

# Actuarial Committee

## Meeting Agenda

Date	Time	Location	Staff Contact
December 6, 2017	9:30 AM	WCIRB California 1221 Broadway, Suite 900 Oakland, CA	David M. Bellusci
1221 Broadway, Suite 900 • Oakland, CA 94612 • 415.777.0777 • Fax 415.778.7007 • www.wcirb.com • wcirb@wcirb.com			

Released: November 29, 2017

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

### I. Approval of Minutes

Meeting held on September 5, 2017

### II. Working Group Meeting Summaries

Actuarial Research Working Group Meeting held September 26, 2017

Medical Analytics Working Group Meeting held October 3, 2017

### III. Unfinished Business

A. AC02-03-03: Experience of Large Deductible Policies

B. AC17-04-04: New Drug Formulary

### IV. New Business

A. AC17-12-01: 9/30/2017 Experience – Review of Methodologies

B. AC17-12-02: Legislative Cost Monitoring

C. AC17-12-03: On-leveling for Wage Level Changes in Pure Premium Ratemaking

D. AC17-12-04: Earthquake Study

E. AC17-12-05: Potential 2018 Actuarial and Research Study Projects

F. AC17-12-06: 2018 Schedule of Meetings

### V. Matters Arising at Time of Meeting

### VI. Next Meeting Date: TBD

### VII. Adjournment

#### Antitrust Notice

As members of the Workers' Compensation Insurance Rating Bureau of California, you are bound, when involved in meetings or other activities of the WCIRB California, to limit your actions (and discussions other than social ones) to matters relating to the business of the WCIRB California. Matters that do not relate directly to WCIRB California business should be avoided. Members should particularly avoid discussions or conduct that could be construed as intended to affect competition (or access to markets). Thus, as members, you should not discuss or pursue the business interests of individual insurers or others, including, in particular, the plans of individual members involving, or the possibility or desirability of (a) raising, lowering, or stabilizing prices (premiums or commissions); (b) doing business or refusing to do business with particular, or classes of, insurers, reinsurers, agents, brokers, or insureds, or in particular locales; or (c) potential actions that would affect the availability of products or service either generally or in specific markets or locales.

**Notice**

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

© 2017 Workers' Compensation Insurance Rating Bureau of California. All rights reserved.

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

Each WCIRB member company, including any registered third party entities, (Company) is authorized to reproduce any part of this work solely for the following purposes in connection with the transaction of workers' compensation insurance: (1) as necessary in connection with Company's required filings with the California Department of Insurance; (2) to incorporate portions of this work, as necessary, into Company manuals distributed at no charge only to Company employees; and (3) to the extent reasonably necessary for the training of Company personnel. Each Company and all agents and brokers licensed to transact workers' compensation insurance in the state of California are authorized to physically reproduce any part of this work for issuance to a prospective or current policyholder upon request at no charge solely for the purpose of transacting workers' compensation insurance and for no other purpose. This reproduction right does not include the right to make any part of this work available on any website or any form of social media.

Workers' Compensation Insurance Rating Bureau of California, WCIRB, WCIRB California, WCIRB Connect, WCIRB Inquiry, WCIRB CompEssentials, X-Mod Direct, eSCAD and the WCIRB California logo (WCIRB Marks) are registered trademarks or service marks of the WCIRB. WCIRB Marks may not be displayed or used in any manner without the WCIRB's prior written permission. Any permitted copying of this work must maintain any and all trademarks and/or service marks on all copies.

To seek permission to use any of the WCIRB Marks or any copyrighted material, please contact the WCIRB at [customerservice@wcirb.com](mailto:customerservice@wcirb.com).

**Actuarial Research Working Group**

# Meeting Summary

To: Participants of the Actuarial Research Working Group  
From: Ward Brooks  
Date: October 5, 2017

---

**RE: Summary of September 26, 2017 Meeting**

## **Insurer Meeting Participants Were Reminded of the Antitrust Notice**

As members of the Workers' Compensation Insurance Rating Bureau of California, you are bound, when involved in meetings or other activities of the WCIRB California, to limit your actions (and discussions other than social ones) to matters relating to the business of the WCIRB California. Matters that do not relate directly to WCIRB California business should be avoided. Members should particularly avoid discussions or conduct that could be construed as intended to affect competition (or access to markets). Thus, as members, you should not discuss or pursue the business interests of individual insurers or others, including, in particular, the plans of individual members involving, or the possibility or desirability of (a) raising, lowering, or stabilizing prices (premiums or commissions); (b) doing business or refusing to do business with particular, or classes of, insurers, reinsurers, agents, brokers, or insureds, or in particular locales; or (c) potential actions that would affect the availability of products or service either generally or in specific markets or locales.

## **Discussion Topics**

At the meeting, the following topics were discussed.

### **1. Seasonality of Exposures**

The Working Group was informed that staff had identified significant seasonality in many classifications' exposures. Some classifications exhibited modest 'Holiday seasonality' with lower exposures in the winter months. Others, such as many agricultural and construction classifications, exhibit varying degrees of increased activity in the summer months. One classification, Ski Resorts, has a relatively unique high winter exposure pattern.

The Working Group was informed that in researching the potential to forecast frequency trends using monthly frequency series, accounting for this seasonality was necessary. Unlike cases where the variable of interest is homogeneous in its seasonality, aggregate frequency series are combinations of classifications with disparate seasonality patterns. For this reason, though staff did study adjusting for seasonality directly in time series models, staff opted to develop seasonal adjustments based on observed claim frequencies rather than use an 'in model' approach. With an in-model approach, the adjustment for the month of August would be the same for each year. Using the approach developed by staff, the adjustment for August would vary depending of the mix of classifications each year. During a construction boom, for example, more claims might be expected in August relative to years with lower than average construction activity. This approach offers the potential to tailor seasonal adjustments to the mix of classifications for both historical on-leveling and forecasting.

The Working Group was informed that staff developed the claims-based seasonality adjustments by comparing observed monthly claim frequencies over time relative to the frequencies that would be expected from an even, pro-rata earning of exposures over time. This claim-based approach does assume that actual exposures are proportional to the observed long-term differences in

## Meeting Summary

Date: October 5, 2017

actual to pro-rata frequencies. Staff noted that this assumption seemed reasonable and may align more closely to hazards, if not exactly aligning with payrolls.

The Working Group was informed that staff explored two claim-based approaches to adjusting for seasonality—an industry based approach and an approach based on grouping classifications based on their historical seasonal patterns. The industry-based approach combined classifications of the same North American Industrial Classification System (NAICS) two-digit super-sector. The development of seasonal groups was based on the development of similarity/dissimilarity measures and cluster analysis. Only classifications with a credible volume of experience were used in the seasonal group development approach. Classifications without credible volumes of historical experience were assigned to the 'Holiday seasonality' group. A Working Group member requested a comparison of the seasonality of the classifications with credible volume used to develop the 'Holiday seasonality' group with that of the classifications that lacked credible volume to be used in the group development. The seasonality of the classifications lacking credible volume was very similar to that of the credible classifications' assigned to the 'Holiday seasonality' group.

The Working Group was informed that because the accident dates of cumulative injury and disease claims are not expected to vary according to exposures as specific injuries do, only specific injuries were used in developing the relativities. Because specific injuries' claim count development is modest, data at only first and second report were evaluated. The results for claims at first and second report levels were comparable.

The Working Group reviewed the seasonality differentials relative to those expected from a pro rata earning of exposures for accident years 2007 through 2014. Staff noted that seasonality patterns may change over time. If implemented, staff proposed that integration of seasonal adjustments would be accompanied by annual updates that would include evaluation of the changing patterns in the selection of years to use in updating seasonal adjustments.

Staff noted that while the development of the seasonality adjustments was done as preliminary work for the monthly indemnity claim frequency analysis, there was potential to incorporate seasonal adjustments into other WCIRB analyses.

## **2. Review of Monthly Indemnity Claim Frequency Time Series**

The Working Group was reminded that at its February 1, 2013 and June 12, 2013 meetings, staff had presented the results of research on the development of "nearcasts" of indemnity claim frequency series for the potential to enhance indemnity claim frequency forecasts. At that time, the Working Group had evaluated alternative explanatory variables, such as unemployment insurance exhaustions. The Working Group was informed that staff had updated the monthly times series using claim-based seasonal adjustments and re-evaluated time series approaches for cumulative and noncumulative indemnity claim series separately. The Working Group was informed that staff had also evaluated including the exogenous variables currently in the WCIRB's annual noncumulative indemnity claim frequency model.

Staff reviewed for the Working Group the indemnity claim frequency patterns from the 1960s at an annual level and the unadjusted and seasonally-adjusted noncumulative and cumulative indemnity monthly claim frequency series from the early 1990s. Staff noted that the monthly noncumulative indemnity claim frequency series had stabilized around 2007.

The Working Group was informed that staff had evaluated autoregressive integrated moving average (ARIMA) models of the seasonally-adjusted monthly series from accident month January 2007 through December 2015 using the Box-Jenkins approach.

## Meeting Summary

Date: October 5, 2017

The Working Group reviewed the results. Staff noted that the noncumulative indemnity claim frequency series had been fairly constant since 2007 and that the constant term in staff's selected model was not significant. Staff noted that the cumulative indemnity claim frequency series had exhibit a modest upward trend since 2007 and that the constant term in staff's selected model was significant. The Working Group discussed the relationship between these near-term findings evaluating the monthly indemnity claim frequency series and the annual model's negative constant term. A Working Group member suggested that the monthly series might support additional adjustment of the constant term in the annual model, noting that the constant term largely captured long-term frequency declines that had not been observed since 2007.

The Working Group was informed that staff had also evaluated the inclusion of the annual model's exogenous variables but found that none of the variables were significant in the monthly model. Staff noted that it was difficult to detect associations between the exogenous variables over the short-term when, for example, only one or two economic cycles or one statutory reforms might have been observed. Additionally, adapting the annual exogenous variables to monthly variables involved estimation error as they had not been originally measured on a monthly basis.

Several Working Group members suggested that staff bring these findings to the Actuarial Committee for consideration.

### 3. Review of Wage Series Alternatives

The Working Group was informed that staff had been requested to review potential wage inflation alternatives to the annual aggregate average wage series developed from the Bureau of Labor Statistics' (BLS) aggregate wage and salary and aggregate employment data, which were forecast by UCLA Anderson Forecast and used in WCIRB ratemaking.

The Working Group was reminded that at the June 28, 2016 meeting, staff had presented the results of evaluating different wage series as part of the analysis to develop the 2017 California Wage Report, distributed to members in 2017. Specifically, in developing the 2017 California Wage Report, staff had evaluated wage data published by the BLS and the California Employment Development Department (EDD) in their Occupational Employment Survey (OES) and other sources and had evaluated the potential to adjust exposures for wage trend at the classification level, which would control for changes in mix of classifications.<sup>1</sup>

Staff reviewed for the Working Group the major alternative series. Staff noted that only two series—the current series and the BLS' Quarterly Census of Employment and Wages (QCEW)—were available for the long term periods. Several alternatives were only available for the most recent decade. Staff noted that the BLS' QCEW series had exhibited more extreme behavior during the dot.com boom and bust, with highs and lows more extreme than the current series'. The Working Group was informed that staff had tested use of the OES series in ratemaking, but that the results were not better than those of the current series'.

Given these findings, the Working Group was informed that staff did not perceive there to be any better alternatives to the current series to use to on-level wages in aggregate ratemaking. Several Working Group members suggested that staff bring these findings to the Actuarial Committee for its consideration.

---

<sup>1</sup> <http://www.labormarketinfo.edd.ca.gov/data/oes-employment-and-wages.html>

## Meeting Summary

Date: October 5, 2017

### **4. Indemnity Claim Reserves at First Report and Development from First to Third Report Level**

The Working Group was informed that WCIRB staff had received several requests to augment the WCIRB's Annual Business Comparatives with insurer's relative case reserve levels benchmarked to statewide. The impetus for this request was so that insurers could better understand how higher severities at first report level were related to future loss development. An implicit assumption expressed by those requesting this addition was that higher case reserves were associated with less future development. Staff evaluated this by insurer group and found that this assumption was supported by experience. Specifically, staff reviewed with the Working Group the relationship between insurers' relative case reserves at first report for policy year 2013 and insurers' subsequent relative loss development from first report level to third report level. The experience showed that higher relative case reserves at first report were found to be inversely related to loss development from first to third report level.

### **5. California Earthquake Study**

The Working Group was informed that the WCIRB had contracted with RMS to conduct an evaluation of the earthquake hazard for California workers' compensation and that RMS had completed this study and would present its report and findings at the December 5, 2017 Actuarial Committee meeting. The Working Group was informed that while RMS's findings would be published in December, staff had begun to explore the future potential to refine RMS's results to classification, industrial, or regional levels.

Staff noted that a need for credibility at more refined levels had been expected, but that the results did not suggest the need for credibility based on the volume of observations. The Working Group was informed that staff was continuing to study the results at refined levels. The Working Group discussed staff's preliminary work. A Working Group member noted that to optimally integrate the overall findings the rate relativities would need to be refined to the third decimal point and this the need to refine to the third decimal would be even greater for any refinement.

### **6. Review of On-Level and Trend Factors Used in Development of Retrospective Rating Database**

A Working Group member had requested that staff provide more information on the trend and benefit on-level factors that were used to update the loss elimination ratios each year between major updates to the database used to develop the retrospective rating plan rating values. Staff provided an overview of changes in recent years' trend and benefit on-level factors and discussed their impact on year-to-year changes in the loss elimination ratios. While the trend and benefit on-level factors underlying the retrospective rating database had previously only been published with major database updates, going forward staff agreed to publish this information annually with the annual update of the loss elimination ratios. A Working Group member asked that staff provide additional information on contributions to changes in loss elimination ratios for future updates. Staff agreed to do this.

**Medical Analytics Working Group**

# Meeting Summary

To: Participants of the Medical Analytics Working Group  
Date: October 3, 2017

---

**RE: Summary of October 3, 2017 Meeting**

**Insurer Meeting Participants Were Reminded of the Antitrust Notice**

As members of the Workers' Compensation Insurance Rating Bureau of California, you are bound, when involved in meetings or other activities of the WCIRB California, to limit your actions (and discussions other than social ones) to matters relating to the business of the WCIRB California. Matters that do not relate directly to WCIRB California business should be avoided. Members should particularly avoid discussions or conduct that could be construed as intended to affect competition (or access to markets). Thus, as members, you should not discuss or pursue the business interests of individual insurers or others, including, in particular, the plans of individual members involving, or the possibility or desirability of (a) raising, lowering, or stabilizing prices (premiums or commissions); (b) doing business or refusing to do business with particular, or classes of, insurers, reinsurers, agents, brokers, or insureds, or in particular locales; or (c) potential actions that would affect the availability of products or service either generally or in specific markets or locales.

**Discussion Topics**

At the meeting, the following topics were discussed.

**1. Chronic Opioid Claims Analysis**

Staff provided the Working Group with a preliminary draft of the opioid analysis that looked at long-term chronic opioid use claims and compared claims that weaned to claims that did not wean. The Working Group discussed the analysis and suggested extending the maturity from 24 to 27 months, looking at claims with surgeries within 30 days of the accident, detailing the opioid drugs prescribed and studying differences in the diagnosis and nature of injury codes for the weaned and not weaned groups. Staff agreed to provide a draft of the analysis for the Working Group to review.

**2. Aggregate Medical Payment Trends – 2016 Update**

Staff reminded the Working Group that the latest Aggregate Medical Payment Trends report is on the WCIRB external website. Staff presented an update of the WCIRB's medical severity trends by component based on medical transaction data collected by the WCIRB. This analysis included medical payments through December 31, 2016. The Working Group was advised that payments per claim for medical services increased 1% in the first half of 2016 then decreased 2% in the second half of 2016. Staff shared with the Working Group that on a cumulative basis, medical costs per claim have declined 12% from the second half of 2012 through the second half of 2016, which was largely attributable to the impact of Senate Bill No. 863 (SB 863).

## Meeting Summary

Date: October 3, 2017

Staff noted the largest shifts in the shares of medical paid by service type was the pharmacy cost share that decreased from 15% to 8% and the medical legal cost share that increased from 9% to 14% from the second half of 2012 to service year 2016. The Working Group was advised that pharmaceutical payments per claim declined significantly in 2016 continuing the sharp downward trend that began in 2013. It was noted that the cumulative decrease in pharmaceutical costs from the second half of 2012 through service year 2016 was 63%. Staff noted there were a number of factors influencing this trend including the April 1, 2016 California Medi-Cal fee methodology change that incorporated the average Federal Upper Limit. Other factors identified included the independent medical review process, reduced physician prescribing, decreased opioid prescribing, fewer spinal implant surgeries and potential savings related to fraud indictments.

### **3. Insurer Medical Benchmark Report Enhancement – Medical Trend by Industry Grouping**

Staff presented a sample benchmark report to the Working Group showing medical trend data by industry and noted this report will be part of future benchmark reports, likely beginning with the third quarter 2017 report.

### **4. Assembly Bill No. 1142 (New Pharmacy Formulary status)**

Staff provided the Working Group with an overview of the current status and timeline for the drug formulary being developed pursuant to Assembly Bill No. 1124 (AB 1124). This included a discussion of the structure of the draft formulary that was proposed by the Department of Industrial Relations (DIR) as well as its ancillary rules. Staff advised that the proposed formulary will apply to drugs dispensed for outpatient use on or after January 1, 2018 regardless of the date of injury. Staff has also advised that the physician drug dispensing rule that requires prospective review for all physician dispensed drugs does not apply to “special fill” and “perioperative fills” in the latest proposed regulations.

Staff noted the economic impact figures released by the DIR had not been updated with the latest changes and briefly reviewed some of the assumptions used to calculate the DIR’s expected decrease in California workers’ compensation prescription drug spending. The Working Group noted that while additional fields had been added to further define the drug formulary, it was unlikely further updates to the drug table would be released before the formulary goes into effect. With the lack of price controls, the ultimate cost impact would depend on how the presence of the formulary will impact how drugs are prescribed in the California system. Staff noted that evaluation of the cost impact of the new formulary would be completed after the final regulations were adopted.

### **5. RBRVS Valuation**

Staff shared a draft of the impact of RBRVS on the physician services for services years 2013 through 2016. Subsequent to the meeting an update on the Special Services was identified.

### **6. Impact of the Affordable Care Act (ACA) on Workers’ Compensation**

Staff informed the Working Group that staff was studying the impact of the Affordable Care Act on workers’ compensation was underway and shared the key study questions and received input from the Working Group.

### **7. Potential 2018 WCIRB Medical Analytics Research Topics**

The Working Group members discussed potential WCIRB Medical Analytics research topics for 2018. A Working Group member suggested looking at Physical Medicine in greater detail than the 30 day Benchmark report, specifically Physical Therapy, Chiropractic Services and Acupuncture.



## **Meeting Summary**

Date: October 3, 2017

Several Working Group members expressed interest in a benchmark report breaking out data by geography. As a follow up to the opioid analysis, one member suggested looking at other non-drug modalities such as psychology and social treatments. Suggested areas of emerging interest included Telemedicine and Marijuana/Marinol. A member suggested studying the possible impacts on the WC system of higher utilization of medicines for co-morbidities such as hypertension, obesity, diabetes or upset stomach. Staff reminded the Working Group that the Formulary would also be analyzed in 2018.

The Working Group was informed that the next meeting would be scheduled for early 2018 in February or March.

## **Item AC02-03-03**

### **Experience of Large Deductible Policies**

Beginning with the year 2000 evaluation, the WCIRB has issued annual data calls for calendar year premium and pure premium data and December 31 evaluations of accident year loss, allocated loss adjustment expense, and claim count experience for large deductible policies.<sup>1</sup> Annually, the Committee reviews the summarized large deductible experience. In these annual reviews, the Committee generally found (a) the percentage of business written on a large deductible basis had been relatively stable, (b) claim reporting and development patterns for experience written on a large deductible basis were generally similar to those of non-large deductible policies, and (c) the impact of excluding the large deductible experience from the rate level calculation has generally been relatively modest. As a result, the Committee has generally agreed that no adjustment to statewide experience to address large deductibles is necessary. The Committee also agreed that annual reviews of updated large deductible experience should continue and the results monitored and presented to the Committee.

Included as Exhibits 1 through 7 is the summary of December 31, 2016 large deductible experience. For comparison purposes, Exhibits 1 through 7 also include analogous information summarizing the non-large deductible experience of insurers writing a large volume of large deductible experience, the experience of all non-large deductible policies, and the total statewide experience.

---

<sup>1</sup> A large deductible policy is defined as having a deductible amount per claim or accident of at least \$100,000.

**Distribution of Calendar Year Premium and Losses**

Calendar Year	Written Premium at Insurer Rate Level				Earned Premium at Insurer Rate Level			
	LD Insurers		Other		LD Insurers		Other	
	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>
2006	36.3%	23.7%	40.0%	100.0%	37.3%	24.4%	38.3%	100.0%
2007	36.2%	26.5%	37.3%	100.0%	36.3%	26.7%	37.0%	100.0%
2008	33.1%	29.2%	37.7%	100.0%	34.7%	28.4%	36.9%	100.0%
2009	29.8%	34.1%	36.1%	100.0%	32.0%	32.8%	35.2%	100.0%
2010	33.2%	32.4%	34.5%	100.0%	33.7%	32.0%	34.3%	100.0%
2011	33.6%	35.1%	31.3%	100.0%	33.4%	35.5%	31.1%	100.0%
2012	35.1%	33.7%	31.2%	100.0%	35.0%	34.5%	30.5%	100.0%
2013	37.2%	28.8%	34.0%	100.0%	36.8%	30.0%	33.2%	100.0%
2014	36.9%	26.7%	36.4%	100.0%	36.3%	26.6%	37.1%	100.0%
2015	34.6%	27.3%	38.1%	100.0%	34.3%	27.6%	38.1%	100.0%
2016	32.8%	32.6%	34.5%	100.0%	33.9%	32.6%	33.5%	100.0%

Calendar Year	Written Premium at Pure Premium Rate Level				Earned Premium at Pure Premium Rate Level			
	LD Insurers		Other		LD Insurers		Other	
	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>
2006	36.7%	25.2%	38.2%	100.0%	37.1%	26.6%	36.4%	100.0%
2007	37.7%	28.2%	34.2%	100.0%	37.2%	28.5%	34.4%	100.0%
2008	34.9%	30.3%	34.8%	100.0%	36.1%	29.1%	34.7%	100.0%
2009	32.5%	34.9%	32.6%	100.0%	35.6%	32.9%	31.5%	100.0%
2010	37.6%	33.2%	29.1%	100.0%	37.8%	33.0%	29.2%	100.0%
2011	37.7%	35.9%	26.4%	100.0%	37.7%	36.3%	26.1%	100.0%
2012	40.7%	32.5%	26.8%	100.0%	40.3%	33.5%	26.2%	100.0%
2013	42.1%	27.5%	30.5%	100.0%	41.7%	28.9%	29.5%	100.0%
2014	41.6%	25.9%	32.5%	100.0%	41.3%	25.5%	33.2%	100.0%
2015	39.2%	26.8%	34.0%	100.0%	39.5%	26.8%	33.7%	100.0%
2016	38.7%	31.4%	29.9%	100.0%	39.5%	31.3%	29.1%	100.0%

Calendar Year	Paid Losses				Incurred Losses			
	LD Insurers		Other		LD Insurers		Other	
	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>
2006	38.9%	17.6%	43.5%	100.0%	37.9%	22.6%	39.5%	100.0%
2007	34.5%	22.5%	43.0%	100.0%	34.6%	24.5%	40.9%	100.0%
2008	33.0%	24.9%	42.1%	100.0%	38.2%	29.2%	32.6%	100.0%
2009	32.8%	27.6%	39.6%	100.0%	25.8%	41.7%	32.5%	100.0%
2010	33.5%	26.2%	40.3%	100.0%	36.1%	32.7%	31.2%	100.0%
2011	32.8%	30.5%	36.7%	100.0%	38.5%	38.7%	22.7%	100.0%
2012	32.6%	31.8%	35.6%	100.0%	35.3%	37.5%	27.2%	100.0%
2013	33.7%	29.8%	36.5%	100.0%	38.1%	32.0%	29.8%	100.0%
2014	35.6%	30.1%	34.3%	100.0%	38.8%	27.7%	33.5%	100.0%
2015	36.3%	29.8%	33.9%	100.0%	41.5%	24.6%	33.9%	100.0%
2016	37.3%	31.4%	31.2%	100.0%	40.6%	29.3%	30.1%	100.0%

Notes: <sup>[1]</sup> Large deductible policies are defined as policies with a deductible amount per claim or accident of at least \$100,000.

Source: Based on WCIRB's quarterly and large deductible data calls.

**Policy Year Ratios of Premiums at Insurer Rate Level to Pure Premium Level**

Policy Year	Written Premium				Earned Premium			
	LD Insurers		Other		LD Insurers		Other	
	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>	<u>Large Ded.<sup>[1]</sup></u>	<u>Non-LD</u>	<u>Non-LD</u>	<u>All</u>
2006	1.452	1.462	1.541	1.486	1.473	1.419	1.539	1.481
2007	1.409	1.449	1.600	1.485	1.412	1.460	1.600	1.490
2008	1.293	1.370	1.537	1.394	1.299	1.360	1.538	1.394
2009	1.246	1.313	1.575	1.363	1.244	1.323	1.580	1.365
2010	1.218	1.351	1.680	1.381	1.218	1.354	1.683	1.382
2011	1.272	1.416	1.735	1.432	1.274	1.421	1.735	1.432
2012	0.961	1.157	1.271	1.103	0.962	1.156	1.272	1.103
2013	1.015	1.212	1.283	1.150	1.016	1.212	1.285	1.151
2014	0.949	1.141	1.254	1.097	0.949	1.143	1.253	1.098
2015	0.995	1.145	1.284	1.128	0.997	1.146	1.291	1.130
2016	1.019	1.174	1.334	1.159	1.009	1.190	1.374	1.170

Notes: <sup>[1]</sup> Large deductible policies are defined as policies with a deductible amount per claim or accident of at least \$100,000.

Source: Based on WCIRB's quarterly and large deductible data calls.

**Calendar/Accident Year Loss Ratios as of December 31, 2016**

**Insurers with Large Deductible Experience <sup>[1]</sup>:**

CY/AY	Large Deductible Experience					Non-Large Deductible Experience				
	Indemnity		Medical <sup>[2]</sup>		Total Incurred <sup>[3]</sup>	Indemnity		Medical <sup>[2]</sup>		Total Incurred <sup>[3]</sup>
	Paid	Incurred	Paid	Incurred		Paid	Incurred	Paid	Incurred	
2006	0.146	0.153	0.207	0.229	0.463	0.140	0.147	0.211	0.231	0.400
2007	0.197	0.209	0.288	0.322	0.630	0.197	0.208	0.299	0.332	0.579
2008	0.250	0.268	0.354	0.405	0.733	0.253	0.271	0.379	0.426	0.752
2009	0.320	0.346	0.440	0.502	0.912	0.268	0.292	0.406	0.463	0.833
2010	0.291	0.317	0.397	0.456	0.839	0.272	0.300	0.420	0.480	0.877
2011	0.255	0.286	0.352	0.415	0.800	0.237	0.268	0.365	0.426	0.800
2012	0.220	0.255	0.284	0.346	0.756	0.188	0.220	0.282	0.342	0.785
2013	0.165	0.199	0.203	0.262	0.675	0.145	0.178	0.203	0.261	0.618
2014	0.131	0.176	0.155	0.219	0.684	0.106	0.148	0.148	0.211	0.574
2015	0.085	0.138	0.110	0.184	0.693	0.063	0.117	0.099	0.177	0.570
2016	0.025	0.060	0.044	0.111	0.650	0.020	0.062	0.038	0.115	0.551

**All Insurers with WC Experience:**

CY/AY	All California WC Experience					All Non-Large Deductible Experience				
	Indemnity		Medical <sup>[2]</sup>		Total Incurred <sup>[3]</sup>	Indemnity		Medical <sup>[2]</sup>		Total Incurred <sup>[3]</sup>
	Paid	Incurred	Paid	Incurred		Paid	Incurred	Paid	Incurred	
2006	0.146	0.157	0.207	0.233	0.440	0.146	0.159	0.207	0.236	0.427
2007	0.198	0.213	0.286	0.325	0.607	0.198	0.216	0.285	0.326	0.594
2008	0.246	0.268	0.350	0.401	0.738	0.244	0.268	0.348	0.398	0.740
2009	0.280	0.307	0.398	0.459	0.850	0.260	0.288	0.377	0.438	0.821
2010	0.263	0.291	0.379	0.437	0.823	0.249	0.277	0.369	0.427	0.814
2011	0.232	0.264	0.338	0.402	0.777	0.221	0.253	0.331	0.396	0.765
2012	0.194	0.228	0.271	0.332	0.743	0.181	0.213	0.263	0.325	0.735
2013	0.151	0.186	0.199	0.259	0.638	0.143	0.178	0.197	0.257	0.616
2014	0.115	0.158	0.146	0.210	0.619	0.106	0.148	0.141	0.206	0.583
2015	0.071	0.126	0.098	0.177	0.615	0.064	0.119	0.092	0.173	0.575
2016	0.022	0.063	0.039	0.112	0.577	0.020	0.064	0.037	0.113	0.540

Notes: <sup>[1]</sup> Large deductible policies are defined as policies with a deductible amount per claim or accident of at least \$100,000.

<sup>[2]</sup> Including M CCP.

<sup>[3]</sup> Including IBNR.

Source: Based on WCIRB's quarterly and large deductible data calls.

**Incurred Indemnity Development**

**Large Deductible (LD) Experience**

	Evaluated as of (months):												
AY	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
2001	2.452	1.369	1.137	1.052	1.031	1.026	1.015	1.008	1.006	1.004	1.006	1.004	1.004
2002	2.431	1.328	1.093	1.044	1.041	1.016	1.008	1.010	1.006	1.007	1.005	1.005	1.003
2003	2.126	1.247	1.090	1.064	1.026	1.018	1.016	1.009	1.010	1.009	1.006	1.008	1.005
2004	1.744	1.212	1.101	1.047	1.035	1.024	1.023	1.013	1.014	1.009	1.010	1.006	
2005	1.862	1.265	1.110	1.062	1.050	1.032	1.025	1.016	1.014	1.011	1.008		
2006	2.066	1.304	1.123	1.085	1.053	1.034	1.024	1.017	1.014	1.011			
2007	2.027	1.318	1.148	1.078	1.052	1.042	1.032	1.015	1.014				
2008	2.075	1.349	1.158	1.079	1.059	1.037	1.026	1.017					
2009	2.192	1.352	1.158	1.093	1.057	1.033	1.023						
2010	2.234	1.349	1.159	1.079	1.057	1.028							
2011	2.159	1.365	1.151	1.077	1.040								
2012	2.307	1.329	1.145	1.073									
2013	2.161	1.321	1.145										
2014	2.282	1.349											
2015	2.249												

**Non-Large Deductible Experience from Insurers Writing LD**

	Evaluated as of (months):												
AY	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
2001	1.849	1.291	1.073	1.026	1.021	1.021	1.008	1.006	1.003	1.002	1.005	1.005	1.000
2002	1.914	1.207	1.050	1.022	1.033	1.011	1.010	1.010	1.005	1.008	1.003	1.000	1.002
2003	1.532	1.122	1.039	1.041	1.022	1.017	1.013	1.013	1.017	1.008	1.009	1.004	1.001
2004	1.254	1.074	1.061	1.033	1.032	1.020	1.017	1.011	1.015	1.009	1.006	1.005	
2005	1.318	1.199	1.084	1.065	1.045	1.028	1.020	1.021	1.017	1.009	1.004		
2006	1.725	1.218	1.105	1.063	1.046	1.038	1.026	1.017	1.007	1.005			
2007	1.752	1.270	1.107	1.054	1.049	1.036	1.022	1.012	1.005				
2008	1.889	1.268	1.117	1.071	1.041	1.031	1.018	1.008					
2009	1.893	1.269	1.125	1.074	1.049	1.027	1.015						
2010	1.917	1.302	1.123	1.067	1.044	1.028							
2011	1.963	1.249	1.132	1.063	1.039								
2012	1.941	1.266	1.105	1.060									
2013	1.861	1.232	1.090										
2014	1.855	1.234											
2015	1.895												

**All California WC Experience**

	Evaluated as of (months):												
AY	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
2001	1.873	1.325	1.106	1.035	1.023	1.021	1.014	1.009	1.006	1.007	1.006	1.005	1.003
2002	1.952	1.263	1.069	1.033	1.033	1.018	1.011	1.010	1.010	1.007	1.005	1.003	1.002
2003	1.782	1.187	1.069	1.056	1.033	1.021	1.018	1.015	1.015	1.009	1.006	1.004	1.003
2004	1.448	1.158	1.083	1.042	1.041	1.026	1.028	1.018	1.014	1.007	1.007	1.003	
2005	1.503	1.218	1.098	1.068	1.053	1.040	1.028	1.016	1.012	1.006	1.005		
2006	1.690	1.247	1.111	1.080	1.053	1.035	1.023	1.015	1.009	1.007			
2007	1.784	1.273	1.120	1.070	1.049	1.037	1.022	1.012	1.011				
2008	1.858	1.302	1.136	1.074	1.045	1.030	1.019	1.012					
2009	1.983	1.293	1.142	1.076	1.048	1.024	1.019						
2010	1.994	1.315	1.131	1.069	1.045	1.026							
2011	1.997	1.277	1.133	1.061	1.037								
2012	1.992	1.279	1.113	1.063									
2013	1.931	1.259	1.111										
2014	1.961	1.278											
2015	1.968												

**All Non-Large Deductible Experience**

	Evaluated as of (months):												
AY	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
2001	1.800	1.311	1.097	1.029	1.020	1.019	1.013	1.010	1.007	1.009	1.006	1.006	1.003
2002	1.818	1.245	1.061	1.029	1.030	1.018	1.013	1.010	1.012	1.007	1.005	1.002	1.002
2003	1.697	1.164	1.060	1.052	1.036	1.023	1.019	1.018	1.018	1.008	1.007	1.003	1.002
2004	1.350	1.135	1.076	1.039	1.043	1.028	1.030	1.020	1.015	1.006	1.005	1.002	
2005	1.376	1.196	1.090	1.070	1.055	1.045	1.030	1.016	1.012	1.003	1.003		
2006	1.577	1.217	1.104	1.077	1.052	1.036	1.022	1.014	1.007	1.005			
2007	1.687	1.252	1.107	1.065	1.048	1.034	1.016	1.010	1.010				
2008	1.777	1.280	1.126	1.072	1.037	1.026	1.015	1.009					
2009	1.896	1.264	1.134	1.068	1.043	1.018	1.017						
2010	1.889	1.298	1.116	1.063	1.038	1.024							
2011	1.926	1.233	1.123	1.053	1.036								
2012	1.847	1.249	1.094	1.057									
2013	1.815	1.224	1.090										
2014	1.807	1.235											
2015	1.830												

Incurred Medical Development \*

Large Deductible (LD) Experience

	Evaluated as of (months):												
AY	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
2001	2.111	1.302	1.129	1.067	1.047	1.056	1.043	1.026	1.030	1.019	1.013	1.011	1.014
2002	1.992	1.221	1.066	1.050	1.060	1.043	1.032	1.028	1.023	1.020	1.016	1.015	0.997
2003	1.726	1.128	1.075	1.076	1.051	1.035	1.035	1.029	1.023	1.015	1.012	1.012	1.002
2004	1.528	1.180	1.112	1.075	1.057	1.049	1.039	1.028	1.029	1.017	1.012	1.007	
2005	1.558	1.180	1.094	1.077	1.065	1.049	1.035	1.031	1.019	1.019	1.009		
2006	1.618	1.200	1.124	1.086	1.054	1.044	1.036	1.027	1.018	1.005			
2007	1.579	1.224	1.131	1.078	1.069	1.067	1.036	1.023	1.008				
2008	1.631	1.224	1.131	1.091	1.075	1.048	1.034	1.016					
2009	1.646	1.237	1.130	1.104	1.072	1.041	1.022						
2010	1.711	1.235	1.143	1.078	1.056	1.032							
2011	1.688	1.269	1.122	1.074	1.042								
2012	1.712	1.206	1.111	1.060									
2013	1.607	1.185	1.104										
2014	1.625	1.178											
2015	1.583												

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):												
AY	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
2001	1.663	1.254	1.075	1.039	1.044	1.041	1.029	1.023	1.018	1.013	1.012	1.015	1.013
2002	1.746	1.151	1.053	1.025	1.060	1.017	1.026	1.022	1.025	1.011	1.013	1.008	1.000
2003	1.318	1.090	1.033	1.060	1.043	1.038	1.030	1.023	1.021	1.016	1.015	1.001	0.999
2004	1.241	1.061	1.091	1.071	1.058	1.045	1.037	1.023	1.021	1.014	1.007	1.002	
2005	1.235	1.156	1.066	1.073	1.067	1.044	1.033	1.030	1.011	1.008	1.004		
2006	1.404	1.183	1.107	1.068	1.061	1.043	1.040	1.020	1.014	1.000			
2007	1.483	1.216	1.107	1.063	1.063	1.044	1.035	1.017	1.004				
2008	1.537	1.180	1.105	1.097	1.061	1.042	1.028	1.010					
2009	1.528	1.205	1.143	1.088	1.063	1.031	1.014						
2010	1.531	1.243	1.136	1.084	1.048	1.022							
2011	1.585	1.213	1.120	1.075	1.035								
2012	1.546	1.181	1.094	1.059									
2013	1.497	1.145	1.087										
2014	1.439	1.155											
2015	1.494												

All California WC Experience

	Evaluated as of (months):												
AY	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
2001	1.658	1.274	1.107	1.047	1.041	1.045	1.040	1.034	1.035	1.022	1.017	1.015	1.013
2002	1.632	1.203	1.059	1.039	1.056	1.040	1.036	1.029	1.028	1.022	1.014	1.010	0.999
2003	1.567	1.119	1.057	1.059	1.060	1.042	1.042	1.037	1.029	1.018	1.011	1.003	0.998
2004	1.351	1.135	1.113	1.081	1.060	1.061	1.043	1.032	1.026	1.012	1.006	1.001	
2005	1.389	1.172	1.087	1.074	1.084	1.055	1.045	1.032	1.020	1.006	1.006		
2006	1.460	1.196	1.103	1.081	1.066	1.048	1.040	1.022	1.012	1.000			
2007	1.518	1.204	1.124	1.081	1.070	1.050	1.032	1.018	1.004				
2008	1.527	1.212	1.129	1.092	1.061	1.041	1.026	1.010					
2009	1.604	1.227	1.140	1.087	1.061	1.030	1.016						
2010	1.620	1.245	1.134	1.077	1.045	1.025							
2011	1.667	1.222	1.125	1.069	1.033								
2012	1.592	1.188	1.093	1.056									
2013	1.559	1.150	1.085										
2014	1.524	1.159											
2015	1.511												

All Non-Large Deductible Experience

	Evaluated as of (months):												
AY	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
2001	1.617	1.269	1.101	1.040	1.040	1.041	1.038	1.038	1.038	1.023	1.019	1.016	1.012
2002	1.586	1.198	1.057	1.035	1.054	1.038	1.038	1.029	1.030	1.022	1.013	1.008	0.999
2003	1.519	1.116	1.050	1.051	1.064	1.045	1.045	1.041	1.032	1.019	1.011	0.999	0.996
2004	1.285	1.115	1.110	1.085	1.060	1.068	1.045	1.034	1.024	1.010	1.003	0.998	
2005	1.316	1.163	1.083	1.072	1.095	1.059	1.051	1.033	1.021	0.998	1.005		
2006	1.402	1.194	1.092	1.079	1.072	1.050	1.042	1.020	1.009	0.997			
2007	1.488	1.194	1.119	1.083	1.070	1.042	1.030	1.015	1.002				
2008	1.482	1.206	1.128	1.093	1.054	1.037	1.021	1.007					
2009	1.584	1.222	1.144	1.078	1.055	1.024	1.012						
2010	1.575	1.250	1.130	1.077	1.039	1.021							
2011	1.657	1.198	1.126	1.066	1.027								
2012	1.534	1.178	1.083	1.053									
2013	1.534	1.132	1.075										
2014	1.473	1.148											
2015	1.476												

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

**Paid Indemnity Development**

**Large Deductible (LD) Experience**

	Evaluated as of (months):												
AY	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
2001	3.712	1.867	1.353	1.172	1.087	1.057	1.035	1.025	1.016	1.012	1.010	1.011	1.008
2002	3.871	1.839	1.344	1.144	1.087	1.043	1.032	1.018	1.017	1.012	1.012	1.010	1.007
2003	3.613	1.758	1.276	1.144	1.071	1.038	1.027	1.022	1.015	1.016	1.012	1.012	1.009
2004	3.080	1.574	1.269	1.122	1.070	1.047	1.034	1.029	1.025	1.019	1.013	1.011	
2005	2.906	1.562	1.237	1.123	1.082	1.055	1.045	1.035	1.023	1.022	1.015		
2006	3.135	1.559	1.238	1.143	1.087	1.064	1.045	1.032	1.027	1.022			
2007	3.001	1.554	1.262	1.144	1.095	1.069	1.049	1.036	1.032				
2008	3.057	1.614	1.276	1.151	1.102	1.070	1.047	1.031					
2009	3.244	1.615	1.284	1.165	1.101	1.066	1.047						
2010	3.236	1.627	1.285	1.157	1.100	1.065							
2011	3.306	1.619	1.285	1.155	1.087								
2012	3.265	1.616	1.269	1.142									
2013	3.272	1.610	1.270										
2014	3.372	1.658											
2015	3.407												

