 | 669 | 255 | 248 |
| 2014 | 5,931 | 572 | 240 | 197 |

Source: California Department of Insurance,
-Annual Report of the Commissioner
-Enforcement Branch
-Workers' Compensation Insurance Fraud Program

California Courts' Civil Filings Summary

| Fiscal Year Beginning | Trial Courts |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Superior and Municipal |  |  |  |
|  | Civil Filings |  |  |  |
|  | All |  | Less Family Law |  |
|  | Number | Change | Number | Change |
| 1959 | 634,624 | --- | --- | --- |
| 1960 | 706,166 | 0.113 | --- | --- |
| 1961 | 744,269 | 0.054 | --- | --- |
| 1962 | 787,441 | 0.058 | --- | --- |
| 1963 | 843,280 | 0.071 | --- | --- |
| 1964 | 891,973 | 0.058 | --- | --- |
| 1965 | 946,260 | 0.061 | --- | --- |
| 1966 | 865,332 | -0.086 | --- | --- |
| 1967 | 891,886 | 0.031 | --- | --- |
| 1968 | 869,810 | -0.025 | --- | --- |
| 1969 | 905,685 | 0.041 | --- | --- |
| 1970 | 959,421 | 0.059 | --- | --- |
| 1971 | 981,212 | 0.023 | --- | --- |
| 1972 | 1,052,267 | 0.072 | --- | --- |
| 1973 | 1,114,949 | 0.060 | --- | --- |
| 1974 | 1,224,562 | 0.098 | --- | --- |
| 1975 | 1,242,827 | 0.015 | --- | --- |
| 1976 | 1,294,779 | 0.042 | --- | --- |
| 1977 | 1,363,357 | 0.053 | --- | --- |
| 1978 | 1,460,745 | 0.071 | --- | --- |
| 1979 | 1,564,719 | 0.071 | --- | --- |
| 1980 | 1,615,838 | 0.033 | --- | --- |
| 1981 | 1,638,175 | 0.014 | --- | --- |
| 1982 | 1,600,398 | -0.023 | --- | --- |
| 1983 | 1,578,141 | -0.014 | --- | --- |
| 1984 | 1,633,409 | 0.035 | --- | --- |
| 1985 | 1,713,056 | 0.049 | --- | --- |
| 1986 | 1,752,304 | 0.023 | --- | --- |
| 1987 | 1,761,284 | 0.005 | --- | --- |
| 1988 | 1,777,499 | 0.009 | --- | --- |
| 1989 | 1,787,771 | 0.006 | --- | --- |
| 1990 | 1,821,421 | 0.019 | 1,436,634 | --- |
| 1991 | 1,886,484 | 0.036 | 1,463,328 | 0.019 |
| 1992 | 1,795,634 | -0.048 | 1,351,376 | -0.077 |
| 1993 | 1,738,323 | -0.032 | 1,277,551 | -0.055 |
| 1994 | 1,793,408 | 0.032 | 1,264,674 | -0.010 |
| 1995 | 1,831,629 | 0.021 | 1,228,797 | -0.028 |
| 1996 | 1,801,902 | -0.016 | 1,228,566 | 0.000 |
| 1997 | 1,700,445 | -0.056 | 1,176,333 | -0.043 |
| 1998 | 1,596,287 | -0.061 | 1,090,763 | -0.073 |
| 1999 | 1,515,827 | -0.050 | 1,037,341 | -0.049 |
| 2000 | 1,504,138 | -0.008 | 1,034,899 | -0.002 |
| 2001 | 1,569,231 | 0.043 | 1,078,629 | 0.042 |
| 2002 | 1,548,402 | -0.013 | 1,075,154 | -0.003 |
| 2003 | 1,503,419 | -0.029 | 1,021,779 | -0.050 |
| 2004 | 1,426,822 | -0.051 | 951,551 | -0.069 |
| 2005 | 1,418,896 | -0.006 | 960,582 | 0.009 |
| 2006 | 1,462,648 | 0.031 | 1,000,197 | 0.041 |
| 2007 | 1,586,597 | 0.085 | 1,143,038 | 0.143 |
| 2008 | 1,731,135 | 0.091 | 1,272,321 | 0.113 |
| 2009 | 1,647,817 | -0.048 | 1,195,146 | -0.061 |
| 2010 | 1,574,569 | -0.044 | 1,127,642 | -0.056 |
| 2011 | 1,464,629 | -0.070 | 1,026,829 | -0.089 |
| 2012 | 1,388,964 | -0.052 | 963,877 | -0.061 |
| 2013 | 1,260,999 | -0.139 | 879,513 | -0.143 |
| 2014 | 1,142,937 | -0.177 | 762,777 | -0.209 |

Notes: Small claims appeals were added to total civil filings in the beginning of year 2003 and are trivial.
Filings from the beginning of year 1989 and prior are from a previous WCIRB study.

Source: California Court Statistics Report

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

| AY | (AY-1). 1 | (AY-1). 2 | (AY-1). 3 | (AY-1). 4 | 1st Half Partial $(A Y-1) .5$ | Y.RL Sources to (AY-1). 6 | to (AY-1).7 | to (AY-1). 8 | to (AY-1). 9 | to (AY-1). 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 5,374 | 5,721 | 5,859 | 5,960 | 6,085 | 6,347 | 6,478 | 6,495 | 6,500 | 6,532 |
| 2005 | 3,184 | 3,665 | 3,969 | 4,243 | 4,568 | 4,693 | 4,762 | 4,832 | 4,844 | 4,880 |
| 2006 | 2,989 | 3,569 | 3,924 | 4,231 | 4,348 | 4,467 | 4,498 | 4,581 | 4,650 | 4,685 |
| 2007 | 3,037 | 3,645 | 4,038 | 4,274 | 4,413 | 4,524 | 4,635 | 4,683 | 4,730 |  |
| 2008 | 2,914 | 3,661 | 4,180 | 4,457 | 4,633 | 4,796 | 4,965 | 5,030 |  |  |
| 2009 | 2,977 | 3,932 | 4,524 | 4,820 | 5,124 | 5,334 | 5,423 |  |  |  |
| 2010 | 3,456 | 4,497 | 5,011 | 5,528 | 5,733 | 5,880 |  |  |  |  |
| 2011 | 3,366 | 4,430 | 5,295 | 5,653 | 5,944 |  |  |  |  |  |
| 2012 | 3,557 | 5,140 | 5,822 | 6,416 |  |  |  |  |  |  |
| 2013 | 4,747 | 6,333 | 7,286 |  |  |  |  |  |  |  |
| 2014 | 5,540 | 7,554 |  |  |  |  |  |  |  |  |
| 2015 | 6,111 |  |  |  |  |  |  |  |  |  |


| AY | $\begin{gathered} (\mathrm{AY}-1) \cdot 1 \\ \text { to }(\mathrm{AY}-1) \cdot 2 \\ \hline \end{gathered}$ | $\begin{gathered} (\mathrm{AY}-1) \cdot 2 \\ \text { to }(\mathrm{AY}-1) \cdot 3 \\ \hline \end{gathered}$ | $\begin{gathered} (\mathrm{AY}-1) \cdot 3 \\ \text { to }(\mathrm{AY}-1) .4 \\ \hline \end{gathered}$ | 1st Half Partia <br> (AY-1). 4 <br> to (AY-1). 5 | $\begin{aligned} & \text { PY.RL Develop } \\ & \text { (AY-1). } 5 \\ & \text { to }(\mathrm{AY}-1) .6 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { nent Factors } \\ \begin{array}{c} (\mathrm{AY}-1) \cdot 6 \\ \text { to }(\mathrm{AY}-1) \cdot 7 \\ \hline \end{array} \end{gathered}$ | $\begin{gathered} (\mathrm{AY}-1) .7 \\ \text { to }(\mathrm{AY}-1) .8 \\ \hline \end{gathered}$ | $\begin{gathered} (\mathrm{AY}-1) .8 \\ \text { to }(\mathrm{AY}-1) .9 \end{gathered}$ | $\begin{gathered} (\mathrm{AY}-1) \cdot 9 \\ \text { to }(\mathrm{AY}-1) .10 \\ \hline \end{gathered}$ | Final Tenths | 1st Half Share of Ttl Ind Fifths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 1.0646 | 1.0240 | 1.0173 | 1.0210 | 1.0430 | 1.0206 | 1.0026 | 1.0009 | 1.0049 | 6,532 | 9.8\% |
| 2005 | 1.1509 | 1.0829 | 1.0692 | 1.0766 | 1.0272 | 1.0148 | 1.0147 | 1.0025 | 1.0074 | 4,880 | 8.3\% |
| 2006 | 1.1941 | 1.0993 | 1.0784 | 1.0275 | 1.0275 | 1.0069 | 1.0185 | 1.0151 | 1.0075 | 4,685 | 8.3\% |
| 2007 | 1.2003 | 1.1076 | 1.0586 | 1.0324 | 1.0252 | 1.0245 | 1.0104 | 1.0101 | 1.0075 | 4,766 | 8.7\% |
| 2008 | 1.2566 | 1.1416 | 1.0663 | 1.0395 | 1.0353 | 1.0352 | 1.0130 | 1.0101 | 1.0075 | 5,119 | 9.5\% |
| 2009 | 1.3208 | 1.1505 | 1.0653 | 1.0631 | 1.0410 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 5,591 | 11.2\% |
| 2010 | 1.3012 | 1.1143 | 1.1032 | 1.0371 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 6,163 | 11.9\% |
| 2011 | 1.3161 | 1.1953 | 1.0677 | 1.0514 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 6,390 | 12.0\% |
| 2012 | 1.4450 | 1.1327 | 1.1020 | 1.0514 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 7,252 | 12.7\% |
| 2013 | 1.3340 | 1.1506 | 1.1020 | 1.0514 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 9,075 | 15.1\% |
| 2014 | 1.3634 | 1.1506 | 1.1020 | 1.0514 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 10,826 | 17.4\% |
| 2015 | 1.3634 | 1.1506 | 1.1020 | 1.0514 | 1.0256 | 1.0167 | 1.0130 | 1.0101 | 1.0075 | 11,941 | 18.8\% |


| AY | (AY-1). 1 | (AY-1). 2 | (AY-1). 3 | (AY-1). 4 | Share of Total 1st Half Partial (AY-1). 5 | demnity Count Y.RL Sources to (AY-1). 6 | to (AY-1). 7 | to (AY-1). 8 | to (AY-1). 9 | to (AY-1). 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 8.4\% | 8.7\% | 8.9\% | 9.0\% | 9.2\% | 9.4\% | 9.8\% | 9.8\% | 9.8\% | 9.8\% |
| 2005 | 5.7\% | 6.4\% | 6.8\% | 7.3\% | 7.7\% | 8.0\% | 8.1\% | 8.3\% | 8.3\% | 8.3\% |
| 2006 | 5.5\% | 6.4\% | 7.0\% | 7.5\% | 7.8\% | 8.0\% | 8.0\% | 8.2\% | 8.3\% | 8.3\% |
| 2007 | 5.9\% | 6.8\% | 7.4\% | 7.8\% | 8.1\% | 8.3\% | 8.4\% | 8.5\% | 8.6\% |  |
| 2008 | 5.9\% | 7.0\% | 7.9\% | 8.4\% | 8.6\% | 8.9\% | 9.2\% | 9.3\% |  |  |
| 2009 | 6.7\% | 8.2\% | 9.3\% | 9.8\% | 10.3\% | 10.7\% | 10.9\% |  |  |  |
| 2010 | 7.5\% | 9.1\% | 9.9\% | 10.8\% | 11.1\% | 11.4\% |  |  |  |  |
| 2011 | 7.2\% | 8.7\% | 10.2\% | 10.7\% | 11.2\% |  |  |  |  |  |
| 2012 | 7.1\% | 9.4\% | 10.4\% | 11.3\% |  |  |  |  |  |  |
| 2013 | 8.9\% | 11.0\% | 12.4\% |  |  |  |  |  |  |  |
| 2014 | 10.0\% | 12.7\% |  |  |  |  |  |  |  |  |
| 2015 | 10.8\% |  |  |  |  |  |  |  |  |  |

Source: WCIRB unit statistical data

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

|  |  |  |  | R | Perma |  | ility | ms to | emnity | Claim | or Ac | , |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | 0.404 | 0.396 | 0.374 | 0.355 | 0.305 | 0.300 | 0.280 | 0.292 | 0.302 | 0.311 | 0.322 | 0.307 | 0.291 | 0.300 | 0.310 |
| Los Angeles/LA Basin | 0.482 | 0.484 | 0.478 | 0.453 | 0.392 | 0.377 | 0.385 | 0.401 | 0.401 | 0.395 | 0.401 | 0.396 | 0.367 | 0.373 | 0.392 |
| San Diego | 0.468 | 0.468 | 0.453 | 0.407 | 0.336 | 0.325 | 0.327 | 0.332 | 0.358 | 0.355 | 0.355 | 0.360 | 0.326 | 0.346 | 0.348 |
| All Other | 0.425 | 0.426 | 0.403 | 0.367 | 0.315 | 0.308 | 0.293 | 0.313 | 0.308 | 0.322 | 0.317 | 0.312 | 0.287 | 0.300 | 0.315 |
| All Regions | 0.448 | 0.449 | 0.436 | 0.407 | 0.349 | 0.339 | 0.335 | 0.352 | 0.355 | 0.358 | 0.361 | 0.356 | 0.330 | 0.339 | 0.354 |
|  | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Region | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | --- | -1.9\% | -5.5\% | -5.2\% | -14.1\% | -1.7\% | -6.4\% | 4.1\% | 3.5\% | 3.0\% | 3.4\% | -4.6\% | -5.2\% | 3.1\% | 3.2\% |
| Los Angeles/LA Basin | --- | 0.4\% | -1.2\% | -5.3\% | -13.4\% | -3.9\% | 2.2\% | 4.0\% | 0.2\% | -1.5\% | 1.6\% | -1.2\% | -7.4\% | 1.6\% | 5.0\% |
| San Diego | --- | 0.0\% | -3.3\% | -10.0\% | -17.5\% | -3.1\% | 0.4\% | 1.7\% | 7.7\% | -0.9\% | 0.0\% | 1.4\% | -9.3\% | 6.0\% | 0.4\% |
| All Other | --- | 0.2\% | -5.2\% | -9.1\% | -14.1\% | -2.2\% | -4.9\% | 6.8\% | -1.7\% | 4.8\% | -1.7\% | -1.5\% | -8.1\% | 4.5\% | 5.2\% |
| All Regions | --- | 0.2\% | -2.9\% | -6.7\% | -14.1\% | -3.0\% | -1.1\% | 4.9\% | 1.0\% | 0.8\% | 0.8\% | -1.4\% | -7.4\% | 2.9\% | 4.4\% |


| Region | Ratio of Indemnity Claims to Total Claims for Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | 0.336 | 0.340 | 0.344 | 0.306 | 0.281 | 0.284 | 0.288 | 0.292 | 0.304 | 0.314 | 0.322 | 0.322 | 0.331 | 0.328 | 0.328 |
| Los Angeles/LA Basin | 0.346 | 0.359 | 0.363 | 0.331 | 0.300 | 0.295 | 0.302 | 0.312 | 0.337 | 0.352 | 0.358 | 0.372 | 0.389 | 0.393 | 0.394 |
| San Diego | 0.310 | 0.309 | 0.309 | 0.278 | 0.260 | 0.258 | 0.258 | 0.269 | 0.281 | 0.303 | 0.313 | 0.327 | 0.329 | 0.329 | 0.330 |
| All Other | 0.341 | 0.350 | 0.350 | 0.321 | 0.294 | 0.286 | 0.291 | 0.295 | 0.307 | 0.320 | 0.327 | 0.330 | 0.343 | 0.339 | 0.329 |
| All Regions | 0.340 | 0.348 | 0.351 | 0.319 | 0.291 | 0.287 | 0.292 | 0.300 | 0.318 | 0.332 | 0.339 | 0.348 | 0.361 | 0.361 | 0.358 |


| Region | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | --- | 1.2\% | 1.0\% | -10.9\% | -8.2\% | 1.1\% | 1.2\% | 1.4\% | 4.0\% | 3.6\% | 2.5\% | 0.0\% | 2.8\% | -0.8\% | -0.1\% |
| Los Angeles/LA Basin | --- | 3.5\% | 1.1\% | -8.7\% | -9.5\% | -1.8\% | 2.6\% | 3.1\% | 8.2\% | 4.3\% | 1.7\% | 4.0\% | 4.7\% | 0.9\% | 0.3\% |
| San Diego | --- | -0.3\% | -0.2\% | -9.8\% | -6.7\% | -0.8\% | 0.0\% | 4.4\% | 4.5\% | 7.6\% | 3.3\% | 4.6\% | 0.5\% | 0.0\% | 0.4\% |
| All Other | --- | 2.7\% | -0.1\% | -8.3\% | -8.3\% | -2.6\% | 1.5\% | 1.5\% | 3.9\% | 4.3\% | 2.4\% | 0.8\% | 3.9\% | -1.3\% | -2.8\% |
| All Regions | --- | 2.6\% | 0.7\% | -9.1\% | -8.7\% | -1.4\% | 1.8\% | 2.5\% | 6.1\% | 4.5\% | 2.1\% | 2.5\% | 3.8\% | 0.0\% | -0.7\% |


| Region | Cumulative Injury Claims per 100 Indemnity Claims for Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | 7.67 | 8.33 | 7.78 | 7.15 | 5.89 | 5.28 | 6.18 | 6.13 | 6.32 | 6.41 | 6.03 | 5.87 | 7.57 | 7.39 | 6.31 |
| Los Angeles/LA Basin | 7.84 | 8.51 | 9.19 | 9.05 | 6.78 | 6.48 | 6.95 | 7.06 | 8.53 | 9.35 | 8.72 | 9.51 | 11.69 | 12.68 | 14.48 |
| San Diego | 6.67 | 7.49 | 7.95 | 7.88 | 5.85 | 5.19 | 5.72 | 5.85 | 6.10 | 7.39 | 6.65 | 6.91 | 8.88 | 10.18 | 10.90 |
| All Other | 5.16 | 5.58 | 5.71 | 5.49 | 3.85 | 4.16 | 4.04 | 4.03 | 4.68 | 5.35 | 4.71 | 4.70 | 5.47 | 5.90 | 5.91 |
| All Regions | 6.90 | 7.52 | 7.82 | 7.58 | 5.69 | 5.49 | 5.87 | 5.96 | 6.92 | 7.63 | 7.02 | 7.41 | 9.10 | 9.80 | 10.59 |


| Region | Annual Change |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Bay Area | --- | 8.6\% | -6.6\% | -8.1\% | -17.6\% | -10.2\% | 16.9\% | -0.8\% | 3.2\% | 1.5\% | -5.9\% | -2.7\% | 28.9\% | -2.4\% | -14.6\% |
| Los Angeles/LA Basin | --- | 8.5\% | 8.0\% | -1.5\% | -25.1\% | -4.5\% | 7.2\% | 1.7\% | 20.7\% | 9.6\% | -6.7\% | 9.0\% | 23.0\% | 8.5\% | 14.2\% |
| San Diego | --- | 12.3\% | 6.1\% | -0.9\% | -25.7\% | -11.3\% | 10.1\% | 2.4\% | 4.3\% | 21.0\% | -10.0\% | 3.9\% | 28.6\% | 14.6\% | 7.1\% |
| All Other | --- | 8.3\% | 2.2\% | -3.8\% | -29.9\% | 8.1\% | -2.9\% | -0.1\% | 16.1\% | 14.2\% | -12.0\% | -0.2\% | 16.4\% | 7.9\% | 0.2\% |
| All Regions | --- | 9.0\% | 4.0\% | -3.0\% | -25.0\% | -3.5\% | 7.0\% | 1.5\% | 16.1\% | 10.3\% | -8.1\% | 5.6\% | 22.9\% | 7.7\% | 8.0\% |

Figures in italics are based on preliminary partial data.

## Ratio of Total Indemnity Claim Counts to Total Claim Counts

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 0.321 |
| 1999 |  |  |  |  |  |  |  |  | 0.331 | 0.330 |
| 2000 |  |  |  |  |  |  |  | 0.339 | 0.338 | 0.338 |
| 2001 |  |  |  |  |  |  | 0.345 | 0.344 | 0.343 | 0.343 |
| 2002 |  |  |  |  |  | 0.360 | 0.360 | 0.359 | 0.358 | 0.358 |
| 2003 |  |  |  |  | 0.358 | 0.357 | 0.355 | 0.355 | 0.354 | 0.353 |
| 2004 |  |  |  | 0.321 | 0.320 | 0.319 | 0.318 | 0.318 | 0.317 | 0.317 |
| 2005 |  |  | 0.297 | 0.295 | 0.294 | 0.294 | 0.294 | 0.293 | 0.293 | 0.293 |
| 2006 |  | 0.303 | 0.297 | 0.296 | 0.296 | 0.295 | 0.295 | 0.294 | 0.294 | 0.294 |
| 2007 | 0.321 | 0.298 | 0.298 | 0.299 | 0.299 | 0.299 | 0.299 | 0.299 | 0.299 | 0.299 |
| 2008 | 0.322 | 0.303 | 0.309 | 0.311 | 0.312 | 0.312 | 0.312 | 0.312 | 0.312 | 0.313 |
| 2009 | 0.318 | 0.318 | 0.329 | 0.332 | 0.333 | 0.334 | 0.334 | 0.334 | 0.334 |  |
| 2010 | 0.323 | 0.331 | 0.345 | 0.349 | 0.350 | 0.351 | 0.351 | 0.351 |  |  |
| 2011 | 0.322 | 0.341 | 0.357 | 0.361 | 0.363 | 0.363 | 0.364 |  |  |  |
| 2012 | 0.318 | 0.339 | 0.358 | 0.363 | 0.364 | 0.365 |  |  |  |  |
| 2013 | 0.333 | 0.353 | 0.369 | 0.372 | 0.374 |  |  |  |  |  |
| 2014 | 0.337 | 0.350 | 0.365 | 0.369 |  |  |  |  |  |  |
| 2015 | 0.325 | 0.349 | 0.365 |  |  |  |  |  |  |  |
| 2016 | 0.333 | 0.347 |  |  |  |  |  |  |  |  |
| 2017 | 0.323 |  |  |  |  |  |  |  |  |  |

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 $68 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

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 | $30.6 \%$ | $34.2 \%$ | $35.7 \%$ | $36.7 \%$ | $37.4 \%$ |
| 2000 | $31.4 \%$ | $35.4 \%$ | $36.9 \%$ | $37.5 \%$ | $36.3 \%$ |
| 2001 | $30.8 \%$ | $35.0 \%$ | $36.6 \%$ | $37.3 \%$ | $37.6 \%$ |
| 2002 | $32.8 \%$ | $36.5 \%$ | $37.5 \%$ | $38.0 \%$ | $37.8 \%$ |
| 2003 | $33.5 \%$ | $37.1 \%$ | $38.3 \%$ | $38.6 \%$ | $38.8 \%$ |
| 2004 | $28.5 \%$ | $31.2 \%$ | $32.6 \%$ | $33.3 \%$ | $34.4 \%$ |
| 2005 | $20.9 \%$ | $24.5 \%$ | $26.8 \%$ | $29.2 \%$ | $31.0 \%$ |
| 2006 | $19.2 \%$ | $24.4 \%$ | $27.7 \%$ | $29.7 \%$ | $30.6 \%$ |
| 2007 | $20.0 \%$ | $26.1 \%$ | $29.1 \%$ | $29.2 \%$ | $30.9 \%$ |
| 2008 | $20.8 \%$ | $27.0 \%$ | $30.2 \%$ | $31.0 \%$ | $32.6 \%$ |
| 2009 | $23.8 \%$ | $30.6 \%$ | $34.3 \%$ | $36.2 \%$ | $37.5 \%$ |
| 2010 | $23.7 \%$ | $31.9 \%$ | $34.9 \%$ | $37.1 \%$ | $38.4 \%$ |
| 2011 | $27.4 \%$ | $34.0 \%$ | $37.8 \%$ | $40.3 \%$ | $40.7 \%$ |
| 2012 | $29.5 \%$ | $36.2 \%$ | $40.3 \%$ | $43.6 \%$ |  |
| 2013 | $31.0 \%$ | $38.5 \%$ | $41.6 \%$ |  |  |
| 2014 | $33.3 \%$ | $42.7 \%$ |  |  |  |
| 2015 | $35.8 \%$ |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | --- | --- | --- | --- | --- |
| 2000 | $2.6 \%$ | $3.4 \%$ | $3.3 \%$ | $2.2 \%$ | $-3.0 \%$ |
| 2001 | $-2.1 \%$ | $-1.2 \%$ | $-0.7 \%$ | $-0.7 \%$ | $3.5 \%$ |
| 2002 | $6.6 \%$ | $4.5 \%$ | $2.4 \%$ | $2.1 \%$ | $0.7 \%$ |
| 2003 | $2.0 \%$ | $1.7 \%$ | $2.0 \%$ | $1.4 \%$ | $2.6 \%$ |
| 2004 | $-14.8 \%$ | $-15.9 \%$ | $-14.9 \%$ | $-13.8 \%$ | $-11.3 \%$ |
| 2005 | $-26.6 \%$ | $-21.6 \%$ | $-17.6 \%$ | $-12.2 \%$ | $-9.9 \%$ |
| 2006 | $-8.3 \%$ | $-0.2 \%$ | $3.2 \%$ | $1.8 \%$ | $-1.4 \%$ |
| 2007 | $4.4 \%$ | $6.6 \%$ | $4.9 \%$ | $-1.7 \%$ | $1.1 \%$ |
| 2008 | $3.8 \%$ | $3.5 \%$ | $3.9 \%$ | $6.1 \%$ | $5.4 \%$ |
| 2009 | $14.5 \%$ | $13.3 \%$ | $13.7 \%$ | $16.8 \%$ | $15.0 \%$ |
| 2010 | $-0.5 \%$ | $4.4 \%$ | $1.8 \%$ | $2.3 \%$ | $2.3 \%$ |
| 2011 | $15.9 \%$ | $6.6 \%$ | $8.1 \%$ | $8.8 \%$ | $6.1 \%$ |
| 2012 | $7.6 \%$ | $6.4 \%$ | $6.6 \%$ | $8.3 \%$ |  |
| 2013 | $5.2 \%$ | $6.4 \%$ | $3.2 \%$ |  |  |
| 2014 | $7.3 \%$ | $10.8 \%$ |  |  |  |
| 2015 | $7.6 \%$ |  |  |  |  |

Temporary Indemnity

| Percentage of All Cumulative Injury Claims |  |  |  |  |  |  | Annual Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | 20.1\% | 17.0\% | 16.2\% | 15.7\% | 15.4\% | 1999 | --- | --- | --- | --- | --- |
| 2000 | 20.6\% | 17.2\% | 17.2\% | 16.6\% | 16.1\% | 2000 | 2.8\% | 1.0\% | 5.9\% | 5.6\% | 4.4\% |
| 2001 | 20.3\% | 18.4\% | 17.5\% | 16.7\% | 16.1\% | 2001 | -1.5\% | 7.2\% | 1.6\% | 0.3\% | 0.0\% |
| 2002 | 19.8\% | 18.0\% | 16.5\% | 15.6\% | 15.6\% | 2002 | -2.3\% | -2.5\% | -5.7\% | -6.3\% | -3.2\% |
| 2003 | 21.5\% | 18.1\% | 16.6\% | 16.1\% | 15.9\% | 2003 | 8.4\% | 0.4\% | 0.8\% | 3.0\% | 2.2\% |
| 2004 | 21.5\% | 18.6\% | 17.2\% | 16.4\% | 15.6\% | 2004 | 0.1\% | 3.3\% | 3.4\% | 2.2\% | -2.1\% |
| 2005 | 21.5\% | 19.0\% | 17.5\% | 15.9\% | 14.6\% | 2005 | -0.2\% | 1.9\% | 2.1\% | -3.3\% | -6.0\% |
| 2006 | 21.6\% | 19.2\% | 16.7\% | 15.4\% | 14.6\% | 2006 | 0.2\% | 0.9\% | -5.0\% | -3.4\% | -0.4\% |
| 2007 | 22.7\% | 18.7\% | 17.1\% | 15.9\% | 15.6\% | 2007 | 5.1\% | -2.1\% | 2.7\% | 3.1\% | 6.8\% |
| 2008 | 22.3\% | 19.1\% | 17.3\% | 16.2\% | 16.1\% | 2008 | -1.8\% | 1.8\% | 0.9\% | 2.3\% | 3.7\% |
| 2009 | 25.1\% | 21.6\% | 19.3\% | 18.2\% | 17.4\% | 2009 | 12.8\% | 13.2\% | 11.7\% | 12.1\% | 7.9\% |
| 2010 | 26.6\% | 21.9\% | 19.9\% | 18.9\% | 18.0\% | 2010 | 6.1\% | 1.3\% | 2.9\% | 4.1\% | 3.2\% |
| 2011 | 26.4\% | 23.7\% | 22.0\% | 20.5\% | 19.2\% | 2011 | -0.9\% | 8.1\% | 10.7\% | 8.5\% | 6.9\% |
| 2012 | 27.0\% | 24.6\% | 21.0\% | 19.9\% |  | 2012 | 2.2\% | 4.0\% | -4.4\% | -2.8\% |  |
| 2013 | 30.1\% | 25.6\% | 21.2\% |  |  | 2013 | 11.7\% | 4.0\% | 1.0\% |  |  |
| 2014 | 30.6\% | 24.8\% |  |  |  | 2014 | 1.4\% | -3.2\% |  |  |  |
| 2015 | 29.1\% |  |  |  |  | 2015 | -4.9\% |  |  |  |  |

## Medical-Only

|  | Percentage of All Cumulative Injury Claims |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | $49.3 \%$ | $48.6 \%$ | $48.0 \%$ | $47.4 \%$ | $47.1 \%$ |
| 2000 | $47.9 \%$ | $47.3 \%$ | $45.8 \%$ | $45.7 \%$ | $47.5 \%$ |
| 2001 | $48.9 \%$ | $46.5 \%$ | $45.8 \%$ | $46.0 \%$ | $46.3 \%$ |
| 2002 | $47.3 \%$ | $45.4 \%$ | $45.9 \%$ | $46.2 \%$ | $46.5 \%$ |
| 2003 | $45.0 \%$ | $44.7 \%$ | $45.0 \%$ | $45.2 \%$ | $45.2 \%$ |
| 2004 | $49.9 \%$ | $50.1 \%$ | $50.2 \%$ | $50.2 \%$ | $49.9 \%$ |
| 2005 | $57.5 \%$ | $56.5 \%$ | $55.5 \%$ | $54.8 \%$ | $54.2 \%$ |
| 2006 | $59.2 \%$ | $56.3 \%$ | $55.5 \%$ | $54.7 \%$ | $54.6 \%$ |
| 2007 | $57.3 \%$ | $55.1 \%$ | $53.7 \%$ | $54.8 \%$ | $53.3 \%$ |
| 2008 | $56.9 \%$ | $53.9 \%$ | $52.4 \%$ | $52.6 \%$ | $51.1 \%$ |
| 2009 | $51.0 \%$ | $47.7 \%$ | $46.2 \%$ | $45.5 \%$ | $44.9 \%$ |
| 2010 | $49.6 \%$ | $46.1 \%$ | $45.1 \%$ | $43.9 \%$ | $43.4 \%$ |
| 2011 | $46.1 \%$ | $42.2 \%$ | $40.1 \%$ | $39.3 \%$ | $39.5 \%$ |
| 2012 | $43.4 \%$ | $39.1 \%$ | $37.7 \%$ | $36.5 \%$ |  |
| 2013 | $38.8 \%$ | $35.8 \%$ | $36.1 \%$ |  |  |
| 2014 | $36.8 \%$ | $32.7 \%$ |  |  |  |
| 2015 | $35.9 \%$ |  |  |  |  |


| Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 1999 | --- | --- | --- | --- | --- |
| 2000 | $-2.8 \%$ | $-2.7 \%$ | $-4.5 \%$ | $-3.6 \%$ | $0.9 \%$ |
| 2001 | $2.0 \%$ | $-1.7 \%$ | $0.0 \%$ | $0.5 \%$ | $-2.7 \%$ |
| 2002 | $-3.2 \%$ | $-2.3 \%$ | $0.2 \%$ | $0.6 \%$ | $0.5 \%$ |
| 2003 | $-5.0 \%$ | $-1.5 \%$ | $-1.9 \%$ | $-2.2 \%$ | $-2.8 \%$ |
| 2004 | $11.0 \%$ | $12.0 \%$ | $11.5 \%$ | $11.0 \%$ | $10.4 \%$ |
| 2005 | $15.2 \%$ | $12.7 \%$ | $10.7 \%$ | $9.0 \%$ | $8.6 \%$ |
| 2006 | $2.9 \%$ | $-0.3 \%$ | $-0.1 \%$ | $0.0 \%$ | $0.8 \%$ |
| 2007 | $-3.2 \%$ | $-2.1 \%$ | $-3.2 \%$ | $0.1 \%$ | $-2.4 \%$ |
| 2008 | $-0.6 \%$ | $-2.2 \%$ | $-2.4 \%$ | $-4.0 \%$ | $-4.2 \%$ |
| 2009 | $-10.4 \%$ | $-11.4 \%$ | $-11.8 \%$ | $-13.6 \%$ | $-12.1 \%$ |
| 2010 | $-2.8 \%$ | $-3.4 \%$ | $-2.5 \%$ | $-3.4 \%$ | $-3.4 \%$ |
| 2011 | $-7.1 \%$ | $-8.5 \%$ | $-11.1 \%$ | $-10.5 \%$ | $-9.1 \%$ |
| 2012 | $-5.7 \%$ | $-7.3 \%$ | $-5.9 \%$ | $-7.2 \%$ |  |
| 2013 | $-10.7 \%$ | $-8.4 \%$ | $-4.3 \%$ |  |  |
| 2014 | $-5.0 \%$ | $-8.7 \%$ |  |  |  |
| 2015 | $-2.7 \%$ |  |  |  |  |

* Includes Permanent Partial, Permanent Total, and Death

Note: Figures in italics are based on a partial accident year. Cumulative injury claims include occupational disease.
Source: WCIRB unit statistical data

## Indemnity Claim Frequency by Geographic Region

## Bay Area

| Indemnity Claim Frequency <br> per $\$ 100 \mathrm{M}$ of Exposure at AY 2014 Level |  |  |  |  |  | Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 26.67 | 27.62 | 27.83 | 27.84 | 27.64 | 2001 | --- | --- | --- | --- | --- |
| 2002 | 25.46 | 26.66 | 27.15 | 27.04 | 27.12 | 2002 | -4.5\% | -3.5\% | -2.5\% | -2.9\% | -1.9\% |
| 2003 | 24.81 | 25.97 | 25.90 | 26.03 | 26.29 | 2003 | -2.5\% | -2.6\% | -4.6\% | -3.7\% | -3.0\% |
| 2004 | 21.22 | 21.49 | 21.62 | 21.88 | 21.68 | 2004 | -14.5\% | -17.3\% | -16.5\% | -15.9\% | -17.5\% |
| 2005 | 18.15 | 18.30 | 18.57 | 18.49 | 18.60 | 2005 | -14.4\% | -14.8\% | -14.1\% | -15.5\% | -14.2\% |
| 2006 | 17.05 | 17.38 | 17.31 | 17.39 | 17.29 | 2006 | -6.1\% | -5.0\% | -6.8\% | -5.9\% | -7.0\% |
| 2007 | 16.17 | 16.28 | 16.45 | 16.52 | 16.55 | 2007 | -5.2\% | -6.4\% | -5.0\% | -5.0\% | -4.3\% |
| 2008 | 14.81 | 15.25 | 15.38 | 15.51 | 15.51 | 2008 | -8.4\% | -6.3\% | -6.5\% | -6.1\% | -6.2\% |
| 2009 | 13.62 | 13.98 | 14.16 | 14.22 | 14.26 | 2009 | -8.1\% | -8.3\% | -8.0\% | -8.3\% | -8.1\% |
| 2010 | 14.13 | 14.70 | 14.84 | 14.94 | 14.97 | 2010 | 3.8\% | 5.1\% | 4.8\% | 5.0\% | 5.0\% |
| 2011 | 13.60 | 14.20 | 14.41 | 14.53 | 14.59 | 2011 | -3.7\% | -3.4\% | -2.9\% | -2.8\% | -2.6\% |
| 2012 | 13.55 | 14.20 | 14.47 | 14.60 |  | 2012 | -0.3\% | 0.0\% | 0.4\% | 0.5\% |  |
| 2013 | 13.03 | 13.59 | 13.79 |  |  | 2013 | -3.9\% | -4.3\% | -4.7\% |  |  |
| 2014 | 12.98 | 13.68 |  |  |  | 2014 | -0.4\% | 0.7\% |  |  |  |
| 2015 | 12.86 |  |  |  |  | 2015 | -0.9\% |  |  |  |  |

Los Angeles/L.A. Basin

| Indemnity Claim Frequency <br> per $\$ 100 \mathrm{M}$ of Exposure at AY 2014 Level |  |  |  |  |  | Annual Change |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 36.46 | 38.05 | 38.88 | 39.21 | 39.55 | 2001 | --- | --- | --- | --- | --- |
| 2002 | 35.72 | 38.79 | 39.32 | 39.65 | 39.61 | 2002 | -2.0\% | 1.9\% | 1.1\% | 1.1\% | 0.2\% |
| 2003 | 36.57 | 38.17 | 38.38 | 38.40 | 38.44 | 2003 | 2.4\% | -1.6\% | -2.4\% | -3.1\% | -3.0\% |
| 2004 | 30.57 | 31.35 | 31.37 | 31.55 | 31.75 | 2004 | -16.4\% | -17.9\% | -18.3\% | -17.8\% | -17.4\% |
| 2005 | 25.62 | 26.33 | 26.66 | 26.89 | 27.20 | 2005 | -16.2\% | -16.0\% | -15.0\% | -14.8\% | -14.3\% |
| 2006 | 24.17 | 24.95 | 25.31 | 25.61 | 25.61 | 2006 | -5.7\% | -5.2\% | -5.1\% | -4.8\% | -5.8\% |
| 2007 | 23.40 | 24.39 | 24.81 | 24.94 | 25.01 | 2007 | -3.2\% | -2.3\% | -2.0\% | -2.6\% | -2.3\% |
| 2008 | 22.50 | 23.80 | 24.21 | 24.35 | 24.47 | 2008 | -3.8\% | -2.4\% | -2.4\% | -2.4\% | -2.2\% |
| 2009 | 22.28 | 23.69 | 24.14 | 24.38 | 24.49 | 2009 | -1.0\% | -0.5\% | -0.3\% | 0.1\% | 0.1\% |
| 2010 | 24.07 | 25.42 | 25.96 | 26.20 | 26.31 | 2010 | 8.0\% | 7.3\% | 7.5\% | 7.4\% | 7.4\% |
| 2011 | 23.90 | 25.61 | 26.22 | 26.48 | 26.68 | 2011 | -0.7\% | 0.8\% | 1.0\% | 1.1\% | 1.4\% |
| 2012 | 25.65 | 27.54 | 28.15 | 28.59 |  | 2012 | 7.3\% | 7.5\% | 7.4\% | 8.0\% |  |
| 2013 | 26.24 | 28.05 | 28.84 |  |  | 2013 | 2.3\% | 1.8\% | 2.5\% |  |  |
| 2014 | 27.14 | 29.66 |  |  |  | 2014 | 3.4\% | 5.8\% |  |  |  |
| 2015 | 27.34 |  |  |  |  | 2015 | 0.7\% |  |  |  |  |

San Diego

| Indemnity Claim Frequency 00M of Exposure at AY 2014 |  |  |  |  |  |  | Annual Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 38.17 | 39.26 | 39.68 | 40.09 | 40.45 | 2001 | --- | --- | --- | --- | --- |
| 2002 | 35.19 | 36.91 | 37.25 | 37.53 | 37.60 | 2002 | -7.8\% | -6.0\% | -6.1\% | -6.4\% | -7.1\% |
| 2003 | 33.27 | 34.14 | 34.44 | 34.38 | 34.65 | 2003 | -5.5\% | -7.5\% | -7.5\% | -8.4\% | -7.8\% |
| 2004 | 27.77 | 28.57 | 28.70 | 28.81 | 28.54 | 2004 | -16.5\% | -16.3\% | -16.7\% | -16.2\% | -17.6\% |
| 2005 | 24.40 | 24.72 | 24.76 | 24.58 | 24.55 | 2005 | -12.1\% | -13.5\% | -13.7\% | -14.7\% | -14.0\% |
| 2006 | 22.80 | 22.63 | 22.60 | 22.50 | 22.48 | 2006 | -6.6\% | -8.4\% | -8.8\% | -8.5\% | -8.5\% |
| 2007 | 21.91 | 22.13 | 22.04 | 21.63 | 21.65 | 2007 | -3.9\% | -2.2\% | -2.4\% | -3.9\% | -3.7\% |
| 2008 | 20.04 | 20.49 | 20.69 | 20.20 | 20.30 | 2008 | -8.5\% | -7.4\% | -6.1\% | -6.6\% | -6.2\% |
| 2009 | 18.56 | 19.39 | 19.62 | 19.73 | 19.82 | 2009 | -7.4\% | -5.4\% | -5.2\% | -2.3\% | -2.3\% |
| 2010 | 20.54 | 21.32 | 21.52 | 21.66 | 21.76 | 2010 | 10.7\% | 10.0\% | 9.7\% | 9.8\% | 9.8\% |
| 2011 | 20.14 | 20.85 | 21.14 | 21.16 | 21.19 | 2011 | -2.0\% | -2.2\% | -1.8\% | -2.3\% | -2.6\% |
| 2012 | 20.66 | 21.50 | 21.57 | 21.78 |  | 2012 | 2.6\% | 3.1\% | 2.0\% | 2.9\% |  |
| 2013 | 19.82 | 20.44 | 20.71 |  |  | 2013 | -4.1\% | -4.9\% | -4.0\% |  |  |
| 2014 | 20.89 | 21.99 |  |  |  | 2014 | 5.4\% | 7.6\% |  |  |  |
| 2015 | 22.96 |  |  |  |  | 2015 | 9.9\% |  |  |  |  |


| All Other | Indemnity Claim Frequency |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | per $\$ 100 \mathrm{M}$ of Exposure at AY 2014 |  |  |  |  |  | Level |
| AY/RL | 1 | 2 | 3 | 4 | 5 |  |  |
| 2001 | 44.09 | 45.09 | 45.45 | 45.15 | 44.95 |  |  |
| 2002 | 41.51 | 43.80 | 43.40 | 43.17 | 43.31 |  |  |
| 2003 | 41.19 | 41.65 | 41.44 | 41.50 | 41.37 |  |  |
| 2004 | 35.26 | 35.70 | 35.72 | 35.45 | 34.95 |  |  |
| 2005 | 30.68 | 31.11 | 30.91 | 30.70 | 30.94 |  |  |
| 2006 | 28.51 | 28.55 | 28.46 | 28.60 | 28.51 |  |  |
| 2007 | 27.21 | 27.49 | 27.72 | 27.66 | 27.82 |  |  |
| 2008 | 24.99 | 25.73 | 25.88 | 26.17 | 26.30 |  |  |
| 2009 | 24.15 | 25.05 | 25.49 | 25.70 | 25.81 |  |  |
| 2010 | 25.57 | 26.87 | 27.23 | 27.43 | 27.55 |  |  |
| 2011 | 25.39 | 26.62 | 27.06 | 27.23 | 27.29 |  |  |
| 2012 | 25.80 | 27.02 | 27.42 | 27.59 |  |  |  |
| 2013 | 25.88 | 27.03 | 27.40 |  |  |  |  |
| 2014 | 26.27 | 28.04 |  |  |  |  |  |
| 2015 | 27.24 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


|  | Annual Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | -- | -- | --- | -- | --- |
| 2002 | $-5.8 \%$ | $-2.9 \%$ | $-4.5 \%$ | $-4.4 \%$ | $-3.7 \%$ |
| 2003 | $-0.8 \%$ | $-4.9 \%$ | $-4.5 \%$ | $-3.9 \%$ | $-4.5 \%$ |
| 2004 | $-14.4 \%$ | $-14.3 \%$ | $-13.8 \%$ | $-14.6 \%$ | $-15.5 \%$ |
| 2005 | $-13.0 \%$ | $-12.9 \%$ | $-13.5 \%$ | $-13.4 \%$ | $-11.5 \%$ |
| 2006 | $-7.1 \%$ | $-8.2 \%$ | $-7.9 \%$ | $-6.8 \%$ | $-7.9 \%$ |
| 2007 | $-4.6 \%$ | $-3.7 \%$ | $-2.6 \%$ | $-3.3 \%$ | $-2.4 \%$ |
| 2008 | $-8.2 \%$ | $-6.4 \%$ | $-6.6 \%$ | $-5.4 \%$ | $-5.4 \%$ |
| 2009 | $-3.3 \%$ | $-2.7 \%$ | $-1.5 \%$ | $-1.8 \%$ | $-1.9 \%$ |
| 2010 | $5.9 \%$ | $7.3 \%$ | $6.8 \%$ | $6.7 \%$ | $6.8 \%$ |
| 2011 | $-0.7 \%$ | $-1.0 \%$ | $-0.6 \%$ | $-0.7 \%$ | $-1.0 \%$ |
| 2012 | $1.6 \%$ | $1.5 \%$ | $1.3 \%$ | $1.3 \%$ |  |
| 2013 | $0.3 \%$ | $0.0 \%$ | $-0.1 \%$ |  |  |
| 2014 | $1.5 \%$ | $3.7 \%$ |  |  |  |
| 2015 | $3.7 \%$ |  |  |  |  |

All Regions

| per \$100M of Exposure at AY 2014 Level |  |  |  |  |  |  | Annual Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY/RL | 1 | 2 | 3 | 4 | 5 | AY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 36.24 | 37.48 | 38.00 | 38.04 | 38.07 | 2001 | --- | --- | --- | --- | --- |
| 2002 | 34.91 | 37.25 | 37.48 | 37.52 | 37.56 | 2002 | -3.7\% | -0.6\% | -1.4\% | -1.4\% | -1.3\% |
| 2003 | 35.08 | 36.21 | 36.22 | 36.28 | 36.32 | 2003 | 0.5\% | -2.8\% | -3.4\% | -3.3\% | -3.3\% |
| 2004 | 29.67 | 30.22 | 30.27 | 30.33 | 30.21 | 2004 | -15.4\% | -16.5\% | -16.4\% | -16.4\% | -16.8\% |
| 2005 | 25.28 | 25.76 | 25.92 | 25.93 | 26.17 | 2005 | -14.8\% | -14.7\% | -14.4\% | -14.5\% | -13.4\% |
| 2006 | 23.69 | 24.13 | 24.24 | 24.44 | 24.39 | 2006 | -6.3\% | -6.3\% | -6.5\% | -5.8\% | -6.8\% |
| 2007 | 22.72 | 23.27 | 23.57 | 23.63 | 23.71 | 2007 | -4.1\% | -3.6\% | -2.8\% | -3.3\% | -2.8\% |
| 2008 | 21.29 | 22.20 | 22.47 | 22.65 | 22.74 | 2008 | -6.3\% | -4.6\% | -4.7\% | -4.1\% | -4.1\% |
| 2009 | 20.60 | 21.59 | 21.97 | 22.16 | 22.25 | 2009 | -3.2\% | -2.8\% | -2.2\% | -2.2\% | -2.2\% |
| 2010 | 21.91 | 23.05 | 23.43 | 23.62 | 23.72 | 2010 | 6.4\% | 6.7\% | 6.6\% | 6.6\% | 6.6\% |
| 2011 | 21.65 | 22.92 | 23.37 | 23.57 | 23.69 | 2011 | -1.2\% | -0.6\% | -0.2\% | -0.2\% | -0.1\% |
| 2012 | 22.44 | 23.79 | 24.25 | 24.53 |  | 2012 | 3.7\% | 3.8\% | 3.7\% | 4.1\% |  |
| 2013 | 22.48 | 23.75 | 24.26 |  |  | 2013 | 0.2\% | -0.2\% | 0.0\% |  |  |
| 2014 | 22.87 | 24.66 |  |  |  | 2014 | 1.7\% | 3.9\% |  |  |  |
| 2015 | 23.06 |  |  |  |  | 2015 | 0.9\% |  |  |  |  |

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

## Indemnity Claim Count Distribution by Part of Body Code

Top 20 Part of Body Codes for Cumulative Injury Indemnity Claims based on AY 2013 Shares

| 2013 | POB | POB | Accident Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Code | Description | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| 1 | 90 | Multiple Body Parts | 28.5\% | 26.5\% | 25.7\% | 24.0\% | 25.1\% | 25.9\% | 29.0\% | 29.8\% | 31.2\% | 30.5\% |
| 2 | 42 | Lower Back | 5.0\% | 5.5\% | 6.4\% | 6.2\% | 7.6\% | 8.3\% | 8.2\% | 8.1\% | 8.9\% | 9.7\% |
| 3 | 91 | Body Systems | 1.7\% | 1.8\% | 2.5\% | 3.0\% | 4.1\% | 3.5\% | 3.7\% | 4.8\% | 6.7\% | 6.0\% |
| 4 | 34 | Wrist | 10.8\% | 11.8\% | 10.4\% | 9.9\% | 7.9\% | 7.0\% | 6.8\% | 7.1\% | 5.7\% | 5.8\% |
| 5 | 38 | Shoulder | 3.5\% | 4.0\% | 4.9\% | 5.4\% | 4.6\% | 4.8\% | 4.6\% | 4.6\% | 4.6\% | 5.0\% |
| 6 | 66 | Psych | 2.7\% | 3.1\% | 4.2\% | 5.5\% | 5.6\% | 5.9\% | 5.2\% | 5.1\% | 4.5\% | 4.4\% |
| 7 | 30 | Multiple Upper | 8.2\% | 7.1\% | 6.4\% | 5.9\% | 5.1\% | 4.4\% | 4.2\% | 4.6\% | 4.0\% | 4.0\% |
| 8 | 35 | Hand | 6.0\% | 5.9\% | 5.8\% | 5.3\% | 4.6\% | 4.4\% | 4.5\% | 3.9\% | 3.9\% | 3.8\% |
| 9 | 39 | Wrist and Hand | 4.7\% | 4.7\% | 4.3\% | 5.6\% | 4.2\% | 4.0\% | 4.2\% | 4.4\% | 3.7\% | 3.3\% |
| 10 | 53 | Knee | 2.5\% | 2.4\% | 3.0\% | 2.8\% | 2.2\% | 2.8\% | 2.5\% | 2.3\% | 2.7\% | 2.5\% |
| 11 | 25 | Soft Tissue (Neck) | 0.7\% | 0.6\% | 0.7\% | 1.1\% | 1.6\% | 2.0\% | 1.6\% | 1.7\% | 1.8\% | 2.1\% |
| 12 | 65 | Unclassified | 2.2\% | 1.9\% | 1.8\% | 1.7\% | 2.3\% | 2.0\% | 2.9\% | 2.7\% | 1.8\% | 1.9\% |
| 13 | 33 | Lower Arm | 2.1\% | 2.3\% | 2.5\% | 1.9\% | 1.8\% | 1.6\% | 1.4\% | 1.6\% | 1.6\% | 0.9\% |
| 14 | 12 | Brain | 4.6\% | 4.7\% | 4.4\% | 4.0\% | 5.5\% | 5.2\% | 4.2\% | 2.9\% | 1.4\% | 1.4\% |
| 15 | 32 | Elbow | 2.1\% | 1.7\% | 1.8\% | 2.1\% | 1.6\% | 1.3\% | 1.2\% | 1.3\% | 1.3\% | 1.3\% |
| 16 | 20 | Multiple Neck | 0.5\% | 0.7\% | 0.7\% | 0.9\% | 1.0\% | 0.9\% | 0.9\% | 1.3\% | 1.1\% | 0.9\% |
| 17 | 41 | Upper Back | 1.3\% | 1.3\% | 1.3\% | 1.2\% | 1.5\% | 1.2\% | 1.3\% | 1.2\% | 1.1\% | 1.1\% |
| 18 | 10 | Multiple Head | 0.6\% | 0.8\% | 0.6\% | 1.0\% | 1.6\% | 1.4\% | 1.0\% | 1.1\% | 1.1\% | 1.3\% |
| 19 | 22 | Disc (Neck) | 0.5\% | 0.5\% | 0.6\% | 0.6\% | 0.5\% | 0.6\% | 0.7\% | 0.7\% | 1.0\% | 1.3\% |
| 20 | 43 | Disc (Back) | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.4\% | 0.4\% | 0.3\% | 0.6\% | 1.0\% | 1.3\% |
| Other |  | Other | 11.8\% | 12.5\% | 11.8\% | 12.0\% | 11.4\% | 12.3\% | 11.5\% | 10.3\% | 10.8\% | 11.5\% |

Top 20 Part of Body Codes for Non-Cumulative Injury Indemnity Claims based on AY 2013 Shares

| 2013 | POB | OB | Accident Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Code | Description | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| 1 | 42 | Lower Back | 15.1\% | 15.5\% | 15.6\% | 16.7\% | 17.4\% | 17.3\% | 16.8\% | 16.8\% | 16.9\% | 16.5\% |
| 2 | 90 | Multiple Body Parts | 12.3\% | 11.2\% | 11.2\% | 10.7\% | 10.8\% | 11.7\% | 13.1\% | 12.6\% | 12.2\% | 12.0\% |
| 3 | 53 | Knee | 7.6\% | 7.9\% | 8.2\% | 8.5\% | 8.6\% | 8.6\% | 8.3\% | 8.4\% | 8.9\% | 8.3\% |
| 4 | 38 | Shoulder | 4.4\% | 4.7\% | 5.1\% | 5.7\% | 6.2\% | 6.1\% | 6.1\% | 6.6\% | 7.5\% | 7.0\% |
| 5 | 36 | Finger | 5.7\% | 6.1\% | 6.1\% | 6.2\% | 6.0\% | 6.0\% | 5.8\% | 5.8\% | 5.8\% | 6.0\% |
| 6 | 35 | Hand | 3.9\% | 4.1\% | 4.2\% | 4.1\% | 4.1\% | 4.3\% | 4.4\% | 4.6\% | 4.6\% | 4.2\% |
| 7 | 55 | Ankle | 3.9\% | 4.3\% | 4.3\% | 4.4\% | 4.4\% | 4.2\% | 4.3\% | 4.2\% | 4.2\% | 4.4\% |
| 8 | 34 | Wrist | 5.4\% | 5.8\% | 5.9\% | 5.7\% | 5.6\% | 6.0\% | 5.6\% | 5.4\% | 4.1\% | 5.1\% |
| 9 | 56 | Foot | 3.0\% | 3.3\% | 3.4\% | 3.1\% | 3.0\% | 2.9\% | 3.0\% | 2.9\% | 3.0\% | 3.3\% |
| 10 | 61 | Abdomen | 2.3\% | 2.3\% | 2.4\% | 2.4\% | 2.4\% | 2.1\% | 2.3\% | 2.3\% | 2.4\% | 2.3\% |
| 11 | 33 | Lower Arm | 1.7\% | 1.8\% | 1.8\% | 1.9\% | 2.0\% | 2.0\% | 2.1\% | 2.2\% | 2.2\% | 2.1\% |
| 12 | 41 | Upper Back | 1.4\% | 1.4\% | 1.5\% | 1.4\% | 1.4\% | 1.5\% | 1.5\% | 1.6\% | 1.9\% | 1.8\% |
| 13 | 32 | Elbow | 1.6\% | 1.8\% | 1.8\% | 1.8\% | 1.8\% | 1.8\% | 1.7\% | 1.8\% | 1.9\% | 1.9\% |
| 14 | 54 | Lower Leg | 1.8\% | 1.9\% | 1.9\% | 1.9\% | 1.8\% | 1.8\% | 1.8\% | 1.8\% | 1.8\% | 1.8\% |
| 15 | 30 | Multiple Upper | 2.5\% | 2.4\% | 2.1\% | 1.9\% | 1.9\% | 2.0\% | 1.9\% | 1.9\% | 1.7\% | 2.1\% |
| 16 | 31 | Upper Arm | 1.6\% | 1.7\% | 1.8\% | 1.9\% | 2.2\% | 2.3\% | 2.3\% | 2.0\% | 1.7\% | 2.0\% |
| 17 | 37 | Thumb | 1.6\% | 1.7\% | 1.7\% | 1.7\% | 1.7\% | 1.5\% | 1.6\% | 1.6\% | 1.6\% | 1.6\% |
| 18 | 25 | Soft Tissue (Neck) | 0.6\% | 0.7\% | 0.9\% | 1.0\% | 1.3\% | 1.5\% | 1.4\% | 1.3\% | 1.4\% | 1.2\% |
| 19 | 10 | Multiple Head | 1.0\% | 1.1\% | 1.1\% | 1.1\% | 1.2\% | 1.3\% | 1.2\% | 1.3\% | 1.1\% | 1.3\% |
| 20 | 44 | Chest | 0.9\% | 1.1\% | 1.2\% | 1.1\% | 1.2\% | 1.2\% | 1.1\% | 1.0\% | 1.1\% | 1.1\% |
| Other |  | Other | 21.6\% | 19.3\% | 17.9\% | 16.7\% | 15.1\% | 14.0\% | 13.8\% | 13.7\% | 14.1\% | 14.2\% |

Note: Figures in italics are based on a partial data.
Source: WCIRB unit statistical data at first report level

