

Actuarial Committee

Meeting Agenda

Date	Time	Location	Staff Contact
June 15, 2018	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: June 8, 2018

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

I. Approval of Minutes

Meetings held on March 19, 2018 and April 3, 2019

II. Working Group Meeting Summaries

Claims Working Group Meeting held on March 29, 2018

Actuarial Research Working Group Meeting held May 24, 2018

III. Unfinished Business

A. AC16-06-05: Update on Medical Severity Trends by Component

A. New Business

A. AC18-06-01: 3/31/2018 Experience – Review of Methodologies

B. AC18-06-02: 1/1/2019 Regulatory Filing – Experience Rating Plan Values

C. AC18-06-03: Classification Payroll Limitations

D. AC18-06-04: Demo of WCIRB Inquiry Data Tool

B. Matters Arising at Time of Meeting

C. Next Meeting Date: August 1, 2018

D. 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.

© 2018 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.

Claims Working Group

Meeting Summary

To: Participants of the Claims Working Group
Date: March 29, 2018

RE: Summary of March 29, 2018 Meeting

Discussion Topics

At the meeting, the following topics were discussed:

1. First Quarter 2018 Review of Diagnostics

The meeting materials included the WCIRB's diagnostic exhibits that are reviewed by the Actuarial Committee and the Claims Working Group on a semi-annual basis. Among the diagnostics discussed by the Working Group were the following:

- a. Indemnity claim frequency has been fairly steady since 2012, which contrasts California's long-term pattern of decline. The Working Group noted that the recent period of steady (rather than declining) frequency may be attributed to the increases in cumulative trauma claims.
- b. The incremental medical-only claim counts have been increasing beginning in 2017 after a period of relatively flat or declining counts. It was suggested that the increase may in part be the result of the clarification of reporting requirements related to first aid claims that were effective beginning in 2017, although other factors may be contributing.
- c. Permanent disability claim closures continue to increase and accelerate, while the rate at which temporary disability claims close has begun to increase. Several Working Group members noted that the trend is largely related to changes in claims handling practices since in many cases both the insurer and the claimant and their attorney are trying to settle claims quickly.
- d. Medical-legal costs decreased from 2016 to 2017 with the biggest decline involving the more complex ML104 reports. The Working Group's consensus was that this decrease was due to changes in the administration of the medical-legal process by the Division of Workers' Compensation. The Working Group expected these decreases to continue, but thought the decreases will eventually level off after the transition period.
- e. Lien filings decreased significantly during 2017 after rising sharply in the fourth quarter of 2016. The Working Group noted that these changes are likely due to Senate Bill No. 1160 (SB 1160), which places additional restrictions on lien filings and became effective on January 1, 2017. The Working Group noted that medical-related disputes prior to the 18-

Meeting Summary

Date: March 29, 2018 [DATE]

month statute of limitations to file the lien continue to occur and these disputes involve significant claims handling costs even if the lien is not eventually filed.

- f. Allocated loss adjustment expense (ALAE) trends continue to rise at all maturities. A Working Group member suggested that the decreasing rate of increase at older maturities may be attributed to the increase in settlement rates.

2. SB 863 Cost Monitoring and Dismissed Lien Impact on Loss Development

Staff presented the Working Group with updates related to Senate Bill No. 863 and the lien reforms of SB 1160. The Working Group noted that the increase in supplemental job displacement benefit costs are consistent with their own data and expect the trend to continue.

3. Impact of Affordable Care Act on California Workers' Compensation

Staff presented the preliminary analysis of the Affordable Care Act (ACA) impact on California workers' compensation costs, and shared with the Working Group the feedback from the Medical Analytics Working Group (MAWG). Staff noted that no indication of an ACA impact was evident on access to care, payments for physician services and overall claim frequency, while there were indicators of an ACA impact on the frequency of soft tissue injuries. Staff also noted that there was a limited volume of claims with comorbidities in the WCIRB's data. As a result, limited inferences related to comorbidities can be made. The Working Group suggested changes in overall claim frequency and increases in claims with soft tissue injuries for employers less likely impacted by the ACA could be partially attributable to factors occurring at the same time as ACA implementation. Staff agreed to further explore the suggested factors.

4. Impact of Medical Fraud Enforcement on California Workers' Compensation Costs

Staff provided an updated analysis on the amount of medical costs generated by providers indicted for fraud or suspended by the Division of Workers' Compensation (indicted/suspended providers). Staff presented an analysis demonstrating the percentage of medical dollars paid to indicted/suspended providers was very significant for periods prior to 2014 but has continued to decrease since then. Staff also noted that, as expected given the typical lag in lien payments, liens are becoming an increasingly significant percentage of the medical dollars that are being paid to indicted/suspended providers.

Staff also presented an analysis showing the percentage of medical dollars being paid to the largest indicted/suspended providers by volume of medical services and by medical fee schedule section.

5. Cost Impact of the MTUS Drug Formulary

Staff presented a preliminary analysis of the cost impact of the Medical Treatment Utilization Schedule (MTUS) drug formulary, and shared with the Working Group the feedback from the MAWG and the Actuarial Committee. Staff first presented the impact analysis of the drug formulary on frictional costs primary from reduction of prospective utilization review (UR) and independent medical review (IMR) due to implementation of the drug formulary. Staff noted that based on the preliminary analysis, the cost savings from the reduced UR under the drug formulary are fairly small (approximately 0.1% of total losses and loss adjustment expenses (LAE)), and the estimated reduction in IMR costs is negligible (approximately 0.01% of total losses and LAE). A Working Group member also suggested examining the potential cost impact

Meeting Summary

Date: March 29, 2018 [DATE]

related to drugs exempt from prospective UR under the drug formulary that are currently being denied through the UR process. Staff agreed to analyze the aforementioned cost impact.

Staff then presented the impact analysis of the drug formulary on pharmaceutical costs due to shifts in prescribing patterns of opioids, compounds, physician-dispensed drugs, and non-exempt and unlisted drugs to exempt drugs and pharmacy-dispensed drugs. Staff also summarized the basis of the assumptions relied upon in the RAND study that estimated the economic impact of the drug formulary, and shared the feedback from the MAWG and the Actuarial Committee on those assumptions. A Working Group member noted that some insurers have already implemented programs similar to the drug formulary to monitor utilization of prescription drugs, and questioned if the assumptions and estimates in the RAND study reflected the impact of shifting from a "partial" drug formulary to a statewide mandatory drug formulary. Staff agreed to discuss this question with RAND and share that feedback with the Actuarial Committee prior to finalizing the WCIRB's estimate of the cost impact of the new formulary. Several Working Group members noted that it would be some time before the impacts of the formulary on prescribing patterns will be fully reflected. Staff noted that due to expected time frames before the full impacts are realized, RAND discounted their estimate by 50%. However, it was also noted that in projecting the impact of the new formulary on post-July 1, 2018 policies, the effect of delayed impacts would be much less since the vast majority of prescriptions on these policies will be paid in 2020 or later.

6. Legislative, Regulatory and Judicial Update

The Working Group reviewed legislation passed 2017 and pending legislation in 2018 as provided in the meeting materials. A Working Group member expressed concern regarding Senate Bill No. 899, which expresses the legislature's intent to abrogate the court's decision in *City of Jackson v. Workers' Compensation Appeals Board* (2017). The Working Group member noted that the bill could impact costs as a wide range of permanent disability apportionment decisions could be construed as potentially discriminatory and thus found to be invalid. WCIRB staff plans to review baseline data involving permanent disability apportionment decisions to present at the next meeting.

With respect to regulations, the Working Group reviewed the update provided and a Working Group member expressed concern that the latest proposed updates to the Official Medical Fee Schedule (OMFS) could potentially lead to cost shifting across regions. The proposed updates varies the maximum fees for certain medical services by region.

The Working Group also reviewed the pending cases included in the meeting materials. Working Group members recommended that the staff continue tracking developments concerning *Hikida v. Workers' Compensation Appeals Board* (2017) which involves apportionment and *King v. CompPartners*, which involves the liability of utilization review organizations.

Actuarial Research Working Group

Meeting Summary

To: Participants of the Actuarial Research Working Group
From: Ward Brooks
Date: June 7, 2018

RE: Summary of May 24, 2018 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. Transactional Indemnity

The Working Group was informed that the WCIRB had begun to collect transactional indemnity data from a number of insurers who volunteered to participate. The Working Group was informed that the transactional indemnity data that the WCIRB receives is a subset of the data submitted to the Division of Workers' Compensation under the Workers' Compensation Information System's (WCIS) Electronic Data Interchange. Staff reviewed the data elements available in the transactional indemnity data. The Working Group was informed that a First Report of Injury (FROI) report was generated for all injuries and includes a variety of demographic information and that Subsequent Report of Injury (SROI) reports contain detailed information on the claim's status, benefit payments and other information. Staff noted that the WCIRB was now receiving SROI data for claims for which the FROI was reported before the WCIRB began to collect transactional indemnity data. That is, the WCIRB has received SROI data for which it does not expect to receive the matching FROI data. The Working Group was informed that, over time, this informational gap will shrink and the ability to make use of the combined FROI and SROI information will grow.

Staff discussed the flow of data, from first receipts in a "user acceptance testing" test phase before entering production and noted that some insurers had provided additional data in one-off submissions in addition to the data submitted on a going forward basis. The Working Group was informed that, depending on the use case, staff may make use of all available data, including data in test or submitted one-off, or only production data. Staff noted that apart from the one-off submissions of additional data that the WCIRB was collecting data only on a going forward basis.

Meeting Summary

Date: June 7, 2018

Staff reviewed for the Working Group a variety of use cases, several of which had been requested by WCIRB committee or working group members. The Working Group was informed that due to the active on-boarding phase of the program, the volumes of data were changing rapidly and subsets for use cases varied depending on the requirements of the use case. Because of this, the number of claims used in the various use cases varied widely. Staff noted that the volumes of data involved in use cases requiring linkage to other WCIRB data sets also affected the volume of data available for the use case.

The Working Group was informed that staff had reconciled the claim volumes received in the transactional indemnity program with claim volumes reported in aggregate financial calls and that the reconciliation was good.

The Working Group provided feedback on the use cases and made suggestions for additional use cases.

The Working Group was informed that staff was working on developing appropriate denominators—exposures or expected claim counts—for the mix of classifications captured in the data and the timing of those exposures. The Group was informed that staff was building on the prior work on seasonality for indemnity claim frequency modeling for these efforts and was working on developing pre-Unit Statistical Report (USR) estimates of exposures and expected claim counts from a combination of policy data, prior USR data, and Hoover's Dun & Bradstreet data.

2. Retrospective Rating Tables of Insurance Charges—Policy Year 2019 Update

The Working Group was reminded that staff had worked on the development of an updated retro database. At the October 19, 2016 meeting, the Working Group reviewed the updated methodology and the loss elimination ratios developed using the updated database. At the February 17, 2017 meeting, the Working Group reviewed proposed enhancements to the major simulation modules used to develop the Advisory Retrospective Rating Plan database and in 2017, staff updated the hazard group assignment methodology and developed updated loss elimination ratios using the updated hazard group assignments. At the February 28, 2018 meeting, staff reviewed changes to the smoothing algorithm for the last set of rating values—the tables of insurance charges.

Staff reviewed for the Working Group the development of the tables of insurance charges. Staff noted that the updated tables of insurance charges are derived from the most recent update to the simulation model, which used claims from policy year 2009 at fifth report level, 2010 at fourth report level, and 2011 at third report level.

The Working Group was informed that the updated insurance charges were generally lower than the previous values. Staff noted that the changes in insurance charges were due to both changes in the underlying data and, particularly for small employers, to changes to the methodology. The Group was informed that, for medium and larger employers, most of the change was due to improved experience. For small employers, approximately \$100,000 of expected losses, some of the change was also due to the discontinuation of binning employers in developing the tables of insurance charges. Each employer's exact loss ratio was now used to calculate the charge at a given entry ratio rather than the mid-point of a bin.

3. Retrospective Rating Supplementary Information—Parametric Excess Loss Curves

The Working Group was reminded that staff had investigated fitting the simulated losses of the retro database in order to provide parametric excess loss curves, which are published for other jurisdictions, using a weighted mixture of lognormal distributions. Staff noted that a methodological adjustment to group claims by open/closed status, rather than likely/not likely

Meeting Summary

Date: June 7, 2018

groupings used in other jurisdictions, was done to be consistent with the manner in which the claim simulations are conducted.

The Working Group was informed that staff also examined modeling permanent partial and temporary total claims both together and separately. The impetus for separately modeling them was that differences in their size of loss distributions were evident in the retro starting database and manifest themselves in simulated ultimate values.

Staff noted that separate modeling of permanent partial and temporary total claims more closely replicated promulgated values, but both methods resulted in much higher elimination ratios at very high limits. The Working Group was informed that staff had also developed a lognormal-Pareto hybrid parameterization that used the lognormal results up to a \$2,000,000 limit, and then used the same Pareto smoothing as used for the promulgated values. The hybrid model also sets the share of total claims excess \$2,000,000 to the share underlying the promulgated values. This adjustment brought the parametric curves much more in line with the promulgated results, though significant differences remain.

The Working Group discussed staff's findings, including the relative merits of the different approaches. A Group member suggested that there would be value in publishing all of the information and practitioners could select the information most appropriate for their use case. Staff agreed to publish the results with the supplemental information accompanying the 2019 updates of the retrospective rating plan on the WCIRB's website.

Item AC16-06-05
Update on Medical Severity Trends by Component

The Committee annually reviews a summary of changes in paid per transaction and paid transactions per claim by medical component. An update to that analysis with medical transaction information through December 31, 2017 will be presented at the meeting.

Item AC18-06-01

3/31/2018 Experience – Review of Methodologies

Staff has prepared a preliminary analysis of statewide experience through March 31, 2018, which is included in Exhibits 1 through 8. This information reflects insurers writing almost 100% of the market based on 2017 premium levels. The methodologies used are consistent with those reflected in the July 1, 2018 Pure Premium Rate Filing. Wage and loss levels were projected to January 1, 2020—the approximate midpoint of experience on policies incepting in 2019, and premiums were adjusted to the industry average filed pure premium rate level as of January 1, 2018.

As shown on Exhibit 8, the projected policy year 2019 loss to the industry average filed pure premium ratio based on March 31, 2018 experience is 0.574. (The projected loss to pure premium ratio for policies incepting between July 1, 2018 and December 31, 2018 reflected in the July 1, 2018 Pure Premium Rate Filing based on December 31, 2017 experience was 0.608.)

Additional supplemental information is included in Exhibits 9 through 12.