**Non-Large Deductible Experience from Insurers Writing LD**

	Evaluated as of (months):												
AY	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
2001	3.838	1.837	1.335	1.145	1.076	1.051	1.031	1.023	1.015	1.013	1.010	1.008	1.005
2002	3.691	1.886	1.293	1.131	1.070	1.048	1.033	1.018	1.015	1.012	1.013	1.008	1.006
2003	3.358	1.767	1.242	1.116	1.074	1.046	1.026	1.024	1.024	1.020	1.016	1.011	1.010
2004	3.050	1.531	1.220	1.117	1.077	1.041	1.034	1.033	1.023	1.022	1.011	1.015	
2005	2.870	1.516	1.261	1.128	1.071	1.061	1.044	1.039	1.028	1.022	1.014		
2006	2.864	1.580	1.246	1.142	1.092	1.064	1.048	1.035	1.029	1.019			
2007	2.995	1.615	1.246	1.132	1.088	1.065	1.042	1.033	1.027				
2008	3.040	1.590	1.269	1.145	1.088	1.058	1.043	1.026					
2009	3.014	1.628	1.268	1.153	1.091	1.061	1.044						
2010	3.133	1.635	1.285	1.146	1.091	1.063							
2011	3.160	1.610	1.267	1.148	1.087								
2012	3.030	1.600	1.265	1.133									
2013	3.095	1.604	1.257										
2014	3.181	1.631											
2015	3.270												

**All California WC Experience**

	Evaluated as of (months):												
AY	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
2001	3.545	1.796	1.322	1.145	1.077	1.051	1.034	1.024	1.017	1.014	1.012	1.011	1.008
2002	3.590	1.782	1.290	1.127	1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008
2003	3.370	1.696	1.249	1.128	1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009
2004	2.914	1.522	1.236	1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	
2005	2.734	1.512	1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015		
2006	2.866	1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018			
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027				
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027					
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043						
2010	3.157	1.628	1.281	1.147	1.091	1.060							
2011	3.208	1.613	1.266	1.144	1.087								
2012	3.137	1.597	1.263	1.137									
2013	3.169	1.607	1.260										
2014	3.231	1.634											
2015	3.275												

**All Non-Large Deductible Experience**

	Evaluated as of (months):												
AY	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
2001	3.572	1.772	1.313	1.135	1.074	1.048	1.033	1.023	1.017	1.015	1.013	1.011	1.009
2002	3.501	1.766	1.271	1.121	1.071	1.048	1.031	1.020	1.018	1.016	1.014	1.007	1.008
2003	3.305	1.670	1.237	1.121	1.073	1.045	1.032	1.028	1.027	1.023	1.016	1.012	1.009
2004	2.844	1.498	1.223	1.113	1.075	1.050	1.045	1.039	1.032	1.020	1.016	1.011	
2005	2.653	1.492	1.233	1.119	1.077	1.064	1.048	1.047	1.032	1.019	1.015		
2006	2.765	1.528	1.223	1.131	1.092	1.070	1.052	1.037	1.026	1.016			
2007	2.856	1.544	1.238	1.138	1.091	1.064	1.044	1.032	1.025				
2008	2.869	1.558	1.269	1.150	1.087	1.055	1.038	1.026					
2009	2.981	1.616	1.278	1.151	1.087	1.058	1.041						
2010	3.113	1.629	1.279	1.141	1.086	1.057							
2011	3.155	1.609	1.256	1.138	1.087								
2012	3.061	1.584	1.259	1.133									
2013	3.103	1.606	1.254										
2014	3.143	1.618											
2015	3.190												



**Paid Medical Development \***

**Large Deductible (LD) Experience**

	Evaluated as of (months):												
AY	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
2001	3.220	1.478	1.203	1.119	1.077	1.059	1.050	1.037	1.031	1.031	1.023	1.023	1.023
2002	3.058	1.372	1.165	1.107	1.076	1.056	1.044	1.032	1.031	1.025	1.025	1.020	1.016
2003	2.665	1.304	1.172	1.112	1.075	1.050	1.041	1.034	1.029	1.030	1.021	1.019	1.018
2004	2.417	1.378	1.188	1.122	1.081	1.064	1.047	1.040	1.037	1.027	1.024	1.019	
2005	2.372	1.335	1.203	1.129	1.093	1.066	1.053	1.051	1.031	1.031	1.021		
2006	2.456	1.380	1.213	1.136	1.087	1.067	1.056	1.039	1.035	1.026			
2007	2.374	1.382	1.218	1.131	1.098	1.082	1.053	1.041	1.033				
2008	2.335	1.411	1.220	1.144	1.110	1.076	1.053	1.038					
2009	2.477	1.427	1.244	1.163	1.106	1.073	1.051						
2010	2.508	1.443	1.260	1.153	1.100	1.070							
2011	2.576	1.465	1.245	1.149	1.094								
2012	2.626	1.458	1.245	1.145									
2013	2.567	1.455	1.234										
2014	2.541	1.447											
2015	2.573												

**Non-Large Deductible Experience from Insurers Writing LD**

	Evaluated as of (months):												
AY	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
2001	2.754	1.482	1.191	1.104	1.070	1.055	1.047	1.039	1.027	1.028	1.021	1.020	1.015
2002	2.916	1.406	1.178	1.098	1.074	1.055	1.047	1.025	1.025	1.022	1.021	1.015	1.013
2003	2.449	1.356	1.153	1.120	1.078	1.060	1.042	1.035	1.032	1.030	1.023	1.015	1.015
2004	2.367	1.260	1.194	1.130	1.090	1.064	1.053	1.042	1.035	1.024	1.024	1.021	
2005	2.072	1.346	1.212	1.140	1.085	1.072	1.056	1.047	1.031	1.028	1.018		
2006	2.255	1.397	1.219	1.139	1.098	1.068	1.058	1.035	1.035	1.027			
2007	2.383	1.430	1.230	1.136	1.097	1.072	1.051	1.042	1.029				
2008	2.312	1.415	1.240	1.148	1.101	1.070	1.054	1.033					
2009	2.308	1.444	1.248	1.162	1.107	1.067	1.046						
2010	2.420	1.470	1.273	1.152	1.101	1.067							
2011	2.517	1.470	1.242	1.148	1.095								
2012	2.499	1.470	1.253	1.142									
2013	2.419	1.470	1.234										
2014	2.498	1.464											
2015	2.564												

**All California WC Experience**

	Evaluated as of (months):												
AY	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
2001	2.842	1.472	1.212	1.109	1.076	1.057	1.045	1.038	1.034	1.030	1.022	1.022	1.022
2002	2.887	1.416	1.168	1.112	1.072	1.054	1.046	1.034	1.032	1.024	1.023	1.018	1.016
2003	2.592	1.318	1.170	1.112	1.074	1.057	1.048	1.041	1.030	1.030	1.026	1.019	1.016
2004	2.298	1.345	1.189	1.123	1.092	1.070	1.055	1.040	1.036	1.034	1.024	1.018	
2005	2.251	1.345	1.209	1.138	1.095	1.073	1.054	1.049	1.038	1.031	1.021		
2006	2.340	1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025			
2007	2.416	1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031				
2008	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035					
2009	2.408	1.447	1.251	1.160	1.104	1.067	1.046						
2010	2.479	1.468	1.265	1.152	1.096	1.066							
2011	2.580	1.470	1.248	1.145	1.095								
2012	2.561	1.468	1.248	1.143									
2013	2.492	1.465	1.238										
2014	2.520	1.462											
2015	2.533												

**All Non-Large Deductible Experience**

	Evaluated as of (months):												
AY	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
2001	2.878	1.465	1.216	1.106	1.076	1.056	1.045	1.039	1.036	1.029	1.020	1.021	1.022
2002	2.845	1.432	1.169	1.115	1.070	1.055	1.047	1.035	1.032	1.022	1.020	1.018	1.017
2003	2.567	1.324	1.169	1.112	1.077	1.061	1.051	1.044	1.030	1.030	1.028	1.019	1.016
2004	2.241	1.326	1.188	1.129	1.098	1.074	1.060	1.040	1.036	1.037	1.024	1.017	
2005	2.180	1.354	1.218	1.142	1.097	1.078	1.055	1.047	1.043	1.031	1.021		
2006	2.270	1.420	1.224	1.142	1.106	1.069	1.056	1.044	1.033	1.024			
2007	2.461	1.432	1.237	1.148	1.096	1.070	1.059	1.042	1.030				
2008	2.320	1.427	1.252	1.150	1.099	1.070	1.050	1.034					
2009	2.371	1.458	1.256	1.159	1.103	1.064	1.043						
2010	2.463	1.485	1.268	1.151	1.094	1.064							
2011	2.583	1.473	1.249	1.143	1.095								
2012	2.520	1.474	1.249	1.141									
2013	2.448	1.471	1.240										
2014	2.507	1.470											
2015	2.509												

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

**Paid ALAE (Excluding M CCP) Development \***

**Large Deductible (LD) Experience**

	Evaluated as of (months):												
AY	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
2001						1.098	1.044	1.042	1.032	1.028	1.022	1.023	1.021
2002					1.127	1.061	1.048	1.035	1.029	1.023	1.022	1.019	1.015
2003				1.191	1.097	1.058	1.046	1.036	1.031	1.026	1.022	1.019	1.015
2004			1.351	1.165	1.100	1.071	1.048	1.038	1.033	1.026	1.022	1.016	
2005		1.785	1.347	1.178	1.118	1.080	1.059	1.048	1.036	1.029	1.023		
2006	4.628	1.744	1.334	1.189	1.116	1.083	1.060	1.047	1.036	1.026			
2007	4.057	1.734	1.350	1.191	1.128	1.091	1.063	1.049	1.035				
2008	4.178	1.759	1.363	1.198	1.135	1.090	1.066	1.045					
2009	4.586	1.793	1.358	1.210	1.132	1.090	1.060						
2010	4.680	1.744	1.348	1.199	1.128	1.080							
2011	4.415	1.749	1.345	1.195	1.112								
2012	4.584	1.754	1.349	1.183									
2013	4.568	1.720	1.304										
2014	4.397	1.666											
2015	4.333												

**Non-Large Deductible Experience from Insurers Writing LD**

	Evaluated as of (months):												
AY	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
2001						1.070	1.043	1.037	1.026	1.020	1.019	1.017	1.015
2002					1.098	1.063	1.050	1.029	1.025	1.020	1.019	1.016	1.013
2003				1.161	1.085	1.071	1.041	1.032	1.027	1.022	1.019	1.016	1.012
2004			1.305	1.150	1.103	1.062	1.048	1.033	1.030	1.024	1.017	1.015	
2005		1.625	1.289	1.185	1.106	1.076	1.051	1.046	1.035	1.028	1.022		
2006	3.124	1.659	1.330	1.179	1.123	1.076	1.062	1.045	1.034	1.026			
2007	3.753	1.765	1.341	1.194	1.116	1.087	1.056	1.041	1.028				
2008	4.186	1.755	1.348	1.188	1.119	1.081	1.057	1.039					
2009	4.072	1.753	1.338	1.192	1.121	1.082	1.052						
2010	4.100	1.762	1.348	1.190	1.118	1.076							
2011	4.219	1.722	1.333	1.193	1.112								
2012	4.196	1.725	1.341	1.179									
2013	4.345	1.719	1.312										
2014	4.243	1.645											
2015	3.840												

**All California WC Experience**

	Evaluated as of (months):												
AY	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
2001						1.084	1.044	1.039	1.028	1.024	1.020	1.017	1.017
2002					1.109	1.064	1.047	1.032	1.026	1.021	1.018	1.017	1.014
2003				1.171	1.101	1.063	1.045	1.034	1.029	1.023	1.020	1.017	1.013
2004			1.339	1.161	1.101	1.069	1.048	1.036	1.030	1.025	1.020	1.016	
2005		1.740	1.330	1.181	1.113	1.079	1.056	1.044	1.035	1.028	1.022		
2006	3.976	1.727	1.330	1.186	1.120	1.081	1.060	1.046	1.035	1.025			
2007	3.956	1.716	1.340	1.194	1.126	1.088	1.060	1.045	1.031				
2008	4.015	1.758	1.367	1.198	1.126	1.085	1.060	1.040					
2009	4.322	1.775	1.354	1.199	1.126	1.083	1.054						
2010	4.300	1.737	1.342	1.190	1.120	1.075							
2011	4.233	1.727	1.335	1.189	1.111								
2012	4.319	1.729	1.336	1.178									
2013	4.385	1.698	1.306										
2014	4.246	1.649											
2015	4.059												

**All Non-Large Deductible Experience**

	Evaluated as of (months):												
AY	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
2001						1.074	1.044	1.037	1.026	1.020	1.019	1.016	1.014
2002					1.095	1.068	1.045	1.030	1.024	1.019	1.017	1.014	1.012
2003				1.152	1.106	1.068	1.045	1.031	1.027	1.022	1.018	1.015	1.011
2004			1.325	1.155	1.102	1.066	1.048	1.032	1.030	1.023	1.018	1.015	
2005		1.704	1.309	1.183	1.108	1.077	1.052	1.045	1.034	1.027	1.021		
2006	3.574	1.710	1.326	1.183	1.124	1.079	1.063	1.044	1.033	1.025			
2007	3.865	1.701	1.333	1.197	1.124	1.089	1.057	1.041	1.028				
2008	3.902	1.761	1.370	1.199	1.123	1.081	1.055	1.036					
2009	4.159	1.761	1.350	1.194	1.121	1.078	1.049						
2010	4.055	1.731	1.339	1.184	1.114	1.072							
2011	4.099	1.712	1.327	1.185	1.109								
2012	4.134	1.710	1.326	1.174									
2013	4.237	1.679	1.308										
2014	4.122	1.634											
2015	3.853												

\* Based on private insurer data only.

**Paid M CCP Development**

**Large Deductible (LD) Experience**

<u>AY</u>	<u>Evaluated as of (months):</u>												
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>
2012	2.517	1.346	1.187	1.084									
2013	2.410	1.377	1.156										
2014	2.617	1.335											
2015	2.385												

**Non-Large Deductible Experience from Insurers Writing LD**

<u>AY</u>	<u>Evaluated as of (months):</u>												
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>
2012	2.463	1.322	1.176	1.098									
2013	2.335	1.350	1.154										
2014	2.416	1.354											
2015	2.456												

**All California WC Experience**

<u>AY</u>	<u>Evaluated as of (months):</u>												
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>
2012	2.494	1.342	1.186	1.089									
2013	2.413	1.378	1.152										
2014	2.553	1.336											
2015	2.400												

**All Non-Large Deductible Experience**

<u>AY</u>	<u>Evaluated as of (months):</u>												
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>
2012	2.463	1.339	1.185	1.092									
2013	2.415	1.379	1.148										
2014	2.502	1.337											
2015	2.415												

Average Incurred Indemnity Per Reported Indemnity Claim

Large Deductible (LD) Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						25,913	26,511	26,888	27,121	27,282	27,366	27,505	27,629	27,721
2002					23,956	24,818	25,237	25,458	25,695	25,840	25,983	26,056	26,165	26,243
2003				21,776	22,971	23,516	23,970	24,343	24,556	24,783	24,989	25,117	25,295	25,420
2004			16,569	17,921	18,649	19,249	19,697	20,109	20,351	20,541	20,721	20,900	21,017	
2005		11,841	14,393	15,806	16,688	17,499	18,001	18,423	18,676	18,910	19,098	19,229		
2006	7,182	11,908	15,067	16,600	17,938	18,779	19,358	19,629	19,928	20,176	20,371			
2007	7,207	12,216	15,610	17,745	18,981	19,840	20,487	21,118	21,396	21,666				
2008	7,699	12,986	16,975	19,284	20,646	21,706	22,481	22,996	23,348					
2009	8,200	13,993	18,069	20,624	22,331	23,504	24,183	24,688						
2010	8,219	13,941	18,128	20,740	22,277	23,420	23,973							
2011	8,728	14,318	18,628	21,120	22,497	23,269								
2012	8,633	14,789	18,867	21,180	22,546									
2013	8,908	14,808	18,654	21,011										
2014	9,062	15,547	19,973											
2015	9,597	16,241												
2016	9,795													

Non-Large Deductible Experience from Insurers Writing LD

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						24,645	25,365	25,665	25,779	25,851	25,884	25,971	26,033	26,024
2002					22,607	23,457	23,573	23,708	23,906	23,991	24,116	24,128	24,067	24,118
2003				20,668	21,680	22,085	22,409	22,787	23,029	23,373	23,521	23,678	23,749	23,757
2004			15,775	16,808	17,320	17,945	18,255	18,505	18,661	18,949	19,005	19,085	19,180	
2005		11,576	13,481	14,579	15,506	16,140	16,434	16,729	17,038	17,332	17,488	17,596		
2006	8,672	12,491	14,794	16,286	17,215	17,923	18,528	18,860	19,121	19,248	19,329			
2007	8,383	13,092	16,250	17,815	18,554	19,393	20,045	20,407	20,626	20,718				
2008	8,911	14,542	18,049	19,832	21,085	21,768	22,278	22,658	22,820					
2009	9,143	14,825	18,241	20,165	21,281	22,053	22,587	22,887						
2010	9,116	14,637	18,346	20,171	21,196	22,028	22,603							
2011	9,146	14,786	17,746	19,681	20,767	21,501								
2012	9,157	14,611	17,649	19,270	20,289									
2013	9,704	14,800	17,623	19,116										
2014	9,641	14,572	17,442											
2015	9,723	15,140												
2016	9,966													

All California WC Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						24,742	25,322	25,651	25,904	26,076	26,262	26,422	26,570	26,647
2002					22,585	23,381	23,829	24,118	24,371	24,627	24,805	24,917	24,975	25,039
2003				21,245	22,486	23,274	23,813	24,259	24,655	25,043	25,285	25,445	25,553	25,631
2004			15,981	17,309	18,038	18,809	19,309	19,856	20,215	20,519	20,653	20,785	20,856	
2005		11,377	13,702	15,013	16,027	16,857	17,502	18,003	18,285	18,515	18,619	18,719		
2006	8,116	12,145	14,933	16,490	17,756	18,654	19,286	19,665	19,944	20,120	20,259			
2007	8,222	13,015	16,305	18,132	19,306	20,204	20,890	21,316	21,554	21,784				
2008	8,657	13,998	17,809	19,992	21,362	22,214	22,816	23,210	23,456					
2009	8,875	14,690	18,395	20,741	22,129	23,071	23,571	23,989						
2010	8,841	14,348	18,235	20,329	21,571	22,461	22,988							
2011	9,165	14,783	18,180	20,292	21,394	22,135								
2012	9,127	14,599	17,983	19,753	20,884									
2013	9,370	14,562	17,758	19,512										
2014	9,358	14,785	18,329											
2015	9,738	15,471												
2016	9,976													

All Non-Large Deductible Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						24,257	24,828	25,137	25,397	25,574	25,802	25,970	26,128	26,199
2002					22,037	22,804	23,261	23,577	23,835	24,136	24,326	24,454	24,492	24,549
2003				20,996	22,255	23,158	23,738	24,219	24,703	25,169	25,429	25,604	25,679	25,734
2004			15,679	16,987	17,716	18,574	19,104	19,721	20,142	20,508	20,616	20,723	20,770	
2005		11,131	13,320	14,570	15,654	16,494	17,220	17,765	18,064	18,290	18,346	18,428		
2006	8,547	12,272	14,860	16,428	17,654	18,584	19,245	19,685	19,952	20,088	20,195			
2007	8,709	13,437	16,681	18,343	19,484	20,404	21,111	21,426	21,641	21,849				
2008	9,096	14,519	18,245	20,366	21,743	22,485	22,995	23,324	23,514					
2009	9,185	15,048	18,567	20,803	22,021	22,839	23,241	23,613						
2010	9,128	14,560	18,293	20,108	21,192	21,944	22,455							
2011	9,360	15,014	17,951	19,866	20,823	21,545								
2012	9,362	14,495	17,492	18,954	19,950									
2013	9,606	14,426	17,248	18,652										
2014	9,507	14,359	17,384											
2015	9,809	15,039												
2016	10,066													

Average Paid Indemnity Per Closed Indemnity Claim

Large Deductible (LD) Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						18,533	20,066	21,378	22,188	22,774	23,230	23,496	23,965	24,365
2002					16,955	18,708	20,110	21,103	21,755	22,212	22,621	23,015	23,348	23,724
2003				14,339	16,531	18,420	19,452	20,230	20,776	21,250	21,786	22,163	22,502	22,928
2004			7,896	10,954	13,204	14,513	15,430	16,070	16,698	17,369	17,805	18,282	18,645	
2005		3,288	6,202	9,453	11,228	12,644	13,612	14,500	15,411	15,977	16,534	16,991		
2006	1,993	3,832	7,422	10,355	12,093	13,495	14,621	15,541	16,288	17,080	17,683			
2007	1,280	3,599	6,967	10,062	12,201	13,876	15,285	16,505	17,348	18,238				
2008	1,462	3,816	7,666	10,719	13,136	15,259	17,011	18,234	19,310					
2009	1,577	4,217	7,898	11,304	14,418	16,800	18,701	20,145						
2010	1,660	4,115	8,074	11,911	15,110	17,313	19,201							
2011	1,778	4,499	8,717	12,751	15,800	17,940								
2012	1,946	4,960	9,611	13,421	16,361									
2013	2,019	5,388	10,034	13,924										
2014	2,217	5,972	11,073											
2015	2,430	6,602												
2016	2,649													

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						18,503	19,828	20,593	21,423	21,973	22,342	22,810	23,076	23,321
2002					15,568	17,227	18,484	19,405	20,000	20,421	20,837	21,311	21,752	22,024
2003				12,237	14,342	16,139	17,285	18,043	18,589	19,044	19,786	20,321	20,861	21,293
2004			7,408	10,218	11,735	13,005	13,977	14,558	15,224	15,827	16,411	16,790	17,176	
2005		3,019	6,178	8,195	10,596	11,473	12,314	13,122	13,879	14,653	15,182	15,633		
2006	1,794	3,762	6,367	9,117	11,357	12,732	13,743	14,884	15,694	16,513	17,219			
2007	1,318	3,383	6,918	9,841	11,892	13,579	15,023	16,217	17,165	18,026				
2008	1,265	3,732	7,480	10,817	13,466	15,633	16,975	18,437	19,308					
2009	1,593	4,020	7,951	11,241	13,914	15,785	17,559	18,806						
2010	1,253	3,878	7,701	11,479	14,374	16,556	18,226							
2011	1,318	4,055	8,190	11,797	14,667	16,633								
2012	1,737	4,908	8,787	12,259	14,790									
2013	2,266	5,345	9,528	12,780										
2014	2,059	5,386	9,703											
2015	2,197	5,822												
2016	2,314													

All California WC Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						17,636	18,933	19,904	20,679	21,266	21,726	22,124	22,667	23,044
2002					15,185	16,892	18,222	19,177	19,813	20,305	20,806	21,464	21,834	22,161
2003				12,789	15,106	16,868	17,977	18,749	19,395	20,015	20,853	21,347	21,796	22,321
2004			6,999	9,867	11,886	13,179	14,067	14,773	15,580	16,489	17,037	17,518	17,957	
2005		2,920	5,668	8,359	10,245	11,404	12,296	13,157	14,240	14,926	15,493	15,994		
2006	1,534	3,345	6,359	9,141	11,038	12,439	13,641	14,914	15,791	16,534	17,214			
2007	1,310	3,403	6,689	9,594	11,735	13,474	15,097	16,286	17,208	18,075				
2008	1,382	3,654	7,317	10,541	13,118	15,503	16,991	18,242	19,224					
2009	1,541	4,012	7,795	11,203	14,255	16,350	18,057	19,392						
2010	1,401	3,968	7,879	11,734	14,572	16,631	18,327							
2011	1,540	4,310	8,497	12,128	14,907	16,874								
2012	1,789	4,967	9,040	12,552	15,121									
2013	2,104	5,317	9,525	12,954										
2014	2,153	5,647	10,168											
2015	2,347	6,177												
2016	2,492													

All Non-Large Deductible Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						17,261	18,456	19,284	20,044	20,631	21,095	21,548	22,123	22,492
2002					14,464	16,148	17,441	18,377	19,009	19,519	20,060	20,829	21,216	21,521
2003				12,021	14,397	16,088	17,237	18,008	18,712	19,406	20,398	20,949	21,451	22,025
2004			6,530	9,278	11,156	12,436	13,312	14,063	14,971	16,013	16,624	17,105	17,586	
2005		2,716	5,365	7,728	9,667	10,676	11,530	12,378	13,567	14,324	14,896	15,423		
2006	1,342	3,105	5,798	8,454	10,427	11,829	13,074	14,554	15,507	16,222	16,946			
2007	1,324	3,302	6,536	9,333	11,475	13,250	14,993	16,164	17,131	17,985				
2008	1,344	3,569	7,128	10,444	13,108	15,634	16,980	18,247	19,178					
2009	1,523	3,905	7,740	11,149	14,167	16,109	17,712	18,988						
2010	1,274	3,892	7,775	11,638	14,283	16,266	17,857							
2011	1,430	4,218	8,386	11,809	14,447	16,323								
2012	1,709	4,971	8,727	12,069	14,430									
2013	2,152	5,279	9,235	12,399										
2014	2,119	5,467	9,655											
2015	2,305	5,943												
2016	2,415													

Average Incurred Indemnity Loss Per Open Indemnity Claim

Large Deductible (LD) Experience

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001						66,400	76,145	83,671	93,084	101,814	105,494	115,134	121,374	126,059	
2002					52,263	61,715	70,857	79,703	87,506	93,510	99,061	103,875	108,896	112,731	
2003				42,362	51,284	58,690	69,103	78,266	83,945	91,015	98,456	103,923	111,640	118,642	
2004			30,379	37,822	45,290	53,043	60,748	67,878	73,649	79,547	86,789	91,788	96,542		
2005		20,600	29,157	35,870	43,825	51,533	57,759	63,786	69,026	75,164	80,241	84,050			
2006	8,646	18,571	27,042	34,205	44,596	51,832	59,896	65,810	71,766	75,775	80,644				
2007	9,198	20,455	30,765	40,406	48,488	54,577	62,707	70,590	75,758	80,107					
2008	10,099	21,407	32,680	42,372	50,347	58,736	67,164	75,175	81,520						
2009	10,651	22,452	33,311	43,523	52,631	60,256	66,519	73,582							
2010	10,675	22,363	33,403	43,828	51,855	59,579	64,931								
2011	11,276	22,688	34,318	43,758	51,540	57,397									
2012	11,223	23,835	34,483	43,751	51,376										
2013	11,617	23,569	34,201	43,925											
2014	11,672	24,871	36,799												
2015	12,292	26,016													
2016	12,644														

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						60,696	71,859	81,896	89,536	97,319	103,711	107,562	112,000	115,620
2002					53,214	66,681	70,513	78,001	86,092	95,540	101,021	104,168	103,505	108,596
2003				42,752	55,343	60,293	69,801	80,625	96,372	108,479	116,340	125,661	124,203	130,398
2004			30,045	37,718	44,199	51,620	58,217	68,393	72,588	80,702	85,506	89,934	97,711	
2005		18,819	25,892	34,186	38,674	47,066	53,687	58,169	62,047	68,379	73,733	80,728		
2006	10,685	20,752	30,190	37,606	42,946	50,233	56,799	61,613	68,181	67,704	67,625			
2007	11,704	23,150	33,504	41,799	48,959	55,605	64,484	70,919	76,734	82,040				
2008	11,788	24,490	35,174	44,205	52,185	58,890	67,138	71,504	79,616					
2009	11,840	24,152	34,509	43,064	50,513	58,256	64,195	71,742						
2010	11,777	23,826	34,479	43,008	49,794	56,824	65,423							
2011	11,803	23,785	32,999	41,615	48,268	55,392								
2012	11,752	23,058	32,902	40,426	47,255									
2013	12,212	23,714	32,466	39,682										
2014	12,435	23,749	33,028											
2015	12,678	25,146												
2016	13,133													

All California WC Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						62,303	71,127	79,779	88,248	95,747	104,424	112,781	121,971	127,940
2002					50,597	58,876	65,848	72,841	79,951	89,255	96,393	103,996	109,509	114,691
2003				41,672	50,545	58,622	67,665	76,909	88,187	99,553	112,809	121,239	126,231	133,918
2004			29,973	37,129	43,500	50,992	58,234	68,373	76,154	87,594	95,069	100,466	108,396	
2005		19,572	27,527	34,451	40,898	48,638	57,238	65,434	72,884	79,987	84,793	91,489		
2006	10,141	20,183	29,327	36,671	45,312	53,457	61,182	68,961	75,489	79,686	85,607			
2007	10,765	22,426	32,898	41,691	49,819	57,010	66,928	74,796	80,849	89,141				
2008	11,294	23,346	34,466	44,020	52,219	60,311	69,306	76,684	85,672					
2009	11,478	23,759	34,140	43,581	51,911	60,021	66,286	74,804						
2010	11,471	23,277	33,930	42,861	50,425	57,865	65,104							
2011	11,886	23,813	33,751	42,718	49,821	57,011								
2012	11,793	23,338	33,325	41,189	48,634									
2013	11,977	23,163	32,660	40,915										
2014	11,977	23,759	34,232											
2015	12,531	25,148												
2016	13,001													

All Non-Large Deductible Experience

AY	Evaluated as of (months):														
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001						60,678	69,217	78,335	86,511	93,620	104,029	111,903	122,206	128,683	
2002					49,978	57,860	64,208	70,768	77,726	87,955	95,550	104,039	109,730	115,391	
2003				41,392	50,247	58,597	67,183	76,473	89,635	102,563	118,461	128,218	132,020	140,049	
2004			29,767	36,791	42,727	50,168	57,281	68,571	77,184	91,273	98,933	104,468	114,278		
2005		19,049	26,666	33,725	39,518	47,353	57,004	66,176	74,695	82,315	86,971	95,247			
2006	10,853	21,110	30,670	38,012	45,664	54,250	61,782	70,547	77,421	81,671	88,253				
2007	11,544	23,487	34,037	42,340	50,481	58,242	69,185	77,088	83,729	94,639					
2008	11,829	24,332	35,347	44,837	53,148	61,139	70,413	77,471	87,961						
2009	11,852	24,422	34,573	43,610	51,532	59,895	66,161	75,487							
2010	11,831	23,757	34,209	42,341	49,658	56,910	65,204								
2011	12,156	24,376	33,457	42,174	48,919	56,801									
2012	12,057	23,069	32,672	39,715	47,027										
2013	12,154	22,938	31,779	39,167											
2014	12,128	23,134	32,709												
2015	12,653	24,652													
2016	13,181														

Average Outstanding Indemnity Per Open Indemnity Claim

Large Deductible (LD) Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						20,632	21,731	23,012	23,679	24,581	23,901	25,345	24,967	25,224
2002					17,202	18,132	20,224	20,573	22,483	21,686	22,541	21,655	21,027	21,137
2003				15,713	16,445	17,551	20,093	22,673	22,400	24,169	25,556	25,393	26,363	28,239
2004			13,493	14,116	15,871	17,916	19,809	21,817	22,147	23,126	23,295	26,163	27,458	
2005		10,216	11,407	13,081	15,149	17,595	19,104	20,285	21,076	22,971	23,495	24,224		
2006	5,652	8,699	10,878	13,044	16,192	18,337	20,009	20,707	21,831	22,736	23,403			
2007	5,701	9,435	12,310	15,124	16,917	17,884	20,026	23,080	23,085	22,984				
2008	6,308	10,024	13,142	15,290	16,507	18,458	20,292	21,968	24,193					
2009	6,675	10,518	12,995	15,039	17,120	18,947	20,364	21,920						
2010	6,587	10,364	12,805	15,256	17,016	18,592	19,168							
2011	7,201	10,533	13,727	15,959	17,536	18,572								
2012	6,775	11,255	13,620	15,710	17,625									
2013	7,312	11,078	13,299	15,458										
2014	7,388	12,117	14,800											
2015	7,859	12,655												
2016	8,120													

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						19,558	22,471	22,926	23,468	23,828	22,128	22,652	22,893	22,237
2002					19,163	23,730	22,073	22,362	24,588	25,719	27,586	26,526	23,127	23,653
2003				16,513	19,977	19,495	20,748	24,044	27,680	29,705	29,821	30,012	28,878	26,643
2004			13,866	15,581	15,932	17,128	19,477	21,934	20,727	23,427	22,091	23,238	22,663	
2005		10,140	11,731	12,580	14,506	17,695	18,770	19,389	19,762	22,506	23,493	25,981		
2006	7,874	11,750	13,573	15,390	16,999	18,853	20,418	22,094	24,122	22,566	22,970			
2007	8,440	12,340	14,847	16,636	17,611	19,564	22,195	24,755	26,138	26,244				
2008	8,146	12,947	15,520	16,674	18,338	20,006	21,856	23,424	26,045					
2009	8,413	13,425	15,531	17,293	18,538	20,238	22,246	24,129						
2010	8,267	12,757	15,245	16,501	17,813	19,920	22,915							
2011	8,179	12,613	13,872	15,922	17,409	19,327								
2012	8,061	12,207	14,415	15,461	17,546									
2013	8,683	13,135	14,541	15,238										
2014	8,988	13,163	14,680											
2015	9,266	14,390												
2016	9,505													

All California WC Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						19,644	21,042	22,476	23,887	24,877	26,602	27,938	30,128	30,736
2002					16,271	17,560	18,505	19,301	20,892	22,682	23,644	25,016	25,584	25,427
2003				15,066	16,613	18,512	20,917	23,612	26,605	29,920	33,711	34,884	34,938	37,772
2004			13,041	14,099	15,446	17,786	19,829	23,174	25,105	29,299	30,540	32,309	35,175	
2005		9,838	11,229	12,580	14,808	17,684	20,680	23,495	25,678	27,558	28,404	30,915		
2006	7,120	10,191	12,215	14,276	17,335	19,932	21,931	24,718	26,594	27,475	30,606			
2007	7,370	11,247	13,977	16,174	18,101	19,989	23,900	26,539	27,847	30,799				
2008	7,569	11,603	14,568	16,539	18,070	20,716	23,227	25,567	29,402					
2009	7,817	12,410	14,589	16,587	18,677	20,972	22,440	25,383						
2010	7,811	11,902	14,325	16,045	17,734	19,606	21,792							
2011	8,193	12,409	14,321	16,673	18,308	20,140								
2012	7,989	12,122	14,437	15,812	17,853									
2013	8,346	12,280	14,041	15,458										
2014	8,368	12,680	14,859											
2015	8,840	13,681												
2016	9,128													

All Non-Large Deductible Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						19,253	20,779	22,277	23,962	24,980	27,599	28,906	32,154	32,913
2002					15,925	17,356	17,941	18,917	20,424	22,986	23,993	26,195	27,233	26,960
2003				14,803	16,680	18,862	21,193	23,913	28,041	31,946	36,922	38,709	38,340	41,598
2004			12,813	14,091	15,262	17,733	19,837	23,717	26,322	32,121	33,921	35,143	39,004	
2005		9,646	11,135	12,323	14,647	17,723	21,388	24,940	27,838	29,772	30,752	34,295		
2006	7,819	11,050	13,001	14,947	17,897	20,709	22,827	26,736	29,064	29,879	34,446			
2007	8,200	12,222	14,866	16,703	18,690	21,056	25,972	28,425	30,541	35,556				
2008	8,133	12,405	15,271	17,158	18,846	21,903	24,744	27,446	32,272					
2009	8,334	13,371	15,423	17,386	19,496	22,061	23,560	27,319						
2010	8,364	12,709	15,130	16,470	18,119	20,171	23,318							
2011	8,632	13,349	14,630	17,047	18,712	20,995								
2012	8,551	12,591	14,898	15,871	17,986									
2013	8,854	12,947	14,464	15,457										
2014	8,850	12,997	14,894											
2015	9,340	14,268												
2016	9,636													

Average Outstanding Medical Per Open Indemnity Claim

Large Deductible (LD) Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						28,202	38,722	50,426	62,425	78,105	84,451	91,938	99,153	107,600
2002					19,477	26,387	35,957	46,741	58,217	66,121	74,992	81,427	90,318	89,743
2003				16,032	21,055	28,765	37,811	48,153	56,613	65,269	70,722	75,773	82,631	83,617
2004			13,393	17,866	24,504	32,120	40,955	48,779	56,604	67,601	76,749	84,172	89,162	
2005		13,746	17,229	21,200	27,032	34,419	41,584	48,766	56,351	64,575	73,286	80,023		
2006	10,698	12,889	16,067	21,182	28,288	33,737	41,446	48,376	56,936	63,493	65,715			
2007	11,763	14,484	18,715	24,327	29,373	35,350	44,681	54,490	61,602	64,722				
2008	12,771	15,977	20,446	25,460	31,427	39,298	49,120	59,550	68,041					
2009	14,141	16,538	20,114	24,123	30,414	37,956	45,226	51,973						
2010	14,058	16,759	20,678	25,943	31,630	37,102	42,682							
2011	14,951	17,330	22,800	27,821	33,356	38,090								
2012	14,692	18,110	21,914	26,345	30,649									
2013	15,291	17,946	21,306	26,462										
2014	14,774	17,749	20,767											
2015	14,990	17,343												
2016	15,382													

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						28,616	40,303	50,231	59,954	71,948	77,346	84,398	90,458	101,558
2002					25,223	38,205	41,087	48,746	59,465	76,299	82,489	92,433	101,351	105,272
2003				20,291	27,631	33,092	41,861	51,714	64,390	70,931	77,126	84,097	85,898	86,360
2004			16,970	22,261	27,972	35,816	45,254	56,790	63,553	73,318	82,509	86,245	91,067	
2005		15,893	19,851	23,506	28,527	38,401	46,108	52,704	57,473	62,428	67,436	77,874		
2006	14,075	17,002	21,532	26,089	30,644	37,786	43,601	50,182	59,662	63,310	63,510			
2007	16,018	19,371	23,758	28,426	33,122	40,105	49,231	60,030	68,617	77,692				
2008	15,391	19,540	23,209	26,408	33,708	41,532	49,282	57,228	66,586					
2009	15,677	19,763	23,994	30,035	35,517	41,337	48,614	56,607						
2010	16,355	19,954	24,736	29,820	35,502	41,770	48,636							
2011	16,127	19,769	23,420	28,667	34,823	39,210								
2012	16,454	20,160	23,997	27,561	32,392									
2013	16,197	20,312	22,578	26,257										
2014	16,734	19,245	22,381											
2015	17,011	20,960												
2016	17,446													

All California WC Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						27,423	35,208	44,615	55,871	69,501	80,353	89,295	100,912	109,426
2002					20,529	26,940	33,748	42,372	51,355	62,347	72,814	83,501	91,973	92,023
2003				17,676	21,664	28,985	36,792	46,277	58,514	69,536	81,556	87,088	88,904	91,207
2004			14,769	19,348	25,314	31,495	40,525	50,231	58,902	73,461	79,190	82,918	89,704	
2005		14,130	17,841	21,444	25,915	34,763	43,267	52,931	63,921	73,533	77,315	87,247		
2006	12,030	15,443	19,800	24,148	30,327	37,392	45,089	56,135	65,177	71,025	76,098			
2007	13,354	17,453	21,752	27,200	33,287	40,769	51,226	60,739	68,522	75,582				
2008	13,997	18,011	22,556	27,730	33,903	42,217	51,116	60,140	69,387					
2009	14,511	18,807	23,370	28,562	34,631	41,851	48,758	57,355						
2010	14,801	18,799	23,301	28,489	34,187	39,872	46,261							
2011	15,354	19,812	24,122	30,014	36,528	41,371								
2012	15,569	19,690	23,841	27,802	32,676									
2013	15,450	19,768	22,659	26,888										
2014	15,285	18,818	22,030											
2015	15,905	19,659												
2016	16,401													

All Non-Large Deductible Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						27,114	33,869	42,458	53,515	66,485	78,840	88,309	101,603	110,147
2002					20,920	27,138	33,025	41,052	49,333	61,195	72,126	84,228	92,572	92,838
2003				18,344	21,909	29,066	36,450	45,676	59,163	71,040	85,823	91,649	91,392	94,252
2004			15,464	20,069	25,664	31,244	40,362	50,811	59,849	76,140	80,329	82,340	89,973	
2005		14,326	18,164	21,569	25,389	34,915	44,022	54,808	67,476	77,856	79,243	90,897		
2006	12,664	16,912	21,995	25,761	31,329	39,175	46,788	60,040	69,452	74,847	81,633			
2007	14,146	19,050	23,372	28,650	35,234	43,514	54,727	64,146	72,438	82,193				
2008	14,546	19,045	23,597	28,855	35,132	43,751	52,148	60,448	70,129					
2009	14,679	19,959	25,075	30,855	36,850	43,945	50,664	60,361						
2010	15,137	19,869	24,691	29,858	35,559	41,416	48,343							
2011	15,533	21,056	24,808	31,163	38,192	43,158								
2012	15,974	20,545	24,928	28,640	33,864									
2013	15,528	20,780	23,431	27,136										
2014	15,537	19,419	22,780											
2015	16,372	20,983												
2016	16,913													



Average Paid ALAE (Excluding Paid M CCP) Per Indemnity Claim \*

Large Deductible (LD) Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						5,000	5,500	5,736	5,978	6,171	6,334	6,468	6,621	6,759
2002					5,167	5,818	6,170	6,470	6,696	6,884	7,030	7,183	7,319	7,424
2003				4,781	5,662	6,205	6,575	6,878	7,121	7,333	7,529	7,689	7,827	7,942
2004			3,470	4,669	5,419	5,956	6,381	6,682	6,925	7,150	7,338	7,489	7,604	
2005		1,825	3,225	4,316	5,063	5,653	6,092	6,441	6,759	6,991	7,185	7,347		
2006	534	2,081	3,546	4,649	5,496	6,121	6,612	6,978	7,297	7,552	7,736			
2007	645	2,238	3,765	5,029	5,954	6,677	7,278	7,723	8,085	8,354				
2008	707	2,373	4,035	5,422	6,452	7,288	7,928	8,425	8,793					
2009	734	2,618	4,492	6,032	7,237	8,156	8,853	9,362						
2010	798	2,832	4,757	6,311	7,512	8,423	9,060							
2011	872	2,964	4,945	6,537	7,728	8,550								
2012	891	2,989	5,030	6,655	7,808									
2013	943	3,276	5,374	6,889										
2014	1,071	3,539	5,614											
2015	1,126	3,673												
2016	1,172													

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						5,357	5,777	6,034	6,249	6,410	6,528	6,647	6,743	6,845
2002					5,558	6,179	6,563	6,871	7,084	7,249	7,382	7,505	7,626	7,730
2003				4,668	5,478	5,951	6,373	6,656	6,861	7,037	7,183	7,313	7,428	7,514
2004			3,277	4,288	4,914	5,456	5,794	6,060	6,251	6,438	6,590	6,689	6,789	
2005		1,852	3,017	3,901	4,633	5,102	5,449	5,715	5,972	6,195	6,365	6,513		
2006	608	1,801	2,962	3,947	4,650	5,192	5,583	5,887	6,165	6,370	6,531			
2007	536	1,849	3,137	4,137	4,911	5,476	5,957	6,290	6,541	6,723				
2008	534	1,952	3,374	4,547	5,388	6,019	6,499	6,864	7,119					
2009	620	2,231	3,816	5,054	5,988	6,682	7,212	7,570						
2010	692	2,445	4,037	5,320	6,220	6,899	7,380							
2011	1,255	3,018	4,385	5,367	6,098	6,575								
2012	1,326	3,085	4,322	5,264	5,843									
2013	1,361	3,021	4,263	5,073										
2014	1,306	2,970	4,055											
2015	1,333	2,740												
2016	849													

All California WC Experience

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001						5,050	5,498	5,717	5,934	6,102	6,236	6,355	6,473	6,587	
2002					5,026	5,599	5,960	6,236	6,436	6,600	6,729	6,858	6,976	7,071	
2003				4,590	5,381	5,926	6,303	6,591	6,810	7,004	7,178	7,323	7,445	7,543	
2004			3,258	4,354	5,037	5,557	5,935	6,212	6,425	6,630	6,800	6,929	7,035		
2005		1,737	2,997	3,966	4,672	5,191	5,580	5,883	6,159	6,377	6,551	6,697			
2006	524	1,838	3,116	4,107	4,853	5,418	5,845	6,180	6,464	6,682	6,844				
2007	564	1,966	3,311	4,403	5,226	5,860	6,385	6,764	7,059	7,273					
2008	609	2,111	3,614	4,871	5,803	6,527	7,070	7,479	7,764						
2009	673	2,398	4,109	5,491	6,546	7,337	7,929	8,341							
2010	739	2,551	4,277	5,667	6,698	7,469	8,008								
2011	762	2,559	4,256	5,590	6,598	7,302									
2012	761	2,605	4,326	5,697	6,663										
2013	800	2,756	4,518	5,822											
2014	882	2,974	4,737												
2015	970	3,121													
2016	983														

All Non-Large Deductible Experience

	Evaluated as of (months):													
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						5,097	5,496	5,700	5,894	6,038	6,145	6,251	6,337	6,429
2002					4,888	5,382	5,751	6,002	6,177	6,318	6,429	6,533	6,634	6,719
2003				4,356	5,031	5,577	5,965	6,234	6,422	6,593	6,739	6,866	6,968	7,044
2004			2,995	3,956	4,552	5,048	5,369	5,616	5,793	5,971	6,118	6,221	6,313	
2005		1,646	2,752	3,586	4,244	4,689	5,024	5,276	5,508	5,712	5,863	5,990		
2006	517	1,636	2,752	3,641	4,300	4,811	5,184	5,491	5,745	5,930	6,074			
2007	509	1,764	2,967	3,930	4,674	5,239	5,706	6,034	6,277	6,449				
2008	550	1,936	3,331	4,496	5,362	6,008	6,484	6,833	7,061					
2009	637	2,258	3,863	5,143	6,099	6,807	7,329	7,678						
2010	707	2,381	3,983	5,270	6,197	6,880	7,358							
2011	706	2,334	3,865	5,048	5,950	6,584								
2012	693	2,375	3,901	5,114	5,965									
2013	718	2,436	3,979	5,146										
2014	772	2,612	4,162											
2015	878	2,768												
2016	877													

\* Based on private insurer data only.