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

| Accident | Paid Indemnity Development |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1992 |  |  |  |  |  |  |  |  | 0.280 |
| 1993 |  |  |  |  |  |  |  | 0.334 | 0.408 |
| 1994 |  |  |  |  |  |  | 0.352 | 0.316 | 0.235 |
| 1995 |  |  |  |  |  | 0.423 | 0.361 | 0.278 | 0.225 |
| 1996 |  |  |  |  | 0.497 | 0.386 | 0.307 | 0.272 | 0.208 |
| 1997 |  |  |  | 0.547 | 0.456 | 0.370 | 0.317 | 0.223 | 0.217 |
| 1998 |  |  | 0.654 | 0.521 | 0.400 | 0.345 | 0.280 | 0.219 | 0.228 |
| 1999 |  | 0.806 | 0.649 | 0.487 | 0.432 | 0.339 | 0.289 | 0.257 | 0.223 |
| 2000 | 2.942 | 0.808 | 0.604 | 0.518 | 0.394 | 0.349 | 0.305 | 0.289 | 0.239 |
| 2001 | 3.231 | 0.797 | 0.682 | 0.544 | 0.404 | 0.377 | 0.329 | 0.277 | 0.245 |
| 2002 | 3.190 | 0.820 | 0.626 | 0.501 | 0.449 | 0.402 | 0.353 | 0.288 | 0.244 |
| 2003 | 3.139 | 0.762 | 0.599 | 0.534 | 0.459 | 0.379 | 0.296 | 0.270 | 0.257 |
| 2004 | 2.920 | 0.609 | 0.577 | 0.471 | 0.392 | 0.353 | 0.290 | 0.303 | 0.284 |
| 2005 | 2.674 | 0.761 | 0.621 | 0.535 | 0.421 | 0.362 | 0.325 | 0.315 | 0.292 |
| 2006 | 2.874 | 0.805 | 0.604 | 0.485 | 0.419 | 0.370 | 0.333 | 0.290 | 0.250 |
| 2007 | 4.233 | 0.899 | 0.662 | 0.515 | 0.446 | 0.393 | 0.357 | 0.309 | 0.280 |
| 2008 | 4.586 | 0.962 | 0.708 | 0.570 | 0.483 | 0.421 | 0.350 | 0.326 | 0.250 |
| 2009 | 5.236 | 0.969 | 0.704 | 0.586 | 0.488 | 0.424 | 0.368 | 0.340 |  |
| 2010 | 5.677 | 0.983 | 0.746 | 0.608 | 0.514 | 0.457 | 0.389 |  |  |
| 2011 | 6.055 | 0.967 | 0.697 | 0.580 | 0.495 | 0.437 |  |  |  |
| 2012 | 6.242 | 0.997 | 0.721 | 0.592 | 0.531 |  |  |  |  |
| 2013 | 6.192 | 0.946 | 0.746 | 0.637 |  |  |  |  |  |
| 2014 | 6.230 | 0.997 | 0.793 |  |  |  |  |  |  |
| 2015 | 6.018 | 1.001 |  |  |  |  |  |  |  |
| 2016 | 6.118 |  |  |  |  |  |  |  |  |


| Accident | Paid Medical Development |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1992 |  |  |  |  |  |  |  |  | 0.192 |
| 1993 |  |  |  |  |  |  |  | 0.222 | 0.243 |
| 1994 |  |  |  |  |  |  | 0.255 | 0.242 | 0.202 |
| 1995 |  |  |  |  |  | 0.256 | 0.269 | 0.229 | 0.206 |
| 1996 |  |  |  |  | 0.344 | 0.299 | 0.280 | 0.264 | 0.175 |
| 1997 |  |  |  | 0.420 | 0.367 | 0.311 | 0.284 | 0.213 | 0.157 |
| 1998 |  |  | 0.523 | 0.421 | 0.344 | 0.314 | 0.215 | 0.175 | 0.170 |
| 1999 |  | 0.753 | 0.577 | 0.436 | 0.414 | 0.279 | 0.219 | 0.196 | 0.220 |
| 2000 | 3.654 | 0.795 | 0.584 | 0.479 | 0.331 | 0.253 | 0.230 | 0.256 | 0.192 |
| 2001 | 3.862 | 0.907 | 0.634 | 0.470 | 0.312 | 0.299 | 0.287 | 0.237 | 0.211 |
| 2002 | 4.334 | 0.858 | 0.535 | 0.368 | 0.357 | 0.352 | 0.277 | 0.254 | 0.208 |
| 2003 | 4.011 | 0.765 | 0.421 | 0.387 | 0.372 | 0.300 | 0.263 | 0.241 | 0.207 |
| 2004 | 3.348 | 0.584 | 0.463 | 0.425 | 0.367 | 0.311 | 0.276 | 0.237 | 0.227 |
| 2005 | 3.236 | 0.577 | 0.460 | 0.419 | 0.382 | 0.337 | 0.264 | 0.272 | 0.242 |
| 2006 | 3.124 | 0.593 | 0.463 | 0.396 | 0.344 | 0.318 | 0.277 | 0.248 | 0.192 |
| 2007 | 3.846 | 0.659 | 0.515 | 0.441 | 0.370 | 0.341 | 0.309 | 0.242 | 0.205 |
| 2008 | 3.959 | 0.677 | 0.532 | 0.469 | 0.416 | 0.352 | 0.288 | 0.245 | 0.201 |
| 2009 | 4.466 | 0.695 | 0.534 | 0.489 | 0.423 | 0.348 | 0.282 | 0.236 |  |
| 2010 | 4.654 | 0.707 | 0.585 | 0.511 | 0.416 | 0.353 | 0.310 |  |  |
| 2011 | 4.343 | 0.715 | 0.541 | 0.463 | 0.399 | 0.334 |  |  |  |
| 2012 | 4.431 | 0.691 | 0.536 | 0.468 | 0.408 |  |  |  |  |
| 2013 | 4.306 | 0.651 | 0.524 | 0.469 |  |  |  |  |  |
| 2014 | 4.558 | 0.669 | 0.549 |  |  |  |  |  |  |
| 2015 | 4.425 | 0.651 |  |  |  |  |  |  |  |
| 2016 | 4.559 |  |  |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

All Entries reflect the paid cost of medical cost containment programs.
Source: WCIRB quarterly calls for experience

IV-A-45
WCIRB California ${ }^{\circledR}$

## Comparison of Projected Loss Ratios as of March 31, 2017 <br> Accident Year 2012 Projected to 63 Months [1]

## Indemnity

| Methodology | Based on Experience Evaluated as of (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | $\underline{51}$ | Current |
| 3-Year Avg. Incurred | 0.242 | 0.241 | 0.237 | 0.231 | 0.230 |
| Latest Year Incurred | 0.244 | 0.238 | 0.235 | 0.230 | 0.230 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.259 | 0.249 | 0.239 | 0.235 | 0.230 |
| 3-Year Avg. Paid | 0.234 | 0.239 | 0.236 | 0.233 | 0.230 |
| Latest Year Paid | 0.242 | 0.238 | 0.234 | 0.232 | 0.230 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.258 | 0.254 | 0.249 | 0.237 | 0.230 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.242 | 0.235 | 0.231 | 0.231 | 0.230 |

Difference from Actual 63-Month Loss Ratio

|  | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{\text { Current }}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 3-Year Avg. Incurred | $5.3 \%$ | $4.7 \%$ | $2.9 \%$ | $0.5 \%$ | $0.0 \%$ |
| Latest Year Incurred | $5.9 \%$ | $3.4 \%$ | $2.2 \%$ | $-0.3 \%$ | $0.0 \%$ |
| Latest Yr. Inc. Adj. for Case Reserves | $12.8 \%$ | $8.0 \%$ | $3.8 \%$ | $1.9 \%$ | $0.0 \%$ |
| 3-Year Avg. Paid | $1.5 \%$ | $4.0 \%$ | $2.6 \%$ | $1.2 \%$ | $0.0 \%$ |
| Latest Year Paid | $5.3 \%$ | $3.6 \%$ | $1.7 \%$ | $1.0 \%$ | $0.0 \%$ |
| Reform-Adj. Paid | $12.1 \%$ | $10.4 \%$ | $8.3 \%$ | $3.0 \%$ | $0.0 \%$ |
| Latest Yr. Pd. Adj. for Settlement | $5.3 \%$ | $2.0 \%$ | $0.5 \%$ | $0.2 \%$ | $0.0 \%$ |

## Medical

Based on Experience Evaluated as of (in months):

|  | 15 | $\underline{27}$ | 39 | $\underline{51}$ | Current |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3-Year Avg. Incurred | 0.356 | 0.344 | 0.331 | 0.316 | 0.310 |
| Latest Year Incurred | 0.371 | 0.340 | 0.324 | 0.314 | 0.310 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.378 | 0.355 | 0.331 | 0.323 | 0.310 |
| 3-Year Avg. Paid | 0.297 | 0.315 | 0.318 | 0.315 | 0.310 |
| Latest Year Paid | 0.312 | 0.325 | 0.315 | 0.313 | 0.310 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.294 | 0.318 | 0.307 | 0.305 | 0.301 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.294 | 0.315 | 0.305 | 0.303 | 0.301 |
| Difference from Actual 63-Month Loss Ratio |  |  |  |  |  |

3-Year Avg. Incurred
Latest Year Incurred
Latest Yr. Inc. Adj. for Case Reserves
3-Year Avg. Paid
Latest Year Paid
Reform-Adj. Paid
Latest Yr. Pd. Adj. for Settlement

| $\underline{15}$ |  | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ |
| ---: | ---: | ---: | ---: | ---: |
| $14.9 \%$ | $11.3 \%$ | $7.0 \%$ | $2.2 \%$ | $\underline{\text { Current }}$ |
| $19.8 \%$ | $9.9 \%$ | $4.6 \%$ | $1.3 \%$ | $0.0 \%$ |
| $22.0 \%$ | $14.7 \%$ | $7.1 \%$ | $4.5 \%$ | $0.0 \%$ |
| $-3.9 \%$ | $1.9 \%$ | $2.9 \%$ | $1.6 \%$ | $0.0 \%$ |
| $0.9 \%$ | $4.9 \%$ | $1.7 \%$ | $1.0 \%$ | $0.0 \%$ |
| $-2.3 \%$ | $5.8 \%$ | $2.2 \%$ | $1.3 \%$ | $0.0 \%$ |
| $-2.0 \%$ | $4.8 \%$ | $1.4 \%$ | $0.8 \%$ | $0.0 \%$ |

[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 863 reforms and RBRVS.
[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, 2017 <br> Accident Year 2013 Projected to 51 Months [1]

## Indemnity

| Methodology | Based on Experience Evaluated as of (in months): |  |  |  |
| :--- | :---: | :---: | ---: | ---: |
|  | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{\text { Current }}$ |
| 3-Year Avg. Incurred | 0.206 | 0.198 | 0.188 |  |
| Latest Year Incurred | 0.203 | 0.195 | 0.189 | 0.188 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.214 | 0.202 | 0.193 | 0.188 |
| 3-Year Avg. Paid | 0.196 | 0.192 | 0.190 | 0.188 |
| Latest Year Paid $_{\text {Reform-Adj. Paid }}{ }^{[2]}$ | 0.195 | 0.189 | 0.189 | 0.188 |
| Latest Yr. Pd. Adj. for Settlement $^{[3]}$ | 0.203 | 0.197 | 0.197 | 0.188 |

Difference from Actual 51-Month Loss Ratio

|  |  | $\underline{25}$ | $\underline{39}$ | Current |
| :--- | ---: | ---: | ---: | ---: |
| 3-Year Avg. Incurred | $9.6 \%$ | $5.3 \%$ | $0.0 \%$ |  |
| Latest Year Incurred | $8.1 \%$ | $3.6 \%$ | $0.3 \%$ | $0.0 \%$ |
| Latest Yr. Inc. Adj. for Case Reserves | $14.0 \%$ | $7.2 \%$ | $2.7 \%$ | $0.0 \%$ |
| 3-Year Avg. Paid | $4.2 \%$ | $1.9 \%$ | $0.3 \%$ | $0.0 \%$ |
| Latest Year Paid | $3.6 \%$ | $0.6 \%$ | $0.5 \%$ | $0.0 \%$ |
| Reform-Adj. Paid | $8.2 \%$ | $5.0 \%$ | $0.9 \%$ | $0.0 \%$ |
| Latest Yr. Pd. Adj. for Settlement | $2.9 \%$ | $-0.4 \%$ | $-0.2 \%$ | $0.0 \%$ |

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

## Medical

Based on Experience Evaluated as of (in months):

| $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\frac{\text { Current }}{0.243}$ |
| ---: | ---: | ---: | ---: |
| 0.276 | 0.259 | 0.244 | 0.243 |
| 0.288 | 0.267 | 0.249 | 0.243 |
| 0.251 | 0.251 | 0.247 | 0.243 |
| 0.258 | 0.249 | 0.245 | 0.243 |
| 0.261 | 0.248 | 0.243 | 0.240 |
| 0.261 | 0.247 | 0.242 | 0.240 |

Difference from Actual 51-Month Loss Ratio

3-Year Avg. Incurred
Latest Year Incurred
Latest Yr. Inc. Adj. for Case Reserves
3-Year Avg. Paid
Latest Year Paid
Reform-Adj. Paid
Latest Yr. Pd. Adj. for Settlement

| $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | Current |
| ---: | ---: | ---: | ---: |
| $17.8 \%$ | $10.7 \%$ | $2.5 \%$ | $0.0 \%$ |
| $13.7 \%$ | $6.5 \%$ | $0.5 \%$ | $0.0 \%$ |
| $18.5 \%$ | $10.0 \%$ | $2.5 \%$ | $0.0 \%$ |
| $3.3 \%$ | $3.3 \%$ | $1.8 \%$ | $0.0 \%$ |
| $6.4 \%$ | $2.4 \%$ | $1.1 \%$ | $0.0 \%$ |
| $9.1 \%$ | $3.5 \%$ | $1.6 \%$ | $0.0 \%$ |
| $8.8 \%$ | $3.0 \%$ | $1.1 \%$ | $0.0 \%$ |

[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 863 reforms and RBRVS.
[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, 2017 <br> Accident Year 2014 Projected to 39 Months [1]

|  | Indemnity |  |  |
| :--- | :---: | :---: | ---: |
| Methodology | Based on Experience Evaluated as of (in months): |  |  |
| 3-Year Avg. Incurred | $\frac{15}{\underline{15}}$ | $\underline{27}$ | $\frac{\text { Current }}{0}$ |
| Latest Year Incurred | 0.167 | 0.163 | 0.164 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.162 | 0.161 | 0.164 |
| 3-Year Avg. Paid | 0.160 | 0.167 | 0.164 |
| Latest Year Paid | 0.157 | 0.162 | 0.164 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.157 | 0.163 | 0.164 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.156 | 0.163 | 0.164 |

Difference from Actual 39-Month Loss Ratio

| 15 | 27 | Current |
| ---: | ---: | ---: |
| $1.8 \%$ | $-0.8 \%$ | $0.0 \%$ |
| $-1.5 \%$ | $-1.9 \%$ | $0.0 \%$ |
| $6.0 \%$ | $1.8 \%$ | $0.0 \%$ |
| $-2.7 \%$ | $-1.2 \%$ | $0.0 \%$ |
| $-4.5 \%$ | $-0.7 \%$ | $0.0 \%$ |
| $-4.5 \%$ | $-0.7 \%$ | $0.0 \%$ |
| $-4.9 \%$ | $-1.2 \%$ | $0.0 \%$ |

## Medical

Based on Experience Evaluated as of (in months):

| 3-Year Avg. Incurred | $0.2 \overline{22}$ | 0.204 | 0.201 |
| :--- | :--- | :--- | :--- |
| Latest Year Incurred | 0.210 | 0.199 | 0.201 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.216 | 0.206 | 0.201 |
| 3-Year Avg. Paid | 0.206 | 0.203 | 0.201 |
| Latest Year Paid $^{\text {Reform-Adj. Paid }}{ }^{[2]}$ | 0.203 | 0.202 | 0.201 |
| Latest Yr. Pd. Adj. for Settlement $^{[3]}$ | 0.205 | 0.202 | 0.200 |

Difference from Actual 39-Month Loss Ratio
3-Year Avg. Incurred
Latest Year Incurred
Latest Yr. Inc. Adj. for Case Reserves
3-Year Avg. Paid
Latest Year Paid
Reform-Adj. Paid
Latest Yr. Pd. Adj. for Settlement

| 15 | $\underline{27}$ | Current |
| ---: | ---: | ---: |
| $10.5 \%$ | $1.5 \%$ | $0.0 \%$ |
| $4.1 \%$ | $-1.4 \%$ | $0.0 \%$ |
| $7.2 \%$ | $2.2 \%$ | $0.0 \%$ |
| $2.2 \%$ | $0.7 \%$ | $0.0 \%$ |
| $0.9 \%$ | $0.3 \%$ | $0.0 \%$ |
| $2.1 \%$ | $0.8 \%$ | $0.0 \%$ |
| $1.9 \%$ | $0.5 \%$ | $0.0 \%$ |

[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 863 reforms and RBRVS.
[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, 2017 

 Accident Year 2015 Projected to 27 Months [1]
## Indemnity

| Methodology | Based on Experience Evaluated as of (in months): |  |
| :--- | ---: | ---: | ---: |
|  | $\frac{15}{15}$ | $\frac{\text { Current }}{}$ |
| 3-Year Avg. Incurred | 0.137 | 0.137 |
| Latest Year Incurred | 0.136 | 0.137 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.136 | 0.137 |
| 3-Year Avg. Paid | 0.134 | 0.137 |
| Latest Year Paid $^{\text {Reform-Adj. Paid }}{ }^{[2]}$ | 0.136 | 0.137 |
| Latest Yr. Pd. Adj. for Settlement $^{[3]}$ | 0.136 | 0.137 |
|  | 0.136 | 0.137 |

Difference from Actual 27-Month Loss Ratio

|  | 15 | Current |
| :---: | :---: | :---: |
| 3-Year Avg. Incurred | -0.1\% | 0.0\% |
| Latest Year Incurred | -0.4\% | 0.0\% |
| Latest Yr. Inc. Adj. for Case Reserves | -0.5\% | 0.0\% |
| 3-Year Avg. Paid | -2.2\% | 0.0\% |
| Latest Year Paid | -0.8\% | 0.0\% |
| Reform-Adj. Paid | -0.8\% | 0.0\% |
| Latest Yr. Pd. Adj. for Settlement | -0.9\% | 0.0\% |


|  | Medical |  |
| :---: | :---: | :---: |
|  | Based on Experience Evaluated as of (in months): |  |
|  | 15 | Current |
| 3-Year Avg. Incurred | 0.181 | 0.176 |
| Latest Year Incurred | 0.177 | 0.176 |
| Latest Yr. Inc. Adj. for Case Reserves | 0.180 | 0.176 |
| 3-Year Avg. Paid | 0.175 | 0.176 |
| Latest Year Paid | 0.174 | 0.176 |
| Reform-Adj. Paid ${ }^{[2]}$ | 0.174 | 0.176 |
| Latest Yr. Pd. Adj. for Settlement ${ }^{[3]}$ | 0.174 | 0.176 |

Difference from Actual 27-Month Loss Ratio

| 15 | Current |
| ---: | ---: |
| $3.1 \%$ | $0.0 \%$ |
| $0.7 \%$ | $0.0 \%$ |
| $2.6 \%$ | $0.0 \%$ |
| $-0.4 \%$ | $0.0 \%$ |
| $-1.1 \%$ | $0.0 \%$ |
| $-0.6 \%$ | $0.0 \%$ |
| $-0.6 \%$ | $0.0 \%$ |

[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 863 reforms and RBRVS.
[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

## Average Incurred Indemnity Loss per Reported Indemnity Claim

| AccidentYear | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 20,639 |
| 1999 |  |  |  |  |  |  |  |  | 22,318 | 22,442 |
| 2000 |  |  |  |  |  |  |  | 22,736 | 22,987 | 23,151 |
| 2001 |  |  |  |  |  |  | 24,496 | 24,976 | 25,338 | 25,545 |
| 2002 |  |  |  |  |  | 22,556 | 23,200 | 23,650 | 23,909 | 24,182 |
| 2003 |  |  |  |  | 21,613 | 22,664 | 23,383 | 23,843 | 24,358 | 24,796 |
| 2004 |  |  |  | 16,560 | 17,632 | 18,386 | 19,103 | 19,641 | 20,178 | 20,482 |
| 2005 |  |  | 12,151 | 14,162 | 15,395 | 16,361 | 17,175 | 17,869 | 18,276 | 18,565 |
| 2006 |  | 9,075 | 13,088 | 15,209 | 16,632 | 17,811 | 18,732 | 19,276 | 19,640 | 19,855 |
| 2007 | 6,673 | 9,284 | 13,939 | 16,776 | 18,442 | 19,638 | 20,481 | 21,108 | 21,583 | 21,835 |
| 2008 | 6,398 | 9,844 | 15,047 | 18,435 | 20,397 | 21,609 | 22,502 | 23,029 | 23,409 | 23,647 |
| 2009 | 6,378 | 10,153 | 15,714 | 18,954 | 21,143 | 22,430 | 23,312 | 23,776 | 24,130 |  |
| 2010 | 6,181 | 10,112 | 15,405 | 18,864 | 20,774 | 21,944 | 22,703 | 23,179 |  |  |
| 2011 | 6,069 | 10,545 | 15,823 | 18,810 | 20,621 | 21,577 | 22,201 |  |  |  |
| 2012 | 6,145 | 10,547 | 15,632 | 18,542 | 20,075 | 21,141 |  |  |  |  |
| 2013 | 6,484 | 10,694 | 15,566 | 18,256 | 19,761 |  |  |  |  |  |
| 2014 | 6,277 | 10,773 | 15,834 | 18,944 |  |  |  |  |  |  |
| 2015 | 6,897 | 11,259 | 16,592 |  |  |  |  |  |  |  |
| 2016 | 6,842 | 11,369 |  |  |  |  |  |  |  |  |
| 2017 | 7,015 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 8.7\% |
| 2000 |  |  |  |  |  |  |  |  | 3.0\% | 3.2\% |
| 2001 |  |  |  |  |  |  |  | 9.9\% | 10.2\% | 10.3\% |
| 2002 |  |  |  |  |  |  | -5.3\% | -5.3\% | -5.6\% | -5.3\% |
| 2003 |  |  |  |  |  | 0.5\% | 0.8\% | 0.8\% | 1.9\% | 2.5\% |
| 2004 |  |  |  |  | -18.4\% | -18.9\% | -18.3\% | -17.6\% | -17.2\% | -17.4\% |
| 2005 |  |  |  | -14.5\% | -12.7\% | -11.0\% | -10.1\% | -9.0\% | -9.4\% | -9.4\% |
| 2006 |  |  | 7.7\% | 7.4\% | 8.0\% | 8.9\% | 9.1\% | 7.9\% | 7.5\% | 6.9\% |
| 2007 |  | 2.3\% | 6.5\% | 10.3\% | 10.9\% | 10.3\% | 9.3\% | 9.5\% | 9.9\% | 10.0\% |
| 2008 | -4.1\% | 6.0\% | 8.0\% | 9.9\% | 10.6\% | 10.0\% | 9.9\% | 9.1\% | 8.5\% | 8.3\% |
| 2009 | -0.3\% | 3.1\% | 4.4\% | 2.8\% | 3.7\% | 3.8\% | 3.6\% | 3.2\% | 3.1\% |  |
| 2010 | -3.1\% | -0.4\% | -2.0\% | -0.5\% | -1.7\% | -2.2\% | -2.6\% | -2.5\% |  |  |
| 2011 | -1.8\% | 4.3\% | 2.7\% | -0.3\% | -0.7\% | -1.7\% | -2.2\% |  |  |  |
| 2012 | 1.3\% | 0.0\% | -1.2\% | -1.4\% | -2.6\% | -2.0\% |  |  |  |  |
| 2013 | 5.5\% | 1.4\% | -0.4\% | -1.5\% | -1.6\% |  |  |  |  |  |
| 2014 | -3.2\% | 0.7\% | 1.7\% | 3.8\% |  |  |  |  |  |  |
| 2015 | 9.9\% | 4.5\% | 4.8\% |  |  |  |  |  |  |  |
| 2016 | -0.8\% | 1.0\% |  |  |  |  |  |  |  |  |
| 2017 | 2.5\% |  |  |  |  |  |  |  |  |  |

Annual Trend*

| All-Yr | $0.8 \%$ | $2.1 \%$ | $2.5 \%$ | $2.3 \%$ | $1.4 \%$ | $0.8 \%$ | $-0.1 \%$ | $-0.4 \%$ | $-0.6 \%$ | $-0.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R $^{2}$ | 0.265 | 0.944 | 0.755 | 0.580 | 0.178 | 0.052 | 0.001 | 0.015 | 0.042 | 0.043 |

* Trend is based on an exponential distribution.

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

Source: WCIRB quarterly calls for experience

## Average Incurred Medical Loss per Reported Claim

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 6,083 |
| 1999 |  |  |  |  |  |  |  |  | 6,757 | 7,041 |
| 2000 |  |  |  |  |  |  |  | 7,418 | 7,781 | 7,935 |
| 2001 |  |  |  |  |  |  | 8,421 | 8,821 | 9,168 | 9,516 |
| 2002 |  |  |  |  |  | 8,459 | 8,958 | 9,306 | 9,669 | 9,970 |
| 2003 |  |  |  |  | 7,858 | 8,324 | 8,758 | 9,158 | 9,564 | 9,921 |
| 2004 |  |  |  | 5,885 | 6,447 | 6,948 | 7,357 | 7,834 | 8,154 | 8,437 |
| 2005 |  |  | 4,948 | 5,625 | 6,064 | 6,569 | 7,085 | 7,511 | 7,830 | 8,045 |
| 2006 |  | 4,277 | 5,502 | 6,313 | 6,872 | 7,410 | 7,892 | 8,279 | 8,599 | 8,751 |
| 2007 | 4,025 | 4,655 | 6,092 | 7,032 | 7,833 | 8,469 | 9,054 | 9,417 | 9,687 | 9,842 |
| 2008 | 4,230 | 5,161 | 6,822 | 8,041 | 8,956 | 9,723 | 10,256 | 10,596 | 10,805 | 10,914 |
| 2009 | 4,363 | 5,649 | 7,778 | 9,081 | 10,252 | 11,005 | 11,524 | 11,806 | 11,954 |  |
| 2010 | 4,427 | 5,893 | 8,053 | 9,651 | 10,693 | 11,398 | 11,781 | 12,040 |  |  |
| 2011 | 4,783 | 6,357 | 8,770 | 10,186 | 11,135 | 11,774 | 12,037 |  |  |  |
| 2012 | 4,816 | 6,531 | 8,680 | 9,926 | 10,678 | 11,181 |  |  |  |  |
| 2013 | 5,220 | 6,583 | 8,575 | 9,551 | 10,234 |  |  |  |  |  |
| 2014 | 4,857 | 6,402 | 8,152 | 9,183 |  |  |  |  |  |  |
| 2015 | 4,972 | 6,524 | 8,244 |  |  |  |  |  |  |  |
| 2016 | 4,991 | 6,629 |  |  |  |  |  |  |  |  |
| 2017 | 5,003 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | 75 | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 15.7\% |
| 2000 |  |  |  |  |  |  |  |  | 15.2\% | 12.7\% |
| 2001 |  |  |  |  |  |  |  | 18.9\% | 17.8\% | 19.9\% |
| 2002 |  |  |  |  |  |  | 6.4\% | 5.5\% | 5.5\% | 4.8\% |
| 2003 |  |  |  |  |  | -1.6\% | -2.2\% | -1.6\% | -1.1\% | -0.5\% |
| 2004 |  |  |  |  | -18.0\% | -16.5\% | -16.0\% | -14.5\% | -14.7\% | -15.0\% |
| 2005 |  |  |  | -4.4\% | -5.9\% | -5.5\% | -3.7\% | -4.1\% | -4.0\% | -4.6\% |
| 2006 |  |  | 11.2\% | 12.2\% | 13.3\% | 12.8\% | 11.4\% | 10.2\% | 9.8\% | 8.8\% |
| 2007 |  | 8.8\% | 10.7\% | 11.4\% | 14.0\% | 14.3\% | 14.7\% | 13.7\% | 12.7\% | 12.5\% |
| 2008 | 5.1\% | 10.9\% | 12.0\% | 14.4\% | 14.3\% | 14.8\% | 13.3\% | 12.5\% | 11.5\% | 10.9\% |
| 2009 | 3.2\% | 9.5\% | 14.0\% | 12.9\% | 14.5\% | 13.2\% | 12.4\% | 11.4\% | 10.6\% |  |
| 2010 | 1.5\% | 4.3\% | 3.5\% | 6.3\% | 4.3\% | 3.6\% | 2.2\% | 2.0\% |  |  |
| 2011 | 8.0\% | 7.9\% | 8.9\% | 5.5\% | 4.1\% | 3.3\% | 2.2\% |  |  |  |
| 2012 | 0.7\% | 2.7\% | -1.0\% | -2.6\% | -4.1\% | -5.0\% |  |  |  |  |
| 2013 | 8.4\% | 0.8\% | -1.2\% | -3.8\% | -4.2\% |  |  |  |  |  |
| 2014 | -7.0\% | -2.7\% | -4.9\% | -3.9\% |  |  |  |  |  |  |
| 2015 | 2.4\% | 1.9\% | 1.1\% |  |  |  |  |  |  |  |
| 2016 | 0.4\% | 1.6\% |  |  |  |  |  |  |  |  |
| 2017 | 0.2\% |  |  |  |  |  |  |  |  |  |

Annual Trend*

| All-Yr | $2.2 \%$ | $4.3 \%$ | $5.4 \%$ | $6.2 \%$ | $5.9 \%$ | $5.2 \%$ | $4.3 \%$ | $3.8 \%$ | $3.6 \%$ | $3.8 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R $^{2}$ | 0.781 | 0.815 | 0.755 | 0.802 | 0.731 | 0.643 | 0.555 | 0.540 | 0.525 | 0.500 |

* Trend is based on an exponential distribution.

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 $69 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).
Source: WCIRB quarterly calls for experience

Average Indemnity Case Outstanding per Open Indemnity Claim

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 32,957 |
| 1999 |  |  |  |  |  |  |  |  | 28,894 | 30,289 |
| 2000 |  |  |  |  |  |  |  | 23,958 | 24,598 | 25,646 |
| 2001 |  |  |  |  |  |  | 19,688 | 21,112 | 22,947 | 23,839 |
| 2002 |  |  |  |  |  | 16,188 | 17,304 | 18,449 | 19,360 | 21,277 |
| 2003 |  |  |  |  | 15,296 | 16,810 | 18,781 | 20,883 | 24,072 | 27,736 |
| 2004 |  |  |  | 13,206 | 14,209 | 15,912 | 18,065 | 20,583 | 23,316 | 24,678 |
| 2005 |  |  | 10,145 | 11,541 | 12,938 | 15,380 | 18,447 | 22,058 | 23,454 | 26,256 |
| 2006 |  | 8,292 | 11,436 | 13,178 | 15,513 | 18,849 | 21,774 | 23,516 | 26,797 | 28,732 |
| 2007 | 6,132 | 8,274 | 11,763 | 14,348 | 16,581 | 18,659 | 20,663 | 24,193 | 27,368 | 29,519 |
| 2008 | 5,823 | 8,561 | 12,287 | 15,109 | 16,880 | 18,338 | 21,405 | 24,023 | 26,746 | 30,727 |
| 2009 | 5,784 | 8,897 | 12,885 | 14,728 | 16,911 | 19,175 | 21,607 | 23,561 | 25,889 |  |
| 2010 | 5,594 | 8,930 | 12,502 | 14,667 | 16,472 | 18,338 | 20,368 | 22,326 |  |  |
| 2011 | 5,496 | 9,562 | 13,060 | 15,210 | 17,530 | 19,127 | 20,914 |  |  |  |
| 2012 | 5,586 | 9,406 | 12,893 | 14,996 | 16,545 | 18,837 |  |  |  |  |
| 2013 | 6,041 | 9,544 | 13,105 | 14,425 | 15,869 |  |  |  |  |  |
| 2014 | 5,713 | 9,683 | 13,337 | 15,398 |  |  |  |  |  |  |
| 2015 | 6,404 | 10,241 | 14,490 |  |  |  |  |  |  |  |
| 2016 | 6,309 | 10,426 |  |  |  |  |  |  |  |  |
| 2017 | 6,491 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | -8.1\% |
| 2000 |  |  |  |  |  |  |  |  | -14.9\% | -15.3\% |
| 2001 |  |  |  |  |  |  |  | -11.9\% | -6.7\% | -7.0\% |
| 2002 |  |  |  |  |  |  | -12.1\% | -12.6\% | -15.6\% | -10.7\% |
| 2003 |  |  |  |  |  | 3.8\% | 8.5\% | 13.2\% | 24.3\% | 30.4\% |
| 2004 |  |  |  |  | -7.1\% | -5.3\% | -3.8\% | -1.4\% | -3.1\% | -11.0\% |
| 2005 |  |  |  | -12.6\% | -8.9\% | -3.3\% | 2.1\% | 7.2\% | 0.6\% | 6.4\% |
| 2006 |  |  | 12.7\% | 14.2\% | 19.9\% | 22.6\% | 18.0\% | 6.6\% | 14.3\% | 9.4\% |
| 2007 |  | -0.2\% | 2.9\% | 8.9\% | 6.9\% | -1.0\% | -5.1\% | 2.9\% | 2.1\% | 2.7\% |
| 2008 | -5.0\% | 3.5\% | 4.5\% | 5.3\% | 1.8\% | -1.7\% | 3.6\% | -0.7\% | -2.3\% | 4.1\% |
| 2009 | -0.7\% | 3.9\% | 4.9\% | -2.5\% | 0.2\% | 4.6\% | 0.9\% | -1.9\% | -3.2\% |  |
| 2010 | -3.3\% | 0.4\% | -3.0\% | -0.4\% | -2.6\% | -4.4\% | -5.7\% | -5.2\% |  |  |
| 2011 | -1.7\% | 7.1\% | 4.5\% | 3.7\% | 6.4\% | 4.3\% | 2.7\% |  |  |  |
| 2012 | 1.6\% | -1.6\% | -1.3\% | -1.4\% | -5.6\% | -1.5\% |  |  |  |  |
| 2013 | 8.2\% | 1.5\% | 1.6\% | -3.8\% | -4.1\% |  |  |  |  |  |
| 2014 | -5.4\% | 1.4\% | 1.8\% | 6.8\% |  |  |  |  |  |  |
| 2015 | 12.1\% | 5.8\% | 8.6\% |  |  |  |  |  |  |  |
| 2016 | -1.5\% | 1.8\% |  |  |  |  |  |  |  |  |
| 2017 | 2.9\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Yr | $1.0 \%$ | $2.4 \%$ | $2.6 \%$ | $2.0 \%$ | $1.7 \%$ | $1.9 \%$ | $1.7 \%$ | $1.2 \%$ |
| $\mathrm{R}^{2}$ | 0.289 | 0.958 | 0.833 | 0.555 | 0.393 | 0.604 | 0.484 | 0.214 |
|  |  | 0.06 | $0.0 \%$ | 0.003 |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

* Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Outstanding Medical Loss Per Open Indemnity Claim

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 60,317 |
| 1999 |  |  |  |  |  |  |  |  | 47,929 | 63,549 |
| 2000 |  |  |  |  |  |  |  | 38,162 | 50,060 | 58,110 |
| 2001 |  |  |  |  |  |  | 27,981 | 36,368 | 46,355 | 58,210 |
| 2002 |  |  |  |  |  | 20,987 | 27,803 | 35,040 | 44,193 | 53,856 |
| 2003 |  |  |  |  | 18,310 | 23,050 | 30,323 | 38,731 | 48,502 | 61,371 |
| 2004 |  |  |  | 15,251 | 19,608 | 25,758 | 31,599 | 41,658 | 50,002 | 59,499 |
| 2005 |  |  | 14,536 | 18,322 | 21,741 | 27,248 | 35,570 | 45,964 | 53,715 | 64,638 |
| 2006 |  | 12,932 | 17,435 | 22,317 | 26,991 | 34,120 | 41,360 | 50,261 | 63,691 | 72,969 |
| 2007 | 12,073 | 13,648 | 17,807 | 21,994 | 28,101 | 34,646 | 43,178 | 52,997 | 62,794 | 72,305 |
| 2008 | 12,580 | 14,475 | 18,600 | 23,566 | 28,410 | 35,427 | 44,626 | 53,700 | 62,932 | 71,200 |
| 2009 | 12,847 | 14,982 | 19,942 | 23,721 | 29,906 | 36,707 | 43,791 | 51,770 | 59,222 |  |
| 2010 | 12,931 | 15,315 | 19,685 | 24,475 | 29,838 | 36,138 | 42,056 | 47,854 |  |  |
| 2011 | 14,408 | 16,711 | 21,621 | 26,329 | 32,192 | 38,969 | 43,443 |  |  |  |
| 2012 | 14,552 | 17,015 | 21,053 | 25,084 | 29,462 | 34,813 |  |  |  |  |
| 2013 | 15,424 | 16,509 | 20,830 | 23,628 | 28,333 |  |  |  |  |  |
| 2014 | 13,618 | 16,167 | 19,576 | 22,983 |  |  |  |  |  |  |
| 2015 | 14,533 | 16,903 | 20,680 |  |  |  |  |  |  |  |
| 2016 | 14,278 | 17,424 |  |  |  |  |  |  |  |  |
| 2017 | 14,429 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 5.4\% |
| 2000 |  |  |  |  |  |  |  |  | 4.4\% | -8.6\% |
| 2001 |  |  |  |  |  |  |  | -4.7\% | -7.4\% | 0.2\% |
| 2002 |  |  |  |  |  |  | -0.6\% | -3.7\% | -4.7\% | -7.5\% |
| 2003 |  |  |  |  |  | 9.8\% | 9.1\% | 10.5\% | 9.8\% | 14.0\% |
| 2004 |  |  |  |  | 7.1\% | 11.8\% | 4.2\% | 7.6\% | 3.1\% | -3.1\% |
| 2005 |  |  |  | 20.1\% | 10.9\% | 5.8\% | 12.6\% | 10.3\% | 7.4\% | 8.6\% |
| 2006 |  |  | 19.9\% | 21.8\% | 24.1\% | 25.2\% | 16.3\% | 9.3\% | 18.6\% | 12.9\% |
| 2007 |  | 5.5\% | 2.1\% | -1.4\% | 4.1\% | 1.5\% | 4.4\% | 5.4\% | -1.4\% | -0.9\% |
| 2008 | 4.2\% | 6.1\% | 4.4\% | 7.1\% | 1.1\% | 2.3\% | 3.4\% | 1.3\% | 0.2\% | -1.5\% |
| 2009 | 2.1\% | 3.5\% | 7.2\% | 0.7\% | 5.3\% | 3.6\% | -1.9\% | -3.6\% | -5.9\% |  |
| 2010 | 0.7\% | 2.2\% | -1.3\% | 3.2\% | -0.2\% | -1.6\% | -4.0\% | -7.6\% |  |  |
| 2011 | 11.4\% | 9.1\% | 9.8\% | 7.6\% | 7.9\% | 7.8\% | 3.3\% |  |  |  |
| 2012 | 1.0\% | 1.8\% | -2.6\% | -4.7\% | -8.5\% | -10.7\% |  |  |  |  |
| 2013 | 6.0\% | -3.0\% | -1.1\% | -5.8\% | -3.8\% |  |  |  |  |  |
| 2014 | -11.7\% | -2.1\% | -6.0\% | -2.7\% |  |  |  |  |  |  |
| 2015 | 6.7\% | 4.6\% | 5.6\% |  |  |  |  |  |  |  |
| 2016 | -1.8\% | 3.1\% |  |  |  |  |  |  |  |  |
| 2017 | 1.1\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Yr | $1.8 \%$ | $2.7 \%$ | $2.8 \%$ | $3.5 \%$ | $4.9 \%$ | $5.9 \%$ | $5.5 \%$ | $4.3 \%$ | $3.4 \%$ |
| $\mathrm{R}^{2}$ | 0.582 | 0.839 | 0.637 | 0.542 | 0.704 | 0.800 | 0.844 | 0.768 | 0.698 |
|  |  |  | 0.499 |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

* Trend is based on an exponential distribution

Source: WCIRB quarterly calls for experience

## Average Paid Indemnity Loss per Indemnity Claim

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 18,872 |
| 1999 |  |  |  |  |  |  |  |  | 20,253 | 20,715 |
| 2000 |  |  |  |  |  |  |  | 20,362 | 21,049 | 21,518 |
| 2001 |  |  |  |  |  |  | 21,545 | 22,534 | 23,226 | 23,759 |
| 2002 |  |  |  |  |  | 19,387 | 20,664 | 21,566 | 22,183 | 22,611 |
| 2003 |  |  |  |  | 17,456 | 19,368 | 20,653 | 21,487 | 22,150 | 22,744 |
| 2004 |  |  |  | 11,747 | 14,011 | 15,443 | 16,494 | 17,264 | 18,012 | 18,634 |
| 2005 |  |  | 7,322 | 10,277 | 12,344 | 13,611 | 14,603 | 15,432 | 16,199 | 16,808 |
| 2006 |  | 3,685 | 7,833 | 10,940 | 12,964 | 14,484 | 15,717 | 16,713 | 17,449 | 17,991 |
| 2007 | 881 | 3,908 | 8,419 | 11,935 | 14,355 | 16,135 | 17,477 | 18,542 | 19,327 | 19,944 |
| 2008 | 910 | 4,253 | 9,087 | 13,082 | 15,989 | 18,048 | 19,492 | 20,515 | 21,308 | 21,802 |
| 2009 | 928 | 4,223 | 9,232 | 13,488 | 16,551 | 18,694 | 20,216 | 21,320 | 22,118 |  |
| 2010 | 904 | 4,194 | 9,189 | 13,535 | 16,616 | 18,648 | 20,097 | 21,120 |  |  |
| 2011 | 969 | 4,242 | 9,393 | 13,524 | 16,413 | 18,386 | 19,726 |  |  |  |
| 2012 | 961 | 4,345 | 9,418 | 13,556 | 16,337 | 18,217 |  |  |  |  |
| 2013 | 961 | 4,335 | 9,396 | 13,658 | 16,436 |  |  |  |  |  |
| 2014 | 939 | 4,369 | 9,705 | 14,237 |  |  |  |  |  |  |
| 2015 | 972 | 4,560 | 10,179 |  |  |  |  |  |  |  |
| 2016 | 996 | 4,752 |  |  |  |  |  |  |  |  |
| 2017 | 1,002 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | 99 | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 9.8\% |
| 2000 |  |  |  |  |  |  |  |  | 3.9\% | 3.9\% |
| 2001 |  |  |  |  |  |  |  | 10.7\% | 10.3\% | 10.4\% |
| 2002 |  |  |  |  |  |  | -4.1\% | -4.3\% | -4.5\% | -4.8\% |
| 2003 |  |  |  |  |  | -0.1\% | -0.1\% | -0.4\% | -0.2\% | 0.6\% |
| 2004 |  |  |  |  | -19.7\% | -20.3\% | -20.1\% | -19.7\% | -18.7\% | -18.1\% |
| 2005 |  |  |  | -12.5\% | -11.9\% | -11.9\% | -11.5\% | -10.6\% | -10.1\% | -9.8\% |
| 2006 |  |  | 7.0\% | 6.5\% | 5.0\% | 6.4\% | 7.6\% | 8.3\% | 7.7\% | 7.0\% |
| 2007 |  | 6.0\% | 7.5\% | 9.1\% | 10.7\% | 11.4\% | 11.2\% | 10.9\% | 10.8\% | 10.9\% |
| 2008 | 3.3\% | 8.8\% | 7.9\% | 9.6\% | 11.4\% | 11.9\% | 11.5\% | 10.6\% | 10.3\% | 9.3\% |
| 2009 | 2.0\% | -0.7\% | 1.6\% | 3.1\% | 3.5\% | 3.6\% | 3.7\% | 3.9\% | 3.8\% |  |
| 2010 | -2.6\% | -0.7\% | -0.5\% | 0.3\% | 0.4\% | -0.2\% | -0.6\% | -0.9\% |  |  |
| 2011 | 7.2\% | 1.1\% | 2.2\% | -0.1\% | -1.2\% | -1.4\% | -1.8\% |  |  |  |
| 2012 | -0.7\% | 2.4\% | 0.3\% | 0.2\% | -0.5\% | -0.9\% |  |  |  |  |
| 2013 | 0.0\% | -0.2\% | -0.2\% | 0.8\% | 0.6\% |  |  |  |  |  |
| 2014 | -2.3\% | 0.8\% | 3.3\% | 4.2\% |  |  |  |  |  |  |
| 2015 | 3.6\% | 4.4\% | 4.9\% |  |  |  |  |  |  |  |
| 2016 | 2.4\% | 4.2\% |  |  |  |  |  |  |  |  |
| 2017 | 0.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Yr | $1.1 \%$ | $1.9 \%$ | $2.7 \%$ | $2.8 \%$ | $1.7 \%$ | $0.8 \%$ | $-0.1 \%$ | $-0.5 \%$ | $-0.8 \%$ |
| $\mathrm{R}^{2}$ | 0.795 | 0.824 | 0.826 | 0.743 | 0.225 | 0.049 | 0.001 | 0.016 | 0.049 |
|  |  | 0.055 |  |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

* Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

## Average Paid Medical Loss Per Indemnity Claim*

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  |  |  | 19,078 |
| 2001 |  |  |  |  |  |  |  |  | 21,471 | 22,376 |
| 2002 |  |  |  |  |  |  |  | 20,963 | 21,979 | 22,808 |
| 2003 |  |  |  |  |  |  | 19,244 | 20,422 | 21,503 | 22,453 |
| 2004 |  |  |  |  |  | 15,843 | 17,331 | 18,607 | 19,777 | 20,830 |
| 2005 |  |  |  |  | 14,264 | 16,184 | 17,816 | 19,111 | 20,494 | 21,651 |
| 2006 |  |  |  | 12,935 | 15,719 | 17,891 | 19,792 | 21,365 | 22,713 | 23,704 |
| 2007 |  |  | 10,477 | 14,554 | 17,707 | 20,206 | 22,381 | 24,312 | 25,664 | 26,701 |
| 2008 |  | 6,115 | 11,546 | 16,022 | 19,726 | 22,716 | 25,060 | 26,820 | 28,149 | 29,098 |
| 2009 | 905 | 6,204 | 11,908 | 16,823 | 20,923 | 24,209 | 26,599 | 28,311 | 29,529 |  |
| 2010* | 923 | 6,134 | 11,835 | 17,048 | 21,318 | 24,256 | 26,429 | 28,069 |  |  |
| 2011* | 923 | 5,539 | 11,315 | 16,203 | 19,935 | 22,670 | 24,636 |  |  |  |
| 2012* | 773 | 5,542 | 10,973 | 15,529 | 18,910 | 21,322 |  |  |  |  |
| 2013 | 821 | 5,380 | 10,482 | 14,765 | 17,885 |  |  |  |  |  |
| 2014 | 953 | 5,242 | 10,271 | 14,469 |  |  |  |  |  |  |
| 2015 | 1,015 | 5,249 | 10,409 |  |  |  |  |  |  |  |
| 2016 | 956 | 5,596 |  |  |  |  |  |  |  |  |
| 2017 | 1,211 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2001 |  |  |  |  |  |  |  |  |  | 17.3\% |
| 2002 |  |  |  |  |  |  |  |  | 2.4\% | 1.9\% |
| 2003 |  |  |  |  |  |  |  | -2.6\% | -2.2\% | -1.6\% |
| 2004 |  |  |  |  |  |  | -9.9\% | -8.9\% | -8.0\% | -7.2\% |
| 2005 |  |  |  |  |  | 2.2\% | 2.8\% | 2.7\% | 3.6\% | 3.9\% |
| 2006 |  |  |  |  | 10.2\% | 10.5\% | 11.1\% | 11.8\% | 10.8\% | 9.5\% |
| 2007 |  |  |  | 12.5\% | 12.6\% | 12.9\% | 13.1\% | 13.8\% | 13.0\% | 12.6\% |
| 2008 |  |  | 10.2\% | 10.1\% | 11.4\% | 12.4\% | 12.0\% | 10.3\% | 9.7\% | 9.0\% |
| 2009 |  | 1.5\% | 3.1\% | 5.0\% | 6.1\% | 6.6\% | 6.1\% | 5.6\% | 4.9\% |  |
| 2010* | 2.0\% | -1.1\% | -0.6\% | 1.3\% | 1.9\% | 0.2\% | -0.6\% | -0.9\% |  |  |
| 2011* | 0.0\% | -9.7\% | -4.4\% | -5.0\% | -6.5\% | -6.5\% | -6.8\% |  |  |  |
| 2012* | -16.3\% | 0.0\% | -3.0\% | -4.2\% | -5.1\% | -5.9\% |  |  |  |  |
| 2013 | 6.2\% | -2.9\% | -4.5\% | -4.9\% | -5.4\% |  |  |  |  |  |
| 2014 | 16.0\% | -2.6\% | -2.0\% | -2.0\% |  |  |  |  |  |  |
| 2015 | 6.6\% | 0.1\% | 1.3\% |  |  |  |  |  |  |  |
| 2016 | -5.8\% | 6.6\% |  |  |  |  |  |  |  |  |
| 2017 | 26.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend** |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Yr | $2.8 \%$ | $-2.0 \%$ | $-1.2 \%$ | $0.7 \%$ | $3.0 \%$ | $5.1 \%$ | $5.6 \%$ | $5.3 \%$ | $4.3 \%$ |
| $\mathrm{R}^{2}$ | 0.359 | 0.666 | 0.306 | 0.042 | 0.369 | 0.681 | 0.785 | 0.749 | 0.649 |
|  |  |  |  | 0.663 |  |  |  |  |  |

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 $69 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

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

| AccidentYear | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 5,055 |
| 1999 |  |  |  |  |  |  |  |  | 5,705 | 5,933 |
| 2000 |  |  |  |  |  |  |  | 6,201 | 6,515 | 6,761 |
| 2001 |  |  |  |  |  |  | 7,019 | 7,416 | 7,746 | 8,045 |
| 2002 |  |  |  |  |  | 7,008 | 7,518 | 7,911 | 8,264 | 8,553 |
| 2003 |  |  |  |  | 6,108 | 6,746 | 7,216 | 7,619 | 7,992 | 8,316 |
| 2004 |  |  |  | 4,132 | 4,868 | 5,432 | 5,899 | 6,295 | 6,656 | 6,994 |
| 2005 |  |  | 2,965 | 3,859 | 4,592 | 5,150 | 5,622 | 5,998 | 6,410 | 6,753 |
| 2006 |  | 1,825 | 3,187 | 4,224 | 5,035 | 5,653 | 6,212 | 6,674 | 7,069 | 7,355 |
| 2007 | 353 | 2,025 | 3,609 | 4,822 | 5,759 | 6,506 | 7,158 | 7,731 | 8,131 | 8,442 |
| 2008 | 395 | 2,329 | 4,072 | 5,477 | 6,641 | 7,575 | 8,301 | 8,850 | 9,269 | 9,577 |
| 2009 | 464 | 2,483 | 4,477 | 6,148 | 7,536 | 8,639 | 9,442 | 10,016 | 10,427 |  |
| 2010 | 477 | 2,549 | 4,672 | 6,560 | 8,080 | 9,131 | 9,912 | 10,503 |  |  |
| 2011 | 510 | 2,603 | 4,999 | 6,925 | 8,390 | 9,456 | 10,213 |  |  |  |
| 2012 | 524 | 2,722 | 5,048 | 6,904 | 8,258 | 9,212 |  |  |  |  |
| 2013 | 536 | 2,708 | 4,964 | 6,752 | 8,019 |  |  |  |  |  |
| 2014 | 575 | 2,666 | 4,869 | 6,592 |  |  |  |  |  |  |
| 2015 | 604 | 2,665 | 4,899 |  |  |  |  |  |  |  |
| 2016 | 580 | 2,787 |  |  |  |  |  |  |  |  |
| 2017 | 684 |  |  |  |  |  |  |  |  |  |


| AccidentYear | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | 99 | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 17.4\% |
| 2000 |  |  |  |  |  |  |  |  | 14.2\% | 14.0\% |
| 2001 |  |  |  |  |  |  |  | 19.6\% | 18.9\% | 19.0\% |
| 2002 |  |  |  |  |  |  | 7.1\% | 6.7\% | 6.7\% | 6.3\% |
| 2003 |  |  |  |  |  | -3.7\% | -4.0\% | -3.7\% | -3.3\% | -2.8\% |
| 2004 |  |  |  |  | -20.3\% | -19.5\% | -18.3\% | -17.4\% | -16.7\% | -15.9\% |
| 2005 |  |  |  | -6.6\% | -5.7\% | -5.2\% | -4.7\% | -4.7\% | -3.7\% | -3.4\% |
| 2006 |  |  | 7.5\% | 9.5\% | 9.6\% | 9.8\% | 10.5\% | 11.3\% | 10.3\% | 8.9\% |
| 2007 |  | 11.0\% | 13.2\% | 14.2\% | 14.4\% | 15.1\% | 15.2\% | 15.8\% | 15.0\% | 14.8\% |
| 2008 | 11.8\% | 15.0\% | 12.8\% | 13.6\% | 15.3\% | 16.4\% | 16.0\% | 14.5\% | 14.0\% | 13.4\% |
| 2009 | 17.5\% | 6.6\% | 9.9\% | 12.3\% | 13.5\% | 14.0\% | 13.8\% | 13.2\% | 12.5\% |  |
| 2010 | 2.8\% | 2.7\% | 4.3\% | 6.7\% | 7.2\% | 5.7\% | 5.0\% | 4.9\% |  |  |
| 2011 | 7.0\% | 2.1\% | 7.0\% | 5.6\% | 3.8\% | 3.6\% | 3.0\% |  |  |  |
| 2012 | 2.7\% | 4.6\% | 1.0\% | -0.3\% | -1.6\% | -2.6\% |  |  |  |  |
| 2013 | 2.3\% | -0.5\% | -1.7\% | -2.2\% | -2.9\% |  |  |  |  |  |
| 2014 | 7.4\% | -1.5\% | -1.9\% | -2.4\% |  |  |  |  |  |  |
| 2015 | 5.0\% | -0.1\% | 0.6\% |  |  |  |  |  |  |  |
| 2016 | -4.0\% | 4.6\% |  |  |  |  |  |  |  |  |
| 2017 | 17.9\% |  |  |  |  |  |  |  |  |  |


| Annual Trend** |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Yr | $5.7 \%$ | $3.6 \%$ | $5.3 \%$ | $6.5 \%$ | $6.1 \%$ | $5.2 \%$ | $4.4 \%$ | $3.9 \%$ | $3.7 \%$ |
| $\mathrm{R}^{2}$ | 0.920 | 0.743 | 0.797 | 0.850 | 0.732 | 0.580 | 0.480 | 0.463 | 0.477 |
|  |  |  | 0.499 |  |  |  |  |  |  |

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 $68 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

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


## Average Paid Indemnity Loss per Closed Indemnity Claim*

| AccidentYear | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 75 | 87 | $\underline{99}$ | 111 |
| 1998 |  |  |  |  |  |  |  |  |  | 16,583 |
| 1999 |  |  |  |  |  |  |  |  | 17,604 | 18,306 |
| 2000 |  |  |  |  |  |  |  | 17,305 | 18,114 | 18,843 |
| 2001 |  |  |  |  |  |  | 17,257 | 18,549 | 19,552 | 20,326 |
| 2002 |  |  |  |  |  | 15,267 | 16,807 | 18,105 | 19,061 | 19,569 |
| 2003 |  |  |  |  | 13,171 | 15,460 | 17,050 | 18,126 | 18,758 | 19,481 |
| 2004 |  |  |  | 7,673 | 10,468 | 12,299 | 13,582 | 14,312 | 15,072 | 15,892 |
| 2005 |  |  | 3,466 | 6,456 | 9,058 | 10,653 | 11,748 | 12,622 | 13,530 | 14,544 |
| 2006 |  | 1,767 | 3,944 | 6,942 | 9,490 | 11,163 | 12,451 | 13,706 | 14,846 | 15,688 |
| 2007 | 891 | 1,659 | 4,368 | 7,649 | 10,251 | 12,200 | 13,937 | 15,445 | 16,568 | 17,544 |
| 2008 | 546 | 1,954 | 4,733 | 8,361 | 11,357 | 13,806 | 15,954 | 17,376 | 18,630 | 19,523 |
| 2009 | 579 | 1,976 | 4,921 | 8,700 | 12,009 | 14,830 | 16,821 | 18,503 | 19,679 |  |
| 2010 | 587 | 1,959 | 5,044 | 8,989 | 12,563 | 15,210 | 17,247 | 18,779 |  |  |
| 2011 | 567 | 2,175 | 5,401 | 9,476 | 12,907 | 15,547 | 17,322 |  |  |  |
| 2012 | 604 | 2,271 | 5,926 | 10,054 | 13,298 | 15,605 |  |  |  |  |
| 2013 | 593 | 2,640 | 6,340 | 10,498 | 13,654 |  |  |  |  |  |
| 2014 | 659 | 2,718 | 6,723 | 11,149 |  |  |  |  |  |  |
| 2015 | 730 | 3,012 | 7,384 |  |  |  |  |  |  |  |
| 2016 | 709 | 3,259 |  |  |  |  |  |  |  |  |
| 2017 | 720 |  |  |  |  |  |  |  |  |  |


| AccidentYear | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | 111 |
| 1999 |  |  |  |  |  |  |  |  |  | 10.4\% |
| 2000 |  |  |  |  |  |  |  |  | 2.9\% | 2.9\% |
| 2001 |  |  |  |  |  |  |  | 7.2\% | 7.9\% | 7.9\% |
| 2002 |  |  |  |  |  |  | -2.6\% | -2.4\% | -2.5\% | -3.7\% |
| 2003 |  |  |  |  |  | 1.3\% | 1.4\% | 0.1\% | -1.6\% | -0.5\% |
| 2004 |  |  |  |  | -20.5\% | -20.4\% | -20.3\% | -21.0\% | -19.7\% | -18.4\% |
| 2005 |  |  |  | -15.9\% | -13.5\% | -13.4\% | -13.5\% | -11.8\% | -10.2\% | -8.5\% |
| 2006 |  |  | 13.8\% | 7.5\% | 4.8\% | 4.8\% | 6.0\% | 8.6\% | 9.7\% | 7.9\% |
| 2007 |  | -6.1\% | 10.8\% | 10.2\% | 8.0\% | 9.3\% | 11.9\% | 12.7\% | 11.6\% | 11.8\% |
| 2008 | -38.8\% | 17.7\% | 8.4\% | 9.3\% | 10.8\% | 13.2\% | 14.5\% | 12.5\% | 12.4\% | 11.3\% |
| 2009 | 6.2\% | 1.1\% | 4.0\% | 4.1\% | 5.7\% | 7.4\% | 5.4\% | 6.5\% | 5.6\% |  |
| 2010 | 1.3\% | -0.8\% | 2.5\% | 3.3\% | 4.6\% | 2.6\% | 2.5\% | 1.5\% |  |  |
| 2011 | -3.3\% | 11.0\% | 7.1\% | 5.4\% | 2.7\% | 2.2\% | 0.4\% |  |  |  |
| 2012 | 6.5\% | 4.4\% | 9.7\% | 6.1\% | 3.0\% | 0.4\% |  |  |  |  |
| 2013 | -1.8\% | 16.2\% | 7.0\% | 4.4\% | 2.7\% |  |  |  |  |  |
| 2014 | 11.2\% | 3.0\% | 6.0\% | 6.2\% |  |  |  |  |  |  |
| 2015 | 10.8\% | 10.8\% | 9.8\% |  |  |  |  |  |  |  |
| 2016 | -3.0\% | 8.2\% |  |  |  |  |  |  |  |  |
| 2017 | 1.6\% |  |  |  |  |  |  |  |  |  |


| Annual Trend** |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Yr | $0.9 \%$ | $6.7 \%$ | $7.1 \%$ | $5.1 \%$ | $2.7 \%$ | $1.5 \%$ | $0.5 \%$ | $-0.1 \%$ | $-0.6 \%$ |
| R $^{2}$ | 0.038 | 0.949 | 0.983 | 0.896 | 0.373 | 0.119 | 0.014 | 0.000 | 0.024 |
|  |  | 0.046 |  |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