**California Workers' Compensation
Accident Year Experience as of March 31, 2018**

Year	Earned Premium	Paid Indemnity	Indemnity Reserves	Paid Medical**	Medical Reserves	IBNR*	Total Incurred**	Loss Ratio*
1986	3,506,609,097	1,382,620,638	4,886,384	1,137,075,716	32,546,668	16,342,179	2,573,471,585	0.734
1987	4,374,085,383	1,504,773,528	7,151,649	1,327,875,924	45,290,687	58,070,009	2,943,161,797	0.673
1988	5,173,049,472	1,701,689,111	7,173,358	1,533,077,060	41,394,885	43,574,688	3,326,909,102	0.643
1989	5,673,263,669	1,936,948,177	8,634,552	1,787,835,523	57,302,851	38,859,918	3,829,581,021	0.675
1990	5,696,824,266	2,254,153,630	9,442,653	2,032,486,129	57,638,798	63,182,859	4,416,904,069	0.775
1991	5,862,703,027	2,470,160,065	17,260,922	2,184,254,104	66,176,080	62,058,271	4,799,909,442	0.819
1992	5,681,120,590	1,971,486,187	13,879,900	1,747,425,721	67,105,401	64,117,403	3,864,014,612	0.680
1993	5,927,913,318	1,689,371,589	14,624,760	1,497,250,051	83,873,750	48,017,906	3,333,138,056	0.562
1994	5,022,834,307	1,621,879,566	21,318,624	1,455,176,700	94,452,979	49,475,916	3,242,303,785	0.646
1995	3,778,723,013	1,755,449,977	31,763,443	1,599,246,699	113,397,226	64,413,366	3,564,270,711	0.943
1996	3,736,857,547	1,940,627,998	38,703,319	1,689,219,219	128,279,588	75,266,516	3,872,096,640	1.036
1997	3,916,944,392	2,299,469,488	46,899,709	1,983,852,636	152,308,753	115,145,386	4,597,675,972	1.174
1998	4,322,051,270	2,752,214,821	60,815,478	2,598,169,603	243,361,726	206,448,942	5,861,010,570	1.356
1999	4,537,629,086	3,030,373,103	58,703,862	2,981,831,430	215,120,646	284,581,250	6,570,610,291	1.448
2000	5,905,419,052	3,395,312,865	81,796,003	3,505,390,396	263,738,518	414,316,554	7,660,554,336	1.297
2001	10,094,684,192	4,791,615,058	127,352,997	5,260,365,409	435,112,750	657,727,021	11,272,173,235	1.117
2002	13,405,893,679	4,719,058,211	117,377,305	5,379,563,757	400,616,608	903,207,385	11,519,823,266	0.859
2003	19,429,675,115	4,477,943,299	177,438,610	4,941,156,061	417,864,163	1,294,015,032	11,308,417,165	0.582
2004	23,042,003,895	3,153,669,019	149,173,369	3,954,398,969	365,721,924	1,404,294,377	9,027,257,658	0.392
2005	21,161,242,185	2,459,082,325	129,497,828	3,521,611,529	360,189,214	1,140,756,803	7,611,137,699	0.360
2006	16,768,812,365	2,506,374,177	144,324,291	3,569,742,463	371,052,751	853,624,601	7,445,118,283	0.444
2007	12,987,728,812	2,630,623,732	159,200,827	3,813,100,970	435,853,167	790,165,373	7,828,944,069	0.603
2008	10,671,253,704	2,697,344,714	191,222,061	3,854,137,211	446,551,449	611,255,978	7,800,511,413	0.731
2009	8,869,126,786	2,566,977,089	190,265,019	3,658,311,174	442,112,719	673,569,904	7,531,235,905	0.849
2010	9,394,735,083	2,574,122,850	199,435,156	3,725,883,913	425,475,490	740,312,410	7,665,229,819	0.816
2011	10,106,080,554	2,496,036,257	232,186,163	3,326,186,075	488,351,410	969,632,875	7,512,392,780	0.743
2012	11,648,141,535	2,479,872,801	281,832,669	3,147,145,240	545,542,608	1,210,365,100	7,664,758,418	0.658
2013	14,112,987,043	2,448,082,788	325,723,360	2,924,610,997	610,438,125	2,228,288,826	8,537,144,096	0.605
2014	15,954,832,248	2,387,980,790	478,935,592	2,673,506,510	741,302,861	3,224,576,963	9,506,302,716	0.596
2015	17,004,264,944	2,102,212,036	676,506,389	2,308,729,571	1,025,918,144	4,239,479,541	10,352,845,681	0.609
2016	17,892,359,041	1,467,259,654	883,902,539	1,753,101,789	1,288,148,897	5,167,534,372	10,559,947,251	0.590
2017	17,605,137,241	631,246,486	892,620,446	989,228,228	1,468,490,782	6,371,278,890	10,352,864,832	0.588
2018	4,387,437,652	18,550,227	106,341,069	33,159,222	251,525,600	2,112,495,638	2,522,071,756	0.575

* 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	<u>27/15</u>	<u>39/27</u>	<u>51/39</u>	<u>63/51</u>	<u>75/63</u>	<u>87/75</u>	<u>99/87</u>	Age-to-Age (in months)										<u>123/111</u>	<u>135/123</u>	<u>147/135</u>	<u>159/147</u>	<u>171/159</u>	<u>183/171</u>	<u>195/183</u>	<u>207/195</u>
1992																									1.000
1993																								1.002	0.999
1994																								0.999	1.001
1995																								1.002	1.001
1996																								1.002	1.001
1997																								1.001	1.001
1998																								1.001	1.001
1999																								1.003	1.001
2000																								1.002	1.000
2001																								1.002	1.000
2002																								1.002	1.001
2003																								1.002	1.001
2004																								1.002	1.001
2005																								1.002	1.001
2006																								1.002	1.001
2007																								1.002	1.001
2008																								1.002	1.001
2009																								1.002	1.001
2010																								1.002	1.001
2011																								1.002	1.001
2012																								1.002	1.001
2013																								1.002	1.001
2014																								1.002	1.001
2015																								1.002	1.001
2016																								1.002	1.001
Selected (a)	1.607	1.196	1.097	1.048	1.033	1.024	1.017	1.013	1.010	1.006	1.006	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001
Cumulative	2.515	1.565	1.309	1.193	1.138	1.102	1.076	1.058	1.045	1.034	1.028	1.022	1.018	1.016	1.014	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012

(a) Selections are latest year for the 15-to-27 month through 99-to-111 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)																
	<u>219/207</u>	<u>231/219</u>	<u>243/231</u>	<u>255/243</u>	<u>267/255</u>	<u>279/267</u>	<u>291/279</u>	<u>303/291</u>	<u>315/303</u>	<u>327/315</u>	<u>339/327</u>	<u>351/339</u>	<u>363/351</u>	<u>375/363</u>	<u>387/375</u>	<u>399/387</u>	<u>ULT/399Inc (b)</u>
1982										1.001	1.000	1.002					
1983									1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.001	
1984								1.000	1.001	1.001	1.000	1.001	1.001	0.999	1.000	1.000	
1985							1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	
1986						1.000	1.001	1.000	1.002	1.002	1.001	1.000	1.000	1.000	1.000		
1987					1.000	1.000	1.000	1.002	1.001	1.000	1.000	1.001	1.000	1.001			
1988				1.001	1.000	1.002	1.002	1.001	1.000	1.000	1.000	1.001	1.000				
1989			1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.000					
1990		1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000					
1991	1.001	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000						
1992	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000								
1993	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000									
1994	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.000									
1995	1.002	0.999	0.999	1.001	1.000	1.001	1.000										
1996	1.002	1.001	1.000	1.001	1.001												
1997	1.000	1.000	1.000	1.000													
1998	1.002	1.002	1.001														
1999	1.000	1.000															
2000	1.002																
Selected (a)	1.001	1.001	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	
Cumulative	1.011	1.010	1.009	1.009	1.008	1.008	1.007	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.004	1.004	1.004

(b) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, and extrapolated to 80 development years.

Incurred Medical Loss Development Factors

Accident Year	<u>27/15</u>	<u>39/27</u>	<u>51/39</u>	<u>63/51</u>	<u>75/63</u>	<u>87/75</u>	<u>99/87</u>	Age-to-Age (in months) (b)										<u>147/135</u>	<u>159/147</u>	<u>171/159</u>	<u>183/171</u>	<u>195/183</u>	<u>207/195</u>
1992																							1.006
1993																						1.013	1.008
1994																						1.021	1.011
1995																						1.005	1.010
1996																						1.012	1.008
1997																						1.005	1.004
1998																						1.007	1.012
1999																						1.003	1.000
2000																						0.998	0.995
2001																						0.999	0.996
2002																						0.999	
2003																						0.999	
2004																						0.999	
2005																						0.999	
2006																						0.999	
2007																						0.999	
2008																						0.999	
2009																						0.999	
2010																						0.999	
2011																						0.999	
2012																						0.999	
2013																						0.999	
2014																						0.999	
2015																						0.999	
2016																						0.999	
Selected (a)	1.288	1.118	1.064	1.032	1.025	1.016	1.011	1.007	1.014	1.010	1.008	1.004	1.005	1.002	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.003
Cumulative	1.848	1.435	1.284	1.206	1.169	1.140	1.123	1.110	1.103	1.087	1.076	1.068	1.060	1.056	1.051	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049

(a) Selections are latest year for the 15-to-27 month through 99-to-111 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	219/207	231/219	243/231	255/243	267/255	279/267	291/279	303/291	315/303	327/315	339/327	351/339	363/351	375/363	387/375	399/387	ULT/399Inc (c)
1982										1.011	1.002	1.005	1.003	1.003	1.002	0.997	
1983									1.004	1.003	1.003	1.005	1.003	1.003	1.002	0.997	
1984								1.004	1.002	1.004	1.003	1.000	1.004	0.999	0.999	1.001	
1985							1.001	1.002	1.004	1.004	1.003	1.004	1.000	0.999	0.999	1.000	
1986						1.003	1.006	1.006	1.005	1.005	1.004	1.002	1.001	0.998	1.004		
1987					1.005	1.010	0.999	1.006	1.003	1.005	1.003	1.001	0.999	1.001			
1988				1.006	1.005	1.005	1.001	1.005	1.002	1.003	1.002	1.000	0.998				
1989				1.008	1.005	1.006	1.007	1.000	1.002	0.999	0.999	1.000					
1990				1.005	1.003	1.002	1.004	0.997	1.001	1.001	0.999						
1991	1.007	1.006	1.008	1.005	1.004	1.001	1.003	1.001	0.999	0.999							
1992	1.009	1.001	1.003	1.005	1.003	1.003	0.999	1.000	1.002								
1993	1.005	1.013	1.013	1.001	1.001	0.999	0.996	1.000									
1994	1.011	1.005	1.006	1.004	1.001	0.996	0.997										
1995	1.012	0.996	1.007	1.000	0.997	0.998											
1996	1.007	1.003	1.000	1.001	0.998												
1997	1.000	0.995	0.997	0.998													
1998	0.999	1.000	0.996														
1999	0.998	0.997															
2000	0.998																

Selected (a)
Cumulative

1.002 0.999 1.003 1.002 1.001 1.000 1.000 1.001 1.001 1.001 1.002 1.002 1.001 1.001 1.000 1.001 0.999 1.030

(c) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, and extrapolated to 80 development years.

Paid Indemnity Loss Development Factors

Accident Year	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195
1992															1.004	1.003
1993														1.005	1.003	1.002
1994													1.007	1.006	1.003	1.004
1995												1.009	1.007	1.004	1.005	1.004
1996											1.011	1.007	1.007	1.006	1.005	1.005
1997										1.016	1.009	1.009	1.008	1.007	1.006	1.006
1998									1.018	1.014	1.010	1.009	1.008	1.006	1.006	1.005
1999								1.022	1.015	1.012	1.010	1.009	1.007	1.007	1.004	1.004
2000								1.022	1.016	1.014	1.011	1.011	1.008	1.007	1.006	1.005
2001								1.022	1.019	1.018	1.014	1.012	1.007	1.006	1.005	1.005
2002							1.030	1.028	1.025	1.020	1.015	1.010	1.009	1.007	1.006	1.005
2003						1.043	1.039	1.037	1.034	1.026	1.018	1.014	1.009	1.008	1.008	
2004				1.102	1.064	1.067	1.045	1.041	1.034	1.026	1.018	1.014	1.011	1.008	1.007	
2005			1.200	1.104	1.073	1.057	1.048	1.037	1.025	1.019	1.014	1.010	1.009	1.007	1.006	
2006		1.423	1.197	1.121	1.085	1.062	1.045	1.032	1.026	1.017	1.016	1.012	1.009	1.007	1.006	
2007	2.243	1.436	1.211	1.127	1.085	1.061	1.042	1.032	1.025	1.018		1.012	1.009	1.008		
2008	2.279	1.468	1.234	1.132	1.083	1.054	1.040	1.025	1.021			1.012	1.009	1.008		
2009	2.369	1.499	1.238	1.135	1.084	1.056	1.039	1.029				1.012	1.009	1.008		
2010	2.399	1.505	1.240	1.129	1.081	1.053	1.036					1.012	1.009	1.007	1.006	1.005
2011	2.433	1.481	1.227	1.129	1.076	1.053						1.012	1.009	1.007	1.006	1.005
2012	2.424	1.477	1.219	1.122	1.075							1.012	1.009	1.007	1.006	1.005
2013	2.385	1.490	1.216	1.111								1.012	1.009	1.007	1.006	1.005
2014	2.455	1.501	1.215									1.012	1.009	1.007	1.006	1.005
2015	2.468	1.475										1.012	1.009	1.007	1.006	1.005
2016	2.403											1.012	1.009	1.007	1.006	1.005

Selected (a) 2.403 1.475 1.215 1.111 1.075 1.053 1.036 1.029 1.024 1.018 1.015 1.011 1.008 1.007 1.005 1.005

Cumulative Unadjusted
for Impact of SB 863

Cumulative Adjusted for
Impact of SB 863 (b)

- (a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors.
(b) The 51-to-ultimate factor for accident year 2014 and the 63-to-ultimate factor for accident year 2013 have been adjusted by 5.0% 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	Age-to-Age (in months)														
	219/207	231/219	243/231	255/243	267/255	279/267	291/279	303/291	315/303	327/315	339/327	351/339	363/351	375/363	387/375
1982										1.002	1.001	1.001	351/339	363/351	375/363
1983									1.001	1.001	1.001	1.001	1.001	1.001	1.001
1984								1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001
1985							1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.000
1986						1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000
1987					1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001
1988				1.001	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.003
1989			1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003
1990		1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001	1.004
1991	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	1.005
1992	1.001	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	1.005
1993	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	1.005
1994	1.004	1.002	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003
1995	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003
1996	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003
1997	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003
1998	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003
1999	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003
2000	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003

Selected (a)
Cumulative

1.004
1.004

- (c) Three-year averages of the 399Inc/399Pd factors are selected.
(d) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, and extrapolated to 80 development years.

Paid Medical Loss Development Factors

Unadjusted (a) Accident Year	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195
1992																
1993															1.012	1.010
1994														1.016	1.012	1.011
1995													1.019	1.018	1.017	1.013
1996												1.023	1.022	1.014	1.014	1.014
1997											1.025	1.020	1.019	1.014	1.014	1.015
1998											1.027	1.021	1.017	1.019	1.018	1.017
1999											1.025	1.020	1.016	1.018	1.018	1.014
2000											1.022	1.020	1.021	1.016	1.012	1.011
2001											1.022	1.026	1.019	1.017	1.012	1.010
2002											1.026	1.018	1.015	1.011	1.011	
2003											1.032	1.025	1.018	1.012		
2004											1.033	1.022	1.017	1.014		
2005											1.031	1.022	1.017			
2006											1.032	1.023	1.017			
2007											1.032	1.019				
2008											1.028					
2009											1.024					
2010																
2011																
2012																
2013																
2014																
2015																
2016																

Adjusted (b) Accident Year	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195
1999																
2000																
2001																
2002																
2003																
2004																
2005																
2006																
2007																
2008																
2009																
2010																
2011																
2012																
2013																
2014																
2015																
2016																

Selected (c)

Cumulative Unadjusted
for Impact of SB 1160

Cumulative Adjusted
for Impact of SB 1160(d)

- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.
 (b) These factors are adjusted for the following: (i) losses paid prior to January 1, 2013 by -4.2% for SB 863 (ii) losses paid prior to January 1, 2014 by -2.1% and paid prior to January 1, 2015 by -1.7% for the RBRVS-based physician fee schedule changes, and (iii) losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -2.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms.
 (c) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors.
 (d) The cumulative factors for 15, 27, 39, 51, 63, and 75 months are adjusted by -3.6%, -3.2%, -2.5%, -1.7%, -1.0%, and -0.4%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Paid Medical Loss Development Factors (Continued)

Unadjusted (a) Accident Year	Age-to-Age (in months)															
	219/207	231/219	243/231	255/243	267/255	279/267	291/279	303/291	315/303	327/315	339/327	351/339	363/351	375/363	387/375	399/387
1982												1.006	1.004	1.004	1.003	1.030
1983									1.004	1.005	1.004	1.004	1.004	1.004	1.003	1.033
1984								1.003	1.003	1.004	1.004	1.003	1.003	1.002	1.003	1.035
1985							1.004	1.004	1.003	1.004	1.004	1.003	1.003	1.002	1.003	1.032
1986						1.004	1.005	1.005	1.005	1.005	1.005	1.006	1.004	1.006	1.004	1.020
1987					1.005	1.005	1.005	1.005	1.005	1.006	1.005	1.003	1.003	1.002		1.020
1988				1.005	1.005	1.006	1.006	1.004	1.005	1.004	1.003	1.003	1.003			
1989			1.006	1.005	1.005	1.008	1.006	1.006	1.005	1.003	1.003	1.003				
1990		1.005	1.005	1.005	1.006	1.004	1.004	1.004	1.003	1.002	1.002					
1991	1.006	1.006	1.006	1.005	1.006	1.006	1.005	1.004	1.003	1.002						
1992	1.007	1.007	1.000	1.007	1.007	1.005	1.005	1.005	1.005							
1993	1.011	1.011	1.009	1.013	1.010	1.008	1.005	1.006								
1994	1.009	1.009	1.012	1.010	1.008	1.008	1.007									
1995	1.012	1.016	1.013	1.011	1.013	1.007										
1996	1.014	1.014	1.010	1.007												
1997	1.013	1.010	1.006	1.006												
1998	1.013	1.010	1.007													
1999	1.012	1.009														
2000	1.008															

Adjusted (b) Accident Year	Age-to-Age (in months)															
	219/207	231/219	243/231	255/243	267/255	279/267	291/279	303/291	315/303	327/315	339/327	351/339	363/351	375/363	387/375	399/387
1982																1.030
1983																1.033
1984																1.035
1985																1.032
1986																1.020
1987																1.020
1988																
1989																
1990																
1991																
1992																
1993																
1994																
1995																
1996																
1997																
1998																
1999																
2000																
Selected (c)	1.012	1.010	1.009	1.009	1.010	1.009	1.006	1.005	1.004	1.003	1.003	1.003	1.003	1.004	1.004	1.028
Cumulative	1.164	1.151	1.139	1.129	1.119	1.108	1.099	1.092	1.087	1.082	1.079	1.076	1.073	1.069	1.066	1.030

(e) Six-year averages of the 399Inc/399Pd factors are selected.