**Paid MCCP per Indemnity Claim**

**Large Deductible (LD) Experience**

	Evaluated as of (months):													
<u>AY</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>
2012	869	1,590	2,046	2,377	2,550									
2013	874	1,588	2,081	2,358										
2014	820	1,612	2,047											
2015	906	1,629												
2016	868													

**Non-Large Deductible Experience from Insurers Writing LD**

	Evaluated as of (months):													
<u>AY</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>
2012	842	1,669	2,140	2,472	2,656									
2013	822	1,593	2,074	2,339										
2014	759	1,502	1,956											
2015	681	1,360												
2016	582													

**All California WC Experience**

	Evaluated as of (months):													
<u>AY</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>
2012	696	1,366	1,773	2,065	2,218									
2013	666	1,297	1,722	1,945										
2014	614	1,259	1,621											
2015	611	1,179												
2016	567													

**All Non-Large Deductible Experience**

	Evaluated as of (months):													
<u>AY</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>
2012	614	1,243	1,622	1,891	2,032									
2013	559	1,136	1,518	1,708										
2014	511	1,062	1,376											
2015	461	927												
2016	416													

Ratio of Paid Losses to Reported Incurred - Indemnity

Large Deductible (LD) Experience

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001	30.9%	46.8%	63.7%	75.7%	83.6%	87.8%	90.5%	92.4%	93.9%	94.9%	95.6%	96.0%	96.6%	97.0%	
2002	29.4%	46.5%	64.2%	78.2%	85.5%	89.4%	91.8%	93.9%	94.7%	95.7%	96.1%	96.9%	97.4%	97.7%	
2003	29.6%	48.7%	68.8%	80.9%	86.7%	90.6%	92.4%	93.4%	94.6%	95.1%	95.7%	96.3%	96.7%	97.1%	
2004	30.4%	53.9%	69.5%	80.2%	85.9%	88.9%	90.8%	91.8%	93.2%	94.3%	95.2%	95.5%	96.0%		
2005	37.6%	58.0%	72.3%	80.5%	85.1%	87.7%	89.7%	91.4%	93.1%	94.0%	95.0%	95.8%			
2006	39.5%	60.8%	72.7%	80.1%	84.3%	87.0%	89.6%	91.4%	92.8%	94.1%	95.1%				
2007	41.1%	60.9%	71.7%	78.8%	83.7%	87.0%	89.3%	90.7%	92.5%	94.1%					
2008	40.6%	59.7%	71.4%	78.7%	84.0%	87.4%	90.2%	92.0%	93.3%						
2009	40.2%	59.6%	71.2%	78.9%	84.1%	87.6%	90.3%	92.5%							
2010	41.0%	59.3%	71.5%	79.7%	85.1%	88.5%	91.7%								
2011	39.2%	60.0%	71.5%	79.6%	85.4%	89.2%									
2012	42.3%	60.4%	73.1%	81.0%	86.2%										
2013	41.1%	61.2%	74.6%	82.6%											
2014	41.0%	60.5%	74.4%												
2015	40.5%	61.3%													
2016	40.7%														

Non-Large Deductible Experience from Insurers Writing LD

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001	22.7%	44.6%	61.2%	74.3%	83.3%	88.0%	90.6%	92.5%	94.1%	95.2%	96.2%	96.7%	97.1%	97.5%	
2002	22.5%	41.7%	62.2%	76.8%	84.7%	88.1%	91.3%	93.4%	94.2%	95.1%	95.5%	96.3%	97.3%	97.6%	
2003	21.2%	44.6%	67.3%	78.8%	84.6%	88.8%	91.3%	92.4%	93.4%	94.1%	95.1%	96.0%	96.6%	97.5%	
2004	21.9%	48.3%	67.8%	78.3%	84.6%	88.3%	90.2%	91.7%	93.6%	94.0%	95.6%	96.2%	97.1%		
2005	26.0%	52.6%	68.1%	79.3%	84.0%	86.0%	88.9%	91.0%	92.4%	93.5%	94.7%	95.5%			
2006	30.3%	52.7%	68.3%	77.1%	82.5%	86.1%	88.3%	90.0%	91.8%	93.7%	95.0%				
2007	31.7%	54.2%	69.0%	77.4%	83.5%	86.6%	88.8%	90.7%	92.6%	94.7%					
2008	33.9%	54.9%	68.6%	78.1%	83.6%	87.0%	89.6%	91.8%	93.4%						
2009	33.7%	53.5%	68.6%	77.4%	82.5%	86.5%	89.4%	91.9%							
2010	33.0%	54.0%	68.2%	77.4%	83.8%	87.7%	90.6%								
2011	33.5%	54.3%	69.9%	78.6%	84.8%	88.7%									
2012	35.5%	55.3%	70.0%	80.0%	85.4%										
2013	33.1%	54.3%	70.9%	81.2%											
2014	31.9%	54.8%	72.1%												
2015	31.6%	54.2%													
2016	32.5%														

All California WC Experience

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001	25.4%	46.8%	63.0%	75.1%	82.9%	87.2%	89.8%	91.5%	92.9%	93.8%	94.4%	95.0%	95.5%	96.0%	
2002	25.1%	45.9%	64.6%	77.9%	84.8%	88.4%	90.9%	92.6%	93.5%	94.2%	95.0%	95.8%	96.3%	96.8%	
2003	25.4%	47.7%	67.9%	79.2%	84.7%	87.9%	89.7%	90.8%	91.8%	92.5%	93.6%	94.4%	95.1%	95.6%	
2004	26.1%	51.9%	68.1%	77.8%	83.4%	86.0%	87.9%	89.0%	90.6%	91.9%	93.1%	93.9%	94.6%		
2005	31.4%	56.2%	70.1%	78.8%	82.8%	84.8%	86.5%	88.1%	90.3%	91.8%	93.1%	94.0%			
2006	33.2%	56.5%	69.8%	77.2%	81.2%	84.1%	86.7%	89.0%	90.7%	92.2%	93.3%				
2007	34.8%	56.6%	68.8%	76.6%	81.6%	84.9%	87.2%	89.3%	91.2%	92.6%					
2008	36.0%	56.7%	68.7%	76.9%	82.4%	86.0%	88.7%	90.6%	92.0%						
2009	35.5%	54.8%	68.6%	76.9%	82.4%	86.0%	89.1%	91.2%							
2010	35.2%	55.7%	69.1%	78.2%	84.0%	87.7%	90.6%								
2011	34.3%	55.1%	69.8%	78.1%	84.1%	88.1%									
2012	35.8%	56.5%	70.4%	79.9%	85.3%										
2013	34.4%	56.3%	71.9%	81.4%											
2014	34.4%	56.7%	72.5%												
2015	34.1%	56.7%													
2016	34.8%														

All Non-Large Deductible Experience

	Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
2001	24.5%	47.6%	62.8%	74.7%	82.5%	87.0%	89.4%	91.2%	92.3%	93.3%	93.9%	94.5%	95.1%	95.6%	
2002	24.4%	45.8%	64.7%	77.7%	84.6%	87.9%	90.5%	92.1%	93.0%	93.6%	94.4%	95.3%	95.9%	96.5%	
2003	24.2%	47.2%	67.4%	78.4%	83.6%	86.6%	88.5%	89.6%	90.5%	91.3%	92.6%	93.4%	94.3%	94.9%	
2004	24.5%	50.9%	67.4%	76.5%	82.0%	84.5%	86.3%	87.5%	89.2%	90.6%	92.0%	93.0%	93.8%		
2005	28.9%	55.2%	68.8%	77.8%	81.4%	83.1%	84.6%	86.1%	88.7%	90.5%	92.0%	93.0%			
2006	30.8%	54.3%	68.2%	75.6%	79.4%	82.4%	85.1%	87.6%	89.5%	91.2%	92.2%				
2007	32.2%	54.6%	67.4%	75.4%	80.5%	83.8%	86.1%	88.5%	90.4%	91.8%					
2008	34.1%	55.3%	67.4%	75.9%	81.5%	85.3%	87.9%	89.9%	91.3%						
2009	33.5%	52.5%	67.2%	75.7%	81.4%	85.2%	88.4%	90.5%							
2010	32.7%	54.0%	67.8%	77.4%	83.3%	87.2%	89.9%								
2011	32.3%	52.8%	68.9%	77.2%	83.4%	87.4%									
2012	32.7%	54.3%	68.8%	79.1%	84.7%										
2013	31.3%	53.5%	70.2%	80.6%											
2014	31.3%	54.4%	71.3%												
2015	30.9%	53.9%													
2016	32.0%														

Ratio of Paid Losses to Reported Incurred - Medical

Large Deductible (LD) Experience

Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001	42.3%	64.2%	72.9%	78.0%	81.4%	83.5%	83.9%	84.4%	85.3%	85.4%	86.4%	87.2%	88.4%	89.1%
2002	42.3%	65.3%	73.5%	80.1%	84.4%	85.6%	86.7%	87.7%	88.0%	88.7%	89.1%	90.2%	90.6%	92.0%
2003	42.3%	63.7%	73.8%	81.0%	83.6%	85.5%	86.8%	87.4%	87.8%	88.4%	89.7%	90.5%	91.1%	92.6%
2004	38.5%	62.1%	73.6%	78.5%	82.0%	83.8%	85.0%	85.7%	86.7%	87.3%	88.3%	89.3%	90.4%	
2005	40.5%	62.6%	70.6%	77.6%	81.4%	83.4%	84.8%	86.2%	87.8%	88.8%	89.9%	90.9%		
2006	41.3%	62.0%	71.3%	77.0%	80.5%	83.0%	84.8%	86.4%	87.5%	88.9%	90.8%			
2007	42.3%	63.5%	71.8%	77.2%	81.1%	83.2%	84.4%	85.7%	87.1%	89.3%				
2008	42.4%	60.9%	70.2%	75.7%	79.4%	81.9%	84.1%	85.7%	87.5%					
2009	39.9%	60.0%	69.2%	76.1%	80.2%	82.7%	85.2%	87.7%						
2010	40.0%	58.6%	68.4%	75.9%	80.7%	84.0%	87.1%							
2011	38.6%	58.8%	68.2%	75.5%	80.8%	84.8%								
2012	38.9%	58.5%	69.2%	76.8%	82.3%									
2013	38.0%	58.1%	70.1%	77.4%										
2014	38.7%	59.0%	71.0%											
2015	38.4%	60.2%												
2016	39.1%													

Non-Large Deductible Experience from Insurers Writing LD

Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001	38.1%	62.1%	70.7%	76.5%	81.2%	83.4%	84.4%	85.8%	86.9%	87.6%	88.9%	89.7%	90.2%	90.4%
2002	36.8%	59.9%	69.0%	76.8%	81.7%	82.9%	86.0%	87.7%	88.1%	88.2%	89.1%	89.8%	90.7%	91.8%
2003	33.1%	58.1%	70.3%	76.8%	81.1%	83.8%	85.5%	86.5%	87.6%	88.6%	89.9%	91.0%	91.9%	93.4%
2004	32.3%	60.0%	68.5%	75.6%	79.7%	82.1%	83.5%	84.8%	86.4%	86.8%	88.4%	89.9%	91.6%	
2005	34.5%	55.2%	66.0%	75.0%	79.8%	81.0%	83.4%	85.2%	86.1%	88.5%	90.3%	91.4%		
2006	34.9%	57.2%	67.5%	74.4%	79.3%	82.2%	84.2%	85.5%	87.0%	88.8%	91.2%			
2007	35.3%	56.7%	66.9%	74.2%	79.7%	82.2%	84.1%	85.8%	87.8%	90.1%				
2008	37.5%	56.5%	67.4%	76.1%	79.8%	82.3%	84.9%	87.1%	89.1%					
2009	37.3%	56.1%	67.5%	74.0%	78.3%	82.3%	85.2%	87.9%						
2010	35.5%	56.5%	67.1%	74.3%	79.9%	84.0%	87.5%							
2011	35.3%	56.0%	68.2%	75.7%	81.0%	85.6%								
2012	35.7%	55.7%	68.2%	77.2%	82.6%									
2013	34.9%	55.0%	69.3%	77.9%										
2014	33.4%	56.4%	70.2%											
2015	33.6%	55.9%												
2016	33.2%													

All California WC Experience

Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001	35.6%	60.7%	69.2%	75.4%	79.8%	82.4%	83.5%	84.3%	84.7%	84.7%	85.3%	86.1%	87.1%	88.0%
2002	34.5%	59.2%	69.5%	76.5%	81.8%	83.4%	84.8%	85.6%	86.1%	86.4%	86.9%	88.3%	89.1%	90.5%
2003	35.5%	58.9%	69.2%	76.4%	80.7%	82.1%	83.4%	83.9%	84.1%	84.8%	86.6%	87.9%	89.2%	90.9%
2004	33.8%	57.9%	68.3%	74.0%	77.7%	80.0%	80.7%	81.7%	83.2%	84.6%	86.5%	88.1%	89.5%	
2005	35.1%	56.7%	66.0%	73.9%	78.3%	79.2%	80.5%	81.8%	83.8%	85.4%	87.5%	88.8%		
2006	35.0%	56.0%	66.0%	72.9%	76.9%	79.3%	81.3%	83.1%	84.8%	86.6%	88.8%			
2007	35.1%	56.8%	66.7%	72.9%	77.0%	79.5%	81.8%	83.9%	85.8%	88.1%				
2008	37.2%	56.6%	66.4%	73.0%	77.3%	80.7%	83.2%	85.3%	87.4%					
2009	37.1%	55.6%	65.6%	72.7%	77.8%	81.3%	84.2%	86.7%						
2010	36.4%	55.7%	66.3%	74.1%	79.5%	83.3%	86.7%							
2011	35.1%	54.9%	66.8%	74.1%	79.3%	83.9%								
2012	35.1%	55.3%	67.2%	75.9%	81.5%									
2013	35.1%	54.5%	68.1%	76.8%										
2014	34.6%	55.9%	69.3%											
2015	34.1%	55.7%												
2016	34.8%													

All Non-Large Deductible Experience

Evaluated as of (months):														
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001	34.1%	60.7%	68.1%	74.5%	79.2%	82.0%	83.5%	84.4%	84.4%	84.3%	84.8%	85.6%	86.6%	87.5%
2002	32.9%	57.2%	67.9%	75.1%	80.8%	82.4%	84.0%	84.7%	85.2%	85.4%	86.0%	87.5%	88.4%	89.9%
2003	33.3%	56.9%	67.2%	74.3%	79.2%	80.5%	81.7%	82.2%	82.4%	83.2%	85.1%	86.7%	88.3%	90.0%
2004	31.9%	55.8%	65.4%	71.5%	75.2%	77.9%	78.4%	79.5%	81.4%	83.0%	85.6%	87.4%	89.0%	
2005	32.6%	53.1%	63.1%	71.6%	76.4%	76.5%	77.9%	79.1%	81.4%	83.4%	86.1%	87.5%		
2006	31.9%	52.7%	63.0%	70.6%	74.8%	77.2%	79.3%	81.2%	83.3%	85.3%	87.6%			
2007	31.6%	53.2%	63.9%	70.6%	74.9%	77.5%	80.4%	82.9%	85.1%	87.4%				
2008	34.8%	54.5%	64.5%	71.6%	76.2%	80.0%	82.8%	85.1%	87.4%					
2009	35.8%	53.4%	63.7%	70.9%	76.6%	80.5%	83.7%	86.2%						
2010	34.7%	54.3%	65.3%	73.2%	78.8%	82.9%	86.4%							
2011	33.3%	53.0%	66.0%	73.3%	78.5%	83.5%								
2012	33.2%	53.7%	66.1%	75.4%	81.1%									
2013	33.6%	52.5%	67.1%	76.5%										
2014	32.5%	54.2%	68.3%											
2015	32.0%	53.2%												
2016	32.6%													

Reported Indemnity Claim Count Development

Large Deductible (LD) Experience

	Evaluated as of (months):													
AY	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	
2001						1.001	1.001	1.000	1.000	1.001	1.001	1.000	1.000	
2002					1.003	1.001	1.000	1.001	1.001	1.002	1.001	1.001	1.000	
2003				1.010	1.003	0.999	1.000	1.001	1.000	1.001	1.001	1.001	1.000	
2004			1.013	1.004	1.002	0.998	1.001	1.001	1.001	1.000	1.001	1.001		
2005		1.035	1.011	1.005	1.000	1.002	1.001	1.000	1.001	1.001	1.001			
2006	1.237	1.029	1.017	1.002	1.005	1.002	1.003	1.001	1.001	1.001				
2007	1.197	1.030	1.009	1.007	1.006	1.002	1.002	1.002	1.001					
2008	1.238	1.033	1.018	1.008	1.006	1.002	1.003	1.002						
2009	1.284	1.046	1.015	1.009	1.005	1.004	1.002							
2010	1.321	1.041	1.018	1.007	1.006	1.005								
2011	1.322	1.053	1.018	1.011	1.006									
2012	1.369	1.045	1.020	1.009										
2013	1.321	1.048	1.018											
2014	1.331	1.051												
2015	1.328													

Non-Large Deductible Experience from Insurers Writing LD

AY	Evaluated as of (months):												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168
2001						0.997	0.997	1.001	1.000	1.001	1.001	1.002	1.001
2002					0.996	1.000	1.002	1.000	1.002	1.002	1.002	1.001	1.000
2003				0.992	1.000	0.999	1.000	1.001	1.001	1.001	1.001	1.001	1.000
2004			0.995	1.004	0.995	1.006	1.002	1.002	1.001	1.001	1.001	1.000	
2005		1.001	1.004	0.996	1.005	1.006	1.002	1.003	1.000	0.999	0.999		
2006	1.109	1.018	0.997	1.006	1.002	1.002	1.000	1.002	1.000	1.001			
2007	1.126	1.013	1.009	1.004	1.003	1.001	1.001	1.001	1.000				
2008	1.135	1.026	1.009	1.005	1.004	1.002	1.001	1.001					
2009	1.161	1.024	1.012	1.006	1.005	1.002	1.001						
2010	1.182	1.028	1.010	1.009	1.004	1.002							
2011	1.204	1.025	1.013	1.008	1.003								
2012	1.199	1.035	1.011	1.007									
2013	1.232	1.024	1.008										
2014	1.206	1.024											
2015	1.230												

All California WC Experience

	Evaluated as of (months):												
AY	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
2001						0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2002					0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003				0.998	0.999	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000
2004			1.001	1.000	0.998	1.000	0.999	0.999	0.999	1.000	1.000	1.000	
2005		1.008	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000		
2006	1.123	1.011	1.004	1.002	1.001	1.000	1.000	1.001	1.001	1.000			
2007	1.123	1.014	1.006	1.004	1.002	1.000	1.001	1.001	1.000				
2008	1.146	1.022	1.011	1.005	1.003	1.001	1.001	1.001					
2009	1.192	1.029	1.011	1.005	1.003	1.002	1.001						
2010	1.216	1.030	1.011	1.006	1.004	1.002							
2011	1.231	1.033	1.013	1.007	1.003								
2012	1.247	1.035	1.013	1.006									
2013	1.249	1.032	1.012										
2014	1.241	1.032											
2015	1.247												

All Non-Large Deductible Experience

	Evaluated as of (months):												
AY	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
2001						0.998	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2002					0.997	0.998	1.000	0.999	0.999	0.999	1.000	1.000	1.000
2003				0.993	0.997	0.998	0.999	0.998	0.999	0.998	1.000	1.000	1.000
2004			0.994	0.998	0.996	1.000	0.998	0.999	0.998	0.999	1.000	0.999	
2005		0.993	0.998	0.997	1.001	1.001	0.999	1.000	0.999	1.000	0.999		
2006	1.070	1.001	0.997	1.002	0.999	1.000	0.999	1.000	1.000	1.000			
2007	1.087	1.005	1.005	1.002	1.001	1.000	1.000	1.000	1.000				
2008	1.103	1.017	1.007	1.003	1.001	1.001	1.000	1.001					
2009	1.149	1.020	1.009	1.003	1.003	1.001	1.001						
2010	1.167	1.025	1.008	1.006	1.002	1.001							
2011	1.191	1.023	1.011	1.005	1.001								
2012	1.189	1.030	1.010	1.005									
2013	1.212	1.023	1.009										
2014	1.196	1.021											
2015	1.205												

Reported Total Claim Count Development

Large Deductible (LD) Experience

AY	Evaluated as of (months):												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168
2001								1.000	1.000	1.001	1.001	1.000	1.000
2002							1.000	1.001	1.001	1.001	1.000	1.000	1.000
2003						1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000
2004					1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	
2005				1.000	1.001	1.001	1.001	1.000	1.000	1.001	1.000		
2006			1.007	1.002	1.002	1.001	1.001	1.000	1.000	1.000			
2007		1.012	1.005	1.003	1.003	1.001	1.001	1.001	1.000				
2008	1.165	1.013	1.009	1.003	1.003	1.001	1.001	1.001					
2009	1.185	1.019	1.006	1.003	1.001	1.002	1.001						
2010	1.198	1.015	1.007	1.003	1.003	1.002							
2011	1.200	1.021	1.006	1.004	1.002								
2012	1.230	1.016	1.007	1.003									
2013	1.209	1.017	1.006										
2014	1.209	1.017											
2015	1.215												

Non-Large Deductible Experience from Insurers Writing LD

AY	Evaluated as of (months):												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168
2001								1.002	1.001	1.001	1.001	1.001	1.000
2002							1.004	1.001	1.001	1.001	1.001	1.000	1.000
2003						1.000	1.001	1.001	1.001	1.000	1.000	1.001	1.000
2004					1.001	1.005	1.001	1.001	1.000	1.000	1.001	1.000	
2005				1.002	1.003	1.002	1.002	1.001	1.000	1.000	1.000		
2006			1.002	1.003	1.002	1.001	1.001	1.001	1.000	1.000			
2007		1.013	1.006	1.003	1.001	1.001	1.001	1.001	1.000				
2008	1.122	1.013	1.006	1.003	1.002	1.001	1.001	1.001					
2009	1.126	1.014	1.007	1.004	1.003	1.001	1.001						
2010	1.138	1.015	1.006	1.005	1.003	1.001							
2011	1.134	1.013	1.007	1.005	1.002								
2012	1.127	1.019	1.007	1.004									
2013	1.150	1.017	1.006										
2014	1.160	1.015											
2015	1.172												

All California WC Experience

AY	Evaluated as of (months):												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168
2001								1.001	1.001	1.001	1.000	1.000	1.000
2002							1.001	1.001	1.001	1.000	1.000	1.000	1.000
2003						1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000
2004					1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	
2005				1.001	1.002	1.001	1.001	1.000	1.000	1.000	1.000		
2006			1.005	1.003	1.002	1.001	1.001	1.001	1.001	1.000			
2007		1.012	1.005	1.004	1.002	1.001	1.001	1.001	1.001	1.000			
2008	1.128	1.013	1.008	1.003	1.002	1.001	1.001	1.001					
2009	1.145	1.016	1.006	1.004	1.002	1.002	1.001						
2010	1.154	1.016	1.007	1.004	1.003	1.002							
2011	1.159	1.018	1.007	1.004	1.002								
2012	1.170	1.017	1.007	1.004									
2013	1.173	1.018	1.007										
2014	1.178	1.017											
2015	1.183												

All Non-Large Deductible Experience

AY	Evaluated as of (months):												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168
2001								1.001	1.001	1.001	1.000	1.000	1.000
2002							1.001	1.001	1.001	1.000	1.000	1.000	1.000
2003						1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000
2004					1.001	1.003	1.001	1.001	1.000	1.000	1.000	1.000	
2005				1.002	1.002	1.002	1.001	1.001	1.000	1.000	1.000		
2006			1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.000			
2007		1.012	1.006	1.004	1.001	1.001	1.001	1.001	1.000				
2008	1.106	1.013	1.007	1.003	1.002	1.001	1.001	1.001					
2009	1.121	1.014	1.007	1.004	1.003	1.002	1.001						
2010	1.128	1.016	1.007	1.005	1.003	1.002							
2011	1.133	1.015	1.008	1.005	1.002								
2012	1.132	1.018	1.008	1.005									
2013	1.149	1.019	1.007										
2014	1.158	1.016											
2015	1.161												

Reported Indemnity Claim Settlement Ratios

Large Deductible (LD) Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						84.6%	88.5%	91.2%	93.0%	94.3%	95.0%	95.6%	96.2%	96.7%
2002					80.2%	85.8%	89.9%	92.6%	94.0%	94.9%	95.6%	96.2%	96.7%	97.2%
2003				73.5%	81.5%	87.3%	90.9%	92.9%	94.0%	94.9%	95.8%	96.4%	96.9%	97.4%
2004			61.4%	74.1%	83.0%	87.7%	90.6%	92.2%	93.6%	94.9%	95.8%	96.4%	97.0%	
2005		50.6%	64.3%	76.0%	83.2%	87.5%	90.1%	92.0%	93.9%	95.0%	96.0%	96.7%		
2006	22.0%	45.2%	61.0%	73.8%	82.0%	86.2%	89.5%	91.9%	93.4%	94.7%	95.7%			
2007	25.2%	48.9%	63.7%	74.7%	81.3%	85.3%	89.0%	91.5%	93.1%	94.5%				
2008	27.8%	47.9%	62.8%	72.9%	79.8%	85.2%	89.1%	91.6%	93.5%					
2009	27.0%	46.4%	60.0%	71.1%	79.3%	84.6%	88.5%	91.5%						
2010	27.2%	46.2%	60.3%	72.3%	80.5%	85.6%	89.6%							
2011	26.8%	46.0%	61.3%	73.0%	81.3%	86.5%								
2012	27.9%	47.9%	62.8%	74.4%	82.3%									
2013	28.2%	48.2%	64.3%	76.4%										
2014	27.6%	49.3%	65.4%											
2015	27.3%	50.4%												
2016	28.5%													

Non-Large Deductible Experience from Insurers Writing LD

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						85.4%	89.4%	91.7%	93.6%	94.9%	95.6%	96.3%	96.7%	97.1%
2002					81.3%	87.4%	90.2%	92.7%	94.1%	95.2%	95.9%	96.6%	97.2%	97.6%
2003				72.4%	82.1%	86.5%	90.2%	92.4%	94.3%	95.2%	96.1%	96.8%	97.2%	97.7%
2004			63.0%	76.0%	82.8%	87.2%	90.3%	92.7%	94.0%	95.2%	96.2%	96.9%	97.5%	
2005		45.8%	63.0%	75.4%	82.5%	86.9%	90.0%	92.0%	93.4%	95.0%	96.1%	97.0%		
2006	22.6%	48.6%	64.6%	74.8%	81.5%	86.2%	88.9%	91.5%	93.5%	94.7%	95.8%			
2007	32.0%	50.9%	64.9%	75.0%	82.0%	86.2%	89.8%	92.3%	94.2%	95.8%				
2008	27.3%	47.9%	61.8%	73.0%	80.3%	85.8%	89.4%	92.0%	94.2%					
2009	26.3%	46.3%	61.3%	72.0%	79.9%	85.2%	89.2%	92.3%						
2010	25.3%	46.1%	60.2%	72.4%	80.7%	86.4%	90.7%							
2011	25.3%	45.6%	61.5%	73.6%	81.8%	87.4%								
2012	25.9%	46.5%	63.3%	75.1%	83.1%									
2013	25.2%	48.5%	64.7%	76.4%										
2014	26.9%	50.0%	66.8%											
2015	28.2%	51.8%												
2016	29.3%													

All California WC Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						84.1%	87.8%	90.4%	92.3%	93.5%	94.5%	95.3%	96.1%	96.6%
2002					79.1%	84.5%	88.2%	90.8%	92.4%	93.7%	94.7%	95.8%	96.4%	96.9%
2003				70.7%	79.2%	84.7%	88.3%	90.5%	92.4%	93.7%	95.2%	95.9%	96.4%	97.0%
2004			60.9%	72.7%	80.5%	85.1%	88.1%	90.5%	92.3%	94.3%	95.4%	96.1%	96.8%	
2005		49.2%	63.2%	74.5%	81.1%	85.4%	88.4%	90.7%	93.1%	94.5%	95.5%	96.4%		
2006	23.5%	47.7%	62.7%	73.3%	80.4%	84.8%	88.1%	91.2%	93.0%	94.3%	95.5%			
2007	26.9%	49.5%	63.3%	73.4%	80.1%	84.5%	88.8%	91.4%	93.2%	94.8%				
2008	26.6%	47.5%	61.4%	71.8%	78.9%	85.0%	88.9%	91.5%	93.6%					
2009	26.2%	45.9%	59.8%	70.5%	79.1%	84.6%	88.6%	91.7%						
2010	26.1%	46.2%	60.2%	72.4%	80.5%	85.9%	90.0%							
2011	26.3%	46.3%	61.7%	73.3%	81.4%	86.9%								
2012	26.6%	47.6%	63.2%	74.9%	82.8%									
2013	26.4%	48.2%	64.4%	76.5%										
2014	26.7%	49.5%	66.1%											
2015	27.4%	51.0%												
2016	28.8%													

All Non-Large Deductible Experience

AY	Evaluated as of (months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
2001						83.9%	87.4%	90.1%	91.9%	93.2%	94.3%	95.1%	96.0%	96.5%
2002					78.7%	84.0%	87.6%	90.1%	91.8%	93.3%	94.3%	95.6%	96.3%	96.8%
2003				69.4%	78.1%	83.4%	87.0%	89.4%	91.6%	93.1%	94.9%	95.7%	96.2%	96.9%
2004			60.6%	72.0%	79.2%	83.7%	86.8%	89.6%	91.7%	94.0%	95.1%	95.9%	96.7%	
2005		48.5%	62.7%	73.7%	79.9%	84.1%	87.5%	90.0%	92.6%	94.2%	95.2%	96.2%		
2006	24.2%	49.1%	63.6%	73.0%	79.5%	84.1%	87.3%	90.8%	92.8%	94.1%	95.4%			
2007	27.7%	49.8%	63.1%	72.7%	79.5%	84.1%	88.7%	91.4%	93.2%	95.0%				
2008	26.1%	47.3%	60.6%	71.2%	78.4%	84.9%	88.7%	91.4%	93.7%					
2009	25.8%	45.7%	59.6%	70.3%	79.0%	84.6%	88.6%	91.8%						
2010	25.6%	46.3%	60.2%	72.4%	80.5%	86.0%	90.3%							
2011	26.1%	46.4%	61.8%	73.5%	81.5%	87.1%								
2012	26.0%	47.4%	63.4%	75.1%	83.1%									
2013	25.5%	48.2%	64.5%	76.6%										
2014	26.2%	49.7%	66.5%											
2015	27.5%	51.4%												
2016	28.9%													

## **Item AC17-04-04 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 October 23, 2017 the DWC submitted the final drug formulary regulations to the Office of Administrative Law (OAL) to be effective January 1, 2018. The OAL has up to December 7, 2017 to complete their review. The proposed regulations can be accessed through the following link <http://www.dir.ca.gov/dwc/DWCPropRegs/MTUS-Formulary/MTUS-Formulary.htm>.

The potential cost impact of the new formulary will be discussed at the meeting.



**Item AC17-12-01**  
**9/30/2017 Experience – Review of Methodologies**

Staff has prepared an analysis of statewide experience through September 30, 2017, which is included in Exhibits 1 through 8. This information reflects insurers writing approximately 100% of the market based on 2016 premium levels. The methodologies used are consistent with those reflected in the January 1, 2018 Pure Premium Rate Filing. Wage and loss levels were 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 July 1, 2017.

As shown on Exhibit 8, the projected policy year 2018 loss to the industry average filed pure premium ratio based on September 30, 2017 experience is 0.628. (The comparable ratio projected based on June 30, 2017 experience as reflected in the Amended January 1, 2018 Pure Premium Rate Filing is 0.641.)

Additional supplemental information is included in Exhibits 9 through 12.

**California Workers' Compensation  
Accident Year Experience as of September 30, 2017**

<u>Year</u>	<u>Earned Premium</u>	<u>Paid Indemnity</u>	<u>Indemnity Reserves</u>	<u>Paid Medical**</u>	<u>Medical Reserves</u>	<u>IBNR*</u>	<u>Total Incurred**</u>	<u>Loss Ratio*</u>
1985	2,872,481,605	1,278,526,315	3,727,056	984,812,249	21,613,400	18,232,285	2,306,911,305	0.803
1986	3,506,609,097	1,382,041,641	5,337,782	1,134,506,417	31,615,741	56,479,902	2,609,981,483	0.744
1987	4,374,085,383	1,504,220,484	7,264,715	1,326,407,608	46,565,282	30,404,345	2,914,862,434	0.666
1988	5,173,049,472	1,701,202,807	7,911,656	1,530,902,326	46,267,305	43,385,554	3,329,669,648	0.644
1989	5,674,529,942	1,937,042,171	9,238,749	1,785,522,109	61,142,053	47,079,110	3,840,024,192	0.677
1990	5,698,665,461	2,254,440,972	9,061,551	2,030,417,697	62,585,617	78,463,136	4,434,968,973	0.778
1991	5,863,319,243	2,469,360,807	17,410,889	2,181,436,794	70,074,357	69,264,928	4,807,547,775	0.820
1992	5,681,466,382	1,970,777,456	14,597,328	1,743,070,935	69,516,363	67,567,143	3,865,529,225	0.680
1993	5,928,480,359	1,688,778,669	15,505,285	1,493,849,397	86,384,089	57,953,730	3,342,471,170	0.564
1994	5,022,749,028	1,621,140,087	21,803,113	1,451,932,679	95,422,027	64,605,112	3,254,903,018	0.648
1995	3,778,975,599	1,753,530,488	32,184,292	1,593,987,603	121,363,546	71,500,058	3,572,565,987	0.945
1996	3,736,857,547	1,938,445,185	40,563,357	1,683,997,097	138,524,816	74,592,960	3,876,123,415	1.037
1997	3,916,944,392	2,297,083,282	50,186,975	1,977,633,238	158,321,129	131,226,500	4,614,451,124	1.178
1998	4,322,051,270	2,748,702,914	62,914,189	2,590,022,707	253,515,262	220,570,756	5,875,725,828	1.359
1999	4,537,629,086	3,026,978,860	61,551,303	2,969,054,381	230,322,569	309,059,463	6,596,966,576	1.454
2000	5,905,419,052	3,389,098,135	86,314,735	3,493,260,383	280,569,679	453,768,273	7,703,011,205	1.304
2001	10,094,684,192	4,780,575,067	135,030,640	5,239,367,227	459,703,045	709,271,880	11,323,947,859	1.122
2002	13,405,893,679	4,709,904,959	121,700,989	5,355,884,157	429,396,350	965,434,151	11,582,320,606	0.864
2003	19,429,675,115	4,465,575,876	184,592,077	4,916,996,853	431,790,722	1,357,634,127	11,356,589,655	0.584
2004	23,043,963,090	3,141,680,494	158,386,895	3,926,730,407	396,909,211	1,426,463,885	9,050,170,892	0.393
2005	21,350,709,483	2,462,180,272	141,746,966	3,517,703,142	383,454,658	1,217,325,518	7,722,410,556	0.362
2006	17,209,009,327	2,543,283,924	158,299,341	3,617,643,342	398,728,028	852,800,427	7,570,755,062	0.440
2007	13,256,259,568	2,661,467,859	177,156,761	3,852,567,625	470,158,255	836,088,471	7,997,438,971	0.603
2008	10,748,217,184	2,689,839,634	204,051,699	3,838,783,245	476,004,211	706,935,514	7,915,614,303	0.736
2009	8,885,303,850	2,542,162,599	211,625,954	3,616,439,798	483,311,004	677,280,904	7,530,820,259	0.848
2010	9,411,101,176	2,542,692,349	222,951,152	3,674,353,873	468,030,719	784,401,063	7,692,429,156	0.817
2011	10,146,407,076	2,451,512,334	267,003,185	3,256,028,809	563,674,432	995,773,195	7,533,991,955	0.743
2012	11,718,349,189	2,428,745,099	319,058,686	3,071,383,830	610,619,596	1,907,249,232	8,337,056,443	0.711
2013	14,186,071,217	2,356,119,822	383,280,892	2,812,964,741	694,286,747	2,780,956,119	9,027,608,321	0.636
2014	16,014,478,353	2,209,369,437	561,343,086	2,487,812,189	859,428,836	3,545,351,098	9,663,304,646	0.603
2015	17,055,735,027	1,806,541,612	804,489,106	2,037,017,295	1,165,247,874	4,640,928,977	10,454,224,864	0.613
2016	17,957,589,633	1,051,488,895	930,745,222	1,389,895,501	1,384,206,239	5,954,149,761	10,710,485,618	0.596
2017*	13,250,739,567	216,649,600	528,495,789	398,752,605	1,037,562,003	5,197,211,410	7,378,671,407	0.557

\* Shown for informational purposes only

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

Source: WCIRB quarterly experience calls

**Incurred Indemnity Loss Development Factors**

Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189
1992														1.001	1.002
1993													1.001	1.001	0.999
1994													1.001	1.001	1.000
1995												1.002	1.003	1.003	1.000
1996											1.003	1.000	1.001	1.000	1.002
1997									1.004	1.002	1.002	1.002	1.003	1.002	1.001
1998								1.006	1.003	1.003	1.002	1.005	1.002	1.001	1.001
1999								1.002	1.006	1.002	1.004	1.003	1.003	1.001	1.001
2000							1.007	1.005	1.003	1.006	1.003	1.002	1.004	1.002	1.000
2001						1.013	1.012	1.006	1.008	1.007	1.005	1.004	1.001	1.001	1.002
2002					1.017	1.015	1.010	1.011	1.007	1.006	1.003	1.003	1.002	1.002	
2003				1.033	1.025	1.017	1.018	1.016	1.011	1.004	1.005	1.003	1.003		
2004			1.044	1.043	1.028	1.029	1.018	1.015	1.010	1.007	1.004	1.001			
2005		1.110	1.076	1.053	1.045	1.033	1.018	1.012	1.005	1.005	1.005				
2006	1.317	1.133	1.080	1.061	1.041	1.027	1.015	1.010	1.007	1.006					
2007	1.350	1.144	1.075	1.057	1.037	1.028	1.012	1.012	1.006						
2008	1.369	1.166	1.086	1.048	1.033	1.021	1.014	1.008							
2009	1.372	1.171	1.086	1.054	1.029	1.019	1.016								
2010	1.402	1.157	1.083	1.047	1.029	1.020									
2011	1.366	1.154	1.072	1.042	1.026										
2012	1.364	1.133	1.074	1.045											
2013	1.333	1.135	1.062												
2014	1.365	1.140													
2015	1.352														
Selected (a)	1.352	1.140	1.062	1.045	1.026	1.020	1.016	1.008	1.008	1.006	1.004	1.003	1.003	1.002	1.001
Cumulative	1.906	1.410	1.237	1.165	1.114	1.086	1.065	1.048	1.040	1.032	1.026	1.022	1.019	1.016	1.015

(a) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and six-year average for the subsequent age-to-age factors.