* Paid indemnity losses used in the severity calculations above represent paid indemnity losses on closed claims only.
** Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience


## Average Medical Paid per Closed Indemnity Claim*

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2000 |  |  |  |  |  |  |  |  |  | 15,358 |
| 2001 |  |  |  |  |  |  |  |  | 17,132 | 18,050 |
| 2002 |  |  |  |  |  |  |  | 16,771 | 17,921 | 18,672 |
| 2003 |  |  |  |  |  |  | 15,211 | 16,298 | 17,203 | 18,161 |
| 2004 |  |  |  |  |  | 11,546 | 12,961 | 14,041 | 15,067 | 16,267 |
| 2005 |  |  |  |  | 9,699 | 11,493 | 13,023 | 14,102 | 15,519 | 17,209 |
| 2006 |  |  |  | 7,931 | 10,493 | 12,559 | 14,369 | 16,017 | 17,783 | 19,054 |
| 2007 |  |  | 5,635 | 8,827 | 11,722 | 13,941 | 16,194 | 18,590 | 20,357 | 22,088 |
| 2008 |  | 3,514 | 6,144 | 9,858 | 13,101 | 16,095 | 19,153 | 21,298 | 23,276 | 24,764 |
| 2009 | 1,939 | 3,311 | 6,333 | 10,302 | 14,202 | 18,019 | 20,826 | 23,260 | 25,065 |  |
| 2010* | 2,004 | 3,264 | 6,594 | 10,772 | 15,163 | 18,745 | 21,612 | 23,998 |  |  |
| 2011* | 1,042 | 2,639 | 6,140 | 10,651 | 14,689 | 18,122 | 20,819 |  |  |  |
| 2012* | 731 | 2,822 | 6,573 | 11,011 | 14,672 | 17,606 |  |  |  |  |
| 2013 | 672 | 2,985 | 6,712 | 10,976 | 14,340 |  |  |  |  |  |
| 2014 | 696 | 2,998 | 6,886 | 11,011 |  |  |  |  |  |  |
| 2015 | 862 | 3,250 | 7,311 |  |  |  |  |  |  |  |
| 2016 | 1,374 | 3,504 |  |  |  |  |  |  |  |  |
| 2017 | 991 |  |  |  |  |  |  |  |  |  |


| Accident |  |  |  |  | Annual | nge |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 87 | $\underline{99}$ | 111 |
| 2001 |  |  |  |  |  |  |  |  |  | 17.5\% |
| 2002 |  |  |  |  |  |  |  |  | 4.6\% | 3.4\% |
| 2003 |  |  |  |  |  |  |  | -2.8\% | -4.0\% | -2.7\% |
| 2004 |  |  |  |  |  |  | -14.8\% | -13.8\% | -12.4\% | -10.4\% |
| 2005 |  |  |  |  |  | -0.5\% | 0.5\% | 0.4\% | 3.0\% | 5.8\% |
| 2006 |  |  |  |  | 8.2\% | 9.3\% | 10.3\% | 13.6\% | 14.6\% | 10.7\% |
| 2007 |  |  |  | 11.3\% | 11.7\% | 11.0\% | 12.7\% | 16.1\% | 14.5\% | 15.9\% |
| 2008 |  |  | 9.0\% | 11.7\% | 11.8\% | 15.5\% | 18.3\% | 14.6\% | 14.3\% | 12.1\% |
| 2009 |  | -5.8\% | 3.1\% | 4.5\% | 8.4\% | 12.0\% | 8.7\% | 9.2\% | 7.7\% |  |
| 2010* | 3.4\% | -1.4\% | 4.1\% | 4.6\% | 6.8\% | 4.0\% | 3.8\% | 3.2\% |  |  |
| 2011* | -48.0\% | -19.1\% | -6.9\% | -1.1\% | -3.1\% | -3.3\% | -3.7\% |  |  |  |
| 2012* | -29.9\% | 6.9\% | 7.0\% | 3.4\% | -0.1\% | -2.8\% |  |  |  |  |
| 2013 | -8.0\% | 5.8\% | 2.1\% | -0.3\% | -2.3\% |  |  |  |  |  |
| 2014 | 3.6\% | 0.5\% | 2.6\% | 0.3\% |  |  |  |  |  |  |
| 2015 | 23.8\% | 8.4\% | 6.2\% |  |  |  |  |  |  |  |
| 2016 | 59.4\% | 7.8\% |  |  |  |  |  |  |  |  |
| 2017 | -27.9\% |  |  |  |  |  |  |  |  |  |


| Annual Trend ${ }^{* *}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All- Yr | $-6.8 \%$ | $-0.2 \%$ | $2.5 \%$ | $3.8 \%$ | $5.4 \%$ | $7.1 \%$ | $6.9 \%$ | $6.2 \%$ | $4.8 \%$ |
| $\mathrm{R}^{2}$ | 0.213 | 0.003 | 0.816 | 0.773 | 0.785 | 0.865 | 0.789 | 0.663 | 0.611 |
|  |  |  | 0.479 |  |  |  |  |  |  |

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 $69 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

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


## Ratio of Incremental Paid Indemnity to Indemnity Claims Open During Period

| Accident | Development |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 1999 |  |  |  |  |  |  |  |  |  | 6,446 |
| 2000 |  |  |  |  |  |  |  |  | 6,932 | 5,906 |
| 2001 |  |  |  |  |  |  |  | 6,515 | 5,886 | 5,665 |
| 2002 |  |  |  |  |  |  | 6,509 | 6,120 | 5,352 | 4,731 |
| 2003 |  |  |  |  |  | 7,027 | 6,432 | 5,603 | 5,694 | 6,259 |
| 2004 |  |  |  |  | 6,215 | 5,588 | 5,639 | 5,264 | 6,325 | 6,649 |
| 2005 |  |  |  | 6,243 | 6,156 | 5,419 | 5,558 | 5,973 | 6,944 | 6,862 |
| 2006 |  |  | 6,433 | 6,815 | 6,321 | 6,466 | 6,980 | 7,227 | 6,800 | 6,680 |
| 2007 |  | 3,805 | 7,024 | 7,599 | 7,282 | 7,316 | 7,257 | 7,351 | 7,447 | 7,587 |
| 2008 | 910 | 4,143 | 7,543 | 8,401 | 8,396 | 8,036 | 7,603 | 7,421 | 7,739 | 6,571 |
| 2009 | 928 | 4,124 | 7,699 | 8,677 | 8,435 | 8,099 | 8,003 | 7,856 | 7,879 |  |
| 2010 | 904 | 4,102 | 7,734 | 8,939 | 8,690 | 8,277 | 8,252 | 7,953 |  |  |
| 2011 | 969 | 4,152 | 8,023 | 8,648 | 8,557 | 8,463 | 8,228 |  |  |  |
| 2012 | 961 | 4,259 | 7,955 | 8,834 | 8,610 | 8,570 |  |  |  |  |
| 2013 | 961 | 4,261 | 7,834 | 9,285 | 8,933 |  |  |  |  |  |
| 2014 | 939 | 4,285 | 8,298 | 10,070 |  |  |  |  |  |  |
| 2015 | 972 | 4,480 | 8,813 |  |  |  |  |  |  |  |
| 2016 | 996 | 4,668 |  |  |  |  |  |  |  |  |
| 2017 | 1,002 |  |  |  |  |  |  |  |  |  |


| Accident Year | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2000 |  |  |  |  |  |  |  |  |  | -8.4\% |
| 2001 |  |  |  |  |  |  |  |  | -15.1\% | -4.1\% |
| 2002 |  |  |  |  |  |  |  | -6.1\% | -9.1\% | -16.5\% |
| 2003 |  |  |  |  |  |  | -1.2\% | -8.4\% | 6.4\% | 32.3\% |
| 2004 |  |  |  |  |  | -20.5\% | -12.3\% | -6.1\% | 11.1\% | 6.2\% |
| 2005 |  |  |  |  | -1.0\% | -3.0\% | -1.4\% | 13.5\% | 9.8\% | 3.2\% |
| 2006 |  |  |  | 9.2\% | 2.7\% | 19.3\% | 25.6\% | 21.0\% | -2.1\% | -2.7\% |
| 2007 |  |  | 9.2\% | 11.5\% | 15.2\% | 13.1\% | 4.0\% | 1.7\% | 9.5\% | 13.6\% |
| 2008 |  | 8.9\% | 7.4\% | 10.6\% | 15.3\% | 9.8\% | 4.8\% | 1.0\% | 3.9\% | -13.4\% |
| 2009 | 2.0\% | -0.5\% | 2.1\% | 3.3\% | 0.5\% | 0.8\% | 5.3\% | 5.9\% | 1.8\% |  |
| 2010 | -2.6\% | -0.5\% | 0.5\% | 3.0\% | 3.0\% | 2.2\% | 3.1\% | 1.2\% |  |  |
| 2011 | 7.2\% | 1.2\% | 3.7\% | -3.3\% | -1.5\% | 2.2\% | -0.3\% |  |  |  |
| 2012 | -0.7\% | 2.6\% | -0.8\% | 2.1\% | 0.6\% | 1.3\% |  |  |  |  |
| 2013 | 0.0\% | 0.1\% | -1.5\% | 5.1\% | 3.8\% |  |  |  |  |  |
| 2014 | -2.3\% | 0.6\% | 5.9\% | 8.5\% |  |  |  |  |  |  |
| 2015 | 3.6\% | 4.5\% | 6.2\% |  |  |  |  |  |  |  |
| 2016 | 2.4\% | 4.2\% |  |  |  |  |  |  |  |  |
| 2017 | 0.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend* |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Yr | $1.0 \%$ | $1.7 \%$ | $2.7 \%$ | $4.5 \%$ | $4.8 \%$ | $4.7 \%$ | $4.1 \%$ | $3.8 \%$ | $3.3 \%$ |
| $\mathrm{R}^{2}$ | 0.727 | 0.835 | 0.833 | 0.855 | 0.831 | 0.672 | 0.685 | 0.596 | 0.550 |
|  |  | 0.316 |  |  |  |  |  |  |  |

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 $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).
*Trend is based on an exponential distribution.
Source: WCIRB quarterly calls for experience

Ratio of Incremental Paid Medical to Indemnity Claims Open During Period*

| Accident Year | Development |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2001 |  |  |  |  |  |  |  |  |  | 9,574 |
| 2002 |  |  |  |  |  |  |  |  | 8,736 | 9,086 |
| 2003 |  |  |  |  |  |  |  | 7,942 | 9,383 | 10,117 |
| 2004 |  |  |  |  |  |  | 7,958 | 8,715 | 9,946 | 11,225 |
| 2005 |  |  |  |  |  | 8,136 | 9,064 | 9,241 | 12,412 | 12,957 |
| 2006 |  |  |  |  | 8,627 | 9,163 | 10,689 | 11,292 | 12,307 | 12,078 |
| 2007 |  |  |  | 8,794 | 9,417 | 10,174 | 11,615 | 13,211 | 12,703 | 12,599 |
| 2008 |  |  | 8,572 | 9,431 | 10,632 | 11,551 | 12,178 | 12,599 | 12,825 | 12,339 |
| 2009 |  | 6,125 | 8,914 | 10,053 | 11,228 | 12,277 | 12,441 | 12,082 | 11,901 |  |
| 2010* | 923 | 6,056 | 8,977 | 10,734 | 11,962 | 11,864 | 12,261 | 12,700 |  |  |
| 2011* | 923 | 5,469 | 9,100 | 10,242 | 11,015 | 11,663 | 12,000 |  |  |  |
| 2012* | 773 | 5,492 | 8,651 | 9,757 | 10,438 | 10,944 |  |  |  |  |
| 2013 | 821 | 5,335 | 8,030 | 9,384 | 10,019 |  |  |  |  |  |
| 2014 | 953 | 5,164 | 7,978 | 9,388 |  |  |  |  |  |  |
| 2015 | 1,015 | 5,171 | 8,241 |  |  |  |  |  |  |  |
| 2016 | 956 | 5,524 |  |  |  |  |  |  |  |  |
| 2017 | 1,211 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0-3 | 3-15 | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 | 75-87 | 87-99 | 99-111 |
| 2002 |  |  |  |  |  |  |  |  |  | -5.1\% |
| 2003 |  |  |  |  |  |  |  |  | 7.4\% | 11.3\% |
| 2004 |  |  |  |  |  |  |  | 9.7\% | 6.0\% | 11.0\% |
| 2005 |  |  |  |  |  |  | 13.9\% | 6.0\% | 24.8\% | 15.4\% |
| 2006 |  |  |  |  |  | 12.6\% | 17.9\% | 22.2\% | -0.8\% | -6.8\% |
| 2007 |  |  |  |  | 9.2\% | 11.0\% | 8.7\% | 17.0\% | 3.2\% | 4.3\% |
| 2008 |  |  |  | 7.2\% | 12.9\% | 13.5\% | 4.8\% | -4.6\% | 1.0\% | -2.1\% |
| 2009 |  |  | 4.0\% | 6.6\% | 5.6\% | 6.3\% | 2.2\% | -4.1\% | -7.2\% |  |
| 2010* |  | -1.1\% | 0.7\% | 6.8\% | 6.5\% | -3.4\% | -1.5\% | 5.1\% |  |  |
| 2011* | 0.0\% | -9.7\% | 1.4\% | -4.6\% | -7.9\% | -1.7\% | -2.1\% |  |  |  |
| 2012* | -16.3\% | 0.4\% | -4.9\% | -4.7\% | -5.2\% | -6.2\% |  |  |  |  |
| 2013 | 6.2\% | -2.9\% | -7.2\% | -3.8\% | -4.0\% |  |  |  |  |  |
| 2014 | 16.0\% | -3.2\% | -0.7\% | 0.0\% |  |  |  |  |  |  |
| 2015 | 6.6\% | 0.1\% | 3.3\% |  |  |  |  |  |  |  |
| 2016 | -5.8\% | 6.8\% |  |  |  |  |  |  |  |  |
| 2017 | 26.7\% |  |  |  |  |  |  |  |  |  |


| Annual Trend** |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All-Yr | $3.7 \%$ | $-2.0 \%$ | $-1.4 \%$ | $0.4 \%$ | $2.1 \%$ | $4.6 \%$ | $6.0 \%$ | $7.4 \%$ | $5.4 \%$ |
| $\mathrm{R}^{2}$ | 0.430 | 0.595 | 0.483 | 0.019 | 0.237 | 0.595 | 0.747 | 0.795 | 0.718 |
|  |  |  | 0.772 |  |  |  |  |  |  |

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 $69 \%$ to $100 \%$ of the total California workers' compensation insured market measured using 2016 earned premium levels).

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


| Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | 02-to-03 | 03-to-04 | 04-to-05 | 05-to-06 | 06-to-07 | 07-to-08 | 08-to-09 | 09-to-10 | 10-to-11 | 11-to-12 | 12-to-13 | 13-to-14 | 14-to-15 | 15-to-16 |
| 3/0 | -13.4\% | 50.7\% | 8.8\% | -4.6\% | 12.4\% | 20.5\% | 4.0\% | 6.1\% | -6.6\% | -0.8\% | 5.6\% | 10.4\% | -6.1\% | 21.7\% |
| 6/3 | -4.0\% | 11.6\% | 17.9\% | -6.0\% | 23.2\% | 5.5\% | 1.4\% | 2.2\% | -4.4\% | 0.4\% | -4.2\% | 10.0\% | -0.5\% |  |
| 9/6 | -8.8\% | -1.6\% | 19.1\% | 3.1\% | 17.3\% | 7.0\% | -0.7\% | -0.9\% | 1.3\% | 3.9\% | -5.6\% | -0.1\% | 3.3\% |  |
| 12/9 | -14.0\% | 5.3\% | 11.8\% | 11.0\% | 11.7\% | 2.1\% | 1.9\% | -2.2\% | 5.8\% | -6.5\% | -1.5\% | -1.3\% | 7.4\% |  |
| 12/0 | -10.1\% | 8.4\% | 13.0\% | 5.5\% | 18.2\% | 3.2\% | -0.9\% | -1.5\% | 1.0\% | -1.2\% | -2.6\% | 1.4\% | 3.7\% |  |
| 15/12 | 0.1\% | -17.4\% | 1.2\% | 12.6\% | 13.8\% | 3.9\% | 3.0\% | 0.9\% | 6.2\% | -1.1\% | -7.4\% | 1.9\% | 0.1\% | 10.8\% |
| 18/15 | -5.5\% | -20.6\% | 15.9\% | -10.1\% | 22.6\% | 3.9\% | 5.0\% | 2.0\% | 8.0\% | -1.1\% | -10.9\% | 1.3\% | 4.6\% |  |
| 21/18 | -13.6\% | -21.4\% | 7.4\% | 15.3\% | 14.1\% | 5.8\% | 3.6\% | 3.4\% | 6.2\% | -2.1\% | -3.0\% | -0.4\% | 0.3\% |  |
| 24/21 | -22.1\% | -11.9\% | 9.8\% | 19.4\% | 9.9\% | 5.4\% | 2.6\% | 5.2\% | 10.8\% | -3.5\% | -6.1\% | -1.0\% | 1.5\% |  |
| 24/12 | -7.9\% | -17.8\% | 0.0\% | 19.1\% | 15.7\% | 4.3\% | 3.0\% | 1.7\% | 6.7\% | -2.4\% | -6.7\% | -0.6\% | 0.7\% |  |
| 27/24 | 0.0\% | -24.8\% | -13.1\% | 15.6\% | 28.1\% | 6.3\% | 7.6\% | 1.2\% | 6.9\% | 10.3\% | -5.4\% | -2.7\% | 0.9\% | 4.0\% |
| 30/27 | -0.4\% | -27.0\% | 12.8\% | -3.5\% | 29.8\% | 11.5\% | 3.9\% | 5.5\% | 4.6\% | 5.8\% | -4.0\% | -0.1\% | 0.8\% |  |
| 33/30 | -10.0\% | -23.2\% | 5.7\% | 10.7\% | 29.6\% | 9.3\% | 8.2\% | 5.1\% | 6.5\% | 3.1\% | -0.6\% | -5.7\% | -0.2\% |  |
| 36/33 | -18.9\% | -12.7\% | 7.1\% | 15.3\% | 21.6\% | 8.7\% | 5.2\% | 5.8\% | 17.9\% | -2.9\% | -5.6\% | 0.6\% | -3.5\% |  |
| 36/24 | -5.9\% | -22.3\% | -4.2\% | 16.5\% | 26.4\% | 9.6\% | 5.7\% | 4.3\% | 8.1\% | 3.2\% | -4.8\% | -3.2\% | -1.1\% |  |
| 39/36 | 2.7\% | -18.8\% | -11.9\% | 16.2\% | 18.8\% | 12.1\% | 9.8\% | 7.2\% | 12.6\% | 7.9\% | -2.7\% | 2.9\% | -7.5\% | 1.1\% |
| 42/39 | -1.4\% | -23.0\% | 23.7\% | -9.6\% | 19.8\% | 17.6\% | 10.4\% | 5.7\% | 6.1\% | 13.3\% | -2.2\% | -2.9\% | -7.2\% |  |
| 45/42 | -5.9\% | -17.4\% | 3.2\% | 11.5\% | 18.0\% | 16.2\% | 8.7\% | 12.7\% | 5.3\% | 5.6\% | 7.7\% | -8.7\% | -3.8\% |  |
| 48/45 | -18.8\% | -11.1\% | 10.9\% | 7.8\% | 15.2\% | 13.3\% | 14.2\% | 5.4\% | 11.0\% | 6.4\% | -5.3\% | -2.3\% | 0.2\% |  |
| 48/36 | -3.4\% | -17.2\% | -2.2\% | 14.6\% | 17.6\% | 15.6\% | 11.3\% | 7.2\% | 8.8\% | 7.1\% | -1.4\% | -3.7\% | -6.1\% |  |

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

Source: WCIRB accident year experience calls.

## Estimated Ultimate Indemnity Severities by Injury Type

I. Indemnity Severity

| Accident | Permanent |  |
| :---: | :---: | :---: |
| Year | Partial | Temporary |
| 2001 | 43,985 | 3,963 |
| 2002 | 41,720 | 3,947 |
| 2003 | 40,992 | 4,178 |
| 2004 | 35,066 | 4,107 |
| 2005 | 33,642 | 3,836 |
| 2006 | 36,369 | 3,868 |
| 2007 | 39,122 | 4,151 |
| 2008 | 41,267 | 4,625 |
| 2009 | 41,557 | 5,282 |
| 2010 | 40,578 | 6,163 |
| 2011 | 39,109 | 6,697 |
| 2012 | 38,641 | 7,239 |
| 2013 | 37,583 | 7,802 |
| 2014 | 39,048 | 8,114 |
| 2015* | 40,391 | 8,881 |

Accident

| Year | Annual Change |  |
| :--- | ---: | ---: |
| 2001 | --- | --- |
| 2002 | $-5.1 \%$ | $-0.4 \%$ |
| 2003 | $-1.7 \%$ | $5.8 \%$ |
| 2004 | $-14.5 \%$ | $-1.7 \%$ |
| 2005 | $-4.1 \%$ | $-6.6 \%$ |
| 2006 | $8.1 \%$ | $0.8 \%$ |
| 2007 | $7.6 \%$ | $7.3 \%$ |
| 2008 | $5.5 \%$ | $11.4 \%$ |
| 2009 | $0.7 \%$ | $14.2 \%$ |
| 2010 | $-2.4 \%$ | $16.7 \%$ |
| 2011 | $-3.6 \%$ | $8.7 \%$ |
| 2012 | $-1.2 \%$ | $8.1 \%$ |
| 2013 | $-2.7 \%$ | $7.8 \%$ |
| 2014 | $3.9 \%$ | $4.0 \%$ |
| $2015 *$ | $3.4 \%$ | $9.5 \%$ |

II. Indemnity Severity Adjusted to PY 2017 Benefit Level

| Accident | Permanent |  |
| :---: | :---: | :---: |
| Year | Partial | Temporary |
| 2001 | 45,468 | 5,888 |
| 2002 | 44,611 | 5,895 |
| 2003 | 46,233 | 5,764 |
| 2004 | 49,197 | 5,532 |
| 2005 | 56,375 | 5,076 |
| 2006 | 56,122 | 4,987 |
| 2007 | 57,949 | 5,237 |
| 2008 | 55,236 | 5,720 |
| 2009 | 55,337 | 6,486 |
| 2010 | 53,308 | 7,456 |
| 2011 | 50,569 | 7,974 |
| 2012 | 48,805 | 8,415 |
| 2013 | 46,078 | 9,025 |
| 2014 | 43,662 | 9,218 |
| 2015* | 44,040 | 9,811 |

Accident

| Year | Annual Change |  |
| :--- | ---: | ---: |
| 2001 | --- | --- |
| 2002 | $-1.9 \%$ | $0.1 \%$ |
| 2003 | $3.6 \%$ | $-2.2 \%$ |
| 2004 | $6.4 \%$ | $-4.0 \%$ |
| 2005 | $14.6 \%$ | $-8.3 \%$ |
| 2006 | $-0.4 \%$ | $-1.7 \%$ |
| 2007 | $3.3 \%$ | $5.0 \%$ |
| 2008 | $-4.7 \%$ | $9.2 \%$ |
| 2009 | $0.2 \%$ | $13.4 \%$ |
| 2010 | $-3.7 \%$ | $15.0 \%$ |
| 2011 | $-5.1 \%$ | $6.9 \%$ |
| 2012 | $-3.5 \%$ | $5.5 \%$ |
| 2013 | $-5.6 \%$ | $7.3 \%$ |
| 2014 | $-5.2 \%$ | $2.1 \%$ |
| $2015 *$ | $0.9 \%$ | $6.4 \%$ |

* Accident year 2015 experience is partial in that it only reflects experience from policy year 2014.

Source: WCIRB unit statistical data

## Estimated Ultimate Medical Severities by Injury Type *

I. Medical Severity

| Accident | Permanent |  | Medical | Accident | Permanent |  | Medical |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Partial | Temporary | Only | Year | Partial | Temporary | Only |
| 2001 | 47,837 | 4,859 | 763 | 2001 | 29,857 | 3,032 | 476 |
| 2002 | 48,075 | 5,367 | 854 | 2002 | 31,183 | 3,481 | 554 |
| 2003 | 46,702 | 5,621 | 922 | 2003 | 31,848 | 3,834 | 628 |
| 2004 | 46,993 | 5,348 | 846 | 2004 | 42,478 | 4,835 | 765 |
| 2005 | 51,468 | 5,339 | 861 | 2005 | 46,636 | 4,837 | 780 |
| 2006 | 56,348 | 5,569 | 878 | 2006 | 50,959 | 5,037 | 794 |
| 2007 | 62,560 | 6,318 | 961 | 2007 | 55,708 | 5,626 | 856 |
| 2008 | 65,251 | 6,881 | 1,044 | 2008 | 58,090 | 6,125 | 930 |
| 2009 | 66,241 | 7,886 | 1,150 | 2009 | 59,035 | 7,028 | 1,025 |
| 2010 | 65,629 | 8,956 | 1,179 | 2010 | 58,701 | 8,010 | 1,055 |
| 2011 | 60,484 | 8,948 | 1,129 | 2011 | 55,543 | 8,217 | 1,037 |
| 2012 | 57,394 | 9,076 | 1,128 | 2012 | 54,869 | 8,677 | 1,078 |
| 2013 | 54,833 | 9,176 | 1,135 | 2013 | 54,537 | 9,126 | 1,129 |
| 2014 | 52,884 | 9,103 | 1,212 | 2014 | 53,789 | 9,259 | 1,233 |
| 2015** | 53,322 | 9,691 | 1,301 | 2015** | 54,218 | 9,854 | 1,323 |
| Accident Year | Annual Change |  |  | Accident Year | Annual Change |  |  |
| 2001 | --- | --- | --- |  | --- | --- | --- |
| 2002 | 0.5\% | 10.5\% | 11.9\% | 2002 | 4.4\% | 14.8\% | 16.3\% |
| 2003 | -2.9\% | 4.7\% | 7.9\% | 2003 | 2.1\% | 10.1\% | 13.4\% |
| 2004 | 0.6\% | -4.9\% | -8.2\% | 2004 | 33.4\% | 26.1\% | 21.7\% |
| 2005 | 9.5\% | -0.2\% | 1.7\% | 2005 | 9.8\% | 0.1\% | 2.0\% |
| 2006 | 9.5\% | 4.3\% | 2.0\% | 2006 | 9.3\% | 4.1\% | 1.8\% |
| 2007 | 11.0\% | 13.4\% | 9.4\% | 2007 | 9.3\% | 11.7\% | 7.8\% |
| 2008 | 4.3\% | 8.9\% | 8.6\% | 2008 | 4.3\% | 8.9\% | 8.6\% |
| 2009 | 1.5\% | 14.6\% | 10.1\% | 2009 | 1.6\% | 14.7\% | 10.3\% |
| 2010 | -0.9\% | 13.6\% | 2.5\% | 2010 | -0.6\% | 14.0\% | 2.9\% |
| 2011 | -7.8\% | -0.1\% | -4.2\% | 2011 | -5.4\% | 2.6\% | -1.7\% |
| 2012 | -5.1\% | 1.4\% | -0.1\% | 2012 | -1.2\% | 5.6\% | 4.0\% |
| 2013 | -4.5\% | 1.1\% | 0.6\% | 2013 | -0.6\% | 5.2\% | 4.7\% |
| 2014 | -3.6\% | -0.8\% | 6.8\% | 2014 | -1.4\% | 1.5\% | 9.2\% |
| 2015** | 0.8\% | 6.5\% | 7.4\% | 2015** | 0.8\% | 6.4\% | 7.3\% |

[^9]** Accident year 2015 experience is partial in that it only reflects experience from policy year 2014.
Source: WCIRB unit statistical data

## Average and Median Indemnity Claim Severities at USR 1

|  | Average <br> Incurred |  | Median <br> Incurred |  |
| :---: | :---: | :---: | :---: | :--- |
| Policy | Indemnity <br> Year | Annual <br> Severity <br> Change | Indemnity <br> Severity | Annual <br> Change |
| 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 | $0.5 \%$ |


|  | Average <br> Incurred |  | Median <br> Incurred |  |
| :--- | :--- | :--- | :--- | :--- |
| Policy | Medical | Annual | Medical <br> Year | Annual <br> Severity |
| 1999 | 10,243 | --- | 4,809 | --- |
| 2000 | 11,934 | $16.5 \%$ | 5,600 | $16.4 \%$ |
| 2001 | 13,853 | $16.1 \%$ | 6,989 | $24.8 \%$ |
| 2002 | 15,151 | $9.4 \%$ | 7,797 | $11.6 \%$ |
| 2003 | 14,501 | $-4.3 \%$ | 7,575 | $-2.8 \%$ |
| 2004 | 13,129 | $-9.5 \%$ | 6,750 | $-10.9 \%$ |
| 2005 | 13,457 | $2.5 \%$ | 6,331 | $-6.2 \%$ |
| 2006 | 14,791 | $9.9 \%$ | 6,924 | $9.4 \%$ |
| 2007 | 16,095 | $8.8 \%$ | 7,942 | $14.7 \%$ |
| 2008 | 17,273 | $7.3 \%$ | 9,000 | $13.3 \%$ |
| 2009 | 17,828 | $3.2 \%$ | 9,723 | $8.0 \%$ |
| 2010 | 17,676 | $-0.9 \%$ | 9,409 | $-3.2 \%$ |
| 2011 | 17,894 | $1.2 \%$ | 9,388 | $-0.2 \%$ |
| 2012 | 17,640 | $-1.4 \%$ | 9,500 | $1.2 \%$ |
| 2013 | 17,046 | $-3.4 \%$ | 9,477 | $-0.2 \%$ |
| 2014 | 17,032 | $-0.1 \%$ | 9,241 | $-2.5 \%$ |

Source: WCIRB Unit Statistical Data

Changes in the Number of Weeks of Temporary Disability Benefits

## First Survey Level

| Accident <br> Year | Average <br> TD Duration |  |  | Median <br> Change | TD Duration |
| :---: | :---: | :---: | :---: | :---: | :---: | | Change |
| :---: |
|  |
| 2004 |

Second Survey Level

| Accident <br> Year | Average <br> TD Duration |  |  | Median <br> Change | TD Duration |
| :---: | :---: | :---: | :---: | :---: | :---: | | TDange |
| :---: |
|  |

Source: WCIRB Permanent Disability Claim Survey
Average Permanent Disability Ratings by Type of Loss

| Non-Cumulative Permanent Disability Claims |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average Permanent Disability Rating |  |  |  |  |  |
| PY/RL | 1 | 2 | 3 | 4 | 5 |
| 2001 | 18.9 | 23.8 | 26.6 | 27.1 | 27.3 |
| 2002 | 19.0 | 24.0 | 25.3 | 25.9 | 25.7 |
| 2003 | 20.1 | 22.5 | 23.8 | 23.5 | 23.1 |
| 2004 | 16.5 | 18.5 | 19.1 | 18.8 | 18.6 |
| 2005 | 12.6 | 14.8 | 16.0 | 16.4 | 17.1 |
| 2006 | 12.0 | 14.5 | 15.7 | 16.8 | 17.3 |
| 2007 | 12.0 | 14.6 | 16.6 | 17.5 | 18.1 |
| 2008 | 12.0 | 15.1 | 16.9 | 17.8 | 17.9 |
| 2009 | 12.6 | 15.3 | 16.9 | 17.4 | 17.4 |
| 2010 | 12.7 | 15.1 | 15.9 | 16.2 | 16.7 |
| 2011 | 12.7 | 14.6 | 15.2 | 16.0 |  |
| 2012 | 11.8 | 13.2 | 14.4 |  |  |
| 2013 | 11.3 | 13.1 |  |  |  |
| 2014 | 10.9 |  |  |  |  |










[^10]Self-Insured Employers - Claim Severity

| Private Self-Insured Employers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Indemnity | Paid Medical |  |  |  |
| CY | Medical | Cases Open <br> on Open | Annual |  |
| Paid | During Year | Ind Claims | 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 | $-11.1 \%$ |


| Public Self-Insured Employers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FY | Medical Paid | Indemnity Cases Open During Year | Paid Medical on Open Ind Claims | Annual <br> 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\% |


| All Self-Insured Employers |  |  |  |  | Insured System at 1st Report Paid Medical |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CY | Medical Paid | Indemnity <br> Cases Open During Year | Paid Medical on Open Ind Claims | Annual 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 | 6,175 | 4.6\% |
| Notes: | Fiscal Year Public data prorated to CYs 50\%/50\%. Insured System AY 2015 change is based on a comparison of 2015 accidents on 2014 policies to 2014 accidents on 2013 policies. Insured System AY 2015 is preliminary. |  |  |  |  |  |  |
| 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

|  |  | Indemnity Claim Severity |  |  |  |  | Total Claim Severity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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

Source: WCIRB unit statistical data
Claim Counts and Losses on Claims in Excess of \$250,000

|  | $\%$ of Claims in Excess of $\$ 250,000$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | $0.112 \%$ | $0.227 \%$ | $0.372 \%$ | $0.525 \%$ | $0.672 \%$ | $0.790 \%$ | $0.857 \%$ | $0.925 \%$ |
| 2003 | $0.107 \%$ | $0.177 \%$ | $0.295 \%$ | $0.441 \%$ | $0.588 \%$ | $0.681 \%$ | $0.775 \%$ | $0.839 \%$ |
| 2004 | $0.098 \%$ | $0.146 \%$ | $0.235 \%$ | $0.351 \%$ | $0.463 \%$ | $0.581 \%$ | $0.663 \%$ | $0.718 \%$ |
| 2005 | $0.109 \%$ | $0.168 \%$ | $0.276 \%$ | $0.409 \%$ | $0.567 \%$ | $0.676 \%$ | $0.747 \%$ | $0.805 \%$ |
| 2006 | $0.153 \%$ | $0.233 \%$ | $0.374 \%$ | $0.536 \%$ | $0.692 \%$ | $0.801 \%$ | $0.885 \%$ | $0.935 \%$ |
| 2007 | $0.161 \%$ | $0.282 \%$ | $0.494 \%$ | $0.707 \%$ | $0.880 \%$ | $1.010 \%$ | $1.085 \%$ | $1.131 \%$ |
| 2008 | $0.182 \%$ | $0.342 \%$ | $0.566 \%$ | $0.826 \%$ | $1.038 \%$ | $1.173 \%$ | $1.250 \%$ |  |
| 2009 | $0.182 \%$ | $0.359 \%$ | $0.616 \%$ | $0.896 \%$ | $1.097 \%$ | $1.223 \%$ |  |  |
| 2010 | $0.175 \%$ | $0.339 \%$ | $0.562 \%$ | $0.804 \%$ | $0.965 \%$ |  |  |  |
| 2011 | $0.194 \%$ | $0.348 \%$ | $0.549 \%$ | $0.756 \%$ |  |  |  |  |
| 2012 | $0.194 \%$ | $0.319 \%$ | $0.484 \%$ |  |  |  |  |  |
| 2013 | $0.200 \%$ | $0.308 \%$ |  |  |  |  |  |  |
| 2014 | $0.192 \%$ |  |  |  |  |  |  |  |




|  | Number of Claims in Excess of $\$ 250,000$ |  |  |  |  |  |  |  |
| :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | 602 | 1,282 | 2,109 | 2,990 | 3,838 | 4,500 | 4,866 | 5,232 |
| 2003 | 540 | 928 | 1,550 | 2,323 | 3,104 | 3,589 | 4,071 | 4,395 |
| 2004 | 472 | 719 | 1,163 | 1,741 | 2,296 | 2,874 | 3,273 | 3,547 |
| 2005 | 496 | 783 | 1,292 | 1,921 | 2,657 | 3,169 | 3,504 | 3,782 |
| 2006 | 667 | 1,036 | 1,673 | 2,401 | 3,108 | 3,603 | 3,984 | 4,211 |
| 2007 | 666 | 1,189 | 2,092 | 3,015 | 3,755 | 4,319 | 4,641 | 4,842 |
| 2008 | 653 | 1,260 | 2,099 | 3,077 | 3,878 | 4,389 | 4,685 |  |
| 2009 | 604 | 1,219 | 2,111 | 3,083 | 3,784 | 4,226 |  |  |
| 2010 | 588 | 1,167 | 1,951 | 2,806 | 3,376 |  |  |  |
| 2011 | 653 | 1,205 | 1,919 | 2,654 |  |  |  |  |
| 2012 | 668 | 1,127 | 1,729 |  |  |  |  |  |
| 2013 | 709 | 1,119 |  |  |  |  |  |  |
| 2014 | 704 |  |  |  |  |  |  |  |


| \% of Indemnity Incurred |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | 4.35\% | 6.36\% | 9.13\% | 12.64\% | 16.07\% | 18.67\% | 20.07\% | 21.84\% |
| 2003 | 5.80\% | 7.10\% | 9.89\% | 13.19\% | 16.47\% | 18.55\% | 21.16\% | 22.92\% |
| 2004 | 6.58\% | 7.79\% | 9.70\% | 13.11\% | 15.78\% | 19.69\% | 22.24\% | 24.01\% |
| 2005 | 7.95\% | 8.27\% | 11.00\% | 15.00\% | 19.77\% | 23.04\% | 25.51\% | 27.31\% |
| 2006 | 11.02\% | 11.47\% | 14.89\% | 18.94\% | 22.71\% | 25.75\% | 28.08\% | 29.89\% |
| 2007 | 10.15\% | 11.62\% | 16.22\% | 20.89\% | 24.90\% | 27.50\% | 29.41\% | 30.54\% |
| 2008 | 9.37\% | 11.20\% | 15.22\% | 20.28\% | 24.26\% | 27.11\% | 28.70\% |  |
| 2009 | 9.06\% | 10.45\% | 15.09\% | 19.60\% | 23.44\% | 26.26\% |  |  |
| 2010 | 9.14\% | 10.82\% | 13.89\% | 18.16\% | 21.17\% |  |  |  |
| 2011 | 9.46\% | 10.54\% | 13.48\% | 17.23\% |  |  |  |  |
| 2012 | 9.02\% | 9.77\% | 12.43\% |  |  |  |  |  |
| 2013 | 7.59\% | 8.80\% |  |  |  |  |  |  |
| 2014 | 8.55\% |  |  |  |  |  |  |  |


| PY/RL | Average Severity <br> on Claims in Excess of $\$ 250,000$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | 717,062 | 592,893 | 508,878 | 481,072 | 488,305 | 498,121 | 511,322 | 529,239 |
| 2003 | 830,287 | 697,511 | 579,912 | 531,520 | 513,563 | 511,184 | 536,729 | 548,977 |
| 2004 | 751,890 | 695,515 | 597,861 | 550,994 | 520,593 | 538,976 | 553,349 | 569,398 |
| 2005 | 739,367 | 668,592 | 545,833 | 501,441 | 498,380 | 513,170 | 526,835 | 543,666 |
| 2006 | 685,716 | 633,586 | 554,027 | 517,029 | 504,508 | 515,982 | 527,649 | 538,512 |
| 2007 | 656,706 | 573,916 | 507,392 | 494,503 | 494,898 | 501,434 | 512,282 | 520,029 |
| 2008 | 617,586 | 515,370 | 466,652 | 456,502 | 457,438 | 469,921 | 477,594 |  |
| 2009 | 649,166 | 525,815 | 479,951 | 458,056 | 463,534 | 478,018 |  |  |
| 2010 | 711,521 | 584,687 | 502,343 | 474,264 | 477,077 |  |  |  |
| 2011 | 687,390 | 560,645 | 499,168 | 478,213 |  |  |  |  |
| 2012 | 704,191 | 587,234 | 522,780 |  |  |  |  |  |
| 2013 | 579,816 | 507,683 |  |  |  |  |  |  |
| 2014 | 711,664 |  |  |  |  |  |  |  |

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

|  | $\%$ of Claims in Excess of $\$ 500,000$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | $0.032 \%$ | $0.043 \%$ | $0.057 \%$ | $0.085 \%$ | $0.122 \%$ | $0.169 \%$ | $0.214 \%$ | $0.256 \%$ |
| 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 | $0.050 \%$ | $0.063 \%$ | $0.092 \%$ | $0.141 \%$ | $0.194 \%$ | $0.251 \%$ | $0.289 \%$ |  |
| 2009 | $0.052 \%$ | $0.069 \%$ | $0.098 \%$ | $0.146 \%$ | $0.204 \%$ | $0.244 \%$ |  |  |
| 2010 | $0.048 \%$ | $0.065 \%$ | $0.091 \%$ | $0.121 \%$ | $0.164 \%$ |  |  |  |
| 2011 | $0.053 \%$ | $0.067 \%$ | $0.088 \%$ | $0.126 \%$ |  |  |  |  |
| 2012 | $0.054 \%$ | $0.067 \%$ | $0.082 \%$ |  |  |  |  |  |
| 2013 | $0.050 \%$ | $0.058 \%$ |  |  |  |  |  |  |
| 2014 | $0.058 \%$ |  |  |  |  |  |  |  |






[^11]Claim Counts and Losses on Claims in Excess of $\$ 1,000,000$

|  | $\%$ of Claims in Excess of $\$ 1,000,000$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PY/RL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2002 | $0.013 \%$ | $0.017 \%$ | $0.021 \%$ | $0.024 \%$ | $0.030 \%$ | $0.039 \%$ | $0.047 \%$ | $0.059 \%$ |
| 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 | $0.016 \%$ | $0.019 \%$ | $0.026 \%$ | $0.031 \%$ | $0.037 \%$ | $0.047 \%$ | $0.055 \%$ | $0.062 \%$ |
| 2008 | $0.019 \%$ | $0.022 \%$ | $0.027 \%$ | $0.034 \%$ | $0.045 \%$ | $0.057 \%$ | $0.065 \%$ |  |
| 2009 | $0.020 \%$ | $0.024 \%$ | $0.029 \%$ | $0.035 \%$ | $0.043 \%$ | $0.050 \%$ |  |  |
| 2010 | $0.021 \%$ | $0.024 \%$ | $0.029 \%$ | $0.035 \%$ | $0.042 \%$ |  |  |  |
| 2011 | $0.021 \%$ | $0.025 \%$ | $0.027 \%$ | $0.031 \%$ |  |  |  |  |
| 2012 | $0.024 \%$ | $0.024 \%$ | $0.028 \%$ |  |  |  |  |  |
| 2013 | $0.018 \%$ | $0.019 \%$ |  |  |  |  |  |  |
| 2014 | $0.025 \%$ |  |  |  |  |  |  |  |




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[^12]
## Change in Claims Mix by Injury Description by Policy Year

Part of Body

| Rank | Code | Description | Percentage of Claims |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ |
| 1 | 90 | Multiple Body Parts - Multiple Body Parts | 17.3\% | 14.4\% | 13.6\% | 13.7\% | 12.8\% | 13.9\% | 14.6\% | 15.9\% | 15.7\% | 15.5\% | 15.1\% |
| 2 | 42 | Trunk - Lower Back Area | 14.0\% | 15.0\% | 15.0\% | 14.9\% | 15.8\% | 15.7\% | 15.4\% | 14.9\% | 15.1\% | 15.1\% | 15.0\% |
| 3 | 53 | Lower Extremities - Knee | 8.5\% | 9.1\% | 9.1\% | 9.4\% | 9.5\% | 8.9\% | 8.8\% | 8.7\% | 9.1\% | 9.0\% | 9.0\% |
| 4 | 38 | Upper Extremities - Shoulder(s) | 5.3\% | 5.6\% | 5.9\% | 6.2\% | 7.1\% | 7.0\% | 6.9\% | 7.0\% | 7.9\% | 8.4\% | 8.7\% |
| 5 | 34 | Upper Extremities - Wrist | 5.9\% | 6.6\% | 6.6\% | 6.5\% | 5.8\% | 6.3\% | 6.1\% | 6.1\% | 5.0\% | 4.4\% | 4.4\% |
| 6 | 36 | Upper Extremities - Finger(s) | 4.9\% | 5.5\% | 5.4\% | 5.4\% | 5.2\% | 4.8\% | 4.7\% | 4.5\% | 4.2\% | 4.4\% | 4.3\% |
| 7 | 35 | Upper Extremities - Hand | 4.0\% | 4.0\% | 4.1\% | 4.0\% | 3.8\% | 3.7\% | 3.8\% | 3.9\% | 3.8\% | 3.7\% | 3.8\% |
| 8 | 55 | Lower Extremities - Ankle | 2.8\% | 3.3\% | 3.5\% | 3.4\% | 3.4\% | 3.1\% | 3.1\% | 3.1\% | 3.2\% | 3.2\% | 3.2\% |
| 9 | 61 | Trunk - Abdomen Including Groin | 2.6\% | 2.7\% | 2.6\% | 2.7\% | 2.8\% | 2.5\% | 2.5\% | 2.5\% | 2.7\% | 2.6\% | 2.7\% |
| 10 | 56 | Lower Extremities - Foot | 2.3\% | 2.6\% | 2.7\% | 2.8\% | 2.5\% | 2.3\% | 2.3\% | 2.2\% | 2.2\% | 2.3\% | 2.3\% |
| 11 | 30 | Upper Extremities - Multiple Upper Extremities | 3.7\% | 3.2\% | 2.9\% | 2.6\% | 2.4\% | 2.5\% | 2.5\% | 2.4\% | 2.3\% | 2.3\% | 2.1\% |
| 12 | 33 | Upper Extremities - Lower Arm | 1.7\% | 1.9\% | 2.0\% | 1.9\% | 1.9\% | 1.9\% | 1.9\% | 2.1\% | 2.1\% | 1.9\% | 2.0\% |
| 13 | 32 | Upper Extremities - Elbow | 1.8\% | 2.0\% | 2.0\% | 2.0\% | 2.0\% | 1.9\% | 1.8\% | 1.8\% | 1.9\% | 2.0\% | 2.0\% |
| 14 | 41 | Trunk - Upper Back Area | 1.2\% | 1.5\% | 1.4\% | 1.4\% | 1.4\% | 1.3\% | 1.3\% | 1.4\% | 1.6\% | 1.8\% | 1.8\% |
| 15 | 31 | Upper Extremities - Upper Arm | 1.9\% | 1.9\% | 2.1\% | 2.0\% | 2.1\% | 2.5\% | 2.4\% | 2.4\% | 1.9\% | 1.7\% | 1.7\% |
| 16 | 25 | Neck - Soft Tissue | 0.6\% | 0.8\% | 0.8\% | 1.0\% | 1.3\% | 1.6\% | 1.7\% | 1.5\% | 1.4\% | 1.5\% | 1.6\% |
| 17 | 54 | Lower Extremities - Lower Leg | 1.5\% | 1.7\% | 1.7\% | 1.6\% | 1.6\% | 1.5\% | 1.5\% | 1.5\% | 1.5\% | 1.5\% | 1.5\% |
| 18 | 91 | Multiple Body Parts - Body Systems and Multiple Body | 0.4\% | 0.4\% | 0.5\% | 0.6\% | 0.8\% | 0.8\% | 0.8\% | 1.0\% | 1.4\% | 1.6\% | 1.4\% |
| 19 | 39 | Upper Extremities - Wrist(s) \& Hand(s) | 1.1\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 1.3\% | 1.2\% | 1.2\% | 1.3\% | 1.2\% | 1.3\% |
| 20 | 37 | Upper Extremities - Thumb | 1.3\% | 1.5\% | 1.6\% | 1.5\% | 1.4\% | 1.3\% | 1.3\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% |
|  |  | All Other | 17.2\% | 15.3\% | 15.2\% | 14.9\% | 15.4\% | 15.5\% | 15.3\% | 14.6\% | 14.6\% | 14.6\% | 14.8\% |
|  |  | TOTAL | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Based on first unit statistical report level of (1) all Death claims, (2) all Permanent Disability claims, and (3) Temporary Only claims exceeding $\$ 5,000$ in total incurred losses

## Change in Claims Mix by Injury Description by Policy Year

Nature of Injury

| Rank | Code | Description | Percentage of Claims |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ |
| 1 | 52 | Strain or Tear | 33.7\% | 33.6\% | 31.7\% | 29.4\% | 30.3\% | 30.7\% | 31.2\% | 30.0\% | 32.8\% | 33.6\% | 33.7\% |
| 2 | 49 | Sprain or Tear | 7.8\% | 8.4\% | 9.9\% | 11.1\% | 12.4\% | 13.6\% | 13.2\% | 13.2\% | 11.6\% | 10.9\% | 11.0\% |
| 3 | 59 | All Other Specific Injuries, NOC | 12.2\% | 11.4\% | 12.7\% | 15.0\% | 13.0\% | 13.3\% | 12.9\% | 14.5\% | 12.5\% | 10.9\% | 9.6\% |
| 4 | 80 | All Other Cumulative Injury, NOC | 10.3\% | 7.5\% | 6.4\% | 5.7\% | 5.2\% | 5.4\% | 5.6\% | 5.9\% | 6.9\% | 8.3\% | 8.8\% |
| 5 | 10 | Contusion | 6.1\% | 6.5\% | 6.9\% | 6.7\% | 7.0\% | 6.7\% | 6.7\% | 6.3\% | 6.5\% | 6.5\% | 6.8\% |
| 6 | 28 | Fracture | 7.2\% | 8.8\% | 9.1\% | 8.9\% | 8.5\% | 7.7\% | 7.5\% | 7.2\% | 6.8\% | 6.6\% | 6.7\% |
| 7 | 90 | Multiple Physical Injuries Only | 3.0\% | 2.4\% | 2.0\% | 1.8\% | 1.9\% | 2.5\% | 2.6\% | 3.0\% | 3.8\% | 4.6\% | 4.4\% |
| 8 | 40 | Laceration | 4.6\% | 5.0\% | 5.0\% | 4.8\% | 4.5\% | 3.9\% | 3.9\% | 3.9\% | 3.7\% | 3.5\% | 3.6\% |
| 9 | 37 | Inflammation | 2.4\% | 2.7\% | 2.9\% | 3.0\% | 3.0\% | 2.8\% | 2.8\% | 2.8\% | 2.7\% | 2.6\% | 2.4\% |
| 10 | 34 | Hernia | 2.0\% | 2.3\% | 2.2\% | 2.2\% | 2.1\% | 1.9\% | 1.8\% | 1.8\% | 1.8\% | 1.7\% | 1.7\% |
| 11 | 16 | Dislocation | 1.1\% | 1.3\% | 1.4\% | 1.6\% | 1.6\% | 1.4\% | 1.3\% | 1.3\% | 1.2\% | 1.2\% | 1.4\% |
| 12 | 77 | Mental Stress | 1.2\% | 1.2\% | 1.3\% | 1.4\% | 1.7\% | 1.9\% | 1.9\% | 1.7\% | 1.5\% | 1.5\% | 1.4\% |
| 13 | 78 | Carpal Tunnel Syndrome | 2.0\% | 1.8\% | 1.7\% | 1.6\% | 1.5\% | 1.4\% | 1.4\% | 1.4\% | 1.2\% | 1.2\% | 1.1\% |
| 14 | 91 | Multiple Injuries Including Both Physical and Psychological | 0.5\% | 0.4\% | 0.4\% | 0.5\% | 0.8\% | 1.0\% | 0.9\% | 1.0\% | 1.1\% | 1.1\% | 1.1\% |
| 15 | 13 | Crushing | 0.9\% | 1.1\% | 1.1\% | 1.1\% | 1.0\% | 0.9\% | 0.9\% | 0.8\% | 0.8\% | 0.8\% | 0.9\% |
| 16 | 04 | Burn | 0.7\% | 0.7\% | 0.7\% | 0.6\% | 0.7\% | 0.6\% | 0.6\% | 0.6\% | 0.6\% | 0.6\% | 0.6\% |
| 17 | 46 | Rupture | 0.4\% | 0.4\% | 0.4\% | 0.4\% | 0.5\% | 0.5\% | 0.6\% | 0.5\% | 0.5\% | 0.6\% | 0.6\% |
| 18 | 43 | Puncture | 0.7\% | 0.8\% | 0.7\% | 0.7\% | 0.7\% | 0.6\% | 0.6\% | 0.6\% | 0.5\% | 0.6\% | 0.6\% |
| 19 | 41 | Myocardial Infarction | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.4\% | 0.4\% | 0.5\% | 0.6\% |
| 20 | 02 | Amputation | 0.7\% | 0.8\% | 0.8\% | 0.8\% | 0.7\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.5\% | 0.5\% |
|  |  | All Other | 2.2\% | 2.6\% | 2.5\% | 2.5\% | 2.6\% | 2.6\% | 2.8\% | 2.6\% | 2.5\% | 2.5\% | 2.5\% |
|  |  | TOTAL | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Based on first unit statistical report level of (1) all Death claims, (2) all Permanent Disability claims, and (3) Temporary Only claims exceeding $\$ 5,000$ in total incurred losses

## Change in Claims Mix by Injury Description by Policy Year

Cause of Injury

| Rank | Code | Description | Percentage of Claims |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ |
| 1 | 99 | Other - Miscellaneous, NOC | 9.1\% | 8.9\% | 8.7\% | 7.6\% | 7.5\% | 8.4\% | 8.9\% | 9.8\% | 10.1\% | 12.1\% | 11.8\% |
| 2 | 56 | Strain by - Lifting | 13.9\% | 13.2\% | 12.9\% | 13.2\% | 13.0\% | 13.1\% | 12.8\% | 12.3\% | 12.2\% | 11.7\% | 11.6\% |
| 3 | 98 | Cumulative, NOC | 6.7\% | 6.6\% | 5.4\% | 5.1\% | 5.8\% | 6.3\% | 6.5\% | 7.3\% | 8.2\% | 8.9\% | 9.1\% |
| 4 | 60 | Strain or Injury By, NOC | 8.4\% | 8.1\% | 8.5\% | 8.6\% | 8.8\% | 8.7\% | 8.4\% | 8.7\% | 8.4\% | 8.4\% | 8.2\% |
| 5 | 97 | Strain by - Repetitive Motion | 5.3\% | 5.0\% | 5.1\% | 5.4\% | 5.6\% | 6.3\% | 6.4\% | 6.6\% | 7.3\% | 7.5\% | 7.8\% |
| 6 | 31 | Fall, Slip or Trip Injury, NOC | 5.9\% | 6.1\% | 6.5\% | 7.0\% | 7.1\% | 6.6\% | 6.1\% | 5.7\% | 5.6\% | 5.3\% | 5.4\% |
| 7 | 29 | Fall - On Same Level | 4.5\% | 4.7\% | 4.8\% | 5.2\% | 4.9\% | 5.3\% | 5.7\% | 5.4\% | 5.0\% | 4.9\% | 4.9\% |
| 8 | 57 | Strain by - Pushing or Pulling | 4.4\% | 4.3\% | 4.3\% | 4.3\% | 4.6\% | 4.6\% | 4.6\% | 4.5\% | 4.4\% | 4.3\% | 4.3\% |
| 9 | 25 | Fall - From Different Level (Elevation) | 3.1\% | 3.3\% | 3.2\% | 3.0\% | 2.8\% | 2.6\% | 2.6\% | 2.5\% | 2.6\% | 2.4\% | 2.5\% |
| 10 | 75 | Struck or Injured By - Falling or Flying Object | 2.6\% | 2.8\% | 2.9\% | 3.0\% | 2.7\% | 2.6\% | 2.7\% | 2.6\% | 2.6\% | 2.3\% | 2.5\% |
| 11 | 53 | Strain by - Twisting | 1.7\% | 1.6\% | 1.7\% | 1.8\% | 2.0\% | 1.9\% | 1.9\% | 2.0\% | 2.2\% | 2.2\% | 2.2\% |
| 12 | 26 | Fall - From Ladder or Scaffolding | 3.0\% | 3.2\% | 3.1\% | 3.0\% | 2.8\% | 2.4\% | 2.6\% | 2.3\% | 2.1\% | 2.1\% | 2.1\% |
| 13 | 55 | Strain by - Holding or Carrying | 1.8\% | 1.8\% | 1.8\% | 1.6\% | 1.5\% | 1.6\% | 1.8\% | 1.9\% | 1.9\% | 1.6\% | 1.5\% |
| 14 | 45 | Motor Vehicle - Collision or Sideswipe with Another Vehicle | 1.7\% | 1.7\% | 1.7\% | 1.7\% | 1.6\% | 1.6\% | 1.4\% | 1.5\% | 1.4\% | 1.4\% | 1.4\% |
| 15 | 81 | Struck or Injured By, NOC | 1.6\% | 1.5\% | 1.7\% | 1.9\% | 1.7\% | 1.5\% | 1.5\% | 1.6\% | 1.6\% | 1.6\% | 1.4\% |
| 16 | 79 | Struck or Injured By - Object Being Lifted or Handled | 1.3\% | 1.4\% | 1.5\% | 1.5\% | 1.4\% | 1.3\% | 1.4\% | 1.3\% | 1.3\% | 1.3\% | 1.3\% |
| 17 | 27 | Fall - From Liquid or Grease Spills | 1.7\% | 1.6\% | 1.6\% | 1.7\% | 1.7\% | 1.7\% | 1.6\% | 1.5\% | 1.4\% | 1.3\% | 1.3\% |
| 18 | 68 | Struck or Stepped On - Stationary Object | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 1.3\% | 1.3\% | 1.2\% | 1.3\% | 1.2\% | 1.2\% | 1.2\% |
| 19 | 58 | Strain by - Reaching | 1.1\% | 1.2\% | 1.0\% | 1.1\% | 1.1\% | 1.2\% | 1.3\% | 1.3\% | 1.2\% | 1.2\% | 1.1\% |
| 20 | 33 | Fall - On Stairs | 0.9\% | 0.9\% | 1.0\% | 1.0\% | 1.1\% | 1.1\% | 1.0\% | 1.0\% | 1.0\% | 1.0\% | 1.0\% |
|  |  | All Other | 20.1\% | 21.1\% | 21.4\% | 21.2\% | 20.9\% | 19.9\% | 19.5\% | 18.9\% | 18.1\% | 17.3\% | 17.4\% |
|  |  | TOTAL | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

[^13]
## Summary of Incurred LAE Ratios by Insurer Type

| CY | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 4.3\% | 8.0\% | 7.0\% | 6.1\% | 7.1\% |
| 2004 | 5.6\% | 9.5\% | 10.6\% | 8.5\% | 10.5\% |
| 2005 | 5.3\% | 13.7\% | 12.2\% | 9.6\% | 12.4\% |
| 2006 | 3.1\% | 18.8\% | 19.8\% | 13.8\% | 19.6\% |
| 2007 | 3.8\% | 14.9\% | 12.3\% | 10.7\% | 12.7\% |
| 2008 | 6.9\% | 11.2\% | 13.3\% | 11.9\% | 13.0\% |
| 2009 | 9.8\% | 10.6\% | 14.3\% | 13.3\% | 13.8\% |
| $2010{ }^{[1]}$ | 4.5\% | 12.5\% | 14.9\% | 13.4\% | 14.6\% |
| $2011{ }^{[1]}$ | 8.6\% | 19.7\% | 15.0\% | 15.4\% | 15.6\% |
| $2012{ }^{[1]}$ | 3.9\% | 15.2\% | 16.6\% | 15.5\% | 16.4\% |
| $2013{ }^{[1]}$ | 16.4\% | 15.0\% | 16.7\% | 16.5\% | 16.5\% |
| $2014{ }^{[1]}$ | 18.0\% | 17.3\% | 16.9\% | 17.1\% | 17.0\% |
| 2015 | 7.7\% | 23.3\% | 19.8\% | 18.9\% | 20.4\% |
| 2016 | 8.1\% | 16.3\% | 17.4\% | 16.2\% | 17.2\% |

Incurred ULAE to Incurred Loss Ratios

| CY | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 10.2\% | 9.1\% | 5.5\% | 7.4\% | 5.9\% |
| 2004 | 10.2\% | 14.8\% | 6.8\% | 8.8\% | 7.8\% |
| 2005 | 15.6\% | 13.5\% | 7.3\% | 11.1\% | 8.2\% |
| 2006 | 28.6\% | 18.7\% | 8.5\% | 15.4\% | 10.1\% |
| 2007 | 34.4\% | 16.7\% | 8.4\% | 15.2\% | 9.6\% |
| 2008 | 41.5\% | 14.2\% | 7.1\% | 14.1\% | 8.2\% |
| 2009 | 51.4\% | 13.1\% | 8.3\% | 14.9\% | 9.0\% |
| 2010 | 55.7\% | 15.5\% | 7.0\% | 13.9\% | 8.2\% |
| 2011 | 394.5\% ${ }^{[2]}$ | 12.6\% | 6.5\% | $18.8 \%{ }^{[2]}$ | 7.3\% |
| 2012 | 26.1\% | 13.4\% | 5.6\% | 8.2\% | 6.8\% |
| 2013 | 19.5\% | 13.6\% | $7.9 \%{ }^{[3]}$ | 9.5\% ${ }^{[3]}$ | 8.7\% ${ }^{[3]}$ |
| 2014 | 24.9\% | 12.3\% | 6.7\% ${ }^{[3]}$ | 9.8\% ${ }^{[3]}$ | 7.5\% ${ }^{[3]}$ |
| 2015 | 28.5\% | 13.1\% | 6.3\% | 9.9\% | 7.4\% |
| 2016 | 35.9\% | 12.4\% | 6.0\% | 10.2\% | 7.3\% |

Incurred LAE to Incurred Loss Ratios

| CY | State Fund | CA Private Insurers | National | Statewide | Private Insurers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 14.4\% | 17.1\% | 12.5\% | 13.5\% | 13.0\% |
| 2004 | 15.8\% | 24.3\% | 17.4\% | 17.3\% | 18.3\% |
| 2005 | 20.9\% | 27.2\% | 19.5\% | 20.7\% | 20.6\% |
| 2006 | 31.7\% | 37.5\% | 28.3\% | 29.1\% | 29.7\% |
| 2007 | 38.3\% | 31.6\% | 20.7\% | 25.9\% | 22.2\% |
| 2008 | 48.3\% | 25.5\% | 20.4\% | 26.0\% | 21.2\% |
| 2009 | 61.2\% | 23.7\% | 22.7\% | 28.2\% | 22.8\% |
| $2010^{[1]}$ | 60.2\% | 28.1\% | 21.9\% | 27.3\% | 22.8\% |
| $2011{ }^{[1]}$ | 403.1\% ${ }^{[2]}$ | 32.3\% | 21.5\% | 34.2\% ${ }^{[2]}$ | 23.0\% |
| $2012{ }^{[1]}$ | 29.9\% | 28.6\% | 22.2\% | 23.7\% | 23.2\% |
| $2013{ }^{[1]}$ | 35.9\% | 28.6\% | 24.7\% ${ }^{[3]}$ | 26.1\% ${ }^{[3]}$ | 25.2\% ${ }^{[3]}$ |
| $2014{ }^{[1]}$ | 42.9\% | 29.6\% | 23.5\% ${ }^{[3]}$ | 26.8\% ${ }^{[3]}$ | 24.5\% ${ }^{[3]}$ |
| $2015{ }^{[1]}$ | 36.2\% | 36.5\% | 26.1\% | 28.8\% | 27.8\% |
| $2016{ }^{[1]}$ | 44.1\% | 28.8\% | 23.4\% | 26.5\% | 24.4\% |

[^14]Source: WCIRB expense calls and quarterly calls for experience

IV-A-75
WCIRB California ${ }^{\circledR}$

## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 3.6\% | --- | --- | 10.4\% | 13.9\% |
| 2004 | 4.2\% | --- | --- | 10.1\% | 13.4\% |
| 2005 | 4.8\% | --- | --- | 10.5\% | 13.6\% |
| 2006 | 5.1\% | --- | --- | 11.9\% | 15.1\% |
| 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\% | 17.9\% | 22.6\% | 20.5\% | 22.0\% |
| 2016 | 11.0\% | 17.8\% | 22.3\% | 20.4\% | 21.6\% |

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 | 21.8\% | 16.3\% | 8.5\% ${ }^{[3]}$ | $11.7 \%{ }^{[3]}$ | 9.4\% ${ }^{[3]}$ |
| 2014 | 28.8\% | 14.7\% | 7.7\% ${ }^{[3]}$ | $11.6 \%{ }^{[3]}$ | 8.6\% ${ }^{[3]}$ |
| 2015 | 35.1\% | 14.8\% | 10.2\% | 13.9\% | 10.9\% |
| 2016 | 37.6\% | 14.0\% | 10.8\% | 14.3\% | 11.3\% |

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 | 27.7\% | 31.7\% | 28.5\% ${ }^{[3]}$ | 28.6\% ${ }^{[3]}$ | 28.9\% ${ }^{[3]}$ |
| 2014 | 37.2\% | 32.5\% | 29.0\% ${ }^{[3]}$ | 30.6\% ${ }^{[3]}$ | 29.4\% ${ }^{[3]}$ |
| 2015 | 45.2\% | 32.7\% | 32.9\% | 34.4\% | 32.8\% |
| 2016 | 48.6\% | 31.9\% | 33.1\% | 34.7\% | 32.9\% |

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 the 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.