(f) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Age 243, Incurred from Age 243 to Ultimate

Accident Year	Age-to-Age (in months)																			
	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195	219/207	231/219	243/231	243Inc/243Pd (c)
1991																	1.002	1.002	1.001	1.014
1992																1.003	1.001	1.002	1.002	1.014
1993															1.004	1.002	1.002	1.003	1.002	1.014
1994														1.005	1.003	1.003	1.004	1.002	1.003	1.019
1995											1.007		1.007	1.006	1.004	1.004	1.005	1.004	1.003	1.024
1996											1.009		1.007	1.007	1.004	1.005	1.004	1.005	1.004	1.023
1997											1.011		1.007	1.007	1.006	1.005	1.004	1.003	1.002	1.023
1998											1.016		1.009	1.009	1.007	1.006	1.005	1.004	1.003	1.022
1999										1.018	1.014	1.010	1.009	1.008	1.006	1.005	1.004	1.003		
2000										1.022	1.015	1.012	1.009	1.007	1.007	1.004	1.004	1.003		
2001										1.030	1.028	1.022	1.019	1.018	1.017	1.006	1.005			
2002										1.043	1.039	1.029	1.025	1.022	1.019	1.008	1.007	1.004		
2003										1.064	1.039	1.029	1.025	1.022	1.015	1.008	1.007	1.006		
2004										1.102	1.067	1.045	1.034	1.026	1.018	1.014	1.011	1.008		
2005			1.200	1.197	1.121	1.073	1.057	1.048	1.037	1.026	1.017	1.016	1.012							
2006						1.085	1.062	1.045	1.032	1.025	1.018									
2007		1.423	1.436	1.211	1.127	1.085	1.061	1.042	1.032	1.025	1.018									
2008	2.243	1.468	1.234	1.132	1.083	1.054	1.040	1.025	1.021											
2009	2.369	1.499	1.238	1.135	1.084	1.056	1.039	1.029												
2010	2.399	1.505	1.240	1.129	1.081	1.053	1.036													
2011	2.433	1.481	1.227	1.129	1.076	1.053														
2012	2.424	1.477	1.219	1.122	1.075															
2013	2.385	1.490	1.216	1.111																
2014	2.455	1.501	1.215																	
2015	2.468	1.475																		
2016	2.403																			
Selected (a)	2.384(d)	1.453(d)	1.197(d)	1.102(d)	1.063(d)	1.053	1.036	1.029	1.024	1.018	1.015	1.011	1.008	1.007	1.005	1.005	1.004	1.003	1.003	1.023

- (a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 243, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (b) The 51-to-ultimate factor for accident year 2014 and the 63-to-ultimate factor for accident year 2013 have been adjusted by 5.0% and 2.0% respectively, for the impacts of SB 863 on indemnity loss development.
- (c) A three-year average of the 243Inc/243Pd 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 243, Incurred from Age 243 to Ultimate (Continued)

Accident Year	Age-to-Age (in months)															
	<u>255/243</u>	<u>267/255</u>	<u>279/267</u>	<u>291/279</u>	<u>303/291</u>	<u>315/303</u>	<u>327/315</u>	<u>339/327</u>	<u>351/339</u>	<u>363/351</u>	<u>375/363</u>	<u>387/375</u>	<u>399/387</u>	<u>ULT/399Inc (e)</u>		
1980									1.000							
1981								1.002	0.999							
1982							1.001	1.000	1.002							
1983						1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.001			
1984					1.000	1.001	1.001	1.000	1.001	1.001	0.999	1.000	1.000			
1985				1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000			
1986			1.000	1.001	1.000	1.002	1.002	1.001	1.000	1.000	1.000	1.000				
1987		1.000	1.000	1.000	1.002	1.001	1.000	1.000	1.001	1.000	1.001					
1988	1.001	1.000	1.002	1.002	1.001	1.000	1.000	1.000	1.001	1.000						
1989	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.000	1.001	1.000						
1990	1.000	1.001	1.000	1.000	1.000	1.000	1.001	1.001	1.000							
1991	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.001								
1992	1.001	1.001	1.000	1.000	1.000	1.000										
1993	1.001	1.001	1.000	1.000	1.000											
1994	1.001	1.001	1.001	1.000												
1995	1.001	1.000	1.001													
1996	1.001	1.001														
1997	1.000															
Selected (a)	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000			
Cumulative	1.009	1.008	1.008	1.007	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.004	1.004	1.004		

(e) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						113,072
2010					116,685	117,014
2011				116,696	117,285	117,595
2012			122,074	123,214	123,902	124,278
2013		127,541	130,589	131,803	132,442	
2014	121,070	133,829	136,890	138,215		
2015	126,677	140,161	142,949			
2016	128,789	142,960				
2017	130,944					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-Ultimate</u>
2010					1.003	
2011				1.005	1.003	
2012			1.009	1.006	1.003	
2013		1.024	1.009	1.005		
2014	1.105	1.023	1.010			
2015	1.106	1.020				
2016	1.110					
Latest Year	1.110	1.020	1.010	1.005	1.003	
Cumulative	1.158	1.043	1.023	1.013	1.008	1.005

Acc. Year	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Ult. Claim Counts	151,661	149,165	146,245	140,046	133,549	124,937

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						96,865
2010					95,681	102,017
2011				88,646	97,677	103,694
2012			81,338	95,225	104,648	111,015
2013		67,355	88,823	104,105	114,164	
2014	40,907	72,182	94,907	111,291		
2015	43,698	77,984	102,913			
2016	46,790	83,464				
2017	50,655					

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						85.2%
2010					81.3%	86.7%
2011				75.0%	82.6%	87.7%
2012			65.1%	76.2%	83.8%	88.9%
2013		50.4%	66.5%	78.0%	85.5%	
2014	29.2%	51.5%	67.8%	79.5%		
2015	29.9%	53.3%	70.4%			
2016	31.4%	56.0%				
2017	33.4%					

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						101,023
2010					100,578	104,545
2011				93,946	101,059	105,046
2012			87,919	99,284	106,802	111,015
2013		74,726	93,979	106,128	114,164	
2014	46,776	78,362	98,551	111,291		
2015	48,846	81,830	102,913			
2016	49,821	83,464				
2017	50,655					

F. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						16,815
2010					15,193	17,206
2011				12,887	15,510	17,291
2012			10,046	13,274	15,587	17,339
2013		6,314	10,505	13,662	15,861	
2014	2,694	6,724	11,155	14,521		
2015	3,008	7,369	11,878			
2016	3,250	7,694				
2017	3,349					

- (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>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						18,328
2010					16,727	18,051
2011				14,367	16,487	17,728
2012			11,464	14,225	16,159	17,339
2013		7,520	11,479	14,078	15,861	
2014	3,198	7,717	11,829	14,521		
2015	3,441	7,932	11,878			
2016	3,490	7,694				
2017	3,349					
2018						

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						1,851,551
2010					1,682,327	1,887,117
2011				1,349,725	1,666,209	1,862,205
2012			1,007,927	1,412,359	1,725,870	1,924,915
2013		561,965	1,078,795	1,494,086	1,810,727	
2014	149,597	604,683	1,165,723	1,616,016		
2015	168,101	649,109	1,222,358			
2016	173,875	642,210				
2017	169,622					

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						656,305
2010					716,824	589,517
2011				771,590	639,680	524,924
2012			837,415	748,060	626,790	502,980
2013		772,837	850,068	744,472	596,120	
2014	418,253	814,271	891,849	754,127		
2015	445,853	850,041	879,554			
2016	458,614	825,382				
2017	461,687					

(c) Adjusted based on ultimate indemnity claim settlement ratios (Item D) and assuming a log-linear relationship between maturities.

(d) Each amount is the product of the adjusted closed indemnity claim counts (Item E) and the adjusted average paid indemnity per closed claim (Item G), and divided by \$1,000.

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

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

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						40,495
2010					34,127	39,310
2011				27,508	32,622	37,761
2012			20,557	26,726	32,554	37,924
2013		12,841	20,353	26,879	32,614	
2014	5,218	13,209	21,243	28,009		
2015	5,373	13,671	21,969			
2016	5,593	13,873				
2017	5,750					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						-168,337
2010					-167,121	-99,375
2011				-145,792	-110,361	-51,015
2012			-135,267	-108,510	-70,121	
2013		-94,649	-104,941	-54,349		
2014	-30,617	-81,616	-77,410			
2015	-27,661	-52,580				
2016	-16,952					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						487,968
2010					549,703	490,142
2011				625,798	529,319	473,908
2012			702,149	639,551	556,668	502,980
2013		678,187	745,128	690,123	596,120	
2014	387,636	732,655	814,440	754,127		
2015	418,192	797,461	879,554			
2016	441,662	825,382				
2017	461,687					

- (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>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						2,339,519
2010					2,232,030	2,377,259
2011				1,975,523	2,195,528	2,336,113
2012			1,710,075	2,051,910	2,282,538	2,427,895
2013		1,240,152	1,823,923	2,184,209	2,406,847	
2014	537,234	1,337,338	1,980,163	2,370,143		
2015	586,294	1,446,570	2,101,912			
2016	615,537	1,467,592				
2017	631,309					

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

Accident Year	Evaluated as of (in months)				
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>
2009					
2010					1.065
2011				1.111	1.064
2012			1.200	1.112	1.064
2013		1.471	1.198	1.102	
2014	2.489	1.481	1.197		
2015	2.467	1.453			
2016	2.384				
Latest Year	2.384	1.453	1.197	1.102	1.064
3-Year Average	2.447	1.468	1.198	1.109	1.064

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)				
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>
2010					1.080
2011				1.126	1.076
2012			1.216	1.122	1.075
2013		1.488	1.215	1.111	
2014	2.459	1.501	1.215		
2015	2.468	1.475			
2016	2.403				

(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>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>
2010					-1.41%
2011				-1.28%	-1.09%
2012			-1.33%	-0.87%	-1.08%
2013		-1.18%	-1.45%	-0.80%	
2014	1.22%	-1.34%	-1.50%		
2015	-0.02%	-1.51%			
2016	-0.79%				

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

Accident Year	Evaluated as of (in months)				
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>
2010					1.066
2011				1.115	1.064
2012			1.203	1.112	1.063
2013		1.472	1.198	1.102	
2014	2.485	1.481	1.197		
2015	2.467	1.453			
2016	2.384				
Latest Year	2.384	1.453	1.197	1.102	1.063
3-Year Average	2.445	1.469	1.199	1.110	1.064

(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 243, Incurred from Age 243 to Ultimate

Accident Year	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195	219/207	231/219	243/231	243Inc243Pd (c)
1991																				
1992																				1.054
1993																				1.609
1994																				1.626
1995																				1.104
1996																				1.111
1997																				1.092
1998																				1.086
1999																				1.091
2000																				
2001																				
2002																				
2003																				
2004																				
2005																				
2006																				
2007																				
2008																				
2009																				
2010																				
2011																				
2012																				
2013																				
2014																				
2015																				
2016																				

Adjusted (b) Accident Year	27/15	39/27	51/39	63/51	75/63	87/75	99/87	111/99	123/111	135/123	147/135	159/147	171/159	183/171	195/183	207/195	219/207	231/219	243/231	243Inc243Pd (c)
1996																				1.092
1997																				1.086
1998																				1.091
1999																				
2000																				
2001																				
2002																				
2003																				
2004																				
2005																				
2006																				
2007																				
2008																				
2009																				
2010																				
2011																				
2012																				
2013																				
2014																				
2015																				
2016																				

Selected (c) 1.872(e) 1.349(e) 1.184(e) 1.107(e) 1.070(e) 1.059 1.041 1.031 1.030 1.026 1.022 1.019 1.016 1.014 1.012 1.012 1.012 1.010 1.009 1.090

Cumulative Unadjusted
for Impact of SB 1160

Cumulative Adjusted
for Impact of SB 1160(f)

- (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: (i) losses paid prior to January 1, 2013 by -4.2% for SB 863, (ii) losses paid prior to January 1, 2014 by -2.1% and paid prior to January 1, 2015 by -1.7% for the RBRVS-based physician fee schedule changes, and (iii) losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -2.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms.
 (c) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 243, 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 243Inc243Pd factor is selected.
 (e) Based on calculations shown on Exhibits 2.6.3 to 2.6.8. Each of these selections are calculated as the latest year paid medical age-to-age factor multiplied by an adjustment for changes in claim settlement rates.
 (f) The cumulative factors for 15, 27, 39, 51, 63, and 75 months are adjusted by -3.6%, -3.2%, -2.5%, -1.7%, -1.0%, and -0.4%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Age 243, Incurred from Age 243 to Ultimate (Continued)

Accident Year	Age-to-Age (in months)													
	<u>255/243</u>	<u>267/255</u>	<u>279/267</u>	<u>291/279</u>	<u>303/291</u>	<u>315/303</u>	<u>327/315</u>	<u>339/327</u>	<u>351/339</u>	<u>363/351</u>	<u>375/363</u>	<u>387/375</u>	<u>399/387</u>	<u>ULT/399Inc (g)</u>
1983										1.003	1.003	1.002	0.997	
1984									1.000	1.004	0.999	0.999	1.001	
1985								1.003	1.004	1.000	0.999	0.999	1.000	
1986							1.005	1.004	1.002	1.001	0.998	1.004		
1987						1.003	1.005	1.003	1.001	0.999	1.001			
1988					1.005	1.002	1.003	1.002	1.000	0.998				
1989				1.007	1.000	1.002	0.999	0.999	1.000					
1990			1.002	1.004	0.997	1.001	1.001	0.999						
1991		1.004	1.001	1.003	1.001	0.999	0.999							
1992	1.005	1.003	1.003	0.999	1.000	1.002								
1993	1.001	1.001	0.999	0.996	1.000									
1994	1.004	1.001	0.996	0.997										
1995	1.000	0.997	0.998											
1996	1.001	0.998												
1997	0.998													
Selected (c)	1.002	1.001	1.000	1.001	1.001	1.002	1.002	1.002	1.001	1.001	1.000	1.001	0.999	
Cumulative	1.041	1.040	1.039	1.039	1.038	1.038	1.036	1.034	1.032	1.031	1.030	1.030	1.029	1.030