**Incurred Indemnity Loss Development Factors (Continued)**

Accident Year	Age-to-Age (in months)																
	213/201	225/213	237/225	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369	393/381	ULT/393Inc (b)
1982										1.001	1.000	1.001	1.002				
1983									1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	
1984								0.999	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	
1985							1.000	1.000	1.000	1.001	1.000	1.002	1.001	1.000	1.000	1.000	
1986						1.000	1.001	1.000	1.001	1.002	1.002	1.000	0.999	1.000	1.000		
1987					1.000	1.000	1.000	1.001	1.002	1.000	1.001	1.000	1.001	1.000			
1988				1.001	1.000	1.000	1.002	1.000	1.000	1.000	1.001	1.000	1.000				
1989			1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.001	1.000					
1990		1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1991	1.000	1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000							
1992	0.998	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000								
1993	0.999	1.001	1.001	1.001	1.001	1.000	1.000	1.000									
1994	1.001	1.002	1.003	1.000	1.001	1.001	1.000										
1995	1.003	1.001	0.998	1.001	1.000	1.000	1.000										
1996	1.001	1.002	1.000	1.001	1.002												
1997	1.001	1.000	1.000	1.000													
1998	1.003	1.000	1.001														
1999	1.001	1.000															
2000	1.002																
Selected (a)	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.000	1.001	1.000	1.000	1.000	
Cumulative	1.014	1.012	1.011	1.010	1.010	1.009	1.008	1.008	1.008	1.008	1.007	1.006	1.006	1.005	1.005	1.005	1.005

(b) The UL T/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

**Incurred Medical Loss Development Factors**

Accident Year	<u>33/21</u>	<u>45/33</u>	<u>57/45</u>	<u>69/57</u>	<u>81/69</u>	<u>93/81</u>	<u>105/93</u>	<u>117/105</u>	<u>129/117</u>	<u>141/129</u>	<u>153/141</u>	<u>165/153</u>	<u>177/165</u>	<u>189/177</u>	<u>201/189</u>
1992														1.021	1.013
1993												1.008		1.012	1.006
1994												1.018		1.006	1.018
1995												1.017		1.015	1.009
1996											1.019	1.026		1.006	1.005
1997										1.024	1.013	1.017		1.006	1.007
1998									1.027	1.020	1.019	1.006		1.010	1.010
1999								1.027	1.020	1.021	1.014	1.009		1.007	0.999
2000							1.030	1.017	1.026	1.017	1.017	1.014		1.002	0.996
2001						1.041	1.042	1.031	1.024	1.017	1.017	1.015		0.995	0.997
2002					1.045	1.038	1.030	1.027	1.024	1.016	1.009	1.003		1.000	
2003				1.063	1.045	1.038	1.038	1.030	1.022	1.013	1.004	1.000			
2004			1.085	1.066	1.063	1.045	1.034	1.027	1.019	1.007	1.001	0.997			
2005		1.103	1.073	1.088	1.059	1.047	1.039	1.015	1.011	1.007	1.001				
2006	1.227	1.124	1.085	1.071	1.053	1.043	1.024	1.014	1.002	1.001					
2007	1.251	1.132	1.090	1.072	1.054	1.037	1.019	1.009	1.005						
2008	1.241	1.143	1.103	1.068	1.045	1.029	1.013	1.005							
2009	1.267	1.146	1.105	1.066	1.034	1.020	1.009								
2010	1.291	1.155	1.085	1.051	1.029	1.015									
2011	1.271	1.140	1.080	1.039	1.022										
2012	1.233	1.102	1.062	1.038											
2013	1.193	1.094	1.049												
2014	1.190	1.092													
2015	1.189														
Selected (a)	1.189	1.092	1.049	1.038	1.022	1.015	1.009	1.005	1.014	1.010	1.008	1.006	1.005	1.003	1.002
Cumulative	1.640	1.379	1.263	1.204	1.160	1.135	1.118	1.108	1.103	1.088	1.077	1.068	1.061	1.056	1.053

(a) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and six-year average for the subsequent age-to-age factors.

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

**Incurred Medical Loss Development Factors (Continued)**

Accident Year	Age-to-Age (in months)														
	213/201	225/213	237/225	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369
1982										1.010	1.005	1.002	1.008		
1983									1.004	1.006	1.003	1.005	1.004	1.002	1.004
1984								1.003	1.003	1.001	1.003	1.001	1.003	1.002	1.000
1985							1.001	1.003	1.003	1.003	1.005	1.002	1.003	0.999	0.999
1986						1.004	1.005	1.004	1.007	1.004	1.005	1.002	1.001	0.998	1.001
1987					1.002	1.006	1.004	1.006	1.003	1.003	1.005	1.000	1.000	1.001	
1988				1.005	1.005	1.005	1.002	1.004	1.003	1.003	1.002	1.000	1.000		
1989			1.008	1.005	1.006	1.007	1.007	1.002	1.003	1.001	0.998	0.999			
1990		1.006	1.009	1.004	1.004	1.003	1.003	1.001	1.001	1.001	1.000				
1991		1.007	1.005	1.003	1.002	1.003	1.001	1.001	1.000	0.999					
1992	1.006	1.005	1.000	1.005	1.005	1.005	1.001	0.999							
1993	1.011	1.004	1.018	1.008	0.998	1.000	0.997	0.996							
1994	1.012	1.006	1.008	1.006	1.001	1.001	0.991								
1995	1.013	0.999	1.007	1.001	1.000	0.997									
1996	1.005	1.009	1.003	0.995	1.004										
1997	1.001	0.996	0.997	0.995											
1998	1.003	1.002	0.993												
1999	1.000	0.996													
2000	0.996														
Selected (a)	1.003	1.001	1.004	1.002	1.002	1.002	1.000	1.000	1.002	1.002	1.003	1.001	1.002	1.000	0.999
Cumulative	1.050	1.047	1.046	1.041	1.040	1.038	1.036	1.036	1.036	1.035	1.033	1.030	1.030	1.028	1.027
															1.028

(c) The ULT/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

**Paid Indemnity Loss Development Factors**

Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189
1992														1.004	1.003
1993													1.005	1.004	1.003
1994												1.007	1.006	1.005	1.004
1995											1.009	1.007	1.006	1.004	1.005
1996											1.009	1.007	1.006	1.006	1.005
1997									1.017	1.013	1.009	1.009	1.007	1.006	1.006
1998								1.018	1.016	1.011	1.010	1.008	1.008	1.006	1.004
1999							1.025	1.018	1.013	1.010	1.010	1.008	1.008	1.005	1.004
2000							1.026	1.018	1.015	1.013	1.012	1.009	1.007	1.006	1.006
2001					1.053	1.036	1.022	1.018	1.016	1.014	1.009	1.008	1.006	1.006	
2002				1.082	1.049	1.033	1.026	1.023	1.022	1.016	1.013	1.009	1.009		
2003				1.081	1.055	1.043	1.036	1.032	1.020	1.016	1.013	1.010			
2004			1.135	1.088	1.062	1.049	1.044	1.031	1.022	1.017	1.012				
2005		1.279	1.143	1.088	1.072	1.054	1.039	1.026	1.022	1.017					
2006	1.704	1.273	1.152	1.099	1.072	1.054	1.039	1.026	1.022	1.017					
2007	1.701	1.290	1.160	1.102	1.072	1.051	1.033	1.030	1.022						
2008	1.724	1.323	1.173	1.103	1.067	1.044	1.030	1.024							
2009	1.782	1.332	1.178	1.106	1.068	1.046	1.034								
2010	1.793	1.339	1.172	1.101	1.066	1.043									
2011	1.796	1.318	1.165	1.098	1.062										
2012	1.776	1.316	1.157	1.101											
2013	1.768	1.317	1.153												
2014	1.819	1.314													
2015	1.798														
Selected (a)	1.798	1.314	1.153	1.101	1.062	1.043	1.034	1.024	1.022	1.017	1.013	1.009	1.007	1.006	1.005
Cumulative Unadjusted for Impact of SB 863	3.944	2.193	1.669	1.448	1.315	1.238	1.187	1.148	1.121	1.097	1.079	1.066	1.056	1.048	1.042
Cumulative Adjusted for Impact of SB 863 (b)	4.159	2.313	1.761	1.477	---	---	---	---	---	---	---	---	---	---	---

(a) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and three-year average for the subsequent age-to-age factors.  
(b) The 45-to-ultimate factor for accident year 2014 and the 57-to-ultimate factor for accident year 2013 have been adjusted by 5.5% 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.)

Paid Indemnity Loss Development Factors (Continued)

Accident Year	213/201	225/213	237/225	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369	393/381	393Inc/393Pd (c)	ULT/393Inc (d)
1982										1.002	1.000	1.001	1.002	1.001	1.001	1.001	1.004	
1983								1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1984								1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.005	
1985							1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.005	
1986						1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1987					1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1988				1.001	1.001	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1989			1.002	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1990		1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1991	1.002	1.002	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1992	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1993	1.002	1.002	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1994	1.004	1.003	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1995	1.005	1.005	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1996	1.004	1.004	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	1.004	
1997	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1998	1.006	1.004	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1999	1.005	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
2000	1.004																1.005	
Selected (a)	1.005	1.003	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	1.004	
Cumulative	1.038	1.032	1.029	1.025	1.023	1.020	1.018	1.017	1.016	1.015	1.014	1.013	1.012	1.011	1.010	1.009	1.005	

(c) Three-year averages of the 393Inc/393Pd factors are selected.

(d) The ULT/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.



**Paid Medical Loss Development Factors**

Unadjusted (a) Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189
1992															1.016
1993													1.013	1.013	1.012
1994													1.017	1.013	1.012
1995												1.021	1.018	1.019	1.015
1996											1.024	1.021	1.019	1.015	1.014
1997										1.027	1.022	1.020	1.016	1.015	1.013
1998									1.033	1.030	1.023	1.019	1.018	1.017	1.017
1999								1.030	1.033	1.026	1.026	1.016	1.016	1.018	1.016
2000						1.047	1.037	1.033	1.027	1.023	1.020	1.020	1.018	1.014	1.011
2001					1.061	1.059	1.040	1.035	1.030	1.023	1.023	1.023	1.016	1.014	1.012
2002				1.086	1.075	1.050	1.037	1.029	1.025	1.023	1.019	1.017	1.013	1.012	
2003					1.060	1.047	1.040	1.030	1.030	1.030	1.020	1.016	1.015		
2004			1.135	1.100	1.075	1.059	1.042	1.037	1.034	1.028	1.020	1.014			
2005		1.232	1.153	1.103	1.079	1.053	1.053	1.042	1.033	1.024	1.018				
2006	1.472	1.252	1.156	1.105	1.073	1.058	1.049	1.035	1.028	1.021					
2007	1.494	1.260	1.157	1.103	1.081	1.063	1.043	1.034	1.024						
2008	1.500	1.271	1.162	1.113	1.081	1.054	1.039	1.028							
2009	1.527	1.282	1.180	1.119	1.074	1.051	1.035								
2010	1.551	1.305	1.176	1.106	1.072	1.049									
2011	1.566	1.290	1.165	1.106	1.064										
2012	1.572	1.288	1.158	1.102											
2013	1.560	1.277	1.154												
2014	1.556	1.267													
2015	1.539														

Adjusted (b) Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189
1999															1.017
2000														1.015	1.011
2001													1.018	1.015	1.013
2002												1.019	1.014	1.012	
2003											1.021	1.018	1.016		
2004										1.030	1.021	1.015			
2005									1.035	1.025	1.020				
2006							1.037	1.030	1.026						
2007							1.046	1.037	1.026						
2008					1.079	1.058	1.042	1.030							
2009				1.113	1.077	1.054	1.037								
2010				1.111	1.067	1.052									
2011			1.174	1.111	1.067										
2012		1.300	1.164	1.106											
2013	1.572	1.282	1.156												
2014	1.560	1.269													
2015	1.539														

- Selected (c) 1.539 1.269 1.156 1.106 1.067 1.052 1.037 1.030 1.030 1.026 1.021 1.017 1.016 1.014 1.014
- Cumulative 4.026 2.616 2.062 1.783 1.612 1.511 1.437 1.385 1.345 1.305 1.272 1.246 1.225 1.206 1.189
- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.  
 (b) These factors are adjusted for the following impacts: (i) reduction of historical outstanding medical losses paid prior to January 1, 2013 by the estimated 4.2% cost savings due to applicable SB 863 provisions; (ii) adjustment 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.  
 (c) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and three-year average for the subsequent age-to-age factors.

Paid Medical Loss Development Factors (Continued)

Unadjusted (a) Accident Year	213/201	225/213	237/225	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369	393/381	393Inc/393Pd (d)	ULT/393Inc (e)
1982										1.007	1.008	1.006	1.006	1.004	1.004	1.003	1.029	
1983									1.004	1.005	1.004	1.004	1.004	1.004	1.004	1.003	1.030	
1984								1.003	1.003	1.003	1.004	1.004	1.002	1.003	1.003	1.003	1.035	
1985							1.006	1.004	1.003	1.003	1.004	1.004	1.003	1.002	1.003	1.002	1.033	
1986						1.004	1.005	1.004	1.005	1.005	1.005	1.005	1.006	1.005	1.004	1.002	1.020	
1987					1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.003	1.003	1.003	1.004	1.021	
1988				1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.003	1.003					
1989			1.007	1.005	1.005	1.007	1.007	1.006	1.005	1.005	1.003	1.003						
1990		1.005	1.005	1.005	1.005	1.006	1.004	1.004	1.003	1.003	1.002							
1991	1.007	1.006	1.005	1.005	1.006	1.005	1.006	1.005	1.005	1.003								
1992	1.009	1.008	1.002	1.006	1.008	1.007	1.005	1.004	1.005									
1993	1.011	1.011	1.010	1.009	1.013	1.008	1.007	1.006										
1994	1.013	1.009	1.011	1.010	1.010	1.007	1.009											
1995	1.011	1.015	1.014	1.012	1.009	1.013												
1996	1.014	1.013	1.013	1.009	1.007													
1997	1.015	1.011	1.007	1.006														
1998	1.015	1.011	1.009															
1999	1.013	1.010																
2000	1.010																	

Adjusted (b) Accident Year	213/201	225/213	237/225	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369	393/381	393Inc/393Pd (d)	ULT/393Inc (e)
1982																	1.029	
1983																1.003	1.030	
1984															1.003	1.003	1.035	
1985															1.003	1.002	1.033	
1986														1.002	1.005	1.005	1.020	
1987														1.003			1.021	
1988																		
1989																		
1990									1.003	1.005	1.002							
1991									1.003	1.003	1.003							
1992									1.005	1.003	1.002							
1993																		
1994					1.011	1.009	1.010	1.007										
1995				1.013	1.009	1.014												
1996			1.014	1.007	1.008													
1997		1.012	1.007	1.007		1.009	1.007	1.007										
1998	1.016	1.011	1.010															
1999	1.014	1.011																
2000	1.011																	
Selected (c)	1.014	1.011	1.010	1.010	1.009	1.010	1.008	1.006	1.004	1.004	1.003	1.003	1.004	1.003	1.004	1.003	1.028	
Cumulative	1.173	1.157	1.144	1.133	1.122	1.112	1.101	1.092	1.086	1.082	1.078	1.075	1.071	1.067	1.063	1.060	1.028	

(d) Six-year averages of the 393Inc/393Pd factors are selected.  
(e) The ULT/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Age 237, Incurred from Age 237 to Ultimate

Accident Year	Age-to-Age (in months)															
	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189	213/201
1992																
1993																
1994																
1995																
1996																
1997																
1998																
1999																
2000																
2001																
2002																
2003																
2004																
2005																
2006																
2007																
2008																
2009																
2010																
2011																
2012																
2013																
2014																
2015																
Selected (a)	1.776(d)	1.297(d)	1.146(d)	1.089(d)	1.053(d)	1.043	1.034	1.024	1.022	1.017	1.013	1.009	1.007	1.006	1.005	1.003
Cumulative Unadjusted for Impact of SB 863	3.780	2.128	1.640	1.432	1.315	1.249	1.198	1.158	1.131	1.107	1.089	1.075	1.065	1.058	1.052	1.047
Cumulative Adjusted for Impact of SB 863 (b)	3.987	2.244	1.730	1.460	1.315	1.249	1.198	1.158	1.131	1.107	1.089	1.075	1.065	1.058	1.052	1.047

- (a) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 237, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (b) The 45-to-ultimate factor for accident year 2014 and the 57-to-ultimate factor for accident year 2013 have been adjusted by 5.5% 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.)
- (c) A three-year average of the 237Inc/237Pd factor is selected.
- (d) Based on calculations shown on Exhibits 2.5.3 to 2.5.8. Each of these selections is calculated as the latest year paid indemnity age-to-age factor multiplied by an adjustment for changes in claim settlement rates.

**Selected Indemnity Development Factors - Paid to Age 237, Incurred from Age 237 to Ultimate (Continued)**

Accident Year	<u>249/237</u>	<u>261/249</u>	<u>273/261</u>	<u>285/273</u>	<u>297/285</u>	<u>309/297</u>	<u>321/309</u>	<u>333/321</u>	<u>345/333</u>	<u>357/345</u>	<u>369/357</u>	<u>381/369</u>	<u>393/381</u>	<u>ULT/393Inc (e)</u>
1981								1.003	0.999	1.001				
1982						1.000	1.001	1.000	1.001	1.002				
1983						1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	
1984					0.999	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	
1985				1.000	1.000	1.001	1.001	1.000	1.002	1.001	1.000	1.000	1.000	
1986			1.000	1.001	1.000	1.001	1.002	1.002	1.000	0.999	1.000	1.000		
1987		1.000	1.000	1.000	1.001	1.002	1.000	1.001	1.000	1.001	1.000			
1988	1.001	1.000	1.000	1.002	1.002	1.000	1.000	1.001	1.000	1.000				
1989	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.001	1.000					
1990	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000						
1991	1.000	1.001	1.000	1.000	1.000	1.000	1.000							
1992	1.001	1.001	1.001	1.000	1.000	1.000								
1993	1.001	1.001	1.000	1.000	1.000									
1994	1.000	1.001	1.001	1.000										
1995	1.001	1.000	1.000											
1996	1.001	1.002												
1997	1.000													
Selected (a)	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.000	1.001	1.000	1.000	1.000	
Cumulative	1.010	1.010	1.009	1.008	1.008	1.008	1.008	1.007	1.006	1.006	1.005	1.005	1.005	1.005

(e) The ULT/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						108,609
2009					103,782	103,970
2010				105,788	106,139	106,400
2011			106,302	107,108	107,505	107,740
2012		111,332	113,048	113,874	114,339	
2013	113,482	118,394	120,014	120,929		
2014	127,113	132,802	134,596			
2015	132,682	138,240				
2016	134,945					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>	<u>81-Ultimate</u>
2009					1.002	
2010				1.003	1.002	
2011			1.008	1.004	1.002	
2012		1.015	1.007	1.004		
2013	1.043	1.014	1.008			
2014	1.045	1.014				
2015	1.042					
Latest Year	1.042	1.014	1.008	1.004	1.002	
Cumulative	1.075	1.031	1.018	1.010	1.006	1.004

Acc. Year	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Ult. Claim Counts	145,019	142,587	136,978	122,138	115,012	108,138

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						95,642
2009					86,558	91,318
2010				83,502	90,094	94,997
2011			75,877	85,915	92,484	97,106
2012		67,025	82,407	92,807	99,905	
2013	50,383	72,601	89,383	100,669		
2014	57,388	82,928	101,807			
2015	61,417	89,558				
2016	65,775					

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						87.6%
2009					82.8%	87.3%
2010				78.2%	84.4%	89.0%
2011			70.2%	79.4%	85.5%	89.8%
2012		58.3%	71.7%	80.7%	86.9%	
2013	41.3%	59.4%	73.2%	82.4%		
2014	41.9%	60.5%	74.3%			
2015	43.1%	62.8%				
2016	45.4%					

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						98,052
2009					90,833	93,901
2010				88,022	92,765	95,898
2011			80,372	89,130	93,934	97,106
2012		72,239	85,481	94,796	99,905	
2013	55,397	76,714	90,777	100,669		
2014	62,128	86,035	101,807			
2015	64,672	89,558				
2016	65,775					

F. Average Paid Indemnity per Closed Claim

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						16,658
2009					15,746	17,549
2010				13,919	16,197	17,934
2011			11,346	14,198	16,360	17,927
2012		8,027	11,709	14,392	16,466	
2013	4,362	8,380	12,078	14,764		
2014	4,572	9,066	12,972			
2015	5,020	9,828				
2016	5,397					

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

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

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

G. Adjusted Average Paid Indemnity per Closed Claim (c)

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						17,609
2009					17,357	18,565
2010				15,444	17,122	18,309
2011			12,545	15,218	16,837	17,927
2012		9,123	12,445	14,946	16,466	
2013	5,054	9,166	12,382	14,764		
2014	5,192	9,616	12,972			
2015	5,426	9,828				
2016	5,397					

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

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						1,726,587
2009					1,576,588	1,743,225
2010				1,359,393	1,588,304	1,755,793
2011			1,008,240	1,356,406	1,581,535	1,740,835
2012		659,002	1,063,858	1,416,799	1,645,034	
2013	279,990	703,163	1,124,005	1,486,322		
2014	322,539	827,352	1,320,626			
2015	350,920	880,155				
2016	354,987					

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

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						570,166
2009					641,369	537,003
2010				699,248	588,239	476,359
2011			739,164	639,634	524,096	422,818
2012		755,345	729,448	621,607	508,362	
2013	562,838	769,112	727,506	594,853		
2014	635,592	876,491	815,130			
2015	670,945	876,975				
2016	668,322					

- (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	21	33	45	57	69	81
2008						43,971
2009					37,237	42,444
2010				31,376	36,662	41,775
2011			24,295	30,181	34,891	39,761
2012		17,048	23,806	29,506	35,220	
2013	8,920	16,795	23,751	29,361		
2014	9,116	17,574	24,860			
2015	9,415	18,014				
2016	9,662					

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						-105,969
2009					-159,188	-109,633
2010				-141,820	-97,924	-37,639
2011			-109,204	-97,033	-50,592	
2012		-88,888	-73,180	-58,688		
2013	-44,724	-69,080	-33,108			
2014	-43,208	-54,603				
2015	-30,645					

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						464,197
2009					482,181	427,370
2010				557,428	490,315	438,720
2011			629,959	542,601	473,505	422,818
2012		666,456	656,267	562,920	508,362	
2013	518,114	700,033	694,397	594,853		
2014	592,384	821,889	815,130			
2015	640,300	876,975				
2016	668,322					

- (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)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						2,190,784
2009					2,058,770	2,170,595
2010				1,916,821	2,078,619	2,194,513
2011			1,638,199	1,899,007	2,055,039	2,163,652
2012		1,325,458	1,720,126	1,979,719	2,153,396	
2013	798,103	1,403,196	1,818,402	2,081,174		
2014	914,922	1,649,240	2,135,756			
2015	991,220	1,757,130				
2016	1,023,310					

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2008					
2009					1.054
2010				1.084	1.056
2011			1.159	1.082	1.053
2012		1.298	1.151	1.088	
2013	1.758	1.296	1.145		
2014	1.803	1.295			
2015	1.773				
Latest Year	1.773	1.295	1.145	1.088	1.053
3-Year Average	1.778	1.296	1.152	1.085	1.054

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					1.068
2010				1.100	1.065
2011			1.162	1.096	1.062
2012		1.310	1.155	1.100	
2013	1.760	1.312	1.152		
2014	1.813	1.312			
2015	1.794				

(h) Each amount is the sum of the adjusted paid indemnity on closed claims (Item H) and the adjusted paid indemnity on open claims (Item L).

(i) Development factors are based on paid indemnity losses from the same insurer mix as that used in the adjustment for changes in claim settlement rates and applied in the calculation of the development factors in Item N.

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

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

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					-1.24%
2010				-1.41%	-0.84%
2011			-0.25%	-1.22%	-0.87%
2012		-0.94%	-0.37%	-1.13%	
2013	-0.12%	-1.22%	-0.62%		
2014	-0.59%	-1.27%			
2015	-1.20%				

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					1.055
2010				1.085	1.057
2011			1.162	1.085	1.053
2012		1.304	1.153	1.089	
2013	1.766	1.301	1.146		
2014	1.808	1.297			
2015	1.776				
Latest Year	1.776	1.297	1.146	1.089	1.053
3-Year Average	1.784	1.301	1.154	1.086	1.055

(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

Selected Medical Development Factors - Paid to Age 237, Incurred from Age 237 to Ultimate

Unadjusted (a) Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189	213/201	225/213	237/225	237Inc/237Pd (d)
1992															1.016	1.009	1.008	1.002	1.061
1993														1.013	1.012	1.011	1.011	1.010	1.105
1994													1.017	1.013	1.012	1.013	1.009	1.011	1.106
1995												1.021	1.018	1.019	1.015	1.014	1.015	1.014	1.117
1996										1.024		1.021	1.019	1.015	1.014	1.014	1.013	1.013	1.101
1997									1.027		1.022	1.020	1.016	1.015	1.013	1.015	1.011	1.007	1.092
1998									1.033	1.030	1.026	1.019	1.018	1.017	1.017	1.015	1.011	1.009	1.094
1999									1.033	1.026	1.023	1.020	1.016	1.018	1.016	1.013	1.010		
2000									1.030	1.023	1.020	1.017	1.013	1.012	1.011	1.010			
2001						1.047	1.037	1.029	1.025	1.023	1.020	1.016	1.014	1.012					
2002						1.061	1.047	1.040	1.035	1.030	1.026	1.020	1.016	1.012					
2003							1.050	1.040	1.030	1.027	1.023	1.020	1.016	1.012					
2004			1.135				1.059	1.042	1.037	1.034	1.028	1.020	1.014						
2005		1.232					1.053	1.042	1.033	1.024	1.018								
2006		1.252					1.058	1.049	1.035	1.028									
2007	1.472	1.494	1.260	1.157	1.103	1.081	1.063	1.043	1.034	1.024									
2008	1.500	1.271	1.162	1.113	1.081	1.054	1.039	1.028											
2009	1.527	1.282	1.180	1.119	1.074	1.051	1.035												
2010	1.551	1.305	1.176	1.106	1.072	1.049													
2011	1.566	1.290	1.165	1.106	1.064														
2012	1.572	1.288	1.158	1.102															
2013	1.560	1.277	1.154																
2014	1.566																		
2015	1.539																		

Adjusted (b) Accident Year	33/21	45/33	57/45	69/57	81/69	93/81	105/93	117/105	129/117	141/129	153/141	165/153	177/165	189/177	201/189	213/201	225/213	237/225	237Inc/237Pd (d)
1996																			
1997																			
1998																			
1999																			
2000																			
2001																			
2002																			
2003																			
2004																			
2005																			
2006																			
2007																			
2008																			
2009																			
2010																			
2011																			
2012																			
2013																			
2014																			
2015																			

Selected (c) Cumulative	1.530(e)	1.258(e)	1.149(e)	1.096(e)	1.059(e)	1.052	1.037	1.030	1.030	1.026	1.021	1.017	1.016	1.014	1.014	1.014	1.011	1.010	1.096
	3.909	2.555	2.032	1.768	1.612	1.522	1.447	1.395	1.355	1.315	1.281	1.255	1.234	1.215	1.198	1.182	1.166	1.153	

- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.
- (b) These factors are adjusted for the following impacts: (i) reduction of historical outstanding medical losses paid prior to January 1, 2013 by the estimated 4.2% cost savings due to applicable SB 863 provisions; (ii) adjustment 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.
- (c) Selections are latest year for the 21-to-33 month through 105-to-117 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 237, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (d) A three-year average of the 237Inc/237Pd factor is selected.
- (e) Based on calculations shown on Exhibits 2.6.3 to 2.6.8. Each of these selections is calculated as the latest year paid medical age-to-age factor multiplied by an adjustment for changes in claim settlement rates.

Selected Medical Development Factors - Paid to Age 237, Incurred from Age 237 to Ultimate (Continued)

Accident Year	Age-to-Age (in months)													ULT/393Inc (f)
	249/237	261/249	273/261	285/273	297/285	309/297	321/309	333/321	345/333	357/345	369/357	381/369	393/381	
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
Selected (c)	1.002	1.002	1.002	1.000	1.000	1.002	1.002	1.003	1.001	1.002	1.000	1.000	0.999	
Cumulative	1.041	1.040	1.038	1.036	1.036	1.036	1.035	1.033	1.030	1.030	1.028	1.027	1.028	

(f) The ULT/393Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 117-to-129 through 345-to-357 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						106,898
2009					102,420	102,608
2010				104,388	104,738	104,996
2011			106,302	107,108	107,505	107,740
2012		111,332	113,048	113,874	114,339	
2013	113,482	118,394	120,014	120,929		
2014	127,113	132,802	134,596			
2015	132,682	138,240				
2016	134,945					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>	<u>81-Ultimate</u>
2009					1.002	
2010				1.003	1.002	
2011			1.008	1.004	1.002	
2012		1.015	1.007	1.004		
2013	1.043	1.014	1.008			
2014	1.045	1.014				
2015	1.042					
Latest Year	1.042	1.014	1.008	1.004	1.002	
Cumulative	1.075	1.031	1.018	1.010	1.006	1.004

Acc. Year	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Ult. Claim Counts	145,021	142,589	136,980	122,140	115,014	108,140

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						94,061
2009					85,330	90,062
2010				82,287	88,821	93,685
2011			75,877	85,915	92,484	97,106
2012		67,025	82,407	92,807	99,905	
2013	50,383	72,601	89,383	100,669		
2014	57,388	82,928	101,807			
2015	61,417	89,558				
2016	65,775					

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	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						87.5%
2009					82.7%	87.3%
2010				78.1%	84.3%	88.9%
2011			70.2%	79.4%	85.5%	89.8%
2012		58.3%	71.6%	80.7%	86.9%	
2013	41.3%	59.4%	73.2%	82.4%		
2014	41.9%	60.5%	74.3%			
2015	43.1%	62.8%				
2016	45.4%					

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						96,514
2009					89,647	92,674
2010				86,860	91,541	94,633
2011			80,372	89,130	93,934	97,106
2012		72,239	85,481	94,796	99,905	
2013	55,397	76,714	90,777	100,669		
2014	62,128	86,035	101,807			
2015	64,672	89,558				
2016	65,775					

F. Average Paid Medical per Closed Indemnity Claim

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						20,271
2009					19,209	21,877
2010				16,933	19,994	22,608
2011			12,852	16,384	19,578	21,769
2012		8,848	12,848	16,092	18,641	
2013	4,773	8,799	12,634	15,783		
2014	4,870	9,132	12,922			
2015	5,199	9,573				
2016	5,510					

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

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

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

G. Adjusted Average Paid Medical per Closed Indemnity Claim (c)

Accident	Evaluated as of (in months)					
Year	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						19,524
2009					21,630	23,410
2010				19,022	21,417	23,214
2011			14,328	17,877	20,240	21,769
2012		10,040	13,732	16,769	18,641	
2013	5,480	9,615	12,986	15,783		
2014	5,472	9,669	12,922			
2015	5,580	9,573				
2016	5,510					

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

Accident	Evaluated as of (in months)					
Year	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						1,884,348
2009					1,939,043	2,169,478
2010				1,652,252	1,960,534	2,196,853
2011			1,151,587	1,593,334	1,901,265	2,113,871
2012		725,293	1,173,869	1,589,639	1,862,322	
2013	303,558	737,591	1,178,872	1,588,862		
2014	339,994	831,889	1,315,587			
2015	360,852	857,294				
2016	362,413					

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

Accident	Evaluated as of (in months)					
Year	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						840,499
2009					926,226	796,938
2010				960,151	843,911	702,639
2011			949,957	860,569	722,454	595,607
2012		888,977	892,330	786,536	661,252	
2013	665,160	851,132	815,502	679,096		
2014	733,688	919,796	857,130			
2015	747,109	887,393				
2016	750,706					

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

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

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

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						65,475
2009					54,197	63,521
2010				43,444	53,019	62,120
2011			31,223	40,606	48,096	56,461
2012		20,064	29,122	37,335	45,195	
2013	10,542	18,587	26,623	33,723		
2014	10,523	18,442	25,149			
2015	10,484	16,474				
2016	8,365					

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	21	33	45	57	69	81
2008						-160,610
2009					-233,968	-165,918
2010				-198,668	-144,213	-58,890
2011			-140,347	-130,549	-69,740	
2012		-104,614	-89,521	-74,259		
2013	-52,855	-76,446	-37,113			
2014	-49,877	-57,301				
2015	-34,124					

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

Accident	Evaluated as of (in months)					
Year	21	33	45	57	69	81
2008						679,890
2009					692,258	631,020
2010				761,483	699,698	643,749
2011			809,610	730,020	652,714	595,607
2012		784,364	802,809	712,277	661,252	
2013	612,305	774,686	778,389	679,096		
2014	683,811	862,496	857,130			
2015	712,985	887,393				
2016	750,706					

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

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



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

M. Paid Medical on Medical-Only Claims (in \$000)

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						208,825
2009					195,548	197,486
2010				190,579	192,726	194,740
2011			182,032	185,522	188,640	192,147
2012		184,326	188,670	193,320	197,720	
2013	173,451	184,342	190,896	197,733		
2014	211,509	224,459	233,200			
2015	222,971	236,185				
2016	236,313					

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

Accident Year	Evaluated as of (in months)					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>
2008						2,773,063
2009					2,826,850	2,997,984
2010				2,636,312	2,888,001	3,071,899
2011			2,318,600	2,704,252	2,950,018	3,117,529
2012		1,693,983	2,165,348	2,495,237	2,721,294	
2013	1,089,314	1,696,619	2,148,157	2,465,691		
2014	1,235,314	1,918,844	2,405,916			
2015	1,296,808	1,980,872				
2016	1,349,431					

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					1.061
2010				1.095	1.064
2011			1.166	1.091	1.057
2012		1.278	1.152	1.091	
2013	1.558	1.266	1.148		
2014	1.553	1.254			
2015	1.527				
Latest Year	1.527	1.254	1.148	1.091	1.057

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

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

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

P. Paid Medical Loss Development Factors (i)

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					1.074
2010				1.105	1.072
2011			1.161	1.106	1.064
2012		1.284	1.156	1.100	
2013	1.552	1.276	1.155		
2014	1.553	1.265			
2015	1.536				

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					-1.24%
2010				-0.90%	-0.76%
2011			0.49%	-1.34%	-0.71%
2012		-0.46%	-0.30%	-0.88%	
2013	0.38%	-0.74%	-0.58%		
2014	0.04%	-0.90%			
2015	-0.57%				

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

Accident Year	Evaluated as of (in months)				
	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>
2009					1.066
2010				1.103	1.069
2011			1.180	1.096	1.059
2012		1.294	1.160	1.096	
2013	1.578	1.273	1.149		
2014	1.561	1.258			
2015	1.530				
Latest Year	1.530	1.258	1.149	1.096	1.059
3-Year Average	1.556	1.275	1.163	1.098	1.065

- (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 September 30, 2017**

		Development Factors			
			Cumulative		
	(1)	(2)	(3)	(4)	(5)
Accident Year	Paid or Incurred Loss <u>Ratio (a)</u>	<u>Annual (b)</u>	Unadjusted for Impact of <u>SB 863 (b)</u>	Adjusted for Impact of <u>SB 863 (b)</u>	Projected Ultimate <u>Loss Ratio</u>
					(5) = (1) x (4)
1985	0.446	1.000	1.005	1.005	0.449
1986	0.396	1.000	1.005	1.005	0.398
1987	0.346	1.000	1.005	1.005	0.347
1988	0.330	1.000	1.005	1.005	0.332
1989	0.343	1.001	1.006	1.006	0.345
1990	0.397	1.000	1.006	1.006	0.400
1991	0.424	1.001	1.007	1.007	0.427
1992	0.349	1.001	1.008	1.008	0.352
1993	0.287	1.000	1.008	1.008	0.290
1994	0.327	1.000	1.008	1.008	0.330
1995	0.473	1.000	1.008	1.008	0.476
1996	0.530	1.001	1.009	1.009	0.534
1997	0.599	1.001	1.010	1.010	0.605
1998	0.651	1.001	1.010	1.010	0.657
1999	0.667	1.004	1.038	1.038	0.693
2000	0.574	1.003	1.042	1.042	0.598
2001	0.474	1.005	1.047	1.047	0.496
2002	0.351	1.005	1.052	1.052	0.370
2003	0.230	1.006	1.058	1.058	0.243
2004	0.136	1.007	1.065	1.065	0.145
2005	0.115	1.009	1.075	1.075	0.124
2006	0.148	1.013	1.089	1.089	0.161
2007	0.201	1.017	1.107	1.107	0.222
2008	0.250	1.022	1.131	1.131	0.283
2009	0.286	1.024	1.158	1.158	0.331
2010	0.270	1.034	1.198	1.198	0.324
2011	0.242	1.043	1.249	1.249	0.302
2012	0.207	1.053	1.315	1.315	0.273
2013	0.166	1.089	1.432	1.460	0.243
2014	0.138	1.146	1.640	1.730	0.239
2015	0.106	1.297	2.128	2.244	0.238
2016	0.059	1.776	3.780	3.987	0.233

- (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 September 30, 2017**

	(1)	(2)	(3)	(4)	(5)	(6)
	<b>Adjusted for SB 863</b>					
Accident Year	Unadjusted Paid or Incurred Loss Ratio (a)	Adjusted Paid or Incurred Loss Ratio (b)	Development Factors		Adjusted Developed Loss Ratio (d)	Projected Ultimate Loss Ratio
			Annual (c)	Cumulative	(2) x (4)	(1) + ((5) - (2))
1985	0.350	0.350	1.001	1.028	0.360	0.360
1986	0.333	0.333	0.999	1.027	0.342	0.342
1987	0.314	0.314	1.000	1.027	0.322	0.322
1988	0.305	0.305	1.000	1.028	0.313	0.313
1989	0.325	0.325	1.002	1.030	0.335	0.335
1990	0.367	0.367	1.001	1.030	0.378	0.378
1991	0.384	0.384	1.003	1.033	0.397	0.397
1992	0.319	0.319	1.002	1.035	0.330	0.330
1993	0.267	0.267	1.002	1.036	0.276	0.276
1994	0.308	0.308	1.000	1.036	0.319	0.319
1995	0.454	0.454	1.000	1.036	0.470	0.470
1996	0.488	0.488	1.002	1.038	0.506	0.506
1997	0.545	0.545	1.002	1.040	0.567	0.567
1998	0.658	0.658	1.002	1.041	0.685	0.685
1999	0.654	0.606	1.010	1.153	0.699	0.747
2000	0.592	0.548	1.011	1.166	0.639	0.683
2001	0.519	0.481	1.014	1.182	0.569	0.607
2002	0.400	0.370	1.014	1.198	0.444	0.473
2003	0.253	0.235	1.014	1.215	0.285	0.304
2004	0.170	0.158	1.016	1.234	0.195	0.208
2005	0.165	0.153	1.017	1.256	0.193	0.204
2006	0.210	0.196	1.021	1.282	0.251	0.265
2007	0.291	0.271	1.026	1.315	0.357	0.376
2008	0.357	0.335	1.030	1.355	0.453	0.476
2009	0.407	0.383	1.030	1.396	0.535	0.559
2010	0.390	0.370	1.037	1.447	0.536	0.556
2011	0.321	0.308	1.052	1.522	0.468	0.482
2012	0.262	0.255	1.059	1.613	0.411	0.418
2013	0.198	0.196	1.096	1.768	0.346	0.349
2014	0.155	0.155	1.149	2.032	0.314	0.315
2015	0.119	0.119	1.258	2.556	0.305	0.305
2016	0.077	0.077	1.530	3.911	0.303	0.303

- (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 June 30, 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					
Accident Year	(1) Annual Benefit Change Prior to Frequency Adjustments (a)	(2) Frequency Adjustments (a)	(3) Annual Impact on Indemnity Benefits Due to Wage Inflation (b)	(4) Annual Cost Impact on Indemnity (c)	(5) Composite Indemnity Adjustment Factor (d)
1985	0.0	0.0	2.0	2.0	1.518
1986	0.0	0.0	1.6	1.6	1.494
1987	0.0	0.0	1.9	1.9	1.466
1988	0.0	0.0	1.5	1.5	1.444
1989	0.0	0.0	1.5	1.5	1.423
1990	2.3	19.9	1.7	24.7	1.141
1991	4.9	14.8	0.8	21.4	0.940
1992	1.8	-8.3	1.6	-5.2	0.991
1993	0.2	-18.1	0.4	-17.6	1.203
1994	-5.1	0.2	0.6	-4.3	1.257
1995	6.3	0.6	1.0	8.0	1.164
1996	5.3	0.4	1.2	7.0	1.088
1997	9.7	0.2	1.6	11.7	0.974
1998	6.5	0.0	1.8	8.4	0.899
1999	5.7	0.0	2.1	7.9	0.833
2000	3.9	0.0	3.1	7.1	0.777
2001	-0.3	0.0	0.2	-0.1	0.778
2002	-0.7	0.0	0.2	-0.5	0.799 (e)
2003	7.3	0.0	1.1	8.5	0.798 (e)
2004	-6.0	-13.7	1.6	-17.6	1.100 (e)
2005	-31.6	-15.3	1.1	-41.5	1.493
2006	5.6	-5.7	1.6	1.2	1.476
2007	1.6	0.0	1.6	3.2	1.430
2008	4.8	0.6	0.7	6.2	1.346
2009	0.4	1.4	0.2	2.0	1.320
2010	0.4	0.0	1.0	1.4	1.302
2011	0.0	0.0	1.6	1.6	1.281
2012	0.3	0.0	2.1	2.4	1.251
2013	2.2	0.2	0.4	2.8	1.217
2014	7.0	1.5	1.7	10.4	1.102
2015	0.3	0.0	2.2	2.5	1.075
2016	0.3	0.0	1.5	1.8	1.056
2017	0.5	0.0	1.1	1.6	
2018	0.4	0.0	2.1	2.5	
1/1/2019	0.2 (Annual 0.4)	0.0	1.2 (Annual 2.4)	1.4	

- (a) Based on WCIRB evaluations of the average impact of legislative changes on the cost of indemnity benefits. These annual changes in benefits reflect the WCIRB's retrospective estimates of the cost impact of recent legislation, 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)  $\{ [\text{Column (1)} / 100 + 1.0] \times [\text{Column (2)} / 100 + 1.0] \times [\text{Column (3)} / 100 + 1.0] - 1.0 \} \times 100$ .
- (d) These factors represent the combined impact of the annual benefit changes on claim severity shown in Column (1), claim frequencies shown in Column (2) and wage inflation impact on benefits shown in Column (3), adjusted to the 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.