Source: WCIRB expense calls and quarterly calls for experience

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

## All Claims

| Service | Number of Med-Legal Reports by Service Year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\frac{\text { Southern }}{}$ | $\frac{\text { Central }}{}$ | Northern | $\frac{\text { All }}{}$ | $\underline{\text { Southern }}$ | $\underline{\text { Central }}$ | Northern | $\underline{\text { All }}$ |  |
| 2013 | 56,873 | 15,773 | 27,421 | 100,067 | --- | -- | --- |  |  |
| 2014 | 63,068 | 17,073 | 27,708 | 107,848 | $10.9 \%$ | $8.2 \%$ | $1.0 \%$ | $7.8 \%$ |  |
| 2015 | 63,740 | 16,762 | 27,173 | 107,675 | $1.1 \%$ | $-1.8 \%$ | $-1.9 \%$ | $-0.2 \%$ |  |
| 2016 | 70,314 | 20,881 | 28,292 | 119,487 | $10.3 \%$ | $24.6 \%$ | $4.1 \%$ | $11.0 \%$ |  |


| Service | Number of Med-Legal Reports per Claim ${ }^{[1]}$ by Service Year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{\text { Southern }}$ | $\frac{\text { Central }}{}$ | Northern | $\underline{\text { All }}$ | $\underline{\text { Southern }}$ | $\underline{\text { Central }}$ | $\underline{\text { Northern }}$ | $\underline{\text { All }}$ |  |
| 2013 | 0.21 | 0.21 | 0.25 | 0.22 | --- | --- | --- |  |  |
| 2014 | 0.22 | 0.23 | 0.25 | 0.23 | $6.4 \%$ | $7.3 \%$ | $0.3 \%$ | $4.8 \%$ |  |
| 2015 | 0.21 | 0.24 | 0.25 | 0.22 | $-4.1 \%$ | $6.5 \%$ | $-1.2 \%$ | $-2.0 \%$ |  |
| 2016 | 0.23 | 0.29 | 0.25 | 0.24 | $8.3 \%$ | $22.3 \%$ | $2.2 \%$ | $8.9 \%$ |  |


| Service | Med-Legal Payment per report by Service Year on All Claims ${ }^{[2]}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | \$1,690 | \$1,065 | \$1,305 | \$1,486 | --- | --- | --- | --- |
| 2014 | \$1,860 | \$1,222 | \$1,383 | \$1,636 | 10.0\% | 14.8\% | 6.0\% | 10.1\% |
| 2015 | \$1,823 | \$1,284 | \$1,368 | \$1,624 | -2.0\% | 5.1\% | -1.1\% | -0.7\% |
| 2016 | \$1,878 | \$1,244 | \$1,354 | \$1,643 | 3.0\% | -3.1\% | -1.0\% | 1.2\% |

${ }^{[1]}$ Includes claims with any medical transaction for the service year.
${ }^{\text {[2] }}$ 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).

## Medical-Legal Reports by Service Year ${ }^{[1]}$

| Serv. Yr. | Number of <br> Reports | Payment <br> 2013 | Per Report |
| :---: | :---: | :---: | :---: | | Number of Reports |
| :---: |
| per Claim ${ }^{[2]}$ |


| Year-to-Year Change |  |  |  |
| :--- | ---: | ---: | ---: |
| $2013-2014$ | $7.8 \%$ | $10.1 \%$ | $4.8 \%$ |
| $2014-2015$ | $-0.2 \%$ | $-0.7 \%$ | $-2.0 \%$ |
| $2015-2016$ | $11.0 \%$ | $1.2 \%$ | $8.9 \%$ |

${ }^{\text {[1] }}$ 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.
${ }^{\text {[2] }}$ Includes claims with any medical transaction for the service year.

Source: WCIRB Unit Statistical Report (USR) and Medical Data Call (MDC).

## Ratio of Paid ALAE to Loss ${ }^{[1]}$ - Private Insurers

|  | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | $\underline{2000}$ | $\underline{2001}$ | 2002 | $\underline{2003}$ | 2004 | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | 2014 | $\underline{2015}$ | $\underline{2016}$ |
| 3 |  |  |  | 5.5\% | 4.4\% | 3.5\% | 5.0\% | 3.2\% | 3.7\% | 5.9\% | 3.3\% | 3.2\% | 3.4\% | 3.9\% | 5.6\% | 3.7\% | 6.2\% |
| 6 |  |  |  | 6.8\% | 5.5\% | 4.8\% | 5.8\% | 4.8\% | 5.0\% | 5.6\% | 5.4\% | 5.1\% | 5.3\% | 5.7\% | 6.4\% | 6.6\% | 7.1\% |
| 9 |  |  |  | 7.3\% | 6.3\% | 6.2\% | 6.0\% | 6.0\% | 5.8\% | 6.2\% | 6.9\% | 6.8\% | 7.0\% | 7.2\% | 8.2\% | 8.8\% | 8.9\% |
| 12 |  |  |  | 7.8\% | 7.5\% | 6.8\% | 6.8\% | 7.0\% | 6.6\% | 7.2\% | 8.0\% | 8.3\% | 8.2\% | 8.6\% | 9.8\% | 10.5\% |  |
| 15 |  |  |  | 8.5\% | 8.5\% | 7.7\% | 7.6\% | 7.7\% | 7.8\% | 8.4\% | 9.4\% | 9.4\% | 9.3\% | 10.3\% | 11.2\% | 12.0\% |  |
| 18 |  |  | 9.4\% | 9.3\% | 9.7\% | 8.8\% | 8.6\% | 9.0\% | 9.1\% | 9.9\% | 10.7\% | 10.7\% | 10.7\% | 11.8\% | 12.7\% | 13.5\% |  |
| 21 |  |  | 9.5\% | 9.8\% | 10.5\% | 9.8\% | 9.8\% | 9.9\% | 9.8\% | 10.9\% | 11.8\% | 11.8\% | 11.8\% | 12.9\% | 13.9\% | 14.4\% |  |
| 24 |  |  | 9.9\% | 10.9\% | 11.3\% | 10.6\% | 10.6\% | 10.6\% | 10.4\% | 11.7\% | 12.6\% | 12.6\% | 12.5\% | 13.7\% | 14.6\% |  |  |
| 27 |  |  | 10.4\% | 11.3\% | 11.9\% | 11.3\% | 11.2\% | 11.2\% | 11.0\% | 12.4\% | 13.2\% | 12.8\% | 13.2\% | 14.2\% | 15.1\% |  |  |
| 30 |  | 10.5\% | 11.2\% | 11.8\% | 12.6\% | 11.9\% | 11.7\% | 11.7\% | 11.6\% | 12.9\% | 13.6\% | 13.3\% | 13.7\% | 14.6\% | 15.4\% |  |  |
| 33 |  | 10.2\% | 10.9\% | 12.1\% | 13.1\% | 12.6\% | 12.1\% | 12.0\% | 12.0\% | 13.3\% | 14.0\% | 13.7\% | 14.1\% | 14.9\% | 15.7\% |  |  |
| 36 |  | 10.4\% | 11.8\% | 12.3\% | 13.5\% | 13.0\% | 12.5\% | 12.3\% | 12.3\% | 13.7\% | 14.3\% | 13.9\% | 14.3\% | 15.2\% |  |  |  |
| 39 |  | 10.5\% | 11.8\% | 12.6\% | 13.9\% | 13.3\% | 12.9\% | 12.7\% | 12.7\% | 14.0\% | 14.4\% | 14.2\% | 14.5\% | 15.4\% |  |  |  |
| 42 | 10.2\% | 11.1\% | 12.0\% | 13.0\% | 14.2\% | 13.7\% | 13.2\% | 13.0\% | 13.1\% | 14.3\% | 14.6\% | 14.4\% | 14.8\% | 15.7\% |  |  |  |
| 45 | 9.8\% | 10.6\% | 12.2\% | 13.2\% | 14.7\% | 13.9\% | 13.4\% | 13.2\% | 13.3\% | 14.5\% | 14.8\% | 14.6\% | 15.0\% | 15.8\% |  |  |  |
| 48 | 10.2\% | 11.3\% | 12.4\% | 13.4\% | 14.9\% | 14.2\% | 13.6\% | 13.4\% | 13.5\% | 14.7\% | 15.0\% | 14.8\% | 15.2\% |  |  |  |  |
| 51 | 9.8\% | 10.9\% | 12.5\% | 13.6\% | 15.0\% | 14.4\% | 13.8\% | 13.6\% | 13.7\% | 14.8\% | 15.1\% | 14.8\% | 15.4\% |  |  |  |  |
| 54 | 10.5\% | 11.0\% | 12.7\% | 13.8\% | 15.2\% | 14.6\% | 13.9\% | 13.8\% | 13.8\% | 15.0\% | 15.3\% | 15.0\% | 15.5\% |  |  |  |  |
| 57 | 9.8\% | 10.8\% | 12.9\% | 14.0\% | 15.3\% | 14.7\% | 14.0\% | 13.9\% | 14.0\% | 15.1\% | 15.4\% | 15.1\% | 15.7\% |  |  |  |  |
| 60 | 10.6\% | 11.2\% | 13.0\% | 14.0\% | 15.4\% | 14.8\% | 14.2\% | 14.1\% | 14.1\% | 15.2\% | 15.5\% | 15.2\% |  |  |  |  |  |
| 63 | 10.0\% | 11.4\% | 13.2\% | 14.1\% | 15.5\% | 14.9\% | 14.3\% | 14.2\% | 14.2\% | 15.3\% | 15.5\% | 15.3\% |  |  |  |  |  |
| 66 | 10.0\% | 11.5\% | 13.3\% | 14.2\% | 15.6\% | 15.0\% | 14.4\% | 14.3\% | 14.3\% | 15.4\% | 15.6\% | 15.4\% |  |  |  |  |  |
| 69 | 10.1\% | 11.6\% | 13.4\% | 14.3\% | 15.7\% | 15.1\% | 14.5\% | 14.4\% | 14.4\% | 15.5\% | 15.7\% | 15.5\% |  |  |  |  |  |
| 72 | 10.2\% | 11.7\% | 13.4\% | 14.4\% | 15.7\% | 15.2\% | 14.6\% | 14.5\% | 14.5\% | 15.6\% | 15.8\% |  |  |  |  |  |  |
| ${ }^{[1]}$ Paid cost of medical cost conatinment programs are included with loss. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: WCIRB accident year experience calls.

## California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year As of September 30, 2016



Year-to-Year Change

${ }^{\text {[1] }}$ The 2014 estimate is based on partial year unit statistical data. The 2015 and 2016 estimates are based on comparison of claim counts based on WCIRB accident year experience as of September 30, 2016 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

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

| Service | Number of Med-Legal Reports per PD Claim ${ }^{[1]}$ by Service Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{\text { Southern }}$ | $\underline{\text { Central }}$ | $\underline{\text { Northern }}$ | $\underline{\text { All }}$ | $\underline{S o u t h e r n}$ | $\underline{\text { Central }}$ | $\underline{\text { Northern }}$ | $\underline{\text { All }}$ |
| 2013 | 0.45 | 0.50 | 0.60 | 0.49 | -- | -- | --- | --- |
| 2014 | 0.45 | 0.53 | 0.58 | 0.49 | $0.3 \%$ | $5.4 \%$ | $-4.7 \%$ | $-0.4 \%$ |
| 2015 | 0.38 | 0.47 | 0.52 | 0.42 | $-14.5 \%$ | $-10.4 \%$ | $-10.2 \%$ | $-13.1 \%$ |


| Service | Med-Legal Payment per report by Service Year on PD Claims ${ }^{[2]}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | \$1,709 | \$1,043 | \$1,321 | \$1,502 | --- | --- | --- | --- |
| 2014 | \$1,908 | \$1,204 | \$1,406 | \$1,675 | 11.7\% | 15.4\% | 6.4\% | 11.5\% |
| 2015 | \$1,877 | \$1,273 | \$1,388 | \$1,664 | -1.6\% | 5.7\% | -1.3\% | -0.7\% |

${ }^{[1]}$ Includes claims with any medical transaction for the service year.
${ }^{[2]}$ Includes services on PD 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 Unit Statistical Report (USR) and Medical Data Call (MDC).

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

| Service | Number of Med-Legal Reports per PD Claim ${ }^{[1]}$ by Service Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ${ }^{[2]}$ | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2012 | 0.24 | 0.31 | 0.32 | 0.27 | --- | --- | --- | --- |
| 2013 | 0.45 | 0.50 | 0.60 | 0.49 | 84.5\% | 63.3\% | 91.1\% | 81.6\% |
| 2014 | 0.45 | 0.53 | 0.58 | 0.49 | 0.3\% | 5.4\% | -4.7\% | -0.4\% |
| 2015 | 0.38 | 0.47 | 0.52 | 0.42 | -14.5\% | -10.4\% | -10.2\% | -13.1\% |


| Service | Med-Legal Payment per report by Service Year on PD Claims ${ }^{[3]}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ${ }^{[2]}$ | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2012 | \$1,504 | \$906 | \$1,138 | \$1,300 | --- | --- | --- | --- |
| 2013 | \$1,709 | \$1,043 | \$1,321 | \$1,502 | 13.6\% | 15.1\% | 16.1\% | 15.6\% |
| 2014 | \$1,908 | \$1,204 | \$1,406 | \$1,675 | 11.7\% | 15.4\% | 6.4\% | 11.5\% |
| 2015 | \$1,877 | \$1,273 | \$1,388 | \$1,664 | -1.6\% | 5.7\% | -1.3\% | -0.7\% |

${ }^{[1]}$ Includes claims with any medical transaction for the service year.
${ }^{[2]} 2012$ only includes services from July 1, 2012 through December 31, 2012.
${ }^{[3]}$ Includes services on PD 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 Unit Statistical Report (USR) and Medical Data Call (MDC).

## Average Paid ALAE ${ }^{[1]}$ Per Reported Indemnity Claim - Private Insurers

As of March 31, 2017

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | 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 | 6,497 |
| 2003 |  |  |  |  | 4,907 | 5,528 | 6,043 | 6,383 | 6,653 | 6,863 |
| 2004 |  |  |  | 3,570 | 4,548 | 5,212 | 5,673 | 6,022 | 6,283 | 6,483 |
| 2005 |  |  | 2,083 | 3,279 | 4,191 | 4,833 | 5,315 | 5,682 | 5,974 | 6,224 |
| 2006 |  | 797 | 2,176 | 3,410 | 4,328 | 5,030 | 5,559 | 5,929 | 6,265 | 6,527 |
| 2007 | 71 | 849 | 2,340 | 3,613 | 4,633 | 5,409 | 6,010 | 6,498 | 6,849 | 7,122 |
| 2008 | 85 | 944 | 2,494 | 3,957 | 5,131 | 6,005 | 6,680 | 7,185 | 7,560 | 7,822 |
| 2009 | 150 | 1,037 | 2,847 | 4,499 | 5,779 | 6,766 | 7,497 | 8,045 | 8,423 |  |
| 2010 | 87 | 1,135 | 3,041 | 4,667 | 5,975 | 6,923 | 7,621 | 8,114 |  |  |
| 2011 | 88 | 1,153 | 3,004 | 4,641 | 5,888 | 6,799 | 7,459 |  |  |  |
| 2012 | 91 | 1,147 | 3,076 | 4,713 | 5,976 | 6,868 |  |  |  |  |
| 2013 | 101 | 1,223 | 3,243 | 4,881 | 6,082 |  |  |  |  |  |
| 2014 | 144 | 1,352 | 3,451 | 5,123 |  |  |  |  |  |  |
| 2015 | 105 | 1,455 | 3,635 |  |  |  |  |  |  |  |
| 2016 | 160 | 1,515 |  |  |  |  |  |  |  |  |
| 2017 | 132 |  |  |  |  |  |  |  |  |  |


| 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 |  |  |  |  |  |  | $9.9 \%$ | $10.7 \%$ | $8.4 \%$ | $8.0 \%$ |
| 2003 |  |  |  |  |  | $5.0 \%$ | $6.6 \%$ | $5.2 \%$ | $5.5 \%$ | $5.6 \%$ |
| 2004 |  |  |  |  | $-7.3 \%$ | $-5.7 \%$ | $-6.1 \%$ | $-5.6 \%$ | $-5.6 \%$ | $-5.5 \%$ |
| 2005 |  |  |  | $-8.1 \%$ | $-7.8 \%$ | $-7.3 \%$ | $-6.3 \%$ | $-5.7 \%$ | $-4.9 \%$ | $-4.0 \%$ |
| 2006 |  |  | $4.4 \%$ | $4.0 \%$ | $3.3 \%$ | $4.1 \%$ | $4.6 \%$ | $4.4 \%$ | $4.9 \%$ | $4.9 \%$ |
| 2007 |  | $6.5 \%$ | $7.5 \%$ | $5.9 \%$ | $7.1 \%$ | $7.5 \%$ | $8.1 \%$ | $9.6 \%$ | $9.3 \%$ | $9.1 \%$ |
| 2008 | $20.3 \%$ | $11.3 \%$ | $6.6 \%$ | $9.5 \%$ | $10.7 \%$ | $11.0 \%$ | $11.1 \%$ | $10.6 \%$ | $10.4 \%$ | $9.8 \%$ |
| 2009 | $76.5 \%$ | $9.8 \%$ | $14.2 \%$ | $13.7 \%$ | $12.6 \%$ | $12.7 \%$ | $12.2 \%$ | $12.0 \%$ | $11.4 \%$ |  |
| 2010 | $-41.7 \%$ | $9.4 \%$ | $6.8 \%$ | $3.7 \%$ | $3.4 \%$ | $2.3 \%$ | $1.7 \%$ | $0.9 \%$ |  |  |
| 2011 | $0.4 \%$ | $1.6 \%$ | $-1.2 \%$ | $-0.5 \%$ | $-1.5 \%$ | $-1.8 \%$ | $-2.1 \%$ |  |  |  |
| 2012 | $3.1 \%$ | $-0.5 \%$ | $2.4 \%$ | $1.5 \%$ | $1.5 \%$ | $1.0 \%$ |  |  |  |  |
| 2013 | $11.4 \%$ | $6.7 \%$ | $5.5 \%$ | $3.5 \%$ | $1.8 \%$ |  |  |  |  |  |
| 2014 | $43.2 \%$ | $10.5 \%$ | $6.4 \%$ | $5.0 \%$ |  |  |  |  |  |  |
| 2015 | $-27.6 \%$ | $7.6 \%$ | $5.3 \%$ |  |  |  |  |  |  |  |
| 2016 | $52.8 \%$ | $4.1 \%$ |  |  |  |  |  |  |  |  |
| 2017 | $-17.6 \%$ |  |  |  |  |  |  |  |  |  |


| ${ }^{2}$ Annual Trend ${ }^{[2]}$ |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |
| All-Year | $5.3 \%$ | $6.4 \%$ | $5.7 \%$ | $4.7 \%$ | $3.8 \%$ | $3.6 \%$ | $3.8 \%$ | $4.8 \%$ | $4.7 \%$ | $4.0 \%$ |
| $R^{2}$ | 0.396 | 0.969 | 0.958 | 0.894 | 0.730 | 0.708 | 0.753 | 0.772 | 0.719 | 0.647 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-Y e a r$ | $6.5 \%$ | $7.6 \%$ | $5.1 \%$ | $2.4 \%$ | $1.0 \%$ | $2.8 \%$ | $5.8 \%$ | $8.8 \%$ | $9.1 \%$ | $5.2 \%$ |
| $R^{2}$ | 0.249 | 0.983 | 0.982 | 0.828 | 0.716 | 0.540 | 0.769 | 0.957 | 0.983 | 0.777 |

${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Trend is based on exponential distribution.
Source: WCIRB accident year experience calls.

## Percentage of Represented and Unrepresented Permanent Disability Claims by Region First and Second Report Level

## First Survey Level

\% Represented
\% Unrepresented
Total

| Northern California |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY2009 | AY2010 | AY2011 | AY2012 | AY2013 | AY2014 |
| 61.4\% | 62.5\% | 63.3\% | 63.1\% | 70.3\% | 71.4\% |
| 38.6\% | 37.5\% | 36.7\% | 36.9\% | 29.7\% | 28.6\% |
| 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Southern California |  |  |  |  |  |
| AY2009 | AY2010 | AY2011 | AY2012 | AY2013 | AY2014 |
| 77.3\% | 78.8\% | 76.8\% | 80.6\% | 82.7\% | 83.7\% |
| 22.7\% | 21.2\% | 23.2\% | 19.4\% | 17.3\% | 16.3\% |
| 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Second Survey Level



| Northern California |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AY2008 | AY2009 | AY2010 | AY2011 | AY2012 | AY2013 |
| 60.9\% | 65.6\% | 64.1\% | 65.5\% | 68.3\% | 72.9\% |
| 39.1\% | 34.4\% | 35.9\% | 34.5\% | 31.7\% | 27.1\% |
| 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Southern California |  |  |  |  |  |
| AY2008 | AY2009 | AY2010 | AY2011 | AY2012 | AY2013 |
| 78.9\% | 79.4\% | 79.4\% | 78.7\% | 81.7\% | 83.6\% |
| 21.1\% | 20.6\% | 20.6\% | 21.3\% | 18.3\% | 16.4\% |
| 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

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 at first survey level for each accident year (AY)

## Distribution of Total ALAE \& MCCP Components - Statewide

| Calendar <br> Year | $\underline{\text { MCCP }}$ |
| :---: | :---: | :---: | :---: | :---: |$\quad$| Defense |
| :---: |
| Expense |$\quad$| Other |
| :---: |
| Paid ALAE |$\quad$| Paid |
| :---: |
| 2005 |

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

## Distribution of Total ALAE \& MCCP Components - Private Insurers

| Calendar <br> Year | MCCP | Defense <br> Expense | Other <br> Paid ALAE | Paid <br> ALAE \& MCCP |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | $28.1 \%$ | $47.2 \%$ | $24.7 \%$ | $100.0 \%$ |  |
| 2014 | $27.1 \%$ | $45.4 \%$ | $27.5 \%$ | $100.0 \%$ |  |
| 2015 | $27.4 \%$ | $42.5 \%$ | $30.0 \%$ | $100.0 \%$ |  |
| 2016 | $25.7 \%$ | $43.7 \%$ | $30.6 \%$ | $100.0 \%$ |  |

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

## Applicant Attorney Expense Paid - Private Insurers

| Calendar <br> Year | Applicant Attorney <br> Amounts paid <br> (in \$millions) | Incurred Losses <br> (in \$milllions) | Applicant Attorney Expenses <br> Paid as a Percent of <br> Incurred Losses |
| :---: | :---: | :---: | :---: |
| 2003 | 197 | 10,423 | $1.9 \%$ |
| 2004 | 284 | 9,073 | $3.1 \%$ |
| 2005 | 255 | 7,559 | $3.4 \%$ |
| 2006 | 219 | 5,540 | $3.9 \%$ |
| 2007 | 181 | 5,444 | $3.3 \%$ |
| 2008 | 144 | 5,711 | $2.5 \%$ |
| 2009 | 220 | 5,700 | $3.9 \%$ |
| 2010 | 266 | 6,260 | $4.3 \%$ |
| 2011 | 271 | 7,500 | $3.6 \%$ |
| 2012 | 330 | 8,532 | $3.9 \%$ |
| 2013 | 345 | 9,510 | $3.6 \%$ |
| 2014 | 307 | 9,632 | $3.2 \%$ |
| 2015 | 302 | 9,429 | $3.2 \%$ |
| 2016 | 341 | 9,621 | $3.5 \%$ |

Source: WCIRB expense calls and quarterly calls for experience

## Average Expense Costs per Represented PD Claim

Private Insurers Only

| Type of Expense | Northern California |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | AY2011 | AY2012 | AY2013 | AY2014 |
| Defense Expense | 4,950 | 4,655 | 4,581 | 5,134 |
| Applicant Attorney Expense | 3,345 | 2,585 | 3,080 | 3,275 |
| ALAE | 7,765 | 7,503 | 8,212 | 7,803 |
|  | Southern California |  |  |  |
|  | AY2011 | AY2012 | AY2013 | AY2014 |
| Defense Expense | 5,757 | 5,466 | 5,398 | 4,992 |
| Applicant Attorney Expense | 2,766 | 2,978 | 3,124 | 3,311 |
| ALAE | 8,387 | 8,225 | 8,521 | 7,038 |

## Second Survey Level

| Type of Expense | Northern California |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { AY2010 }}{}$ | $\frac{\text { AY2011 }}{}$ | $\frac{\text { AY2012 }}{}$ | $\frac{\text { AY2013 }}{}$ |  |
| Defense Expense | 6,482 | 6,398 | 6,253 | 6,093 |  |
| Applicant Attorney Expense | 4,201 | 5,129 | 3,761 | 4,512 |  |
| ALAE | 8,571 | 9,585 | 10,333 | 9,628 |  |
|  |  | Southern California |  |  |  |
|  | $\underline{\text { AY2010 }}$ | $\underline{\text { AY2011 }}$ | $\underline{\text { AY2012 }}$ | $\underline{\text { AY2013 }}$ |  |
| Defense Expense | 7,329 | 6,905 | 6,871 | 6,339 |  |
| Applicant Attorney Expense | 4,028 | 3,923 | 4,295 | 3,875 |  |
| ALAE | 9,422 | 9,765 | 10,347 | 9,323 |  |

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.

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

| All Claims |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Year | Number of Med-Legal Reports by Service Year |  |  |  |  |  |  |  |
|  | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | 56,873 | 15,773 | 27,421 | 100,067 | --- | --- | --- | --- |
| 2014 | 63,068 | 17,073 | 27,708 | 107,848 | 10.9\% | 8.2\% | 1.0\% | 7.8\% |
| 2015 | 63,740 | 16,762 | 27,173 | 107,675 | 1.1\% | -1.8\% | -1.9\% | -0.2\% |
| 2016 | 70,314 | 20,881 | 28,292 | 119,487 | 10.3\% | 24.6\% | 4.1\% | 11.0\% |
| 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 | 6.4\% | 7.3\% | 0.3\% | 4.8\% |
| 2015 | 0.21 | 0.24 | 0.25 | 0.22 | -4.1\% | 6.5\% | -1.2\% | -2.0\% |
| 2016 | 0.23 | 0.29 | 0.25 | 0.24 | 8.3\% | 22.3\% | 2.2\% | 8.9\% |
| Service <br> Year | Med-Legal Payment per report by Service Year on All Claims ${ }^{[2]}$ |  |  |  |  |  |  |  |
|  | Southern | Central | Northern | All | Southern | Central | Northern | All |
| 2013 | \$1,690 | \$1,065 | \$1,305 | \$1,486 | --- | --- | --- | --- |
| 2014 | \$1,860 | \$1,222 | \$1,383 | \$1,636 | 10.0\% | 14.8\% | 6.0\% | 10.1\% |
| 2015 | \$1,823 | \$1,284 | \$1,368 | \$1,624 | -2.0\% | 5.1\% | -1.1\% | -0.7\% |
| 2016 | \$1,878 | \$1,244 | \$1,354 | \$1,643 | 3.0\% | -3.1\% | -1.0\% | 1.2\% |

${ }^{[1]}$ 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).

## Item AC17-08-02 <br> 1/1/2018 Filing - Loss Adjustment Expense Experience Review

Staff has developed the indicated policy year 2018 ratio of loss adjustment expense (LAE) to loss based on calendar year unallocated loss adjustment expense (ULAE) experience through calendar year 2016, accident year allocated loss adjustment expense (ALAE) experience as of March 31, 2017, and projection methodologies generally consistent with those reflected in the WCIRB's January 1, 2017 and July 1, 2017 Pure Premium Rate Filings. The indicated policy year 2018 ULAE and ALAE projections, including projections for the cost of medical cost containment programs (MCCP), are summarized separately below.

## 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 TPAs or other adjustments to countrywide reported ULAE costs that ultimately are apportioned to California.

The approach to derive the adjusted calendar year California paid ULAE for ratemaking purposes, as reflected in the January 1, 2017 and July 1, 2017 Pure Premium Rate Filings, 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 TPAs 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 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 countrywide paid losses.

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 TPAs. 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 paid losses. Paid losses may not always be the most appropriate measure to apportion countrywide ULAE to California, and some insurers may have a more accurate method to derive the California ULAE. As a result, for these insurers, the California paid ULAE as reported on the WCIRB's Expense Call was used in deriving the ratios of California paid ULAE to paid losses 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 2015 and 2016 ULAE has been computed as described above. 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, the ULAE ratios shown on Exhibit 1 for national insurers are

[^15]generally closer to the average of those for other private insurers in 2013 through 2016 than in prior years. Also as discussed at prior meetings, ULAE ratios for State Compensation Insurance Fund (State Fund) are much higher than those of other insurers.

Exhibits 2.1 and 2.2 show the average calendar paid ULAE per open indemnity claim for all insurers and private insurers, respectively. The ULAE severities for calendar years 2015 and 2016 shown on Exhibit 2 were computed based on the approach described above using the new Expense Call information and, as a result, may not be comparable to the ULAE severities for prior years which, except for 2013 and 2014 which reflect partial adjustments to reported ULAE, are based solely on the California ULAE reported by insurers.

Exhibits 3.1 through 3.5 show the policy year 2018 projection of ULAE to loss based on the relationship of calendar year statewide paid ULAE to the number of indemnity claims open at the beginning of the calendar year. This methodology assumes that ULAE paid is a function of the volume of claims handled by claims adjusters. Exhibit 4 shows an analogous projection 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. In the January 1, 2017 and July 1, 2017 Pure Premium Rate Filings, inasmuch as the ULAE data derived from the new Expense Call information was only available for calendar year 2015, the projected ULAE per open indemnity claim was based on the ULAE severity for the latest calendar year only. ULAE based on the new Expense Call information is now available for calendar years 2015 and 2016. As a result, consistent with prior pure premium rate filings, the ULAE projections shown in Exhibits 3.5 and 4 are based on the average of ULAE severities from the latest two calendar years. As in the last several pure premium rate filings, the projected ULAE severity trend was based on the UCLA projected annual growth in California wage levels.

Exhibit 5 shows the projection of policy year 2018 ULAE based on the relationship of statewide calendar ULAE paid to statewide calendar year paid losses. Exhibit 6 shows an analogous projection 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 projections shown in Exhibits 3 and 4, the projected ratios of ULAE to losses shown in Exhibits 5 and 6 are based on the average of calendar years 2015 and 2016.

As in the January 1, 2017 and July 1, 2017 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 4 and 6). (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 policy year 2018 ULAE projection based on this approach is $10.3 \% .^{2}$

Table 1 shows the projected ratio of ULAE to losses based on the WCIRB's current methodology applied to statewide data as well as the approach using statewide data and private insurer average ULAE. Table 1 also shows alternative ULAE projections based on (a) the WCIRB's current methodology but projected based on calendar year 2016 only as shown in Exhibits 7 through 10, (b) the projection of ULAE paid to a weighted number of indemnity claims as shown in Exhibits 11 and 12, and (c) projections based on recent calendar year ratios of paid ULAE to paid losses.

[^16]Table 1: Projections of Policy Year 2018 ULAE to Loss

| ULAE Projection Method | Statewide w/ <br> Statewide <br> ULAE Ratio | Private Insurer <br> Average ULAE |
| :--- | :---: | :---: |
| Current WCIRB Methodology <br> Paid ULAE per Open Indemnity Claim Applied to <br> the Latest Two Years | $13.8 \%$ | $11.3 \%$ |
| Paid ULAE to Paid Losses Applied to the Latest <br> Two Years <br> Average of Open Indemnity Claim-Based and <br> Paid Loss-Based Projections | $11.7 \%$ | $9.2 \%$ |
| Alternative Methodologies | $12.8 \%$ | $\mathbf{1 0 . 3 \%}$ |
| Paid ULAE per Open Indemnity Claim Applied <br> to the Latest Year Only | $13.8 \%$ | $11.4 \%$ |
| Paid ULAE to Paid Losses Applied to the Latest <br> Year Only | $11.9 \%$ | $9.4 \%$ |
| Paid ULAE per Weighted Open Indemnity Claim <br> Applied to the Latest Two Years | $13.7 \%$ | $10.7 \%$ |
| Latest Two Calendar Year Paid ULAE to Loss <br> Ratios <br> Latest Calendar Year Paid ULAE to Loss Ratio | $14.1 \%$ | $14.3 \%$ |

## 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 average ALAE per indemnity claim. (ALAE amounts and projections exclude MCCP costs, which are discussed separately below.)

Beginning in 2016, the cost of independent medical review (IMR) and independent bill review (IBR) is no longer reported in MCCP as a component of ALAE but is still included in reported ALAE. As a result, ALAE excluding MCCP costs paid in 2016 and later include the cost of IMR and IBR while ALAE excluding MCCP costs paid prior to 2016 do not include IMR and IBR costs (the converse is true for MCCP costs). Since this change in reporting requirements applies to IMRs and IBRs in 2016 and later on any accident years, if no adjustment is made, paid ALAE and MCCP cost development patterns may be distorted. Staff is in the process of reviewing information on IMR and IBR costs in order to adjust the ALAE and MCCP payment patterns for the change in IMR and IBR reporting. More information on this potential adjustment will be presented at the meeting.

Exhibit 13 shows private insurer average paid ALAE per reported indemnity claim by accident year. Exhibits 14.1 and 14.2 show statewide and private insurer annual ALAE severity growth percentages based on the estimated ultimate ALAE per indemnity claim, while Exhibit 15 shows private insurer annual ALAE growth percentages based on ratios of incremental calendar year paid ALAE per indemnity claims inventory.

Exhibits 16.1 through 16.4 show the ALAE projection, excluding MCCP costs, on a statewide basis. Exhibit 17 shows the ALAE projection, excluding MCCP costs, based on statewide claim and loss projections and private insurer average ALAE per indemnity claim. The projections in both Exhibits 16.4 and 17 were computed using a $4.0 \%$ ALAE severity trend which, as in the last several pure premium rate
filings, was selected based on averaging the shorter-term (5-year) and longer-term (post-2005) average private insurer ALAE severity growth rates shown in Exhibits 14.2 and 15. ${ }^{3}$

As shown in Exhibit 17, the preliminary projected ratio of ALAE (excluding MCCP) to loss based on statewide data and private insurer average ALAE costs (the methodology reflected in the January 1, 2017 and July 1, 2017 Pure Premium Rate Filings) is $18.6 \% .{ }^{4}$ This projection as well as the ALAE (excluding MCCP) projection using statewide ALAE experience and the WCIRB's current methodology are shown in Table 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 WCIRB's current ALAE projection methodology. Specifically, ALAE projections based on the following methodologies have been included:

1. Projected Ultimate ALAE per Indemnity Claim and Future Number of Indemnity Claims Projection Based on the Latest Year - Exhibits 18 (statewide) and 19 (statewide using private insurer ALAE)
2. Latest Year Paid ALAE Ratio Development Compared to Losses - Projection Based on the Average of the Latest Two Years - Exhibits 20 (statewide) and 21 (statewide using private insurer ALAE).
3. Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses - Projection Based on the Average of the Latest Two Years - Exhibits 22.1 and 22.2 (statewide) and 23 (statewide using private insurer ALAE).

The policy year 2018 ALAE projections derived based on each of the alternative ALAE projection methodologies are shown in the lower portion of Table 2.

Table 2: Projections of Policy Year 2018 ALAE (Excluding MCCP) to Loss

| ALAE Projection Method | Statewide <br> ALAE Ratio | Statewide w/ <br> Private Insurer <br> Average ALAE |
| :--- | :---: | :---: |
| Current WCIRB Methodology <br> Projected Ultimate ALAE per Indemnity Claim - Trend <br> Applied to the Latest Two Years | $18.1 \%$ | $\mathbf{1 8 . 6 \%}$ |
| Alternative Methodologies <br> Projected Ultimate ALAE per Indemnity Claim - Trend <br> Applied to the Latest Year <br> Latest Year Paid ALAE Ratio Development Compared <br> to Losses - Projection Based on Latest Two Years <br> Latest Year Paid ALAE to Paid Indemnity <br> Development Compared to Losses - Projection <br> Based on Latest Two Years | $18.5 \%$ | $18.9 \%$ |

[^17]
## ALAE Projection - MCCP Costs

As in the January 1, 2017 and July 1, 2017 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.

As discussed for ALAE excluding MCCP costs above, MCCP costs paid prior to 2016 include the cost of IMR and IBR while MCCP costs paid in 2016 and later do not include IMR and IBR costs. If no adjustment is made, paid MCCP cost development patterns could be distorted. Staff is reviewing potential adjustments to paid MCCP costs to reflect MCCP on a consistent basis. More information on this potential adjustment will be presented at the meeting.

Exhibit 24 shows statewide average paid MCCP per reported indemnity claim by accident year. Exhibit 25 shows statewide and private insurer annual MCCP severity growth percentages based on ratios of calendar year paid MCCP costs per indemnity claims inventory. (Calendar year MCCP costs for 2013 through 2015 shown in Exhibit 25 have been adjusted to exclude estimated fees paid for IMR and IBR by calendar year.) Exhibit 26 shows statewide annual MCCP severity growth percentages based on estimated accident year ultimate MCCP costs per indemnity claim.

Exhibits 27.1 and 27.2 show the projection of MCCP costs based on statewide data. Projected MCCP development through 63 months is based on the latest year paid MCCP age-to-age factor, while projected MCCP development after 63 months is based on the selected paid medical 63 -to-ultimate development factor. ${ }^{5}$ Exhibit 27.2 shows the projected policy year 2018 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. The MCCP severity trend based on the approximate average rates of growth in (a) statewide calendar year MCCP per indemnity claims inventory from 2009 through 2016 (see Exhibit 25) and (b) estimated ultimate accident year MCCP costs per indemnity claim from 2011 through 2016 (see Exhibit 26) (the methodology used in the January 1, 2017 and July 1, 2017 Pure Premium Rate Filings) is $-1.0 \%$. However, given the concerns with the impact of the change in IMR and IBR fee reporting discussed above, the MCCP cost projection shown on Exhibit 27.2 is based on the same severity trend of 0\% reflected in the July 1, 2017 Pure Premium Rate Filing. The preliminary projected ratio of MCCP to loss based on this methodology is $4.0 \% .^{6}$ This projection is also shown in Table 3.

Exhibit 28 shows an alternative MCCP projection based on trending from the latest year only. Exhibit 29 shows an alternative MCCP projection which bases the projected MCCP severity trend solely on the average annual growth rate in calendar year paid MCCP costs per indemnity claims inventory (see Exhibit 25). These projections are also shown in Table 3.

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Table 3: Projections of Policy Year 2018 MCCP to Loss

| MCCP Projection Method | Statewide <br> MCCP Ratio |
| :--- | :---: |
| Current WCIRB Methodology <br> Projected Ultimate MCCP per Indemnity Claim - Trend Applied to the <br> Latest Two Years | $\mathbf{4 . 0 \%}$ |
| Alternative Methodologies <br> Projected Ultimate MCCP per Indemnity Claim - Trend Applied to the <br> Latest Year | $3.9 \%$ |
| Projected Ultimate MCCP per Indemnity Claim - Trend Based on CY <br> MCCP per Open Indemnity Claim and Applied to the Latest Two <br> Years | $4.5 \%$ |

The total preliminary ratio of LAE to losses for policy year 2018 based on data evaluated as of March 31, 2017 and the projection methodologies reflected in July 1, 2017 Pure Premium Rate Filing is $32.9 \%{ }^{7}$

[^19]
## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 3.6\% | --- | --- | 10.4\% | 13.9\% |
| 2004 | 4.2\% | --- | --- | 10.1\% | 13.4\% |
| 2005 | 4.8\% | --- | --- | 10.5\% | 13.6\% |
| 2006 | 5.1\% | --- | --- | 11.9\% | 15.1\% |
| 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\% | 17.9\% | 22.6\% | 20.5\% | 22.0\% |
| 2016 | 11.0\% | 17.8\% | 22.3\% | 20.4\% | 21.6\% |

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 |  | 21.8\% | 16.3\% | 8.5\% ${ }^{[3]}$ | $11.7 \%{ }^{[3]}$ | $9.4 \%{ }^{[3]}$ |
| 2014 |  | 28.8\% | 14.7\% | 7.7\% ${ }^{[3]}$ | $11.6 \%{ }^{[3]}$ | 8.6\% ${ }^{[3]}$ |
| 2015 | [4] | 35.1\% | 14.8\% | 10.2\% | 13.9\% | 10.9\% |
| 2016 | [4] | 37.6\% | 14.0\% | 10.8\% | 14.3\% | 11.3\% |

## 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 | 27.7\% | 31.7\% | 28.5\% ${ }^{[3]}$ | 28.6\% ${ }^{[3]}$ | 28.9\% ${ }^{[3]}$ |
| 2014 | 37.2\% | 32.5\% | 29.0\% ${ }^{[3]}$ | $30.6 \%{ }^{[3]}$ | $29.4 \%{ }^{[3]}$ |
| 2015 | 45.2\% | 32.7\% | 32.9\% | 34.4\% | 32.8\% |
| 2016 | 48.6\% | 31.9\% | 33.1\% | 34.7\% | 32.9\% |

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 the 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.

Source: WCIRB expense calls and quarterly calls for experience

## Calendar Year ULAE Paid Per Open Indemnity Claim - Statewide

| Calendar Year | ULAE <br> Paid (in Millions) <br> (a) | Number of Open Indemnity Claims at Beginning of the Year <br> (b) | Number of Indemnity Claims Reported During Year | ULAE Paid Per Open Indemnity Claim | Annual Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | (c) | (d) | (e) |
| 2000 | -- | 267,027 | 161,741 | -- | --- |
| 2001 | -- | 251,668 | 203,146 | -- | --- |
| 2002 | -- | 347,829 | 226,429 | -- | --- |
| 2003 | -- | 385,374 | 226,658 | -- | --- |
| 2004 | -- | 452,987 | 200,468 | -- | --- |
| 2005 | -- | 470,466 | 162,321 | -- | --- |
| 2006 | -- | 442,927 | 152,759 | -- | --- |
| 2007 | -- | 397,102 | 121,257 | -- | --- |
| 2008 | -- | 397,117 | 116,404 | -- | --- |
| 2009 | -- | 373,598 | 109,857 | -- | --- |
| 2010 | 844 | 360,624 | 117,135 | 2,339 | --- |
| 2011 | 847 | 360,339 | 122,817 | 2,352 | 0.5\% |
| 2012 | 792 | 360,391 | 127,623 | 2,199 | -6.5\% |
| 2013 (f) | 982 | 365,706 | 138,294 | 2,685 |  |
| 2014 (f) | 950 | 366,420 | 143,220 | 2,592 | -3.5\% |
| 2015 (g) | 1,131 | 367,816 | 145,949 | 3,074 |  |
| 2016 (g) | 1,173 | 365,874 | 148,005 | 3,207 | 4.3\% |

## 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 insurers that submitted both the ULAE and claim count data for that calendar year. Therefore, each calendar year may contain a different mix of insurers. Calendar year 2012 ULAE paid amount shown excludes the impact of a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.
(b), (c) Based on WCIRB accident year experience calls. Column (c) is for information only.
(d) $\quad(\mathrm{a}) /(\mathrm{b}) \times 1,000,000$.
(f) 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.
(g) Reflects adjustments for ULAE costs related to deductible policies and third party administrators based on the 2015 and 2016 Expense Calls.

## Calendar Year ULAE Paid Per Open Indemnity Claim - Private Insurers



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.
(f) (a)/(b) $\times 1,000,000$.

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.
(g) Reflects adjustments for ULAE costs related to deductible policies and third party administrators based on the 2015 and 2016 Expense Calls.