(g) The ULT/399Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding the most recent two evaluations, 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>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						113,072
2010					116,685	117,014
2011				116,696	117,285	117,595
2012			122,074	123,214	123,902	124,278
2013		127,541	130,589	131,803	132,442	
2014	121,070	133,829	136,890	138,215		
2015	126,677	140,161	142,949			
2016	128,789	142,960				
2017	130,944					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-Ultimate</u>
2010					1.003	
2011				1.005	1.003	
2012			1.009	1.006	1.003	
2013		1.024	1.009	1.005		
2014	1.105	1.023	1.010			
2015	1.106	1.020				
2016	1.110					
Latest Year	1.110	1.020	1.010	1.005	1.003	
Cumulative	1.158	1.043	1.023	1.013	1.008	1.005

Acc. Year	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Ult. Claim Counts	151,661	149,165	146,245	140,046	133,549	124,937

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						96,865
2010					95,681	102,017
2011				88,646	97,677	103,694
2012			81,338	95,225	104,648	111,015
2013		67,355	88,823	104,105	114,164	
2014	40,907	72,182	94,907	111,291		
2015	43,698	77,984	102,913			
2016	46,790	83,464				
2017	50,655					

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						85.2%
2010					81.3%	86.7%
2011				75.0%	82.6%	87.7%
2012			65.1%	76.2%	83.8%	88.9%
2013		50.4%	66.5%	78.0%	85.5%	
2014	29.2%	51.5%	67.8%	79.5%		
2015	29.9%	53.3%	70.4%			
2016	31.4%	56.0%				
2017	33.4%					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						101,023
2010					100,578	104,545
2011				93,946	101,059	105,046
2012			87,919	99,284	106,802	111,015
2013		74,726	93,979	106,128	114,164	
2014	46,776	78,362	98,551	111,291		
2015	48,846	81,830	102,913			
2016	49,821	83,464				
2017	50,655					

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						20,780
2010					18,725	21,572
2011				14,702	18,129	20,828
2012			10,994	14,640	17,578	19,852
2013		6,715	10,969	14,363	17,059	
2014	2,987	6,884	11,007	14,438		
2015	3,250	7,297	11,371			
2016	3,487	7,523				
2017	3,595					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						22,970
2010					20,890	22,877
2011				16,626	19,601	21,474
2012			12,593	15,840	18,317	19,852
2013		7,947	12,014	14,869	17,059	
2014	3,493	7,821	11,691	14,438		
2015	3,669	7,814	11,371			
2016	3,716	7,523				
2017	3,595					

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						2,320,502
2010					2,101,101	2,391,642
2011				1,561,949	1,980,822	2,255,757
2012			1,107,117	1,572,679	1,956,287	2,203,904
2013		593,873	1,129,015	1,577,987	1,947,527	
2014	163,399	612,863	1,152,201	1,606,799		
2015	179,227	639,425	1,170,242			
2016	185,151	627,918				
2017	182,119					

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						988,093
2010					1,032,936	884,176
2011				1,025,984	891,402	741,313
2012			1,003,385	938,200	807,235	655,820
2013		888,300	958,095	867,845	695,608	
2014	512,296	877,362	936,269	798,147		
2015	522,919	888,580	887,474			
2016	554,810	868,085				
2017	569,780					

(c) Adjusted based on ultimate indemnity claim settlement ratios (Item D) and assuming a log-linear relationship between maturities.

(d) Each amount is equal to the product of [adjusted closed indemnity claim counts (Item E)] and [adjusted average paid medical per closed indemnity claim (Item G)], and divided by \$1,000.

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

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

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						60,967
2010					49,177	58,958
2011				36,577	45,460	53,328
2012			24,632	33,520	41,926	49,447
2013		14,759	22,940	31,333	38,057	
2014	6,391	14,232	22,301	29,644		
2015	6,302	14,291	22,167			
2016	6,766	14,591				
2017	7,097					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						-253,438
2010					-240,820	-149,045
2011				-193,859	-153,790	-72,046
2012			-162,076	-136,090	-90,308	
2013		-108,790	-118,276	-63,356		
2014	-37,501	-87,940	-81,265			
2015	-32,442	-54,964				
2016	-20,508					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						734,655
2010					792,116	735,130
2011				832,125	737,612	669,268
2012			841,309	802,109	716,927	655,820
2013		779,509	839,819	804,490	695,608	
2014	474,796	789,422	855,004	798,147		
2015	490,477	833,616	887,474			
2016	534,302	868,085				
2017	569,780					

- (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)					
	15	27	39	51	63	75
2009						225,716
2010					221,875	224,670
2011				208,244	211,922	215,230
2012			209,886	215,199	220,050	224,377
2013		205,391	213,990	220,100	226,941	
2014	193,937	228,970	238,683	245,684		
2015	204,042	241,355	250,592			
2016	217,202	257,434				
2017	237,373					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						3,280,874
2010					3,156,160	3,395,570
2011				2,826,201	3,174,794	3,396,946
2012			2,158,312	2,589,987	2,893,264	3,084,101
2013		1,578,773	2,182,824	2,602,577	2,870,076	
2014	832,131	1,631,255	2,245,888	2,650,630		
2015	873,747	1,714,397	2,308,308			
2016	936,655	1,753,437				
2017	989,272					

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

Accident Year	Evaluated as of (in months)				
	15-27	27-39	39-51	51-63	63-75
2010					1.076
2011				1.123	1.070
2012			1.200	1.117	1.066
2013		1.383	1.192	1.103	
2014	1.960	1.377	1.180		
2015	1.962	1.346			
2016	1.872				
Latest Year	1.872	1.346	1.180	1.103	1.066

(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 2014 and later.

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)				
	15-27	27-39	39-51	51-63	63-75
2010					1.086
2011				1.129	1.082
2012			1.209	1.125	1.076
2013		1.388	1.204	1.111	
2014	1.935	1.384	1.194		
2015	1.955	1.359			
2016	1.875				

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

Accident Year	Evaluated as of (in months)				
	15-27	27-39	39-51	51-63	63-75
2010					-0.95%
2011				-0.53%	-1.07%
2012			-0.72%	-0.73%	-0.92%
2013		-0.41%	-0.93%	-0.74%	
2014	1.29%	-0.55%	-1.17%		
2015	0.35%	-0.90%			
2016	-0.16%				

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

Accident Year	Evaluated as of (in months)				
	15-27	27-39	39-51	51-63	63-75
2010					1.083
2011				1.132	1.074
2012			1.212	1.124	1.070
2013		1.393	1.198	1.107	
2014	1.972	1.381	1.184		
2015	1.962	1.349			
2016	1.872				
Latest Year	1.872	1.349	1.184	1.107	1.070
3-Year Average	1.935	1.374	1.198	1.121	1.076

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

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

**Developed Indemnity Loss Ratios Using Selected Loss Development Factors
Adjusted for Changes in Claim Settlement Rates
Based on Experience as of March 31, 2018**

Accident Year	Development Factors				
	(1) Paid or Incurred Loss Ratio(a)	(2) Annual(b)	Cumulative		(5) Projected Ultimate Loss Ratio (5) = (1) x (4)
			(3) Unadjusted for Impact of SB 863(b)	(4) Adjusted for Impact of SB 863(b)	
1986	0.396	1.000	1.004	1.004	0.397
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	1.001	1.006	1.006	0.400
1991	0.424	1.001	1.007	1.007	0.427
1992	0.349	1.000	1.007	1.007	0.352
1993	0.287	1.000	1.007	1.007	0.289
1994	0.327	1.000	1.007	1.007	0.329
1995	0.473	1.001	1.008	1.008	0.477
1996	0.530	1.001	1.008	1.008	0.534
1997	0.599	1.001	1.009	1.009	0.604
1998	0.651	1.000	1.009	1.009	0.657
1999	0.668	1.003	1.035	1.035	0.691
2000	0.575	1.003	1.038	1.038	0.597
2001	0.475	1.004	1.043	1.043	0.495
2002	0.352	1.005	1.048	1.048	0.369
2003	0.230	1.005	1.053	1.053	0.243
2004	0.137	1.007	1.060	1.060	0.145
2005	0.116	1.008	1.069	1.069	0.124
2006	0.149	1.011	1.080	1.080	0.161
2007	0.203	1.015	1.096	1.096	0.222
2008	0.253	1.018	1.116	1.116	0.282
2009	0.289	1.024	1.143	1.143	0.331
2010	0.274	1.029	1.176	1.176	0.322
2011	0.247	1.036	1.218	1.218	0.301
2012	0.213	1.053	1.283	1.283	0.273
2013	0.173	1.063	1.364	1.391	0.241
2014	0.150	1.102	1.503	1.579	0.236
2015	0.124	1.197	1.799	1.889	0.234
2016	0.082	1.453	2.614	2.744	0.225
2017	0.036	2.384	6.231	6.543	0.235

(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
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Reform Adjusted						
	Development Factors						
Accident	Unadjusted	Adjusted	Annual(c)	Cumulative		Adjusted	Projected
Year	Paid or Incurred	Paid or Incurred		Unadjusted for	Adjusted for	Developed	Ultimate
	<u>Loss Ratio(a)</u>	<u>Loss Ratio(b)</u>		<u>Reforms(c)</u>	<u>Reforms(c)</u>	<u>Loss Ratio(d)</u>	<u>Loss Ratio</u>
						(2) x (5)	(1) + ((6) - (2))
1986	0.334	0.334	1.001	1.031	1.031	0.344	0.344
1987	0.314	0.314	1.000	1.031	1.031	0.324	0.324
1988	0.304	0.304	1.001	1.032	1.032	0.314	0.314
1989	0.325	0.325	1.001	1.033	1.033	0.336	0.336
1990	0.367	0.367	1.002	1.035	1.035	0.380	0.380
1991	0.384	0.384	1.002	1.037	1.037	0.398	0.398
1992	0.319	0.319	1.002	1.038	1.038	0.332	0.332
1993	0.267	0.267	1.001	1.039	1.039	0.277	0.277
1994	0.309	0.309	1.001	1.040	1.040	0.321	0.321
1995	0.453	0.453	1.000	1.040	1.040	0.471	0.471
1996	0.486	0.486	1.001	1.041	1.041	0.506	0.506
1997	0.545	0.545	1.002	1.042	1.042	0.568	0.568
1998	0.657	0.657	1.003	1.045	1.045	0.687	0.687
1999	0.657	0.609	1.009	1.145	1.145	0.697	0.745
2000	0.594	0.550	1.010	1.156	1.156	0.636	0.679
2001	0.521	0.483	1.012	1.170	1.170	0.565	0.603
2002	0.401	0.372	1.012	1.184	1.184	0.441	0.470
2003	0.254	0.236	1.012	1.199	1.199	0.283	0.301
2004	0.172	0.160	1.014	1.216	1.216	0.194	0.206
2005	0.166	0.155	1.016	1.235	1.235	0.191	0.203
2006	0.213	0.199	1.019	1.258	1.258	0.250	0.264
2007	0.294	0.274	1.022	1.286	1.286	0.353	0.372
2008	0.361	0.339	1.026	1.319	1.319	0.447	0.469
2009	0.412	0.389	1.030	1.358	1.358	0.528	0.552
2010	0.397	0.376	1.031	1.401	1.401	0.527	0.547
2011	0.329	0.316	1.041	1.458	1.458	0.460	0.474
2012	0.270	0.263	1.059	1.544	1.538	0.404	0.412
2013	0.207	0.205	1.070	1.652	1.636	0.335	0.337
2014	0.168	0.167	1.107	1.829	1.798	0.300	0.301
2015	0.136	0.136	1.184	2.165	2.111	0.287	0.287
2016	0.098	0.098	1.349	2.920	2.827	0.277	0.277
2017	0.056	0.056	1.872	5.467	5.270	0.296	0.296

- (a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
- (b) Based on experience evaluated as of March 31, 2018. 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) See Exhibits 2.6.1 and 2.6.2.
- (d) The developed medical loss ratios shown were derived based on an adjustment to reflect the impact of reforms. 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 <u>Adjustments (a)</u>	(2) Frequency <u>Adjustments (a)</u>	(3) Annual Impact on Indemnity Benefits Due to Wage <u>Inflation (b)</u>	(4a) Annual Cost Impact on <u>Indemnity (c)</u>	(5a) Composite Indemnity Adjustment <u>Factor (d)</u>	
1986	0.0	0.0	1.6	1.6	1.528	
1987	0.0	0.0	1.9	1.9	1.500	
1988	0.0	0.0	1.5	1.5	1.478	
1989	0.0	0.0	1.5	1.5	1.456	
1990	2.3	19.9	1.7	24.7	1.167	
1991	4.9	14.8	0.8	21.4	0.961	
1992	1.8	-8.3	1.6	-5.2	1.014	
1993	0.2	-18.1	0.4	-17.6	1.230	
1994	-5.1	0.2	0.6	-4.3	1.286	
1995	6.3	0.6	1.0	8.0	1.191	
1996	5.3	0.4	1.2	7.0	1.113	
1997	9.7	0.2	1.6	11.7	0.997	
1998	6.5	0.0	1.8	8.4	0.919	
1999	5.7	0.0	2.1	7.9	0.852	
2000	3.9	0.0	3.1	7.1	0.795	
2001	-0.3	0.0	0.2	-0.1	0.796	
2002	-0.7	0.0	0.2	-0.5	0.817	(e)
2003	7.3	0.0	1.1	8.5	0.817	(e)
2004	-6.0	-13.7	1.6	-17.6	1.125	(e)
2005	-31.6	-15.3	1.1	-41.5	1.527	
2006	5.6	-5.7	1.6	1.2	1.510	
2007	1.6	0.0	1.6	3.2	1.463	
2008	4.8	0.6	0.7	6.2	1.378	
2009	0.4	1.4	0.2	2.0	1.350	
2010	0.4	0.0	1.0	1.4	1.332	
2011	0.0	0.0	1.6	1.6	1.311	
2012	0.3	0.0	2.1	2.4	1.280	
2013	2.6	0.2	0.4	3.2	1.240	
2014	7.0	1.5	1.7	10.4	1.123	
2015	0.3	0.0	2.3	2.6	1.095	
2016	0.3	0.0	1.0	1.3	1.081	
2017	0.5	0.0	1.4	1.9	1.061	
2018	0.4	0.0	2.1	2.5		
2019	0.4	0.0	2.0	2.4		
1/1/2020	0.2	(Annual 0.4)	0.0	0.8	(Annual 1.7)	1.0

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

Annual Medical Cost Level Change - Non-Legislative

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)
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	0.4%	4.2%	0.3%	0.7%
2015	0.933	0.067	0.1%	3.1%	0.2%	0.3%
2016	0.918	0.082	0.1%	5.4%	0.4%	0.5%
2017	0.906	0.094	0.1%	2.2%	0.2%	0.3%
2018	0.906	0.094	0.0%	2.6%	0.2%	0.2%
2019	0.906	0.094	0.0%	3.0%	0.3%	0.3%
1/1/2020	0.906	0.094	0.0% (Annual 0.0%)	1.3% (Annual 2.6%)	0.1%	0.1%

- (a) From a Special Carrier Study through 1990. Based on WCIRB's Aggregate Indemnity and Medical Costs Calls for years 1991 through 2012. Based on WCIRB medical transaction data from 2013 onwards. Accident years 2011 and subsequent do not include MCCP costs.
- (b) Based on the WCIRB's evaluation of the cost impact of changes in the medical fee schedules. Includes the 1/1/2014 changes to the physician fee schedule to a resource-based relative value scale (RBRVS) except for the proportion reflected in loss development (See Exhibit 2.4).
- (c) Based on a component of the Consumer Price Index. Projections furnished by the California Department of Finance.
- (d) Adjusted CPI on workers' compensation medical costs that are not subject to fee schedules. The current year impact is the weighted average of 0% and Column (4), with Columns (1) and (2) from prior years as weights. (i) 1993's non-fee proportion is reduced by 13.8% due to the new medical-legal fee schedule enacted in 1994. (ii) 1998's non-fee proportion is reduced by 7.7% due to the Inpatient Hospital Fee Schedule (IHFS) effective 4/1/1999. (iii) 2002's non-fee proportion is reduced by 7.6% due to the new pharmaceutical fee schedule effective 1/1/2003. (iv) 2003's non-fee proportion is reduced by 17.2% due to the outpatient fee schedule effective 1/1/2004. (v) Given the anticipated impact of legislative reform, a 0% inflation rate has been assumed for 2004 and 2005.