**Annual Medical Cost Level Change - Non-Legislative**

Accident Year	(1) Proportion of Medical Subject to Fee Schedule (a)	(2) Proportion of Medical Not Subject to Fee Schedule (a)	(3) Impact of Fee Schedule Change on Total Medical (b)	(4) Change in Medical CPI (c)	(5) Impact of CPI Change on Total Medical (d)	(6) Annual 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 MCCC 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 weighted average of 0% and Column (4), with Columns (1) and (2) from prior years as weights. (i) 1993's non-free proportion is reduced by 13.8% due to the new medical-legal fee schedule enacted in 1994. (ii) 1998's non-free proportion is reduced by 7.7% due to the Inpatient Hospital Fee Schedule (IHFS) effective 4/1/1999. (iii) 2002's non-free proportion is reduced by 7.6% due to the new pharmaceutical fee schedule effective 1/1/2003. (iv) 2003's non-free proportion is reduced by 17.2% due to the outpatient fee schedule effective 1/1/2004. (v) Given the anticipated impact of legislative reform, a 0% inflation rate has been assumed for 2004 and 2005.
- (e) Column (6) = Column (3) + Column (5).

**Annual Medical Cost Level Change - Legislative**

Accident Year	(1) Annual Legislative Cost Impact on <u>Medical Severity(a)</u>	(2) Annual Legislative Cost Impact on Medical Due to <u>Frequency Changes(b)</u>	(3) Annual Total Legislative Cost <u>Impact on Medical(c)</u>
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)  $[\text{Column (1)} + 1.0] \times [\text{Column (2)} + 1.0] - 1.0$

**Total Medical Cost Level Factors**

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical(b)	(3) Total Annual Cost Impact on Medical(c)	(4) Composite Medical On-level Factor(d)
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)  $\text{Column (3)} = [1.0 + \text{Column (1)}] \times [1.0 + \text{Column (2)}] - 1.0$ .

(d) These factors adjust the annual impact shown in Column (3) to the 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**

<u>Year</u>	<u>Annual Wage Level Change</u>	<u>Factor to a 1/1/2019 Wage Level</u>
1985	5.7	3.209
1986	4.7	3.064
1987	5.6	2.902
1988	4.4	2.780
1989	4.3	2.665
1990	5.0	2.538
1991	2.3	2.481
1992	4.7	2.370
1993	1.2	2.342
1994	1.8	2.300
1995	2.9	2.235
1996	3.4	2.162
1997	4.7	2.065
1998	5.2	1.963
1999	6.2	1.848
2000	9.0	1.696
2001	0.6	1.685
2002	0.5	1.677
2003	3.3	1.624
2004	4.7	1.551
2005	3.1	1.504
2006	4.6	1.438
2007	4.5	1.376
2008	2.1	1.348
2009	0.5	1.341
2010	3.0	1.302
2011	3.1	1.263
2012	4.1	1.213
2013	0.7	1.205
2014	3.3	1.166
2015	4.3	1.118
2016	2.9	1.087
Projected:		
2017	2.1	
2018	4.0	
1/1/2019	2.3	(Annual = 4.7)

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

Premium Adjustment Factors

	(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 Rates (b)	Factor to Industry Average Filed Pure Premium Rate Level as of July 1, 2017 (c)	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of July 1, 2017 (d)	Adjustment to Remove Surcharge Premium (e)	Average 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	3.209	---	---	0.974	0.991	0.984	1.026	---	3.069
1986	3.064	---	---	0.890	0.991	0.983	1.026	---	2.680
1987	2.902	---	---	0.782	0.992	0.983	1.026	---	2.234
1988	2.780	---	---	0.700	0.993	0.963	1.026	---	1.955
1989	2.665	---	---	0.689	0.993	0.945	1.026	---	1.881
1990	2.538	---	---	0.672	0.991	0.942	1.026	---	1.749
1991	2.481	---	---	0.622	0.987	0.939	1.026	---	1.581
1992	2.370	---	---	0.597	0.982	0.940	1.026	---	1.441
1993	2.342	---	---	0.589	0.981	0.949	1.026	---	1.390
1994	2.300	---	---	0.675	0.986	0.948	1.026	---	1.574
1995	2.235	---	---	0.913	0.995	0.958	1.026	---	2.067
1996	2.162	1.024	0.970	0.947	1.000	0.935	1.026	---	2.135
1997	2.065	0.989	0.968	0.979	1.000	0.949	1.026	---	2.076
1998	1.963	0.965	1.009	1.046	1.000	0.959	1.026	---	2.086
1999	1.848	0.972	1.019	1.048	1.000	0.954	1.026	---	1.980
2000	1.696	1.006	0.924	0.918	1.000	0.970	1.026	---	1.565
2001	1.685	1.029	0.814	0.791	1.000	0.969	1.026	---	1.341
2002	1.677	1.157	0.729	0.630	1.000	0.991	1.026	---	1.039
2003	1.624	1.267	0.596	0.470	1.000	1.005	1.026	---	0.741
2004	1.551	1.397	0.606	0.434	1.000	0.981	1.026	---	0.668
2005	1.504	1.470	0.730	0.497	1.000	0.982	1.026	---	0.741
2006	1.438	1.447	0.940	0.650	1.000	0.956	1.026	---	0.952
2007	1.376	1.493	1.281	0.858	1.000	0.931	1.026	0.985	1.218
2008	1.348	1.426	1.525	1.069	1.000	0.946	1.026	0.991	1.472
2009	1.341	1.366	1.503	1.100	1.000	0.937	1.026	1.034	1.587
2010	1.302	1.383	1.473	1.065	1.000	0.941	1.026	1.005	1.444
2011	1.263	1.401	1.472	1.051	1.000	0.982	1.026	---	1.317
2012	1.213	1.222	1.213	0.993	1.000	1.000	1.026	---	1.174
2013	1.205	1.138	0.977	0.859	1.000	0.983	1.026	---	1.025
2014	1.166	1.126	0.900	0.799	1.000	0.961	1.026	---	0.945
2015	1.118	1.108	0.874	0.789	1.000	0.952	1.026	---	0.903
2016	1.087	1.147	0.941	0.820	1.000	0.952	1.026	---	0.913

- (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 July 1, 2017 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory July 1, 2017 pure premium rate (\$2.00) to the industry average filed pure premium rate as of July 1, 2017 (\$2.34).
- (d)  $(2b) \div (2a)$ . This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of July 1, 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)  $(1) \times (2c) \times (3) \times (6) \div [(4) \times (5)]$  for calendar years 2007 to 2010.  $(1) \times (2c) \times (3) \div [(4) \times (5)]$  for all other calendar years.

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

AY	Annual %	Annual Log Differences						
	Changes Intra-	Intra-Class Indemnity Frequency			AY+1		Economic	CalOSHA
	Class Ind Freq	per \$M Exposure at PY 2015 Level			Indemnity	Cumulative	Variables	Dummy
	Total	Total	Cumulative	Non-cum.	Benefit Level	Injury Index	(1st Prin. Comp.)	Variable
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.080	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	-0.015	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

**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 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 September 30, 2017**

Accident Year	(1) Estimated Ultimate Severity	(2) Annual % Change	(3) Indemnity Adjustment Factor(a)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	9,986	---	1.825	18,221	---
1991	10,924	9.4%	1.726	18,850	3.5%
1992	11,026	0.9%	1.668	18,396	-2.4%
1993	12,015	9.0%	1.658	19,926	8.3%
1994	12,979	8.0%	1.737	22,545	13.1%
1995	14,557	12.2%	1.618	23,553	4.5%
1996	16,314	12.1%	1.518	24,771	5.2%
1997	19,382	18.8%	1.362	26,404	6.6%
1998	21,232	9.5%	1.257	26,678	1.0%
1999	23,308	9.8%	1.164	27,137	1.7%
2000	24,708	6.0%	1.087	26,855	-1.0%
2001	27,212	10.1%	1.088	29,607	10.2%
2002	26,295	-3.4%	1.117	29,372	-0.8%
2003	25,876	-1.6%	1.116	28,880	-1.7%
2004	21,097	-18.5%	1.327	28,002	-3.0%
2005	19,012	-9.9%	1.526	29,013	3.6%
2006	20,766	9.2%	1.422	29,538	1.8%
2007	22,602	8.8%	1.378	31,144	5.4%
2008	24,751	9.5%	1.306	32,318	3.8%
2009	25,903	4.7%	1.298	33,619	4.0%
2010	25,576	-1.3%	1.280	32,736	-2.6%
2011	25,185	-1.5%	1.260	31,728	-3.1%
2012	24,771	-1.6%	1.230	30,472	-4.0%
2013	25,057	1.2%	1.199	30,040	-1.4%
2014	26,825	7.1%	1.102	29,558	-1.6%
2015	27,508	2.5%	1.075	29,572	0.0%
2016	27,875	1.3%	1.056	29,444	-0.4%
(6) Estimated Annual Exponential Trend Based on 2005 to 2016:					-0.3%
(7) Estimated Annual Exponential Trend Based on 2011 to 2016:					-1.4%
Selected Indemnity Severity Trend:					0.7%

(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 September 30, 2017**

Accident Year	(1) Estimated Ultimate Severity(a)	(2) Annual % Change	(3) Medical Adjustment Factor(b)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	8,814	---	1.016	8,958	---
1991	9,473	7.5%	0.997	9,449	5.5%
1992	9,564	1.0%	0.965	9,226	-2.4%
1993	10,604	10.9%	0.948	10,056	9.0%
1994	11,686	10.2%	0.997	11,655	15.9%
1995	13,418	14.8%	0.990	13,284	14.0%
1996	14,461	7.8%	0.980	14,176	6.7%
1997	17,135	18.5%	0.973	16,676	17.6%
1998	21,012	22.6%	0.859	18,050	8.2%
1999	23,912	13.8%	0.745	17,807	-1.3%
2000	26,902	12.5%	0.685	18,419	3.4%
2001	32,025	19.0%	0.625	20,027	8.7%
2002	32,381	1.1%	0.650	21,043	5.1%
2003	30,933	-4.5%	0.683	21,133	0.4%
2004	28,608	-7.5%	0.905	25,903	22.6%
2005	29,486	3.1%	0.908	26,762	3.3%
2006	32,314	9.6%	0.906	29,267	9.4%
2007	36,184	12.0%	0.892	32,266	10.2%
2008	39,462	9.1%	0.891	35,175	9.0%
2009	41,549	5.3%	0.892	37,070	5.4%
2010	41,911	0.9%	0.895	37,527	1.2%
2011	38,251 (c)	---	0.919	35,159 (c)	---
2012	36,111	-5.6%	0.957	34,553	-1.7%
2013	34,176	-5.4%	0.996	34,023	-1.5%
2014	33,431	-2.2%	1.018	34,036	0.0%
2015	33,308	-0.4%	1.018	33,902	-0.4%
2016	33,964	2.0%	1.014	34,435	1.6%
Selected Medical Severity Trend:					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 September 30, 2017**

(1) Accident Year	MCCP Included				MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change
2005	29,486	---	26,762	---	27,912	---	25,333	---
2006	32,314	9.6%	29,267	9.4%	30,267	8.4%	27,413	8.2%
2007	36,184	12.0%	32,266	10.2%	33,747	11.5%	30,093	9.8%
2008	39,462	9.1%	35,175	9.0%	35,979	6.6%	32,070	6.6%
2009	41,549	5.3%	37,070	5.4%	38,047	5.7%	33,946	5.8%
2010	41,911	0.9%	37,527	1.2%	38,340	0.8%	34,330	1.1%
2011	41,969	0.1%	38,577	2.8%	38,251	-0.2%	35,159	2.4%
2012	39,596	-5.7%	37,887	-1.8%	36,111	-5.6%	34,553	-1.7%
2013	37,570	-5.1%	37,401	-1.3%	34,176	-5.4%	34,023	-1.5%
2014	36,780	-2.1%	37,445	0.1%	33,431	-2.2%	34,036	0.0%
2015	36,621	-0.4%	37,274	-0.5%	33,308	-0.4%	33,902	-0.4%
2016	37,308	1.9%	37,826	1.5%	33,964	2.0%	34,435	1.6%

Estimated Annual Exponential  
Trend Based on 2005 to 2016: 2.6%  
Trend Based on 2011 to 2016: -0.4%

Selected Medical Severity Trend: 3.0%

- (a) Estimated ultimate severities for all accident years were derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts.
- (b) Adjustments to accident years 2005 through 2010 based on WCIRB's Annual Calls for Direct California Workers' Compensation Aggregate Indemnity and Medical Costs.
- (c) Ultimate severities are on-leveled based on adjustment factors shown on Exhibit 4.4, excluding the impact of frequency.

Source: WCIRB experience calls

**Projected On-Level Accident Year  
Indemnity Loss to Industry Average Filed Pure Premium Ratios  
Based on Experience as of September 30, 2017**

Accident Year	(1) Developed Indemnity <u>Loss Ratio(a)</u>	(2) Composite Indemnity <u>Adjustment Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio <u>(1)×(2)÷(3)</u>
1985	0.449	1.518	3.069	0.222
1986	0.398	1.494	2.680	0.222
1987	0.347	1.466	2.234	0.228
1988	0.332	1.444	1.955	0.245
1989	0.345	1.423	1.881	0.261
1990	0.400	1.141	1.749	0.261
1991	0.427	0.940	1.581	0.254
1992	0.352	0.991	1.441	0.242
1993	0.290	1.203	1.390	0.251
1994	0.330	1.257	1.574	0.263
1995	0.476	1.164	2.067	0.268
1996	0.534	1.088	2.135	0.272
1997	0.605	0.974	2.076	0.284
1998	0.657	0.899	2.086	0.283
1999	0.693	0.833	1.980	0.291
2000	0.598	0.777	1.565	0.297
2001	0.496	0.778	1.341	0.288
2002	0.370	0.799	1.039	0.284
2003	0.243	0.798	0.741	0.262
2004	0.145	1.100	0.668	0.239
2005	0.124	1.493	0.741	0.250
2006	0.161	1.476	0.952	0.249
2007	0.222	1.430	1.218	0.261
2008	0.283	1.346	1.472	0.259
2009	0.331	1.320	1.587	0.276
2010	0.324	1.302	1.444	0.292
2011	0.302	1.281	1.317	0.294
2012	0.273	1.251	1.174	0.291
2013	0.243	1.217	1.025	0.288
2014	0.239	1.102	0.945	0.278
2015	0.238	1.075	0.903	0.283
2016	0.233	1.056	0.913	0.270
				Projections (d)
2017				0.274
2018				0.272
1/1/2019				0.271

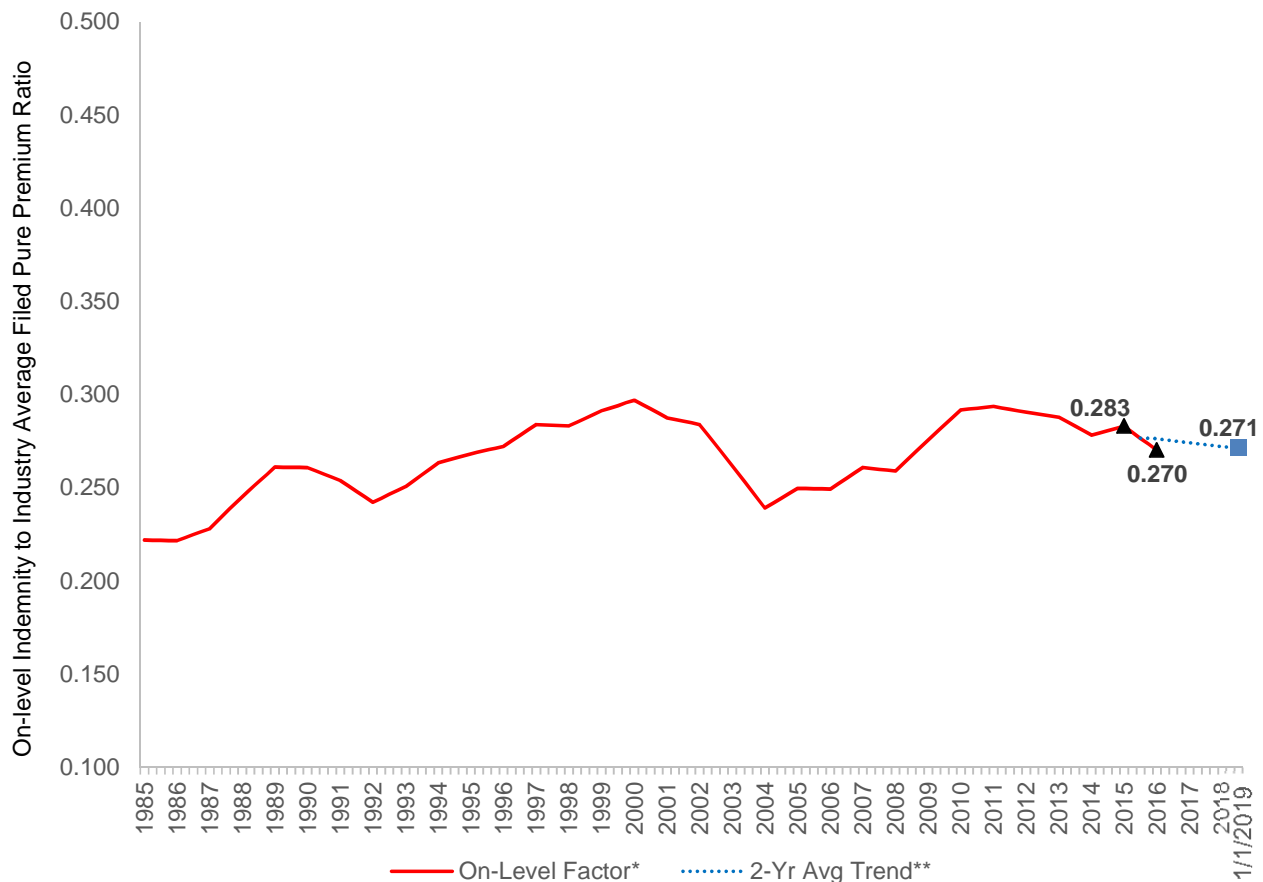
(a) See Exhibit 3.1.

(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 September 30, 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 September 30, 2017**

Accident Year	(1) Developed Medical <u>Loss Ratio(a)</u>	(2) Composite Medical <u>On-Level Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Medical to Industry Average Filed <u>Pure Premium Ratio(e)</u> (1)×(2)÷(3)
1985	0.360	0.991	3.069	0.116
1986	0.342	0.962	2.680	0.123
1987	0.322	0.927	2.234	0.134
1988	0.313	0.893	1.955	0.143
1989	0.335	0.867	1.881	0.154
1990	0.378	0.702	1.749	0.152
1991	0.397	0.601	1.581	0.151
1992	0.330	0.633	1.441	0.145
1993	0.276	0.758	1.390	0.151
1994	0.319	0.795	1.574	0.161
1995	0.470	0.784	2.067	0.178
1996	0.506	0.773	2.135	0.183
1997	0.567	0.766	2.076	0.209
1998	0.685	0.675	2.086	0.222
1999	0.699	0.585	1.980	0.206
2000	0.639	0.537	1.565	0.219
2001	0.569	0.490	1.341	0.208
2002	0.444	0.509	1.039	0.217
2003	0.285	0.534	0.741	0.206
2004	0.195	0.807	0.668	0.236
2005	0.193	0.937	0.741	0.243
2006	0.251	0.984	0.952	0.260
2007	0.357	0.966	1.218	0.283
2008	0.453	0.959	1.472	0.296
2009	0.535	0.946	1.587	0.319
2010	0.536	0.943	1.444	0.350
2011	0.468	0.960	1.317	0.341
2012	0.411	0.988	1.174	0.346
2013	0.346	1.016	1.025	0.343
2014	0.314	1.020	0.945	0.339
2015	0.305	1.018	0.903	0.344
2016	0.303	1.014	0.913	0.336
				Projections (d)
2017				0.349
2018				0.354
1/1/2019				0.357

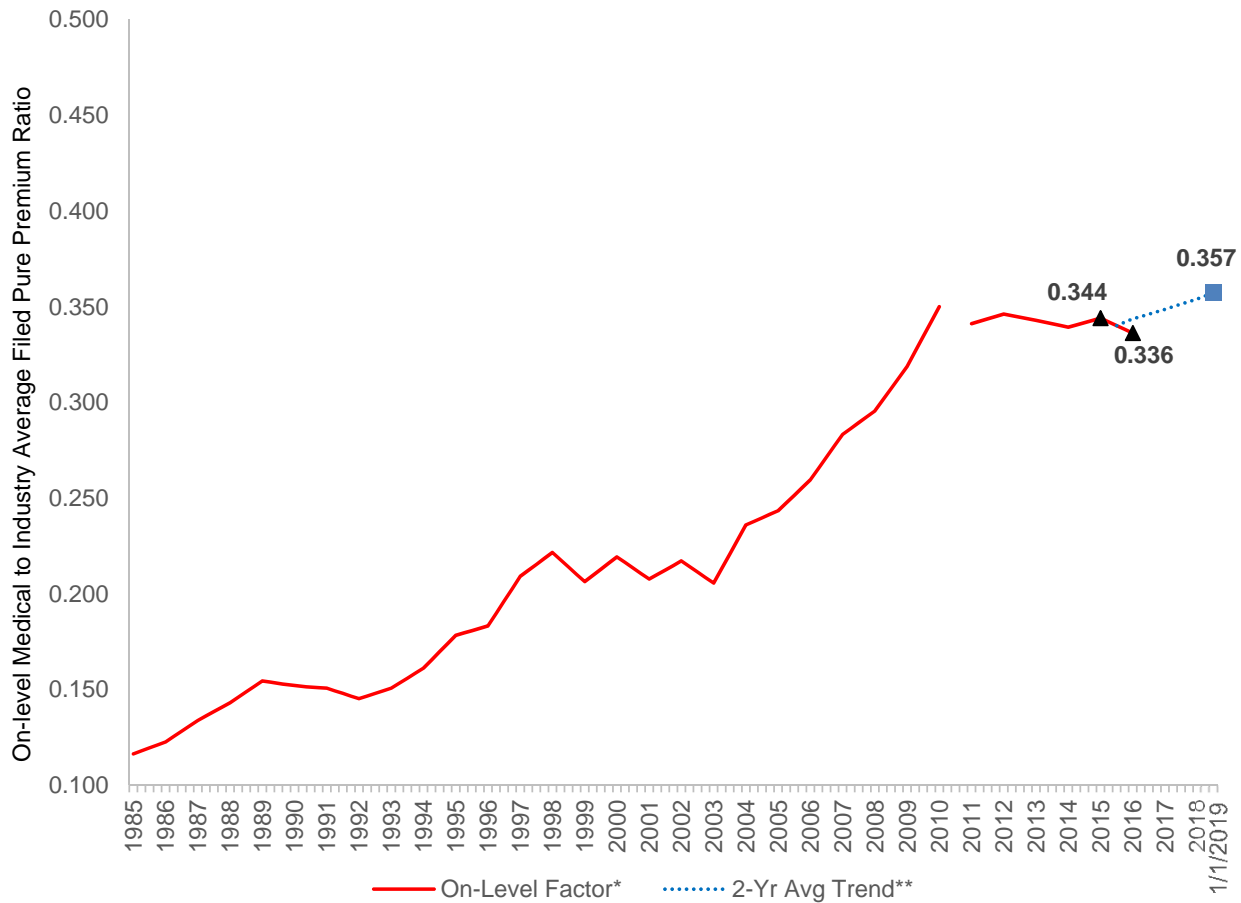
(a) See Exhibit 3.2.

(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.

**On-Level Medical Loss to Industry Average Filed Pure Premium Ratios  
Based on Experience as of September 30, 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 January 1, 2018 and December 31, 2018  
Based on Experience as of September 30, 2017**

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.271	0.357	0.628

Quarterly Incurred Indemnity Loss Development Factors  
Through September 30, 2017

Age in Months	Accident Year																		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3								2.417	2.724	2.785	3.031	3.116	3.052	3.238	3.344	3.303	3.209	3.201	3.358
9/6								1.656	1.776	1.820	1.848	1.904	2.001	1.966	1.940	1.960	1.948	1.945	1.860
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	1.260	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	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	1.189	
21/18	1.140	1.150	1.148	1.153	1.127	1.066	1.096	1.117	1.128	1.139	1.153	1.140	1.146	1.141	1.141	1.132	1.137	1.132	
24/21	1.112	1.121	1.111	1.117	1.094	1.045	1.082	1.098	1.106	1.106	1.114	1.119	1.117	1.111	1.104	1.114	1.111		
27/24	1.096	1.093	1.100	1.094	1.073	1.045	1.070	1.082	1.081	1.088	1.089	1.091	1.085	1.087	1.081	1.082	1.087		
30/27	1.069	1.074	1.082	1.064	1.051	1.040	1.054	1.057	1.072	1.075	1.075	1.080	1.071	1.068	1.067	1.074	1.066		
33/30	1.058	1.048	1.062	1.047	1.032	1.036	1.042	1.049	1.053	1.059	1.052	1.064	1.053	1.060	1.047	1.055	1.049		
36/33	1.046	1.039	1.046	1.035	1.020	1.029	1.033	1.039	1.043	1.051	1.049	1.049	1.043	1.041	1.043	1.042			
39/36	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036			
42/39	1.028	1.034	1.030	1.023	1.018	1.020	1.020	1.031	1.033	1.036	1.038	1.035	1.032	1.028	1.031	1.030			
45/42	1.026	1.026	1.020	1.009	1.019	1.018	1.024	1.026	1.028	1.030	1.035	1.027	1.033	1.022	1.024	1.025			
48/45	1.020	1.022	1.013	1.008	1.013	1.013	1.021	1.019	1.021	1.024	1.024	1.026	1.023	1.024	1.020				
51/48	1.017	1.018	1.015	1.010	1.016	1.010	1.018	1.021	1.018	1.022	1.023	1.021	1.018	1.017	1.015				
54/51	1.018	1.013	1.009	1.007	1.017	1.009	1.017	1.021	1.020	1.021	1.020	1.020	1.016	1.019	1.015				
57/54	1.017	1.012	1.006	1.008	1.011	1.011	1.018	1.017	1.014	1.018	1.017	1.015	1.014	1.013	1.011				
60/57	1.014	1.007	1.005	1.008	1.009	1.011	1.013	1.019	1.016	1.013	1.015	1.012	1.014	1.012					
63/60	1.012	1.007	1.007	1.008	1.008	1.010	1.014	1.013	1.015	1.011	1.014	1.014	1.009	1.012					
66/63	1.009	1.005	1.006	1.011	1.008	1.010	1.013	1.016	1.014	1.015	1.013	1.013	1.009	1.010					
69/66	1.007	1.003	1.005	1.008	1.007	1.011	1.012	1.011	1.010	1.009	1.012	1.007	1.010	1.010					
72/69	1.006	1.005	1.005	1.005	1.009	1.009	1.013	1.011	1.009	1.009	1.009	1.010	1.008						
75/72	1.004	1.004	1.005	1.003	1.005	1.007	1.010	1.011	1.010	1.010	1.008	1.007	1.004						
78/75	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.007						
81/78	1.002	1.003	1.004	1.004	1.005	1.006	1.010	1.009	1.007	1.007	1.006	1.006	1.007						
84/81	1.003	1.005	1.003	1.006	1.006	1.007	1.008	1.005	1.009	1.006	1.004	1.007							
87/84	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004							
90/87	1.003	1.003	1.003	1.003	1.004	1.008	1.008	1.008	1.008	1.004	1.005	1.005							
93/90	1.002	1.004	1.003	1.002	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.005							
96/93	1.003	1.001	1.004	1.002	1.006	1.006	1.003	1.002	1.003	1.004	1.004								

Source: WCIRB accident year experience calls

Quarterly Incurred Medical Loss Development Factors \*  
Through September 30, 2017

Age in Months	Accident Year																		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3								2.584	2.662	2.782	2.892	2.992	2.757	2.853	2.843	2.921	2.863	3.019	3.196
9/6								1.650	1.744	1.717	1.807	1.800	1.827	1.833	1.819	1.840	1.884	1.755	1.725
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	1.168	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	1.116	1.123	1.144	1.151	1.126	1.086	1.087	1.103	1.106	1.126	1.135	1.129	1.141	1.136	1.117	1.114	1.094	1.094	
21/18	1.086	1.101	1.122	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.068	
24/21	1.072	1.080	1.083	1.082	1.060	1.040	1.052	1.070	1.074	1.067	1.074	1.080	1.080	1.067	1.064	1.055	1.059		
27/24	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.049		
30/27	1.052	1.058	1.070	1.051	1.038	1.039	1.049	1.046	1.054	1.057	1.048	1.063	1.052	1.046	1.037	1.044	1.037		
33/30	1.047	1.051	1.059	1.035	1.018	1.032	1.030	1.041	1.045	1.045	1.051	1.055	1.045	1.046	1.031	1.033	1.032		
36/33	1.042	1.035	1.040	1.029	1.016	1.024	1.034	1.042	1.033	1.042	1.040	1.041	1.037	1.028	1.026	1.027			
39/36	1.032	1.034	1.037	1.018	1.012	1.028	1.025	1.027	1.029	1.033	1.031	1.040	1.039	1.027	1.021	1.024			
42/39	1.031	1.036	1.026	1.019	1.013	1.017	1.020	1.025	1.035	1.036	1.037	1.037	1.031	1.022	1.026	1.022			
45/42	1.033	1.032	1.023	1.012	1.019	1.033	1.021	1.025	1.029	1.026	1.030	1.028	1.027	1.021	1.018	1.017			
48/45	1.023	1.026	1.017	1.008	1.013	1.025	1.018	1.022	1.025	1.029	1.034	1.022	1.023	1.020	1.018				
51/48	1.020	1.024	1.014	1.009	1.013	1.018	1.015	1.020	1.021	1.021	1.026	1.024	1.019	1.014	1.013				
54/51	1.027	1.017	1.016	1.010	1.012	1.021	1.019	1.022	1.022	1.027	1.023	1.019	1.018	1.015	1.011				
57/54	1.024	1.014	1.007	1.011	1.017	1.020	1.018	1.019	1.019	1.023	1.020	1.017	1.018	1.013	1.007				
60/57	1.021	1.015	1.009	1.008	1.014	1.020	1.019	1.018	1.017	1.019	1.016	1.015	1.014	1.012					
63/60	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.010	1.010					
66/63	1.016	1.010	1.012	1.015	1.013	1.015	1.022	1.019	1.018	1.017	1.015	1.010	1.009	1.008					
69/66	1.013	1.006	1.008	1.016	1.018	1.015	1.023	1.017	1.017	1.015	1.014	1.010	1.008	1.007					
72/69	1.009	1.007	1.009	1.015	1.010	1.014	1.015	1.013	1.014	1.012	1.011	1.010	1.007						
75/72	1.008	1.006	1.008	1.010	1.009	1.012	1.012	1.011	1.018	1.013	1.008	1.006	1.002						
78/75	1.012	1.008	1.012	1.010	1.011	1.018	1.013	1.012	1.012	1.010	1.008	1.008	1.006						
81/78	1.006	1.006	1.009	1.010	1.014	1.018	1.017	1.016	1.009	1.009	1.005	1.006	1.006						
84/81	1.006	1.009	1.014	1.009	1.007	1.012	1.011	1.008	1.010	1.008	1.007	1.005							
87/84	1.008	1.008	1.010	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.004							
90/87	1.005	1.008	1.008	1.009	1.012	1.009	1.009	1.013	1.008	1.006	1.006	1.003							
93/90	1.007	1.015	1.009	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003							
96/93	1.007	1.010	1.012	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003								

Source: WCIRB accident 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 September 30, 2017

Age in Months	Accident Year																		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3								4.376	4.495	4.553	4.807	4.911	4.722	4.854	5.099	5.076	5.056	5.086	5.259
9/6								2.259	2.375	2.377	2.398	2.452	2.432	2.484	2.462	2.462	2.484	2.456	2.414
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	1.536	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	1.572	
18/15	1.399	1.395	1.401	1.403	1.379	1.331	1.306	1.306	1.327	1.332	1.343	1.355	1.361	1.361	1.353	1.364	1.372	1.364	
21/18	1.298	1.303	1.303	1.311	1.297	1.241	1.217	1.233	1.235	1.243	1.259	1.257	1.261	1.261	1.263	1.267	1.264	1.251	
24/21	1.257	1.256	1.258	1.260	1.244	1.183	1.181	1.195	1.191	1.194	1.206	1.209	1.215	1.213	1.204	1.216	1.211		
27/24	1.199	1.203	1.200	1.205	1.186	1.140	1.142	1.151	1.149	1.153	1.162	1.165	1.168	1.164	1.159	1.170	1.177		
30/27	1.161	1.165	1.175	1.172	1.161	1.122	1.117	1.126	1.129	1.130	1.141	1.141	1.137	1.134	1.141	1.147	1.142		
33/30	1.125	1.130	1.142	1.136	1.123	1.097	1.096	1.100	1.101	1.108	1.114	1.116	1.112	1.111	1.111	1.115	1.105		
36/33	1.103	1.103	1.115	1.111	1.097	1.085	1.081	1.080	1.084	1.092	1.094	1.098	1.091	1.091	1.096	1.092			
39/36	1.081	1.081	1.092	1.087	1.072	1.070	1.066	1.064	1.067	1.074	1.078	1.077	1.073	1.075	1.074	1.075			
42/39	1.071	1.077	1.080	1.073	1.063	1.059	1.058	1.058	1.062	1.067	1.067	1.071	1.070	1.065	1.064	1.066			
45/42	1.054	1.063	1.064	1.056	1.049	1.047	1.049	1.047	1.051	1.058	1.059	1.057	1.055	1.054	1.052	1.049			
48/45	1.050	1.055	1.053	1.046	1.044	1.041	1.044	1.043	1.047	1.049	1.051	1.050	1.048	1.048	1.048				
51/48	1.038	1.043	1.044	1.036	1.035	1.033	1.036	1.036	1.037	1.042	1.042	1.043	1.039	1.038	1.038				
54/51	1.038	1.036	1.037	1.034	1.035	1.030	1.028	1.035	1.036	1.038	1.041	1.038	1.036	1.036	1.034				
57/54	1.033	1.037	1.030	1.028	1.026	1.025	1.028	1.030	1.032	1.033	1.033	1.032	1.033	1.028	1.027				
60/57	1.030	1.027	1.026	1.024	1.024	1.024	1.024	1.028	1.029	1.029	1.032	1.027	1.030	1.028					
63/60	1.026	1.024	1.021	1.022	1.019	1.019	1.021	1.023	1.025	1.025	1.024	1.026	1.025	1.025					
66/63	1.023	1.023	1.021	1.019	1.019	1.019	1.020	1.025	1.025	1.025	1.025	1.023	1.022	1.023					
69/66	1.021	1.020	1.017	1.016	1.017	1.016	1.021	1.020	1.020	1.020	1.022	1.020	1.019	1.022					
72/69	1.016	1.018	1.016	1.016	1.015	1.017	1.015	1.020	1.019	1.019	1.019	1.019	1.019						
75/72	1.016	1.015	1.014	1.012	1.012	1.013	1.015	1.019	1.018	1.016	1.016	1.017	1.015						
78/75	1.014	1.012	1.013	1.012	1.011	1.012	1.015	1.017	1.016	1.015	1.016	1.016	1.015						
81/78	1.013	1.011	1.012	1.011	1.010	1.012	1.015	1.015	1.016	1.015	1.015	1.013	1.012						
84/81	1.011	1.013	1.010	1.010	1.009	1.011	1.013	1.015	1.014	1.013	1.012	1.013							
87/84	1.010	1.008	1.010	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010							
90/87	1.009	1.010	1.009	1.008	1.008	1.011	1.012	1.013	1.012	1.011	1.010	1.010							
93/90	1.009	1.008	1.008	1.007	1.008	1.012	1.011	1.011	1.012	1.010	1.010	1.009							
96/93	1.009	1.006	1.007	1.007	1.007	1.008	1.011	1.011	1.008	1.010	1.010								

Source: WCIRB accident year experience calls

Quarterly Paid Medical Loss Development Factors \*  
Through September 30, 2017

Age in Months	Accident Year																		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3								5.308	5.615	6.579	6.101	6.048	5.854	5.989	6.284	5.604	5.720	5.897	5.421
9/6								2.348	2.381	2.348	2.375	2.361	2.327	2.398	2.498	2.428	2.287	2.326	2.216
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	1.490	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	1.267	1.286	1.310	1.330	1.295	1.243	1.230	1.227	1.259	1.243	1.259	1.268	1.282	1.284	1.263	1.265	1.278	1.259	
21/18	1.168	1.192	1.219	1.211	1.179	1.153	1.151	1.163	1.173	1.170	1.178	1.182	1.187	1.192	1.193	1.192	1.189	1.170	
24/21	1.124	1.149	1.159	1.154	1.125	1.115	1.118	1.127	1.133	1.132	1.137	1.144	1.153	1.154	1.148	1.146	1.146		
27/24	1.108	1.121	1.128	1.123	1.093	1.090	1.093	1.106	1.107	1.110	1.112	1.119	1.120	1.123	1.122	1.122	1.124		
30/27	1.088	1.101	1.108	1.103	1.077	1.084	1.087	1.097	1.100	1.100	1.106	1.107	1.111	1.109	1.111	1.111	1.105		
33/30	1.072	1.086	1.089	1.077	1.063	1.071	1.065	1.081	1.083	1.086	1.092	1.094	1.093	1.094	1.090	1.089	1.081		
36/33	1.066	1.069	1.076	1.061	1.055	1.062	1.062	1.071	1.072	1.072	1.077	1.083	1.082	1.078	1.080	1.076			
39/36	1.059	1.060	1.061	1.049	1.044	1.053	1.056	1.057	1.059	1.061	1.066	1.071	1.066	1.069	1.065	1.064			
42/39	1.049	1.055	1.054	1.041	1.044	1.049	1.054	1.055	1.058	1.059	1.061	1.068	1.063	1.062	1.057	1.059			
45/42	1.045	1.047	1.044	1.036	1.037	1.040	1.047	1.048	1.049	1.054	1.053	1.056	1.056	1.053	1.051	1.045			
48/45	1.039	1.044	1.037	1.032	1.035	1.037	1.043	1.043	1.046	1.047	1.050	1.051	1.046	1.045	1.046				
51/48	1.035	1.037	1.034	1.031	1.030	1.033	1.037	1.036	1.036	1.039	1.041	1.043	1.040	1.039	1.038				
54/51	1.036	1.032	1.027	1.030	1.029	1.034	1.034	1.035	1.035	1.036	1.042	1.038	1.035	1.035	1.035				
57/54	1.030	1.027	1.024	1.024	1.024	1.029	1.031	1.034	1.031	1.033	1.038	1.034	1.034	1.031	1.028				
60/57	1.028	1.026	1.021	1.023	1.026	1.028	1.029	1.028	1.032	1.032	1.035	1.030	1.030	1.030					
63/60	1.025	1.022	1.019	1.019	1.020	1.024	1.024	1.024	1.024	1.027	1.027	1.026	1.026	1.025					
66/63	1.021	1.020	1.020	1.018	1.021	1.023	1.024	1.026	1.026	1.029	1.029	1.024	1.027	1.024					
69/66	1.022	1.019	1.018	1.016	1.019	1.021	1.023	1.023	1.021	1.024	1.024	1.022	1.020	1.019					
72/69	1.018	1.016	1.017	1.018	1.016	1.021	1.021	1.022	1.022	1.023	1.021	1.020	1.019						
75/72	1.016	1.014	1.015	1.015	1.014	1.018	1.020	1.019	1.019	1.018	1.018	1.018	1.015						
78/75	1.015	1.014	1.015	1.016	1.015	1.016	1.018	1.017	1.022	1.019	1.018	1.017	1.016						
81/78	1.014	1.013	1.014	1.013	1.014	1.018	1.018	1.015	1.019	1.018	1.015	1.015	1.013						
84/81	1.012	1.013	1.012	1.012	1.013	1.016	1.016	1.015	1.018	1.015	1.015	1.015							
87/84	1.011	1.010	1.012	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.012							
90/87	1.012	1.011	1.013	1.012	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.012							
93/90	1.010	1.011	1.012	1.011	1.013	1.013	1.012	1.014	1.014	1.013	1.011	1.010							
96/93	1.010	1.008	1.010	1.010	1.009	1.013	1.015	1.016	1.011	1.012	1.010								

Source: WCIRB accident 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 Year	Development															
	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201
1992																1.000
1993															1.000	1.000
1994														1.000	1.000	1.000
1995													1.001	1.000	1.001	1.000
1996												1.001	1.000	1.000	1.000	1.000
1997											1.000	1.000	1.000	1.000	1.000	1.000
1998										1.000	1.000	1.000	0.998	1.000	1.000	1.000
1999									1.000	1.000	1.000	0.996	1.000	1.000	1.000	1.000
2000								1.000	1.000	1.000	0.994	1.000	1.000	1.000	1.000	1.000
2001							0.999	0.999	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000
2002						0.999	1.000	1.000	0.999	0.999	1.000	1.000	1.000	1.000	1.000	
2003					0.999	0.998	0.999	0.998	0.999	0.999	1.000	1.000	1.000	1.000		
2004				0.999	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000			
2005			1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2006		1.008	1.006	1.002	1.000	1.000	1.001	1.000	1.000	1.000	1.000					
2007	1.515	1.016	1.008	1.004	1.002	1.001	1.000	1.000	1.000	1.000						
2008	1.518	1.029	1.012	1.006	1.003	1.002	1.001	1.001	1.001							
2009	1.627	1.036	1.014	1.006	1.004	1.002	1.001	1.001								
2010	1.684	1.041	1.014	1.007	1.003	1.002	0.999									
2011	1.714	1.045	1.015	1.008	1.004	1.002										
2012	1.726	1.048	1.015	1.007	1.004											
2013	1.738	1.043	1.014	1.008												
2014	1.728	1.045	1.014													
2015	1.730	1.042														
2016	1.730															

Latest Year																
<u>Age-to-Age</u>																
1.730	1.042	1.014	1.008	1.004	1.002	0.999	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<u>Age-to-Ultimate</u>																
1.859	1.075	1.032	1.018	1.010	1.006	1.004	1.005	1.004	1.002	1.002	1.002	1.002	1.003	1.003	1.003	1.003

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 61% to 100% of the total California workers' compensation insured market measured using 2016 earned premium levels).