## Reported Indemnity Claim Count Development - Statewide

| Accident |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 |
| 1995 |  |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.004 |
| 1996 |  |  |  |  |  |  |  |  |  |  | 1.001 | 1.001 | 1.001 | 1.000 |
| 1997 |  |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |
| 1998 |  |  |  |  |  |  |  |  | 1.001 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 |
| 1999 |  |  |  |  |  |  |  | 1.001 | 1.002 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2000 |  |  |  |  |  |  | 1.000 | 0.998 | 1.000 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |
| 2001 |  |  |  |  |  | 0.999 | 0.998 | 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 |
| 2003 |  |  |  | 0.999 | 1.008 | 0.998 | 0.999 | 0.999 | 1.000 | 0.999 | 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 |  |  |
| 2005 |  | 1.007 | 1.004 | 1.000 | 1.001 | 1.001 | 0.999 | 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 | 1.001 | 1.000 |  |  |  |  |
| 2007 | 1.125 | 1.015 | 1.006 | 1.004 | 1.002 | 1.000 | 1.001 | 1.001 | 1.000 |  |  |  |  |  |
| 2008 | 1.153 | 1.023 | 1.011 | 1.005 | 1.003 | 1.001 | 1.001 | 1.001 |  |  |  |  |  |  |
| 2009 | 1.194 | 1.029 | 1.011 | 1.006 | 1.003 | 1.002 | 1.001 |  |  |  |  |  |  |  |
| 2010 | 1.220 | 1.030 | 1.011 | 1.006 | 1.004 | 1.002 |  |  |  |  |  |  |  |  |
| 2011 | 1.230 | 1.033 | 1.014 | 1.008 | 1.003 |  |  |  |  |  |  |  |  |  |
| 2012 | 1.241 | 1.035 | 1.014 | 1.006 |  |  |  |  |  |  |  |  |  |  |
| 2013 | 1.240 | 1.032 | 1.012 |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 1.242 | 1.032 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 1.246 |  |  |  |  |  |  |  |  |  |  |  |  |  |


| I. Age-to-Age (Latest Year) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1.246 | 1.032 | 1.012 | 1.006 | 1.003 | 1.002 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.321 | 1.060 | 1.028 | 1.016 | 1.009 | 1.007 | 1.005 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 | 1.002 | 1.002 |
| III. Estimated Percent of Ultimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 75.7\% | 94.3\% | 97.3\% | 98.4\% | 99.1\% | 99.3\% | 99.5\% | 99.7\% | 99.8\% | 99.9\% | 99.9\% | 99.9\% | 99.8\% | 99.8\% |
| Accident Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | 180-192 | 192-204 | 204-216 | 216-228 | 228-240 | 240-252 | 252-264 | 264-276 | 276-288 | 288-300 | 300-312 | 312-324 | 324-336 |  |
| 1989 |  |  |  | 1.001 | 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 |  |  |
| 1991 |  | 1.001 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |
| 1992 | 1.001 | 0.999 | 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 |  |  |  |  |  |
| 1994 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |
| 1995 | 1.001 | 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 |  |  |  |  |  |  |  |  |
| 1997 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |
| 1998 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.001 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | 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 |  |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| III. Estimated Percent of Ultimate Indemnity Claims Reported |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99.8\% | 99.8\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: WCIRB quarterly calls for experience

Ultimate Indemnity Claim Settlement Ratios - Statewide


| Accident |  |  |  |  |  | Evaluated as of (in months): |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{180}$ | 192 | $\underline{204}$ | $\underline{216}$ | $\underline{228}$ | $\underline{240}$ | $\underline{252}$ | $\underline{264}$ | $\underline{276}$ | $\underline{288}$ | 300 | 312 | 324 | 336 |
| 1989 |  |  |  |  | 98.2\% | 98.5\% | 99.4\% | 99.4\% | 99.5\% | 99.5\% | 99.6\% | 99.6\% | 99.5\% | 99.6\% |
| 1990 |  |  |  | 97.8\% | 98.1\% | 99.0\% | 99.0\% | 99.1\% | 99.2\% | 99.3\% | 99.3\% | 99.3\% | 99.4\% |  |
| 1991 |  |  | 97.0\% | 97.2\% | 98.8\% | 98.8\% | 98.9\% | 98.9\% | 99.0\% | 99.1\% | 99.1\% | 99.2\% |  |  |
| 1992 |  | 96.9\% | 97.0\% | 98.7\% | 98.7\% | 98.8\% | 98.8\% | 98.9\% | 98.9\% | 99.0\% | 99.1\% |  |  |  |
| 1993 | 96.7\% | 97.1\% | 98.5\% | 98.6\% | 98.7\% | 98.7\% | 98.8\% | 98.9\% | 98.9\% | 99.0\% |  |  |  |  |
| 1994 | 96.8\% | 98.4\% | 98.5\% | 98.6\% | 98.5\% | 98.6\% | 98.7\% | 98.6\% | 98.7\% |  |  |  |  |  |
| 1995 | 97.8\% | 98.1\% | 98.2\% | 97.8\% | 98.0\% | 98.1\% | 98.1\% | 98.2\% |  |  |  |  |  |  |
| 1996 | 97.6\% | 97.8\% | 97.3\% | 97.4\% | 97.6\% | 97.6\% | 97.7\% |  |  |  |  |  |  |  |
| 1997 | 97.6\% | 97.2\% | 97.5\% | 97.6\% | 97.6\% | 97.8\% |  |  |  |  |  |  |  |  |
| 1998 | 97.4\% | 97.7\% | 97.8\% | 97.8\% | 97.9\% |  |  |  |  |  |  |  |  |  |
| 1999 | 97.9\% | 97.9\% | 97.8\% | 98.0\% |  |  |  |  |  |  |  |  |  |  |
| 2000 | 97.6\% | 97.4\% | 97.7\% |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | 96.8\% | 97.2\% |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 | 97.2\% |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: WCIRB quarterly calls for experience

## Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide

As of December 31, 2016

| Selected Indemnity Claim Reporting and Closure Patterns - As of 12/31/2016 |  |  |  | Cumulative Indemnity Claim Counts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent | Percent | Percent |  | Open | Reported | Open | Estimated | Annual |
| Year | Reported | Closed | Open | AY | Year | @12/31/16 | @12/31/16 | Ultimate(d) | Change |
|  | (a) | (b) | (c) | (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | 75.7\% | 21.8\% | 53.9\% | 1989 | 28 | 222,623 | 941 | 222,623 |  |
| 2 | 94.3\% | 48.1\% | 46.2\% | 1990 | 27 | 248,812 | 1,539 | 248,843 |  |
| 3 | 97.3\% | 64.3\% | 33.0\% | 1991 | 26 | 249,723 | 1,995 | 249,793 |  |
| 4 | 98.4\% | 75.4\% | 23.0\% | 1992 | 25 | 198,431 | 1,730 | 198,525 |  |
| 5 | 99.0\% | 82.1\% | 17.0\% | 1993 | 24 | 156,120 | 1,517 | 156,211 |  |
| 6 | 99.3\% | 86.3\% | 13.0\% | 1994 | 23 | 143,669 | 1,783 | 143,762 |  |
| 7 | 99.5\% | 89.6\% | 9.9\% | 1995 | 22 | 135,141 | 2,332 | 135,257 |  |
| 8 | 99.7\% | 91.4\% | 8.2\% | 1996 | 21 | 133,098 | 2,941 | 133,246 |  |
| 9 | 99.8\% | 93.5\% | 6.4\% | 1997 | 20 | 137,253 | 2,896 | 137,427 |  |
| 10 | 99.9\% | 94.7\% | 5.2\% | 1998 | 19 | 147,438 | 2,888 | 147,646 |  |
| 11 | 99.9\% | 95.4\% | 4.5\% | 1999 | 18 | 148,634 | 2,753 | 148,831 |  |
| 12 | 99.8\% | 96.2\% | 3.6\% | 2000 | 17 | 161,949 | 3,454 | 162,203 |  |
| 13 | 99.8\% | 96.6\% | 3.2\% | 2001 | 16 | 185,601 | 4,873 | 185,932 |  |
| 14 | 99.8\% | 96.8\% | 3.0\% | 2002 | 15 | 194,674 | 5,134 | 195,036 |  |
| 15 | 99.8\% | 97.2\% | 2.6\% | 2003 | 14 | 184,204 | 5,464 | 184,555 |  |
| 16 | 99.8\% | 97.2\% | 2.6\% | 2004 | 13 | 158,939 | 5,096 | 159,226 |  |
| 17 | 99.8\% | 97.7\% | 2.1\% | 2005 | 12 | 139,585 | 5,042 | 139,809 |  |
| 18 | 99.9\% | 98.0\% | 1.8\% | 2006 | 11 | 133,295 | 5,941 | 133,451 |  |
| 19 | 99.9\% | 97.9\% | 2.0\% | 2007 | 10 | 130,246 | 6,793 | 130,414 |  |
| 20 | 99.9\% | 97.8\% | 2.1\% | 2008 | 9 | 122,941 | 7,829 | 123,153 |  |
| 21 | 99.9\% | 97.7\% | 2.2\% | 2009 | 8 | 113,729 | 9,399 | 114,092 |  |
| 22 | 99.9\% | 98.2\% | 1.7\% | 2010 | 7 | 118,465 | 11,794 | 119,022 |  |
| 23 | 99.9\% | 98.7\% | 1.2\% | 2011 | 6 | 120,605 | 15,754 | 121,451 |  |
| 24 | 99.9\% | 99.0\% | 1.0\% | 2012 | 5 | 127,486 | 21,825 | 128,726 |  |
| 25 | 100.0\% | 99.1\% | 0.9\% | 2013 | 4 | 134,896 | 31,548 | 137,079 |  |
| 26 | 100.0\% | 99.2\% | 0.8\% | 2014 | 3 | 138,276 | 46,899 | 142,132 |  |
| 27 | 100.0\% | 99.4\% | 0.6\% | 2015 | 2 | 138,714 | 67,965 | 147,111 |  |
| 28 | 100.0\% | 99.6\% | 0.4\% | 2016 | 1 | 112,760 | 80,298 | 148,954 |  |
|  |  |  |  |  |  |  |  | Projected(e) |  |
|  |  |  |  | 2017 |  |  |  | 146,661 | -1.5\% |
|  |  |  |  | 2018 |  |  |  | 144,094 | -1.8\% |
|  |  |  |  | 2019 |  |  |  | 142,163 | -1.3\% |
|  |  |  |  | Total |  | 4,337,307 | 358,423 |  |  |

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, 2016 (column (3)) and selected reporting pattern (column (a)).
(e) Estimated based on projected frequency trends for accident years 2017 to 2019. 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, 2016

|  | Estimated Number of Reported Indemnity Claims(a) |  |  | Estimated Number of Open Indemnity Claims(b) |  |  | Estimated Number of Indemnity Claims Opened During(c) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AY | @12/31/17 | @12/31/18 | @12/31/19 | @12/31/17 | @12/31/18 | @12/31/19 | $\underline{2017}$ | $\underline{\underline{2018}}$ | $\underline{2019}$ |
| 1989 | 222,623 | 222,623 | 222,623 | 942 | 942 | 942 | 0 | 0 | 0 |
| 1990 | 248,843 | 248,843 | 248,843 | 1,052 | 1,052 | 1,052 | 31 | 0 | 0 |
| 1991 | 249,761 | 249,793 | 249,793 | 1,545 | 1,056 | 1,056 | 38 | 31 | 0 |
| 1992 | 198,470 | 198,500 | 198,525 | 1,586 | 1,228 | 840 | 39 | 30 | 25 |
| 1993 | 156,137 | 156,167 | 156,191 | 1,361 | 1,248 | 966 | 17 | 31 | 24 |
| 1994 | 143,678 | 143,693 | 143,722 | 1,396 | 1,253 | 1,148 | 9 | 15 | 28 |
| 1995 | 135,170 | 135,179 | 135,193 | 1,678 | 1,314 | 1,179 | 29 | 9 | 14 |
| 1996 | 133,131 | 133,160 | 133,169 | 2,297 | 1,653 | 1,294 | 33 | 29 | 9 |
| 1997 | 137,275 | 137,309 | 137,339 | 3,033 | 2,369 | 1,705 | 22 | 35 | 30 |
| 1998 | 147,458 | 147,482 | 147,519 | 3,111 | 3,259 | 2,545 | 20 | 23 | 37 |
| 1999 | 148,622 | 148,642 | 148,666 | 2,911 | 3,136 | 3,285 | -12 | 21 | 23 |
| 2000 | 161,988 | 161,975 | 161,997 | 3,000 | 3,173 | 3,418 | 39 | -13 | 22 |
| 2001 | 185,640 | 185,685 | 185,670 | 3,959 | 3,439 | 3,637 | 39 | 45 | -15 |
| 2002 | 194,690 | 194,731 | 194,778 | 5,112 | 4,153 | 3,607 | 16 | 41 | 47 |
| 2003 | 184,212 | 184,226 | 184,265 | 4,858 | 4,837 | 3,930 | 8 | 15 | 39 |
| 2004 | 158,923 | 158,930 | 158,943 | 4,714 | 4,191 | 4,173 | -16 | 7 | 13 |
| 2005 | 139,557 | 139,543 | 139,549 | 4,475 | 4,140 | 3,680 | -28 | -14 | 6 |
| 2006 | 133,237 | 133,210 | 133,197 | 4,822 | 4,272 | 3,951 | -58 | -27 | -13 |
| 2007 | 130,262 | 130,206 | 130,179 | 5,834 | 4,712 | 4,175 | 16 | -57 | -26 |
| 2008 | 122,994 | 123,010 | 122,956 | 6,411 | 5,509 | 4,450 | 53 | 15 | -53 |
| 2009 | 113,896 | 113,945 | 113,959 | 7,253 | 5,940 | 5,104 | 167 | 50 | 14 |
| 2010 | 118,642 | 118,816 | 118,868 | 9,805 | 7,566 | 6,196 | 177 | 174 | 52 |
| 2011 | 120,884 | 121,065 | 121,242 | 12,035 | 10,005 | 7,720 | 279 | 181 | 178 |
| 2012 | 127,828 | 128,124 | 128,315 | 16,697 | 12,756 | 10,604 | 342 | 295 | 192 |
| 2013 | 135,759 | 136,123 | 136,438 | 23,242 | 17,781 | 13,584 | 863 | 365 | 314 |
| 2014 | 139,869 | 140,763 | 141,141 | 32,711 | 24,098 | 18,436 | 1,593 | 894 | 378 |
| 2015 | 143,121 | 144,769 | 145,695 | 48,543 | 33,857 | 24,943 | 4,407 | 1,648 | 926 |
| 2016 | 140,452 | 144,914 | 146,583 | 68,810 | 49,151 | 34,282 | 27,692 | 4,462 | 1,669 |
| Projected |  |  |  |  |  |  |  |  |  |
| 2017 | 111,023 | 138,289 | 142,682 | 79,061 | 67,751 | 48,394 | 111,023 | 27,266 | 4,393 |
| 2018 |  | 109,081 | 135,869 |  | 77,678 | 66,565 |  | 109,081 | 26,788 |
| 2019 |  |  | 107,619 |  |  | 76,637 |  |  | 107,619 |
| Total | 4,484,146 | 4,628,796 | 4,771,528 | 362,256 | 363,518 | 363,498 | 146,839 | 144,651 | 142,732 |
| (d) Open Claims at Beginning of the Year: |  |  |  |  |  |  | 358,423 | 362,256 | 363,518 |
| (e) "Weighted" Open Claims: |  |  |  |  |  |  | 652,100 | 651,558 | 648,982 |

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 2017 is the total number of indemnity claims from all accident years that were open as of December 31, 2016 (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 Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Calendar Year | Number of Open Indemnity Claims at Beginning of the Year | ULAE Paid <br> Per Open Indemnity Claim | ULAE <br> Paid (\$000) |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |
| 2000 | 267,027 | --- | --- |
| 2001 | 251,668 | --- | --- |
| 2002 | 347,829 | --- | --- |
| 2003 | 385,374 | --- | --- |
| 2004 | 452,987 | --- | --- |
| 2005 | 470,466 | --- | --- |
| 2006 | 442,927 | --- | --- |
| 2007 | 397,102 | --- | --- |
| 2008 | 397,117 | --- | --- |
| 2009 | 373,598 | --- | --- |
| 2010 | 360,624 | 2,339 | 843,664 |
| 2011 | 360,339 | 2,352 | 847,365 |
| 2012 | 360,391 | 2,199 | 792,426 |
| 2013 | 365,706 | 2,685 | 981,911 |
| 2014 | 366,420 | 2,592 | 949,860 |
| 2015 | 367,816 | 3,074 | 1,130,776 |
| 2016 | 365,874 | 3,207 | 1,173,458 |
| Projected |  |  |  |
| 2017 | 358,423 | 3,320 | 1,189,834 |
| 2018 | 362,256 | 3,460 | 1,253,371 |
| 2019 | 363,518 | 3,618 | 1,315,300 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,473,761 |
| (e) Calendar Year 2016 Earned Premium (\$000): |  |  | 17,956,139 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.625 |
| (g) Premium Adjustment Factor for Calendar Year 2016: |  |  | 0.955 |
| (h) Projected Losses (\$000): (e) $\times(\mathrm{f}) \times(\mathrm{g})$ |  |  | 10,717,570 |
| (i) Projected Ratio of ULAE to Losses: (d)/(h) |  |  | 13.8\% |

Notes:
(a) Calendar years 2000 to 2016 are from column (b) of Exhibit 2.1, and 2017 to 2019 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2016 are from column (d) of Exhibit 2.1. Calendar years 2017 to 2019 are projected based on applying the California average annual wage level changes of $3.2 \%, 4.1 \%, 4.2 \%$ and $4.6 \%$ for 2016 to 2019 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per open indemnity claim from averaging 2016 and 2016.
(c) Column (a) $x$ column (b).
(d) Average of calendar years 2018 and 2019, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2017 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 5.2 of Item AC17-06-01.

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, 2018 and December 31, 2018

| Calendar Year | Number of Open Indemnity Claims at Beginning of the Year | ULAE Paid <br> Per Open Indemnity Claim | ULAE <br> Paid (\$000) |
| :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |
| 2000 | 267,027 | --- | --- |
| 2001 | 251,668 | --- | --- |
| 2002 | 347,829 | --- | --- |
| 2003 | 385,374 | --- | --- |
| 2004 | 452,987 | --- | --- |
| 2005 | 470,466 | --- | --- |
| 2006 | 442,927 | --- | --- |
| 2007 | 397,102 | --- | --- |
| 2008 | 397,117 | --- | --- |
| 2009 | 373,598 | --- | --- |
| 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 | 367,816 | 2,498 | 918,843 |
| 2016 | 365,874 | 2,643 | 967,074 |
| Projected |  |  |  |
| 2017 | 358,423 | 2,717 | 973,738 |
| 2018 | 362,256 | 2,832 | 1,025,736 |
| 2019 | 363,518 | 2,961 | 1,076,417 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,206,098 |
| (e) Calendar Year 2016 Earned Premium (\$000): |  |  | 17,956,139 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.625 |
| (g) Premium Adjustment Factor for Calendar Year 2016: |  |  | 0.955 |
| (h) Projected Losses (\$000): (e) $\times(\mathrm{f}) \times(\mathrm{g})$ |  |  | 10,717,570 |
| (i) Projected Ratio of ULAE to Losses: (d)/(h) |  |  | 11.3\% |

Notes:
(a) Calendar years 2000 to 2016 are from column (b) of Exhibit 2.1, and 2017 to 2019 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2016 are from column (d) of Exhibit 2.2, private insurers ULAE paid per open indemnity claim. Calendar years 2017 to 2019 are projected based on applying the California average annual wage level changes of $3.2 \%, 4.1 \%, 4.2 \%$ and $4.6 \%$ for 2016 to 2019 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per open indemnity claim from averaging 2015 and 2016.
(c) Column (a) $x$ column (b).
(d) Average of calendar years 2018 and 2019, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2018 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 5.2 of Item AC17-06-01.

## Projected Ratio of ULAE to Loss - Statewide <br> Based on Ratio of ULAE Paid to Paid Losses

For Policies with Effective Dates between January 1, 2018 and December 31, 2018
\(\left.$$
\begin{array}{ccc}\begin{array}{c}\text { Calendar } \\
\text { Year }\end{array} & \begin{array}{c}\text { Paid ULAE as \% } \\
\text { of Premium }\end{array} & \begin{array}{c}\text { Paid Loss as \% } \\
\text { of Premium }\end{array} \\
2000 & --- & (\mathrm{b})\end{array}
$$ \begin{array}{c}Paid ULAE as \% <br>

of Paid Losses\end{array}\right]\)| $(\mathrm{c})=(\mathrm{a}) /(\mathrm{b})$ |
| :---: |

## Notes:

${ }^{1}$ Based on averaging of the 2015 and 2016 paid ULAE to paid loss ratios.
${ }^{2}$ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2016 experience.
${ }^{3}$ (b) $\times(c)$.
${ }^{4}$ See Exhibit 8 of AC17-06-01.
${ }^{5}$ See Exhibit 5.2 of AC17-06-01.

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, 2018 and December 31, 2018

| Calendar Year | Paid ULAE as \% of Premium | Paid Loss as \% of Premium | Paid ULAE as \% of Paid Losses ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
|  | (a) $=(\mathrm{b}) \times(\mathrm{c})$ | (b) | (c) |
| 2000 | --- | 74.8\% | --- |
| 2001 | --- | 59.5\% | --- |
| 2002 | --- | 54.5\% | --- |
| 2003 | --- | 43.8\% | --- |
| 2004 | --- | 37.9\% | --- |
| 2005 | --- | 36.4\% | --- |
| 2006 | --- | 40.5\% | --- |
| 2007 | --- | 50.8\% | --- |
| 2008 | --- | 64.0\% | --- |
| 2009 | --- | 74.8\% | --- |
| 2010 | 5.8\% | 72.7\% | 0.079 |
| 2011 | 5.4\% | 70.1\% | 0.077 |
| 2012 | 4.9\% | 65.3\% | 0.075 |
| 2013 | 5.5\% | 58.5\% | 0.094 |
| 2014 | 4.3\% | 50.5\% | 0.086 |
| 2015 | 5.2\% | 48.0\% | 0.109 |
| 2016 | 5.2\% | 45.7\% | 0.113 |
| Projected |  |  |  |
| 2017 | 5.3\% ${ }^{4}$ | $48.3 \%^{3}$ | $0.111^{2}$ |
| 2018 | $5.5 \%{ }^{4}$ | $49.2 \%^{3}$ | $0.111{ }^{2}$ |
| 2019 | 5.5\% ${ }^{4}$ | $49.7 \%^{3}$ | $0.111^{2}$ |
| (d) Projected ULAE Paid to CY2016 Earned Premium Ratio: (Average of calendar years 2018 and 2019 in column (a)) |  |  | 5.5\% |
| (e) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{5}$ : |  |  | 0.625 |
| (f) Premium Adjustment Factor for Calendar Year 2016 ${ }^{\text {² }}$ |  |  | 0.955 |
| (g) Projected Ratio of ULAE to Losses: <br> (d) $/[(\mathrm{e}) \times(\mathrm{f})]$ |  |  | 9.2\% |

Notes:
${ }^{1}$ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.
${ }^{2}$ Based on averaging of the 2015 and 2016 paid ULAE to paid loss ratios.
${ }^{3}$ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2016 experience.
${ }^{4}$ (b) $\times(c)$.
${ }^{5}$ See Exhibit 8 of AC17-06-01.
${ }^{6}$ See Exhibit 5.2 of AC17-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim
Trend from Latest Year
For Policies with Effective Dates between January 1, 2017 and December 31, 2017

| Calendar Year | Number of Open Indemnity | ULAE Paid |  |
| :---: | :---: | :---: | :---: |
|  | Claims at Beginning | Per Open | ULAE |
|  | of the Year | Indemnity Claim | Paid (\$000) |
|  | (a) | (b) | (c) |
| 2000 | 267,027 | --- | --- |
| 2001 | 251,668 | --- | --- |
| 2002 | 347,829 | --- | --- |
| 2003 | 385,374 | --- | --- |
| 2004 | 452,987 | --- | --- |
| 2005 | 470,466 | --- | --- |
| 2006 | 442,927 | --- | --- |
| 2007 | 397,102 | --- | --- |
| 2008 | 397,117 | --- | --- |
| 2009 | 373,598 | --- | --- |
| 2010 | 360,624 | 2,339 | 843,664 |
| 2011 | 360,339 | 2,352 | 847,365 |
| 2012 | 360,391 | 2,199 | 792,426 |
| 2013 | 365,706 | 2,685 | 981,911 |
| 2014 | 366,420 | 2,592 | 949,860 |
| 2015 | 367,816 | 3,074 | 1,130,776 |
| 2016 | 365,874 | 3,207 | 1,173,458 |
| Projected |  |  |  |
| 2017 | 358,423 | 3,337 | 1,196,235 |
| 2018 | 362,256 | 3,479 | 1,260,113 |
| 2019 | 363,518 | 3,638 | 1,322,375 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,481,688 |
| (e) Calendar Year 2016 Earned Premium (\$000): |  |  | 17,956,139 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.625 |
| (g) Premium Adjustment Factor for Calendar Year 2016: |  |  | 0.955 |
| (h) Projected Losses (\$000): (e) $\times$ (f) $\times(\mathrm{g})$ |  |  | 10,717,570 |
| (i) Projected Ratio of ULAE to Losses: $(\mathrm{d}) /(\mathrm{h})$ |  |  | 13.8\% |

## Notes:

(a) Calendar years 2000 to 2016 are from column (b) of Exhibit 2.1, and 2017 to 2019 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2016 are from column (d) of Exhibit 2.1. Calendar years 2017 to 2019 are projected based on applying the California average annual wage level changes of $4.1 \%, 4.2 \%$ and $4.6 \%$ for 2017 to 2019 derived from information published by the UCLA Anderson School of Business, to the 2016 ULAE paid per open indemnity claim.
(c) Column (a) $x$ column (b).
(d) Average of calendar years 2017 and 2018, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2017 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 5.2 of Item AC17-06-01.

## 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, 2017 and December 31, 2017

| 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) |
| 2000 | 267,027 | --- | --- |
| 2001 | 251,668 | --- | --- |
| 2002 | 347,829 | --- | --- |
| 2003 | 385,374 | --- | --- |
| 2004 | 452,987 | --- | --- |
| 2005 | 470,466 | --- | --- |
| 2006 | 442,927 | --- | --- |
| 2007 | 397,102 | --- | --- |
| 2008 | 397,117 | --- | --- |
| 2009 | 373,598 | --- | --- |
| 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 | 367,816 | 2,498 | 918,843 |
| 2016 | 365,874 | 2,643 | 967,074 |
| Projected |  |  |  |
| 2017 | 358,423 | 2,751 | 985,845 |
| 2018 | 362,256 | 2,867 | 1,038,489 |
| 2019 | 363,518 | 2,998 | 1,089,800 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,221,094 |
| (e) Calendar Year 2016 Earned Premium (\$000): |  |  | 17,956,139 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.625 |
| (g) Premium Adjustment Factor for Calendar Year 2016: |  |  | 0.955 |
| (h) Projected Losses (\$000): (e) $\times$ (f) $\times(\mathrm{g})$ |  |  | 10,717,570 |
| (i) Projected Ratio of ULAE to Losses: (d)/(h) |  |  | 11.4\% |

Notes:
(a) Calendar years 2000 to 2016 are from column (b) of Exhibit 2.1, and 2017 to 2019 are from line (d), Exhibit 3.4.
(b) Calendar years 2010 to 2016 are from column (d) of Exhibit 2.2, private insurers ULAE paid per open indemnity claim. Calendar years 2017 to 2019 are projected based on applying the California average annual wage level changes of $4.1 \%, 4.2 \%$ and $4.6 \%$ for 2017 to 2019 derived from information published by the UCLA Anderson School of Business, to the 2016 ULAE paid per open indemnity claim.
(c) Column (a) x column (b).
(d) Average of calendar years 2017 and 2018, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2017 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 5.2 of Item AC17-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Ratio of ULAE Paid to Paid Losses - Trend from Latest Year
For Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Calendar Year | Paid ULAE as \% of Premium <br> (a) | Paid Loss as \% of Premium <br> (b) | Paid ULAE as \% of Paid Losses (c) $=(\mathrm{a}) /(\mathrm{b})$ |
| :---: | :---: | :---: | :---: |
| 2000 | --- | 74.8\% | --- |
| 2001 | --- | 59.5\% | --- |
| 2002 | --- | 54.5\% | --- |
| 2003 | --- | 43.8\% | --- |
| 2004 | --- | 37.9\% | --- |
| 2005 | --- | 36.4\% | --- |
| 2006 | --- | 40.5\% | --- |
| 2007 | --- | 50.8\% | --- |
| 2008 | --- | 64.0\% | --- |
| 2009 | --- | 74.8\% | --- |
| 2010 | 8.8\% | 72.7\% | 0.121 |
| 2011 | 8.1\% | 70.1\% | 0.116 |
| 2012 | 6.6\% | 65.3\% | 0.101 |
| 2013 | 6.8\% | 58.5\% | 0.117 |
| 2014 | 5.9\% | 50.5\% | 0.116 |
| 2015 | 6.6\% | 48.0\% | 0.138 |
| 2016 | 6.5\% | 45.7\% | 0.143 |
| Projected |  |  |  |
| 2017 | 6.9\% ${ }^{3}$ | $48.3 \%^{2}$ | $0.143{ }^{1}$ |
| 2018 | 7.0\% ${ }^{3}$ | 49.2\% ${ }^{2}$ | $0.143{ }^{1}$ |
| 2019 | $7.1 \%^{3}$ | $49.7 \%^{2}$ | $0.143{ }^{1}$ |
| (d) Projected ULAE Paid to CY2016 Earned Premium Ratio: (Average of calendar years 2018 and 2019 in column (a)) |  |  | 7.1\% |
| (e) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{\text {: }}$ |  |  | 0.625 |
| (f) Premium Adjustment Factor for Calendar Year 2016 ${ }^{\text {5 }}$ |  |  | 0.955 |
| (g) Projected Ratio of ULAE to Losses: <br> (d) $/[(\mathrm{e}) \times(\mathrm{f})]$ |  |  | 11.9\% |
| Notes: |  |  |  |
| ${ }^{1}$ Based on 2016 paid ULAE to paid loss ratio. |  |  |  |
| ${ }^{2}$ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2016 experience. |  |  |  |
| ${ }^{3}$ (b) $\times$ (c). |  |  |  |
| ${ }^{4}$ See Exhibit 8 of AC17-06-01. |  |  |  |
| ${ }^{5}$ See Exhibit 5.2 of AC17-06-01. |  |  |  |

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, 2018 and December 31, 2018

| Calendar Year | Paid ULAE as \% of Premium (a)=(b) $\times(\mathrm{c})$ | Paid Loss as \% of Premium <br> (b) | Paid ULAE as \% of Paid Losses ${ }^{1}$ <br> (c) |
| :---: | :---: | :---: | :---: |
| 2000 | --- | 74.8\% | --- |
| 2001 | --- | 59.5\% | --- |
| 2002 | --- | 54.5\% | --- |
| 2003 | --- | 43.8\% | --- |
| 2004 | --- | 37.9\% | --- |
| 2005 | --- | 36.4\% | --- |
| 2006 | --- | 40.5\% | --- |
| 2007 | --- | 50.8\% | --- |
| 2008 | --- | 64.0\% | --- |
| 2009 | --- | 74.8\% | --- |
| 2010 | 5.8\% | 72.7\% | 0.079 |
| 2011 | 5.4\% | 70.1\% | 0.077 |
| 2012 | 4.9\% | 65.3\% | 0.075 |
| 2013 | 5.5\% | 58.5\% | 0.094 |
| 2014 | 4.3\% | 50.5\% | 0.086 |
| 2015 | 5.2\% | 48.0\% | 0.109 |
| 2016 | 5.2\% | 45.7\% | 0.113 |
| Projected |  |  |  |
| 2017 | 5.4\% ${ }^{4}$ | 48.3\% ${ }^{3}$ | $0.113^{2}$ |
| 2018 | 5.6\% ${ }^{4}$ | 49.2\% ${ }^{3}$ | $0.113^{2}$ |
| 2019 | $5.6 \%{ }^{4}$ | 49.7\% ${ }^{3}$ | $0.113^{2}$ |
| (d) Projected ULAE Paid to CY2016 Earned Premium Ratio: (Average of calendar years 2018 and 2019 in column (a)) |  |  | 5.6\% |
| (e) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{\text {: }}$ |  |  | 0.625 |
| (f) Premium Adjustment Factor for Calendar Year 2016 ${ }^{6}$ : |  |  | 0.955 |
| (g) Projected Ratio of ULAE to Losses: <br> (d) $/[(\mathrm{e}) \times(\mathrm{f})]$ |  |  | 9.4\% |

Notes:
${ }^{1}$ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.
${ }^{2}$ Based on 2016 paid ULAE to paid loss ratio.
${ }^{3}$ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2016 experience.
${ }^{4}$ (b) $\times(\mathrm{c})$.
${ }^{5}$ See Exhibit 8 of AC17-06-01.
${ }^{6}$ See Exhibit 5.2 of AC17-06-01.

## Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Weighted Open Indemnity Claim For Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Weighted <br> Calendar <br> Year <br> Number of | ULAE Paid <br> Open Indemnity Claims | (a) <br> Per Weighted Open <br> Indemnity Claim |
| :---: | :---: | :---: |
| 2000 | 590,509 | $(\mathrm{~b})$ |

Notes:
(a) Calendar years 2000 to 2016 are based on columns (b)+[2.0x (c)] of Exhibit 2.1, and 2017 to 2019 are from line (e), Exhibit 3.4.
(b) Calendar years 2010 to 2016 are from column (a) of Exhibit 2.1 divided by column (a) above, multiplied by $1,000,000$. Calendar years 2017 to 2019 are projected based on applying the California average annual wage level changes of $3.2 \%, 4.1 \%, 4.2 \%$ and $4.6 \%$ for 2016 to 2019 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per weighted open indemnity claim from averaging 2015 and 2016.
(c) Column (a) $x$ column (b).
(d) Average of calendar years 2018 and 2019, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2017 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 5.2 of Item AC17-06-01.

## 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, 2018 and December 31, 2018

|  | Weighted | ULAE Paid |  |
| :---: | :---: | :---: | :---: |
| Calendar | Number of | Per Weighted Open | ULAE |
| Year | Open Indemnity Claims | Indemnity Claim | Paid (\$000) |
|  | (a) | (b) | (c) |
| 2000 | 590,509 | --- | --- |
| 2001 | 657,960 | --- | --- |
| 2002 | 800,687 | --- | --- |
| 2003 | 838,690 | --- | --- |
| 2004 | 853,923 | --- | --- |
| 2005 | 795,108 | --- | --- |
| 2006 | 748,445 | --- | --- |
| 2007 | 639,616 | --- | --- |
| 2008 | 629,925 | --- | --- |
| 2009 | 593,312 | --- | --- |
| 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 | 659,714 | 1,334 | 880,241 |
| 2016 | 661,884 | 1,389 | 919,214 |
| Projected |  |  |  |
| 2017 | 652,100 | 1,439 | 938,430 |
| 2018 | 651,558 | 1,500 | 977,267 |
| 2019 | 648,982 | 1,569 | 1,017,954 |
| (d) Projected ULAE Paid (\$000): |  |  | 1,144,747 |
| (e) Calendar Year 2016 Earned Premium (\$000): |  |  | 17,956,139 |
| (f) Projected Loss to Industry Average Filed Pure Premium Ratio: |  |  | 0.625 |
| (g) Premium Adjustment Factor for Calendar Year 2016: |  |  | 0.955 |
| (h) Projected Losses (\$000): (e) $\times(\mathrm{f}) \times(\mathrm{g})$ |  |  | 10,717,570 |
| (i) Projected Ratio of ULAE to Losses: (d)/(h) |  |  | 10.7\% |

Notes:
(a) Calendar years 2000 to 2016 are based on columns (b)+[2.0x (c)] of Exhibit 2.1, and 2017 to 2019 are from line (e), Exhibit 3.4.
(b) Calendar years 2010 to 2015 are from column (a) of Exhibit 2.2 divided by columns (b)+\{2.0 $\times$ (c)] of Exhibit 2.2, multiplied by 1,000,000. Calendar years 2016 to 2018 are projected based on applying the California average annual wage level changes of $3.2 \%, 4.1 \%, 4.2 \%$ and $4.6 \%$ for 2016 to 2019 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per weighted open indemnity claim from averaging 2015 to 2016.
(c) Column (a) x column (b).
(d) Average of calendar years 2018 and 2019, projected 3.5 years to the approximate average midpoint of ultimate ULAE payments on 2017 policies, based on applying the an average annual change of $4.0 \%$ for 2019 to 2022 derived from the information published by the UCLA Anderson School of Business.
(e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2016.
(f) See Exhibit 8 of Item AC17-06-01.
(g) See Exhibit 8 of Item AC17-06-01.

## Average Paid ALAE ${ }^{[1]}$ Per Reported Indemnity Claim - Private Insurers

As of March 31, 2017

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | 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 | 6,497 |
| 2003 |  |  |  |  | 4,907 | 5,528 | 6,043 | 6,383 | 6,653 | 6,863 |
| 2004 |  |  |  | 3,570 | 4,548 | 5,212 | 5,673 | 6,022 | 6,283 | 6,483 |
| 2005 |  |  | 2,083 | 3,279 | 4,191 | 4,833 | 5,315 | 5,682 | 5,974 | 6,224 |
| 2006 |  | 797 | 2,176 | 3,410 | 4,328 | 5,030 | 5,559 | 5,929 | 6,265 | 6,527 |
| 2007 | 71 | 849 | 2,340 | 3,613 | 4,633 | 5,409 | 6,010 | 6,498 | 6,849 | 7,122 |
| 2008 | 85 | 944 | 2,494 | 3,957 | 5,131 | 6,005 | 6,680 | 7,185 | 7,560 | 7,804 |
| 2009 | 150 | 1,037 | 2,847 | 4,499 | 5,779 | 6,766 | 7,497 | 8,045 | 8,372 |  |
| 2010 | 87 | 1,135 | 3,041 | 4,667 | 5,975 | 6,923 | 7,621 | 8,040 |  |  |
| 2011 | 88 | 1,153 | 3,004 | 4,641 | 5,888 | 6,799 | 7,381 |  |  |  |
| 2012 | 91 | 1,147 | 3,076 | 4,713 | 5,976 | 6,808 |  |  |  |  |
| 2013 | 101 | 1,223 | 3,243 | 4,881 | 6,052 |  |  |  |  |  |
| 2014 | 144 | 1,352 | 3,451 | 5,104 |  |  |  |  |  |  |
| 2015 | 105 | 1,455 | 3,635 |  |  |  |  |  |  |  |
| 2016 | 160 | 1,515 |  |  |  |  |  |  |  |  |
| 2017 | 132 |  |  |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{\text { Year }}$ | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ | $\underline{87}$ | $\underline{99}$ | $\underline{111}$ |
| 2001 |  |  |  |  |  |  |  | $26.3 \%$ | $27.9 \%$ | $25.7 \%$ |
| 2002 |  |  |  |  |  |  | $9.9 \%$ | $10.7 \%$ | $8.4 \%$ | $8.0 \%$ |
| 2003 |  |  |  |  |  | $5.0 \%$ | $6.6 \%$ | $5.2 \%$ | $5.5 \%$ | $5.6 \%$ |
| 2004 |  |  |  |  | $-7.3 \%$ | $-5.7 \%$ | $-6.1 \%$ | $-5.6 \%$ | $-5.6 \%$ | $-5.5 \%$ |
| 2005 |  |  |  | $-8.1 \%$ | $-7.8 \%$ | $-7.3 \%$ | $-6.3 \%$ | $-5.7 \%$ | $-4.9 \%$ | $-4.0 \%$ |
| 2006 |  |  | $4.4 \%$ | $4.0 \%$ | $3.3 \%$ | $4.1 \%$ | $4.6 \%$ | $4.4 \%$ | $4.9 \%$ | $4.9 \%$ |
| 2007 |  | $6.5 \%$ | $7.5 \%$ | $5.9 \%$ | $7.1 \%$ | $7.5 \%$ | $8.1 \%$ | $9.6 \%$ | $9.3 \%$ | $9.1 \%$ |
| 2008 | $20.3 \%$ | $11.3 \%$ | $6.6 \%$ | $9.5 \%$ | $10.7 \%$ | $11.0 \%$ | $11.1 \%$ | $10.6 \%$ | $10.4 \%$ | $9.6 \%$ |
| 2009 | $76.5 \%$ | $9.8 \%$ | $14.2 \%$ | $13.7 \%$ | $12.6 \%$ | $12.7 \%$ | $12.2 \%$ | $12.0 \%$ | $10.7 \%$ |  |
| 2010 | $-41.7 \%$ | $9.4 \%$ | $6.8 \%$ | $3.7 \%$ | $3.4 \%$ | $2.3 \%$ | $1.7 \%$ | $-0.1 \%$ |  |  |
| 2011 | $0.4 \%$ | $1.6 \%$ | $-1.2 \%$ | $-0.5 \%$ | $-1.5 \%$ | $-1.8 \%$ | $-3.2 \%$ |  |  |  |
| 2012 | $3.1 \%$ | $-0.5 \%$ | $2.4 \%$ | $1.5 \%$ | $1.5 \%$ | $0.1 \%$ |  |  |  |  |
| 2013 | $11.4 \%$ | $6.7 \%$ | $5.5 \%$ | $3.5 \%$ | $1.3 \%$ |  |  |  |  |  |
| 2014 | $43.2 \%$ | $10.5 \%$ | $6.4 \%$ | $4.6 \%$ |  |  |  |  |  |  |
| 2015 | $-27.6 \%$ | $7.6 \%$ | $5.3 \%$ |  |  |  |  |  |  |  |
| 2016 | $52.8 \%$ | $4.1 \%$ |  |  |  |  |  |  |  |  |
| 2017 | $-17.6 \%$ |  |  |  |  |  |  |  |  |  |


| Annual Trend ${ }^{[2]}$ |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| All-Year | $5.3 \%$ | $6.4 \%$ | $5.7 \%$ | $4.7 \%$ | $3.7 \%$ | $3.5 \%$ | $3.8 \%$ | $4.8 \%$ | $4.7 \%$ | $4.0 \%$ |
| $R^{2}$ | 0.396 | 0.969 | 0.958 | 0.893 | 0.726 | 0.702 | 0.748 | 0.770 | 0.719 | 0.646 |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-$ Year | $6.5 \%$ | $7.6 \%$ | $5.1 \%$ | $2.3 \%$ | $0.9 \%$ | $2.6 \%$ | $5.6 \%$ | $8.6 \%$ | $9.0 \%$ | $5.2 \%$ |
| $R^{2}$ | 0.249 | 0.983 | 0.982 | 0.835 | 0.685 | 0.490 | 0.733 | 0.946 | 0.985 | 0.778 |

${ }^{[1]}$ 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.

Estimated Ultimate ALAE Per Indemnity Claim - Statewide


| Estimated Annual Exponential Trend Based on: |  | $\mathbf{R}^{2}$ |
| :---: | :---: | :---: | :---: |
| 2005 to 2016 | $5.4 \%$ | 0.873 |
| 2011 to 2016 | $3.7 \%$ | 0.952 |

Notes:
${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Based on private insurers latest year paid ALAE age-to-age development from Exhibit 16.1.
${ }^{[3]}$ See Exhibit 16.3.

Estimated Ultimate ALAE Per Indemnity Claim - Private Insurers

| Acc. Year | $\begin{aligned} & \text { Paid ALAE } \left.{ }^{[1]}\right] \\ & @ 3 / 31 / 17 \\ & \frac{\text { (in } \$ 000)}{(1)} \end{aligned}$ | Cumulative Development Factors ${ }^{[2]}$ (2) | $\begin{aligned} & \text { Estimated } \\ & \text { Ultimate } \\ & \text { ALAE } \\ & \frac{(\text { in } \$ 000)}{(3)=(1) \times(2)} \end{aligned}$ | Indemnity Claim Counts @3/31/17 <br> (4) | Cumulative Count Development Factors ${ }^{[3]}$ (5) | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate ALAE Per Indemnity Claim (7) $=(3) /(6) \times 1000$ | Annual Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | 413,483 | 1.045 | 432,247 | 175,272 | 1.000 | 175,353 | 2,465 | --- |
| 1992 | 317,610 | 1.049 | 333,152 | 141,923 | 1.001 | 142,023 | 2,346 | -4.8\% |
| 1993 | 235,103 | 1.052 | 247,285 | 113,517 | 1.001 | 113,609 | 2,177 | -7.2\% |
| 1994 | 217,938 | 1.057 | 230,403 | 105,373 | 1.001 | 105,476 | 2,184 | 0.4\% |
| 1995 | 238,873 | 1.063 | 253,820 | 101,309 | 1.001 | 101,454 | 2,502 | 14.5\% |
| 1996 | 284,911 | 1.071 | 305,106 | 103,148 | 1.002 | 103,333 | 2,953 | 18.0\% |
| 1997 | 360,579 | 1.078 | 388,606 | 104,718 | 1.002 | 104,926 | 3,704 | 25.4\% |
| 1998 | 497,771 | 1.085 | 540,287 | 112,429 | 1.002 | 112,699 | 4,794 | 29.4\% |
| 1999 | 547,740 | 1.095 | 599,709 | 116,335 | 1.003 | 116,626 | 5,142 | 7.3\% |
| 2000 | 649,781 | 1.105 | 718,091 | 118,395 | 1.003 | 118,722 | 6,049 | 17.6\% |
| 2001 | 770,700 | 1.116 | 860,481 | 113,887 | 1.003 | 114,242 | 7,532 | 24.5\% |
| 2002 | 809,583 | 1.128 | 913,294 | 112,926 | 1.004 | 113,351 | 8,057 | 7.0\% |
| 2003 | 818,778 | 1.141 | 933,979 | 108,262 | 1.004 | 108,719 | 8,591 | 6.6\% |
| 2004 | 701,075 | 1.154 | 809,381 | 99,363 | 1.005 | 99,811 | 8,109 | -5.6\% |
| 2005 | 653,764 | 1.171 | 765,683 | 97,252 | 1.005 | 97,736 | 7,834 | -3.4\% |
| 2006 | 716,165 | 1.194 | 855,251 | 104,234 | 1.005 | 104,793 | 8,161 | 4.2\% |
| 2007 | 783,887 | 1.222 | 957,665 | 107,291 | 1.006 | 107,959 | 8,871 | 8.7\% |
| 2008 | 823,185 | 1.257 | 1,034,747 | 105,484 | 1.007 | 106,253 | 9,739 | 9.8\% |
| 2009 | 844,340 | 1.303 | 1,100,514 | 100,846 | 1.009 | 101,790 | 10,812 | 11.0\% |
| 2010 | 874,152 | 1.368 | 1,195,979 | 108,726 | 1.012 | 109,988 | 10,874 | 0.6\% |
| 2011 | 833,053 | 1.461 | 1,217,206 | 112,869 | 1.015 | 114,512 | 10,629 | -2.2\% |
| 2012 | 823,819 | 1.608 | 1,324,893 | 121,008 | 1.018 | 123,197 | 10,754 | 1.2\% |
| 2013 | 768,715 | 1.860 | 1,429,952 | 127,016 | 1.025 | 130,150 | 10,987 | 2.2\% |
| 2014 | 653,571 | 2.343 | 1,531,027 | 128,049 | 1.036 | 132,611 | 11,545 | 5.1\% |
| 2015 | 471,719 | 3.563 | 1,680,594 | 129,781 | 1.063 | 137,949 | 12,183 | 5.5\% |
| 2016 | 182,666 | 9.952 | 1,817,827 | 120,667 | 1.188 | 143,402 | 12,676 | 4.1\% |


| Estimated Annual Exponential Trend Based on: |  | $\mathbf{R}^{2}$ |
| :---: | :---: | :---: | :---: |
| 2005 to 2016 | $4.0 \%$ | 0.890 |
| 2011 to 2016 | $3.8 \%$ | 0.956 |

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 16.1.
${ }^{[3]}$ Based on analogous Exhibit 16.3, applicable to private insurers only.

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

| Year | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1989 | 1,007 | 1,076 | 635 | 1,143 | 1,062 | 1,029 | 1,125 | 1,143 | 1,344 | 1,524 | 1,471 | 1,497 | 1,635 | 1,934 |
| 1990 | 1,315 | 1,572 | 987 | 2,157 | 1,139 | 1,274 | 1,193 | 1,355 | 1,542 | 1,432 | 1,812 | 1,590 | 1,633 | 1,850 |
| 1991 | 1,370 | 1,729 | 834 | 1,697 | 1,577 | 1,256 | 1,495 | 1,388 | 1,574 | 1,438 | 1,789 | 1,645 | 1,423 | 2,177 |
| 1992 | 1,478 | 1,724 | 1,416 | 1,837 | 1,653 | 1,405 | 1,827 | 1,389 | 1,669 | 1,502 | 1,636 | 1,587 | 1,831 | 1,723 |
| 1993 | 1,741 | 2,105 | 1,502 | 2,157 | 1,833 | 1,541 | 1,927 | 1,664 | 1,886 | 1,800 | 1,951 | 1,979 | 2,176 | 2,312 |
| 1994 | 1,410 | 1,470 | 1,686 | 1,932 | 1,717 | 1,617 | 1,646 | 1,576 | 1,632 | 1,833 | 1,663 | 2,110 | 1,707 | 1,847 |
| 1995 | 2,175 | 1,618 | 1,671 | 1,766 | 1,849 | 1,766 | 1,916 | 1,772 | 1,672 | 2,033 | 2,051 | 2,112 | 2,009 | 2,467 |
| 1996 | 2,839 | 2,166 | 2,027 | 1,997 | 1,979 | 1,947 | 1,946 | 1,686 | 2,011 | 2,085 | 2,144 | 2,076 | 2,315 | 2,138 |
| 1997 | 3,218 | 2,600 | 2,378 | 2,409 | 2,347 | 2,287 | 2,314 | 2,225 | 2,414 | 2,353 | 2,147 | 2,222 | 2,266 | 2,321 |
| 1998 | 3,042 | 2,979 | 2,556 | 2,484 | 2,502 | 2,336 | 2,432 | 2,381 | 2,277 | 2,340 | 2,344 | 2,320 | 2,513 | 2,397 |
| 1999 | 2,736 | 2,646 | 2,529 | 2,629 | 2,403 | 2,646 | 2,804 | 2,545 | 2,698 | 2,641 | 2,332 | 2,143 | 2,416 | 2,573 |
| 2000 | 2,473 | 2,283 | 2,525 | 2,805 | 2,720 | 2,864 | 2,854 | 2,740 | 2,803 | 2,842 | 2,539 | 2,585 | 2,830 | 2,677 |
| 2001 | 2,103 | 2,964 | 2,284 | 2,764 | 2,811 | 2,873 | 2,654 | 2,736 | 2,755 | 2,778 | 2,801 | 3,278 | 3,191 | 2,743 |
| 2002 | 1,956 | 2,799 | 2,537 | 2,873 | 2,910 | 3,083 | 2,899 | 2,967 | 3,021 | 2,915 | 3,015 | 3,445 | 3,264 | 3,282 |
| 2003 | 864 | 2,334 | 2,577 | 2,881 | 2,947 | 3,058 | 3,032 | 3,216 | 3,224 | 3,546 | 3,397 | 3,648 | 3,736 | 3,284 |
| 2004 | 67 | 820 | 2,100 | 2,676 | 3,009 | 3,077 | 3,145 | 3,263 | 3,130 | 3,060 | 3,306 | 3,575 | 3,394 | 3,193 |
| 2005 |  | 69 | 768 | 1,986 | 2,649 | 2,916 | 3,070 | 3,251 | 3,284 | 3,317 | 3,438 | 3,614 | 3,891 | 3,572 |
| 2006 |  |  | 106 | 782 | 2,162 | 2,758 | 2,992 | 3,243 | 3,474 | 3,296 | 3,404 | 3,580 | 3,450 | 3,185 |
| 2007 |  |  |  | 71 | 846 | 2,333 | 2,807 | 3,192 | 3,452 | 3,603 | 3,686 | 3,670 | 3,762 | 3,518 |
| $2008$ |  |  |  |  | 85 | 939 | 2,399 | 3,110 | 3,500 | 3,591 | 3,702 | 3,827 | 3,962 | 3,740 |
| $2009$ |  |  |  |  |  | 150 | 1,034 | $2,742$ | 3,391 | 3,644 | 3,820 | 3,938 | 4,069 | 3,935 |
| $2010$ |  |  |  |  |  |  | 87 | $1,129$ | 2,898 | 3,450 | 3,743 | 3,893 | 4,175 | 4,084 |
| 2011 |  |  |  |  |  |  |  | 88 | 1,147 | 2,879 | 3,432 | 3,689 | 4,038 | 4,079 |
| 2012 |  |  |  |  |  |  |  |  | 90 | 1,147 | 2,979 | 3,495 | 3,940 | 4,057 |
| 2013 |  |  |  |  |  |  |  |  |  | 101 | 1,223 | 3,096 | 3,607 | 3,897 |
| 2014 |  |  |  |  |  |  |  |  |  |  | 144 | 1,348 | 3,263 | 3,769 |
| 2015 |  |  |  |  |  |  |  |  |  |  |  | 105 | 1,457 | 3,429 |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  | 160 | 1,509 |
| 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  | 132 |
| ALAE per |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Claim | 1,751 | 2,013 | 1,846 | 1,951 | 1,977 | 2,104 | 2,184 | 2,354 | 2,506 | 2,565 | 2,657 | 2,782 | 2,922 | 2,948 |
| Annual |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Change | 9.7\% | 15.0\% | -8.3\% | 5.7\% | 1.4\% | 6.4\% | 3.8\% | 7.8\% | 6.5\% | 2.4\% | 3.6\% | 4.7\% | 5.0\% | 0.9\% |
|  |  |  |  |  | Estimated Annual Exponential Trend Based on Payment Year: |  |  |  |  |  | $\underline{R}^{2}$ |  |  |  |
|  |  |  |  |  |  |  |  |  | -2017 | 4.6\% | $0.989$ |  |  |  |
|  |  |  |  |  |  |  |  | 2012-2017 |  | 3.6\% | 0.977 |  |  |  |
|  | aid ALA | xclude th | id cost | dical cost | ntainm | program |  |  |  |  |  |  |  |  |
|  | mnity cl ar N . | invento | the sum | indemnit | ims op | of Apr | Year | nd new | orted in | nity clai | between | 11 of ye | -1 and |  |

Source: WCIRB quarterly calls for experience

Paid Allocated Loss Adjustment Expense Development - Private Insurers
As of March 31, 2017

| 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 | 159-171 | 171-183 | 183-195 |
| 1985 |  |  |  |  |  |  | 1.035 | 1.023 | 1.013 | 1.036 | 1.009 | 1.008 | 1.010 | 1.006 | 1.011 |
| 1986 |  |  |  |  |  | 1.055 | 1.036 | 1.023 | 1.017 | 1.010 | 1.011 | 1.009 | 1.009 | 1.010 | 1.005 |
| 1987 |  |  |  |  | 1.086 | 1.051 | 1.031 | 1.022 | 1.015 | 1.012 | 1.009 | 1.013 | 1.010 | 1.006 | 1.004 |
| 1988 |  |  |  | 1.145 | 1.085 | 1.048 | 1.033 | 1.021 | 1.014 | 1.011 | 1.011 | 1.014 | 1.004 | 1.004 | 1.004 |
| 1989 |  |  | 1.299 | 1.148 | 1.102 | 1.079 | 1.040 | 1.026 | 1.017 | 1.011 | 1.007 | 1.004 | 1.005 | 1.005 | 1.004 |
| 1990 |  | 1.627 | 1.276 | 1.149 | 1.097 | 1.046 | 1.032 | 1.020 | 1.014 | 1.009 | 1.007 | 1.006 | 1.005 | 1.005 | 1.006 |
| 1991 | 2.921 | 1.552 | 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 |
| 1992 | 2.511 | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 1998 | 2.618 | 1.463 | 1.229 | 1.139 | 1.102 | 1.083 | 1.055 | 1.041 | 1.028 | 1.023 | 1.020 | 1.017 | 1.014 | 1.013 | 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 |
| 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 | 1.014 | 1.013 |
| 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 |
| 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 |  |
| 2003 | 2.931 | 1.550 | 1.267 | 1.155 | 1.088 | 1.057 | 1.042 | 1.032 | 1.028 | 1.022 | 1.020 | 1.017 | 1.012 |  |  |
| 2004 | 2.785 | 1.572 | 1.282 | 1.149 | 1.090 | 1.064 | 1.045 | 1.033 | 1.029 | 1.024 | 1.019 | 1.014 |  |  |  |
| 2005 | 2.741 | 1.599 | 1.285 | 1.157 | 1.104 | 1.072 | 1.053 | 1.042 | 1.033 | 1.027 | 1.020 |  |  |  |  |
| 2006 | 2.879 | 1.591 | 1.278 | 1.166 | 1.108 | 1.075 | 1.056 | 1.043 | 1.032 | 1.023 |  |  |  |  |  |
| 2007 | 2.902 | 1.571 | 1.291 | 1.173 | 1.116 | 1.081 | 1.055 | 1.042 | 1.029 |  |  |  |  |  |  |
| 2008 | 2.833 | 1.621 | 1.311 | 1.177 | 1.115 | 1.077 | 1.055 | 1.037 |  |  |  |  |  |  |  |
| 2009 | 3.006 | 1.623 | 1.303 | 1.178 | 1.112 | 1.076 | 1.050 |  |  |  |  |  |  |  |  |
| 2010 | 2.944 | 1.591 | 1.295 | 1.166 | 1.108 | 1.068 |  |  |  |  |  |  |  |  |  |
| 2011 | 2.943 | 1.590 | 1.285 | 1.168 | 1.101 |  |  |  |  |  |  |  |  |  |  |
| 2012 | 3.023 | 1.575 | 1.286 | 1.157 |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | 2.942 | 1.550 | 1.259 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | 2.869 | 1.521 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | 2.793 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Latest Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 2.793 | 1.521 | 1.259 | 1.157 | 1.101 | 1.068 | 1.050 | 1.037 | 1.029 | 1.023 | 1.020 | 1.014 | 1.012 | 1.011 | 1.010 |
| Cumulative | 9.952 | 3.563 | 2.343 | 1.860 | 1.608 | 1.461 | 1.368 | 1.303 | 1.257 | 1.222 | 1.194 | 1.171 | 1.154 | 1.141 | 1.128 |
| 3-Year Arithmetics Average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 2.868 | 1.549 | 1.277 | 1.164 | 1.107 | 1.074 | 1.053 | 1.041 | 1.031 | 1.025 | 1.019 | 1.016 | 1.014 | 1.013 | 1.012 |
| Cumulative | 10.886 | 3.795 | 2.451 | 1.919 | 1.649 | 1.490 | 1.388 | 1.317 | 1.266 | 1.227 | 1.197 | 1.175 | 1.156 | 1.140 | 1.126 |
| Average Excluding High \& Low |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 2.776 | 1.566 | 1.267 | 1.148 | 1.095 | 1.063 | 1.043 | 1.031 | 1.023 | 1.019 | 1.015 | 1.013 | 1.011 | 1.009 | 1.008 |
| Cumulative | 9.576 | 3.450 | 2.203 | 1.739 | 1.515 | 1.383 | 1.301 | 1.247 | 1.210 | 1.182 | 1.161 | 1.143 | 1.128 | 1.116 | 1.106 |


| Accident | Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 195-207 | 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 |
| 1985 | 1.003 | 1.005 | 1.005 | 1.004 | 1.003 | 1.005 | 1.006 | 1.005 | 1.003 | 1.004 | 1.004 | 1.004 | 1.004 | 1.006 | 1.004 | 1.003 |
| 1986 | 1.005 | 1.004 | 1.005 | 1.007 | 1.003 | 1.006 | 1.005 | 1.004 | 1.005 | 1.005 | 1.006 | 1.007 | 1.006 | 1.006 | 1.005 |  |
| 1987 | 1.004 | 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 |  |  |
| 1988 | 1.004 | 1.004 | 1.005 | 1.005 | 1.005 | 1.003 | 1.005 | 1.004 | 1.004 | 1.005 | 1.004 | 1.004 | 1.004 |  |  |  |
| 1989 | 1.005 | 1.004 | 1.004 | 1.004 | 1.003 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 |  |  |  |  |
| 1990 | 1.006 | 1.004 | 1.004 | 1.002 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.002 | 1.003 |  |  |  |  |  |
| 1991 | 1.005 | 1.003 | 1.002 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 | 1.002 | 1.003 |  |  |  |  |  |  |
| 1992 | 1.005 | 1.003 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 | 1.003 | 1.003 |  |  |  |  |  |  |  |
| 1993 | 1.006 | 1.006 | 1.007 | 1.006 | 1.006 | 1.005 | 1.005 | 1.005 |  |  |  |  |  |  |  |  |
| 1994 | 1.007 | 1.007 | 1.007 | 1.006 | 1.007 | 1.005 | 1.005 |  |  |  |  |  |  |  |  |  |
| 1995 | 1.009 | 1.009 | 1.009 | 1.008 | 1.007 | 1.008 |  |  |  |  |  |  |  |  |  |  |
| 1996 | 1.009 | 1.009 | 1.008 | 1.008 | 1.006 |  |  |  |  |  |  |  |  |  |  |  |
| 1997 | 1.009 | 1.008 | 1.008 | 1.007 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 | 1.011 | 1.011 | 1.009 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.011 | 1.009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Latest Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age-to-Age | 1.010 | 1.009 | 1.009 | 1.007 | 1.006 | 1.008 | 1.005 | 1.005 | 1.003 | 1.003 | 1.003 | 1.004 | 1.004 | 1.004 | 1.005 | 1.003 |
| Cumulative | 1.116 | 1.105 | 1.095 | 1.085 | 1.078 | 1.071 | 1.063 | 1.057 | 1.052 | 1.049 | 1.045 | 1.042 | 1.039 | 1.036 | 1.034 | 1.032 |
| 3-Year Arithmetics Average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 1.011 | 1.010 | 1.008 | 1.008 | 1.007 | 1.006 | 1.004 | 1.004 | 1.002 | 1.003 | 1.003 | 1.004 | 1.005 | 1.005 | 1.004 | 1.003 |
| Cumulative | 1.113 | 1.101 | 1.091 | 1.082 | 1.074 | 1.067 | 1.060 | 1.055 | 1.052 | 1.049 | 1.045 | 1.042 | 1.039 | 1.036 | 1.034 | 1.032 |
| Average Excluding High \& Low |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age-to-Age | 1.007 | 1.006 | 1.006 | 1.005 | 1.005 | 1.004 | 1.004 | 1.004 | 1.003 | 1.004 | 1.004 | 1.004 | 1.004 | 1.006 |  |  |
| Cumulative | 1.097 | 1.090 | 1.083 | 1.077 | 1.071 | 1.066 | 1.062 | 1.057 | 1.053 | 1.049 | 1.045 | 1.042 | 1.039 | 1.036 | 1.034 | 1.032 |

[^20]Source: WCIRB accident year experience calls. Excludes MCCP costs.

| Quarterly Paid ALAE Loss Development Factors ${ }^{[1]}$ - Private Insurers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age in Months |  | Accident Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | $\underline{2005}$ | $\underline{2006}$ | $\underline{2007}$ | $\underline{2008}$ | $\underline{2009}$ | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| 3 | - 6 |  |  |  |  | 3.396 | 7.976 | 7.570 | 5.434 | 9.136 | 8.769 | 8.694 | 8.531 | 6.324 | 9.820 | 6.772 |
| 6 | - 9 |  |  |  |  | 2.427 | 3.016 | 2.765 | 2.630 | 3.023 | 3.176 | 3.214 | 3.061 | 3.130 | 3.158 | 2.984 |
| 9 | - 12 |  |  |  |  | 2.022 | 2.078 | 2.021 | 2.034 | 2.077 | 2.165 | 2.113 | 2.134 | 2.139 | 2.133 | 2.095 |
| 12 | - 15 |  |  |  |  | 1.653 | 1.627 | 1.687 | 1.724 | 1.737 | 1.701 | 1.714 | 1.772 | 1.739 | 1.719 | 1.777 |
| 15 | - 18 |  |  |  | 1.623 | 1.415 | 1.486 | 1.494 | 1.509 | 1.482 | 1.485 | 1.510 | 1.490 | 1.483 | 1.479 |  |
| 18 | - 21 |  |  |  | 1.318 | 1.357 | 1.328 | 1.289 | 1.326 | 1.334 | 1.343 | 1.338 | 1.346 | 1.326 | 1.309 |  |
| 21 | - 24 |  |  |  | 1.249 | 1.255 | 1.234 | 1.237 | 1.255 | 1.253 | 1.248 | 1.248 | 1.234 | 1.239 | 1.220 |  |
| 24 | - 27 |  |  |  | 1.192 | 1.187 | 1.191 | 1.190 | 1.197 | 1.189 | 1.186 | 1.198 | 1.189 | 1.175 | 1.182 |  |
| 27 | - 30 |  |  | 1.240 | 1.151 | 1.165 | 1.167 | 1.172 | 1.170 | 1.158 | 1.163 | 1.159 | 1.156 | 1.149 |  |  |
| 30 | - 33 |  |  | 1.127 | 1.145 | 1.128 | 1.119 | 1.135 | 1.138 | 1.133 | 1.131 | 1.130 | 1.121 | 1.117 |  |  |
| 33 | - 36 |  |  | 1.113 | 1.110 | 1.107 | 1.103 | 1.111 | 1.114 | 1.113 | 1.107 | 1.102 | 1.102 | 1.093 |  |  |
| 36 | - 39 |  |  | 1.093 | 1.087 | 1.093 | 1.090 | 1.097 | 1.094 | 1.091 | 1.092 | 1.092 | 1.085 | 1.083 |  |  |
| 39 | - 42 |  | 1.139 | 1.076 | 1.083 | 1.083 | 1.086 | 1.096 | 1.082 | 1.083 | 1.081 | 1.081 | 1.076 |  |  |  |
| 42 | - 45 |  | 1.063 | 1.077 | 1.068 | 1.063 | 1.069 | 1.069 | 1.074 | 1.069 | 1.068 | 1.070 | 1.062 |  |  |  |
| 45 | - 48 |  | 1.059 | 1.057 | 1.058 | 1.057 | 1.059 | 1.063 | 1.064 | 1.062 | 1.059 | 1.059 | 1.054 |  |  |  |
| 48 | - 51 |  | 1.049 | 1.039 | 1.050 | 1.050 | 1.050 | 1.052 | 1.053 | 1.053 | 1.051 | 1.049 | 1.046 |  |  |  |
| 51 | - 54 | 1.072 | 1.043 | 1.044 | 1.048 | 1.049 | 1.050 | 1.049 | 1.050 | 1.048 | 1.048 | 1.044 |  |  |  |  |
| 54 | - 57 | 1.038 | 1.045 | 1.037 | 1.037 | 1.038 | 1.043 | 1.045 | 1.043 | 1.040 | 1.043 | 1.039 |  |  |  |  |
| 57 | - 60 | 1.037 | 1.025 | 1.032 | 1.034 | 1.037 | 1.038 | 1.039 | 1.039 | 1.037 | 1.037 | 1.034 |  |  |  |  |
| 60 | - 63 | 1.031 | 1.027 | 1.028 | 1.030 | 1.032 | 1.032 | 1.034 | 1.034 | 1.032 | 1.031 | 1.031 |  |  |  |  |
| 63 | - 66 | 1.029 | 1.025 | 1.025 | 1.030 | 1.030 | 1.031 | 1.033 | 1.031 | 1.032 | 1.029 |  |  |  |  |  |
| 66 | - 69 | 1.027 | 1.023 | 1.022 | 1.026 | 1.027 | 1.029 | 1.028 | 1.028 | 1.028 | 1.025 |  |  |  |  |  |
| 69 | - 72 | 1.018 | 1.021 | 1.022 | 1.023 | 1.025 | 1.028 | 1.026 | 1.026 | 1.023 | 1.022 |  |  |  |  |  |
| 72 | - 75 | 1.014 | 1.017 | 1.018 | 1.021 | 1.022 | 1.023 | 1.023 | 1.022 | 1.021 | 1.021 |  |  |  |  |  |
| 75 | - 78 | 1.018 | 1.018 | 1.019 | 1.020 | 1.020 | 1.023 | 1.022 | 1.022 | 1.020 |  |  |  |  |  |  |
| 78 | - 81 | 1.017 | 1.013 | 1.015 | 1.019 | 1.019 | 1.020 | 1.020 | 1.020 | 1.017 |  |  |  |  |  |  |
| 81 | - 84 | 1.015 | 1.013 | 1.015 | 1.017 | 1.018 | 1.019 | 1.018 | 1.017 | 1.016 |  |  |  |  |  |  |
| 84 | - 87 | 1.014 | 1.011 | 1.013 | 1.015 | 1.016 | 1.016 | 1.016 | 1.015 | 1.014 |  |  |  |  |  |  |
| 87 | - 90 | 1.013 | 1.012 | 1.012 | 1.014 | 1.015 | 1.015 | 1.016 | 1.014 |  |  |  |  |  |  |  |
| 90 | - 93 | 1.010 | 1.011 | 1.011 | 1.013 | 1.014 | 1.014 | 1.014 | 1.012 |  |  |  |  |  |  |  |
| 93 | - 96 | 1.010 | 1.011 | 1.011 | 1.013 | 1.013 | 1.013 | 1.013 | 1.012 |  |  |  |  |  |  |  |
| 96 | - 99 | 1.007 | 1.009 | 1.010 | 1.012 | 1.012 | 1.012 | 1.011 | 1.010 |  |  |  |  |  |  |  |
| 99 | - 102 | 1.008 | 1.009 | 1.009 | 1.012 | 1.012 | 1.012 | 1.011 |  |  |  |  |  |  |  |  |
| 102 | - 105 | 1.007 | 1.008 | 1.008 | 1.010 | 1.012 | 1.011 | 1.009 |  |  |  |  |  |  |  |  |
| 105 | - 108 | 1.008 | 1.008 | 1.008 | 1.010 | 1.010 | 1.010 | 1.008 |  |  |  |  |  |  |  |  |
| 108 | - 111 | 1.007 | 1.007 | 1.008 | 1.009 | 1.009 | 1.009 | 1.008 |  |  |  |  |  |  |  |  |
| 111 | - 114 | 1.007 | 1.008 | 1.008 | 1.009 | 1.009 | 1.008 |  |  |  |  |  |  |  |  |  |
| 114 | - 117 | 1.006 | 1.007 | 1.007 | 1.009 | 1.008 | 1.007 |  |  |  |  |  |  |  |  |  |
| 117 | - 120 | 1.006 | 1.007 | 1.007 | 1.008 | 1.008 | 1.007 |  |  |  |  |  |  |  |  |  |
| 120 | - 123 | 1.006 | 1.006 | 1.007 | 1.007 | 1.007 | 1.006 |  |  |  |  |  |  |  |  |  |

[1] All paid allocated loss adjustment expense exclude the paid cost of medical cost containment programs.
Source: WCIRB quarterly calls for experience.