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

Annual Medical Cost Level Change - Legislative

Accident Year	(1) Annual Legislative Cost Impact on Medical Severity(a)	(2) Annual Legislative Cost Impact on Medical Due to Frequency Changes(b)	(3) Annual Total Legislative Cost Impact on Medical(c)
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	-4.0%	0.0%	-4.0%
2013	-3.2%	0.2%	-3.0%
2014	-2.2%	1.3%	-0.9%
2015	-0.3%	0.0%	-0.3%
2016	-0.4%	0.0%	-0.4%
2017	-0.3%	0.0%	-0.3%
2018	0.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%
1/1/2020	0.0%	0.0%	0.0%

- (a) Reflects the WCIRB's most recent estimates of the cost impact of legislation. Does not include the estimated -4.2% impact of 1/1/2013 medical provisions in SB 863 and the impact of the SB 1160 lien provisions on future medical costs, which are reflected in the medical loss development projections.
- (b) This reflects the annual percentage impact on medical costs due to changes in the frequency of indemnity claims as a result of benefit changes.
- (c) $[\text{Column (1)} + 1.0] \times [\text{Column (2)} + 1.0] - 1.0$

Total Medical Cost Level Factors

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical(b)	(3) Total Annual Cost Impact on Medical(c)	(4) Composite Medical On-level Factor(d)
1986	3.0%	0.0%	3.0%	0.940
1987	3.8%	0.0%	3.8%	0.906
1988	3.8%	0.0%	3.8%	0.872
1989	3.0%	0.0%	3.0%	0.847
1990	3.7%	19.1%	23.5%	0.686
1991	3.6%	12.9%	16.9%	0.587
1992	3.0%	-7.9%	-5.2%	0.619
1993	2.7%	-18.7%	-16.5%	0.741
1994	-2.3%	-2.3%	-4.6%	0.776
1995	0.9%	0.5%	1.4%	0.765
1996	1.0%	0.4%	1.4%	0.755
1997	0.7%	0.2%	0.9%	0.748
1998	0.8%	12.6%	13.5%	0.659
1999	2.5%	12.6%	15.4%	0.571
2000	1.7%	7.0%	8.8%	0.525
2001	2.9%	6.6%	9.7%	0.478
2002	2.0%	-5.6%	-3.7%	0.497
2003	1.4%	-6.0%	-4.7%	0.521
2004	0.0%	-33.9%	-33.9%	0.788
2005	0.0%	-13.9%	-13.9%	0.915
2006	0.3%	-5.1%	-4.8%	0.962
2007	1.8%	0.1%	1.9%	0.944
2008	0.2%	0.5%	0.7%	0.937
2009	0.4%	1.0%	1.4%	0.924
2010	0.3%	0.0%	0.3%	0.921
2011	0.3%	-2.0%	-1.7%	0.937
2012	0.1%	-4.0%	-3.9%	0.975
2013	0.1%	-3.0%	-2.9%	1.005
2014	0.7%	-0.9%	-0.2%	1.011 (e)
2015	0.3%	-0.3%	0.0%	1.012 (e)
2016	0.5%	-0.4%	0.1%	1.012 (e)
2017	0.3%	-0.3%	0.0%	1.013 (e)
2018	0.2%	0.0%	0.2%	
2019	0.3%	0.0%	0.3%	
1/1/2020	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 1/1/2020 level.

(e) The on-level factors for accident years 2014, 2015, 2016, and 2017 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(a)</u>	<u>Factor to a 1/1/2020 Wage Level</u>
1986	4.7	3.155
1987	5.6	2.988
1988	4.4	2.862
1989	4.3	2.744
1990	5.0	2.613
1991	2.3	2.554
1992	4.7	2.440
1993	1.2	2.411
1994	1.8	2.368
1995	2.9	2.301
1996	3.4	2.226
1997	4.7	2.126
1998	5.2	2.021
1999	6.2	1.903
2000	9.0	1.746
2001	0.6	1.735
2002	0.5	1.727
2003	3.3	1.671
2004	4.7	1.596
2005	3.1	1.548
2006	4.6	1.480
2007	4.5	1.417
2008	2.1	1.387
2009	0.5	1.380
2010	3.0	1.340
2011	3.1	1.300
2012	4.1	1.249
2013	0.7	1.240
2014	3.3	1.200
2015	4.4	1.150
2016	1.9	1.128
2017	2.7	1.099
Projected:		
2018	4.1	
2019	3.9	
1/1/2020	1.6	(Annual = 3.2)

(a) Historical wage changes through 2016 are based on Bureau of Labor Statistics data. Forecasts for 2017 to 2020 are based on the average of wage level projections made by the UCLA Anderson School of Business as of March 2018 and those made by the California Department of Finance as of April 2018.

Premium Adjustment Factors

	(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)	(6)	(7)
		Ratio of Industry Average Charged Rates to Advisory Pure Premium	Factor to Industry Average Filed Pure Premium Rate Level as of	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of	Adjustment to Remove Surcharge	Average Experience	Off-Balance Correction in Advisory January 1, 2018 Pure Premium	Factor to Adjust for Impact of Premium Resulting from	Composite Premium Adjustment
Calendar	Factor to a 1/1/2020	Pure Premium	Rate Level as of	Rate Level as of	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
<u>Year</u>	<u>Wage Level (a)</u>	<u>Rates (b)</u>	<u>January 1, 2018 (c)</u>	<u>January 1, 2018 (d)</u>	<u>Premium (e)</u>	<u>Modification (f)</u>	<u>Rates</u>	<u>Audits (g)</u>	<u>Factor (h)</u>
1986	3.155	---	---	0.844	0.991	0.983	1.015	---	2.645
1987	2.988	---	---	0.742	0.992	0.983	1.015	---	2.204
1988	2.862	---	---	0.664	0.993	0.963	1.015	---	1.929
1989	2.744	---	---	0.653	0.993	0.945	1.015	---	1.856
1990	2.613	---	---	0.637	0.991	0.942	1.015	---	1.725
1991	2.554	---	---	0.590	0.987	0.939	1.015	---	1.560
1992	2.440	---	---	0.566	0.982	0.940	1.015	---	1.422
1993	2.411	---	---	0.559	0.981	0.949	1.015	---	1.372
1994	2.368	---	---	0.640	0.986	0.948	1.015	---	1.553
1995	2.301	---	---	0.866	0.995	0.958	1.015	---	2.040
1996	2.226	1.023	0.920	0.899	1.000	0.935	1.015	---	2.109
1997	2.126	0.989	0.918	0.928	1.000	0.949	1.015	---	2.048
1998	2.021	0.965	0.956	0.991	1.000	0.959	1.015	---	2.057
1999	1.903	0.972	0.967	0.995	1.000	0.954	1.015	---	1.955
2000	1.746	1.005	0.876	0.872	1.000	0.970	1.015	---	1.545
2001	1.735	1.029	0.772	0.750	1.000	0.969	1.015	---	1.324
2002	1.727	1.157	0.691	0.597	1.000	0.991	1.015	---	1.025
2003	1.671	1.267	0.565	0.446	1.000	1.005	1.015	---	0.731
2004	1.596	1.397	0.575	0.412	1.000	0.981	1.015	---	0.660
2005	1.548	1.470	0.692	0.471	1.000	0.982	1.015	---	0.731
2006	1.480	1.450	0.892	0.615	1.000	0.956	1.015	---	0.938
2007	1.417	1.495	1.216	0.813	1.000	0.931	1.015	0.985	1.201
2008	1.387	1.427	1.446	1.013	1.000	0.946	1.015	0.991	1.451
2009	1.380	1.367	1.425	1.042	1.000	0.937	1.015	1.034	1.565
2010	1.340	1.384	1.397	1.009	1.000	0.941	1.015	1.005	1.424
2011	1.300	1.400	1.396	0.997	1.000	0.982	1.015	---	1.301
2012	1.249	1.222	1.151	0.942	1.000	1.000	1.015	---	1.159
2013	1.240	1.138	0.926	0.814	1.000	0.983	1.015	---	1.011
2014	1.200	1.126	0.853	0.758	1.000	0.961	1.015	---	0.932
2015	1.150	1.107	0.829	0.749	1.000	0.951	1.015	---	0.892
2016	1.128	1.146	0.893	0.779	1.000	0.950	1.015	---	0.912
2017	1.099	1.155	0.986	0.854	1.000	0.959	1.015	---	0.964

- (a) See Exhibit 5.1.
- (b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.
- (c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory January 1, 2018 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2018 pure premium rate (\$1.94) to the industry average filed pure premium rate as of January 1, 2018 (\$2.22).
- (d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of January 1, 2018.
- (e) Based on unit statistical data.
- (f) Based on average promulgated experience modifications. Calendar years 1996 through 2000 include adjustments for the impacts of AB 1913 and SB 1217 (1998).
- (g) Based on a comparison of premium reported on a calendar year basis to premium reported on an estimated ultimate policy year basis over the course of two accident years. The factor is applied only for calendar years 2007 to 2010, during which reported premiums were impacted by recessionary economic forces.
- (h) (1)x(2c)x(3)x(6) ÷ [(4)x(5)] for calendar years 2007 to 2010. (1)x(2c)x(3) ÷ [(4)x(5)] for all other calendar years.

2017 Accident Year Indemnity Claim Frequency Model
As of PY 2015 Preliminary 1st Set & December 2017 UCLA

AY	Annual %	Annual Log Differences							
	Changes Intra- Class Ind Freq	Intra-Class Indemnity Frequency per \$M Exposure at PY 2016 Level				AY+1	Cumulative Injury Index	Economic Variables (1st Prin. Comp.)	CalOSHA Dummy Variable
	Total	Total	Cumulative	Non-cum.	Indemnity Benefit Level				
1962	----	----	----	----	----	----	----	----	----
1963	2.0%	0.020	----	----	0.000	----	-0.029	0.000	
1964	0.3%	0.003	----	----	0.000	----	0.004	0.000	
1965	-0.3%	-0.003	----	----	0.000	----	0.020	0.000	
1966	1.7%	0.017	----	----	0.000	----	0.191	0.000	
1967	1.8%	0.017	----	----	0.000	----	-0.146	0.000	
1968	1.4%	0.014	----	----	0.049	----	0.059	0.000	
1969	2.7%	0.026	----	----	0.000	----	0.044	0.000	
1970	1.8%	0.018	----	----	0.000	----	-0.337	0.000	
1971	1.5%	0.015	----	----	0.162	----	-0.190	0.000	
1972	-4.3%	-0.044	----	----	0.040	----	0.161	0.000	
1973	7.0%	0.067	----	----	0.049	----	0.090	0.000	
1974	19.2%	0.176	----	----	0.058	----	-0.035	0.000	
1975	12.5%	0.118	----	----	0.000	----	-0.298	0.000	
1976	0.8%	0.008	----	----	0.063	----	0.085	0.000	
1977	4.3%	0.042	----	----	0.001	----	0.112	0.000	
1978	-8.7%	-0.091	----	----	0.000	----	0.173	0.000	
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	-0.018	-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	1.3%	0.013	0.033	0.010	0.003	0.022	0.048	0.000	
2012	4.7%	0.046	0.130	0.036	0.022	0.094	0.120	0.000	
2013	0.6%	0.006	0.155	-0.015	0.071	0.170	0.154	0.000	
2014	0.5%	0.005	0.095	-0.009	0.003	0.104	0.172	0.000	
2015	-0.6%	-0.006	0.075	-0.020	0.002	0.094	0.192	0.000	
2016*	-3.2%	-0.033	0.000	-0.039	0.004	0.040	0.128	0.000	
2017	-0.9%	-0.009	-0.009	-0.009	0.004	0.000	0.109	0.000	
2018	-1.3%	-0.013	-0.013	-0.013	0.004	0.000	0.066	0.000	
2019	-2.0%	-0.020	-0.020	-0.020	0.004	0.000	-0.005	0.000	
2020	-2.1%	-0.021	-0.021	-0.021	0.004	0.000	-0.016	0.000	

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020
Std Err of Y Est	0.040
R Squared	0.583
No. of Observations	38
Degrees of Freedom	33

X Coefficient(s)	0.178	0.284	0.094	-0.131
Std Err of Coef.	0.073	0.062	0.044	0.077

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; December 2017 UCLA Anderson Forecasts for 2017 on.

Regression is over AY 1979 through AY 2016. AY 2017 through AY 2020 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 2016 is preliminary and change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

**Projection of Indemnity Severity Trends by Accident Year
Based on Experience as of March 31, 2018**

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	9,989	---	1.867	18,647	---
1991	10,921	9.3%	1.765	19,280	3.4%
1992	11,016	0.9%	1.707	18,804	-2.5%
1993	12,001	8.9%	1.697	20,363	8.3%
1994	12,963	8.0%	1.777	23,040	13.1%
1995	14,558	12.3%	1.655	24,098	4.6%
1996	16,309	12.0%	1.553	25,335	5.1%
1997	19,363	18.7%	1.394	26,987	6.5%
1998	21,223	9.6%	1.286	27,283	1.1%
1999	23,260	9.6%	1.191	27,707	1.6%
2000	24,678	6.1%	1.112	27,443	-1.0%
2001	27,109	9.8%	1.113	30,176	10.0%
2002	26,249	-3.2%	1.143	29,998	-0.6%
2003	25,840	-1.6%	1.142	29,505	-1.6%
2004	21,090	-18.4%	1.358	28,639	-2.9%
2005	19,077	-9.5%	1.561	29,785	4.0%
2006	20,876	9.4%	1.455	30,380	2.0%
2007	22,613	8.3%	1.410	31,880	4.9%
2008	24,699	9.2%	1.336	32,995	3.5%
2009	25,932	5.0%	1.328	34,435	4.4%
2010	25,586	-1.3%	1.310	33,505	-2.7%
2011	25,240	-1.4%	1.289	32,532	-2.9%
2012	24,969	-1.1%	1.259	31,425	-3.4%
2013	25,101	0.5%	1.222	30,669	-2.4%
2014	26,703	6.4%	1.123	29,986	-2.2%
2015	27,152	1.7%	1.095	29,718	-0.9%
2016	27,005	-0.5%	1.081	29,186	-1.8%
2017	27,237	0.9%	1.061	28,895	-1.0%
(6) Estimated Annual Exponential Trend Based on 2005 to 2017:					-0.7%
(7) Estimated Annual Exponential Trend Based on 2012 to 2017:					-1.6%
Selected Indemnity Severity Trend:					0.0%

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

Source: WCIRB experience calls.

**Projection of Medical Severity Trends by Accident Year
Based on Experience as of March 31, 2018**

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	8,846	---	0.993	8,784	---
1991	9,506	7.5%	0.975	9,265	5.5%
1992	9,612	1.1%	0.943	9,060	-2.2%
1993	10,643	10.7%	0.927	9,860	8.8%
1994	11,751	10.4%	0.975	11,452	16.1%
1995	13,445	14.4%	0.967	13,003	13.5%
1996	14,464	7.6%	0.958	13,850	6.5%
1997	17,192	18.9%	0.951	16,346	18.0%
1998	21,092	22.7%	0.839	17,702	8.3%
1999	23,864	13.1%	0.727	17,356	-2.0%
2000	26,793	12.3%	0.669	17,913	3.2%
2001	31,771	18.6%	0.611	19,400	8.3%
2002	32,177	1.3%	0.634	20,416	5.2%
2003	30,711	-4.6%	0.667	20,485	0.3%
2004	28,430	-7.4%	0.884	25,133	22.7%
2005	29,370	3.3%	0.886	26,028	3.6%
2006	32,213	9.7%	0.884	28,487	9.4%
2007	35,828	11.2%	0.870	31,188	9.5%
2008	38,956	8.7%	0.870	33,893	8.7%
2009	41,168	5.7%	0.871	35,859	5.8%
2010	41,447	0.7%	0.874	36,234	1.0%
2011	37,815 (c)	---	0.897	33,935 (c)	---
2012	35,727	-5.5%	0.942	33,661	-0.8%
2013	33,246	-6.9%	0.983	32,696	-2.9%
2014	32,027	-3.7%	1.008	32,294	-1.2%
2015	31,344	-2.1%	1.012	31,715	-1.8%
2016	31,167	-0.6%	1.012	31,533	-0.6%
2017	32,159	3.2%	1.013	32,572	3.3%

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 (7).
- (b) These adjustment factors are based on Exhibit 4.4, excluding the impact of frequency, and including the impact of SB 863 and SB 1160 provisions applicable to outstanding medical losses.
- (c) Severities for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Severities for accident years 2010 and prior do reflect MCCP costs.