Quarterly Reported Indemnity Claim Count Development Factors

Accident Year	Development														
	<u>3-6</u>	<u>6-9</u>	<u>9-12</u>	<u>12-15</u>	<u>15-18</u>	<u>18-21</u>	<u>21-24</u>	<u>24-27</u>	<u>27-30</u>	<u>30-33</u>	<u>33-36</u>	<u>36-39</u>	<u>39-42</u>	<u>42-45</u>	<u>45-48</u>
2008	2.551	1.655	1.337	1.094	1.025	1.015	1.011	1.009	1.007	1.004	1.003	1.003	1.002	1.003	1.002
2009	2.705	1.690	1.386	1.112	1.037	1.021	1.013	1.009	1.007	1.007	1.005	1.004	1.003	1.002	1.002
2010	2.721	1.714	1.410	1.129	1.039	1.022	1.016	1.011	1.008	1.005	1.005	1.003	1.004	1.003	1.001
2011	2.714	1.742	1.425	1.126	1.042	1.026	1.018	1.010	1.010	1.006	1.005	1.004	1.003	1.003	1.002
2012	2.768	1.731	1.421	1.125	1.050	1.028	1.018	1.013	1.009	1.007	1.004	1.005	1.003	1.003	1.002
2013	2.831	1.742	1.423	1.139	1.045	1.027	1.016	1.010	1.009	1.007	1.004	1.004	1.004	1.002	1.002
2014	2.792	1.726	1.424	1.132	1.046	1.025	1.017	1.012	1.010	1.005	1.004	1.004	1.004	1.002	
2015	2.819	1.747	1.418	1.137	1.048	1.024	1.016	1.013	1.008	1.005					
2016	2.731	1.720	1.413	1.140	1.046	1.027									
2017	2.825	1.689													

Reported Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189	201
1992																	99.2%
1993																98.9%	99.0%
1994															98.5%	98.7%	98.8%
1995													98.0%	98.3%	98.5%	98.6%	
1996													97.5%	97.9%	98.1%	98.3%	98.5%
1997												97.0%	97.4%	97.8%	98.0%	98.2%	98.4%
1998											95.9%	96.6%	97.0%	97.4%	97.7%	98.0%	98.2%
1999										94.8%	95.7%	96.3%	96.8%	97.1%	97.5%	97.9%	98.1%
2000									92.9%	94.2%	95.1%	95.8%	96.4%	97.0%	97.4%	97.7%	98.0%
2001							89.7%	91.7%	93.1%	94.1%	95.0%	95.8%	96.4%	96.8%	97.2%	97.6%	
2002						87.2%	89.7%	91.7%	93.3%	94.4%	95.5%	96.2%	96.8%	97.3%	97.6%		
2003					83.2%	87.2%	89.7%	91.7%	93.3%	94.8%	95.6%	96.2%	96.8%	97.4%			
2004				78.5%	83.7%	87.0%	89.6%	91.6%	93.7%	94.9%	95.8%	96.5%	97.1%				
2005			71.9%	79.6%	84.1%	87.5%	90.0%	92.4%	94.0%	95.1%	96.1%	96.9%					
2006		61.3%	72.5%	79.6%	84.3%	87.5%	90.6%	92.7%	94.1%	95.4%	96.3%						
2007		45.4%	59.8%	71.1%	78.6%	83.3%	87.7%	90.8%	92.7%	94.4%	95.6%						
2008	21.4%	44.7%	58.4%	69.7%	77.4%	83.7%	88.1%	90.9%	93.2%	94.8%							
2009	21.2%	42.7%	56.7%	68.2%	77.2%	83.4%	87.8%	91.2%	93.4%								
2010	21.3%	43.0%	57.4%	69.8%	78.9%	84.9%	89.3%	92.3%									
2011	22.0%	43.5%	58.7%	71.4%	80.2%	86.0%	90.1%										
2012	22.5%	44.1%	60.2%	72.9%	81.5%	87.4%											
2013	22.0%	44.4%	61.3%	74.5%	83.2%												
2014	21.6%	45.1%	62.4%	75.6%													
2015	22.3%	46.3%	64.8%														
2016	22.9%	48.7%															
2017	24.6%																

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 61% to 100% of the total California workers' compensation insured market measured using 2016 earned premium levels).

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident Year	Evaluated as of (in months):																
	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189	201
1992																	99.1%
1993																98.8%	98.9%
1994															98.3%	98.5%	98.6%
1995														97.6%	97.9%	98.2%	98.4%
1996													97.2%	97.7%	97.9%	98.1%	98.3%
1997												96.8%	97.2%	97.6%	97.7%	97.9%	98.2%
1998											95.9%	96.5%	96.9%	97.1%	97.4%	97.7%	98.0%
1999										94.9%	95.8%	96.4%	96.5%	96.9%	97.3%	97.6%	97.8%
2000									93.2%	94.5%	95.5%	95.5%	96.1%	96.7%	97.1%	97.5%	97.8%
2001							89.8%	91.7%	93.1%	93.9%	94.7%	95.6%	96.1%	96.6%	97.0%	97.4%	
2002						87.3%	89.8%	90.0%	91.9%	93.2%	94.2%	95.3%	96.0%	96.5%	97.0%		
2003					83.5%	87.4%	89.8%	91.7%	93.1%	94.6%	95.4%	96.0%	96.6%	97.1%			
2004				78.7%	83.9%	87.1%	89.6%	91.6%	93.5%	94.8%	95.6%	96.3%	96.9%				
2005			71.7%	79.4%	84.0%	87.4%	89.8%	92.2%	93.8%	95.0%	95.9%	96.7%					
2006		60.6%	72.2%	79.3%	84.1%	87.2%	90.4%	92.5%	93.9%	95.2%	96.1%						
2007		43.9%	58.7%	70.4%	78.1%	82.9%	87.4%	90.5%	92.5%	94.2%	95.5%						
2008	13.3%	42.2%	56.8%	68.5%	76.6%	83.0%	87.6%	90.5%	92.9%	94.6%							
2009	12.2%	40.0%	55.0%	67.0%	76.3%	82.8%	87.3%	90.8%	93.0%								
2010	11.8%	40.1%	55.6%	68.7%	78.2%	84.4%	89.0%	91.9%									
2011	11.9%	40.3%	56.8%	70.2%	79.4%	85.5%	89.8%										
2012	12.0%	40.7%	58.3%	71.7%	80.7%	86.9%											
2013	11.7%	41.3%	59.4%	73.2%	82.4%												
2014	11.6%	41.9%	60.5%	74.3%													
2015	12.0%	43.1%	62.8%														
2016	12.3%	45.4%															
2017	13.2%																

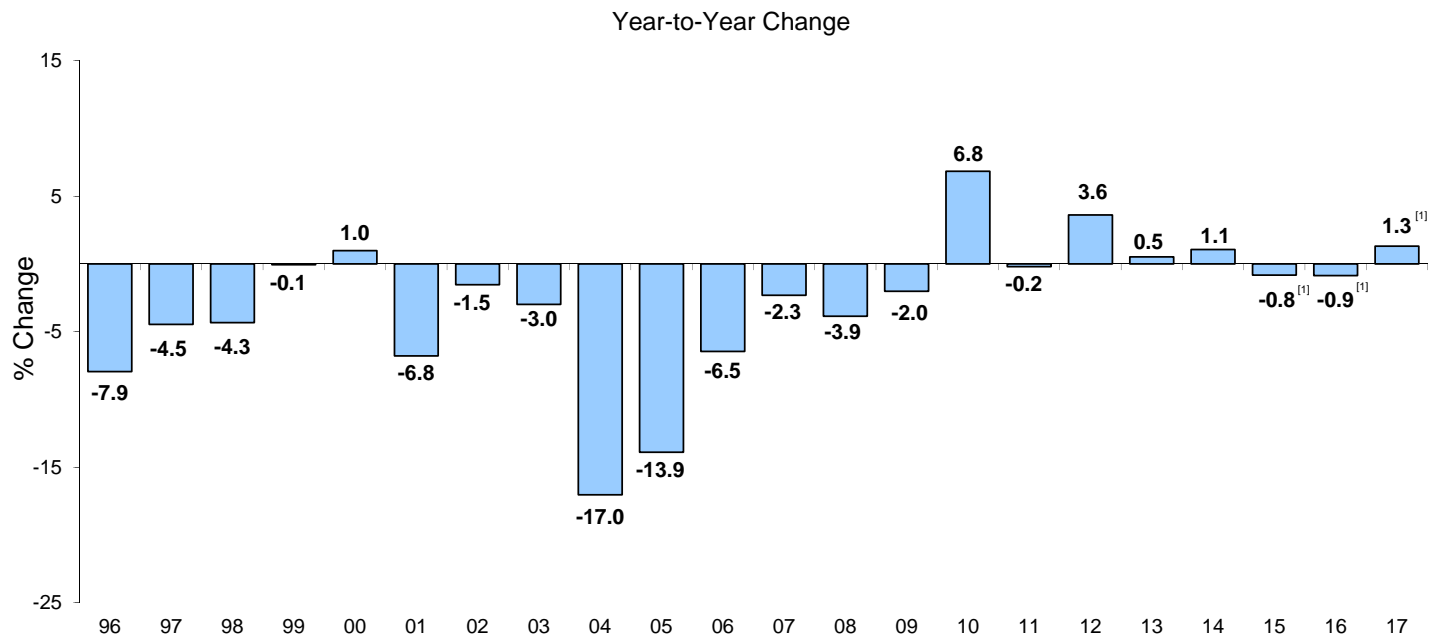
Notes All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 61% to 100% of the total California workers' compensation insured market measured using 2016 earned premium levels).

**Quarterly Ultimate Settlement Ratios**

Accident	Evaluated as of (in months):															
<u>Year</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>15</u>	<u>18</u>	<u>21</u>	<u>24</u>	<u>27</u>	<u>30</u>	<u>33</u>	<u>36</u>	<u>39</u>	<u>42</u>	<u>45</u>	<u>48</u>
2008	0.8%	5.4%	13.2%	22.8%	31.4%	37.7%	42.0%	45.8%	49.4%	53.1%	56.6%	60.1%	63.0%	65.7%	68.3%	70.7%
2009	0.7%	4.6%	12.1%	21.1%	29.4%	35.4%	39.8%	43.8%	47.4%	51.1%	54.8%	58.3%	61.3%	64.4%	66.9%	69.4%
2010	0.6%	4.6%	11.6%	20.7%	29.5%	35.5%	39.8%	44.1%	47.9%	51.8%	55.3%	58.8%	62.0%	65.4%	68.4%	71.3%
2011	0.8%	5.0%	11.9%	21.2%	29.6%	35.7%	40.2%	44.6%	48.5%	52.8%	56.7%	60.6%	63.9%	67.0%	70.0%	72.7%
2012	0.8%	5.0%	12.0%	21.1%	29.4%	35.8%	40.6%	45.4%	49.6%	53.9%	58.1%	62.0%	65.4%	68.6%	71.5%	74.1%
2013	0.9%	5.0%	11.7%	20.8%	29.1%	35.7%	41.1%	46.1%	50.7%	55.2%	59.3%	63.2%	66.7%	70.1%	73.0%	75.7%
2014	0.7%	4.7%	11.6%	20.6%	29.3%	36.1%	41.8%	46.9%	51.6%	56.1%	60.4%	64.4%	67.7%	71.2%	74.1%	
2015	0.8%	4.7%	11.9%	20.9%	30.0%	37.3%	43.0%	48.2%	53.3%	58.3%	62.6%					
2016	0.8%	5.1%	12.3%	21.9%	31.5%	39.3%	45.2%									
2017	0.8%	5.5%	13.2%													

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	4.6%	7.7%	9.6%	8.6%	6.3%	4.4%	3.8%	3.6%	3.7%	3.5%	3.5%	2.9%	2.7%	2.6%	2.4%
2009	3.9%	7.5%	9.0%	8.3%	6.0%	4.4%	4.0%	3.6%	3.7%	3.7%	3.5%	3.0%	3.0%	2.5%	2.5%
2010	4.0%	7.0%	9.1%	8.7%	6.0%	4.4%	4.3%	3.8%	3.9%	3.5%	3.5%	3.2%	3.4%	3.0%	2.9%
2011	4.2%	6.8%	9.3%	8.4%	6.1%	4.5%	4.3%	3.9%	4.3%	3.9%	4.0%	3.3%	3.0%	3.0%	2.7%
2012	4.2%	7.0%	9.1%	8.3%	6.4%	4.8%	4.9%	4.1%	4.3%	4.2%	3.9%	3.4%	3.2%	2.9%	2.7%
2013	4.1%	6.7%	9.0%	8.4%	6.6%	5.4%	5.0%	4.6%	4.5%	4.1%	3.9%	3.6%	3.3%	2.9%	2.8%
2014	4.0%	6.9%	9.0%	8.7%	6.8%	5.7%	5.1%	4.8%	4.5%	4.3%	4.0%	3.3%	3.5%	2.9%	
2015	3.9%	7.2%	8.9%	9.2%	7.3%	5.6%	5.3%	5.0%	5.0%	4.3%					
2016	4.2%	7.2%	9.6%	9.7%	7.8%	5.9%									
2017	4.7%	7.7%													

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



<sup>[1]</sup> 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 September 30, 2017 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

## **Item AC17-12-02**

### **Legislative Cost Monitoring**

At the November 8, 2016 meeting, the Committee reviewed information on emerging post-Senate Bill No. 863 (SB 863) costs based on the most current data available.<sup>1</sup> At the meeting, the Committee noted areas related to permanent disability (PD) costs that emerge later in the life of a claim and fee schedules that had not yet been fully implemented warrant further monitoring.

In September of 2016, the Governor signed Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) into law. SB 1160 and AB 1244 include a number of provisions related to liens. (SB 1160 also includes a number of provisions related to utilization review which become effective on January 1, 2018 injuries.) The WCIRB's prospective evaluation of SB 1160 and AB 1244 was included in the Amended January 1, 2017 Pure Premium Rate Filing.

Staff's follow-up analysis to several provisions of SB 863 and initial retrospective analysis of the lien reforms of SB 1160 and AB 1244 are summarized below.

#### *SB 863 Provisions*

SB 863 increased minimum and maximum weekly PD benefits for 2013 and 2014 injuries and made a number of changes to the manner in which PD ratings are computed, including eliminating the factor for future earning capacity and as a result effectively eliminating the impact of the Ogilvie decision, adding a 1.4 adjustment factor to each impairment in the PD rating, and eliminating add-ons for psychiatric impairment, sleep disorder, and sexual dysfunction from increasing PD ratings. Prior WCIRB SB 863 cost monitoring reports have noted that emerging information on PD ratings suggest that PD costs are emerging generally consistent with prospective estimates. However, the reports have also noted that PD benefits are generally paid later in the life of a claim and it often take a number of years before the final PD rating on a claim is determined.

Exhibit 1.1 shows average PD ratings based on WCIRB unit statistical data. Early estimates of average PD ratings following SB 863 continue to follow a downward trend. Exhibit 1.2 shows distributions of PD ratings by PD interval as well as the proportion of indemnity claims involving PD. There has been a gradual shift from mid-range PD ratings to lower ratings over the last few years while there has not been a significant change in the proportion of indemnity claims involving PD. However, these shifts have been occurring long before the implementation of SB 863. Given the downward trend in PD ratings shown in unit statistical data, which often reflects claims adjuster estimates of the final PD rating, staff plans to review updated information on final PD ratings issued by the Disability Evaluation Unit (DEU) during 2018. Prior estimates of post-SB 863 ratings from the DEU data, as noted in prior SB 863 cost monitoring reports, have shown increases in the average PD rating comparable to those prospectively estimated by the WCIRB.

Exhibits 2.1 through 2.3 show treatment patterns for psychiatric impairments, sleep disorder, and sexual dysfunction based on WCIRB Medical Data Call (MDC) data. As shown in Exhibits 2.2 and 2.3, the proportion of claims receiving treatment for sleep disorder or sexual dysfunction has been very low, which is consistent with prior information reviewed on PD add-ons for these impairments. Although SB 863 only eliminated psychiatric add-ons to PD ratings and continued to allow treatment for psychiatric impairments, as shown in Exhibit 2.1, average psychiatric payment costs per claim with physician services decreased significantly in 2013 and 2014, driven by a sharp drop in the proportion of physician services claims receiving psychiatric services. Some of this decrease may also be related to the changes to the physician fee schedule effective beginning in 2014 and savings in reduced medical utilization resulting from other

---

<sup>1</sup> These findings were later published in the WCIRB's *Senate Bill No. 863 WCIRB Cost Monitoring Report – 2016 Retrospective Evaluation*, released on November 17, 2016.

provisions of SB 863. Nevertheless, given this information and information on PD add-ons reviewed in prior cost monitoring reports, staff believes the estimated savings for the provisions of SB 863 eliminating the PD add-ons reflected in prior evaluations of SB 863 continue to be appropriate.

SB 863 made changes to the supplemental job displacement benefit (SJDB) to set it at a maximum of \$6,000 for all eligible claims and modified the basis upon which the SJDB is paid and the types of expenses that are reimbursed. Payments under the \$120 million return-to-work fund established by SB 863 and administered by the Division of Workers' Compensation (DWC) is also triggered by the reception of a SJDB. In the WCIRB's 2016 SB 863 Cost Monitoring Report, it was noted that the most current information available showed increases in SJDB costs subsequent to the implementation of SB 863, resulting in an approximate 0.1% increase in total system costs. Exhibit 3 shows updated information on SJDB costs including calendar year SJDB payments based on WCIRB aggregate financial data calls and SJDB utilization and average cost per SJDB based on WCIRB PD Claim Survey data. Utilization of the SDJB continues to increase with the most recent information showing approximately double the increase noted in the 2016 SB 863 Cost Monitoring Report. However, SDJB costs remain a relatively small proportion of total indemnity benefits paid.

The independent medical review (IMR) process was one of the cornerstone reforms of SB 863. Although the number of IMR filings have been significantly greater than initially projected, the IMR process has been a significant driver of the reductions in average medical severities resulting from SB 863. Exhibit 4 shows updated counts of IMR filings based on information provided by the DWC. The number of IMR filings have remained relatively consistent through 2017.

The 2016 SB 863 Cost Monitoring Report noted that the prospectively estimated reductions in the duration of temporary disability (TD) resulting from the IMR process had not materialized. Exhibit 5 shows updated information on TD duration based on WCIRB PD Claim Survey data. The most recent survey data shows average and median TD duration generally consistent with or higher than that of the prior year, which continues to suggest that significant savings to TD duration resulting from SB 863 have not materialized.

SB 863 provided for changes to the physician fee schedule to be based on the Medicare Resource-Based Relative Value Scale (RBRVS). The new fee schedule became effective beginning in 2014 and was to be phased in over a four-year period. The 2016 SB 863 Cost Monitoring Report included the estimated impact of the first three years of the phase-in based on WCIRB MDC data through the second quarter of 2016, which indicated significant savings in physician costs had emerged subsequent to the implementation of the new fee schedule. Exhibits 6.1 through 6.4 show updated information on physician costs based on WCIRB MDC data through the second quarter of 2017. As shown in Exhibits 6.1 and 6.2 for the 2014 and 2015 service years (the first two years of the phase-in), total physician costs per claim continue to show decreases generally consistent with prior estimates reviewed by the Committee. However, as shown in Exhibits 6.3 and 6.4, average physician costs for the 2016 and 2017 service years (the final two years of the phase-in) increased generally consistent with the WCIRB's prospective estimates for those years. The changes in physician cost trends from the first two years of the phase-in are generally attributable to reductions in the utilization of physician services, particularly for special services and reports, being more one-time in nature and not continuing into more recent years.

#### *SB 1160 and AB 1244 Provisions*

SB 1160 provided for a number of provisions related to liens. First, all liens filed on or after January 1, 2017 are required to include a declaration under penalty of perjury that the lien is not subject to IMR or independent bill review and that it satisfies one of several criteria. Second, liens must be filed by the original service provider and can no longer be assigned to a third party unless the original provider has ceased doing business and assigned all rights to the third party. Finally, liens from providers indicted for fraud are stayed until the disposition of the criminal proceedings. AB 1244 provides for a special process to consolidate liens from providers convicted of fraud. The WCIRB's prospective estimate of the impact of

these provisions on costs was included in the Amended January 1, 2017 Pure Premium Rate Filing as well as the July 1, 2017 and January 1, 2018 Pure Premium Rate Filings. The WCIRB assumed a 10% reduction in lien filings resulting from these provisions which would result in a 0.6% decrease in total costs.<sup>2</sup>

Lien filings from the first three quarters of 2017 are available from the DWC. Exhibit 7.1 shows lien filings by quarter. As discussed at prior meetings, given SB 863's dual statutes of limitations on lien filings in effect through June 30, 2016 and the enactment of SB 1160 and AB 1244 on September 30, 2016, lien filings in third quarter of 2016 may be the only quarter representative of the post-SB 863 and pre-SB 1160 level. After an increase in lien filings in the fourth quarter of 2016 shortly before the new legislation became effective, lien filings decreased sharply in 2017. Some of this decrease may be resulting from lines filed in the fourth quarter of 2016 prior to the effective date of SB 1160 which would have otherwise been filed in early 2017. Exhibit 7.2 shows recent lien filings by month which shows that, with the exception of some lower filings in January and February, lien filing activity has been relatively consistent in 2017. Average quarterly lien filings through the first three quarters of 2017 are approximately 40% lower than the third quarter of 2016 level.

SB 1160 also provides that all outstanding liens must have a declaration under penalty of perjury filed by July 1, 2017 or be dismissed by operation of law. In August of 2017, the DWC advised that approximately 292,000 liens had been dismissed and posted the list of dismissed liens on their website. These lien dismissals could potentially significantly impact losses and loss adjustment expenses for older accident years as well as claim development and settlement patterns. As shown in Exhibit 8, over 20% of medical services payments in the fifth through eighth development years are for medical liens. However, some of these dismissed liens may have been settled prior to the due date of the lien declaration and others may have already incurred significant loss adjustment expenses in defending against the lien prior to the dismissal.

Staff has begun linking the dismissed lien data to other data sources to analyze the potential impact on older accident years. Over 90% of the liens were linked back to the original DWC lien filing information based on the provider name and date of lien filing. Exhibit 9 summarizes information on the dismissed liens including distributions by accident year, year of lien filing, type of lien, and region and also includes the average lien demand amount based on the DWC data.<sup>3</sup> Almost all the dismissed liens were for medical services, over 90% were from the Los Angeles Basin area, and 60% were on claims that occurred between 2010 and 2013. The demand amounts from the dismissed liens were larger on liens from older accident years, but on average were 25% less than demand amounts on other non-dismissed liens from similarly aged claims.

Staff has been able to link a portion of the DWC lien filings to unit statistical claim data as well as MDC transactions. The data was first linked to MDC data using the provider name and accident date. Claims were excluded if the provider had services on more than one claim with that accident date. The policy and claim information from MDC was then linked back to unit statistical data. Approximately 3,100 claims were matched to the recently dismissed liens and 8,600 claims were matched to other liens. Staff is in the process of refining this logic to achieve better matching results. A preliminary summary of the information from the matched claims with dismissed or non-dismissed liens is shown in Exhibit 10. The two sets of claims show fairly similar profiles and average costs, with the vast majority being permanent partial disability claims and a significant proportion being cumulative injury claims.

Payments for medical liens are captured in the WCIRB's MDC data. Using provider and accident date information, approximately 1,000 "dismissed" liens and 2,800 non-dismissed liens were linked to medical

---

<sup>2</sup> In the Decision on the January 1, 2018 Pure Premium Rate Filing, given the lower lien filings emerging through the first three quarters of 2017, the California Department of Insurance reflected a reduction in total costs of -2.4% resulting from SB 1160 and AB 1244 compared to the -0.6% reflected in the Filing.

<sup>3</sup> Lien demands over \$1,000,000 were excluded in that they likely involved multiple services or were reported in error.



services in MDC to the original DWC lien filing information. These results are limited by the availability of the information used for matching, and staff is in the process of refining this logic to achieve better matching results. Nonetheless, the 1,000 “dismissed” liens with MDC payments indicates that at least some of the liens on the DWC’s dismissed list were settled prior to the due date of the declaration and, as a result, no declaration was needed. Based approximately on the matching rates for the MDC transactions and unit statistical claims, anywhere from 25% to 40% of the dismissed liens may have been settled. A preliminary summary of the information from the matched liens is shown in Exhibit 11. The average lien demand amount from DWC data is somewhat higher than the MDC billed amount but the payment rate of 25% of the billed amount is consistent with prior studies of lien payment information.

**Average Permanent Disability Rating (PDR)**

Accident	Report Level									
<u>Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
1999	17.5	22.0	24.3	25.6	26.0					
2000	20.5	23.1	25.1	26.2	26.5					
2001	20.3	23.5	26.2	27.0	27.2	27.6	27.5	27.2		
2002	18.8	23.6	25.4	26.0	26.1	26.1	25.8	25.9		
2003	19.1	22.8	24.2	24.5	24.1	23.8	23.9	24.0	23.8	23.9
2004	18.5	20.2	21.1	20.3	20.0	20.1	20.3	20.5	20.5	20.5
2005	13.0	15.1	15.9	16.4	16.8	17.3	17.4	17.6	17.5	17.6
2006	12.0	14.3	15.7	16.5	17.2	17.6	17.7	17.7	17.7	17.8
2007	11.9	14.5	16.2	17.2	17.8	18.1	18.0	18.1	18.2	17.9
2008	11.9	14.8	16.8	17.8	18.1	18.0	18.2	18.4	18.5	
2009	12.4	15.2	16.9	17.7	17.5	17.8	18.0	18.2		
2010	12.6	15.1	16.3	16.5	16.9	17.3	17.6			
2011	12.7	14.6	15.2	15.8	16.4	16.7				
2012	12.1	13.6	14.6	15.4	16.3					
2013	11.3	12.9	14.0	14.4						
2014	11.0	12.5	13.6							
2015	10.4	11.9								
2016	9.7									

Source: WCIRB unit statistical data. Data in italics is preliminary.

**Distribution of Permanent Disability Ratings**

**Report Level 1**

PDR Interval	Accident Year															
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1 - 4	9.3%	9.5%	8.8%	10.3%	18.8%	21.7%	21.3%	19.9%	17.4%	15.3%	15.4%	16.0%	17.9%	20.3%	22.9%	25.0%
5 - 9	13.4%	14.7%	14.3%	15.4%	25.1%	29.3%	30.2%	29.7%	29.8%	32.3%	31.0%	31.6%	32.1%	32.0%	32.8%	33.0%
10 - 14	18.1%	18.6%	19.0%	20.0%	22.6%	19.6%	18.8%	19.5%	19.0%	18.5%	19.0%	19.3%	20.6%	19.9%	19.6%	19.9%
15 - 19	15.6%	17.3%	16.8%	15.0%	13.5%	12.5%	13.1%	14.5%	15.7%	15.5%	16.0%	16.6%	15.7%	14.8%	13.0%	12.2%
20 - 24	12.7%	12.5%	13.6%	13.4%	7.9%	6.5%	6.2%	6.9%	7.7%	7.3%	7.2%	6.9%	6.1%	6.0%	5.0%	4.5%
25 - 34	15.7%	15.3%	15.3%	14.5%	7.3%	6.1%	5.8%	5.5%	5.9%	6.1%	6.6%	5.7%	4.6%	4.3%	4.2%	3.3%
35 - 49	9.5%	8.4%	8.4%	7.8%	3.1%	2.7%	2.9%	2.7%	3.0%	3.3%	3.1%	2.6%	2.0%	1.8%	1.6%	1.5%
50 - 69	4.3%	3.2%	3.1%	2.8%	1.2%	1.2%	1.3%	1.0%	1.1%	1.3%	1.4%	1.0%	0.8%	0.7%	0.7%	0.5%
70 - 99	1.4%	0.6%	0.8%	0.8%	0.4%	0.5%	0.3%	0.3%	0.3%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.1%

PD % of All Indemnity 52.7% 50.9% 47.7% 44.4% 37.8% 35.8% 34.9% 36.2% 35.9% 35.9% 36.1% 35.6% 33.0% 33.9% 35.3% 34.4%

**Report Level 2**

PDR Interval	Accident Year														
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1 - 4	9.0%	8.4%	9.3%	11.3%	17.9%	19.1%	17.4%	16.5%	14.8%	13.5%	14.0%	15.5%	17.7%	19.5%	21.2%
5 - 9	11.4%	11.7%	11.6%	14.1%	22.8%	25.0%	24.5%	24.4%	25.0%	27.6%	26.6%	26.9%	26.8%	27.4%	29.0%
10 - 14	13.6%	13.6%	14.3%	16.9%	18.9%	18.2%	18.2%	18.1%	17.8%	17.0%	17.7%	18.3%	19.4%	19.0%	19.1%
15 - 19	13.5%	13.3%	13.5%	13.6%	13.4%	13.6%	15.1%	15.5%	15.9%	15.9%	17.0%	18.1%	17.0%	15.8%	14.4%
20 - 24	11.5%	12.3%	12.8%	13.1%	8.5%	8.0%	8.3%	8.8%	8.9%	8.4%	8.5%	8.1%	7.5%	7.1%	6.3%
25 - 34	18.5%	18.1%	17.8%	15.6%	10.1%	8.3%	8.9%	8.8%	9.0%	9.0%	8.8%	7.5%	6.8%	6.6%	5.9%
35 - 49	13.5%	14.0%	12.9%	9.8%	5.3%	4.7%	4.9%	5.1%	5.5%	5.5%	4.7%	3.6%	3.3%	3.1%	2.7%
50 - 69	7.0%	6.8%	6.1%	4.3%	2.4%	2.3%	2.1%	2.1%	2.5%	2.5%	2.1%	1.5%	1.2%	1.1%	1.0%
70 - 99	2.0%	1.8%	1.6%	1.3%	0.8%	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.5%	0.4%	0.3%	0.4%

PD % of All Indemnity 55.1% 54.6% 53.5% 48.4% 42.7% 41.8% 43.1% 44.3% 44.2% 44.4% 43.9% 42.7% 41.9% 42.8% 43.7%

**Report Level 3**

PDR Interval	Accident Year													
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1 - 4	8.2%	8.7%	9.4%	11.7%	17.2%	16.8%	16.0%	15.2%	14.0%	13.0%	14.6%	16.3%	17.7%	18.9%
5 - 9	10.3%	10.7%	10.7%	14.1%	21.7%	22.6%	22.0%	21.7%	22.7%	25.4%	24.2%	23.2%	24.4%	25.3%
10 - 14	11.7%	11.6%	13.0%	15.3%	17.6%	17.6%	17.1%	16.8%	16.6%	16.2%	16.9%	17.6%	18.3%	18.2%
15 - 19	11.6%	11.7%	12.5%	13.2%	13.9%	14.5%	15.0%	15.1%	15.2%	15.8%	17.5%	18.2%	16.8%	15.6%
20 - 24	11.1%	11.7%	12.2%	11.1%	8.8%	9.1%	8.9%	9.1%	9.3%	8.8%	9.1%	8.6%	7.9%	7.7%
25 - 34	18.7%	18.5%	18.3%	16.6%	11.0%	10.0%	10.7%	10.7%	10.7%	10.1%	9.8%	9.0%	8.5%	8.5%
35 - 49	16.0%	16.0%	14.4%	11.0%	6.0%	5.9%	6.4%	6.9%	7.0%	6.5%	5.0%	4.4%	4.4%	4.0%
50 - 69	9.3%	8.5%	7.2%	5.3%	2.8%	2.7%	2.9%	3.4%	3.4%	3.2%	2.3%	1.9%	1.6%	1.6%
70 - 99	3.2%	2.4%	2.2%	1.6%	0.9%	0.8%	0.9%	1.0%	1.1%	1.0%	0.6%	0.6%	0.5%	0.4%

PD % of All Indemnity 55.4% 57.1% 55.3% 50.4% 45.3% 45.8% 46.0% 47.5% 47.8% 47.8% 47.1% 46.3% 46.3% 47.5%

**Report Level 4**

PDR Interval	Accident Year												
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1 - 4	8.4%	8.7%	9.4%	12.1%	16.4%	16.1%	15.6%	14.8%	13.8%	13.9%	15.4%	16.4%	18.3%
5 - 9	9.9%	10.2%	10.5%	15.6%	20.9%	21.7%	20.9%	20.9%	21.5%	23.6%	22.3%	22.1%	23.9%
10 - 14	10.9%	11.2%	12.6%	15.8%	17.4%	17.1%	16.4%	16.0%	16.1%	16.1%	16.3%	16.9%	18.0%
15 - 19	10.8%	11.4%	12.5%	13.7%	14.5%	14.4%	14.5%	14.5%	15.2%	16.2%	17.4%	17.7%	15.6%
20 - 24	10.8%	11.5%	11.7%	10.7%	9.2%	9.1%	9.0%	9.2%	9.3%	9.1%	9.1%	8.5%	8.2%
25 - 34	18.8%	18.7%	18.9%	15.7%	11.3%	10.8%	11.4%	11.4%	11.2%	10.4%	10.3%	9.8%	8.8%
35 - 49	16.9%	16.6%	14.6%	10.3%	6.4%	6.7%	7.1%	7.8%	7.7%	6.5%	5.7%	5.2%	5.2%
50 - 69	10.0%	9.0%	7.4%	4.8%	2.9%	3.1%	3.8%	4.1%	4.0%	3.3%	2.7%	2.5%	1.9%
70 - 99	3.4%	2.7%	2.4%	1.4%	0.9%	1.0%	1.1%	1.3%	1.3%	0.9%	0.7%	0.7%	0.4%

PD % of All Indemnity 56.6% 57.9% 55.6% 51.4% 47.3% 46.9% 47.3% 49.1% 49.3% 49.2% 48.7% 48.0% 48.2%

Source: WCIRB unit statistical data. Data in italics is preliminary.

**Psychiatric Treatment Patterns**

Cumulative Percentage of Physician Services Claims with Psych Payments

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	2.5%	4.1%	4.8%	5.2%	5.6%	5.9%	6.1%	6.3%	6.5%	6.6%	6.7%	6.8%	6.9%
2012Q4	2.5%	4.0%	4.7%	5.1%	5.4%	5.7%	5.8%	6.0%	6.1%	6.3%	6.4%	6.5%	6.6%
2013Q1	2.8%	4.3%	4.9%	5.4%	5.6%	5.8%	6.0%	6.1%	6.2%	6.3%	6.4%	6.5%	6.5%
2013Q2	2.4%	3.8%	4.3%	4.6%	4.8%	5.0%	5.2%	5.4%	5.5%	5.7%	5.8%	5.8%	5.9%
2013Q3	2.2%	3.4%	3.8%	4.0%	4.2%	4.4%	4.6%	4.7%	4.9%	5.0%	5.1%	5.1%	5.2%
2013Q4	2.0%	2.4%	2.6%	2.9%	3.1%	3.4%	3.6%	3.7%	3.9%	4.0%	4.0%	4.1%	4.2%
2014Q1	0.6%	1.2%	1.5%	1.8%	2.1%	2.3%	2.5%	2.7%	2.8%	3.0%	3.1%	3.1%	
2014Q2	0.6%	1.1%	1.4%	1.7%	2.0%	2.2%	2.4%	2.5%	2.7%	2.8%	2.8%		
2014Q3	0.5%	1.0%	1.4%	1.7%	1.9%	2.1%	2.3%	2.4%	2.6%	2.7%			
2014Q4	0.4%	0.9%	1.3%	1.6%	1.8%	2.0%	2.2%	2.3%	2.4%				
2015Q1	0.4%	0.9%	1.2%	1.5%	1.7%	1.9%	2.0%	2.2%					
2015Q2	0.4%	1.0%	1.3%	1.6%	1.8%	2.0%	2.1%						
2015Q3	0.4%	0.9%	1.2%	1.5%	1.7%	1.8%							
2015Q4	0.4%	0.9%	1.2%	1.5%	1.7%								
2016Q1	0.4%	1.0%	1.3%	1.6%									
2016Q2	0.4%	0.9%	1.2%										
2016Q3	0.4%	0.8%											
2016Q4	0.4%												

Cumulative Psych Payments Per Psych Claim

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$221	\$324	\$386	\$434	\$472	\$506	\$533	\$556	\$570	\$585	\$602	\$619	\$632
2012Q4	\$222	\$305	\$369	\$412	\$446	\$473	\$495	\$513	\$532	\$552	\$574	\$594	\$611
2013Q1	\$224	\$310	\$359	\$396	\$419	\$443	\$460	\$480	\$505	\$523	\$538	\$553	\$570
2013Q2	\$222	\$301	\$355	\$386	\$414	\$446	\$467	\$488	\$507	\$529	\$548	\$567	\$581
2013Q3	\$226	\$309	\$350	\$392	\$422	\$452	\$479	\$499	\$514	\$533	\$553	\$577	\$601
2013Q4	\$231	\$307	\$373	\$418	\$460	\$500	\$524	\$551	\$575	\$606	\$635	\$658	\$681
2014Q1	\$301	\$446	\$532	\$649	\$707	\$739	\$765	\$794	\$824	\$856	\$884	\$909	
2014Q2	\$316	\$418	\$500	\$545	\$593	\$633	\$664	\$703	\$742	\$772	\$803		
2014Q3	\$270	\$410	\$480	\$541	\$582	\$648	\$699	\$739	\$772	\$808			
2014Q4	\$296	\$420	\$505	\$588	\$664	\$732	\$771	\$856	\$872				
2015Q1	\$346	\$462	\$533	\$620	\$707	\$753	\$791	\$823					
2015Q2	\$385	\$523	\$605	\$709	\$779	\$830	\$876						
2015Q3	\$357	\$478	\$611	\$678	\$732	\$777							
2015Q4	\$377	\$527	\$638	\$719	\$770								
2016Q1	\$470	\$605	\$721	\$779									
2016Q2	\$411	\$628	\$707										
2016Q3	\$405	\$543											
2016Q4	\$392												

Cumulative Psych Payments Per Physician Services Claim

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$5.5	\$13.2	\$18.5	\$22.7	\$26.6	\$30.1	\$32.7	\$35.1	\$36.9	\$38.6	\$40.5	\$42.2	\$43.6
2012Q4	\$5.4	\$12.3	\$17.2	\$21.0	\$24.2	\$26.8	\$28.9	\$30.8	\$32.7	\$34.8	\$36.9	\$38.7	\$40.3
2013Q1	\$6.2	\$13.4	\$17.6	\$21.3	\$23.5	\$25.7	\$27.5	\$29.4	\$31.5	\$33.2	\$34.5	\$35.9	\$37.4
2013Q2	\$5.3	\$11.5	\$15.4	\$17.7	\$19.9	\$22.4	\$24.3	\$26.2	\$28.0	\$29.9	\$31.6	\$33.1	\$34.5
2013Q3	\$4.9	\$10.5	\$13.1	\$15.8	\$17.9	\$20.1	\$22.1	\$23.7	\$25.1	\$26.6	\$28.0	\$29.7	\$31.2
2013Q4	\$4.7	\$7.2	\$9.9	\$12.2	\$14.5	\$16.9	\$18.7	\$20.6	\$22.3	\$24.0	\$25.6	\$27.1	\$28.5
2014Q1	\$1.9	\$5.2	\$8.0	\$11.8	\$14.8	\$17.3	\$19.3	\$21.2	\$23.2	\$25.3	\$27.0	\$28.5	
2014Q2	\$1.8	\$4.7	\$7.1	\$9.3	\$11.7	\$13.9	\$15.7	\$17.8	\$19.7	\$21.2	\$22.6		
2014Q3	\$1.4	\$4.1	\$6.7	\$9.1	\$11.3	\$13.8	\$16.1	\$18.1	\$19.9	\$21.6			
2014Q4	\$1.3	\$4.0	\$6.5	\$9.2	\$12.1	\$14.7	\$16.7	\$19.8	\$21.3				
2015Q1	\$1.5	\$4.1	\$6.5	\$9.2	\$11.8	\$14.1	\$16.0	\$17.7					
2015Q2	\$1.6	\$5.0	\$7.7	\$11.2	\$14.0	\$16.5	\$18.8						
2015Q3	\$1.4	\$4.1	\$7.2	\$9.9	\$12.2	\$14.3							
2015Q4	\$1.5	\$4.9	\$7.8	\$10.6	\$12.9								
2016Q1	\$2.1	\$6.0	\$9.6	\$12.5									
2016Q2	\$1.6	\$5.4	\$8.3										
2016Q3	\$1.5	\$4.6											
2016Q4	\$1.4												

Source: WCIRB Medical Data Call

**Sleep Disorder Treatment Patterns**

**Cumulative Percentage of Physician Services Claims with Sleep Disorder Payments**

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%
2012Q4	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
2013Q1	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%
2013Q2	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
2013Q3	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
2013Q4	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
2014Q1	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	
2014Q2	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%		
2014Q3	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%			
2014Q4	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%				
2015Q1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%					
2015Q2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%					
2015Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%							
2015Q4	0.0%	0.0%	0.0%	0.0%	0.0%								
2016Q1	0.0%	0.0%	0.0%	0.0%									
2016Q2	0.0%	0.0%	0.0%										
2016Q3	0.0%	0.0%											
2016Q4	0.0%												