## Reported Indemnity Claim Count Development - Statewide



| cident Age-to-Age Development (in months): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 183-195 | 195-207 | 207-219 | 219-231 | 231-243 | 243-255 | 255-267 | 267-279 | 279-291 | 291-303 | 303-315 | 315-327 | 327-339 |  |
| 1989 |  |  |  | 0.999 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |
| 1990 |  |  | 0.996 | 1.000 | 1.000 | 1.001 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |
| 1991 |  | 0.998 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |
| 1992 | 0.999 | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |
| 1993 | 1.000 | 1.000 | 1.001 | 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 |  |  |  |  |  |  |
| 1995 | 1.001 | 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 |  |  |  |  |  |  |  |  |
| 1997 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |
| 1998 | 1.000 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |
| 1999 | 1.000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| 2000 | 1.000 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | 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 |  |
| II. Age-to-Ultimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.003 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 |

Source: WCIRB quarterly calls for experience

## Projected Ratio of ALAE ${ }^{[1]}$ to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and ALAE Severity For Policies with Effective Dates between January 1, 2018 and December 31, 2018

|  | Paid ALAE |  |  | Cumulative |  |  | Estimated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid ALAE ${ }^{[1]}$ | Cumulative | Estimated | Indemnity | Count | Estimated | Ult. ALAE |
| Acc. | @3/31/17 | Development | Ult. ALAE | Claim Counts | Development | Ultimate | Per Indemnity |
| Year | (in \$000) | Factors ${ }^{[2]}$ | (in \$000) | @3/31/17 | Factors ${ }^{[3]}$ | Ind. Counts | Claim |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5) | (6) $=(4) \times(5)$ | $(7)=(3) /(6) \times 1000$ |
| 1991 | 447,847 | 1.045 | 468,171 | 249,729 | 1.000 | 249,811 | 1,874 |
| 1992 | 347,521 | 1.049 | 364,527 | 198,442 | 1.000 | 198,538 | 1,836 |
| 1993 | 253,191 | 1.052 | 266,311 | 156,131 | 1.001 | 156,225 | 1,705 |
| 1994 | 237,319 | 1.057 | 250,893 | 143,689 | 1.001 | 143,792 | 1,745 |
| 1995 | 263,980 | 1.063 | 280,498 | 135,154 | 1.001 | 135,299 | 2,073 |
| 1996 | 309,396 | 1.071 | 331,326 | 133,103 | 1.001 | 133,289 | 2,486 |
| 1997 | 393,677 | 1.078 | 424,276 | 137,271 | 1.002 | 137,486 | 3,086 |
| 1998 | 570,503 | 1.085 | 619,232 | 147,452 | 1.002 | 147,728 | 4,192 |
| 1999 | 623,395 | 1.095 | 682,542 | 148,641 | 1.002 | 148,930 | 4,583 |
| 2000 | 771,338 | 1.105 | 852,428 | 161,971 | 1.002 | 162,320 | 5,252 |
| 2001 | 970,245 | 1.116 | 1,083,271 | 185,627 | 1.002 | 186,076 | 5,822 |
| 2002 | 1,028,748 | 1.128 | 1,160,536 | 194,673 | 1.003 | 195,194 | 5,946 |
| 2003 | 1,034,991 | 1.141 | 1,180,612 | 184,208 | 1.003 | 184,727 | 6,391 |
| 2004 | 869,885 | 1.154 | 1,004,271 | 158,953 | 1.003 | 159,399 | 6,300 |
| 2005 | 769,025 | 1.171 | 900,675 | 139,590 | 1.003 | 139,964 | 6,435 |
| 2006 | 801,218 | 1.194 | 956,823 | 133,295 | 1.002 | 133,621 | 7,161 |
| 2007 | 850,137 | 1.222 | 1,038,603 | 130,250 | 1.003 | 130,583 | 7,954 |
| 2008 | 880,310 | 1.257 | 1,106,553 | 122,971 | 1.003 | 123,341 | 8,971 |
| 2009 | 895,374 | 1.303 | 1,167,031 | 113,766 | 1.004 | 114,274 | 10,213 |
| 2010 | 914,637 | 1.368 | 1,251,369 | 118,531 | 1.006 | 119,252 | 10,493 |
| 2011 | 863,605 | 1.461 | 1,261,846 | 120,655 | 1.008 | 121,656 | 10,372 |
| 2012 | 848,777 | 1.608 | 1,365,032 | 127,548 | 1.011 | 128,940 | 10,587 |
| 2013 | 794,354 | 1.860 | 1,477,646 | 135,069 | 1.017 | 137,303 | 10,762 |
| 2014 | 679,553 | 2.343 | 1,591,892 | 138,792 | 1.026 | 142,356 | 11,182 |
| 2015 | 487,910 | 3.563 | 1,738,279 | 140,610 | 1.049 | 147,521 | 11,783 |
| 2016 | 187,587 | 9.952 | 1,866,802 | 129,487 | 1.161 | 150,387 | 12,413 |

Projected Based on 2-Year Average of 2015 and 2016:


Notes:
[1] All paid ALAE exclude the paid cost of medical cost containment programs.
[2] Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 16.1.
[3] Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
[4] Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2015 and
[5] Severity is projected by applying an annual growth rate of $4.0 \%$, 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 14.2 and (ii) paid ALAE per open indemnity claim from Exhibit 15, to the ultimate ALAE severity estimated from averaging 2015 and 2016.
[6] Column(6) x Column(7) / 1,000.
[7] Based on the reported earned premium for calendar year 2016 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, 2017.
[8] See Exhibit 8 of Item AC17-06-01
[9] See Exhibit 5.2 of Item AC17-06-01

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, 2018 and December 31, 2018

|  | Indemnity | Cumulative Count | Estimated | Estimated Ult. ALAE | Estimated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acc. | Claim Counts | Development | Ultimate | Per Indemnity | Ult. ALAE |
| Year | @3/31/17 | Factors ${ }^{[2]}$ | Ind. Counts | Claim ${ }^{[3]}$ | (in \$000) |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5) $=(3) \times(4)$ |
| 1991 | 249,729 | 1.000 | 249,811 | 2,465 | 615,787 |
| 1992 | 198,442 | 1.000 | 198,538 | 2,346 | 465,724 |
| 1993 | 156,131 | 1.001 | 156,225 | 2,177 | 340,047 |
| 1994 | 143,689 | 1.001 | 143,792 | 2,184 | 314,100 |
| 1995 | 135,154 | 1.001 | 135,299 | 2,502 | 338,493 |
| 1996 | 133,103 | 1.001 | 133,289 | 2,953 | 393,554 |
| 1997 | 137,271 | 1.002 | 137,486 | 3,704 | 509,199 |
| 1998 | 147,452 | 1.002 | 147,728 | 4,794 | 708,220 |
| 1999 | 148,641 | 1.002 | 148,930 | 5,142 | 765,821 |
| 2000 | 161,971 | 1.002 | 162,320 | 6,049 | 981,794 |
| 2001 | 185,627 | 1.002 | 186,076 | 7,532 | 1,401,542 |
| 2002 | 194,673 | 1.003 | 195,194 | 8,057 | 1,572,716 |
| 2003 | 184,208 | 1.003 | 184,727 | 8,591 | 1,586,945 |
| 2004 | 158,953 | 1.003 | 159,399 | 8,109 | 1,292,588 |
| 2005 | 139,590 | 1.003 | 139,964 | 7,834 | 1,096,508 |
| 2006 | 133,295 | 1.002 | 133,621 | 8,161 | 1,090,518 |
| 2007 | 130,250 | 1.003 | 130,583 | 8,871 | 1,158,353 |
| 2008 | 122,971 | 1.003 | 123,341 | 9,739 | 1,201,164 |
| 2009 | 113,766 | 1.004 | 114,274 | 10,812 | 1,235,481 |
| 2010 | 118,531 | 1.006 | 119,252 | 10,874 | 1,296,708 |
| 2011 | 120,655 | 1.008 | 121,656 | 10,629 | 1,293,136 |
| 2012 | 127,548 | 1.011 | 128,940 | 10,754 | 1,386,664 |
| 2013 | 135,069 | 1.017 | 137,303 | 10,987 | 1,508,546 |
| 2014 | 138,792 | 1.026 | 142,356 | 11,545 | 1,643,539 |
| 2015 | 140,610 | 1.049 | 147,521 | 12,183 | 1,797,196 |
| 2016 | 129,487 | 1.161 | 150,387 | 12,676 | 1,906,372 |

Projected Based on 2-Year Average of 2015 and 2016:


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 16.3.
${ }^{[3]}$ Based on estimated ultimate ALAE per indemnity for private insures from Exhibit 14.2.
${ }^{[4]}$ Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2015 and 2016.
${ }^{[5]}$ Severity is projected by applying an annual growth rate of $4.0 \%$, 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 14.2 and (ii) paid ALAE per open indemnity claim from Exhibit 15, to the ultimate ALAE severity estimated from averaging 2015 and 2016.
${ }^{[6]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[7]}$ Based on the reported earned premium for calendar year 2016 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, 2017.
${ }^{[8]}$ See Exhibit 8 of Item AC17-06-01.
${ }^{[9]}$ See Exhibit 5.2 of Item AC17-06-01.

Projected Ratio of $\operatorname{ALAE}^{[1]}$ to Losses - Statewide
Based on Estimated Accident Year Indemnity Claim Frequency and ALAE Severity - Trend From Latest Year For Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Acc. | Paid ALAE |  |  | Cumulative |  |  | Estimated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid ALAE ${ }^{[1]}$ | Cumulative | Estimated | Indemnity | Count | Estimated | Ult. ALAE |
|  | @3/31/17 | Development | Ult. ALAE | Claim Counts | Development | Ultimate | Per Indemnity |
| Year | (in \$000) | Factors ${ }^{[2]}$ | (in \$000) | @3/31/17 | Factors ${ }^{[3]}$ | Ind. Counts | Claim |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5) | (6) $=(4) \times(5)$ | $(7)=(3) /(6) \times 1000$ |
| 1991 | 447,847 | 1.045 | 468,171 | 249,729 | 1.000 | 249,811 | 1,874 |
| 1992 | 347,521 | 1.049 | 364,527 | 198,442 | 1.000 | 198,538 | 1,836 |
| 1993 | 253,191 | 1.052 | 266,311 | 156,131 | 1.001 | 156,225 | 1,705 |
| 1994 | 237,319 | 1.057 | 250,893 | 143,689 | 1.001 | 143,792 | 1,745 |
| 1995 | 263,980 | 1.063 | 280,498 | 135,154 | 1.001 | 135,299 | 2,073 |
| 1996 | 309,396 | 1.071 | 331,326 | 133,103 | 1.001 | 133,289 | 2,486 |
| 1997 | 393,677 | 1.078 | 424,276 | 137,271 | 1.002 | 137,486 | 3,086 |
| 1998 | 570,503 | 1.085 | 619,232 | 147,452 | 1.002 | 147,728 | 4,192 |
| 1999 | 623,395 | 1.095 | 682,542 | 148,641 | 1.002 | 148,930 | 4,583 |
| 2000 | 771,338 | 1.105 | 852,428 | 161,971 | 1.002 | 162,320 | 5,252 |
| 2001 | 970,245 | 1.116 | 1,083,271 | 185,627 | 1.002 | 186,076 | 5,822 |
| 2002 | 1,028,748 | 1.128 | 1,160,536 | 194,673 | 1.003 | 195,194 | 5,946 |
| 2003 | 1,034,991 | 1.141 | 1,180,612 | 184,208 | 1.003 | 184,727 | 6,391 |
| 2004 | 869,885 | 1.154 | 1,004,271 | 158,953 | 1.003 | 159,399 | 6,300 |
| 2005 | 769,025 | 1.171 | 900,675 | 139,590 | 1.003 | 139,964 | 6,435 |
| 2006 | 801,218 | 1.194 | 956,823 | 133,295 | 1.002 | 133,621 | 7,161 |
| 2007 | 850,137 | 1.222 | 1,038,603 | 130,250 | 1.003 | 130,583 | 7,954 |
| 2008 | 880,310 | 1.257 | 1,106,553 | 122,971 | 1.003 | 123,341 | 8,971 |
| 2009 | 895,374 | 1.303 | 1,167,031 | 113,766 | 1.004 | 114,274 | 10,213 |
| 2010 | 914,637 | 1.368 | 1,251,369 | 118,531 | 1.006 | 119,252 | 10,493 |
| 2011 | 863,605 | 1.461 | 1,261,846 | 120,655 | 1.008 | 121,656 | 10,372 |
| 2012 | 848,777 | 1.608 | 1,365,032 | 127,548 | 1.011 | 128,940 | 10,587 |
| 2013 | 794,354 | 1.860 | 1,477,646 | 135,069 | 1.017 | 137,303 | 10,762 |
| 2014 | 679,553 | 2.343 | 1,591,892 | 138,792 | 1.026 | 142,356 | 11,182 |
| 2015 | 487,910 | 3.563 | 1,738,279 | 140,610 | 1.049 | 147,521 | 11,783 |
| 2016 | 187,587 | 9.952 | 1,866,802 | 129,487 | 1.161 | 150,387 | 12,413 |

Projected Based on Latest Year:

| Ultimate ALAE ${ }^{[6]}$ | Ult. Ind. Counts ${ }^{[4]}$ | Ult. ALAE per Ind. Counts ${ }^{[5]}$ |
| :---: | :---: | :---: |
| 2017 1,911,576 | 148,071 | 12,910 |
| 2018 1,953,248 | 145,480 | 13,426 |
| 1/1/2019 1,978,539 | 144,502 | 13,692 |
| (a) Projected ALAE Incurred (\$000): |  | 1,978,539 |
| (b) Calendar Year 2016 Earned Premium ${ }^{[7]}$ (\$000): |  | 17,954,400 |
| (c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[8]}$ : |  | 0.625 |
| (d) Premium Adjustment Factor for Calendar Year 2016 ${ }^{[9]}$ : |  | 0.955 |
| (e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d) |  | 10,713,061 |
| (f) Projected Ratio of ALAE to Losses: (a)/(e) |  | 18.5\% |

Notes:
${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 16.1.
${ }^{[3]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
${ }^{[4]}$ Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the 2016 ultimate indemnity claim counts.
${ }^{[5]}$ Severity is projected by applying an annual growth rate of $4.0 \%$, 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 14.2 and (ii) paid ALAE per open indemnity claim from Exhibit 15, to the 2016 ultimate ALAE severity.
${ }^{[6]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[7]}$ Based on the reported earned premium for calendar year 2016 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, 2017.
${ }^{[8]}$ See Exhibit 8 of Item AC17-06-01.
${ }^{[9]}$ See Exhibit 5.2 of Item AC17-06-01.

Projected Ratio of ALAE $^{[1]}$ to Losses - Statewide
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, 2018 and December 31, 2018

|  | Indemnity | Cumulative Count | Estimated | Estimated <br> Ult. ALAE | Estimated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acc. | Claim Counts | Development | Ultimate | Per Indemnity | Ult. ALAE |
| Year | @3/31/17 | Factors[2] | Ind. Counts | Claim[3] | (in \$000) |
|  | (1) | (2) | (3) $=(1) \times(2)$ | (4) | (5) $=(3) \times(4)$ |
| 1991 | 249,729 | 1.000 | 249,811 | 2,465 | 615,787 |
| 1992 | 198,442 | 1.000 | 198,538 | 2,346 | 465,724 |
| 1993 | 156,131 | 1.001 | 156,225 | 2,177 | 340,047 |
| 1994 | 143,689 | 1.001 | 143,792 | 2,184 | 314,100 |
| 1995 | 135,154 | 1.001 | 135,299 | 2,502 | 338,493 |
| 1996 | 133,103 | 1.001 | 133,289 | 2,953 | 393,554 |
| 1997 | 137,271 | 1.002 | 137,486 | 3,704 | 509,199 |
| 1998 | 147,452 | 1.002 | 147,728 | 4,794 | 708,220 |
| 1999 | 148,641 | 1.002 | 148,930 | 5,142 | 765,821 |
| 2000 | 161,971 | 1.002 | 162,320 | 6,049 | 981,794 |
| 2001 | 185,627 | 1.002 | 186,076 | 7,532 | 1,401,542 |
| 2002 | 194,673 | 1.003 | 195,194 | 8,057 | 1,572,716 |
| 2003 | 184,208 | 1.003 | 184,727 | 8,591 | 1,586,945 |
| 2004 | 158,953 | 1.003 | 159,399 | 8,109 | 1,292,588 |
| 2005 | 139,590 | 1.003 | 139,964 | 7,834 | 1,096,508 |
| 2006 | 133,295 | 1.002 | 133,621 | 8,161 | 1,090,518 |
| 2007 | 130,250 | 1.003 | 130,583 | 8,871 | 1,158,353 |
| 2008 | 122,971 | 1.003 | 123,341 | 9,739 | 1,201,164 |
| 2009 | 113,766 | 1.004 | 114,274 | 10,812 | 1,235,481 |
| 2010 | 118,531 | 1.006 | 119,252 | 10,874 | 1,296,708 |
| 2011 | 120,655 | 1.008 | 121,656 | 10,629 | 1,293,136 |
| 2012 | 127,548 | 1.011 | 128,940 | 10,754 | 1,386,664 |
| 2013 | 135,069 | 1.017 | 137,303 | 10,987 | 1,508,546 |
| 2014 | 138,792 | 1.026 | 142,356 | 11,545 | 1,643,539 |
| 2015 | 140,610 | 1.049 | 147,521 | 12,183 | 1,797,196 |
| 2016 | 129,487 | 1.161 | 150,387 | 12,676 | 1,906,372 |

Projected Based on Latest Year

|  |  | Ult. Ind. Counts ${ }^{[4]}$ | Ult. ALAE per Ind. Counts ${ }^{[5]}$ | Ultimate ALAE ${ }^{[6]}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2017 |  | 148,071 | 13,183 | 1,952,094 |
| 2018 |  | 145,480 | 13,711 | 1,994,650 |
| 1/1/2019 |  | 144,502 | 13,982 | 2,020,477 |
|  | a) Projected ALAE Incurred (\$000): |  |  | 2,020,477 |
|  | (b) Calendar Year 2016 Earned Premium ${ }^{[7]}$ (\$000): |  |  | 17,954,400 |
|  | c) Projected Loss to Industry Average Filed Pure | mium Ratio ${ }^{[8]}$ : |  | 0.625 |
|  | d) Premium Adjustment Factor for Calendar Year | $16^{[9]}$ : |  | 0.955 |
|  | (e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d) |  |  | 10,713,061 |
|  | (f) Projected Ratio of ALAE to Losses: (a)/(e) |  |  | 18.9\% |

## Notes

${ }^{[1]}$ All paid ALAE exclude the paid cost of medical cost containment programs.
${ }^{[2]}$ Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
${ }^{[3]}$ Based on estimated ultimate ALAE per indemnity for private insures from Exhibit 14.2.
${ }^{[4]}$ Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the 2016 ultimate indemnity claim counts.
${ }^{[5]}$ Severity is projected by applying an annual growth rate of $4.0 \%$, 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 14.2 and (ii) paid ALAE per open indemnity claim from Exhibit 15, to the 2016 ultimate ALAE severity.
${ }^{[6]}$ Column(6) $\times$ Column(7) / 1,000.
${ }^{[7]}$ Based on the reported earned premium for calendar year 2016 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, 2017.
${ }^{[8]}$ See Exhibit 8 of Item AC17-06-01.
${ }^{[9]}$ See Exhibit 5.2 of Item AC17-06-01.

Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide
For Policies with Effective Dates between January 1, 2018 and December 31, 2018
Latest Year Development Factors

| Accident Year | Paid ALAE as \% of Premium at $3 / 31 / 17$ | 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) |
| 1988 | 3.1\% | 1.036 | 3.2\% | 48.5\% | 27.7\% | 4.2\% |
| 1989 | 4.5\% | 1.039 | 4.7\% | 49.6\% | 28.7\% | 6.0\% |
| 1990 | 5.7\% | 1.042 | 5.9\% | 46.1\% | 26.3\% | 8.1\% |
| 1991 | 7.2\% | 1.045 | 7.5\% | 40.5\% | 23.6\% | 11.8\% |
| 1992 | 5.8\% | 1.049 | 6.0\% | 35.2\% | 20.6\% | 10.8\% |
| 1993 | 4.1\% | 1.052 | 4.3\% | 35.1\% | 20.7\% | 7.7\% |
| 1994 | 4.4\% | 1.057 | 4.7\% | 41.8\% | 25.1\% | 7.0\% |
| 1995 | 6.6\% | 1.063 | 7.0\% | 55.9\% | 36.3\% | 7.6\% |
| 1996 | 7.7\% | 1.071 | 8.3\% | 58.6\% | 38.4\% | 8.5\% |
| 1997 | 9.4\% | 1.078 | 10.1\% | 59.5\% | 42.7\% | 9.9\% |
| 1998 | 11.2\% | 1.085 | 12.2\% | 59.5\% | 45.5\% | 11.6\% |
| 1999 | 12.2\% | 1.095 | 13.3\% | 58.1\% | 40.2\% | 13.6\% |
| 2000 | 11.3\% | 1.105 | 12.5\% | 46.8\% | 33.8\% | 15.5\% |
| 2001 | 9.4\% | 1.116 | 10.5\% | 38.9\% | 27.4\% | 15.8\% |
| 2002 | 7.5\% | 1.128 | 8.5\% | 29.8\% | 22.3\% | 16.3\% |
| 2003 | 5.2\% | 1.141 | 5.9\% | 19.5\% | 15.0\% | 17.1\% |
| 2004 | 3.7\% | 1.154 | 4.3\% | 16.1\% | 15.6\% | 13.7\% |
| 2005 | 3.6\% | 1.171 | 4.2\% | 18.7\% | 17.8\% | 11.5\% |
| 2006 | 4.6\% | 1.194 | 5.5\% | 23.9\% | 24.5\% | 11.5\% |
| 2007 | 6.4\% | 1.222 | 7.8\% | 32.0\% | 34.2\% | 11.8\% |
| 2008 | 8.2\% | 1.257 | 10.2\% | 38.5\% | 43.2\% | 12.5\% |
| 2009 | 10.0\% | 1.303 | 13.1\% | 44.0\% | 50.4\% | 13.8\% |
| 2010 | 9.7\% | 1.368 | 13.3\% | 42.4\% | 50.4\% | 14.3\% |
| 2011 | 8.5\% | 1.461 | 12.4\% | 39.0\% | 45.0\% | 14.8\% |
| 2012 | 7.2\% | 1.608 | 11.6\% | 34.3\% | 40.9\% | 15.5\% |
| 2013 | 5.6\% | 1.860 | 10.4\% | 29.9\% | 35.6\% | 15.9\% |
| 2014 | 4.2\% | 2.343 | 9.9\% | 26.9\% | 32.7\% | 16.7\% |
| 2015 | 2.9\% | 3.563 | 10.2\% | 26.5\% | 32.2\% | 17.3\% |
| 2016 | 1.0\% | 9.952 | 10.4\% | 26.1\% | 32.9\% | 17.6\% |

(7) Projected ALAE as a Percent of Ultimate On-level Losses:

Average of latest 2 years: 17.5\%

Notes:
(1) Based on accident year paid ALAE and calendar year earned premium information. 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 16.1.
(3) $=(1) \times(2)$.
(4), (5) Based on Exhibits 7.1 and 7.3 of Item AC17-06-01. MCCP costs are not included in the medical ratios shown for accident years 2011 to 2016.
(6) $=(3) /[(4)+(5)]$.
(7) Based on averaging 2015 and 2016.

## 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, 2018 and December 31, 2018
Latest Year Development Factors

| Accident Year | Paid ALAE as \% of Premium at $3 / 31 / 17$ | Development Factors | Ultimate ALAE as \% of Premium | Ultimate <br> 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) |
| 1988 | 4.3\% | 1.036 | 4.4\% | 48.5\% | 27.7\% | 5.8\% |
| 1989 | 6.2\% | 1.039 | 6.4\% | 49.6\% | 28.7\% | 8.2\% |
| 1990 | 7.8\% | 1.042 | 8.1\% | 46.1\% | 26.3\% | 11.2\% |
| 1991 | 9.7\% | 1.045 | 10.2\% | 40.5\% | 23.6\% | 15.9\% |
| 1992 | 7.6\% | 1.049 | 7.9\% | 35.2\% | 20.6\% | 14.2\% |
| 1993 | 5.3\% | 1.052 | 5.6\% | 35.1\% | 20.7\% | 10.0\% |
| 1994 | 5.7\% | 1.057 | 6.0\% | 41.8\% | 25.1\% | 9.0\% |
| 1995 | 8.3\% | 1.063 | 8.9\% | 55.9\% | 36.3\% | 9.6\% |
| 1996 | 9.6\% | 1.071 | 10.3\% | 58.6\% | 38.4\% | 10.6\% |
| 1997 | 11.7\% | 1.078 | 12.6\% | 59.5\% | 42.7\% | 12.3\% |
| 1998 | 13.2\% | 1.085 | 14.3\% | 59.5\% | 45.5\% | 13.7\% |
| 1999 | 14.5\% | 1.095 | 15.8\% | 58.1\% | 40.2\% | 16.1\% |
| 2000 | 13.1\% | 1.105 | 14.5\% | 46.8\% | 33.8\% | 18.0\% |
| 2001 | 11.6\% | 1.116 | 12.9\% | 38.9\% | 27.4\% | 19.5\% |
| 2002 | 9.9\% | 1.128 | 11.2\% | 29.8\% | 22.3\% | 21.6\% |
| 2003 | 6.8\% | 1.141 | 7.7\% | 19.5\% | 15.0\% | 22.4\% |
| 2004 | 4.7\% | 1.154 | 5.4\% | 16.1\% | 15.6\% | 17.0\% |
| 2005 | 4.2\% | 1.171 | 5.0\% | 18.7\% | 17.8\% | 13.6\% |
| 2006 | 5.2\% | 1.194 | 6.2\% | 23.9\% | 24.5\% | 12.9\% |
| 2007 | 7.2\% | 1.222 | 8.8\% | 32.0\% | 34.2\% | 13.3\% |
| 2008 | 9.1\% | 1.257 | 11.4\% | 38.5\% | 43.2\% | 14.0\% |
| 2009 | 11.0\% | 1.303 | 14.4\% | 44.0\% | 50.4\% | 15.2\% |
| 2010 | 10.6\% | 1.368 | 14.5\% | 42.4\% | 50.4\% | 15.6\% |
| 2011 | 9.1\% | 1.461 | 13.3\% | 39.0\% | 45.0\% | 15.9\% |
| 2012 | 7.6\% | 1.608 | 12.3\% | 34.3\% | 40.9\% | 16.3\% |
| 2013 | 5.9\% | 1.860 | 10.9\% | 29.9\% | 35.6\% | 16.7\% |
| 2014 | 4.6\% | 2.343 | 10.7\% | 26.9\% | 32.7\% | 17.9\% |
| 2015 | 3.1\% | 3.563 | 10.9\% | 26.5\% | 32.2\% | 18.5\% |
| 2016 | 1.1\% | 9.952 | 11.1\% | 26.1\% | 32.9\% | 18.7\% |

(7) Projected ALAE as a Percent of Ultimate On-level Losses:

Average of latest 2 years: $18.6 \%$

Notes:
(1) Based on accident year paid ALAE and calendar year earned premium information reported by 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 16.1.
(3) $=(1) \times(2)$.
(4), (5) Based on analogous Exhibits 7.1 and 7.3 of Item AC17-06-01. MCCP costs are not included in the medical ratios shown for accident years 2011 to 2016.
$(6)=(3) /[(4)+(5)]$.
(7) Based on averaging 2015 and 2016.

| Development of Paid Allocated Loss Adjustment Expenses as a Percent of Paid Indemnity ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident |  |  |  |  |  | Age-to | Deve | ment in | months: |  |  |  |  |  | Paid | Paid |
| 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 | 177183 | 183-Ult | 183-Ult |
| 1986 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.007 |  |  |
| 1987 |  |  |  |  |  |  |  |  |  |  |  |  | 1.008 | ${ }^{1.004}$ |  |  |
| 1988 |  |  |  |  |  |  |  |  |  |  |  | 1.011 | 1.002 | ${ }^{1.002}$ |  |  |
| 1989 1990 |  |  |  |  |  |  |  |  |  |  | 1.002 | 1.002 | 1.002 | ${ }^{1.003}$ |  |  |
| ${ }_{1999}^{1991}$ |  |  |  |  |  |  |  |  | 1.002 | ${ }_{1}^{1.0000}$ | ${ }_{1}^{1.001}$ | ${ }_{1}^{1.000}$ | 1.003 1.002 1 | ${ }_{1}^{1.002}$ |  |  |
| 1992 |  |  |  |  |  |  |  | 1.004 | 1.000 | 1.000 | 1.001 | 1.003 | 1.005 | 1.001 |  |  |
| 1993 |  |  |  |  |  |  | 1.008 | 1.007 | 1.007 | 1.004 | 1.006 | 1.007 | 1.007 | ${ }^{1.005}$ |  |  |
| 1994 1995 |  |  |  |  |  | 1.006 | 1.009 | 1.007 | 1.007 | 1.005 | 1.010 | 1.010 | 1.008 | 1.006 |  |  |
| 1995 1996 |  |  |  |  | ${ }_{1}^{1.008}$ | ${ }^{1.002}$ | 1.010 | 1.009 | 1.011 | 1.010 | 1.010 | 1.009 | 1.010 | 1.007 |  |  |
| 1996 1997 |  |  | 0.989 | ${ }_{0}^{0.998}$ | 1.004 | ${ }_{1}^{1.014}$ | ${ }_{1}^{1.023}$ | 1.011 | ${ }^{1.014}$ | ${ }_{1}^{1.011}$ | ${ }_{1}^{1.011}$ | 1.009 | 1.008 | 1.006 |  |  |
| 1998 |  | 0.950 | 0.996 | 1.017 | 1.023 | 1.031 | 1.020 |  |  |  |  |  |  |  |  |  |
| 1999 | 0.909 | 0.990 | 1.013 | 1.019 | 1.028 | 1.028 | 1.024 | 1.018 | 1.016 | 1.014 | 1.012 | 1.010 | 1.008 | ${ }^{1.007}$ |  |  |
| 2000 | 1.012 | 1.001 | 0.999 | 1.030 | 1.032 | 1.035 | 1.023 | 1.020 | 1.016 | 1.014 | 1.011 | 1.011 | 1.007 | 1.007 |  |  |
| 2001 | 1.067 | 0.968 | 1.012 | 1.029 | 1.034 | 1.027 | 1.022 | 1.013 | 1.013 | 1.010 | 1.010 | 1.006 | 1.009 | 1.007 |  |  |
| 2002 | 0.975 | 0.965 | 1.017 | 1.033 | 1.032 | 1.022 | 1.013 | 1.014 | 1.010 | 1.009 | 1.006 | 1.007 | 1.006 | 1.005 |  |  |
| 2003 | 1.064 | 0.992 | 1.046 | 1.041 | 1.025 | 1.019 | 1.017 | 1.011 | 1.011 | 1.002 | 1.004 | 1.007 | 1.003 |  |  |  |
| 2004 | 1.211 | 1.079 | 1.071 | 1.040 | 1.025 | 1.022 | 1.009 | 1.005 | 1.002 | 1.006 | 1.005 | 1.003 |  |  |  |  |
| 2005 | 1.233 | 1.119 | 1.066 | 1.047 | 1.033 | 1.018 | 1.012 | 1.004 | 1.008 |  | 1.006 |  |  |  |  |  |
| ${ }_{2006}$ | ${ }^{1.271}$ | ${ }^{1.103}$ | ${ }^{1.065}$ | 1.041 | ${ }^{1.026}$ | 1.019 | ${ }^{1.011}$ | 1.011 | ${ }^{1.006}$ | 1.006 |  |  |  |  |  |  |
| 2007 2008 | 1.269 | 1.088 | 1.063 | 1.047 | 1.031 | 1.019 | 1.013 | 1.010 | 1.004 |  |  |  |  |  |  |  |
| 2008 209 | ${ }^{1.225}$ | 1.094 | 1.064 | 1.042 | 1.030 | 1.022 | 1.014 | 1.012 |  |  |  |  |  |  |  |  |
| 2009 2010 | 1.253 1.225 1 | ${ }_{1}^{1.081} 1$ | 1.054 | 1.037 | 1.026 | 1.019 | 1.010 |  |  |  |  |  |  |  |  |  |
| 2011 | ${ }^{1.207}$ | ${ }^{1.073}$ | 1.047 | 1.035 | 1.023 |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | 1.247 | 1.066 | 1.054 | 1.031 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2013 2014 | +1.233 | ${ }^{1.040}$ | 1.036 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | ${ }_{1} 1.130$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^21]Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide
For Policies with Effective Dates between January 1, 2018 and December 31, 2018 Using Paid ALAE as a Percent of Paid Indemnity Latest Year Development Factors
$\left.\begin{array}{lccccc} & \begin{array}{c}\text { Paid ALAE as } \\ \text { a Percent of } \\ \text { Accident } \\ \text { Year }\end{array} & \begin{array}{c}\text { Indemnity } \\ \text { at 3/31/17 }\end{array} & \begin{array}{c}1) \\ \text { Development } \\ \text { Factors }\end{array} & \begin{array}{c}\text { Ultimate ALAE } \\ \text { as a Percent } \\ \text { of Ultimate } \\ \text { Indemnity }\end{array} & \begin{array}{c}\text { Indemnity } \\ \text { On-level } \\ \text { Factors }\end{array}\end{array} \begin{array}{c}\text { Ulimate ALAE } \\ \text { as a Percent } \\ \text { of Ultimate } \\ \text { On-level } \\ \text { Indemnity }\end{array}\right]$

Notes:
(1) Based on accident year paid ALAE information. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
(2) See Exhibit 22.1.
(3) $=(1) \times(2)$.
(4) From Exhibit 4.1 of Item AC17-06-01
(5) $=(3) /(4)$.
(6) Projected by averaging 2015 and 2016.
(7), (8) From Exhibit 8 of Item AC17-06-01.
$(9)=(6) \times(7) /[(7)+(8)]$.

Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide
For Policies with Effective Dates between January 1, 2018 and December 31, 2018 Using Paid ALAE as a Percent of Paid Indemnity for Private Insurers Latest Year Development Factors

| Accident <br> Year | Paid ALAE as a Percent of Paid Indemnity at $3 / 31 / 17$ <br> (1) | Development Factors (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) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 32.0\% | 1.080 | 34.6\% | 0.808 | 42.8\% |
| 2004 | 36.7\% | 1.083 | 39.7\% | 1.114 | 35.6\% |
| 2005 | 38.9\% | 1.087 | 42.2\% | 1.512 | 27.9\% |
| 2006 | 37.3\% | 1.093 | 40.8\% | 1.495 | 27.3\% |
| 2007 | 37.2\% | 1.100 | 41.0\% | 1.448 | 28.3\% |
| 2008 | 36.6\% | 1.104 | 40.4\% | 1.364 | 29.6\% |
| 2009 | 38.5\% | 1.117 | 43.0\% | 1.337 | 32.2\% |
| 2010 | 38.6\% | 1.128 | 43.6\% | 1.318 | 33.1\% |
| 2011 | 37.8\% | 1.144 | 43.3\% | 1.298 | 33.3\% |
| 2012 | 37.7\% | 1.170 | 44.1\% | 1.267 | 34.8\% |
| 2013 | 37.1\% | 1.207 | 44.8\% | 1.233 | 36.3\% |
| 2014 | 36.2\% | 1.251 | 45.3\% | 1.116 | 40.5\% |
| 2015 | 35.9\% | 1.266 | 45.5\% | 1.089 | 41.8\% |
| 2016 | 31.9\% | 1.431 | 45.7\% | 1.068 | 42.8\% |
| (6) ALAE as Percent of On-level Indemnity: |  |  |  |  | Projected: 42.3\% |
| (7) Indicated Indemnity to Industry Average Filed Pure Premium Ratio: |  |  |  |  | 0.266 |
| (8) Indicated Medical to Industry Average Filed Pure Premium Ratio: |  |  |  |  | 0.359 |
| (9) ALAE as Percent of Total Losses: |  |  |  |  | 18.0\% |

Notes:
(1) Based on accident year paid ALAE information reported by private insurers. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
(2) See Exhibit 22.1.
(3) $=(1) \times(2)$.
(4) From Exhibit 4.1 of Item AC17-06-01
(5) $=(3) /(4)$.
(6) Projected by averaging 2015 and 2016.
(7), (8) From Exhibit 8 of Item AC17-06-01.
$(9)=(6) \times(7) /[(7)+(8)]$.

# Average Paid MCCP ${ }^{[1]}$ Per Reported Indemnity Claim - Statewide As of March 31, 2017 

| Accident | Evaluated as of (in months): |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{3}$ | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ | $\underline{87}$ |
| 2012 | 191 | 876 | 1,451 | 1,835 | 2,107 | 2,271 |  |  |
| 2013 | 184 | 817 | 1,398 | 1,784 | 1,994 |  |  |  |
| 2014 | 162 | 778 | 1,369 | 1,685 |  |  |  |  |
| 2015 | 172 | 777 | 1,272 |  |  |  |  |  |
| 2016 | 154 | 731 |  |  |  |  |  |  |
| 2017 | 165 |  |  |  |  |  |  |  |


| Accident | Annual Change |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{3}$ | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ |  |
| 2013 | $-3.8 \%$ | $-6.7 \%$ | $-3.7 \%$ | $-2.8 \%$ | $-5.4 \%$ |  |
| 2014 | $-12.2 \%$ | $-4.7 \%$ | $-2.1 \%$ | $-5.5 \%$ |  |  |
| 2015 | $6.7 \%$ | $-0.2 \%$ | $-7.0 \%$ |  |  |  |
| 2016 | $-10.6 \%$ | $-5.9 \%$ |  |  |  |  |
| 2017 | $7.2 \%$ |  |  |  |  |  |

Annual Trend ${ }^{[2]}$

| All-Year | $-3.4 \%$ | $-4.0 \%$ | $-4.1 \%$ | $-4.2 \%$ | $-5.4 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| R $^{2}$ | 0.617 | 0.935 | 0.941 | 0.963 | 1.000 |

${ }^{[1]}$ Trend is based on exponential distribution using accident years 2012 and subsequent. Source: WCIRB accident year experience calls.

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

|  | Private Insurer |  | Statewide |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Paid MCCP |  |
| Calendar Year | per Indemnity Claim Adjusted to Remove IMR/IBR Fees | Year-to-Year Change | per Indemnity Claim Adjusted to Remove IMR/IBR Fees | Year-to-Year Change |
| 2005 | \$469 | --- | --- | --- |
| 2006 | \$559 | 19.3\% | --- | --- |
| 2007 | \$631 | 12.8\% | \$433 | --- |
| 2008 | \$953 | 51.0\% | \$673 | 55.4\% |
| 2009 | \$830 | -13.0\% | \$665 | -1.2\% |
| 2010 | \$888 | 7.0\% | \$733 | 10.2\% |
| 2011 | \$931 | 4.8\% | \$786 | 7.1\% |
| 2012 | \$982 | 5.5\% | \$841 | 7.0\% |
| 2013 | \$1,011 | 2.9\% | \$891 | 5.9\% |
| 2014 | \$908 | -10.2\% | \$815 | -8.6\% |
| 2015 | \$999 | 10.0\% | \$902 | 10.8\% |
| 2016 | \$1,008 | 0.9\% | \$915 | 1.4\% |
| Estimated Annual Exponential Trend Based on: |  |  |  |  |
| 2005-2016 |  | 6.1\% |  | --- |
| $\mathrm{R}^{2}$ |  | 0.685 |  | --- |
| 2009-2016 |  | 2.3\% |  | 4.2\% |
| $\mathrm{R}^{2}$ |  | 0.605 |  | 0.813 |

${ }^{\text {[1] }}$ 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 .
${ }^{[2]}$ Paid MCCP per indemnity claim for calendar years 2013 through 2015 was adjusted to remove the cost of independent medical review (IMR) and independent bill review (IBR). IMR/IBR fees estimated based on a WCIRB review of insurer payments and information provided by the Division of Workers' Compensation.

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

## Estimated Ultimate MCCP Per Indemnity Claim - Statewide

| Year | $\begin{gathered} \text { Paid } \\ \text { MCCP } \\ \text { @3/31/17 } \\ \text { (in } \$ 000 \text { ) } \end{gathered}$ <br> (1) | Cumulative Development Factors ${ }^{[1]}$ (2) | Estimated Ultimate MCCP $(3)=(1) \times(2)$ | Indemnity Claim Counts @3/31/17 <br> (4) | Cumulative Count Development Factors ${ }^{[2]}$ (5) | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP Per Indemnity Claim $(7)=(3) /(6) \times 1000$ | Annual change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 311,681 | 1.572 | 489,980 | 120,655 | 1.008 | 121,656 | 4,028 | --- |
| 2012 | 289,656 | 1.696 | 491,304 | 127,548 | 1.011 | 128,940 | 3,810 | -5.4\% |
| 2013 | 269,315 | 1.822 | 490,694 | 135,069 | 1.017 | 137,303 | 3,574 | -6.2\% |
| 2014 | 233,884 | 2.044 | 477,947 | 138,792 | 1.026 | 142,356 | 3,357 | -6.1\% |
| 2015 | 178,884 | 2.565 | 458,767 | 140,610 | 1.049 | 147,521 | 3,110 | -7.4\% |
| 2016 | 94,593 | 4.649 | 439,798 | 129,487 | 1.161 | 150,387 | 2,924 | -6.0\% |
|  |  |  |  | Estimated Annual Exponential Trend |  |  | 2011-2016: | -6.3\% |
|  |  |  |  |  |  |  |  | 0.998 |

Notes:
[1] Based on MCCP development through 63 months from Exhibit 27.1, 63-to-ultimate and 75-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC17-06-01.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3

## Paid MCCP Development Factors - Statewide



Annual Development

| Age in | Accident Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Months | $\underline{2012}$ | $\underline{\underline{2013}}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ |
| $15-27$ | 1.854 | 1.886 | 1.945 | 1.813 |  |
| $27-39$ | 1.298 | 1.307 | 1.255 |  |  |
| $39-51$ | 1.159 | 1.122 |  |  |  |
| $51-63$ | 1.074 |  |  |  |  |
|  |  | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ |
| Age-to-Age ${ }^{[1]}$ | $\underline{1.813}$ | 1.255 | $\underline{63-U l t}$. |  |  |
| Age -to-Ult. ${ }^{[2]}$ | 4.649 | 2.565 | 2.044 | 1.824 | 1.696 |

Notes:
[1] Based on Latest Year.
[2] 63-to-Ult. is based on selected paid medical 63-to-ultimate development factor on Exhibit 3.2 of Item AC17-06-01.

Projected Ratio of MCCP to Losses - Statewide
Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity For Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Year | Paid MCCP $@ 3 / 31 / 17$ $\frac{(\text { in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | $\begin{aligned} & \text { Estimated } \\ & \text { Ultimate } \\ & \text { MCCP } \\ & (3)=(1) \times(2) \end{aligned}$ | Indemnity Claim Counts @3/31/17 (4) | Cumulative Count Development Factors ${ }^{[2]}$ (5) | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP Per Indemnity Claim (7)=(3)/(6) $\times 1000$ | Annual change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 311,681 | 1.572 | 489,980 | 120,655 | 1.008 | 121,656 | 4,028 |  |
| 2012 | 289,656 | 1.696 | 491,304 | 127,548 | 1.011 | 128,940 | 3,810 | -5.4\% |
| 2013 | 269,315 | 1.822 | 490,694 | 135,069 | 1.017 | 137,303 | 3,574 | -6.2\% |
| 2014 | 233,884 | 2.044 | 477,947 | 138,792 | 1.026 | 142,356 | 3,357 | -6.1\% |
| 2015 | 178,884 | 2.565 | 458,767 | 140,610 | 1.049 | 147,521 | 3,110 | -7.4\% |
| 2016 | 94,593 | 4.649 | 439,798 | 129,487 | 1.161 | 150,387 | 2,924 | -6.0\% |

## Projected Based on 2-Year Average of 2015 and 2016:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts $^{[3]}$ | Ult.MCCP per <br> Ind. Counts${ }^{[4]}$ |
| :--- | :---: | :---: | :---: |
| 2017 | 440,303 | 145,934 | 3,017 |
| 2018 | 432,598 | 143,380 | 3,017 |
| $1 / 1 / 2019$ | 429,690 | 142,416 | 3,017 |


| (a) Projected MCCP (\$000): | 429,690 |
| :--- | ---: |
| (b) Calendar Year 2016 Earned Premium ${ }^{[6]}(\$ 000)$ : | $17,954,400$ |
| (c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ : | 0.625 |
| (d) Premium Adjustment Factor for Calendar Year $2016^{[8]}:$ | 0.955 |
| (e) Projected Losses (\$000): (b) $\times$ (c) $\times$ (d) | $10,713,061$ |
| (f) Projected Ratio of MCCP to Losses: (a)/(e) | $4.0 \%$ |

Notes:
[1] Based on MCCP development through 63 months from Exhibit 27.1, 63-to-ultimate and 72-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC17-06-01.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
[3] Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2015 and 2016.
[4] Severity is projected by applying an annual growth rate of $0 \%$ to the ultimate MCCP severity estimated from averaging 2015 and 2016.
[5] Column(6) x Column(7) / 1,000.
[6] Based on the reported earned premium for calendar year 2016 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, 2017.
[7] See Exhibit 8 of Item AC17-06-01.
[8] See Exhibit 5.2 of Item AC17-06-01.

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 January 1, 2018 and December 31, 2018

| Year | Paid MCCP $@ 3 / 31 / 17$ $\frac{(\text { in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | Estimated Ultimate $\xrightarrow[(3)=(1) \times(2)]{\text { MCCP }}$ | Indemnity Claim Counts @3/31/17 <br> (4) | Cumulative Count Development Factors ${ }^{[2]}$ (5) | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP Per Indemnity Claim $(7)=(3) /(6) \times 1000$ | Annual change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 311,681 | 1.572 | 489,980 | 120,655 | 1.008 | 121,656 | 4,028 | --- |
| 2012 | 289,656 | 1.696 | 491,304 | 127,548 | 1.011 | 128,940 | 3,810 | -5.4\% |
| 2013 | 269,315 | 1.822 | 490,694 | 135,069 | 1.017 | 137,303 | 3,574 | -6.2\% |
| 2014 | 233,884 | 2.044 | 477,947 | 138,792 | 1.026 | 142,356 | 3,357 | -6.1\% |
| 2015 | 178,884 | 2.565 | 458,767 | 140,610 | 1.049 | 147,521 | 3,110 | -7.4\% |
| 2016 | 94,593 | 4.649 | 439,798 | 129,487 | 1.161 | 150,387 | 2,924 | -6.0\% |

## Projected Based on Latest Year:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts ${ }^{[3]}$ | Ult.MCCP per <br> Ind. Counts ${ }^{[4]}$ |
| :--- | :---: | :---: | :---: |
| 2017 | 433,025 | 148,071 | 2,924 |
| 2018 | 425,447 | 145,480 | 2,924 |
| $1 / 1 / 2019$ | 422,587 | 144,502 | 2,924 |

(a) Projected MCCP (\$000):

422,587
(b) Calendar Year 2016 Earned Premium ${ }^{[6]}$ (\$000):
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ :

17,954,400
(d) Premium Adjustment Factor for Calendar Year $2016{ }^{[8]}$ :
0.625
(e) Projected Losses (\$000): (b) x (c) x (d)
0.955
(f) Projected Ratio of MCCP to Losses: (a)/(e)

10,713,061
3.9\%

Notes:
[1] Based on MCCP development through 63 months from Exhibit 27.1, 63-to-ultimate and 72-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC17-06-01.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
[3] Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the 2016 ultimate indemnity claim counts.
[4] Severity is projected by applying an annual growth rate of $0 \%$ to the 2016 ultimate MCCP severity.
[5] Column(6) x Column(7) / 1,000.
[6] Based on the reported earned premium for calendar year 2016 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, 2017.
[7] See Exhibit 8 of Item AC17-06-01.
[8] See Exhibit 5.2 of Item AC17-06-01.

## Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity with Calendar Year Trend For Policies with Effective Dates between January 1, 2018 and December 31, 2018

| Year | Paid MCCP @3/31/16 $\frac{\text { (in } \$ 000)}{(1)}$ | Cumulative Development Factors ${ }^{[1]}$ (2) | Estimated Ultimate $\xrightarrow[(3)=(1) \times(2)]{\text { MCCP }}$ | Indemnity Claim Counts @3/31/16 (4) | Cumulative Count Development Factors ${ }^{[2]}$ (5) | Estimated Ultimate Ind. Counts $(6)=(4) \times(5)$ | Estimated Ultimate MCCP Per Indemnity Claim $(7)=(3) /(6) \times 1000$ | Annual change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 311,681 | 1.572 | 489,980 | 120,655 | 1.008 | 121,656 | 4,028 | --- |
| 2012 | 289,656 | 1.696 | 491,304 | 127,548 | 1.011 | 128,940 | 3,810 | -5.4\% |
| 2013 | 269,315 | 1.822 | 490,694 | 135,069 | 1.017 | 137,303 | 3,574 | -6.2\% |
| 2014 | 233,884 | 2.044 | 477,947 | 138,792 | 1.026 | 142,356 | 3,357 | -6.1\% |
| 2015 | 178,884 | 2.565 | 458,767 | 140,610 | 1.049 | 147,521 | 3,110 | -7.4\% |
| 2016 | 94,593 | 4.649 | 439,798 | 129,487 | 1.161 | 150,387 | 2,924 | -6.0\% |

## Projected Based on 2-Year Average of 2015 and 2016:

|  | Ultimate MCCP ${ }^{[5]}$ | Ult. Ind. Counts ${ }^{[3]}$ | Ult.MCCP per <br> Ind. Counts ${ }^{[4]}$ |
| :--- | :---: | :---: | :---: |
| 2017 | 468,514 | 145,934 | 3,210 |
| 2018 | 479,505 | 143,380 | 3,344 |
| $1 / 1 / 2019$ | 486,108 | 142,416 | 3,413 |

(a) Projected MCCP (\$000):

486,108
(b) Calendar Year 2016 Earned Premium ${ }^{[6]}$ (\$000):
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ${ }^{[7]}$ :

17,954,400
(d) Premium Adjustment Factor for Calendar Year 2016 ${ }^{[8]}$ :
0.625
(e) Projected Losses (\$000): (b) x (c) x (d)
(f) Projected Ratio of MCCP to Losses: (a)/(e)

10,713,061
4.5\%

Notes:
[1] Based on MCCP development through 63 months from Exhibit 27.1, 51-to-ultimate and 63-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC17-06-01.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 16.3.
[3] Estimated based on projected frequency trends for accident years 2016 to 2019. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit C7.2 of Item AC17-08-01). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2015 and 2016.
[4] Severity is projected by applying an annual growth rate of $4.2 \%$, which is based on the approximate average rate of growth in paid MCCP per indemnity claim from Exhibit 24, to the ultimate MCCP severity estimated from averaging 2015 and 2016.
[5] Column(6) $\times$ Column(7) / 1,000.
[6] Based on the reported earned premium for calendar year 2016 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, 2017.
[7] See Exhibit 8 of Item AC17-06-01.
[8] See Exhibit 5.2 of Item AC17-06-01.

## Item AC17-08-03 <br> 1/1/2018 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 WCIRB's summary analysis of March 31, 2017 experience, included in Item AC17-06-01 of this Agenda, were based on a combination of (a) latest year reform-adjusted 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 231 months, and (c) three-year average (unadjusted) incurred loss development factors after 231 months. Attached 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, 2017 experience, derived using the following loss development methodologies and the trending methodology reflected in the analysis included in Item AC17-06-01 of this Agenda are included: ${ }^{1}$

1. 3-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. Latest Year 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. 3-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 through 7.3.
8. 3-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.
[^22]A summary of the preliminary policy year 2018 loss ratio projections based on the alternative loss development methodologies described above is shown in Table 1.

## Table 1: Projected Policy Year 2018 Loss Ratios Based on Alternative Loss Development Methodologies ${ }^{2}$

| 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 <br> Alternative Methodologies | $\mathbf{0 . 2 6 6}$ | $\mathbf{0 . 3 5 9}$ | $\mathbf{0 . 6 2 5}$ |
| Incurred Methodologies | 0.236 | 0.297 | 0.533 |
| 3-Year Average (Unadjusted) | 0.235 | 0.282 | 0.517 |
| Latest Year (Unadjusted) <br> Latest Year Adjusted for Changes in Case Reserve <br> Levels | 0.244 | 0.298 | 0.542 |
| Latest Year Adjusted for Changes in Insurer Mix | 0.238 | 0.288 | 0.526 |
| Paid Methodologies | 0.260 | 0.366 | 0.626 |
| 3-Year Average (Unadjusted) | 0.259 | 0.356 | 0.615 |
| Latest Year (Unadjusted) | 0.275 | 0.368 | 0.643 |
| Latest Year Adjusted for Reforms | 0.267 | 0.373 | 0.640 |
| 3-Year Average Adjusted for Changes in Claim <br> Settlement Rates and Reforms <br> Latest Year Adjusted for Changes in Insurer Mix | 0.258 | 0.351 | 0.609 |
| BF Paid to 27 Months; Latest Year Reform-Adjusted <br> after 27 Months | 0.263 | 0.356 | 0.619 |

## Trending Methodologies

The trending projections reflected in the summary analysis of March 31, 2017 experience, included in Item AC17-06-01 of this Agenda, were 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 preliminary 15-month frequency change for accident year 2016 and the WCIRB's indemnity claim frequency model for accident years 2017 through 2019. The severity growth estimates were based on the approximate average longer-term (post-2005) on-level severity trends for indemnity and medical.

Attached for the Committee's review are a number of alternative trending 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

[^23]IV-C-2
on March 31, 2017 experience, derived using the loss development methodologies reflected in the analysis included in Item AC17-06-01 of this Agenda and the following trending methodologies are included:

1. Separate Projections of Frequency and Severity Growth Applied to the Latest Year Only Exhibits 11.1 and 11.2.
2. Separate Projections of Frequency and the Approximate Average of the Longer-Term (Post2005) and Shorter Term (5-Year) Severity Growth Rates Applied to the Latest Two Years Exhibits 12.1 and 12.2.
3. Post-2005 On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios - Exhibits 13.1 and 13.2.
4. 5-Year On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios Exhibits 14.1 and 14.2.
5. 5-Year Fitted On-Level Loss Ratio Exponential Trend - Exhibits 15.1 and 15.2

A summary of the preliminary policy year 2018 loss ratio projections based on the alternative trending methodologies described above is shown in Table 2.