Source: WCIRB experience calls.

**Projection of Medical Severity Trends by Accident Year
Adjusted to Remove the Cost of Medical Cost Containment Programs (MCCP)
Based on Experience as of March 31, 2018**

(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	29,370	---	26,028	---	27,769	---	24,608	---
2006	32,213	9.7%	28,487	9.4%	30,136	8.5%	26,650	8.3%
2007	35,828	11.2%	31,188	9.5%	33,375	10.7%	29,052	9.0%
2008	38,956	8.7%	33,893	8.7%	35,474	6.3%	30,864	6.2%
2009	41,168	5.7%	35,859	5.8%	37,652	6.1%	32,796	6.3%
2010	41,447	0.7%	36,234	1.0%	37,869	0.6%	33,106	0.9%
2011	41,526	0.2%	37,266	2.8%	37,815	-0.1%	33,935	2.5%
2012	39,156	-5.7%	36,892	-1.0%	35,727	-5.5%	33,661	-0.8%
2013	36,513	-6.7%	35,910	-2.7%	33,246	-6.9%	32,696	-2.9%
2014	35,164	-3.7%	35,456	-1.3%	32,027	-3.7%	32,294	-1.2%
2015	34,346	-2.3%	34,752	-2.0%	31,344	-2.1%	31,715	-1.8%
2016	34,143	-0.6%	34,544	-0.6%	31,167	-0.6%	31,533	-0.6%
2017	35,197	3.1%	35,650	3.2%	32,159	3.2%	32,572	3.3%

Estimated Annual Exponential Trend

Trend Based on 2005 to 2017:

Trend Based on 2012 to 2017:

1.9%
-0.9%

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 6.3.

Source: WCIRB experience calls.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Indemnity Loss Ratio(a)	(2) Composite Indemnity Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1)×(2)÷(3)
1986	0.397	1.528	2.645	0.230
1987	0.347	1.500	2.204	0.236
1988	0.332	1.478	1.929	0.254
1989	0.345	1.456	1.856	0.271
1990	0.400	1.167	1.725	0.270
1991	0.427	0.961	1.560	0.263
1992	0.352	1.014	1.422	0.251
1993	0.289	1.230	1.372	0.260
1994	0.329	1.286	1.553	0.273
1995	0.477	1.191	2.040	0.278
1996	0.534	1.113	2.109	0.282
1997	0.604	0.997	2.048	0.294
1998	0.657	0.919	2.057	0.294
1999	0.691	0.852	1.955	0.301
2000	0.597	0.795	1.545	0.307
2001	0.495	0.796	1.324	0.298
2002	0.369	0.817	1.025	0.294
2003	0.243	0.817	0.731	0.271
2004	0.145	1.125	0.660	0.247
2005	0.124	1.527	0.731	0.259
2006	0.161	1.510	0.938	0.260
2007	0.222	1.463	1.201	0.270
2008	0.282	1.378	1.451	0.268
2009	0.331	1.350	1.565	0.285
2010	0.322	1.332	1.424	0.301
2011	0.301	1.311	1.301	0.303
2012	0.273	1.280	1.159	0.302
2013	0.241	1.240	1.011	0.296
2014	0.236	1.123	0.932	0.285
2015	0.234	1.095	0.892	0.287
2016	0.225	1.081	0.912	0.267
2017	0.235	1.061	0.964	0.258
				Projections (d)
2018				0.259
2019				0.254
1/1/2020				0.251

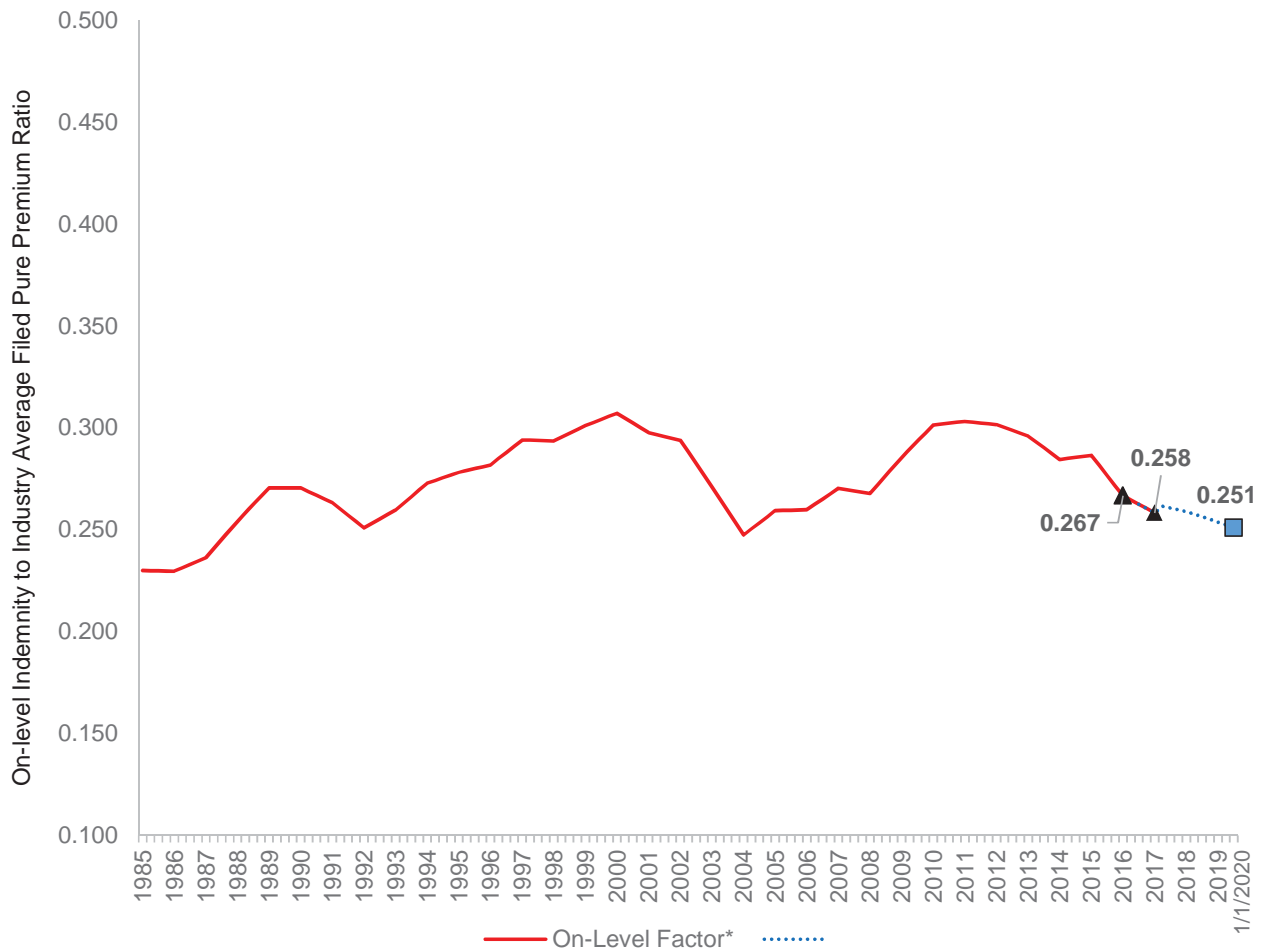
(a) See Exhibit 3.1.

(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 2017 from Exhibit 12, and projected frequency trends for accident years 2018 through 2020 from Exhibit 6.1; these trends were then separately applied to the 2018 through 2020 on-level ratios.

**On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of March 31, 2018**



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

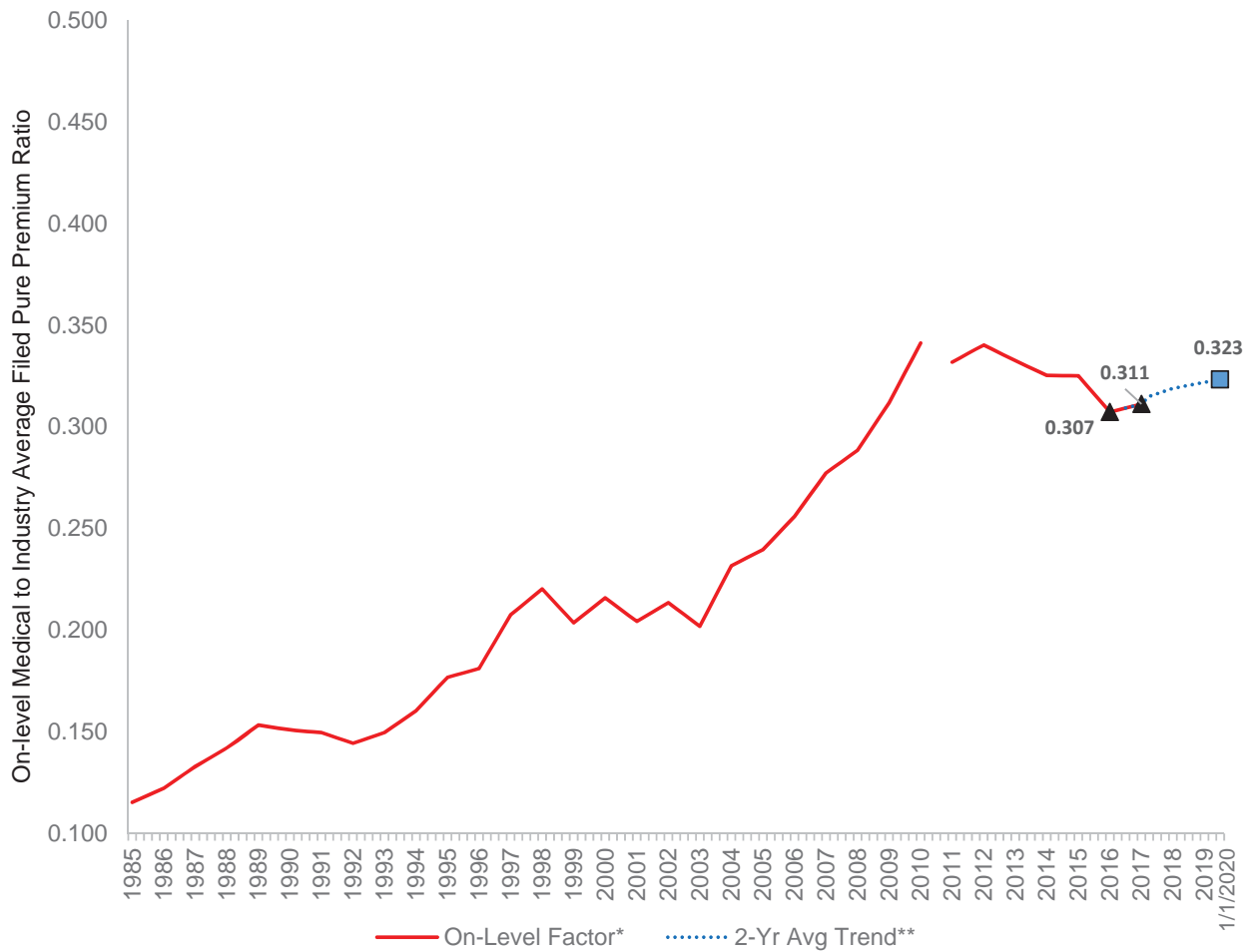
** The 1/1/2020 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2016 and 2017 years.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical On-Level Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1)x(2)÷(3)
1986	0.344	0.940	2.645	0.122
1987	0.324	0.906	2.204	0.133
1988	0.314	0.872	1.929	0.142
1989	0.336	0.847	1.856	0.153
1990	0.380	0.686	1.725	0.151
1991	0.398	0.587	1.560	0.150
1992	0.332	0.619	1.422	0.144
1993	0.277	0.741	1.372	0.150
1994	0.321	0.776	1.553	0.160
1995	0.471	0.765	2.040	0.177
1996	0.506	0.755	2.109	0.181
1997	0.568	0.748	2.048	0.208
1998	0.687	0.659	2.057	0.220
1999	0.697	0.571	1.955	0.204
2000	0.636	0.525	1.545	0.216
2001	0.565	0.478	1.324	0.204
2002	0.441	0.497	1.025	0.214
2003	0.283	0.521	0.731	0.202
2004	0.194	0.788	0.660	0.232
2005	0.191	0.915	0.731	0.240
2006	0.250	0.962	0.938	0.256
2007	0.353	0.944	1.201	0.277
2008	0.447	0.937	1.451	0.288
2009	0.528	0.924	1.565	0.312
2010	0.527	0.921	1.424	0.341
2011	0.460	0.937	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.011	0.333
2014	0.300	1.011	0.932	0.325
2015	0.287	1.012	0.892	0.325
2016	0.277	1.012	0.912	0.307
2017	0.296	1.013	0.964	0.311
				Projections (d)
2018				0.319
2019				0.322
1/1/2020				0.323

- (a) See Exhibit 3.2. Medical loss ratios for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Ratios for accident years 2010 and prior do reflect MCCP costs.
- (b) See Exhibit 4.4.
- (c) See Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from Exhibit 6.4, the actual frequency trend for accident year 2017 from Exhibit 12, and projected frequency trends for accident years 2018 through 2020 from Exhibit 6.1; these trends were then separately applied to the 2018 through 2020 on-level ratios.
- (e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**On-Level Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of March 31, 2018**



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

** The 1/1/2020 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2016 and 2017 years.

**Indicated Loss to Industry Average Filed Pure Premium Ratios
For Policies with Effective Dates between January 1, 2019 and December 31, 2019
Based on Experience as of March 31, 2018**