**Cumulative Sleep Disorder Payments Per Sleep Disorder Claim**

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$366	\$1,012	\$1,002	\$932	\$881	\$863	\$823	\$783	\$768	\$771	\$776	\$755	\$758
2012Q4	\$1,768	\$932	\$966	\$863	\$860	\$759	\$748	\$681	\$678	\$669	\$657	\$659	\$689
2013Q1	\$387	\$515	\$589	\$655	\$678	\$659	\$571	\$559	\$540	\$530	\$516	\$527	\$528
2013Q2	\$387	\$446	\$496	\$549	\$527	\$441	\$437	\$482	\$467	\$465	\$468	\$478	\$482
2013Q3	N/A	\$894	\$660	\$583	\$495	\$493	\$505	\$508	\$511	\$541	\$543	\$559	\$649
2013Q4	\$321	\$474	\$510	\$518	\$476	\$473	\$469	\$497	\$520	\$508	\$526	\$541	\$544
2014Q1	\$208	\$602	\$415	\$529	\$485	\$446	\$454	\$470	\$482	\$482	\$505	\$509	
2014Q2	\$208	\$168	\$292	\$332	\$351	\$343	\$349	\$402	\$498	\$516	\$530		
2014Q3	\$326	\$149	\$336	\$434	\$496	\$476	\$488	\$488	\$497	\$520			
2014Q4	\$187	\$176	\$259	\$319	\$337	\$357	\$385	\$397	\$415				
2015Q1	\$135	\$183	\$218	\$272	\$300	\$324	\$360	\$360					
2015Q2	\$150	\$194	\$213	\$252	\$279	\$311	\$383						
2015Q3	\$405	\$311	\$273	\$300	\$300	\$293							
2015Q4	\$107	\$414	\$488	\$632	\$665								
2016Q1	\$508	\$409	\$481	\$596									
2016Q2	\$542	\$561	\$683										
2016Q3	\$73	\$494											
2016Q4	N/A												

**Cumulative Sleep Disorder Payments Per Physician Services Claim**

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$0.0	\$0.4	\$0.5	\$0.7	\$0.8	\$0.9	\$1.0	\$1.1	\$1.2	\$1.3	\$1.4	\$1.4	\$1.5
2012Q4	\$0.1	\$0.1	\$0.3	\$0.3	\$0.5	\$0.6	\$0.7	\$0.7	\$0.7	\$0.8	\$0.8	\$0.9	\$1.0
2013Q1	\$0.0	\$0.1	\$0.2	\$0.4	\$0.5	\$0.6	\$0.7	\$0.8	\$0.8	\$0.8	\$0.8	\$0.9	\$0.9
2013Q2	\$0.0	\$0.1	\$0.2	\$0.3	\$0.3	\$0.4	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6
2013Q3	\$0.0	\$0.1	\$0.3	\$0.4	\$0.4	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.8	\$0.9
2013Q4	\$0.0	\$0.1	\$0.2	\$0.3	\$0.3	\$0.4	\$0.5	\$0.6	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7
2014Q1	\$0.0	\$0.1	\$0.3	\$0.4	\$0.5	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.8	
2014Q2	\$0.0	\$0.1	\$0.2	\$0.3	\$0.3	\$0.4	\$0.4	\$0.5	\$0.7	\$0.7	\$0.7		
2014Q3	\$0.0	\$0.0	\$0.1	\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	\$0.5	\$0.5			
2014Q4	\$0.0	\$0.0	\$0.1	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3				
2015Q1	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.2	\$0.2	\$0.2					
2015Q2	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2						
2015Q3	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1							
2015Q4	\$0.0	\$0.0	\$0.1	\$0.1	\$0.2								
2016Q1	\$0.0	\$0.0	\$0.1	\$0.1									
2016Q2	\$0.0	\$0.1	\$0.1										
2016Q3	\$0.0	\$0.0											
2016Q4	\$0.0												

Source: WCIRB Medical Data Call

**Sexual Dysfunction Treatment Patterns**

Cumulative Percentage of Physician Services Claims with Sexual Dysfunction Payments

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012Q4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013Q1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013Q2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013Q4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014Q1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2014Q2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2014Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2014Q4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2015Q1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2015Q2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2015Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2015Q4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2016Q1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2016Q2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2016Q3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2016Q4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Cumulative Sexual Dysfunction Payments Per Sexual Dysfunction Claim

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$695	\$695	\$695	\$695	\$695	\$695	\$402	\$702	\$402	\$402	\$352	\$352	\$352
2012Q4	\$296	\$296	\$258	\$360	\$360	\$360	\$360	\$360	\$360	\$436	\$435	\$431	\$431
2013Q1	N/A	N/A	\$40	\$248	\$248	\$248	\$297	\$297	\$297	\$587	\$705	\$602	\$602
2013Q2	\$1,274	\$977	\$977	\$977	\$977	\$977	\$803	\$803	\$641	\$576	\$576	\$529	\$529
2013Q3	\$552	\$552	\$349	\$349	\$274	\$463	\$420	\$385	\$418	\$418	\$508	\$457	\$443
2013Q4	\$499	\$499	\$613	\$613	\$598	\$598	\$598	\$651	\$651	\$651	\$651	\$651	\$426
2014Q1	\$1,472	\$1,398	\$1,459	\$1,864	\$1,864	\$2,287	\$2,047	\$2,047	\$1,748	\$1,617	\$1,617	\$1,617	
2014Q2	\$834	\$834	\$737	\$737	\$737	\$657	\$657	\$657	\$657	\$1,183	\$1,183	\$1,183	
2014Q3	\$462	\$426	\$814	\$814	\$596	\$596	\$596	\$596	\$535	\$432			
2014Q4	\$2,319	\$2,305	\$2,305	\$1,737	\$1,480	\$1,480	\$1,480	\$1,069	\$852				
2015Q1	\$180	\$180	\$407	\$408	\$378	\$347	\$2,530	\$2,289					
2015Q2	N/A	\$756	\$756	\$490	\$590	\$590	\$475						
2015Q3	\$541	\$541	\$706	\$706	\$515	\$515							
2015Q4	\$927	\$504	\$504	\$617	\$619								
2016Q1	\$651	\$651	\$651	\$479									
2016Q2	\$409	\$322	\$170										
2016Q3	N/A	\$671											
2016Q4	\$550												

Cumulative Sexual Dysfunction Payments Per Physician Services Claim

Accident	Service Quarter (Delay from Accident Quarter)												
Quarter	0	1	2	3	4	5	6	7	8	9	10	11	12
2012Q3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2012Q4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1
2013Q1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1
2013Q2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
2013Q3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
2013Q4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2014Q1	\$0.0	\$0.1	\$0.1	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	
2014Q2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	
2014Q3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
2014Q4	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1				
2015Q1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$0.3					
2015Q2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0					
2015Q3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0						
2015Q4	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1								
2016Q1	\$0.0	\$0.0	\$0.0	\$0.0									
2016Q2	\$0.0	\$0.0	\$0.0										
2016Q3	\$0.0	\$0.0											
2016Q4	\$0.0												

Source: WCIRB Medical Data Call

### Supplemental Job Displacement Benefit (SJDB) Costs

#### Calendar Year Paid SJDB Costs

Calendar Year	SJDB Paid (\$millions)	% of Total Indemnity Paid
2010	\$32.0	1.1%
2011	\$32.3	1.1%
2012	\$36.2	1.1%
2013	\$37.2	1.1%
2014	\$30.0	0.9%
2015	\$45.8	1.4%
2016	\$64.6	1.8%

#### SJDB Costs by Accident Year

##### First Survey Level

Accident Year	% of Claims w/ Incurred SJDB	% of Claims w/ Paid SJDB	Average Incurred SJDB	% Change	Average Paid SJDB	% Change
2009	20.3%	3.3%	\$5,965	---	\$3,945	---
2010	16.6%	3.2%	\$5,948	0%	\$4,097	4%
2011	14.7%	3.0%	\$5,995	1%	\$4,241	4%
2012	11.9%	2.5%	\$5,845	-3%	\$4,227	0%
2013	16.1%	4.2%	\$5,796	-1%	\$5,054	20%
2014	20.2%	7.2%	\$5,648	-3%	\$4,927	-3%

##### Second Survey Level

Accident Year	% of Claims w/ Incurred SJDB	% of Claims w/ Paid SJDB	Average Incurred SJDB	% Change	Average Paid SJDB	% Change
2009	22.7%	2.7%	\$6,489	---	\$4,879	---
2010	20.0%	3.0%	\$6,437	-1%	\$4,601	-6%
2011	16.2%	2.2%	\$6,607	3%	\$5,105	11%
2012	14.8%	2.4%	\$6,343	-4%	\$4,303	-16%
2013	24.0%	6.5%	\$5,743	-9%	\$4,497	5%

Source: WCIRB aggregate financial data calls and Permanent Disability Claim Survey

**IMR Filed Counts**

Quarterly IMRs Filed

<u>Year &amp; Quarter</u>	<u>Total IMRs Filed</u>	<u>Change from Same Quarter in Prior Year</u>	<u>Eligible IMRs</u>	<u>Change from Same Quarter in Prior Year</u>
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%	38,752	---
2015 2Q	65,418	9.1%	42,761	---
2015 3Q	65,889	10.5%	43,036	---
2015 4Q	61,327	4.7%	41,060	---
2016 1Q	60,772	-0.6%	41,023	5.9%
2016 2Q	64,852	-0.9%	44,287	3.6%
2016 3Q	62,411	-5.3%	43,892	2.0%
2016 4Q	61,318	0.0%	43,618	6.2%
2017 1Q	61,973	2.0%	43,480	6.0%
2017 2Q	62,773	-3.2%	44,491	0.5%
2017 3Q	63,377	1.5%	44,422	1.2%

Yearly IMR Counts

	<u>Original IMR Applications</u>	<u>Duplicates</u>	<u>Ineligible</u>	<u>Total Rejected</u>	<u>Eligible IMRs</u>	<u>Eligible IMR Yearly Change</u>
2013 IMR Counts	83,920	15,560	15,516	31,076	52,844	---
2014 IMR Counts	228,084	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%

Source: DWC



### Changes in the Number of Weeks of Temporary Disability Benefits

#### First Survey Level

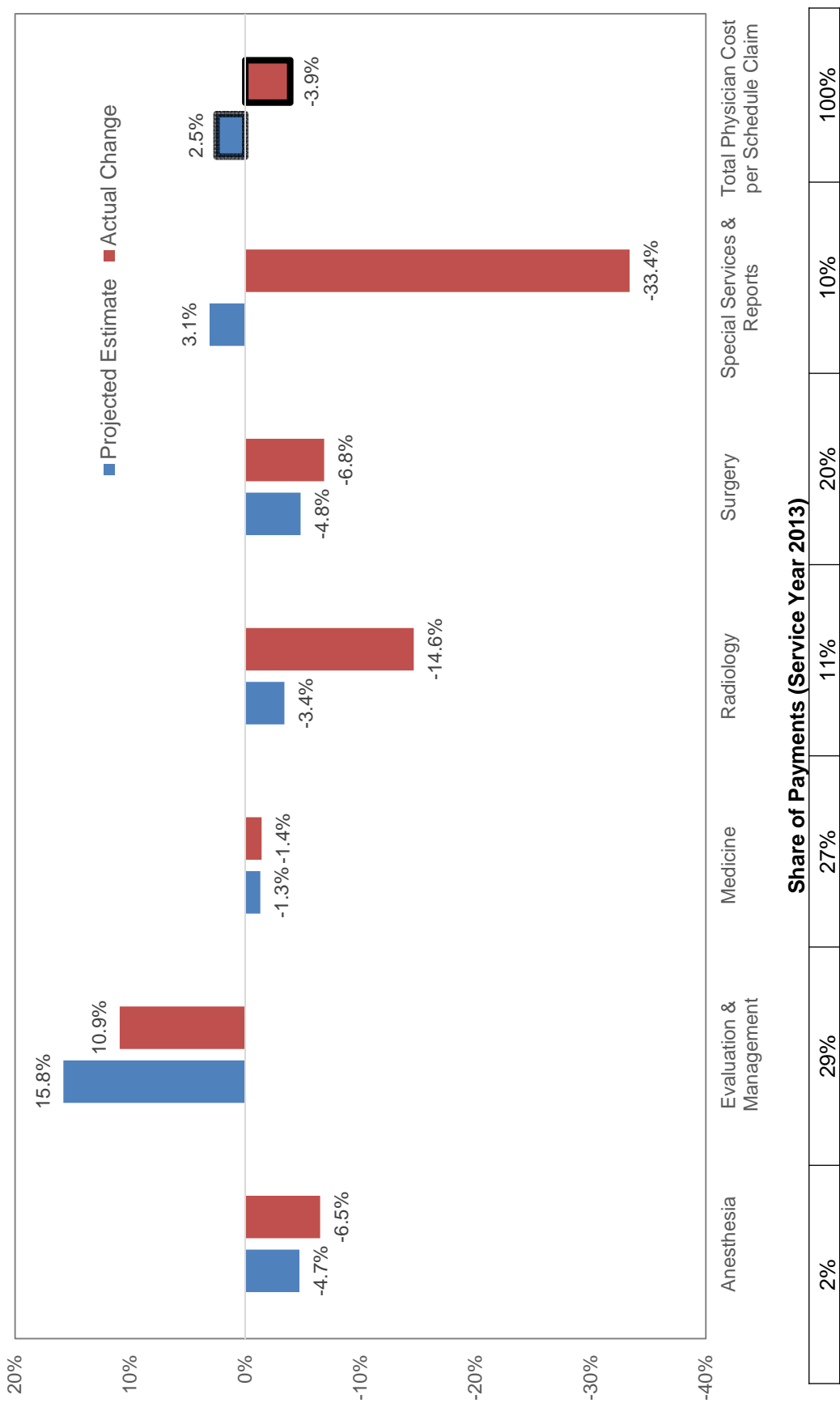
<u>Accident Year</u>	<u>Average TD Duration</u>	<u>Change</u>	<u>Median TD Duration</u>	<u>Change</u>
2004	38.5	-----	24.1	-----
2005	42.4	10.3%	28.6	18.5%
2006	44.2	4.2%	30.5	6.8%
2007	47.2	6.9%	34.6	13.3%
2008	50.4	6.8%	39.0	12.8%
2009	48.5	-3.8%	36.0	-7.7%
2010	46.2	-4.7%	33.8	-6.1%
2011	44.6	-3.6%	30.0	-11.2%
2012	43.8	-1.7%	29.8	-0.5%
2013	42.5	-3.2%	29.3	-1.8%
2014	41.8	-1.5%	29.2	-0.4%

#### Second Survey Level

<u>Accident Year</u>	<u>Average TD Duration</u>	<u>Change</u>	<u>Median TD Duration</u>	<u>Change</u>
2003	40.2	-----	25.3	-----
2004	38.3	-4.7%	24.4	-3.5%
2005	42.1	9.9%	29.4	20.8%
2006	43.2	2.6%	29.9	1.4%
2007	47.2	9.2%	34.1	14.1%
2008	51.1	8.2%	39.0	14.4%
2009	48.9	-4.3%	36.1	-7.3%
2010	44.9	-8.2%	32.7	-9.5%
2011	46.0	2.5%	30.8	-5.7%
2012	41.4	-10.0%	27.8	-9.9%
2013	42.4	2.4%	30.2	8.6%

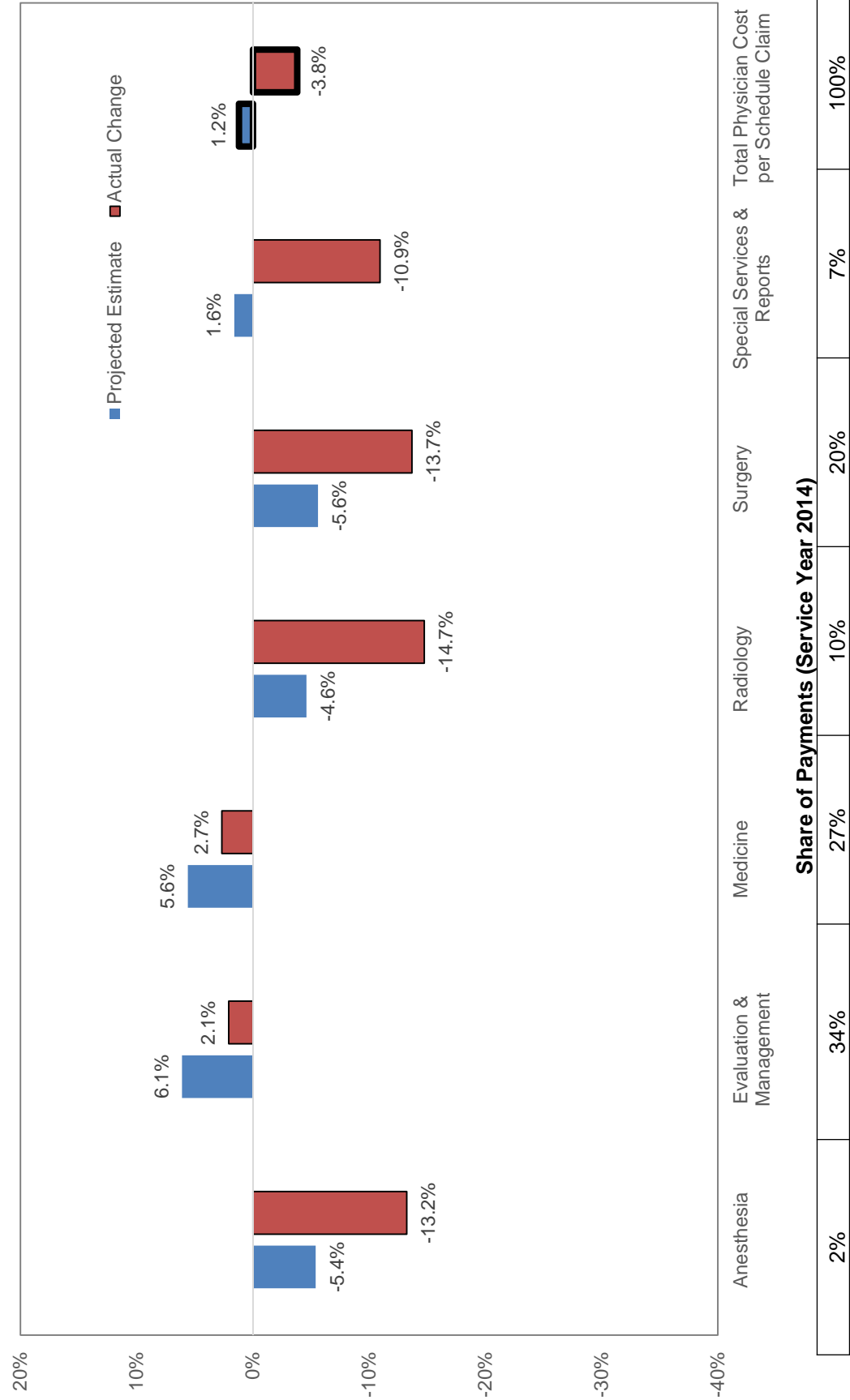
Source: WCIRB Permanent Disability Claim Survey

# Projected vs. Actual Change in Physician Fees Schedule Payments per Claim: SY 2013 to SY 2014 Transactions through 2Q2017 (42 months)



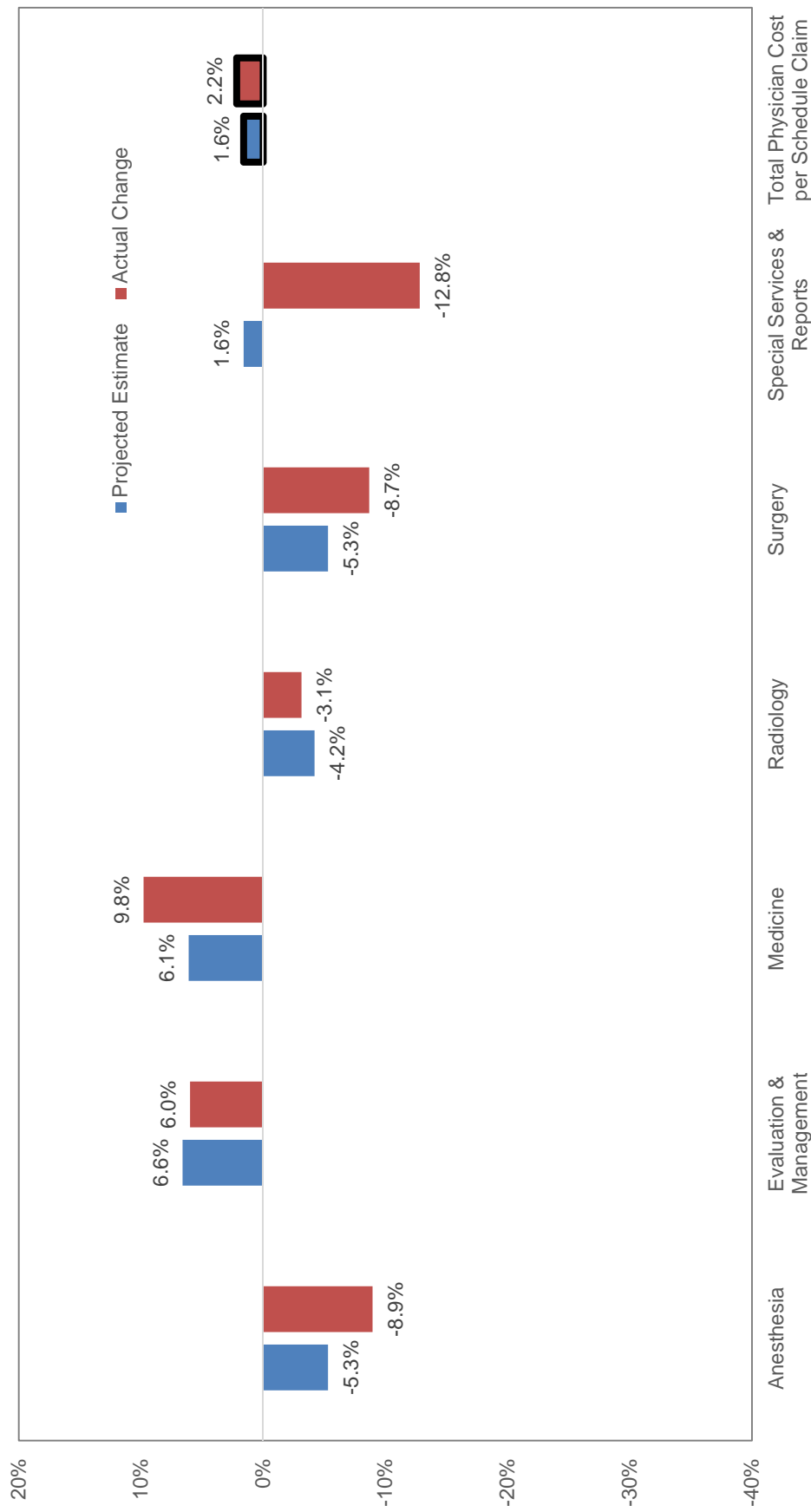
Source: WCIRB Medical Data Call

# Projected vs. Actual Change in Physician Fees Schedule Payments per Claim: SY 2014 to SY 2015 Transactions through 2Q2017 (30 months)



Source: WCIRB Medical Data Call

# Projected vs. Actual Change in Physician Fees Schedule Payments per Claim: SY 2015 to SY 2016 Transactions through 2Q2017 (18 months)

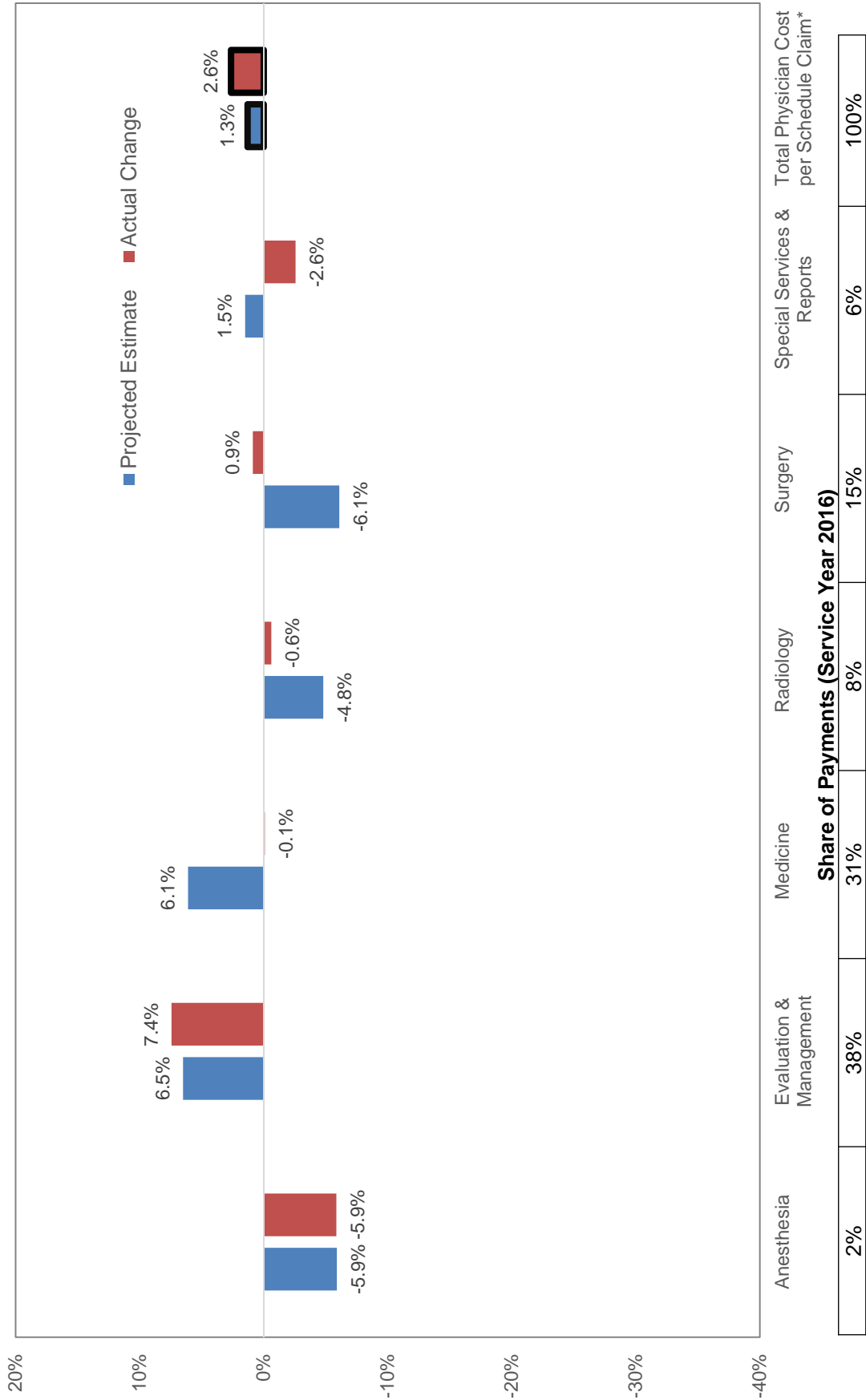


Share of Payments (Service Year 2015)

2%	36%	29%	9%	18%	7%	100%
----	-----	-----	----	-----	----	------

Source: WCIRB Medical Data Call

# Projected vs. Actual Change in Physician Fees Schedule Payments per Claim: SY 2016 to SY 2017 Transactions through 2Q2017 (6 months)



Source: WCIRB Medical Data Call

Counts by Region

<u>Time Period</u>	<u>Bay Area</u>	<u>Central Coast/ Valley</u>	<u>Los Angeles County</u>	<u>Remainder of LA Basin</u>	<u>Remaining CA Zip Codes</u>	<u>Sacramento</u>	<u>San Diego County</u>	<u>Total</u>
2011	18,723	24,414	283,774	114,554	2,535	3,934	15,922	<b>463,856</b>
1st Qtr 2012	5,490	7,245	97,245	38,034	895	1,248	4,936	<b>155,093</b>
2nd Qtr 2012	5,467	8,970	122,040	44,065	1,102	1,322	4,991	<b>187,957</b>
3rd Qtr 2012	6,434	15,289	207,639	85,152	698	1,407	6,611	<b>323,230</b>
4th Qtr 2012	10,397	25,730	342,549	123,129	1,119	1,557	8,523	<b>513,004</b>
1st Qtr 2013	1,232	2,193	46,830	17,032	230	268	1,312	<b>69,097</b>
2nd Qtr 2013	1,450	1,562	18,947	6,917	211	339	684	<b>30,110</b>
3rd Qtr 2013	1,607	1,795	25,999	9,855	247	410	991	<b>40,904</b>
4th Qtr 2013	1,928	2,025	29,537	10,893	276	358	1,136	<b>46,153</b>
1st Qtr 2014	1,841	2,029	25,668	10,117	239	384	1,165	<b>41,443</b>
2nd Qtr 2014	1,697	2,306	29,417	11,942	265	354	1,263	<b>47,244</b>
3rd Qtr 2014	1,941	1,996	29,665	12,198	355	424	1,378	<b>47,957</b>
4th Qtr 2014	1,690	2,371	34,772	12,469	374	384	1,488	<b>53,548</b>
1st Qtr 2015	2,071	3,058	45,827	18,016	431	488	2,133	<b>72,024</b>
2nd Qtr 2015	2,370	4,218	54,147	22,198	501	500	2,787	<b>86,721</b>
3rd Qtr 2015	2,428	4,977	61,619	24,827	691	526	3,047	<b>98,115</b>
4th Qtr 2015	2,338	4,991	68,843	26,571	686	495	3,085	<b>107,009</b>
1st Qtr 2016	2,884	5,410	67,259	27,326	672	538	3,931	<b>108,020</b>
2nd Qtr 2016	2,543	5,112	66,511	26,852	536	506	3,912	<b>105,972</b>
3rd Qtr 2016	2,243	4,167	45,707	20,136	420	462	3,404	<b>76,539</b>
4th Qtr 2016	1,872	4,433	66,169	25,942	506	397	4,400	<b>103,719</b>
1st Qtr 2017	1,228	1,872	24,947	9,594	334	312	1,380	<b>39,667</b>
2nd Qtr 2017	1,537	2,211	33,194	11,969	349	369	1,764	<b>51,393</b>
3rd Qtr 2017	1,700	2,047	29,215	10,487	298	419	1,149	<b>45,315</b>

Counts by Type

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

\* 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

### Lien Filed Counts by Month

Year.Month	Number of Liens Filed	
2016.01	34,877	
2016.02	34,352	
2016.03	38,791	
2016.04	36,419	
2016.05	36,861	
2016.06	32,692	
2016.07	24,184	<----SB 863 "Dual Statutes" Ends
2016.08	26,963	
2016.09	25,392	<----SB 1160 Signed
2016.10	25,219	
2016.11	28,706	
2016.12	49,794	
2017.01	8,748	<----SB 1160 Becomes Effective
2017.02	13,075	
2017.03	17,844	
2017.04	17,785	
2017.05	17,750	
2017.06	15,858	
2017.07	15,463	
2017.08	16,369	
2017.09	13,447	

Source: DWC

**Medical Lien Payments by Development Period**

Lien Payments as a % of Total Medical Services Payments

Development	Calendar Year			
<u>Year<sup>1</sup></u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017 (6 Mo.)</u>
1	0.0%	0.0%	0.0%	0.0%
2	1.7%	1.5%	1.2%	0.3%
3	8.3%	8.2%	7.6%	4.2%
4	16.4%	16.3%	17.8%	15.3%
5	21.6%	22.5%	21.6%	21.4%
6	21.6%	24.9%	22.2%	21.8%
7	20.8%	22.6%	22.8%	21.2%
8	17.9%	20.4%	21.2%	22.1%
9	16.0%	17.9%	19.9%	21.0%
10	13.6%	15.0%	16.3%	13.3%
11	13.4%	10.6%	15.8%	12.1%
12	11.1%	10.4%	10.2%	11.4%
13	8.8%	8.6%	10.7%	10.8%
14	7.8%	7.9%	9.0%	9.0%
15	5.4%	6.6%	6.9%	4.9%
16	4.9%	5.9%	11.6%	5.1%
17+	2.7%	2.8%	3.5%	2.5%
All Periods	8.9%	8.9%	8.4%	7.3%

Ratio of Lien Paid Amount to Charged Amount

Development	Calendar Year			
<u>Year<sup>1</sup></u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017 (6 Mo.)</u>
1	0.0%	0.0%	0.0%	0.0%
2	41.3%	30.3%	31.3%	27.1%
3	41.6%	31.8%	32.4%	26.0%
4	40.9%	34.3%	33.0%	26.5%
5	41.8%	33.7%	34.7%	26.9%
6	39.1%	36.4%	35.1%	28.5%
7	37.4%	32.0%	36.7%	31.5%
8	33.6%	30.7%	33.0%	32.8%
9	28.2%	29.1%	30.8%	28.3%
10	27.2%	24.9%	25.8%	27.3%
11	25.6%	23.7%	23.4%	24.3%
12	25.7%	25.0%	20.9%	25.7%
13	28.7%	25.9%	20.5%	22.9%
14	35.5%	27.2%	24.3%	27.4%
15	28.7%	22.2%	25.7%	25.9%
16	29.3%	30.2%	28.5%	24.6%
17+	31.1%	23.7%	26.6%	25.8%
All Periods	36.5%	31.5%	31.8%	27.5%

Source: WCIRB Medical Data Call

<sup>1</sup> For example, calendar year 2014 development year 5 represents payments made on 2010 claims in 2014.



**DWC Dismissed Lien Summary**

<u>Accident Year</u>	<u>% of Liens</u>	<u>Avg. Lien Demand</u>	<u>Lien Filing Year</u>	<u>% of Liens</u>	<u>Avg. Lien Demand</u>
Before 1996	2.8%	\$11,572	2013	11.6%	\$9,285
1996	0.4%	\$10,828	2014	19.9%	\$8,109
1997	0.5%	\$10,307	2015	36.6%	\$8,076
1998	0.6%	\$10,350	2016	31.9%	\$8,475
1999	0.7%	\$9,804			
2000	1.0%	\$9,430			
2001	1.0%	\$9,667	<u>Lien Type</u>	<u>% of Liens</u>	<u>Avg. Lien Demand</u>
2002	1.2%	\$9,520	Medical	99.9%	\$8,353
2003	1.3%	\$9,270	Other	0.1%	\$5,017
2004	1.6%	\$9,669			
2005	2.0%	\$9,056			
2006	2.7%	\$8,792	<u>Region</u>	<u>% of Liens</u>	<u>Avg. Lien Demand</u>
2007	3.8%	\$8,776	Bay Area	1.7%	\$9,798
2008	5.2%	\$8,237	Central Coast/Valley	3.3%	\$9,085
2009	7.3%	\$8,206	Los Angeles County	66.1%	\$8,402
2010	11.6%	\$7,992	Remainder of LA Basin	25.5%	\$7,965
2011	15.9%	\$8,111	Sacramento	0.3%	\$15,166
2012	18.3%	\$8,233	San Deigo County	2.8%	\$7,739
2013	14.0%	\$8,070	Other CA	0.3%	\$13,379
2014	7.0%	\$7,277			
2015	1.1%	\$7,305			
2016	0.0%	\$7,513			

Source: Approximately 271,000 dismissed liens linked to the original lien filing (93% of total dismissals).

Unit Statistical Claims Involving Liens (Preliminary)

Claims with Non-Dismissed Liens											
Policy Year	Latest RL	Claim Distribution	% Open	% PP	% Indemnity	% Cumulative	Avg Ind Pd	Avg Ind Inc	Avg Med Pd	Avg Med Inc	Avg ALAE Pd
2004 & Prior	5+	9.8%	76%	91%	98%	13%	70,753	104,657	117,928	188,039	10,242
2005	10	2.6%	47%	87%	93%	16%	69,037	81,084	130,804	159,133	20,013
2006	10	5.0%	35%	91%	97%	15%	69,041	83,040	130,895	165,988	20,298
2007	9	7.7%	32%	86%	95%	15%	63,714	73,165	117,942	139,214	21,324
2008	8	10.1%	31%	90%	97%	18%	55,146	64,369	101,011	123,839	20,232
2009	7	13.1%	27%	82%	95%	18%	44,800	51,134	79,573	95,755	19,043
2010	6	15.1%	31%	79%	95%	17%	38,677	43,851	62,942	73,939	19,546
2011	5	15.8%	34%	77%	96%	18%	32,827	38,809	49,709	61,166	19,898
2012	4	11.8%	41%	73%	96%	16%	26,380	31,709	37,969	47,462	16,119
2013	3	6.4%	53%	71%	94%	22%	21,251	26,906	25,651	36,074	11,861
2014	2	2.2%	62%	68%	92%	19%	16,025	26,002	18,029	31,828	8,719
2015	1	0.3%	78%	61%	96%	22%	8,733	37,306	11,412	31,210	4,687
All		100%	39%	81%	96%	17%	44,474	54,336	75,243	96,335	17,700

Claims with Dismissed Liens											
Policy Year	Latest RL	Claim Distribution	% Open	% PP	% Indemnity	% Cumulative	Avg Ind Pd	Avg Ind Inc	Avg Med Pd	Avg Med Inc	Avg ALAE Pd
2004 & Prior	5+	7.7%	82%	87%	96%	13%	85,752	129,327	131,529	212,507	14,942
2005	10	2.9%	46%	89%	93%	22%	63,325	88,648	134,226	187,823	20,586
2006	10	4.5%	32%	84%	95%	16%	73,225	86,181	154,426	175,694	21,410
2007	9	6.6%	35%	93%	96%	14%	69,243	82,250	153,646	186,732	23,013
2008	8	9.1%	31%	87%	96%	15%	56,177	67,064	93,698	108,756	21,956
2009	7	12.3%	27%	84%	97%	15%	46,569	50,721	79,876	91,041	19,461
2010	6	15.9%	30%	81%	96%	17%	38,153	43,330	63,658	73,117	20,494
2011	5	18.5%	29%	77%	96%	18%	28,838	32,211	50,206	57,552	19,197
2012	4	13.6%	36%	69%	94%	18%	28,055	33,205	40,402	51,390	16,160
2013	3	7.2%	46%	72%	93%	20%	25,844	30,289	31,971	39,206	12,469
2014	2	1.8%	40%	71%	93%	12%	19,108	22,860	18,312	31,079	9,111
2015	1	0.1%	100%	100%	100%	0%	775	9,402	1,554	8,523	2,409
All		100%	37%	80%	96%	16%	44,454	54,002	76,764	95,502	18,655

Source: Based on approximately 12,000 DWC liens linked to claims from WCIRB unit statistical data.

Medical Lien Transactions

	Non-Dismissed Liens					"Dismissed" Liens				
	% of Liens	Average Billed Amt	Average Paid Amt	Paid %	Average Lien Demand	% of Liens	Average Billed Amt	Average Paid Amt	Paid %	Average Lien Demand
Type of Provider										
Physician Specialist	16%	\$4,650	\$1,226	26%	\$7,038	16%	\$5,106	\$1,275	25%	\$7,138
Pharmacist	7%	\$5,919	\$1,344	23%	\$9,174	7%	\$4,669	\$1,285	28%	\$9,377
MD General Practitioner	7%	\$6,267	\$1,218	19%	\$6,525	7%	\$6,897	\$1,968	29%	\$8,091
Physical Therapist	7%	\$6,076	\$1,952	32%	\$7,067	7%	\$5,765	\$1,516	26%	\$8,089
Ambulatory Surgical Center (ASC) Provider	5%	\$3,298	\$1,206	37%	\$5,587	4%	\$3,943	\$1,387	35%	\$6,305
Durable Medical Equipment (DME) Supplier	5%	\$4,700	\$1,181	25%	\$4,940	5%	\$6,547	\$1,161	18%	\$8,799
Occupational Health Provider	4%	\$3,670	\$1,109	30%	\$5,516	4%	\$4,739	\$1,654	35%	\$5,298
Chiropractic	2%	\$7,129	\$1,471	21%	\$6,495	3%	\$8,940	\$1,604	18%	\$9,249
Hospital-Based Provider	1%	\$10,763	\$1,443	13%	\$14,475	2%	\$14,628	\$4,882	33%	\$32,655
Other	10%	\$5,181	\$1,149	22%	\$6,063	8%	\$5,048	\$1,093	22%	\$5,969
Not Specified	35%	\$5,175	\$1,228	24%	\$6,325	36%	\$5,897	\$1,574	27%	\$7,770
All	100%	\$5,233	\$1,276	24%	\$6,671	100%	\$5,832	\$1,523	26%	\$8,058

Accident Year	Non-Dismissed Liens					"Dismissed" Liens				
	% of Liens	Average Billed Amt	Average Paid Amt	Paid %	Average Lien Demand	% of Liens	Average Billed Amt	Average Paid Amt	Paid %	Average Lien Demand
2004 & Prior										
2005	3%	\$8,391	\$1,848	22%	\$8,466	2%	\$3,738	\$1,068	29%	\$6,841
2006	1%	\$5,538	\$1,401	25%	\$5,518	0%	\$5,771	\$637	11%	\$8,100
2007	2%	\$5,601	\$1,533	27%	\$6,141	2%	\$4,357	\$1,409	32%	\$3,577
2008	5%	\$4,607	\$1,268	28%	\$6,079	3%	\$8,688	\$2,651	31%	\$10,438
2009	8%	\$4,127	\$1,186	29%	\$6,856	7%	\$5,374	\$2,323	43%	\$9,156
2010	13%	\$4,316	\$1,358	31%	\$5,872	11%	\$4,435	\$1,282	29%	\$11,159
2011	18%	\$4,741	\$1,238	26%	\$6,327	18%	\$6,855	\$2,056	30%	\$7,440
2012	19%	\$4,478	\$1,105	25%	\$6,221	21%	\$5,650	\$1,396	25%	\$8,595
2013	17%	\$6,259	\$1,308	21%	\$7,189	22%	\$5,503	\$1,160	21%	\$6,669
2014	9%	\$7,213	\$1,389	19%	\$7,750	10%	\$6,990	\$1,426	20%	\$8,706
2015	3%	\$5,729	\$1,234	22%	\$8,096	4%	\$5,265	\$880	17%	\$5,066
All	0%	\$4,300	\$773	18%	\$9,506	0%	N/A	N/A	N/A	N/A
	100%	\$5,233	\$1,276	24%	\$6,671	100%	\$5,832	\$1,523	26%	\$8,058

Source: Based on approximately 4,000 DWC liens linked to lien payments from WCIRB Medical Data Call data. Lien demand information from DWC data.

## **Item AC17-12-03**

### **On-leveling for Wage Level Changes in Pure Premium Ratemaking**

Staff presented the results of evaluating different wage series as part of the analysis to develop the 2017 California Wage Report, made available to members in January of 2017. In the report, staff noted that these historical and projected wage series can potentially be used to on-level and trend historical exposures and indemnity benefits.