Table 2: Projected Policy Year 2018 Loss Ratios Based on Alternative Trending Methodologies

| Trending Methodologies | Indemnity <br> Loss Ratio | Medical <br> Loss Ratio | Total <br> Loss Ratio |
| :--- | :---: | :---: | :---: |
| Current WCIRB Methodology <br> Separate Projections of Frequency and Severity, with <br> Indemnity Severity at 0\% and Medical Severity at +3\%, <br> Applied to the Latest Two Years | $\mathbf{0 . 2 6 6}$ | $\mathbf{0 . 3 5 9}$ | $\mathbf{0 . 6 2 5}$ |
| Alternative Methodologies <br> Separate Projections of Frequency and Severity Applied <br> to the Latest Year | 0.264 | 0.359 | 0.623 |
| Separate Projections of Frequency and Severity, with <br> Indemnity Severity at -0.2\% and Medical Severity at <br> 2.0\%, Applied to the Latest Two Years | 0.265 | 0.349 | 0.614 |
| Post-2005 On-level Loss Ratio Exponential Trend <br> Applied to the Latest Two Years <br> 5-Year On-level Loss Ratio Exponential Trend Applied to <br> the Latest Two Years | 0.289 | 0.394 | 0.683 |
| 5-Year Fitted On-level Loss Ratio Exponential Trend | 0.271 | 0.353 | 0.626 |

Developed Loss Ratios Using Unadjusted 3-Year Average Incurred Development Factors Based on Experience as of March 31, 2017

(a) Based on AC17-06-01, 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 AC17-06-01, Exhibit 2.1.
(c) Based on AC17-06-01, 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, 2017

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident Year | Developed Indemnity Loss Ratio(a) | Composite Indemnity Adjustment Factor(b) | Composite Premium Adjustment Factor(c) | On-Level Indemnity to Industry Average Filed Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.124 | 1.512 | 0.777 | 0.241 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.240 |
| 2007 | 0.220 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.279 | 1.364 | 1.543 | 0.247 |
| 2009 | 0.323 | 1.337 | 1.664 | 0.260 |
| 2010 | 0.312 | 1.318 | 1.513 | 0.272 |
| 2011 | 0.290 | 1.298 | 1.381 | 0.272 |
| 2012 | 0.262 | 1.267 | 1.231 | 0.269 |
| 2013 | 0.226 | 1.233 | 1.075 | 0.259 |
| 2014 | 0.217 | 1.116 | 0.991 | 0.244 |
| 2015 | 0.220 | 1.089 | 0.947 | 0.253 |
| 2016 | 0.213 | 1.068 | 0.955 | 0.238 |

Projections (d)
2017
2018
0.237

1/1/2019
(a) See Exhibit 1.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 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, 2017
(1)

Accident
Year
Developed Medical Loss Ratio(a)
(2)

Composite Medical
On-Level Factor(b)
On-Level Factor(b)

| 2005 | 0.187 |
| :--- | :--- |
| 2006 | 0.241 |
| 2007 | 0.338 |
| 2008 | 0.420 |
| 2009 | 0.488 |
| 2010 | 0.474 |
| 2011 | 0.415 |
| 2012 | 0.358 |
| 2013 | 0.297 |
| 2014 | 0.268 |
| 2015 | 0.265 |
| 2016 | 0.266 |

(3)

Composite Premium Adjustment Factor(c)

| 0.865 | 0.777 |
| :--- | :--- |
| 0.908 | 0.999 |
| 0.892 | 1.277 |
| 0.885 | 1.543 |
| 0.873 | 1.664 |
| 0.870 | 1.513 |
| 0.886 | 1.381 |
| 0.912 | 1.231 |
| 0.979 | 1.075 |
| 1.019 | 0.991 |
| 1.017 | 0.947 |
| 1.013 | 0.955 |

(4a)
On-Level Medical to Industry Average Filed Pure Premium Ratio (e)
$(1) \times(2) \div(3)$
0.209
0.219
0.236
0.241
0.256
0.273
0.266
0.265
0.271
0.275
0.285
0.282

Projections (d)
2017
0.290

2018
0.295

1/1/2019
0.297
(a) See Exhibit 1.1.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1 ; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Using Unadjusted Latest Year Incurred Development Factors Based on Experience as of March 31, 2017


(a) Based on AC17-06-01, 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 AC17-06-01, Exhibit 2.1.
(c) Based on AC17-06-01, 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, 2017

| Accident <br> Year | Developed Indemnity <br> Loss Ratio(a) | $(2)$ <br> Composite Indemnity | $(3)$ <br> Adjustment Factor(b) | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | (4) <br> On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: |
| 2005 |

(a) Based on Exhibit 2.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 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, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level 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) |
| :---: | :---: | :---: | :---: | :---: |
| 2005 | 0.187 | 0.865 | 0.777 | $(1) \times(2) \div(3)$ |
| 2007 | 0.241 | 0.908 | 0.999 | 0.209 |
| 2008 | 0.338 | 0.892 | 1.277 | 0.219 |
| 2009 | 0.420 | 0.885 | 1.543 | 0.236 |
| 2010 | 0.486 | 0.873 | 1.664 | 0.241 |
| 2011 | 0.469 | 0.870 | 1.513 | 0.255 |
| 2012 | 0.408 | 0.886 | 1.381 | 0.270 |
| 2013 | 0.348 | 0.912 | 1.231 | 0.262 |
| 2014 | 0.287 | 0.979 | 0.991 | 0.258 |
| 2015 | 0.256 | 1.019 | 0.947 | 0.261 |
| 2016 | 0.253 | 1.017 | 0.955 | 0.263 |
|  | 1.013 |  | 0.272 |  |
| 2017 |  |  |  | 0.266 |
| 2018 |  |  |  | Projections (d) |
| $1 / 1 / 2019$ |  |  |  | 0.275 |

(a) See Exhibit 2.2.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

Incurred Indemnity Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

## A. Indemnity Case Reserves Per Open Claim

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 21,539 |
| 2007 |  |  |  | 16,876 | 18,624 | 20,642 |
| 2008 |  |  | 14,732 | 16,911 | 19,192 | 21,402 |
| 2009 |  | 12,499 | 14,663 | 16,462 | 18,320 | 20,627 |
| 2010 | 9,567 | 13,061 | 15,207 | 17,526 | 19,122 | 20,903 |
| 2011 | 9,404 | 12,891 | 14,996 | 16,560 | 18,829 |  |
| 2012 | 9,546 | 13,111 | 14,430 | 15,880 |  |  |
| 2013 | 9,683 | 13,342 | 15,404 |  |  |  |
| 2014 | 10,255 | 14,505 |  |  |  |  |
| 2015 | 10,428 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

B. Average Paid Indemnity per Closed Claim Adjusted to Common Benefit Level(a)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 16,722 |
| 2007 |  |  |  |  | 15,934 | 18,193 |
| 2008 |  |  |  | 14,063 | 17,104 | 19,761 |
| 2009 |  |  | 10,719 | 14,795 | 18,269 | 20,721 |
| 2010 |  | 6,127 | 10,917 | 15,260 | 18,472 | 20,932 |
| 2011 | 2,608 | 6,456 | 11,327 | 15,430 | 18,577 | 20,703 |
| 2012 | 2,651 | 6,915 | 11,733 | 15,514 | 18,198 |  |
| 2013 | 3,002 | 7,212 | 11,937 | 15,532 |  |  |
| 2014 | 2,843 | 7,031 | 11,664 |  |  |  |
| 2015 | 3,074 | 7,532 |  |  |  |  |
| 2016 | 3,259 |  |  |  |  |  |
| rend (b) | 4.4\% | 3.9\% | 2.1\% | 1.9\% | 2.7\% | .5 |

## C. Indemnity Case Reserves per Open Claim Adjusted by Paid Indemnity Severity Trend(c)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 21,547 |
| 2007 |  |  |  |  | 18,953 | 22,193 |
| 2008 |  |  | 13,888 | 16,045 | 19,522 | 20,859 |
| 2009 |  | 12,759 | 14,305 | 16,526 | 20,7107 | 23,545 |
| 2010 | 8,995 | 13,142 | 14,734 | 17,022 | 21,332 | 24,251 |
| 2011 | 9,265 | 13,537 | 15,176 | 17,533 | 21,972 |  |
| 2012 | 9,543 | 13,943 | 15,632 | 18,059 |  |  |
| 2013 | 9,829 | 14,361 | 16,101 |  |  |  |
| 2014 | 10,124 | 14,792 |  |  |  |  |
| 2015 | 10,428 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

(a) Represents average paid indemnity on closed claims only. All evaluations are brought to the accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.1, excluding utilization impacts.
(b) Trend is based on a 6 -year exponential distribution.
(c) Latest evaluation for each accident year is brought to the accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.1, excluding utilization impacts. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average indemnity case reserves by the selected annual paid indemnity severity trend on closed claims (Item B) of 3.0\%.

Incurred Indemnity Loss Development Factors

## Adjusted for Changes in Average Case Reserve Levels

D. Indemnity Open Claim Counts

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 15,014 |
| 2007 |  |  |  | 30,694 | 22,773 | 17,661 |
| 2008 |  |  | 41,290 | 30,442 | 21,943 | 16,640 |
| 2009 |  | 55,872 | 41,686 | 29,239 | 20,926 | 16,188 |
| 2010 |  |  |  |  | 14,944 |  |
| 2011 | 70,812 | 55,695 | 40,319 | 28,143 | 19,675 | 13,986 |
| 2012 | 77,700 | 57,822 | 40,899 | 28,091 | 19,402 |  |
| 2013 | 80,337 | 61,846 | 41,977 | 27,838 |  |  |
| 2014 | 83,087 | 62,225 | 42,072 |  |  |  |
| 2015 | 82,205 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |

E. Total Indemnity Case Reserves Adjusted to Common Benefit Level and by Paid Indemnity

Severity Trend (in \$000) (d)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 323,500 |
| 2007 |  |  |  |  | 478,141 | 447,277 |
| 2008 |  |  | 573,455 | 488,442 | 441,211 | 380,370 |
| 2009 |  |  |  | 312,899 | 596,324 | 483,214 |
| 2010 | 609,994 | 731,959 | 594,072 | 479,054 | 433,385 | 362,405 |
| 2011 | 655,487 | 782,710 | 620,696 | 492,514 | 426,294 | 349,347 |
| 2012 | 741,506 | 843,014 | 656,168 | 502,720 |  |  |
| 2013 | 789,671 | 888,166 | 677,382 |  |  |  |
| 2014 | 841,204 | 920,417 |  |  |  |  |
| 2015 | 857,242 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

F. Paid Indemnity Loss on All Claims Adjusted to the Common Benefit Level (in \$000) (e)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | $\underline{39}$ | 51 | 63 | $\underline{75}$ |
| 2006 |  |  |  |  |  | 1,695,793 |
| 2007 |  |  |  |  | 1,951,905 | 2,118,534 |
| 2008 |  |  |  | 1,879,261 | 2,129,506 | 2,306,079 |
| 2009 |  |  | 1,500,340 | 1,856,108 | 2,107,323 | 2,285,892 |
| 2010 |  | 1,032,189 | 1,552,735 | 1,924,901 | 2,172,070 | 2,347,205 |
| 2011 | 436,209 | 1,062,946 | 1,570,088 | 1,925,729 | 2,169,711 | 2,334,423 |
| 2012 | 466,148 | 1,129,581 | 1,667,175 | 2,030,541 | 2,277,470 |  |
| 2013 | 505,593 | 1,206,583 | 1,797,554 | 2,183,941 |  |  |
| 2014 | 530,935 | 1,306,331 | 1,961,112 |  |  |  |
| 2015 | 579,148 | 1,431,162 |  |  |  |  |
| 2016 | 615,649 |  |  |  |  |  |

(d) Each amount is derived as the product of the indemnity open claim counts (Item D) and the adjusted average indemnity case reserves per open claim (Item C).
(e) Brought to accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.1, excluding utilization impacts.

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

Incurred Indemnity Loss Development Factors
Adjusted for Changes in Average Case Reserve Levels
G. Adjusted Total Indemnity Incurred (in \$000) (f)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  | $2,982,890$ | $3,161,022$ |
| 2007 |  |  |  |  | $2,805,669$ | $3,084,743$ |
| 2008 |  |  |  | $3,236,527$ |  |  |
| 2009 |  |  | $, 966,071$ | $2,481,580$ | $2,773,565$ | $3,035,616$ |
| 2010 |  |  | $3,195,385$ |  |  |  |
| 2011 | $1,131,252$ | $2,002,151$ | $2,470,283$ | $2,820,220$ | $3,070,477$ | $3,212,127$ |
| 2012 | $1,199,432$ | $2,100,810$ | $2,566,111$ | $2,861,938$ | $3,012,445$ | $3,138,918$ |
| 2013 | $1,316,479$ | $2,215,171$ | $2,700,392$ | $2,986,353$ |  |  |
| 2014 | $1,344,606$ | $2,253,546$ | $2,727,142$ |  |  |  |
| 2015 | $1,431,788$ | $2,379,838$ |  |  |  |  |
| 2016 | $1,472,892$ |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

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

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  |  | 1.061 |
| 2007 |  |  |  | 1.099 | 1.060 |
| 2008 |  |  | 1.265 | 1.146 | 1.099 |
| 2009 | 1.752 | 1.262 | 1.137 | 1.094 | 1.049 |
| 2010 | 1.770 | 1.234 | 1.125 | 1.083 | 1.046 |
| 2011 | 1.752 | 1.221 | 1.115 | 1.078 | 1.042 |
| 2012 | 1.683 | 1.219 | 1.106 |  |  |
| 2013 | 1.676 | 1.210 |  |  |  |
| 2014 | 1.662 |  |  |  |  |
| 2015 |  |  |  | 1.106 | 1.078 |
|  | 1.662 | 1.210 |  |  | 1.042 |

## I. Indemnity Incurred Loss Development Factors Adjusted to Common Benefit Level (g)

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  |  | 1.051 |
| 2007 |  |  |  | 1.067 | 1.045 |
| 2008 |  | 1.233 | 1.124 | 1.064 | 1.044 |
| 2009 | 1.659 | 1.250 | 1.112 | 1.066 | 1.043 |
| 2010 | 1.650 | 1.219 | 1.108 | 1.052 | 1.038 |
| 2011 | 1.657 | 1.216 | 1.094 | 1.059 |  |
| 2012 | 1.603 | 1.202 | 1.093 |  |  |
| 2013 | 1.629 | 1.224 |  |  |  |
| 2014 | 1.631 |  |  |  |  |
| 2015 |  |  |  |  |  |

(f) Each amount is the sum of the adjusted total indemnity case reserves (Item E) and the adjusted total indemnity paid losses (Item F).
(g) Development factors are based on incurred losses adjusted to a common benefit level and from the same insurer mix as those which have been adjusted for changes in case reserve levels and applied in the calculation of the development factors in Item H .

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

## Incurred Indemnity Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

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

| Accident Year | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-27 | 27-39 | 39-51 | 51-63 | 63-75 |
| 2006 |  |  |  |  | 0.95\% |
| 2007 |  |  |  | 2.93\% | 1.40\% |
| 2008 |  |  | 2.85\% | 3.38\% | 0.48\% |
| 2009 |  | 2.60\% | 1.91\% | 2.63\% | 0.97\% |
| 2010 | 5.62\% | 0.93\% | 2.21\% | 2.52\% | 0.83\% |
| 2011 | 7.25\% | 1.18\% | 1.58\% | 2.95\% | 0.99\% |
| 2012 | 5.69\% | 0.43\% | 1.91\% | 1.76\% |  |
| 2013 | 4.98\% | 1.41\% | 1.21\% |  |  |
| 2014 | 2.91\% | -1.14\% |  |  |  |
| 2015 | 1.93\% |  |  |  |  |
| 2016 |  |  |  |  |  |

K. Indemnity Incurred Loss Development Factors Adjusted for Changes in Case Reserve

Adequacy (i)

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> 2006 | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2007 |  |  |  | 1.097 | 1.061 |
| 2008 |  |  |  | 1.060 |  |
| 2009 |  | 1.265 | 1.145 | 1.099 | 1.048 |
| 2010 | 1.759 | 1.262 | 1.137 | 1.089 | 1.053 |
| 2011 | 1.757 | 1.239 | 1.127 | 1.084 | 1.046 |
| 2012 | 1.684 | 1.223 | 1.115 | 1.078 |  |
| 2013 | 1.673 | 1.219 | 1.105 |  |  |
| 2014 | 1.661 |  |  |  |  |
| 2015 | 1.661 | 1.210 | 1.105 | 1.078 | 1.042 |

(h) Each factor represents the change in age-to-age development factors from Item I to those in Item H.
(i) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item J )] and [the incurred indemnity age-to-age development factors from AC17-06-01, Exhibit 2.1.1].

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

## Incurred Medical Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

A. Medical Case Reserves Per Open Indemnity Claim

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2006 |  |  |  |  |  | 41,107 |
| 2007 |  |  |  |  | 34,639 | 43,326 |
| 2008 |  |  |  | 28,427 | 35,437 | 44,659 |
| 2009 |  |  | 23,766 | 29,948 | 36,763 | 43,832 |
| 2010 |  | 19,681 | 24,461 | 29,843 | 36,130 | 42,025 |
| 2011 | 16,725 | 21,620 | 26,322 | 32,180 | 38,942 | 43,422 |
| 2012 | 17,016 | 21,042 | 25,075 | 29,447 | 34,795 |  |
| 2013 | 16,515 | 20,835 | 23,628 | 28,341 |  |  |
| 2014 | 16,166 | 19,576 | 22,979 |  |  |  |
| 2015 | 16,906 | 20,666 |  |  |  |  |
| 2016 | 17,411 |  |  |  |  |  |

B. Average Paid Medical Loss Per Claim Adjusted to the Common Benefit Level (a)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | 39 | 51 | 63 | $\underline{75}$ |
| 2006 |  |  |  |  |  | 5,440 |
| 2007 |  |  |  |  | 5,601 | 6,154 |
| 2008 |  |  |  | 5,685 | 6,476 | 7,097 |
| 2009 |  |  | 5,236 | 6,407 | 7,342 | 8,023 |
| 2010 |  | 4,006 | 5,599 | 6,883 | 7,774 | 8,425 |
| 2011 | 2,243 | 4,303 | 5,960 | 7,220 | 8,135 | 8,786 |
| 2012 | 2,413 | 4,476 | 6,121 | 7,321 | 8,166 |  |
| 2013 | 2,586 | 4,737 | 6,441 | 7,647 |  |  |
| 2014 | 2,682 | 4,897 | 6,629 |  |  |  |
| 2015 | 2,675 | 4,917 |  |  |  |  |
| 2016 | 2,786 |  |  |  |  |  |
| Annual Trend (b): | 4.2\% | 4.3\% | 4.8\% | 5.7\% | 7.8\% | 10.4\% |

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

| Accident |  |  | ated as | months) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 15 | $\underline{27}$ | $\underline{39}$ | 51 | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 27,944 |
| 2007 |  |  |  |  | 23,061 | 29,621 |
| 2008 |  |  |  | 20,193 | 24,445 | 31,398 |
| 2009 |  |  | 17,275 | 21,405 | 25,912 | 33,282 |
| 2010 |  | 15,504 | 18,311 | 22,689 | 27,466 | 35,279 |
| 2011 | 13,010 | 16,435 | 19,410 | 24,051 | 29,114 | 37,395 |
| 2012 | 13,791 | 17,421 | 20,575 | 25,494 | 30,861 |  |
| 2013 | 14,618 | 18,466 | 21,809 | 27,023 |  |  |
| 2014 | 15,495 | 19,574 | 23,118 |  |  |  |
| 2015 | 16,425 | 20,748 |  |  |  |  |
| 2016 | 17,411 |  |  |  |  |  |

(a) Represents average paid medical on all claims. All evaluations are brought to the accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.4, excluding utilization impacts.
(b) Trend is based on a 6-year exponential distribution.
(c) Latest evaluation for each accident year is brought to the accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.4, excluding utilization impacts. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average medical case reserves by the selected annual paid medical severity trend on all claims (Item B) of 6.0\%.

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

## Incurred Medical Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

D. Total Medical Case Reserves Adjusted to the Common Benefit Level and by Paid Medical Severity Trend (in \$000) (d)

| Accident | Evaluated as of (in months) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |  |
| 2006 |  |  |  |  |  | 419,551 |  |
| 2007 |  |  |  |  | 525,176 | 523,130 |  |
| 2008 |  |  |  |  | 613,814 | 560,084 |  |
| 209 |  |  | 713,276 | 651,609 | 568,581 | 522,461 |  |
| 2010 |  | 866,254 | 763,324 | 663,411 | 574,762 | 527,204 |  |
| 2011 | 882,256 | 915,321 | 782,590 | 676,856 | 572,826 | 523,012 |  |
| 2012 | 975,667 | $1,007,294$ | 841,478 | 76,41 | 598,770 |  |  |
| 2013 | $1,135,849$ | $1,116,500$ | 915,477 | 752,273 |  |  |  |
| 2014 | $1,244,862$ | $1,210,560$ | 972,602 |  |  |  |  |
| 2015 | $1,364,723$ | $1,291,057$ |  |  |  |  |  |
| 2016 | $1,431,250$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## E. Paid Medical Loss on All Claims Adjusted to the Common Benefit Level (in \$000) (e)

| Accident | Evaluated as of (in months) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | $\underline{15}$ | $\underline{27}$ | $\underline{39}$ | $\underline{51}$ | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | $2,028,860$ |
| 2007 |  |  |  |  | $2,171,096$ | $2,289,220$ |
| 2008 |  |  | $1,769,275$ | $2,175,700$ | $2,502,2819,259$ | $2,723,207$ |
| 2009 |  | $1,318,859$ | $1,863,063$ | $2,304,740$ | $2,611,659$ | $2,739,951$ |
| 2010 | 705,960 | $1,403,050$ | $1,963,899$ | $2,387,309$ | $2,698,045$ | $2,918,294$ |
| 2011 | 679,654 | $1,347,677$ | $1,881,638$ | $2,276,909$ | $2,560,583$ |  |
| 2012 | 765,463 | $1,482,809$ | $2,060,870$ | $2,478,603$ |  |  |
| 2013 | 837,378 | $1,621,950$ | $2,244,992$ |  |  |  |
| 2014 | 874,701 | $1,712,000$ |  |  |  |  |
| 2015 | 943,622 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

F. Adjusted Total Medical Incurred (in \$000) (f)

| Accident Year | Evaluated as of (in months) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | $\underline{27}$ | 39 | 51 | $\underline{63}$ | $\underline{75}$ |
| 2006 |  |  |  |  |  | 2,448,411 |
| 2007 |  |  |  |  | 2,814,395 | 3,042,389 |
| 2008 |  |  |  | 2,790,910 | 3,040,042 | 3,245,668 |
| 2009 |  |  | 2,482,551 | 2,827,309 | 3,070,861 | 3,278,716 |
| 2010 |  | 2,185,114 | 2,626,387 | 2,968,150 | 3,186,421 | 3,364,105 |
| 2011 | 1,588,215 | 2,318,371 | 2,746,489 | 3,064,165 | 3,270,870 | 3,441,306 |
| 2012 | 1,655,321 | 2,354,971 | 2,723,117 | 2,993,050 | 3,159,353 |  |
| 2013 | 1,901,312 | 2,599,308 | 2,976,347 | 3,230,876 |  |  |
| 2014 | 2,082,239 | 2,832,510 | 3,217,594 |  |  |  |
| 2015 | 2,239,424 | 3,003,057 |  |  |  |  |
| 2016 | 2,374,871 |  |  |  |  |  |

(d) Each amount is derived as the product of the indemnity open claim counts (Exhibit 3.2, Item D) and the adjusted average medical case reserves per open claim (Item C).
(e) Brought to accident year 2016 benefit level based on benefit factors shown in AC17-06-01, Exhibit 4.4, excluding utilization impacts.
(f) Each amount is the sum of the adjusted total medical case reserves (Item D) and the adjusted total medical paid losses (Item E).

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

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WCIRB California ${ }^{\circledR}$

## Incurred Medical Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

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

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | ---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  | 1.085 | 1.081 |
| 2007 |  |  | 1.137 | 1.089 | 1.061 |
| 2008 |  | 1.427 | 1.197 | 1.139 | 1.086 |
| 2009 | 1.460 | 1.185 | 1.130 | 1.074 | 1.068 |
| 2010 | 1.423 | 1.156 | 1.116 | 1.067 | 1.056 |
| 2011 | 1.367 | 1.145 | 1.086 | 1.056 |  |
| 2012 | 1.360 | 1.136 |  |  |  |
| 2013 | 1.341 |  |  |  |  |
| 2014 |  |  |  |  |  |
| 2015 | 1.341 | 1.136 | 1.086 | 1.056 | 1.052 |

H. Medical Incurred Loss Development Factors Adjusted to Common Benefit Level (g)

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  | 1.081 | 1.062 |
| 2007 |  |  | 1.116 | 1.088 | 1.071 |
| 2008 |  | 1.182 | 1.133 | 1.080 | 1.058 |
| 2009 | 1.425 | 1.212 | 1.116 | 1.068 | 1.036 |
| 2010 | 1.450 | 1.179 | 1.101 | 1.060 | 1.025 |
| 2011 | 1.389 | 1.150 | 1.079 | 1.049 |  |
| 2012 | 1.349 | 1.120 | 1.075 |  |  |
| 2013 | 1.325 | 1.133 |  |  |  |
| 2014 | 1.314 |  |  |  |  |

I. Impact of Adjustments to Common Case Reserve Level (h)

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{Y e a r}$ | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  |  | $1.71 \%$ |
| 2007 |  |  |  | $0.45 \%$ | $0.96 \%$ |
| 2008 |  | $1.28 \%$ | $0.48 \%$ | $0.09 \%$ | $0.89 \%$ |
| 2009 |  |  |  | $0.52 \%$ | $1.81 \%$ |
| 2010 | $0.11 \%$ | $-0.81 \%$ | $1.24 \%$ | $0.48 \%$ | $1.91 \%$ |
| 2011 | $0.67 \%$ | $0.44 \%$ | $1.37 \%$ | $0.69 \%$ | $2.66 \%$ |
| 2012 | $2.44 \%$ | $0.54 \%$ | $1.90 \%$ | $0.59 \%$ |  |
| 2013 | $1.31 \%$ | $2.22 \%$ | $1.02 \%$ |  |  |
| 2014 | $2.69 \%$ | $0.26 \%$ |  |  |  |
| 2015 | $2.03 \%$ |  |  |  |  |

(g) Development factors are based on incurred losses adjusted to a common benefit level and from the same insurer mix as those which have been adjusted for changes in case reserve levels and applied in the calculation of the development factors in Item G.
(h) Each factor represents the change in age-to-age development factors from Item H to those in Item Source: Accident year experience of insurers with available claim count data

## Incurred Medical Loss Development Factors Adjusted for Changes in Average Case Reserve Levels

J. Medical Incurred Loss Development Factors After Adjustment for Changes in Case Reserve Adequacy (i)

| Accident | Age-to-Age Development (in months): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\underline{15-27}$ | $\underline{27-39}$ | $\underline{39-51}$ | $\underline{51-63}$ | $\underline{63-75}$ |
| 2006 |  |  |  | 1.083 | 1.079 |
| 2007 |  |  | 1.137 | 1.088 | 1.079 |
| 2008 |  |  |  | 1.197 | 1.138 |
| 2009 | 1.433 | 1.202 | 1.131 | 1.086 | 1.067 |
| 2010 | 1.462 | 1.190 | 1.118 | 1.067 | 1.056 |
| 2011 | 1.425 | 1.159 | 1.100 | 1.057 | 1.052 |
| 2012 | 1.371 | 1.145 | 1.087 |  |  |
| 2013 | 1.362 | 1.138 |  |  |  |
| 2014 | 1.341 |  |  |  |  |
| 2015 |  |  |  |  |  |
|  | 1.341 | 1.138 | 1.087 | 1.057 |  |

(i) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item I)] and [the incurred medical age-to-age development factors from AC17-06-01, Exhibit 2.2.1].

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

## Developed Loss Ratios Using Latest Year Incurred Development Factors Adjusted for Changes in Average Case Reserve Levels Based on Experience as of March 31, 2017


(a) Based on AC17-06-01, 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 2012 to 2016 were adjusted for changes in indemnity case reserve levels based on estimated annual severity trends on closed indemnity claims (see Exhibit 3.4, Item K). Age-to-age factors for developing accident years prior to 2012 are selected as the age-to-age factors shown in AC17-06-01, Exhibit 2.1.
(c) Age-to-age factors for developing accident years 2012 to 2016 were adjusted for changes in medical case reserve levels based on estimated annual medical severity trend on all claims (see Exhibit 3.8, Item J). Age-to-age factors for developing accident years prior to 2012 are selected as the age-to-age factors shown in AC17-06-01, Exhibit 2.2.

Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios

Using Latest Year Incurred Development Factors Adjusted for Changes in Indemnity Average Case Reserve Levels Based on Experience as of March 31, 2017

|  | (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) $\times(2) \div(3)$ |
| 2005 | 0.124 | 1.512 | 0.777 | 0.241 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.240 |
| 2007 | 0.220 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.279 | 1.364 | 1.543 | 0.247 |
| 2009 | 0.323 | 1.337 | 1.664 | 0.259 |
| 2010 | 0.311 | 1.318 | 1.513 | 0.271 |
| 2011 | 0.289 | 1.298 | 1.381 | 0.272 |
| 2012 | 0.262 | 1.267 | 1.231 | 0.270 |
| 2013 | 0.231 | 1.233 | 1.075 | 0.265 |
| 2014 | 0.222 | 1.116 | 0.991 | 0.251 |
| 2015 | 0.225 | 1.089 | 0.947 | 0.258 |
| 2016 | 0.224 | 1.068 | 0.955 | 0.250 |

Projections (d)
2017
0.249

2018
0.246

1/1/2019
0.244
(a) See Exhibit 3.9.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Latest Year Incurred Development Factors
Adjusted for Changes in Medical Average Case Reserve Levels
Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level 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) |
| :---: | :---: | :---: | :---: | :---: |
| 2005 | 0.187 | 0.865 |  | $(1) \times(2) \div(3)$ |

Projections (d)
2017
0.291

2018
0.295

1/1/2019
0.298
(a) See Exhibit 3.9.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Using Latest Year Incurred Loss Development Factors Adjusted for Insurer Mix <br> Based on Experience as of March 31, 2017

|  | (1) | (2) | $\text { nnity }^{(3)}$ | (4) | (5) | ${ }^{\text {(6) }}$ Medical ${ }^{(7)}$ |  | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Incurred | Develop | ment Factors | Developed Loss | Incurred | Develop | nt Factors | Developed Loss | Developed Loss |
|  | Loss Ratio(a) | Annual | Cumulative(b) | Ratio(c) | Loss Ratio(a) | Annual | Cumulative(d) | Ratio(c) | $\frac{\text { Ratio }}{(4)+(8)}$ |
| 2005 | 0.122 | --- | 0.967 | 0.118 | 0.183 | --- | 1.011 | 0.185 | 0.302 |
| 2006 | 0.157 | --- | 0.981 | 0.154 | 0.234 | --- | 1.013 | 0.237 | 0.390 |
| 2007 | 0.214 | --- | 1.001 | 0.214 | 0.325 | --- | 1.031 | 0.335 | 0.549 |
| 2008 | 0.268 | --- | 1.035 | 0.278 | 0.401 | --- | 1.064 | 0.427 | 0.704 |
| 2009 | 0.307 | --- | 1.059 | 0.325 | 0.459 | --- | 1.081 | 0.497 | 0.822 |
| 2010 | 0.291 | --- | 1.087 | 0.316 | 0.437 | --- | 1.103 | 0.482 | 0.799 |
| 2011 | 0.264 | --- | 1.106 | 0.292 | 0.372 | --- | 1.112 | 0.414 | 0.706 |
| 2012 | 0.230 | --- | 1.139 | 0.262 | 0.310 | --- | 1.146 | 0.355 | 0.617 |
| 2013 | 0.188 | --- | 1.201 | 0.226 | 0.243 | --- | 1.199 | 0.291 | 0.517 |
| 2014 | 0.164 | --- | 1.319 | 0.216 | 0.201 | --- | 1.298 | 0.261 | 0.477 |
| 2015 | 0.137 | --- | 1.605 | 0.220 | 0.175 | --- | 1.463 | 0.257 | 0.476 |
| 2016 | 0.082 | --- | 2.652 | 0.218 | 0.132 | --- | 1.949 | 0.258 | 0.475 |

(a) Based on AC17-06-01, 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 averaging the loss ratios developed using the latest year incurred methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2016 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, 2017

(a) See Exhibit 4.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

## Projected On-Level Accident Year <br> Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Incurred Development Factors Adjusted for Insurer Mix <br> Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | (4) <br> Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio (e) |
| :---: |
| 2006 |

Projections (d)
2017
0.281

2018
0.286

1/1/2019
0.288
(a) See Exhibit 4.1.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Using Unadjusted 3-Year Average Paid Development Factors Based on Experience as of March 31, 2017

|  | (1) Indemnity |  |  | (4) | (5) Medical (7) (8) |  |  |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident <br> Year | Reported Paid Loss Ratio(a) | Annual Development Factor(b) | Cumulative Development Factor | Developed <br> Loss Ratio <br> (1) $\times(3)$ | Reported Paid Loss Ratio(a) | Annual Development Factor(c) | Cumulative Development Factor | $\begin{aligned} & \text { Developed } \\ & \frac{\text { Loss Ratio }}{(5) \times(7)} \end{aligned}$ | Total Developed Loss Ratio $(4)+(8)$ |
| 2005 | 0.115 | 1.010 | 1.076 | 0.123 | 0.163 | 1.018 | 1.243 | 0.203 | 0.326 |
| 2006 | 0.147 | 1.014 | 1.091 | 0.160 | 0.208 | 1.022 | 1.271 | 0.264 | 0.424 |
| 2007 | 0.199 | 1.018 | 1.111 | 0.221 | 0.287 | 1.028 | 1.306 | 0.375 | 0.596 |
| 2008 | 0.248 | 1.025 | 1.139 | 0.282 | 0.353 | 1.032 | 1.348 | 0.475 | 0.757 |
| 2009 | 0.282 | 1.030 | 1.173 | 0.330 | 0.401 | 1.037 | 1.398 | 0.561 | 0.891 |
| 2010 | 0.265 | 1.040 | 1.220 | 0.323 | 0.382 | 1.047 | 1.463 | 0.559 | 0.882 |
| 2011 | 0.235 | 1.054 | 1.287 | 0.303 | 0.312 | 1.063 | 1.556 | 0.485 | 0.787 |
| 2012 | 0.199 | 1.080 | 1.390 | 0.276 | 0.251 | 1.088 | 1.693 | 0.425 | 0.701 |
| 2013 | 0.157 | 1.127 | 1.566 | 0.245 | 0.187 | 1.130 | 1.913 | 0.357 | 0.602 |
| 2014 | 0.123 | 1.221 | 1.912 | 0.236 | 0.140 | 1.212 | 2.319 | 0.326 | 0.562 |
| 2015 | 0.084 | 1.490 | 2.848 | 0.239 | 0.100 | 1.392 | 3.228 | 0.323 | 0.562 |
| 2016 | 0.034 | 2.438 | 6.943 | 0.238 | 0.053 | 1.945 | 6.277 | 0.330 | 0.568 |

(a) Based on AC17-06-01, Exhibit 1.
(b) Age-to-age factors are selected as three-year averages based on AC17-06-01, Exhibit 2.5.
(c) Age-to-age factors are selected as three-year averages based on AC17-06-01, Exhibit 2.6. These factors have not been adjusted for the SB 863 reforms or RBRVS.

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, 2017

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident Year | Developed Indemnity Loss Ratio(a) | Composite Indemnity Adjustment Factor(b) | Composite Premium Adjustment Factor(c) | On-Level Indemnity to Industry Average Filed Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.330 | 1.337 | 1.664 | 0.265 |
| 2010 | 0.323 | 1.318 | 1.513 | 0.282 |
| 2011 | 0.303 | 1.298 | 1.381 | 0.285 |
| 2012 | 0.276 | 1.267 | 1.231 | 0.284 |
| 2013 | 0.245 | 1.233 | 1.075 | 0.281 |
| 2014 | 0.236 | 1.116 | 0.991 | 0.266 |
| 2015 | 0.239 | 1.089 | 0.947 | 0.275 |
| 2016 | 0.238 | 1.068 | 0.955 | 0.266 |

Projections (d)
2017
0.265

2018
0.261

1/1/2019
(a) See Exhibit 5.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 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, 2017

| Accident <br> Year | Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: |
| 2006 |

(a) See Exhibit 5.1.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Using Unadjusted Latest Year Paid Development Factors

 Based on Experience as of March 31, 2017|  | (1) | (2) Indem | (3) | (4) | (5) | (6) Medi | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Paid Loss Ratio(a) | Annual Development Factor(b) | Cumulative <br> Development Factor | Developed <br> Loss Ratio <br> (1) $\times(3)$ | Paid Loss Ratio(a) | Annual Development Factor(c) | Cumulative <br> Development Factor | $\begin{aligned} & \text { Developed } \\ & \frac{\text { Loss Ratio }}{(5) \times(7)} \end{aligned}$ | Total <br> Developed $\frac{\text { Loss Ratio }}{(4)+(8)}$ |
| 2005 | 0.115 | 1.010 | 1.076 | 0.123 | 0.163 | 1.018 | 1.243 | 0.203 | 0.326 |
| 2006 | 0.147 | 1.014 | 1.091 | 0.160 | 0.208 | 1.022 | 1.271 | 0.264 | 0.424 |
| 2007 | 0.199 | 1.018 | 1.111 | 0.221 | 0.287 | 1.028 | 1.306 | 0.375 | 0.596 |
| 2008 | 0.248 | 1.025 | 1.139 | 0.282 | 0.353 | 1.032 | 1.348 | 0.475 | 0.757 |
| 2009 | 0.282 | 1.025 | 1.168 | 0.329 | 0.401 | 1.033 | 1.393 | 0.558 | 0.887 |
| 2010 | 0.265 | 1.039 | 1.213 | 0.322 | 0.382 | 1.042 | 1.451 | 0.554 | 0.876 |
| 2011 | 0.235 | 1.053 | 1.277 | 0.301 | 0.312 | 1.060 | 1.538 | 0.479 | 0.780 |
| 2012 | 0.199 | 1.076 | 1.375 | 0.273 | 0.251 | 1.082 | 1.665 | 0.418 | 0.691 |
| 2013 | 0.157 | 1.122 | 1.542 | 0.241 | 0.187 | 1.127 | 1.876 | 0.350 | 0.591 |
| 2014 | 0.123 | 1.215 | 1.874 | 0.231 | 0.140 | 1.205 | 2.261 | 0.318 | 0.549 |
| 2015 | 0.084 | 1.502 | 2.815 | 0.236 | 0.100 | 1.387 | 3.135 | 0.313 | 0.550 |
| 2016 | 0.034 | 2.471 | 6.955 | 0.238 | 0.053 | 1.957 | 6.136 | 0.322 | 0.561 |

(a) Based on AC17-06-01, Exhibit 1.
(b) 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 AC17-06-01, Exhibit 2.5 .
(c) 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 AC17-06-01, Exhibit 2.6. These factors have not been adjusted for the SB 863 reforms or RBRVS.

Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios

## Based on Unadjusted Latest Year Paid Selections

Based on Experience as of March 31, 2017

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident Year | Developed Indemnity Loss Ratio(a) | Composite Indemnity Adjustment Factor(b) | Composite Premium Adjustment Factor(c) | On-Level Indemnity to Industry Average Filed Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.273 | 1.267 | 1.231 | 0.281 |
| 2013 | 0.241 | 1.233 | 1.075 | 0.277 |
| 2014 | 0.231 | 1.116 | 0.991 | 0.260 |
| 2015 | 0.236 | 1.089 | 0.947 | 0.272 |
| 2016 | 0.238 | 1.068 | 0.955 | 0.267 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.264 |
| 2018 |  |  |  | 0.260 |
| 1/1/2019 |  |  |  | 0.259 |

(a) See Exhibit 6.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

Projected On-Level Accident Year

## Medical Loss to Industry Average Filed Pure Premium Ratios Based on Unadjusted Latest Year Paid Selections Based on Experience as of March 31, 2017

| Accident <br> Year | Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: |
| 2006 |

Projections (d)
2017
0.348

2018
0.353

1/1/2019
0.356
(a) See Exhibit 6.1.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Adjusted for the Impact of Reforms Based on Paid Latest Year Selections Based on Experience as of March 31, 2017

|  | Indemnity |  |  | (4) | (5) | (6) <br> (7) <br> Medical |  |  | (9) | (10) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Adjusted |  |  |  | Total |
|  |  |  |  | Developed |  |  |  |  | Developed | Developed |
| Accident | Paid | Development Factors |  | Loss | Paid | Paid | Development Factors |  | Loss | Loss |
| Year | Loss Ratio(a) | Annual(b) | Cumulative(b) | Ratio | Loss Ratio(a) | Loss Ratio(c) | Annual(d) | Cumulative(d) | Ratio | Ratio |
|  |  |  |  | (1) $\times(3)$ |  |  |  |  | (6) $\times(8)$ | (4) + (9) |
| 2005 | 0.115 | 1.010 | 1.076 | 0.123 | 0.163 | 0.152 | 1.019 | 1.252 | 0.190 | 0.314 |
| 2006 | 0.147 | 1.014 | 1.091 | 0.160 | 0.208 | 0.194 | 1.024 | 1.283 | 0.249 | 0.409 |
| 2007 | 0.199 | 1.018 | 1.111 | 0.221 | 0.287 | 0.268 | 1.030 | 1.321 | 0.354 | 0.575 |
| 2008 | 0.248 | 1.025 | 1.139 | 0.282 | 0.353 | 0.330 | 1.034 | 1.366 | 0.451 | 0.733 |
| 2009 | 0.282 | 1.025 | 1.168 | 0.329 | 0.401 | 0.377 | 1.035 | 1.414 | 0.533 | 0.862 |
| 2010 | 0.265 | 1.039 | 1.213 | 0.322 | 0.382 | 0.362 | 1.045 | 1.477 | 0.534 | 0.856 |
| 2011 | 0.235 | 1.053 | 1.277 | 0.301 | 0.312 | 0.298 | 1.064 | 1.572 | 0.469 | 0.769 |
| 2012 | 0.199 | 1.076 | 1.375 | 0.273 | 0.251 | 0.244 | 1.086 | 1.707 | 0.417 | 0.690 |
| 2013 | 0.157 | 1.122 | 1.573 | 0.246 | 0.187 | 0.184 | 1.131 | 1.931 | 0.355 | 0.602 |
| 2014 | 0.123 | 1.215 | 1.995 | 0.246 | 0.140 | 0.140 | 1.208 | 2.333 | 0.326 | 0.572 |
| 2015 | 0.084 | 1.502 | 2.997 | 0.251 | 0.100 | 0.100 | 1.389 | 3.240 | 0.324 | 0.575 |
| 2016 | 0.034 | 2.471 | 7.406 | 0.254 | 0.053 | 0.053 | 1.957 | 6.340 | 0.333 | 0.587 |

(a) Based on AC17-06-01, Exhibit 1. For medical, Paid MCCP costs are excluded from accident years 2011 and subsequent. Column 5 is shown for informational purposes only.
(b) Based on AC17-06-01, Exhibit 2.5.1. Does not reflect any adjustment for changes in claim settlement rates. The cumulative loss development factors for developing accident years 2013 through 2016 are adjusted for the impact of SB 863.
(c) Based on experience evaluated as of March 31, 2017. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1 , 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and $-1.7 \%$ applied to payments made before January 1, 2015.
(d) Based on AC16-03-02, Exhibit 2.6.1. Does not reflect any adjustment for changes in claim settlement rates. Age-to-age factors for developing accident years 2005 to 2016 reflect an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1,2013 and adjustments to historical outstanding medical losses paid prior to January 1, 2014 by an estimated $2.1 \%$ decrease in costs, and losses paid prior to January 1,2015 by an estimated $1.7 \%$ decrease in costs due to RBRVS.

## Projected On-Level Accident Year <br> Indemnity Loss to Industry Average Filed Pure Premium Ratios <br> Using Latest Year Paid Development Adjusted for Reforms <br> Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Indemnity <br> Loss Ratio(a) | $(2)$ <br> Composite Indemnity <br> Adjustment Factor(b) | $(3)$ | $(4)$ <br> Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | On-Level Indemnity to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: |
| 2005 |

Projections (d)
2017
0.281

2018
0.277

1/1/2019
0.275
(a) See Exhibit 7.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

## Projected On-Level Accident Year

## Medical Loss to Industry Average Filed Pure Premium Ratios Using Latest Year Paid Development Adjusted for Reforms <br> Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio |
| :---: |
| 2006 |

2018
0.365

1/1/2019
0.368
(a) See Exhibit 7.1.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1 ; these trends were then separately applied to the 2015 and 2016 on-level ratios.

# Developed Loss Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates Based on 3-Year Average Selections <br> Based on Experience as of March 31, 2017 


(a) Based on AC17-06-01, Exhibit 1. Column 5 is shown for informational purposes only.
(b) Age-to-age factors for developing accident years 2012 to 2016 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC17-06-01, Exhibit 2.5.8, Item Q). The cumulative loss development factors for developing accident years 2013 through 2016 are adjusted for the impact of SB 863 (see AC17-06-01, Exhibit 2.5.1).
(c) Based on experience evaluated as of March 31, 2017. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and -1.7\% applied to payments made before January 1, 2015.
(d) Age-to-age factors for developing accident years 2012 to 2016 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC17-06-01, Exhibit 2.6.8, Item R). Age-to-age factors for developing accident years 2005 to 2016 reflect an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013 and adjustments to historical outstanding medical losses paid prior to January 1,2014 by an estimated $2.1 \%$ decrease in costs, and losses paid prior to January 1, 2015 by an estimated $1.7 \%$ decrease in costs due to RBRVS.

# Projected On-Level Accident Year <br> Indemnity Loss to Industry Average Filed Pure Premium Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates <br> Based on 3-Year Average Selections <br> Based on Experience as of March 31, 2017 

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident Year | Developed Indemnity Loss Ratio(a) | Composite Indemnity Adjustment Factor(b) | Composite Premium Adjustment Factor(c) | On-Level Indemnity to Industry Average Filed Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.272 | 1.267 | 1.231 | 0.280 |
| 2013 | 0.244 | 1.233 | 1.075 | 0.280 |
| 2014 | 0.244 | 1.116 | 0.991 | 0.275 |
| 2015 | 0.245 | 1.089 | 0.947 | 0.282 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.272 |
| 2018 |  |  |  | 0.269 |
| 1/1/2019 |  |  |  | 0.267 |

(a) See Exhibit 8.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 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, 2017

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Accident | Developed Medical | Composite Medical | Composite Premium | On-Level Medical to Industry Average Filed |
| Year | Loss Ratio(a) | On-Level Factor(b) | Adjustment Factor(c) | Pure Premium Ratio(e) |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.190 | 0.937 | 0.777 | 0.230 |
| 2006 | 0.249 | 0.984 | 0.999 | 0.245 |
| 2007 | 0.354 | 0.966 | 1.277 | 0.268 |
| 2008 | 0.451 | 0.959 | 1.543 | 0.280 |
| 2009 | 0.533 | 0.946 | 1.664 | 0.303 |
| 2010 | 0.534 | 0.943 | 1.513 | 0.333 |
| 2011 | 0.469 | 0.960 | 1.381 | 0.326 |
| 2012 | 0.417 | 0.988 | 1.231 | 0.335 |
| 2013 | 0.355 | 1.016 | 1.075 | 0.335 |
| 2014 | 0.328 | 1.020 | 0.991 | 0.338 |
| 2015 | 0.328 | 1.018 | 0.947 | 0.352 |
| 2016 | 0.338 | 1.014 | 0.955 | 0.359 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.364 |
| 2018 |  |  |  | 0.370 |
| 1/1/2019 |  |  |  | 0.373 |

(a) See Exhibit 8.1.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Developed Loss Ratios Using Latest Year Paid Loss Development Factors Adjusted for Insurer Mix <br> Based on Experience as of March 31, 2017

|  | Indemnity |  |  |  | Medical |  |  |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Paid | Develop | ment Factors | Developed Loss | Paid | Develop | nt Factors | Developed Loss | Developed Loss |
| Year | Loss Ratio(a) | Annual | Cumulative(b) | Ratio(c) | Loss Ratio(a) | Annual | Cumulative(d) | Ratio(c) | $\frac{\text { Ratio }}{(4)+(8)}$ |
| 2005 | 0.115 | --- | 1.029 | 0.118 | 0.163 | --- | 1.213 | 0.198 | 0.316 |
| 2006 | 0.147 | --- | 1.049 | 0.154 | 0.208 | --- | 1.236 | 0.257 | 0.411 |
| 2007 | 0.199 | --- | 1.080 | 0.215 | 0.287 | --- | 1.278 | 0.367 | 0.582 |
| 2008 | 0.248 | --- | 1.131 | 0.280 | 0.353 | --- | 1.338 | 0.472 | 0.752 |
| 2009 | 0.282 | --- | 1.170 | 0.330 | 0.401 | --- | 1.386 | 0.556 | 0.886 |
| 2010 | 0.265 | --- | 1.225 | 0.325 | 0.382 | --- | 1.451 | 0.554 | 0.879 |
| 2011 | 0.235 | --- | 1.283 | 0.302 | 0.312 | --- | 1.518 | 0.473 | 0.775 |
| 2012 | 0.199 | --- | 1.374 | 0.273 | 0.251 | --- | 1.639 | 0.412 | 0.685 |
| 2013 | 0.157 | --- | 1.536 | 0.240 | 0.187 | --- | 1.841 | 0.343 | 0.584 |
| 2014 | 0.123 | --- | 1.879 | 0.232 | 0.140 | --- | 2.232 | 0.314 | 0.545 |
| 2015 | 0.084 | --- | 2.809 | 0.236 | 0.100 | --- | 3.085 | 0.308 | 0.544 |
| 2016 | 0.034 | --- | 6.960 | 0.239 | 0.053 | --- | 6.038 | 0.317 | 0.556 |

(a) Based on AC17-06-01, 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) Column (4) divided by Column (1).
(c) Developed loss ratios were derived by averaging the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2016 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, 2017

| Accident <br> Year | (1) | (2) | (3) | (4) <br> On-Level Indemnity to Industry Average Filed Pure Premium Ratio $(1) \times(2) \div(3)$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Indemnity | Composite Indemnity | Composite Premium |  |
|  | Loss Ratio(a) | Adjustment Factor(b) | Adjustment Factor(c) |  |
|  |  |  |  |  |
| 2005 | 0.118 | 1.512 | 0.777 | 0.230 |
| 2006 | 0.154 | 1.495 | 0.999 | 0.230 |
| 2007 | 0.215 | 1.448 | 1.277 | 0.243 |
| 2008 | 0.280 | 1.364 | 1.543 | 0.248 |
| 2009 | 0.330 | 1.337 | 1.664 | 0.265 |
| 2010 | 0.325 | 1.318 | 1.513 | 0.283 |
| 2011 | 0.302 | 1.298 | 1.381 | 0.284 |
| 2012 | 0.273 | 1.267 | 1.231 | 0.281 |
| 2013 | 0.240 | 1.233 | 1.075 | 0.276 |
| 2014 | 0.232 | 1.116 | 0.991 | 0.261 |
| 2015 | 0.236 | 1.089 | 0.947 | 0.271 |
| 2016 | 0.239 | 1.068 | 0.955 | 0.267 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.264 |
| 2018 |  |  |  | 0.260 |
| 1/1/2019 |  |  |  | 0.258 |

(a) See Exhibit 9.1.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1 ; these trends were then separately applied to the 2015 and 2016 on-level ratios.

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios <br> Using Unadjusted Paid Development Factors Adjusted for Insurer Mix <br> Based on Experience as of March 31, 2017 

| Accident Year | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | Developed Medical Loss Ratio(a) | Composite Medical On-Level Factor(b) | Composite Premium Adjustment Factor(c) | On-Level Medical to Industry Average File Pure Premium Ratio |
|  |  |  |  | (1) $\times(2) \div(3)$ |
| 2005 | 0.198 | 0.865 | 0.777 | 0.220 |
| 2006 | 0.257 | 0.908 | 0.999 | 0.234 |
| 2007 | 0.367 | 0.892 | 1.277 | 0.256 |
| 2008 | 0.472 | 0.885 | 1.543 | 0.271 |
| 2009 | 0.556 | 0.873 | 1.664 | 0.292 |
| 2010 | 0.554 | 0.870 | 1.513 | 0.319 |
| 2011 | 0.473 | 0.886 | 1.381 | 0.303 |
| 2012 | 0.412 | 0.912 | 1.231 | 0.305 |
| 2013 | 0.343 | 0.979 | 1.075 | 0.313 |
| 2014 | 0.314 | 1.019 | 0.991 | 0.323 |
| 2015 | 0.308 | 1.017 | 0.947 | 0.331 |
| 2016 | 0.317 | 1.013 | 0.955 | 0.337 |
|  |  |  |  | Projections (d) |
| 2017 |  |  |  | 0.342 |
| 2018 |  |  |  | 0.348 |
| 1/1/2019 |  |  |  | 0.351 |

(a) See Exhibit 9.1.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Projected Indemnity Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method Accident Year 2016 Indemnity Projected from 15 Months to 27 Months

1. AY 2016 Reported Paid Indemnity Loss Ratio at 15 Months ..... 0.034
(Based on Exhibit 1 of AC17-06-01)
2. Reported Paid Indemnity Loss Ratios at 27 Months for ELR
a) AY 2014 (Based on March 31, 2016 Experience) ..... 0.082
b) AY 2015 (Based on Exhibit 1 of AC17-06-01) ..... 0.084
3. Frequency Adjustments to AY 2016
(Based on Exhibit 12 of AC17-06-01)
a) AY 2014-2015 Frequency Change ..... -0.8\%
b) AY 2015-2016 Frequency Change ..... -1.0\% ..... -1.0\%
4. Average Indemnity Severity Change, AY 2010-2015 ..... $-1.5 \%$(Based on Exhibit 6.2 of AC17-06-01)
5. Composite Indemnity On-Level Adjustment Factors(Based on Exhibit 4.1 of AC17-06-01)
a) AY 2014 to Current ..... 1.116
b) AY 2015 to Current ..... 1.089
c) AY 2016 to Current ..... 1.068
6. Composite Premium On-Level Adjustment Factors
(Based on Exhibit 5.2 of AC17-06-01)
a) AY 2014 to Current ..... 0.991
b) AY 2015 to Current ..... 0.947
c) AY 2016 to Current ..... 0.955
7. AY 2016 Expected Paid Indemnity Loss Ratio at 27 Months
a) Projected from 2014
$=(2 a)^{*}[1+(3 a)]$ * $[1+(3 b)]$ * $[1+(4)]^{\wedge 2}{ }^{*}[(5 a) /(5 c)] /[(6 a) /(6 c)]$ ..... 0.079
b) Projected from 2015 $=(2 b) *[1+(3 b)]^{*}[1+(4)] *[(5 b) /(5 c)] /[(6 b) /(6 c)]$ ..... 0.084
c) Average of 2014 and 2015 Projections $=[(7 a)+(7 b)] / 2$ ..... 0.081
8. Projected Indemnity 15-to-27 Paid Development Factor ..... 2.456
(Based on Exhibit 2.5.1 of AC17-06-01)
9. Projected AY 2016 Paid Indemnity Loss Ratio at 27 Months $=(1)+(7 c) *[1-1 /(8)]$ ..... 0.083

# Projected Medical Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method Accident Year 2016 Medical Projected from 15 Months to 27 Months 

|  | Adjusted for Reforms ${ }^{1}$ |
| :---: | :---: |
| 1. AY 2016 Reported Paid Medical Loss Ratio at 15 Months (Based on Exhibit 1 of AC17-06-01) | 0.053 |
| 2. Reported Paid Medical Loss Ratios at 27 Months for ELR |  |
| a) AY 2014 (Based on March 31, 2016 Experience) | 0.101 |
| b) AY 2015 (Based on Exhibit 1 of AC17-06-01) | 0.100 |
| 3. Frequency Adjustments to AY 2016 (Based on Exhibit 12 of AC17-06-01) |  |
| a) AY 2014-2015 Frequency Change | -0.8\% |
| b) AY 2015-2016 Frequency Change | -1.0\% |
| 4. Average Medical Severity Change, AY 2010-2015 (Based on Exhibit 6.3 of AC17-06-01) | 0.5\% |
| 5. Composite Medical On-Level Adjustment Factors (Based on Exhibit 4.4 of AC17-06-01) |  |
| a) AY 2014 to Current | 1.020 |
| b) AY 2015 to Current | 1.018 |
| c) AY 2016 to Current | 1.014 |
| 6. Composite Premium On-Level Adjustment Factors (Based on Exhibit 5.2 of AC17-06-01) |  |
| a) AY 2014 to Current | 0.991 |
| b) AY 2015 to Current | 0.947 |
| c) AY 2016 to Current | 0.955 |
| 7. AY 2016 Expected Paid Medical Loss Ratio at 27 Months <br> a) Projected from 2014 |  |
| $=(2 a){ }^{*}[1+(3 a)]^{*}[1+(3 b)]^{*}[1+(4)]^{\wedge} 2$ * [(5a) / (5c)] / [(6a) / (6c)] | 0.097 |
| b) Projected from 2015 |  |
| $=(2 \mathrm{~b})^{*}[1+(3 b)]^{*}[1+(4)]^{*}[(5 \mathrm{~b}) /(5 \mathrm{c})] /[(6 \mathrm{~b}) /(6 \mathrm{c})$ ] | 0.101 |
| c) Average of 2014 and 2015 Projections $=[(7 a)+(7 b)] / 2$ | 0.099 |
| 8. Projected Medical 15-to-27 Paid Development Factor (Based on Exhibit 2.6.1 of AC17-06-01) | 1.954 |
| 9. Projected AY 2016 Paid Medical Loss Ratio at 27 Months |  |
| experience evaluated as of March 31, 2017. Reflects an adjustment fo ts made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ uary 1, 2014, and $-1.7 \%$ applied to payments made before January 1, | \% applied ments made |

${ }^{1}$ Based on experience evaluated as of March 31, 2017. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and -1.7\% applied to payments made before January 1, 2015.