	<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)	0.251	0.323	0.574

Quarterly Incurred Indemnity Loss Development Factors
Through March 31, 2018

Age in	Accident Year																			
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3									2.417	2.724	2.785	3.031	3.116	3.052	3.238	3.344	3.303	3.209	3.201	3.356
9/6									1.656	1.776	1.820	1.848	1.904	2.001	1.966	1.940	1.960	1.948	1.945	1.874
12/9									1.448	1.511	1.510	1.530	1.564	1.632	1.587	1.585	1.570	1.578	1.578	1.580
15/12	1.229	1.260	1.268	1.250	1.257	1.238	1.180	1.149	1.189	1.234	1.248	1.293	1.306	1.306	1.303	1.301	1.301	1.313	1.309	1.298
18/15	1.172	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	1.189	
21/18	1.145	1.140	1.150	1.148	1.153	1.127	1.066	1.096	1.117	1.128	1.139	1.153	1.140	1.146	1.141	1.141	1.132	1.137	1.134	
24/21	1.126	1.112	1.121	1.111	1.117	1.094	1.045	1.082	1.098	1.106	1.106	1.114	1.119	1.117	1.111	1.104	1.114	1.111	1.104	
27/24	1.074	1.096	1.093	1.100	1.094	1.073	1.045	1.070	1.082	1.081	1.088	1.089	1.091	1.085	1.087	1.081	1.082	1.087	1.079	
30/27	1.078	1.069	1.074	1.082	1.064	1.051	1.040	1.054	1.057	1.072	1.075	1.075	1.080	1.071	1.068	1.067	1.074	1.066		
33/30	1.045	1.058	1.048	1.062	1.047	1.032	1.036	1.042	1.049	1.053	1.059	1.052	1.064	1.053	1.060	1.047	1.055	1.050		
36/33	1.043	1.046	1.039	1.046	1.035	1.020	1.029	1.033	1.039	1.043	1.051	1.049	1.049	1.043	1.041	1.043	1.042	1.036		
39/36	1.038	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036	1.031		
42/39	1.027	1.028	1.034	1.030	1.023	1.018	1.020	1.020	1.031	1.033	1.036	1.038	1.035	1.032	1.028	1.031	1.030			
45/42	1.024	1.026	1.026	1.020	1.009	1.019	1.018	1.024	1.026	1.028	1.030	1.035	1.027	1.033	1.022	1.024	1.024			
48/45	1.025	1.020	1.022	1.013	1.008	1.013	1.013	1.021	1.019	1.021	1.024	1.024	1.026	1.023	1.024	1.020	1.020			
51/48	1.022	1.017	1.018	1.015	1.010	1.016	1.010	1.018	1.021	1.018	1.022	1.023	1.021	1.018	1.017	1.015	1.019			
54/51	1.019	1.018	1.013	1.009	1.007	1.017	1.009	1.017	1.021	1.020	1.021	1.020	1.020	1.016	1.019	1.015				
57/54	1.014	1.017	1.012	1.006	1.008	1.011	1.011	1.018	1.017	1.014	1.018	1.017	1.015	1.014	1.013	1.011				
60/57	1.013	1.014	1.007	1.005	1.008	1.009	1.011	1.013	1.019	1.016	1.013	1.015	1.012	1.014	1.012	1.012				
63/60	1.012	1.012	1.007	1.007	1.008	1.008	1.010	1.014	1.013	1.015	1.011	1.014	1.014	1.009	1.012	1.009				
66/63	1.014	1.009	1.005	1.006	1.011	1.008	1.010	1.013	1.016	1.014	1.015	1.013	1.013	1.009	1.010					
69/66	1.010	1.007	1.003	1.005	1.008	1.007	1.011	1.012	1.011	1.010	1.009	1.012	1.007	1.010	1.010					
72/69	1.009	1.006	1.005	1.005	1.005	1.009	1.009	1.013	1.011	1.009	1.009	1.009	1.010	1.008	1.007					
75/72	1.006	1.004	1.004	1.005	1.003	1.005	1.007	1.010	1.011	1.010	1.010	1.008	1.007	1.004	1.006					
78/75	1.007	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.006						
81/78	1.005	1.002	1.003	1.004	1.004	1.005	1.006	1.010	1.009	1.007	1.007	1.006	1.006	1.007						
84/81	1.003	1.003	1.005	1.003	1.006	1.006	1.007	1.008	1.005	1.009	1.006	1.004	1.007	1.005						
87/84	1.003	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004	1.006						
90/87	1.001	1.003	1.003	1.003	1.003	1.004	1.008	1.008	1.008	1.008	1.004	1.005	1.005							
93/90	1.001	1.002	1.004	1.003	1.002	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.004							
96/93	1.002	1.003	1.001	1.004	1.002	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003							

Source: WCIRB accident year experience calls

Quarterly Incurred Medical Loss Development Factors *
Through March 31, 2018

Age in	Accident Year																			
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3									2.584	2.662	2.782	2.892	2.992	2.757	2.853	2.843	2.921	2.863	3.019	3.199
9/6									1.650	1.744	1.717	1.807	1.800	1.827	1.833	1.819	1.840	1.884	1.755	1.741
12/9									1.453	1.443	1.466	1.454	1.488	1.521	1.484	1.500	1.482	1.451	1.487	1.447
15/12	1.144	1.168	1.201	1.207	1.203	1.197	1.132	1.145	1.138	1.182	1.167	1.199	1.206	1.228	1.211	1.207	1.199	1.206	1.215	1.184
18/15	1.093	1.116	1.123	1.144	1.151	1.126	1.086	1.087	1.103	1.106	1.126	1.135	1.129	1.141	1.136	1.117	1.114	1.094	1.095	
21/18	1.078	1.086	1.101	1.122	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.069	
24/21	1.074	1.072	1.080	1.083	1.082	1.060	1.040	1.052	1.070	1.074	1.067	1.074	1.080	1.080	1.067	1.064	1.055	1.059	1.058	
27/24	1.044	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.048	1.041	
30/27	1.044	1.052	1.058	1.070	1.051	1.038	1.039	1.049	1.046	1.054	1.057	1.048	1.063	1.052	1.046	1.037	1.044	1.037		
33/30	1.035	1.047	1.051	1.059	1.035	1.018	1.032	1.030	1.041	1.045	1.045	1.051	1.055	1.045	1.046	1.031	1.033	1.033		
36/33	1.037	1.042	1.035	1.040	1.029	1.016	1.024	1.034	1.042	1.033	1.042	1.040	1.041	1.037	1.028	1.026	1.027	1.021		
39/36	1.029	1.032	1.034	1.037	1.018	1.012	1.028	1.025	1.027	1.029	1.033	1.031	1.040	1.039	1.027	1.021	1.023	1.022		
42/39	1.025	1.031	1.036	1.026	1.019	1.013	1.017	1.020	1.025	1.035	1.036	1.037	1.037	1.031	1.022	1.026	1.022			
45/42	1.025	1.033	1.032	1.023	1.012	1.019	1.033	1.021	1.025	1.029	1.026	1.030	1.028	1.027	1.021	1.018	1.017			
48/45	1.028	1.023	1.026	1.017	1.008	1.013	1.025	1.018	1.022	1.025	1.029	1.034	1.022	1.023	1.020	1.018	1.014			
51/48	1.019	1.020	1.024	1.014	1.009	1.013	1.018	1.015	1.020	1.021	1.021	1.026	1.024	1.019	1.014	1.013	1.010			
54/51	1.025	1.027	1.017	1.016	1.010	1.012	1.021	1.019	1.022	1.022	1.027	1.023	1.019	1.018	1.015	1.011				
57/54	1.027	1.024	1.014	1.007	1.011	1.017	1.020	1.018	1.019	1.019	1.023	1.020	1.017	1.018	1.013	1.007				
60/57	1.021	1.021	1.015	1.009	1.008	1.014	1.020	1.019	1.018	1.017	1.019	1.016	1.015	1.014	1.012	1.008				
63/60	1.014	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.009	1.009	1.005				
66/63	1.023	1.016	1.010	1.012	1.015	1.013	1.015	1.022	1.019	1.018	1.017	1.015	1.010	1.008	1.008					
69/66	1.025	1.013	1.006	1.008	1.016	1.018	1.015	1.023	1.017	1.017	1.015	1.014	1.010	1.008	1.008					
72/69	1.020	1.009	1.007	1.009	1.015	1.010	1.014	1.015	1.013	1.014	1.012	1.011	1.010	1.007	1.005					
75/72	1.015	1.008	1.006	1.008	1.010	1.009	1.012	1.012	1.011	1.018	1.013	1.008	1.006	1.001	1.003					
78/75	1.012	1.012	1.008	1.012	1.010	1.011	1.018	1.013	1.012	1.012	1.010	1.008	1.008	1.006						
81/78	1.006	1.006	1.006	1.009	1.010	1.014	1.018	1.017	1.016	1.009	1.009	1.005	1.006	1.006						
84/81	1.008	1.006	1.009	1.014	1.009	1.007	1.012	1.011	1.008	1.010	1.008	1.007	1.005	1.001						
87/84	1.005	1.008	1.008	1.010	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.003	1.001						
90/87	1.002	1.005	1.008	1.008	1.009	1.012	1.009	1.009	1.013	1.008	1.006	1.006	1.003							
93/90	1.006	1.007	1.015	1.009	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003							
96/93	1.007	1.007	1.010	1.012	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003	1.002							

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 March 31, 2018

Age in	Accident Year																				
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
6/3									4.376	4.495	4.553	4.807	4.911	4.722	4.854	5.099	5.076	5.056	5.087	5.060	
9/6									2.259	2.375	2.377	2.398	2.452	2.432	2.484	2.462	2.462	2.484	2.456	2.445	
12/9									1.812	1.834	1.810	1.825	1.861	1.869	1.877	1.866	1.879	1.910	1.882	1.893	
15/12	1.499	1.536	1.538	1.552	1.550	1.516	1.491	1.456	1.482	1.488	1.481	1.507	1.532	1.539	1.506	1.539	1.540	1.559	1.571	1.544	
18/15	1.380	1.399	1.395	1.401	1.403	1.379	1.331	1.306	1.306	1.327	1.332	1.343	1.355	1.361	1.361	1.353	1.364	1.372	1.366		
21/18	1.323	1.298	1.303	1.303	1.311	1.297	1.241	1.217	1.233	1.235	1.243	1.259	1.257	1.261	1.261	1.263	1.267	1.264	1.256		
24/21	1.259	1.257	1.256	1.258	1.260	1.244	1.183	1.181	1.195	1.191	1.194	1.206	1.209	1.215	1.213	1.204	1.216	1.211	1.206		
27/24	1.186	1.199	1.203	1.200	1.205	1.186	1.140	1.142	1.151	1.149	1.153	1.162	1.165	1.168	1.164	1.159	1.170	1.176	1.160		
30/27	1.157	1.161	1.165	1.175	1.172	1.161	1.122	1.117	1.126	1.129	1.130	1.141	1.141	1.137	1.134	1.141	1.147	1.142			
33/30	1.118	1.125	1.130	1.142	1.136	1.123	1.097	1.096	1.100	1.101	1.108	1.114	1.116	1.112	1.111	1.111	1.115	1.107			
36/33	1.102	1.103	1.103	1.115	1.111	1.097	1.085	1.081	1.080	1.084	1.092	1.094	1.098	1.091	1.091	1.096	1.092	1.089			
39/36	1.074	1.081	1.081	1.092	1.087	1.072	1.070	1.066	1.064	1.067	1.074	1.078	1.077	1.073	1.075	1.074	1.075	1.071			
42/39	1.067	1.071	1.077	1.080	1.073	1.063	1.059	1.058	1.058	1.062	1.067	1.067	1.071	1.070	1.065	1.064	1.066				
45/42	1.057	1.054	1.063	1.064	1.056	1.049	1.047	1.049	1.047	1.051	1.058	1.059	1.057	1.055	1.054	1.052	1.050				
48/45	1.049	1.050	1.055	1.053	1.046	1.044	1.041	1.044	1.043	1.047	1.049	1.051	1.050	1.048	1.048	1.048	1.045				
51/48	1.039	1.038	1.043	1.044	1.036	1.035	1.033	1.036	1.036	1.037	1.042	1.042	1.043	1.039	1.038	1.038	1.039				
54/51	1.035	1.038	1.036	1.037	1.034	1.035	1.030	1.028	1.035	1.036	1.038	1.041	1.038	1.036	1.036	1.033					
57/54	1.029	1.033	1.037	1.030	1.028	1.026	1.025	1.028	1.030	1.032	1.033	1.033	1.032	1.033	1.028	1.027					
60/57	1.025	1.030	1.027	1.026	1.024	1.024	1.024	1.024	1.028	1.029	1.029	1.032	1.027	1.030	1.028	1.025					
63/60	1.023	1.026	1.024	1.021	1.022	1.019	1.019	1.021	1.023	1.025	1.025	1.024	1.026	1.025	1.025	1.021					
66/63	1.023	1.023	1.023	1.021	1.019	1.019	1.019	1.020	1.025	1.025	1.025	1.025	1.023	1.022	1.022						
69/66	1.019	1.021	1.020	1.017	1.016	1.017	1.016	1.021	1.020	1.020	1.020	1.022	1.020	1.019	1.022						
72/69	1.018	1.016	1.018	1.016	1.016	1.015	1.017	1.015	1.020	1.019	1.019	1.019	1.019	1.019	1.016						
75/72	1.015	1.016	1.015	1.014	1.012	1.012	1.013	1.015	1.019	1.018	1.016	1.016	1.017	1.015	1.014						
78/75	1.014	1.014	1.012	1.013	1.012	1.011	1.012	1.015	1.017	1.016	1.015	1.016	1.016	1.015							
81/78	1.013	1.013	1.011	1.012	1.011	1.010	1.012	1.015	1.015	1.016	1.015	1.015	1.013	1.012							
84/81	1.011	1.011	1.013	1.010	1.010	1.009	1.011	1.013	1.015	1.014	1.013	1.012	1.013	1.013							
87/84	1.012	1.010	1.008	1.010	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010	1.012							
90/87	1.008	1.009	1.010	1.009	1.008	1.008	1.011	1.012	1.013	1.012	1.011	1.010	1.010								
93/90	1.009	1.009	1.008	1.008	1.007	1.008	1.012	1.011	1.011	1.012	1.010	1.010	1.009								
96/93	1.008	1.009	1.006	1.007	1.007	1.007	1.008	1.011	1.011	1.008	1.010	1.010	1.009								

Source: WCIRB accident year experience calls

Quarterly Paid Medical Loss Development Factors *
Through March 31, 2018

Age in	Accident Year																			
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6/3									5.308	5.615	6.579	6.101	6.048	5.854	5.989	6.284	5.604	5.720	5.897	5.238
9/6									2.348	2.381	2.348	2.375	2.361	2.327	2.398	2.498	2.428	2.287	2.326	2.249
12/9									1.716	1.765	1.731	1.723	1.756	1.746	1.763	1.736	1.750	1.705	1.752	1.738
15/12	1.453	1.490	1.514	1.547	1.554	1.510	1.437	1.423	1.429	1.444	1.413	1.429	1.445	1.472	1.446	1.443	1.460	1.454	1.479	1.432
18/15	1.241	1.267	1.286	1.310	1.330	1.295	1.243	1.230	1.227	1.259	1.243	1.259	1.268	1.282	1.284	1.263	1.265	1.278	1.262	
21/18	1.164	1.168	1.192	1.219	1.211	1.179	1.153	1.151	1.163	1.173	1.170	1.178	1.182	1.187	1.192	1.193	1.192	1.189	1.173	
24/21	1.132	1.124	1.149	1.159	1.154	1.125	1.115	1.118	1.127	1.133	1.132	1.137	1.144	1.153	1.154	1.148	1.146	1.146	1.141	
27/24	1.096	1.108	1.121	1.128	1.123	1.093	1.090	1.093	1.106	1.107	1.110	1.112	1.119	1.120	1.123	1.122	1.122	1.124	1.110	
30/27	1.077	1.088	1.101	1.108	1.103	1.077	1.084	1.087	1.097	1.100	1.100	1.106	1.107	1.111	1.109	1.111	1.111	1.105		
33/30	1.065	1.072	1.086	1.089	1.077	1.063	1.071	1.065	1.081	1.083	1.086	1.092	1.094	1.093	1.094	1.090	1.089	1.082		
36/33	1.055	1.066	1.069	1.076	1.061	1.055	1.062	1.062	1.071	1.072	1.072	1.077	1.083	1.082	1.078	1.080	1.076	1.071		
39/36	1.051	1.059	1.060	1.061	1.049	1.044	1.053	1.056	1.057	1.059	1.061	1.066	1.071	1.066	1.069	1.065	1.064	1.061		
42/39	1.044	1.049	1.055	1.054	1.041	1.044	1.049	1.054	1.055	1.058	1.059	1.061	1.068	1.063	1.062	1.057	1.059			
45/42	1.039	1.045	1.047	1.044	1.036	1.037	1.040	1.047	1.048	1.049	1.054	1.053	1.056	1.056	1.053	1.051	1.045			
48/45	1.035	1.039	1.044	1.037	1.032	1.035	1.037	1.043	1.043	1.046	1.047	1.050	1.051	1.046	1.045	1.046	1.041			
51/48	1.030	1.035	1.037	1.034	1.031	1.030	1.033	1.037	1.036	1.036	1.039	1.041	1.043	1.040	1.039	1.038	1.037			
54/51	1.031	1.036	1.032	1.027	1.030	1.029	1.034	1.034	1.035	1.035	1.036	1.042	1.038	1.035	1.035	1.034				
57/54	1.026	1.030	1.027	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	1.026	1.028	1.026	1.021	1.023	1.026	1.028	1.029	1.028	1.032	1.032	1.035	1.030	1.030	1.030	1.023				
63/60	1.023	1.025	1.022	1.019	1.019	1.020	1.024	1.024	1.024	1.024	1.027	1.027	1.026	1.027	1.025	1.021				
66/63	1.026	1.021	1.020	1.020	1.018	1.021	1.023	1.024	1.026	1.026	1.029	1.029	1.024	1.028	1.023					
69/66	1.021	1.022	1.019	1.018	1.016	1.019	1.021	1.023	1.023	1.021	1.024	1.024	1.022	1.020	1.020					
72/69	1.022	1.018	1.016	1.017	1.018	1.016	1.021	1.021	1.022	1.022	1.023	1.021	1.020	1.019	1.016					
75/72	1.017	1.016	1.014	1.015	1.015	1.014	1.018	1.020	1.019	1.019	1.018	1.018	1.018	1.015	1.015					
78/75	1.018	1.015	1.014	1.015	1.016	1.015	1.016	1.018	1.017	1.022	1.019	1.018	1.017	1.016						
81/78	1.015	1.014	1.013	1.014	1.013	1.014	1.018	1.018	1.015	1.019	1.018	1.015	1.015	1.013						
84/81	1.013	1.012	1.013	1.012	1.012	1.013	1.016	1.016	1.015	1.018	1.015	1.015	1.015	1.013						
87/84	1.013	1.011	1.010	1.012	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.011	1.012						
90/87	1.013	1.012	1.011	1.013	1.012	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.011							
93/90	1.011	1.010	1.011	1.012	1.011	1.013	1.013	1.012	1.014	1.014	1.013	1.011	1.010							
96/93	1.010	1.010	1.008	1.010	1.010	1.009	1.013	1.015	1.016	1.011	1.012	1.010	1.009							