Staff conducted a review of the underlying series used to on-level premiums and indemnity benefit level costs for wage level changes in pure premium ratemaking. The currently selected UCLA wage series and the Occupational Employee Statistics (OES) wage series were evaluated retrospectively to determine whether the OES series provides an improvement in accuracy compared to the current method. The Amended January 1, 2018 Pure Premium Rate Filing loss ratios (experience as of June 30, 2017) and benefit level adjustments were used in the analysis to calculate the ultimate loss ratios while the wage on-level adjustment is based on the June 2017 UCLA series or the May 2016 OES series which was published in April 2017 (both of which were the most current of these series available at the time of the analysis).

#### Wage Series

The OES series was published by the Bureau of Labor Statistics (BLS) and the California Employment Development Department (EDD) in the Occupational Employment Survey<sup>1</sup> while the UCLA series is developed from the BLS' aggregate wage and salary and aggregate employment data, which are forecast by the UCLA Anderson Forecast and used in ratemaking. There are several differences which are noted below.

1. UCLA Wage: UCLA is updated on a quarterly basis with the most recent wage information and is thus more responsive. The UCLA forecasts are based on annual aggregate average wages which may cause more volatility during periods of economic transition. The UCLA wage forecasts rely on the BLS reported wage information.
2. OES Wage: OES is updated annually which causes changes to wage trends to be captured more slowly. Unlike the UCLA wage series, the OES series is based on median information which may better represent the covered exposure, especially during periods of economic transition. The OES series is collected through semiannual surveys to collect employment and wages for specific occupations. As such, data adjustments are needed at the classification level to reduce potential distortions due to changes of mix of classifications. Staff used the OES data to model median wages and develop occupational-level wage inflation projections while preparing the 2017 California Wage Report. Wage projections for future periods are not published in the OES series.

Staff also reviewed a modified UCLA wage forecast series. In this series, the UCLA wage forecast for future years was adjusted by the change in the emerging year when compared to the previous UCLA forecast. This adjustment was made for both the first and second projection years in the forecast, which mimics the projection years used in pure premium ratemaking. For example, the forecasted 2015 and 2016 wage changes from the June 2014 UCLA forecast was adjusted with the change on 2014 from the March 2014 to the June 2014 UCLA forecasts to obtain the adjusted forecasted wage changes for 2015 and 2016. This alternative series is intended to be more responsive to changes in emerging average wage levels.

---

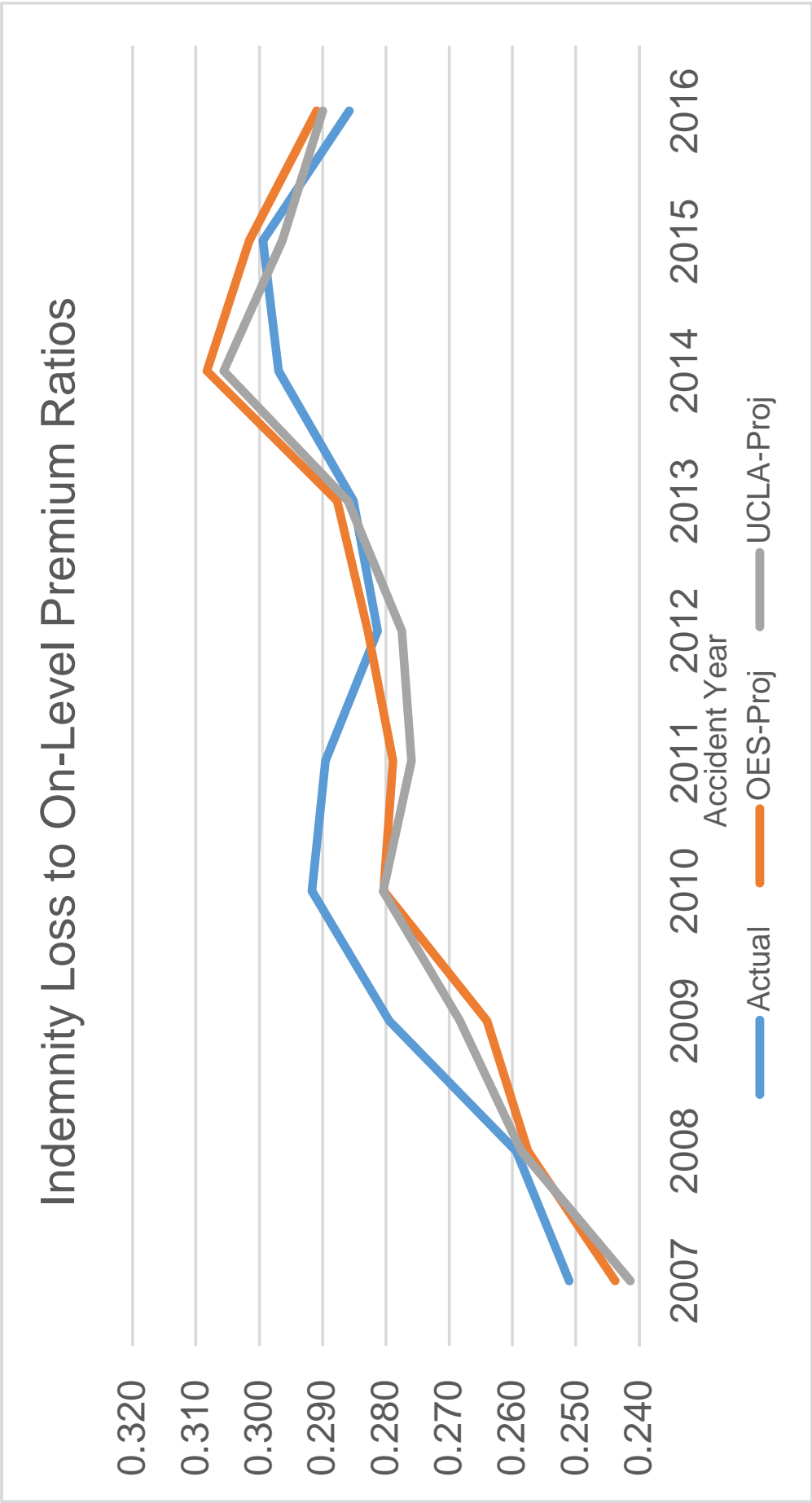
<sup>1</sup> <http://www.labormarketinfo.edd.ca.gov/data/oes-employment-and-wages.html>

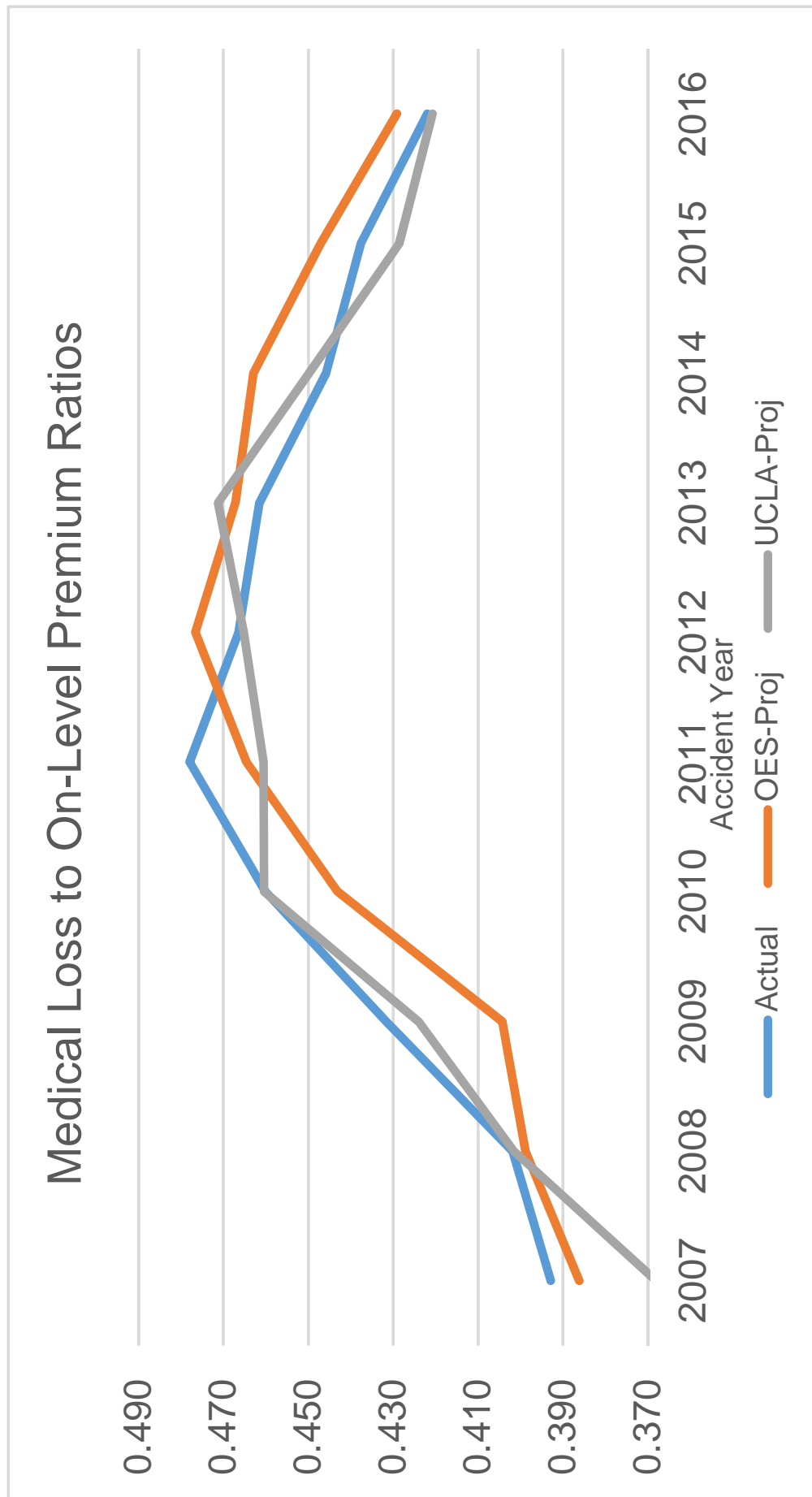
### Methodology

The OES and UCLA were both used to on-level developed loss ratios on an accident year basis. The methodology used to calculate projected ultimate loss ratios is based on the separate frequency and severity trends applied to the previous two years prior to the corresponding unadjusted latest year at the current wage level. The frequency and severity assumptions used for the analysis are based on those included in the Amended January 1, 2018 Pure Premium Rate Filing. Inasmuch as only the wage level change projection is being reviewed in this analysis, the loss trending methodology applied should not impact the results.

Exhibits 1 and 2 show the projected loss ratios under each wage on-leveling basis and compares those projected loss ratios to the emerged loss ratios for the period at the current wage level. The UCLA projections are more in-line with the actual loss ratio, which is most clearly seen in the medical loss ratios shown in Exhibit 2. Exhibit 3 compares the absolute error between the projected loss ratio and the actual loss ratio using the currently selected latest 2-year average frequency and severity trend as well as a 5-year loss ratio trend. The projected loss ratios on-leveled using the UCLA series perform similar to or better than those using the OES series for the majority of the years. Based on these results, staff does not recommend adopting the OES wage series for use in pure premium ratemaking.

Exhibit 4 compares the differences of adjusted and unadjusted UCLA forecast wage changes (as described above) to the “full maturity” wage changes for 2007 through 2016. (The reported wages are assumed to reach “full maturity” 12 months after the end of the year. For example, the “full maturity” 2015 wage change is as of December 2016.) The adjusted wage series generally performed the same or worse than the unadjusted wage series based on the average absolute error. As a result, staff does not recommend making these adjustments to the UCLA forecasts when being used for pure premium ratemaking.





Accident Year	UCLA Projection - Latest 2-Yr Avg Freq and Sev Trend			OES Projection - Latest 2-Yr Avg Freq and Sev Trend			Error Difference
	Ind Abs Error	Med Abs Error	Total Abs Error	Ind Abs Error	Med Abs Error	Total Abs Error	
2007	0.97%	2.48%	3.45%	0.73%	0.67%	1.40%	TRUE 3.18%
2008	0.08%	0.03%	0.11%	0.18%	0.31%	0.49%	FALSE -0.57%
2009	1.12%	0.76%	1.87%	1.55%	2.73%	4.27%	FALSE -3.38%
2010	1.12%	0.03%	1.10%	1.14%	1.70%	2.84%	FALSE -2.31%
2011	1.36%	1.74%	3.10%	1.07%	1.34%	2.41%	TRUE 0.90%
2012	0.39%	0.12%	0.51%	0.15%	1.02%	1.17%	FALSE -0.89%
2013	0.09%	0.97%	1.06%	0.26%	0.56%	0.81%	TRUE 0.33%
2014	0.87%	0.40%	1.27%	1.13%	1.71%	2.84%	FALSE -2.12%
2015	0.30%	0.91%	1.21%	0.22%	0.95%	1.16%	TRUE 0.06%
2016	0.41%	0.12%	0.29%	0.51%	0.72%	1.23%	FALSE -1.33%
Average	0.67%	0.76%	1.40%	0.69%	1.17%	1.86%	

Accident Year	UCLA Projection - 5-Yr LR Trend			OES Projection - 5-Yr LR Trend			Error Difference
	Ind Abs Error	Med Abs Error	Total Abs Error	Ind Abs Error	Med Abs Error	Total Abs Error	
2009	0.12%	0.32%	0.45%	0.49%	1.12%	1.61%	FALSE -1.64%
2010	0.05%	1.68%	1.73%	0.08%	1.75%	1.82%	FALSE -0.12%
2011	0.27%	0.38%	0.11%	0.64%	0.70%	1.34%	FALSE -1.61%
2012	1.77%	2.89%	4.66%	2.43%	4.94%	7.37%	FALSE -3.62%
2013	1.62%	4.57%	6.19%	1.73%	4.82%	6.55%	FALSE -0.49%
2014	1.83%	3.90%	5.73%	1.88%	3.99%	5.87%	FALSE -0.19%
2015	0.29%	1.23%	0.94%	0.10%	1.82%	1.71%	FALSE -1.05%
2016	0.27%	0.39%	0.65%	0.01%	0.33%	0.32%	TRUE 0.47%
Average	0.78%	1.92%	2.56%	0.92%	2.43%	3.33%	



UCLA Adjusted vs Unadjusted Series Based on the Specified Forecast <sup>1</sup>														
Year	12/YY+1		3/YY-1		6/YY-1		3/YY-2		6/YY-2		3/YY-2		6/YY-2	
	Full Maturity Wage Changes <sup>2</sup>		Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error	Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error	Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error	Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error	Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error	Adj Wage Chg Abs Error	Unadj Wage Chg Abs Error
2007	4.55%		0.23%	2.30%	3.53%	1.97%								
2008	2.26%		0.04%	0.29%	0.44%	0.44%							1.34%	0.22%
2009	0.86%		1.85%	1.64%	2.45%	1.87%							3.15%	3.15%
2010	3.50%		0.66%	0.58%	0.60%	0.62%							0.40%	0.18%
2011	3.35%		2.39%	0.98%	0.33%	0.20%							2.00%	0.78%
2012	3.68%		2.05%	0.79%	0.65%	0.61%							0.41%	0.12%
2013	0.77%		0.05%	1.21%	0.57%	0.93%							2.11%	2.15%
2014	2.99%		0.91%	0.55%	0.39%	0.55%							0.79%	0.43%
2015	4.38%		2.31%	1.84%	1.08%	1.78%							1.53%	1.69%
2016	2.91%		1.48%	1.53%	1.77%	1.53%							1.03%	0.33%
Avg Error			1.2%	1.2%	1.2%	1.0%							1.4%	1.0%
2017	2.13%		1.64%	2.26%	1.37%	2.32%							2.57%	2.33%
2018	4.01%		1.01%	0.83%	0.36%	0.21%							1.06%	0.11%

<sup>1</sup> For example for 2007, the 3/YY-2 column represents the 2007 wage level change projected in the March 2005 UCLA Forecast. Each value represents the error in the projected change from the "full maturity" change.

<sup>2</sup> Years 2016 and later use the September 2017 UCLA Wage Forecast.

## **Item AC17-12-04 Earthquake Study**

At the December 6, 2016 meeting, the Committee discussed the WCIRB undertaking a study of the potential earthquake exposure in California. At the meeting, the Committee noted that it had been a number of years since the WCIRB had updated its projections around statewide earthquake exposure and there have been significant enhancements in catastrophe modeling since that time. The Committee also noted that while individual insurers have their own processes to evaluate earthquake exposure, a WCIRB published analysis of the statewide earthquake exposure in California could help inform system stakeholders as to this potential exposure. The study was authorized by the Governing Committee at their meeting of April 5, 2017.

The WCIRB contracted with Risk Management Solutions (RMS), a leading catastrophe risk modeling firm, to conduct an analysis of potential statewide workers' compensation exposure arising from earthquakes. Classification exposures by location information underlying the study was provided by the WCIRB based on the information used in its studies of regional differences in frequency and severity.

Representatives of RMS will present their study findings at the meeting.

## Item AC17-12-05

### Potential 2018 Actuarial and Research Study Projects

Potential actuarial and medical research studies under consideration for 2018 are shown below. Also shown for each potential study is staff's assessment of the current status of the study. Committee input is being solicited as to the completeness and relative priority of these potential studies.

#### A. Studies/Projects Arising Out of California Department of Insurance (CDI) Directives

1. Industry Average Rates. In the CDI Decision on the January 1, 2011 Pure Premium Rate Filing as modified by the Commissioner's June 21, 2011 directive, the WCIRB was directed to include information on industry average filed and charged rates in WCIRB pure premium rate filings.

**Project Status:** In response to the CDI directive, in 2011, the WCIRB developed a process to compute industry average filed rates by classification with respect to the January 1, 2012 Pure Premium Rate Filing. In 2013, the WCIRB, in consultation with the CDI, developed an alternative simplified process to be used for potential mid-year filings that produced January 1 average insurer rate estimates of comparable accuracy to the more comprehensive process. As in the last several years, staff anticipates using the simplified process to determine industry average rates as of January 1, 2018 for purpose of a potential July 1, 2018 Pure Premium Rate Filing and the comprehensive process to compute industry average filed rates as of July 1, 2018 for purposes of the January 1, 2019 Pure Premium Rate Filing.

2. Adjusted Incurred Loss Development Methodology. In the decisions on the July 1, 2017 and January 1, 2018 Pure Premium Rate Filings, the CDI recommended the WCIRB to review the underlying assumptions of the adjusted incurred loss development methodology.

**Project Status:** Staff anticipates undertaking a comprehensive review of the assumptions underlying the case reserve-adjusted incurred loss development methodology that has been used in providing alternative loss development projections as part of the WCIRB's pure premium rate filing materials. Staff anticipates completing this analysis for Actuarial Committee's review by the third quarter of 2018 for consideration of the January 1, 2019 Pure Premium Rate Filing.

3. Unallocated Loss Adjustment Expenses (ULAE) Apportionment to California. In the decision on the January 1, 2018 Pure Premium Rate Filing, the CDI directed the WCIRB to continue its analysis of the appropriate basis to apportion countrywide ULAE to California and relied in part on the expected results of that analysis in the advisory pure premium rate level decision.

**Project Status:** At the September 5, 2017 meeting, the Actuarial Committee adopted changes to the WCIRB's annual Expense Call to collect open indemnity claim count information. This information will facilitate a new method of apportioning countrywide ULAE to California, which should better reflect the longer duration of claims in California than did paid losses. Staff anticipates compiling this information for the 2017 calendar year in the second quarter of 2018 and presenting it to the Actuarial Committee in the third quarter of 2018 for consideration of the January 1, 2019 Pure Premium Rate Filing.

4. Indemnity Claim Frequency Model. In the CDI Decision on the January 1, 2017 Pure Premium Rate Filing, the CDI recommended that the WCIRB review its frequency projection model in light of the continued increases in indemnity claim frequency.

**Project Status:** The WCIRB regularly reviews its frequency projection model and has made a number of enhancements over the years. In 2017, staff continued its review of the model parameters including consideration of a time-series approach with the Actuarial Research Working Group (ARWG). Staff anticipates continuing this work in 2018 with any recommendation for change presented to the to the Actuarial Committee in the third quarter of 2018 for consideration of the January 1, 2019 Pure Premium Rate Filing

5. Terrorism Data Reporting. In 2016 and 2017, the CDI directed staff to provide information to both the National Association of Insurance Commissioners (NAIC) and the Federal Insurance Office (FIO) related to terrorism exposure in California workers' compensation.

**Project Status:** In early 2017, the WCIRB issued a special call related to terrorism premium and based on that information and data already collected via unit statistical reports provided the information requested by the NAIC on terrorism charges by insurer on a confidential basis in July of 2017. Also in 2017, the staff worked with FIO, NCCI and ISO, who is collecting the terrorism data on behalf of the FIO, to finalize the workers' compensation terrorism data reporting structure for information submitted to the FIO. In accordance with that structure and FIO requirements, staff provided the FIO, on a confidential basis, terrorism premium and exposure information by insurer group in September of 2017. The NAIC and the FIO have requested similar information to be provided in early 2018. As a result, staff anticipates providing the annual update to that information in the first and second quarters of 2018.

#### **B. Studies/Projects Directed by Legislation**

1. Statewide Paid Costs. Section 11759.1 of the Insurance Code requires the WCIRB to report annually on workers' compensation costs paid during the preceding calendar year. The 2017 calendar year report is required to be completed by June of 2018.

**Project Status:** Staff anticipates publishing the report by the end of the second quarter of 2018. In addition, as in the last several years, staff anticipates compiling information from this report and other WCIRB reports into a high-level "executive summary" of the state of the California workers' compensation system to be published by the third quarter of 2018.

2. Policyholder Dividends. Section 11739 of the Insurance Code requires the WCIRB to collect information on policyholder dividends in California and prepare an annual report to the Insurance Commissioner.

**Project Status:** Staff anticipates providing the report to the CDI by the third quarter of 2018.

#### **C. Cost Impact of Legislative Changes**

1. SB 863 Cost Monitoring. SB 863 was enacted in 2012 and included a number of reform provisions related to the California benefit delivery system. In March of 2013, the WCIRB submitted a comprehensive plan to the CDI to monitor the emerging costs related to SB 863. The WCIRB's fourth and final comprehensive retrospective cost evaluation of SB 863 was published on November 17, 2016.

**Project Status:** While the final comprehensive SB 863 monitoring report was published in 2016, at the November 8, 2016 joint Actuarial Committee and Claims Working Group meeting, it was agreed that staff will prepare summaries of the key elements of SB 863 that are still emerging, such as the phased-in changes to the physician fee schedule to a Resource-Based Relative Value Scale (RBRVS) basis. Staff is presenting a summary of updated SB 863 cost monitoring information at the December 6, 2017 Actuarial Committee

**meeting. The 2018 follow-up on any outstanding SB 863 issues, such as the changes related to the permanent disability add-ons, will be summarized and presented to the Actuarial Committee by the fourth quarter of 2018.**

2. Review of SB 863 Ratemaking Adjustments. The WCIRB's initial evaluations of SB 863 included estimates to several impacted system components that were in part based on judgmental assumptions that may or may not materialize. These estimates were reflected in the on-leveling adjustments reflected in the January 1, 2013 and subsequent pure premium rate filings.

**Project Status: The WCIRB adjusts on-level factors based on differences in emerging experience from that reflected in the WCIRB's initial SB 863 projections as part of the pure premium rate filing process. Staff anticipates updating the on-level adjustments based on the latest SB 863 cost monitoring information for the review of the Actuarial Committee in the first quarter of 2018 in consideration of a potential July 1, 2018 Pure Premium Rate Filing. In addition, given that it is more than five years since SB 863 was enacted, staff anticipates reviewing the continued efficacy of further SB 863 adjustments, including those related to loss development, with the Actuarial Committee in the third quarter of 2018 in consideration of the January 1, 2019 Pure Premium Rate Filing.**

3. Additional SB 863 Fee Schedules. SB 863 provides for new fee schedules for interpreter, copy and home health services to be promulgated.

**Project Status: The Division of Workers' Compensation (DWC) promulgated a schedule for copy services effective July 1, 2015. The Actuarial Committee reviewed the impact of this schedule in the second quarter of 2015 and agreed that no prospective pure premium rate adjustment was appropriate. At this time, the DWC has not promulgated final schedules for interpreter and home health services. If either of those fee schedules are finalized, working with the Claims Working Group, Medical Analytics Working Group and Actuarial Committee, staff anticipates completing its analysis of the pure premium rate impact of the new fee schedules within 120 days of the final values being promulgated.**

4. Drug Formulary. Assembly Bill No. 1124 requires the DWC to establish a formulary for prescription medications.

**Project Status: On October 23, 2017, the DWC submitted a final drug formulary to the Office of Administrative Law for approval to be effective January 1, 2018. A preliminary assessment of the proposed formulary will be presented to the Actuarial Committee at the meeting of December 6, 2017. Working with the Medical Analytics Working Group and Actuarial Committee, staff anticipates completing its analysis of the pure premium rate impact of the new formulary in the first quarter of 2018 for consideration of a potential July 1, 2018 Pure Premium Rate Filing. Additionally, staff anticipates completing a preliminary review of the retrospective impact of the new formulary based on transactions through the second quarter of 2018 for review of the Actuarial Committee in the fourth quarter of 2018.**

5. Impact of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244). SB 1160 and AB 1244 were signed into law on September 30, 2016. Primarily, SB 1160 restricts utilization review within the first 30 days of treatment on injuries occurring on or after January 1, 2018 and SB 1160 and AB 1244 include a number of provisions related to liens. The WCIRB's cost evaluation of SB 1160 and AB 1244 as approved by the Actuarial Committee at the September 6, 2016 meeting was reflected in the WCIRB's Amended January 1, 2017, July 1, 2017 and January 1, 2018 Pure Premium Rate Filings.

**Project Status: The CDI decision on the January 1, 2018 Pure Premium Rate Filing attributed greater savings than reflected in the WCIRB filing to the lien provisions of**

**SB 1160 and AB 1244 based on lien filing counts through the third quarter of 2017. Staff anticipates continuing to review the number of liens filed on a quarterly basis. Staff anticipates reviewing the cost estimates reflected in the WCIRB's pure premium rate filing for SB 1160 and AB 1244 including the potential impact of the dismissal of existing liens on loss development in the first quarter of 2018 in consideration of a potential July 1, 2018 Pure Premium Rate Filing. The potential impact of the SB 1160 restrictions on utilization review within the first 30 days on the level of medical services provided will be reviewed in the fourth quarter of 2018 based on medical transaction data through June 30, 2018.**

**D. Other Studies Directly Impacting Pure Premium Rates and Rate Level Projections**

1. Classification Ratemaking Methodologies. In adopting new loss development groupings for classification relativities at the September 8, 2010 meeting, the Actuarial Committee also recommended several areas of additional actuarial research.

**Project Status: Refinements to the loss development process for classification relativities and other refinements that were approved at the April 2, 2012 meeting were implemented in 2013 and reflected in the January 1, 2014 Pure Premium Rate Filing. In 2014, staff began a multi-year study of stochastic loss development, as used in loss development for the advisory retrospective rating plan values, for classification ratemaking and presented the analysis at the December 3, 2014 Actuarial Committee meeting. At the December 3, 2014 meeting, the Committee agreed that a stochastic approach for classification relativity loss development is promising but requires significant additional study. Staff doesn't anticipate further work on this topic in 2018.**

2. Study of Dual Wage Thresholds. At the June 15, 2016 meeting, the Classification and Rating Committee discussed the analysis of all sixteen dual wage classification thresholds scheduled for 2017 in preparation for the January 1, 2018 Regulatory Filing. The Committee concurred with staff's recommendation for the 2017 analysis that includes an analytical review of all dual wage classification thresholds using unit statistical data and external wage data from published governmental sources.

**Project Status: At the April 25, 2017 and June 1, 2017 meetings, the Classification and Rating Committee adopted staff's recommendations for dual wage threshold adjustments based on the new methodology and those recommendations were included in the January 1, 2018 Regulatory Filing and adopted by the CDI. However, given anomalies in the analysis of the dual wage information for the Glaziers dual wage classifications, the Classification and Rating Committee adopted staff's recommendation that an in-depth study be completed of the Glaziers dual wage classifications. Staff anticipates completing this study for the Classification and Rating Committee's review in the second quarter of 2018 in preparation for the January 1, 2019 Regulatory Filing.**

3. Expansion of Payroll Limits for Additional Classifications. At the March 21, 2017 meeting, the Actuarial Committee reviewed the summary of the February 17, 2017 meeting of the Actuarial Research Working Group (ARWG) which discussed claim costs by wage level interval. During the meeting, it was noted that the data suggested that severity costs increased to a point, then leveled off at the state average annual salary, while total costs per \$100 of payroll declined at high levels of wages. Given this, it was noted that staff planned to explore expanding the number of classifications subject to an employee annual payroll limitation.

**Project Status: Staff is analyzing the feasibility of limiting the payroll in four additional classifications to the annual wage limitation currently used for executive officers, partners and individual employers as well as several athletic and entertainment classifications (\$128,700 in 2018). Staff anticipates completing this study, including recommended advisory**

**pure premium rate adjustments for the Classification and Rating and Actuarial Committees' review in the second quarter of 2018 in preparation for the January 1, 2019 Regulatory Filing.**

4. Study of Alternative Loss Trending Methodologies. At the August 2, 2017 meeting, the Actuarial Committee reviewed a retrospective analysis of alternative loss trending methodologies in which it was noted that methods based on trending from the latest year generally outperformed the comparable methods based on trending from the latest two years. The Committee recommended that the feasibility of basing the trend projection solely on the latest year be analyzed.

**Project Status: Staff anticipates reviewing the retrospective analysis of the performance of the latest year trending methodology for review of the Actuarial Committee by the first quarter of 2018 in consideration of a potential July 1, 2018 Pure Premium Rate Filing.**

5. Review of Medical On-Level Adjustments. Adjusting developed accident year medical loss ratios for the impact of measureable phenomena that impact medical costs such as legislative reforms, fee schedule changes and general medical inflation is a key component of the WCIRB's pure premium ratemaking process. It has been a number of years since the Actuarial Committee has undertaken a comprehensive review of that process.

**Project Status: Staff anticipates undertaking a comprehensive review of the on-leveling process for medical losses including the process by which annual changes in Medicare fees are incorporated into the California workers' compensation fee schedules for review of the Actuarial Committee by the fourth quarter of 2018.**

6. Study of Loss Development Tail. At the August 2, 2017 meeting, the Actuarial Committee reviewed a study of longer-term loss development that focused on the recent volatility in incurred loss development patterns. At that meeting, it was noted that paid loss development patterns fit very well to the inverse power curve that is currently being utilized for incurred loss development.

**Project Status: Staff plans to continue to review the tail development methodology with the Actuarial Committee as part of the Committee's regular reviews of loss experience. However, given the commitment to other projects, staff does not anticipate completing an in-depth study of the loss development tail in 2018.**

7. Review of ULAE Projection Methodologies. Although the WCIRB has continued to modify the data collected related to ULAE in order to enhance the accuracy of the ULAE projection, a comprehensive review of the ULAE projection methodologies has not been undertaken for some time.

**Project Status: Given that the new data related to the ULAE projection is only being collected for calendar year 2017 in early 2018 and the commitment to other projects, staff does not anticipate completing this review in 2018.**

#### **E. Other Studies Indirectly Impacting Rate Level Projections**

1. Evaluation of the Impact of Fraud Indictments. Efforts by the DWC, CDI, local district attorneys and others that have been successful in identifying and prosecuting fraud have been identified as a significant driver of reduced medical cost trends. At the meeting of December 6, 2016, the Actuarial Committee recommended that staff continue to track the volume of medical services provided in the past by providers who have subsequently been indicted for fraud.

**Project Status: At the March 30, 2017 meeting, staff provided the Claims Working Group updated information on the amount of medical costs generated by providers that have been indicted for fraud. Staff anticipates providing an update of this information for review of the Claims Working Group and the Actuarial Committee by the second quarter of 2018.**

2. Study of Medicare "Set-asides" (MSAs). At the July 28, 2015 meeting, the Claims Working Group recommended that consideration be given to conducting a more in-depth study of MSAs.

**Project Status:** At the March 23, 2016 meeting, the Claims Working Group discussed a potential study on the cost of MSAs that provided additional information on the frequency in which MSAs are used and the costs involved when MSAs are used. Prior to undertaking a more comprehensive study, the Working Group agreed that staff should compare post-settlement loss development patterns of claims that are settled through a compromise and release (C&R), which includes a settlement component for future medical losses, with those settled through a stipulated award.

The Claims Working Group and Actuarial Committee reviewed the development differences between C&R settled claims and stipulated award settled claims at the November 8, 2016 meeting. At the March 30, 2017 meeting, the Claims Working Group suggested that any further study of the issue be deferred pending ongoing research by other organizations. Staff doesn't anticipate further work on this issue in 2018.

3. Impact of the Affordable Care Act (ACA) on Workers' Compensation Costs. The ACA has fundamentally altered the healthcare delivery system in the United States and may have significant impact on workers' compensation medical costs in California. At the October 1, 2013 meeting, the Medical Analytics Working Group discussed various ways to assess the ACA impact on California workers' compensation costs in the future when sufficient post-ACA experience is available.

**Project Status:** At the December 6, 2016 Actuarial Committee meeting, the Actuarial Committee noted that sufficient time has elapsed with enough additional workers covered in California to conduct an initial evaluation of potential impacts along the criteria identified in 2013. Staff is in the process of completing this study and anticipates publishing an analysis of the potential ACA impacts on California workers compensation by the first quarter of 2018.

4. Analysis of Cumulative Injury Claims. Recent Actuarial Committee analyses of claim frequency changes have indicated that cumulative injury claims are an increasingly significant component of the changes and are continuing to increase.

**Project Status:** Staff anticipates completing a comprehensive study of the various characteristics of cumulative injury claims and their impact on various statewide measures for review of the Actuarial Committee by the third quarter of 2018.

5. Analysis of Factors Driving California Medical Payout Pattern. Staff analysis has shown that the very slow rate of medical loss payouts is one of the key contributing factors to the high medical costs in California.

**Project Status:** Staff published a comprehensive analysis of the factors driving the medical loss payout pattern in California and how those patterns differ from patterns in other states on July 8, 2015. While not planning a major update to the report in 2018, staff anticipates updating some of the key comparisons of California to the rest of the country with respect to medical payouts in the second quarter of 2018.

6. Physical Medicine Analysis. At the October 3, 2017 meeting, the Medical Analytics Working Group recommended that given increases in the cost of physical medicine and the potential for physical medicine to be used in lieu of opioid prescriptions, staff consider a comprehensive study of physical medicine costs.



**Project Status: Staff anticipates completing a comprehensive analysis of physical medicine utilization and costs in California by the second quarter of 2018.**

7. Analysis of Medical-Legal Costs. At the August 2, 2017 meeting, the Actuarial Committee noted that unlike many other medical-related costs, the cost of medical-legal reports continued to increase sharply despite no change in the medical-legal fee schedule for a number of years. Given this, it was suggested that a comprehensive study of medical legal costs may be appropriate.

**Project Status: Staff anticipates completing a comprehensive analysis of medical legal costs by the third quarter of 2018.**

8. Analysis of Very Large Claims. The Claims Working Group and Actuarial Committee regularly review the frequency and relative cost of large claims. Given recent trends in medical treatment patterns for severe injuries as well as updated mortality information including that for impaired individuals, it has been suggested that the WCIRB undertake comprehensive analysis of the frequency and characteristics of very large or “jumbo” claims in the California workers’ compensation system.

**Project Status: Staff anticipates completing a comprehensive study of very large claims including an analysis of their relative frequency, severity, trends, loss development patterns, payment patterns, medical treatment patterns, claimant characteristics, and claim adjudication patterns by the fourth quarter of 2018.**

#### **F. Studies Related to Rating Plans**

1. Experience Rating Plan – Small Medical-Only Claims. In the decision on the January 1, 2017 Regulatory Filing, the CDI clarified the requirements related to the reporting of small medical-only or “first aid” claims to specify that all claims with medical costs incurred must be reported. In the decision on the January 1, 2018 Regulatory Filing, the CDI adopted the WCIRB proposed changes to the Experience Rating Plan to be effective January 1, 2019 that provide that the first \$250 of each claim will not be used in the experience modification computation.

**Project Status: In 2018, the WCIRB will be implementing the 2019 changes to the experience rating formula adopted by the CDI and conducting an extensive educational outreach effort to stakeholders on the changes. Staff anticipates providing an initial summary as to how the adopted changes related to small medical-only claims may be impacting claim reporting by the fourth quarter of 2018.**

2. Experience Rating Eligibility. At the October 22, 2014 meeting, the Actuarial Research Working Group discussed changes to the experience rating eligibility criteria in light of other changes to the Plan being adopted and noted that staff has not completed a comprehensive review of experience rating eligibility in a number of years.

**Project Status: Now that the changes to the experience rating formula to vary the split point by the size of the employer have been implemented and the changes to the formula to address the non-reporting of small medical-only claims have been adopted, staff anticipates completing an initial review of the appropriateness of the current eligibility threshold for review of the Classification and Rating and Actuarial Committees by the fourth quarter of 2018.**

3. Development of Experience Rating Expected Loss Rates. The Actuarial Committee annually reviews the WCIRB’s methodology to compute the experience rating expected loss rates proposed to the CDI each year. The methodology used for this process was adopted by the Actuarial Committee at the June 11, 2008 meeting.

**Project Status:** Staff anticipates no further analysis in this area in 2018. However, since it has been almost a decade since a comprehensive review of the methodology has been undertaken, staff anticipates beginning the methodology review process in 2019.

4. Retrospective Rating Plan Values. In 2012, the WCIRB updated the advisory *California Retrospective Rating Plan* values, including insurance charges and loss elimination ratios, to be effective January 1, 2013.

**Project Status:** Staff published updated California hazard group classification assignments on a decimal basis and loss and loss and ALAE elimination ratios in the second quarter of 2017. Staff anticipates publishing a full update to the advisory *California Retrospective Rating Plan*, including updated insurance charges, following review of the Actuarial Research Working Group by the third quarter of 2018.

#### G. Other Potential Studies

1. Analysis of California Regional Differences. Recent WCIRB analyses of claim frequency, cumulative injuries, liens, and other system components have suggested that there are significant regional differences across California. However, analyses of these differences had been limited by the data the WCIRB had historically collected on location. At the July 25, 2014 meeting, the Actuarial Research Working Group discussed potential alternative sources of geographical information to enhance analyses of regional differences.

**Project Status:** Staff used a wide range of available information to prepare an analysis of regional differences in components such as frequency, severity and permanent disability patterns. The WCIRB's latest report on regional differences was published on October 19, 2017. Staff anticipates continuing this work in 2018 by also including a focus on regional differences in loss development and frequency and severity differences by industry and diagnostic group with a follow-up report to be published by the fourth quarter of 2018.

2. Wage Data Analysis. Early in 2017, staff developed a comprehensive data cube and wage report for members with detailed information on various wage distributions by industry, classification and occupation as well as other wage related information. The information relates historical and projected wage levels by classification to industries, recognizing differences in payroll exclusions in developing insured exposures and differences in the allocation of standard exception classifications.

**Project Status:** Staff anticipates updating this wage information based on updated source information and publishing a report on the impact of various local changes in minimum wage levels on exposures and claim costs by the first quarter of 2018.

3. Comparison of Workers' Compensation Medical Costs to Group Health Costs. At the May 27, 2009 meeting, the Claims Working Group suggested that consideration be given to conducting a research study comparing occupational and non-occupational medical treatment cost data for a similar mix of injuries.

**Project Status:** Staff anticipates no further analysis in this area in 2018.

4. Development of Diagnostic Grouper. The WCIRB has been collecting ICD-9 and now ICD-10 information on each medical transaction since 2012. The Medical Analytics Working Group has suggested that WCIRB medical analytical research as well as WCIRB benchmarking reports provided to members can be significantly enhanced by summarizing information based on groupings of claims by similar diagnoses.

**Project Status: Staff anticipates developing by the third quarter of 2018, a diagnostic grouper that will assign claims to diagnostic groups. Diagnostic groups may vary by level of maturity.**

5. Aging of the Work Force. This study would quantify the aging of the work force and identify changes in costs – particularly severities – due to this demographic shift. The study would also identify future aging patterns and forecast their impact.

**Project Status: Staff completed some preliminary analysis of the impact of aging on claim costs as part of prior frequency studies, but does not anticipate conducting any further analysis in this area in 2018.**

6. Terrorism Losses. In early 2003, at the direction of the Governing Committee, the WCIRB contracted with EQECAT to help estimate potential terrorism losses with respect to the Terrorism Risk Insurance Act of 2002. The results of the analysis were published in a March 12, 2003 WCIRB Bulletin.

**Project Status: Since the last update was completed in 2003 and the earthquake analysis was recently completed based on exposure information by location provided by staff using the information derived for regional studies, staff is considering updating the study by the fourth quarter of 2018 pending recommendation of the Actuarial and Governing Committees.**

7. Earthquake Losses. In July of 2002, EQECAT completed a report estimating the average annual expected costs arising from California earthquakes. In 2003, EQECAT completed a follow-up study to address some of the issues raised by the CDI in reviewing the 2002 study. Based on the results of these studies, the WCIRB included a provision to reflect expected earthquake losses in the January 1, 2004 Pure Premium Rate Filing. In the Decision on that filing, the CDI rejected this provision based on concerns as to the underlying loss distribution projected by the model and the lack of a mechanism to fund the cost of a major earthquake if one were to occur. In 2007, the WCIRB contracted with EQECAT to update the California earthquake studies. The updated report was published in June 2007.

**Project Status: At the April 5, 2017 meeting, the Governing Committee authorized the WCIRB to contract with Risk Management Solutions (RMS), a leading catastrophe risk modeling firm, to conduct an analysis of potential statewide workers' compensation exposure arising from earthquakes. The results of the study is scheduled for presentation to the Actuarial Committee at the meeting of December 6, 2017. Depending on Actuarial Committee feedback, additional work on refining cost estimates by classification and region could be completed in 2018.**

**Item AC17-12-06**  
**2018 Schedule of Meetings**

Shown below is a proposed schedule of Actuarial Committee meetings for 2018.

Monday, March 19, 2018

Monday, April 2, 2018

Friday, June 15, 2018

Wednesday, August 1, 2018

Tuesday, September 4, 2018

Wednesday, December 5, 2018