## Developed Loss Ratios Using Latest Year Reform Adjusted Development Factors - BF Adjusted Age 15 Loss Ratio Based on Experience as of March 31, 2017

|  | (1) | (2) | (3) Indemnity | (4) | (5) | (6) | Medical |  | (9) | (10) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reported | Annual | Cumulative Dev. Factor |  |  | Adjusted | Annual | Cumulative | Adjusted | Total |
| Accident | Paid | Development | Unadjusted | Adjusted | Developed | Paid | Development | Development | Developed | Developed |
| Year | Loss Ratio(a) | Factor(b) | for SB863 | for SB863 | $\frac{\text { Loss Ratio }}{(1) \times(3)}$ | Loss Ratio(c) | Factor(d) | Factor | $\frac{\text { Loss Ratio }}{(6) \times(8)}$ | $\frac{\text { Loss Ratio }}{(5)+(9)}$ |
| 2005 | 0.115 | 1.010 | 1.076 | 1.076 | 0.123 | 0.152 | 1.019 | 1.252 | 0.190 | 0.314 |
| 2006 | 0.147 | 1.014 | 1.091 | 1.091 | 0.160 | 0.194 | 1.024 | 1.283 | 0.249 | 0.409 |
| 2007 | 0.199 | 1.018 | 1.111 | 1.111 | 0.221 | 0.268 | 1.030 | 1.321 | 0.354 | 0.575 |
| 2008 | 0.248 | 1.025 | 1.139 | 1.139 | 0.282 | 0.330 | 1.034 | 1.366 | 0.451 | 0.733 |
| 2009 | 0.282 | 1.025 | 1.168 | 1.168 | 0.329 | 0.377 | 1.035 | 1.414 | 0.533 | 0.862 |
| 2010 | 0.265 | 1.039 | 1.213 | 1.213 | 0.322 | 0.362 | 1.045 | 1.477 | 0.534 | 0.856 |
| 2011 | 0.235 | 1.053 | 1.277 | 1.277 | 0.301 | 0.298 | 1.064 | 1.572 | 0.469 | 0.769 |
| 2012 | 0.199 | 1.068 | 1.365 | 1.365 | 0.271 | 0.244 | 1.079 | 1.696 | 0.414 | 0.685 |
| 2013 | 0.157 | 1.112 | 1.518 | 1.548 | 0.242 | 0.184 | 1.122 | 1.904 | 0.350 | 0.593 |
| 2014 | 0.123 | 1.207 | 1.832 | 1.951 | 0.241 | 0.140 | 1.202 | 2.289 | 0.320 | 0.561 |
| 2015 | 0.084 | 1.489 | 2.728 | 2.905 | 0.244 | 0.100 | 1.382 | 3.164 | 0.316 | 0.560 |
| 2016 | 0.083 |  | 2.728 | 2.905 | 0.240 | 0.101 |  | 3.164 | 0.319 | 0.559 |

(a) Based on AC17-06-01, Exhibit 1. The 2016 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 AC17-06-01, Exhibit 2.5.
(c) Based on experience evaluated as of March 31, 2017. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and $-1.7 \%$ applied to payments made before January 1, 2015. The 2016 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 AC17-06-01, Exhibit 2.6. Reflects an adjustment for SB 863 of $-4.2 \%$ applied to payments made before January 1, 2013, and adjustments for RBRVS of $-2.1 \%$ applied to payments made before January 1, 2014, and $-1.7 \%$ applied to payments made before January 1 , 2015.

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, 2017

| Accident <br> Year | $(1)$ <br> Developed Indemnity <br> Loss Ratio(a) | $(2)$ <br> 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 |
| :---: | :---: | :---: | :---: | :---: |
| 2005 | 0.123 | 1.512 | 0.777 | $(1) \times(2) \div(3)$ |
| 2006 | 0.160 | 1.495 | 0.999 | 0.240 |
| 2008 | 0.221 | 1.448 | 1.277 | 0.239 |
| 2009 | 0.282 | 1.364 | 1.543 | 0.250 |
| 2010 | 0.329 | 1.337 | 1.664 | 0.249 |
| 2011 | 0.322 | 1.318 | 1.298 | 1.381 |
| 2012 | 0.301 | 1.267 | 1.233 | 1.231 |
| 2013 | 0.271 | 1.116 | 1.075 | 0.264 |
| 2014 | 0.242 | 1.089 | 0.991 | 0.280 |
| 2015 | 0.241 | 1.068 | 0.947 | 0.282 |
| 2016 | 0.244 |  | 0.955 | 0.279 |

Projections (d)
2017
0.269

2018
0.265

1/1/2019
0.263
(a) See Exhibit 10.3.
(b) Based on AC17-06-01, Exhibit 4.1.
(c) See AC16-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2 , the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 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, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | $(4)$ <br> On-Level Medical to <br> Industry Average Filed <br> Pure Premium Ratio (e) |
| :---: |
| 2006 |

Projections (d)
2017
0.348

2018
0.353

1/1/2019
0.356
(a) See Exhibit 10.3.
(b) Based on AC17-06-01, Exhibit 4.4.
(c) See AC16-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Year 2016
Based on Experience as of March 31, 2017

| Accident <br> Year | (1) <br> Developed Indemnity <br> Loss Ratio(a) | $(2)$ <br> Composite Indemnity <br> Adjustment Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: | | (4) <br> On-Level Indemnity to <br> Industry Average File <br> Pure Premium Ratio |
| :---: |
| 2006 |

(a) See AC17-06-01, Exhibit 3.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC17-06-01, Exhibit 6.2, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 on-level ratio.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Severity Trends Applied to Accident Year 2016
Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level Factor(b) | $(3)$ <br> 2005 | Composite Premium <br> Adjustment Factor(c) |
| :---: | :---: | :---: | :---: | :---: |

Projections (d)
2017
0.350

2018
0.355

1/1/2019
0.359
(a) See AC17-06-01, Exhibit 3.2.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC17-06-01, Exhibit 6.4, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 on-level ratio.
(e) 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.

Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency Trend and Post-2005 and Five-Year Average Severity Trend

Based on Experience as of March 31, 2017

|  | (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) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.271 | 1.267 | 1.231 | 0.279 |
| 2013 | 0.242 | 1.233 | 1.075 | 0.278 |
| 2014 | 0.241 | 1.116 | 0.991 | 0.271 |
| 2015 | 0.244 | 1.089 | 0.947 | 0.280 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |

Projections (d)
2017
0.271

2018
0.266

1/1/2019
0.265
(a) See AC17-06-01, Exhibit 3.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend of $-0.2 \%$ based on the average annual rates of growth in the 2005 through 2016 and 2011 through 2016 severities from AC17-06-01, Exhibit 6.2, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency Trend and Post-2005 and Five-Year Average Severity Trend Based on Experience as of March 31, 2017

| Accident <br> Year | $(1)$ <br> Developed Medical <br> Loss Ratio(a) | $(2)$ <br> Composite Medical <br> On-Level 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) |
| :---: | :---: | :---: | :---: | :---: |
| 2005 | 0.190 | 0.937 |  | $(1) \times(2) \div(3)$ |

(a) See AC17-06-01, Exhibit 3.2.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend of $2.0 \%$ based on the average annual rates of growth in the 2005 through 2016 and 2011 through 2016 severities from AC17-06-01, Exhibit 6.4, the actual frequency trend for accident year 2016 from AC17-06-01, Exhibit 12, and projected frequency trends for accident years 2017, 2018, and 2019 from AC17-06-01, Exhibit 6.1; these trends were then separately applied to the 2015 and 2016 on-level ratios.
(e) 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.

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios <br> Post-2005 Exponential Loss Ratio Trend <br> Based on Experience as of March 31, 2017

|  | (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) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.271 | 1.267 | 1.231 | 0.279 |
| 2013 | 0.242 | 1.233 | 1.075 | 0.278 |
| 2014 | 0.241 | 1.116 | 0.991 | 0.271 |
| 2015 | 0.244 | 1.089 | 0.947 | 0.280 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |

(a) See AC17-06-01, Exhibit 3.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately $1.5 \%$ based on the 2005 to 2016 on-level indemnity to industry average filed pure premium ratios to each of the 2015 and 2016 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

# Medical Loss to Industry Average Filed Pure Premium Ratios <br> Post-2005 Exponential Loss Ratio Trend <br> Based on Experience as of March 31, 2017 

| Accident Year | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | On-Level Medical to | On-Level Medical to |
|  | Developed Medical Loss Ratio(a) | Composite Medical On-Level Factor(b) | Composite Premium Adjustment Factor(c) | Industry Average Filed Pure Premium Ratio(e) | Industry Average Filed Pure Premium Ratio(f) |
|  |  |  | (1) $\times(2) \div(3)$ |  |  |
| 2005 | 0.190 | 0.937 | 0.777 | 0.230 | 0.230 |
| 2006 | 0.249 | 0.984 | 0.999 | 0.245 | 0.245 |
| 2007 | 0.354 | 0.966 | 1.277 | 0.268 | 0.268 |
| 2008 | 0.451 | 0.959 | 1.543 | 0.280 | 0.280 |
| 2009 | 0.533 | 0.946 | 1.664 | 0.303 | 0.303 |
| 2010 | 0.534 | 0.943 | 1.513 | 0.333 | 0.333 |
| 2011 | 0.469 | 0.960 | 1.381 | 0.326 | 0.358 |
| 2012 | 0.414 | 0.988 | 1.231 | 0.332 | 0.365 |
| 2013 | 0.350 | 1.016 | 1.075 | 0.331 | 0.365 |
| 2014 | 0.320 | 1.020 | 0.991 | 0.330 | 0.364 |
| 2015 | 0.316 | 1.018 | 0.947 | 0.340 | 0.376 |
| 2016 | 0.325 | 1.014 | 0.955 | 0.345 | 0.380 |
| Projected (d) |  |  |  |  |  |
| 2017 |  |  | 0.368 |  |  |
| 2018 |  |  | 0.385 |  |  |
| 1/1/2019 |  |  | 0.394 |  |  |
| (a) | See AC17-06-01, Exhibit 3.2. |  |  |  |  |
| (b) | See AC17-06-01, Exhibit 4.4. |  |  |  |  |
| (c) | See AC17-06-01, Exhibit 5.2. |  |  |  |  |
| (d) | These on-level ratios were projected by separately applying an exponential trend of approximately $4.8 \%$ based on the 2005 to 2016 on-level medical to industry average filed pure premium ratios including MCCP costs to each of the 2015 and 2016 on-level medical to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios. |  |  |  |  |
| (e) | 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. |  |  |  |  |
| (f) | These on-level ratios include MCCP and are used to calculate the exponential trend to project future on-level ratios. |  |  |  |  |

Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios

Five-Year Exponential Loss Ratio Trend
Based on Experience as of March 31, 2017

|  | (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) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.271 | 1.267 | 1.231 | 0.279 |
| 2013 | 0.242 | 1.233 | 1.075 | 0.278 |
| 2014 | 0.241 | 1.116 | 0.991 | 0.271 |
| 2015 | 0.244 | 1.089 | 0.947 | 0.280 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |

2017
2018

Projected (d)

2018
0.275

1/1/2019
0.274
(a) See AC17-06-01, Exhibit 3.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately $-0.5 \%$ based on the 2011 to 2016 on-level indemnity to industry average filed pure premium ratios to each of the 2015 and 2016 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Five-Year Exponential Loss Ratio Trend Based on Experience as of March 31, 2017

(1)
(2)
(3)
(4)

On-Level Medical to

| Accident <br> Year | Developed Medical <br> Loss Ratio(a) | Composite Medical <br> On-Level Factor(b) |  | Composite Premium <br> Adjustment Factor(c) | Industry Average Filed <br> Pure Premium Ratio(e) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | 0.190 |  |  |  | $(1) \times(2) \div(3)$ |
| 2006 | 0.249 | 0.937 | 0.984 | 0.999 | 0.230 |
| 2007 | 0.354 | 0.966 | 1.277 | 0.245 |  |
| 2008 | 0.451 | 0.959 | 1.543 | 0.268 |  |
| 2009 | 0.533 | 0.946 | 1.664 | 0.280 |  |
| 2010 | 0.534 | 0.943 | 1.513 | 0.303 |  |
| 2011 | 0.469 | 0.960 | 1.381 | 0.333 |  |
| 2012 | 0.414 | 0.988 | 1.231 | 0.326 |  |
| 2013 | 0.350 | 1.016 | 1.075 | 0.332 |  |
| 2014 | 0.320 | 1.020 | 0.991 | 0.331 |  |
| 2015 | 0.316 | 1.018 | 0.947 | 0.330 |  |
| 2016 | 0.325 | 1.014 |  |  | 0.955 |

2017

Projected (d)

2018
0.348

1/1/2019
0.351
0.353
(a) See AC17-06-01, Exhibit 3.2.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately $1.0 \%$ based on the 2011 to 2016 on-level medical to industry average filed pure premium ratios to each of the 2015 and 2016 on-level medical to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.
(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Five-Year Fitted Exponential Loss Ratio Trend <br> Based on Experience as of March 31, 2017

|  | (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) $\times(2) \div(3)$ |
| 2005 | 0.123 | 1.512 | 0.777 | 0.240 |
| 2006 | 0.160 | 1.495 | 0.999 | 0.239 |
| 2007 | 0.221 | 1.448 | 1.277 | 0.250 |
| 2008 | 0.282 | 1.364 | 1.543 | 0.249 |
| 2009 | 0.329 | 1.337 | 1.664 | 0.264 |
| 2010 | 0.322 | 1.318 | 1.513 | 0.280 |
| 2011 | 0.301 | 1.298 | 1.381 | 0.282 |
| 2012 | 0.271 | 1.267 | 1.231 | 0.279 |
| 2013 | 0.242 | 1.233 | 1.075 | 0.278 |
| 2014 | 0.241 | 1.116 | 0.991 | 0.271 |
| 2015 | 0.244 | 1.089 | 0.947 | 0.280 |
| 2016 | 0.245 | 1.068 | 0.955 | 0.274 |

## 2017 <br> 2018

Projected (d)
0.273

1/1/2019
0.271
(a) See AC17-06-01, Exhibit 3.1.
(b) See AC17-06-01, Exhibit 4.1.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected by fitting an exponential trend to the 2011 to 2016 on-level indemnity to industry average filed pure premium ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Five-Year Fitted Exponential Loss Ratio Trend Based on Experience as of March 31, 2017

(1)
(2)
(3)
(4)

On-Level Medical to

| Accident <br> Year | Developed Medical <br> Loss Ratio(a) | Composite Medical <br> On-Level Factor(b) | Composite Premium <br> Adjustment Factor(c) | Industry Average Filed <br> Pure Premium Ratio(e) <br> 2005 | 0.190 |
| :---: | :---: | :---: | :---: | :---: | :---: |

(a) See AC17-06-01, Exhibit 3.2.
(b) See AC17-06-01, Exhibit 4.4.
(c) See AC17-06-01, Exhibit 5.2.
(d) These on-level ratios were projected by fitting an exponential trend to the 2011 to 2016 on-level medical to industry average filed pure premium ratios.
(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).

## Item AC17-08-04 <br> Study of Longer-Term Loss Development

During the review of December 31, 2016 experience at the April 3, 2017 meeting, the Committee noted the recent volatility in incurred loss development patterns and its impact on the loss development projected for the very mature periods for which the WCIRB projection is based on incurred development. The Committee recommended staff review the process used in selecting loss development factors for these longer-term periods. Staff's analysis is summarized below.

## Longer-Term Age-to-Age Development

In the July 1, 2017 Pure Premium Rate Filing, the selected loss development methodology through 384 months was based on (a) latest year paid loss development through 108 months, ${ }^{1}$ (b) three-year average paid loss development from 108 months through 228 months, (c) a three-year average of ratios of incurred losses to paid losses at 228 months and (d) three-year average incurred loss development from 228 months through 384 months. (A consistent methodology has been reflected in the last several pure premium rate filings.) The selection of a three-year average of paid and incurred loss development factors is based on studies of longer-term loss development conducted in 2011 and 2014, respectively, which showed that loss development factors tended to be driven more by random fluctuation than systematic trends at later maturities. ${ }^{2}$ The utilization of incurred loss development after 228 months is based on a 2014 study which showed that a shift in the paid-to-incurred ratio in the mid-1990s related to the Minniear decision and other factors may be distorting paid loss development patterns for older accident years. ${ }^{3}$

Exhibit 1 shows historical changes in paid and incurred medical age-to-age factors at various maturities. The development factors shown in Exhibit 1 are indexed to accident year 1990. Although both paid and incurred development have shifted during periods of reform, incurred development has typically been more volatile with more significant noise within periods of change as well as higher peaks, lower valleys, and a greater degree of cyclicality. In particular, incurred development at later maturities (as shown for 108 to 120 months and 228 to 240 months in Exhibit 1) is significantly more volatile than the corresponding paid development.

Exhibits 2.1 through 2.4 show historical incurred and paid indemnity and medical age-to-age factors. Also shown in Exhibits 2.1 through 2.4 are estimates of trend in the age-to-age factors at each maturity based on a different number of years and the corresponding R-squared of the trend. R-squared values over 0.5 are highlighted on the exhibits for emphasis. In general, presence of a significant trend over an extended period suggests that a fewer number of years should be averaged in order to be more responsive to recent trends. However, if the age-to-age factors are highly cyclical, using a fewer number of years may bias the projected development in a particular direction depending on where you are in the cycle. In addition, a shorter-term average is generally more volatile than a longer-term average. As shown in Exhibit 2.2 for incurred medical, significant trends continue to exist at three years even at later maturities, while the significance reduces significantly at around a six-year average. As shown in Exhibit 2.4 for paid medical, the significance of trends wanes after around four years.

Exhibits 3.1 through 3.4 show estimates of the volatility in a three-year average selection compared to that for a six-year average measured by the standard deviation in the age-to-age and cumulative factors selected over the last six December 31 evaluation periods. For incurred losses (Exhibits 3.1 and 3.2), a six-year average significantly reduces the volatility in the selections at later maturities. For paid losses

[^24](Exhibits 3.3 and 3.4 ), the six-year average reduces the volatility only modestly when compared to a three-year average.

Based on the information reviewed and shown in Exhibits 1 through 3, staff believes using a six-year average of incurred loss development factors after 108 months will significantly reduce the impact of volatility and cyclicality in the incurred loss development projections while still being responsive to shift in incurred development patterns. However, paid loss development has shown much less significant volatility than incurred loss development, both historically and recently. As a result, staff continues to recommend using a three-year average of paid loss development factors after 108 months rather than the six-year average recommended for incurred loss development.

At this time, staff does not have reason to believe the factors driving the dramatic slowdown in paid medical development and the shift in the paid-to-incurred ratios in the mid-1990s no longer apply. As a result, staff continues to recommend using incurred development rather than paid development when using loss development factors from accident years prior to 1998 (approximately 228 months) to develop more recent years.

## Tail Development

Beginning with the January 1, 2017 Pure Premium Rate Filing, the projected loss development tail factor has been based on an inverse power curve fit to incurred loss development. Specifically, an inverse power curve is fit to a six-year average of incurred loss development factors from the $10^{\text {th }}$ through $30^{\text {th }}$ development years and extrapolated to 80 development years. This approach is based on a study of longer-term incurred loss development reviewed by the Committee at the April 5, 2016 meeting. ${ }^{4}$ Staff has updated the material reviewed at the April 5,2016 meeting to include the most recent incurred loss development.

Exhibits 4.1 and 4.2 show for indemnity and medical, respectively, tail development factors estimated for the seven most recent December 31 evaluations based on an inverse power curve fit. The R-squared of the fit is also shown. For each evaluation, various numbers of historical factors were averaged to form the basis of the fit, and each projected tail factor was based on an extrapolation to 80 development years as in the current approach. The current approach of using a six-year average produces a good fit at each evaluation, which is not significantly improved by using a longer-term average.

Although assessments of the accuracy of the tail development factor are difficult to make, the volatility in the tail factors over time can be estimated. Generally, significant changes in the loss development projection should not be driven by changes in projected tail development since the tail development factor is based on activity occurring on much older claims unless the change is believed to be indicative of a fundamental and persistent shift in loss development patterns. The lower section of Exhibits 4.1 and 4.2 show the standard deviation of the tail factors across evaluations generated by each multi-year average. The standard deviation of the projected tail factors continues to be minimized at a six-year average. As a result, staff recommends continuing to use a six-year average when fitting the inverse power tail to incurred loss development.

As discussed at prior meetings, the most recent incurred development has been significantly different than in the past. Exhibit 5 shows graphs of age-to-age incurred loss development over historical December 31 evaluations. The factors shown in Exhibit 5 are based on a rolling product of age-to-age factors over three consecutive maturities for smoothing purposes. Although incurred development shifts over time, for the vast majority of observations, it exhibits the continuous asymptotic decrease with increasing maturity consistent with the inverse power curve assumptions. For indemnity, the pattern is generally consistent in the history including for the most recent (2016) evaluation. However, the factors for the 2016 incurred medical evaluation are significantly different from prior periods, with over $50 \%$ of the

[^25]observations on this exhibit below 1.0 and a shape much more flat than what is implied by the inverse power curve. As discussed at prior meetings, this anomalous incurred development over the latest year is likely related to a delayed reflection of Senate Bill No. SB 863 medical cost savings in case reserves or the recent increases in indemnity claim settlement rates reducing outstanding reserve levels. Staff believes the most recent incurred medical development patterns for older claims represent temporary shifts that are not expected to emerge in the development of more recent claims. In addition, this pattern is not consistent with the assumptions of the inverse power curve. As a result, staff recommends excluding this most recent evaluation from the six-year average of factors used to fit the inverse power curve tail factor for medical.

Although longer-term paid development is not currently used in the WCIRB's loss development projection, staff reviewed fits of the inverse power curve to paid development factors and found that the fits were very good. However, based on the factors potentially distorting late-term paid development discussed above, staff does not recommend utilizing longer-term paid development in the projection until it can be further studied.





## Incurred Indemnity Loss Development Factors



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Standard Deviation of Incurred Indemnity Loss Development Factors Across Evalutions

| Factors Based on a 3-Year Average 6/204 228/216 240/228 252/240 264/25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| @12/31/2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $3-\mathrm{Yr}$ Avg | 1.011 | 1.007 | 1.006 | 1.003 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.000 | 0.999 | 1.001 | 1.000 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 3-Yr Avg Cum @12/31/2015 | 1.038 | 1.027 | 1.020 | 1.014 | 1.011 | 1.008 | 1.006 | 1.004 | 1.003 | 1.002 | 1.002 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 |
| 3-Yr Avg | 1.012 | 1.007 | 1.006 | 1.004 | 1.002 | 1.003 | 1.002 | 1.001 | 1.002 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 |
| 3-Yr Avg Cum @12/31/2014 | 1.044 | 1.031 | 1.024 | 1.018 | 1.014 | 1.011 | 1.009 | 1.007 | 1.006 | 1.004 | 1.004 | 1.004 | 1.003 | 1.003 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.001 | 1.000 |
| 3-Yr Avg | 1.014 | 1.007 | 1.006 | 1.004 | 1.003 | 1.002 | 1.002 | 1.001 | 1.002 | 1.001 | 1.000 | 1.001 | 1.001 | 1.001 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| 3-Yr Avg Cum @12/31/2013 | 1.049 | 1.034 | 1.027 | 1.021 | 1.017 | 1.014 | 1.012 | 1.010 | 1.009 | 1.007 | 1.007 | 1.007 | 1.006 | 1.005 | 1.005 | 1.005 | 1.004 | 1.004 | 1.003 | 1.002 | 1.001 |
| 3-Yr Avg | 1.013 | 1.008 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 | 1.001 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| 3-Yr Avg Cum @12/31/2012 | 1.052 | 1.038 | 1.030 | 1.024 | 1.020 | 1.017 | 1.015 | 1.014 | 1.013 | 1.011 | 1.010 | 1.008 | 1.008 | 1.007 | 1.007 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 |
| 3-Yr Avg | 1.011 | 1.006 | 1.004 | 1.003 | 1.003 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| 3-Yr Avg Cum @12/31/2011 | 1.043 | 1.032 | 1.026 | 1.021 | 1.018 | 1.014 | 1.013 | 1.012 | 1.011 | 1.010 | 1.009 | 1.008 | 1.008 | 1.007 | 1.007 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 |
| 3-Yr Avg | 1.007 | 1.005 | 1.003 | 1.003 | 1.002 | 1.001 | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.000 | 1.000 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.000 | 1.000 | 1.001 |
| 3-Yr Avg Cum | 1.029 | 1.022 | 1.017 | 1.014 | 1.011 | 1.009 | 1.008 | 1.007 | 1.007 | 1.007 | 1.006 | 1.006 | 1.006 | 1.005 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 |




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| @12/31/2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3-Yr Avg | 1.012 | 1.006 | 1.008 | 1.005 | 1.003 | 1.001 | 1.000 | 1.002 | 1.000 | 1.000 | 1.002 | 1.001 | 1.002 | 1.000 | 1.000 | 0.999 | 1.001 | 1.001 | 1.002 | 1.000 | 1.000 |
| $3-\mathrm{Yr}$ Avg Cum | 1.048 | 1.035 | 1.029 | 1.021 | 1.016 | 1.012 | 1.011 | 1.010 | 1.008 | 1.008 | 1.008 | 1.006 | 1.005 | 1.003 | 1.003 | 1.004 | 1.005 | 1.003 | 1.003 | 1.000 | 1.000 |
| @12/31/2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $3-\mathrm{Yr}$ Avg | 1.019 | 1.012 | 1.010 | 1.009 | 1.008 | 1.007 | 1.004 | 1.006 | 1.003 | 0.998 | 1.005 | 1.003 | 1.001 | 1.002 | 1.002 | 0.999 | 1.002 | 1.002 | 1.004 | 1.001 | 1.002 |
| 3-Yr Avg Cum | 1.107 | 1.085 | 1.072 | 1.061 | 1.051 | 1.043 | 1.036 | 1.032 | 1.026 | 1.022 | 1.024 | 1.019 | 1.016 | 1.015 | 1.013 | 1.011 | 1.012 | 1.010 | 1.008 | 1.003 | 1.002 |
| @12/31/2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3-Yr Avg | 1.025 | 1.017 | 1.014 | 1.014 | 1.012 | 1.011 | 1.005 | 1.008 | 1.008 | 1.002 | 1.009 | 1.005 | 1.002 | 1.003 | 1.004 | 1.001 | 1.003 | 1.003 | 1.005 | 1.001 | 1.003 |
| 3-Yr Avg Cum | 1.168 | 1.139 | 1.120 | 1.104 | 1.089 | 1.076 | 1.064 | 1.058 | 1.049 | 1.041 | 1.039 | 1.030 | 1.025 | 1.023 | 1.020 | 1.016 | 1.015 | 1.013 | 1.009 | 1.004 | 1.003 |
| @12/31/2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $3-\mathrm{Yr}$ Avg | 1.027 | 1.020 | 1.016 | 1.015 | 1.009 | 1.013 | 1.009 | 1.007 | 1.011 | 1.004 | 1.008 | 1.003 | 1.003 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 | 1.003 | 1.005 |
| $3-\mathrm{Yr}$ Avg Cum | 1.193 | 1.161 | 1.138 | 1.120 | 1.103 | 1.093 | 1.079 | 1.070 | 1.062 | 1.050 | 1.046 | 1.038 | 1.035 | 1.032 | 1.027 | 1.024 | 1.020 | 1.016 | 1.012 | 1.008 | 1.005 |
| @12/31/2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3-Yr Avg | 1.031 | 1.023 | 1.018 | 1.016 | 1.010 | 1.013 | 1.008 | 1.008 | 1.011 | 1.006 | 1.007 | 1.004 | 1.004 | 1.005 | 1.002 | 1.005 | 1.004 | 1.003 | 1.003 | 1.003 | 1.004 |
| $3-\mathrm{Yr}$ Avg Cum | 1.205 | 1.170 | 1.144 | 1.124 | 1.106 | 1.095 | 1.081 | 1.073 | 1.064 | 1.053 | 1.046 | 1.038 | 1.035 | 1.031 | 1.026 | 1.023 | 1.018 | 1.014 | 1.011 | 1.007 | 1.004 |
| @12/31/2011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $3-\mathrm{Yr}$ Avg | 1.027 | 1.021 | 1.018 | 1.014 | 1.012 | 1.014 | 1.013 | 1.009 | 1.008 | 1.007 | 1.005 | 1.004 | 1.004 | 1.008 | 1.002 | 1.005 | 1.004 | 1.003 | 1.003 | 1.004 | 1.005 |
| $3-\mathrm{Yr}$ Avg Cum | 1.208 | 1.176 | 1.152 | 1.131 | 1.115 | 1.102 | 1.087 | 1.072 | 1.063 | 1.055 | 1.048 | 1.043 | 1.039 | 1.034 | 1.026 | 1.024 | 1.019 | 1.015 | 1.012 | 1.009 | 1.005 |

120/108 132/120 144/132 156/144 168/156 180/168 192/180 204/192 216/204 228/216 240/228 252/240 264/252 276/264 288/276 300/288 312/300 324/312 336/324 348/336 360/348

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[^27]Standard Deviation of Paid Indemnity Loss Development Factors Across Evalutions

| $\begin{aligned} & 000^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 000.0 \\ & 000.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 000^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 100^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & 000.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 100^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 100^{\circ} 0 \\ & 000.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & 100.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 200^{\circ} 0 \\ & 100^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 200^{\circ} 0 \\ & 100^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \varepsilon 00^{\circ} 0 \\ & 100.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 7000 \\ & 100.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 900^{\circ} 0 \\ & 100^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 9000 \\ & 000.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 900^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 900^{\circ} 0 \\ & 100^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 800^{\circ} 0 \\ & 200^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1100^{\circ} 0 \\ & \varepsilon 00.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 910^{\circ} 0 \\ & 900^{\circ} 0 \\ & \hline \end{aligned}$ | sıolve」 әл！！̣｜numす <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ：＾әдP1S |
| 200．1 | 200 ！ | 800＇ 1 | t00＇1 | 900\％ | 900－ | 800＇1 | $600 \cdot 1$ | 010\％ | 110＇1 | 210\％ | ャレロ！ | 二10＇1 | 020• | S20\％ | 080＇！ | 880＇！ | $\angle 70 \cdot 1$ | 890\％ | ع $20 \cdot 1$ | 160＇1 | unう 6＾＊$\dagger$ 入－ |
| 200 1 | 100＇ 1 | 100＇1 | 100＇1 | 100\％ | 100＇1 | 100＇ 1 | $100 \cdot 1$ | 100 1 | 100＇1 | 100＇1 | 200＇1 | 800＇1 | ع00• | ＋00\％ | 900٪ | L00＇ | 600 1 | 1．0＇1 | カ10\％ | $\angle 10 \cdot 1$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | トレOZ／レモ／で回 |
| 100\％ | 200＇1 | ＋00＇1 | ＋00\％ | 900\％ | L00＇1 | 800＇ | 010\％ | 120＇t | 210\％ | ＋10＇t | $\angle 10 \cdot 1$ | 120＇ | †20• | 080＇t | 980＇ | ＋70＇1 | ESO＊ | 990＇： | 6 $\mathrm{O}^{\circ}$－ | 001\％ | unう 6＾$\forall 入 入$－ |
| 100＇t | 100＇1 | 100＇ 1 | 100＇ 1 | 100\％ | 100＇1 | 100＇ 1 | 100＇ 1 | 100＇1 | 100＇1 | 200＇1 | 800－ | ＋00＇ 1 | ع00－ | S00＇1 | 900 1 | 800＇ | 600\％ | $110 \cdot 1$ | ＋10\％ | 610\％ | 6＾ヲ $\dagger$ 入－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | てトOZ／LE／で（0） |
| 100\％ | 200＇1 | t00＇1 | 900\％ | 900 1 | L00＇1 | 800 1 | 010\％ | 120＇1 | ع10＇1 | 910\％ | 610＇1 | †てO＇ | 820• | ャع0＇ | 0to＇ 1 | 670＇1 | 690＇1 | 2＜0＇t | 680\％ | Stri | unう 0 ィ $\forall 入 入$－ |
| 100＇1． | 100＇1 | 100 1 | 100\％ | 100\％ | 100 1 | $100 \cdot 1$ | $100 \cdot 1$ | 100\％ | 200• | 800＇： | 800－ | S00＇1 | t00 1 | 900 1 | 900 ！ | 800 1 | 010＇1 | 210\％ | 910• | †てO• | 6＾ө $\forall$ 入－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100\％ | 200 1 | ع00＇ 1 | ＋00\％ | 900\％ | 200＇1 | 800＇1 | 600＇1 | 120＇1 | ع10＇1 | 910＇1 | 020＇1 | S20＇1 | 0ع0＇ 1 | 980＇1 | \＆ャ0＇ 1 | 2S0＇1 | 290＇1 | 9 $0^{\circ}$－ | 960 1 | Sて1．1 | unう 6＾$\forall$ 入入－$\varepsilon$ |
| 100\％ | 100 1 | 100＇1 | 100＇1 | 100\％ | 100＇1 | $100 \cdot 1$ | 100＇1 | 200\％ | 200 1 | ع00＇－ | ＋00－ | ＋00＇－ | 900 1 | 900－ | L00＇ 1 | 800 ！ | 600 1 | ع10＇t | 610＇1 | L20＇ | б＾$\forall$ 入入－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ャレOZ／LE／で（0） |
| 100＇1 | 200＇1 | ع00＇ 1 | ＋00\％ | S00\％ | 900 1 | L00＇1 | 800＇1 | O10\％ | ع10＇1 | 910＇1 | 020＇1 | S20＇1 | 080＇ 1 | 980＇ | \＆t0＇1 | 2S0＇1 | ع90＇ 1 | 820＇t | 001＊ | 181．1 | unう 6＾$\forall$ ハ人－ |
| $100 \%$ | 100＇1 | 100＇1 | 100＇1 | 100\％ | 100＇1 | 100＇1 | $100 \cdot 1$ | 200\％ | 200 1 | ع00＇－ | ¢00＇ | 900＇1 | S00\％ | 900＇1 | L00＇ | 800＇ | 010＇1 | ＋10＇t | OZO＇ 1 | 820＇1 | 6＾ヲ $\dagger$ 入－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | G10Z／LE／Z |
| 100＇1 | 200 1 | 200＇1 | 800 1 | 500＇1 | S00．1 | 900＇1 | $800^{\circ} \mathrm{L}$ | O10\％ | ع10＇ | 910＇1 | 610\％ | カ20＇ | 620＇ | SEO＇1 | てヤ0＇1 | OSO＇ 1 | 190＇1 | LLO＇ | 860＇ | 8て1．1 | unう 6＾＊$\dagger$ 入－ |
| 100＇1． | 100 ！ | 100 1 | 100 1 | 100\％ | 100 1 | 100\％ | $200 \cdot 1$ | 200 1 | ع00 1 | ع00＇－ | 500 1 | S00＇： | S00\％ | 900＇1 | L00 ！ | 800 ！ | 010\％ | St0＇t | 020 1 | LくO ！ | 6＾ө入入－ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 910て／LE／乙，（0） |



| 6－Yr Avg | 1.025 | 1.018 | 1.013 | 1.010 | 1.008 | 1.007 | 1.006 | 1.005 | 1.005 | 1.004 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6－Yr Avg Cum | 1.121 | 1.094 | 1.074 | 1.060 | 1.050 | 1.041 | 1.034 | 1.029 | 1.024 | 1.019 | 1.016 | 1.013 | 1.010 | 1.009 | 1.007 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 |
| ＠12／31／2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6－Yr Avg | 1.024 | 1.017 | 1.013 | 1.010 | 1.008 | 1.007 | 1.006 | 1.004 | 1.004 | 1.003 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| 6－Yr Avg Cum | 1.116 | 1.090 | 1.071 | 1.058 | 1.048 | 1.040 | 1.033 | 1.027 | 1.023 | 1.019 | 1.015 | 1.013 | 1.011 | 1.009 | 1.008 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 |
| ＠12／31／2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6－Yr Avg | 1.022 | 1.016 | 1.012 | 1.009 | 1.008 | 1.006 | 1.005 | 1.004 | 1.004 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 |
| 6－Yr Avg Cum | 1.108 | 1.084 | 1.067 | 1.054 | 1.045 | 1.037 | 1.030 | 1.025 | 1.021 | 1.017 | 1.014 | 1.012 | 1.010 | 1.009 | 1.008 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 | 1.001 |
| ＠12／31／2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6－Yr Avg | 1.020 | 1.015 | 1.012 | 1.009 | 1.007 | 1.006 | 1.005 | 1.004 | 1.003 | 1.003 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.002 |
| 6－Yr Avg Cum | 1.103 | 1.081 | 1.065 | 1.052 | 1.043 | 1.035 | 1.029 | 1.024 | 1.020 | 1.017 | 1.014 | 1.012 | 1.011 | 1.010 | 1.009 | 1.007 | 1.006 | 1.005 | 1.004 | 1.003 | 1.002 |
| ＠12／31／2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6－Yr Avg | 1.019 | 1.015 | 1.011 | 1.009 | 1.007 | 1.006 | 1.004 | 1.003 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.002 |
| 6－Yr Avg Cum | 1.097 | 1.076 | 1.061 | 1.049 | 1.040 | 1.032 | 1.027 | 1.022 | 1.019 | 1.016 | 1.014 | 1.012 | 1.011 | 1.010 | 1.009 | 1.008 | 1.007 | 1.006 | 1.004 | 1.003 | 1.002 |
| ＠12／31／2011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6－Yr Avg | 1.018 | 1.014 | 1.011 | 1.009 | 1.007 | 1.005 | 1.004 | 1.003 | 1.002 | 1.002 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.001 | 1.002 |
| 6－Yr Avg Cum | 1.092 | 1.073 | 1.057 | 1.045 | 1.037 | 1.030 | 1.025 | 1.021 | 1.018 | 1.015 | 1.014 | 1.012 | 1.011 | 1.010 | 1.009 | 1.008 | 1.007 | 1.006 | 1.004 | 1.003 | 1.002 |

[^28]Standard Deviation of Paid Medical Loss Development Factors Across Evalutions

| $\begin{aligned} & 100^{\circ} 0 \\ & 100^{\circ} 0 \end{aligned}$ | $\begin{aligned} & 200^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2000^{\circ} \\ 1000^{2} \\ \hline \end{array}$ | $\begin{aligned} & 200^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 200^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2000^{\circ} \\ 1000^{2} \\ \hline \end{array}$ | $\begin{aligned} & 2000^{\circ} \\ & 0000^{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & 200^{\circ} 0 \\ & 000^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1000^{\circ} \\ & 2000^{\prime} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 000^{\circ} 0 \\ & \varepsilon 00^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 900^{\circ} 0 \\ & 800^{\circ} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 800^{\circ} 0 \\ & 200{ }^{2} 0 \\ & \hline \end{aligned}$ | $\begin{array}{r} 600^{\circ} 0 \\ 100^{\circ} 0 \\ \hline \end{array}$ | $\begin{array}{r} 1+0^{\circ} 0 \\ 100{ }^{2} 0 \\ \hline \end{array}$ | $\begin{array}{r} \hline 010^{\circ} 0 \\ 100{ }^{2} 0 \\ \hline \end{array}$ | $\begin{array}{r} \hline 010^{\circ} 0 \\ 100^{\circ} 0 \\ \hline \end{array}$ | $\begin{aligned} & 1+0^{\circ} 0 \\ & 100^{\circ} 0 \end{aligned}$ | $\begin{aligned} & \hline 010^{\circ} 0 \\ & 200{ }^{2} 0 \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline 010^{\circ} 0 \\ 100{ }^{2} 0 \\ \hline \end{array}$ | $\begin{aligned} & 1100^{\circ} 0 \\ & 200{ }^{2} 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline+10^{\circ} 0 \\ & 200^{\circ} 0 \\ & \hline \end{aligned}$ | s．oppoy en！le｜nun s．oprey $26 \mathrm{~V}-0 \mathrm{Ol}-2 \mathrm{O} \mathrm{V}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ：$n$ agpls |
| $900^{\circ} \stackrel{1}{ }$ | $10^{\circ} \mathrm{t}$ | L10＇t | 120＇ | S20＇ | $080 \cdot 1$ | ¢ $80 \cdot 1$ | $1+0^{\circ}$ | Lto＇ | 2S0＇ | LSO＇ | S90＇ | LLO＇ | $060^{\circ}$ | LO＇． | 921＇ | $6 \mathrm{t} \cdot 1$ | － $21 \cdot 1$ | S02＇ | しっで | 182＇ |  |
| 900 1 | S00．1 | 900＇t | ＋00＇1 | ＋00＇1 | ＋00＇1 | S00＇1 | $900 \cdot 1$ | S00＇t | 900．1 | ＋00＇1 | $800^{\circ} \mathrm{L}$ | 120＇t | \＆10＇t | $910^{\circ}$ | $\angle 10 \cdot$ | 020 1 | 220＇1 | 920＇1 | $080 \cdot 1$ | $280 \cdot 1$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ＋10Z／LE／で® |
| 500＇1 | 600＇ 1 | ع10＇t | L10＇t | $220 \cdot 1$ | $\angle 20 \cdot 1$ | 280＇ | $680 \cdot 1$ | $\pm 0^{\circ} \mathrm{L}$ | OSO＇ 1 | 950＇ 1 | 990＇1 | 620＇1 | $860^{\circ}$ | OHL＇ | 0¢1＇ | OGL• | GLI＇t | 802＇। | ¢عて＇ | $\dagger$ ¢で |  |
| ＋00．1 | 900．1 | ＋00＇1 | ＋00＇ 1 | ＋00＇1 | S00＇1 | 900＇1 | $900 \cdot 1$ | $900 \cdot 1$ | 900＇1 | 900 1 | $600 \cdot 1$ | 210＇t | ع10＇t | 910＇t | $\angle 10 \cdot$ | 810．1 | 220＇1 | \＆ $20 \cdot 1$ | L20＇ 1 | 280＇t |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | て10Z／LE／て1® |
| ＋00．1 | $800^{\circ}$ | 210．1 | L10＇t | 己20＇ | $\angle 20 \cdot 1$ | عと0＇ | $680 \cdot$ | $970 \cdot 1$ | tSO＇t | 290＇ | S $20^{\circ}$ | $880^{\circ}$ | ＋01－ | 021－ | 681－ | 091． 1 | 981． | てLでト | 9 －で | L82＇ |  |
| ＋00＇ 1 | ＋00＇t | ＋00＇t | ＋00＇ | S00＇ | 900＇t | S00＇1 | $900 \cdot$ | $900 \cdot 1$ | 800＇t | 800＇ | 210＇t | \＆10＇ | －10＇1 | Sto＇ | $\angle 10 \cdot 1$ | 810＇1 | 220＇ | \＆ 2 ＇ 1 | 820＇ | \＆ 0 ＇$\downarrow$ | ¢＾＊ $\boldsymbol{\lambda}^{\text {－}}$－ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 800＇ 1 | 200． | 210\％ | L10＇t | 220＇t | $\angle 20 \cdot 1$ | ع 0 － 1 | $680 \cdot$ | $\angle 0^{\circ} \mathrm{L}$ | $\angle 90^{\circ}+$ | 690＇+ | $280^{\circ}$ | $960^{\circ}$ | 2L＋＇ | 0عヶ＊ | 6 t － | 2L1． | 961． | \＆टて＇। | 6¢て＇ | 208＇ |  |
| 800＇ 1 | ＋00＇t | 900＇t | S00＇t | 900＇ | S00＇t | S00＇1 | $900 \cdot$ | $800^{\circ}$ | 010＇t | 120＇t | ع10＇t | \＆10＇t | Sto＇ | Sto＇t | $\angle 10 \cdot 1$ | 610＇1 | 020＇t | ャ20＇t | $620 \cdot 1$ | ¢ $80 \cdot 1$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ャレ0て／1と／で® |
| 800＇ | $800^{\circ}$ | 210＇1 | 910＇ | 120＇ | $920 \cdot 1$ | $180 \cdot 1$ | $\angle 80^{\circ}$ | $970 \cdot 1$ | $690^{\circ}$ | 120＇ | 980＇1 | 001＇1 | 91．＇ | عと $1 \cdot \downarrow$ | ZS1．1 | SLI＇ | 861．1 | LてZ＇। | 99て＇ | て18＇เ |  |
| ع00 1 | ＋00＇t | ＋00＇t | ＋00＇ 1 | ＋00＇1 | S00＇1 | S00＇1 | $900 \cdot 1$ | $600 \cdot 1$ | $210 \cdot 1$ | 120＇t | ع10＇t | ＋10＇t | S10＇t | Sto＇t | $\angle 10 \cdot$ | 020 1 | 020＇1 | ャ20＇เ | 280＇ 1 | 980＇\％ | 6＾ヲ $\boldsymbol{\text { 人 }}$－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ¢10Z／LE／Z |
| 800＇ 1 | 200＇t | ＋10＇t | －10＇t | 810＇ | 220＇ | $820 \cdot 1$ | ¢ $0^{\circ} \mathrm{L}$ | Sto ${ }^{\circ}$ | 9S0＇t | 990＇ | 820＇t | 860＇ | 801＇1 | ャて1• | しがよ | 291．1 | ع81－1 | เしでト | くセで | 06て＇ |  |
| 800＇ | ＋00＇1 | ＋00＇1 | 800 1 | ＋00＇1 | ＋00＇1 | $900 \cdot 1$ | L00＇ | $600^{\circ}$ | O10＇t | O10＇1 | $10^{\circ} \mathrm{F}$ | ع10＇ 1 | ャ10＇t | ＋10＇L | S10＇L | 810＇1 | 810＇1 | ャ20＇t | $080 \cdot 1$ | ャع०＇เ | 6＾＊ $\boldsymbol{\text { 人 }}$－$\varepsilon$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 910Z／Lと／で⓪ |

> Factors Based on a 6-Year Average $120 / 108132 / 120144 / 132156 / 144168 / 156180 / 168192 / 180 \underline{204 / 192} \underline{216 / 204} \underline{228 / 216} \underline{240 / 228} \underline{252 / 240} 264 / 252$
120／108 132／120 144／132 156／144 168／156 180／168 192／180 204／192 216／204 228／216 240／228 252／240 264／252 276／264 288／276 300／288 312／300 324／312 336／324 348／336 360／348

| 1.033 | 1.029 | 1.023 | 1.020 | 1.018 | 1.016 | 1.014 | 1.014 | 1.013 | 1.012 | 1.009 | 1.009 | 1.008 | 1.007 | 1.005 | 1.005 | 1.004 | 1.004 | 1.004 | 1.004 | 1.004 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

 1.037
1.006 1.007 1.009
1.055 웅 1.012
1.077 1.013
1.091 $\begin{array}{llllllll}1.033 & 1.029 & 1.023 & 1.020 & 1.018 & 1.016 & 1.014 & 1.014 \\ 1.289 & 1.247 & 1.212 & 1.184 & 1.161 & 1.140 & 1.122 & 1.106\end{array}$ $\begin{array}{llllllll}1.034 & 1.029 & 1.024 & 1.021 & 1.019 & 1.017 & 1.016 & 1.014\end{array}$ ©
$\stackrel{y}{2}$
N
N
©
 ＠12／31／2015


 | 0 |
| :---: | :---: | 6－Yr Avg Cum

＠12／31／2013 $6-\mathrm{Yr}$ Avg
$6-\mathrm{Yr}$ Avg Cum
 6－Yr Avg
$6-\mathrm{Yr}$ Avg Cum ＠12／31／2011 $6-\mathrm{Yr}$ Avg
$6-\mathrm{Yr}$ Avg Cum


## Projected Indemnity Incurred 348-to-Ultimate Factor

Fitted on Inverse Power Curve based on $t=10$ to $\mathbf{t}=\mathbf{3 0}$
@12/31/2016 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.001 | 1.002 | 1.002 | 1.004 | 1.005 | 1.004 | 1.004 | 1.004 | 1.015 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.671 | 0.623 | 0.449 | $\mathbf{0 . 8 0 4}$ | 0.771 | 0.779 | 0.676 | 0.678 | 0.591 |

@12/31/2015 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. $\quad$ 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.001 | 1.002 | 1.005 | 1.005 | 1.005 | 1.005 | 1.004 | 1.005 | 1.016 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.671 | 0.361 | $\mathbf{0 . 7 8 6}$ | 0.756 | 0.770 | 0.663 | 0.667 | 0.655 | 0.564 |

@12/31/2014 3-Yr Avg. 4-Yr Avg. $\underline{\text { 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. }}$ Stopping Point

| Year 80 | 1.004 | 1.007 | 1.007 | 1.006 | 1.006 | 1.005 | 1.006 | 1.007 | 1.018 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| R-Squared | 0.564 | $\mathbf{0 . 7 5 1}$ | 0.699 | 0.706 | 0.577 | 0.590 | 0.596 | 0.534 | 0.501 |

@12/31/2013 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.010 | 1.009 | 1.007 | 1.007 | 1.006 | 1.007 | 1.008 | 1.010 | 1.020 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | $\mathbf{0 . 7 1 2}$ | 0.646 | 0.661 | 0.467 | 0.499 | 0.538 | 0.475 | 0.473 | 0.440 |

@12/31/2012 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.011 | 1.006 | 1.007 | 1.005 | 1.007 | 1.007 | 1.010 | 1.011 | 1.022 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.663 | 0.472 | 0.310 | 0.362 | 0.414 | 0.349 | 0.377 | 0.360 | 0.374 |

@12/31/2011 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.004 | 1.006 | 1.003 | 1.006 | 1.007 | 1.010 | 1.011 | 1.013 | 1.022 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| R-Squared | $\mathbf{0 . 5 0 5}$ | 0.286 | 0.389 | 0.222 | 0.168 | 0.157 | 0.137 | 0.264 | 0.316 |

@12/31/2010 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.003 | 1.002 | 1.005 | 1.007 | 1.010 | 1.012 | 1.013 | 1.016 | 1.024 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.288 | 0.522 | 0.367 | 0.286 | 0.351 | 0.374 | 0.189 | 0.149 | 0.258 |

StdDev. @80Yrs (2010 to 2016)

| 0.004 | 0.003 | 0.002 | 0.001 | 0.002 | 0.003 | 0.003 | 0.004 | 0.003 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| StdDev. @80Yrs (2010 to 2015) |  |  |  |  |  |  |  |  |
| 0.004 | 0.003 | 0.002 | 0.001 | 0.002 | 0.003 | 0.003 | 0.004 | 0.003 |

## Projected Medical Incurred 348-to-Ultimate Factor

Fitted on Inverse Power Curve based on $t=10$ to $t=30$
 Stopping Point

| Year 80 | 1.006 | 1.012 | 1.015 | 1.028 | 1.028 | 1.033 | 1.035 | 1.034 | 1.143 |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.399 | 0.718 | 0.712 | 0.798 | 0.837 | 0.880 | $\mathbf{0 . 8 9 6}$ | 0.888 | 0.756 |

@12/31/2015 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.028 | 1.026 | 1.039 | 1.037 | 1.042 | 1.044 | 1.042 | 1.046 | 1.155 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| R-Squared | 0.735 | 0.721 | 0.747 | 0.823 | 0.860 | 0.885 | $\mathbf{0 . 8 8 6}$ | 0.862 | 0.755 |

@12/31/2014 3-Yr Avg. 4-Yr Avg. $\underline{\text { 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. }}$ Stopping Point

| Year 80 | 1.029 | 1.049 | 1.045 | 1.049 | 1.050 | 1.046 | 1.050 | 1.053 | 1.165 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.640 | 0.807 | 0.878 | 0.897 | $\mathbf{0 . 9 1 1}$ | 0.906 | 0.881 | 0.854 | 0.754 |

@12/31/2013 3-Yr Avg. 4-Yr Avg. $\underline{\text { 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. } 10-\mathrm{Yr} \text { Avg. All-Yr Avg. }}$ Stopping Point

| Year 80 | 1.058 | 1.049 | 1.054 | 1.053 | 1.049 | 1.053 | 1.056 | 1.064 | 1.175 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| R-Squared | 0.815 | 0.875 | 0.903 | $\mathbf{0 . 9 1 4}$ | 0.905 | 0.884 | 0.855 | 0.820 | 0.713 |

@12/31/2012 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.053 | 1.059 | 1.056 | 1.051 | 1.056 | 1.059 | 1.068 | 1.068 | 1.186 |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.872 | 0.916 | $\mathbf{0 . 9 2 1}$ | 0.906 | 0.887 | 0.864 | 0.813 | 0.792 | 0.664 |

@12/31/2011 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.058 | 1.054 | 1.048 | 1.055 | 1.058 | 1.068 | 1.068 | 1.089 | 1.198 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| R-Squared | $\mathbf{0 . 8 4 6}$ | 0.845 | 0.842 | 0.831 | 0.808 | 0.766 | 0.739 | 0.778 | 0.613 |

@12/31/2010 3-Yr Avg. 4-Yr Avg. 5-Yr Avg. 6-Yr Avg. 7-Yr Avg. 8-Yr Avg. 9-Yr Avg. 10-Yr Avg. All-Yr Avg. Stopping Point

| Year 80 | 1.038 | 1.032 | 1.047 | 1.053 | 1.065 | 1.064 | 1.088 | 1.109 | 1.205 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| R-Squared | 0.786 | 0.759 | $\mathbf{0 . 8 2 1}$ | 0.796 | 0.758 | 0.716 | 0.765 | 0.702 | 0.577 |

StdDev. @80Yrs (2010 to 2016)

| 0.019 | 0.017 | 0.014 | 0.010 | 0.012 | 0.012 | 0.018 | 0.026 | 0.023 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| StdDev. @80Yrs (2010 to 2015) |  |  |  |  |  |  |  |  |
| 0.014 | 0.013 | 0.006 | 0.006 | 0.008 | 0.010 | 0.016 | 0.024 | 0.019 |

## Incurred Indemnity Age-to-Age Factors at December 31 Evaluations Product of 3 Periods' Factors



Incurred Medical Age-to-Age Factors at December 31 Evaluations
Product of 3 Periods' Factors



[^0]:    ${ }^{1}$ See Item AC12-12-02 of the December 5, 2012 Actuarial Committee Agenda.
    ${ }^{2}$ See Item AC12-12-02 of the August 6, 2015 Actuarial Committee Agenda.
    ${ }^{3}$ For example, to project accident year 2016 from 2013 and 2014 would use the actual 12-month frequency change for 2014, and the frequency model projections for 2015 and 2016.
    ${ }^{4}$ Consistent with the prior studies, in order to avoid conclusions driven by changes to the frequency model and its inputs over time, the most recent model was used for all projections.
    ${ }^{5}$ All projections were based on the data reviewed at the June 16,2017 meeting and may not be comparable to the data reflected in Item AC17-06-01 of this Agenda.

[^1]:    ${ }^{6}$ These adjustments are also relied upon in projecting on-level severities in the separate frequency and severity trends method, but that method allows for more flexibility when selecting the trend projection.

[^2]:    *Accident Years 2011 and prior are based on Exhibit 2.1

[^3]:    ${ }^{1}$ In the January 1, 2018 Pure Premium Rate Filing, ratios will be adjusted to the July 1, 2017 industry average filed pure premium rate level.

[^4]:    * 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.

[^5]:    Three-year averages of the $387 \mathrm{Inc} / 387 \mathrm{Pd}$ factors are selected.

[^6]:    

[^7]:    * 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

[^8]:    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. using 2016 earned premium levels).
    

[^9]:    * Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident year 2012 and forward exclude the paid cost of medical cost containment programs.

[^10]:    Note: Cumulative claims include both cumulative and occupational disease claims.

[^11]:    Notes: Incurred Amounts and Severities are first dollar.

[^12]:    Notes: Incurred Amounts and Severities are first dollar.
    Source: WCIRB unit statistical data

[^13]:    Source: Based on first unit statistical report level of (1) all Death claims, (2) all Permanent Disability claims, and (3) Temporary Only claims exceeding $\$ 5,000$ in total incurred losses

[^14]:    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.
    ${ }^{[2]} 2011$ figures include a reallocation made by the State Compensation Insurance Fund to move a significant amount of reserves from loss to ULAE.
    ${ }^{[3]} 2013$ 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.

[^15]:    ${ }^{1}$ See Item AC15-03-07 of the June 12, 2015 and August 6, 2015 Actuarial Committee Agendas for more information.

[^16]:    2 The projected ULAE to loss ratio in the July 1, 2017 Pure Premium Rate Filing based on this approach was $11.5 \%$.

[^17]:    ${ }^{3}$ The projected ALAE severity trend reflected in the July 1, 2017 Premium Rate Filing was also 4.0\%.
    ${ }^{4}$ The projected ratio of ALAE (excluding MCCP) to loss reflected in the July 1, 2017 Pure Premium Rate Filing was $18.4 \%$.

[^18]:    ${ }^{5}$ See Exhibit 2.6.1 of Item AC16-06-01 of this Actuarial Committee Agenda.
    ${ }^{6}$ The projected ratio of MCCP to loss reflected in the July 1, 2017 Pure Premium Rate Filing was 4.3\%.

[^19]:    7 The projected LAE to loss ratio in the July 1, 2017 Pure Premium Rate Filing was $34.2 \%$.

[^20]:    Note: Factors in italics are based on powertail fit to the " 3 -Year Arithmetics Average" factors.

[^21]:    | 1.130 | 1.013 | ${ }^{1.036}$ | 1.031 | 1.023 | 1.014 | 1.010 | 1.012 | 1.004 | 1.006 | 1.006 | 1.003 | 1.003 | 1.005 |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 1.431 | 1.266 | 1.251 | 1.207 | 1.170 | 1.144 | 1.128 | 1.117 | 1.104 | 1.100 | 1.093 | 1.087 | 1.083 |  | 1.128 | 1.050 |
    | 3-Year Arithmetics Average Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
    | 1.177 | 1.040 | ${ }^{1.046}$ | ${ }^{1.033}$ | 1.025 | 1.018 | 1.012 | 1.011 | 1.006 | 1.007 | 1.005 | 1.006 | 1.006 | 1.006 |  |  |
    | 1.569 | 1.333 | 1.282 | 1.226 | 1.187 | 1.158 | 1.137 | 1.123 | 1.111 | 1.105 | 1.097 | 1.092 | 1.086 | 1.079 | 1.126 | 1.050 |
    | Average Excluding High \& Low |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
    | 1.168 | 1.041 | 1.038 | 1.031 | 1.025 | 1.020 | 1.015 | 1.011 | 1.009 | 1.007 | 1.007 | 1.007 | 1.006 | 1.005 |  |  |
    | 1.533 | 1.312 | 1.261 | 1.214 | 1.177 | 1.148 | 1.126 | 1.110 | 1.098 | 1.088 | 1.080 | 1.073 | 1.065 | 1.059 | 1.106 | 0 |

    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
    Age to Age
    Age-to-Ult.
    Age to Age
    Age-to-Ult.
    Age to Age
    Age-to-Ult. indemnity development factors are from Exhibits 2.3.1 and 2.3.2 of Item AC17-06-01.

[^22]:    ${ }^{1}$ 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 231 months.

[^23]:    ${ }^{2}$ 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 231 months.

[^24]:    ${ }^{1}$ Development periods through 84 months also reflected adjustments for changing claim settlement rates.
    ${ }^{2}$ See Item AC11-12-04 of the December 1, 2011 Actuarial Committee Agenda and Item AC14-03-03 of the June 11, 2014 Actuarial Committee Agenda.
    ${ }^{3}$ See Item AC14-03-03 of the June 11, 2014 Actuarial Committee Agenda.

[^25]:    ${ }^{4}$ See Item AC16-03-03 of the April 5, 2016 Actuarial Committee Agenda.

[^26]:    

[^27]:    

[^28]:    