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	Development															
Year	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159	159-171	171-183	183-195
1993																1.000
1994															1.000	1.000
1995														1.000	1.001	1.001
1996													1.001	1.000	1.000	1.000
1997												1.000	1.000	1.000	1.000	1.000
1998											1.000	1.000	1.000	1.000	1.000	1.000
1999										1.000	1.000	1.001	1.000	1.000	1.000	1.000
2000									1.000	1.000	1.000	1.000	1.001	1.001	1.000	1.000
2001								0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002							1.000	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2003						0.998	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
2004					1.000	0.999	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000		
2005				1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2006			1.008	1.004	1.002	1.001	1.001	1.000	1.001	1.001	1.000	1.000				
2007		1.036	1.011	1.006	1.003	1.002	1.000	1.000	1.001	1.000	1.000					
2008	6.226	1.059	1.017	1.009	1.004	1.003	1.001	1.001	1.001	1.000						
2009	6.968	1.080	1.022	1.008	1.005	1.003	1.002	1.002	1.000							
2010	7.382	1.089	1.021	1.010	1.006	1.003	1.002	1.001								
2011	7.502	1.100	1.026	1.011	1.005	1.003	1.002									
2012	7.678	1.120	1.026	1.009	1.006	1.003										
2013	8.155	1.101	1.024	1.009	1.005											
2014	7.722	1.105	1.023	1.010												
2015	8.018	1.106	1.020													
2016	7.723	1.110														
2017	7.810															
Latest Year																
Age-to-Age	7.810	1.110	1.020	1.010	1.005	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate	9.046	1.158	1.043	1.023	1.013	1.008	1.005	1.003	1.002	1.002	1.002	1.001	1.002	1.002	1.002	1.002

Quarterly Reported Indemnity Claim Count Development Factors

Accident Year	Development														
	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48
2008	2.534	1.651	1.335	1.093	1.025	1.015	1.010	1.009	1.006	1.004	1.003	1.003	1.002	1.003	1.002
2009	2.681	1.684	1.382	1.109	1.036	1.021	1.012	1.009	1.007	1.007	1.005	1.004	1.003	1.002	1.002
2010	2.688	1.707	1.407	1.124	1.037	1.021	1.016	1.011	1.008	1.005	1.005	1.003	1.004	1.003	1.001
2011	2.689	1.740	1.423	1.123	1.041	1.026	1.018	1.010	1.010	1.006	1.005	1.004	1.004	1.003	1.002
2012	2.746	1.727	1.420	1.122	1.050	1.028	1.018	1.012	1.009	1.007	1.004	1.004	1.003	1.003	1.002
2013	2.817	1.738	1.420	1.138	1.045	1.027	1.016	1.010	1.009	1.006	1.004	1.004	1.003	1.002	1.002
2014	2.774	1.723	1.421	1.129	1.045	1.025	1.017	1.012	1.010	1.005	1.004	1.004	1.004	1.002	1.002
2015	2.796	1.742	1.414	1.135	1.047	1.024	1.016	1.012	1.008	1.005	1.003	1.003			
2016	2.730	1.720	1.412	1.140	1.046	1.027	1.017	1.012							
2017	2.825	1.690	1.413	1.130											

Reported Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>	<u>171</u>	<u>183</u>	<u>195</u>
1993																	98.9%
1994																98.7%	98.8%
1995															98.2%	98.4%	98.6%
1996														97.7%	98.1%	98.3%	98.5%
1997													97.2%	97.5%	97.8%	98.0%	98.2%
1998												96.3%	96.8%	97.2%	97.5%	97.8%	98.1%
1999											95.4%	96.2%	96.7%	97.1%	97.4%	97.8%	98.0%
2000										93.8%	94.9%	95.7%	96.3%	96.7%	97.3%	97.6%	97.8%
2001									90.9%	92.6%	93.8%	94.7%	95.4%	96.2%	96.7%	97.1%	97.4%
2002								88.8%	91.2%	92.7%	94.0%	95.0%	96.0%	96.5%	97.1%	97.5%	97.8%
2003							85.7%	88.9%	91.0%	92.7%	94.1%	95.3%	96.0%	96.6%	97.1%	97.6%	
2004						82.0%	86.0%	88.8%	91.1%	92.8%	94.6%	95.6%	96.3%	96.9%	97.4%		
2005					76.6%	82.3%	86.2%	89.1%	91.3%	93.4%	94.8%	95.8%	96.6%	97.2%			
2006				67.1%	76.0%	82.1%	86.0%	88.9%	91.7%	93.4%	94.7%	95.7%	96.5%				
2007			53.1%	66.2%	75.4%	81.3%	85.5%	89.5%	91.9%	93.7%	95.1%	96.1%					
2008		34.5%	51.4%	64.5%	73.9%	80.5%	86.0%	89.6%	92.2%	94.0%	95.3%						
2009	5.8%	33.2%	49.6%	62.7%	72.7%	80.5%	85.7%	89.6%	92.2%	94.1%							
2010	5.6%	33.6%	50.2%	63.5%	74.7%	82.0%	87.2%	90.8%	93.2%								
2011	7.2%	34.0%	50.7%	65.3%	76.0%	83.3%	88.2%	91.6%									
2012	7.2%	34.0%	51.7%	66.6%	77.3%	84.5%	89.3%										
2013	8.3%	33.3%	52.8%	68.0%	79.0%	86.2%											
2014	6.5%	33.8%	53.9%	69.3%	80.5%												
2015	7.5%	34.5%	55.6%	72.0%													
2016	7.3%	36.3%	58.4%														
2017	7.4%	38.7%															
2018	8.5%																

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>	<u>171</u>	<u>183</u>	<u>195</u>
1993																	98.8%
1994																98.3%	98.5%
1995															97.8%	98.1%	98.3%
1996														97.4%	97.8%	98.0%	98.2%
1997													96.8%	97.2%	97.5%	97.7%	97.9%
1998												96.0%	96.5%	96.9%	97.3%	97.6%	97.8%
1999											95.1%	95.8%	96.4%	96.8%	97.1%	97.6%	97.8%
2000										93.5%	94.5%	95.3%	95.9%	96.5%	97.1%	97.4%	97.6%
2001									90.6%	92.3%	93.5%	94.4%	95.2%	96.0%	96.4%	96.9%	97.3%
2002								88.8%	91.1%	92.6%	93.8%	94.8%	95.8%	96.3%	96.8%	97.3%	97.6%
2003							85.9%	89.0%	91.0%	92.6%	93.9%	95.2%	95.8%	96.4%	97.0%	97.4%	
2004						82.1%	86.1%	88.9%	91.0%	92.7%	94.4%	95.4%	96.1%	96.8%	97.2%		
2005					76.3%	82.1%	86.1%	89.0%	91.1%	93.3%	94.7%	95.6%	96.4%	97.0%			
2006				66.4%	75.5%	81.8%	85.7%	88.7%	91.4%	93.2%	94.5%	95.6%	96.4%				
2007			51.8%	65.3%	74.7%	80.8%	85.2%	89.2%	91.6%	93.5%	94.9%	96.0%					
2008		31.4%	49.5%	63.1%	72.9%	79.8%	85.5%	89.2%	91.9%	93.8%	95.1%						
2009	0.7%	29.4%	47.4%	61.4%	71.7%	79.8%	85.2%	89.2%	92.0%	93.9%							
2010	0.7%	29.5%	48.0%	62.1%	73.7%	81.3%	86.7%	90.5%	93.0%								
2011	0.8%	29.4%	48.2%	63.7%	75.0%	82.6%	87.7%	91.3%									
2012	0.8%	28.9%	49.3%	65.1%	76.2%	83.8%	88.9%										
2013	0.9%	28.9%	50.4%	66.5%	78.0%	85.5%											
2014	0.7%	29.2%	51.5%	67.8%	79.5%												
2015	0.8%	29.9%	53.3%	70.4%													
2016	0.8%	31.4%	56.0%														
2017	0.8%	33.4%															
2018	0.9%																

Quarterly Ultimate Settlement Ratios

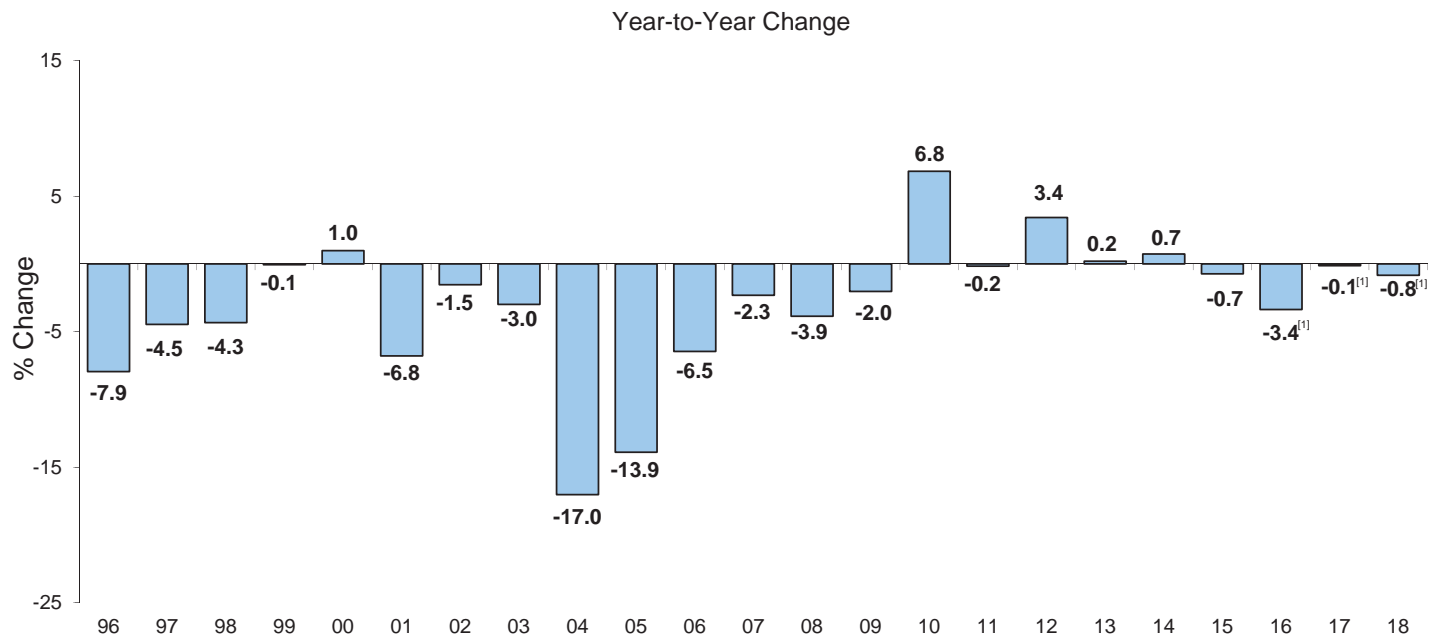
Accident	Evaluated as of (in months):															
Year	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
2009	0.7%	4.7%	12.2%	21.3%	29.7%	35.7%	40.0%	44.0%	47.7%	51.3%	55.0%	58.5%	61.5%	64.6%	67.1%	69.6%
2010	0.7%	4.8%	11.9%	21.1%	29.9%	35.9%	40.3%	44.6%	48.3%	52.3%	55.8%	59.3%	62.5%	65.9%	68.9%	71.8%
2011	0.8%	5.1%	12.0%	21.3%	29.8%	35.9%	40.4%	44.8%	48.6%	53.0%	56.9%	60.9%	64.1%	67.2%	70.2%	72.9%
2012	0.8%	5.1%	12.1%	21.3%	29.5%	35.9%	40.7%	45.6%	49.7%	54.1%	58.3%	62.1%	65.5%	68.7%	71.6%	74.3%
2013	0.9%	5.1%	11.8%	20.9%	29.3%	35.9%	41.3%	46.3%	50.9%	55.4%	59.5%	63.4%	66.9%	70.3%	73.2%	75.9%
2014	0.8%	4.8%	11.7%	20.7%	29.5%	36.2%	42.0%	47.1%	51.8%	56.3%	60.5%	64.5%	67.9%	71.4%	74.3%	77.1%
2015	0.8%	4.8%	12.1%	21.0%	30.2%	37.5%	43.2%	48.5%	53.5%	58.6%	62.9%	66.9%	70.5%			
2016	0.8%	5.1%	12.3%	21.9%	31.6%	39.4%	45.3%	51.1%	56.1%							
2017	0.8%	5.6%	13.3%	23.9%	33.7%											
2018	1.0%															

Accident	Quarterly Incremental Change														
Year	<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>
2009	4.0%	7.5%	9.1%	8.4%	6.0%	4.4%	4.0%	3.7%	3.6%	3.7%	3.5%	3.0%	3.0%	2.5%	2.5%
2010	4.1%	7.2%	9.2%	8.8%	6.0%	4.3%	4.3%	3.8%	3.9%	3.5%	3.5%	3.2%	3.4%	3.0%	2.9%
2011	4.3%	6.9%	9.3%	8.4%	6.1%	4.5%	4.4%	3.9%	4.4%	3.9%	4.0%	3.3%	3.1%	3.0%	2.7%
2012	4.3%	7.1%	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	4.2%	6.7%	9.1%	8.4%	6.6%	5.4%	5.0%	4.6%	4.5%	4.1%	3.9%	3.5%	3.3%	2.9%	2.8%
2014	4.0%	6.9%	9.0%	8.8%	6.7%	5.7%	5.1%	4.7%	4.5%	4.2%	4.0%	3.3%	3.5%	2.9%	2.8%
2015	4.0%	7.3%	9.0%	9.2%	7.3%	5.6%	5.3%	5.1%	5.1%	4.3%	4.0%	3.6%			
2016	4.2%	7.2%	9.6%	9.7%	7.8%	6.0%	5.8%	5.0%							
2017	4.7%	7.7%	10.6%	9.8%											

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 83% to 100% of the total California workers' compensation insured market measured using 2017 earned premium levels).

Source: WCIRB quarterly calls for experience

California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year



^[1] The 2015-2016 estimate is based on partial year unit statistical data. The 2016-2017 and 2017-2018 estimates are based on comparison of claim counts based on WCIRB accident year experience as of March 31, 2018 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

Item AC18-06-02

1/1/2019 Regulatory Filing – Experience Rating Plan Values

An analysis of the indicated policy year 2019 experience rating off-balance factor and the factors used to generate proposed policy year 2019 expected loss rates will be presented at the meeting.

Item AC18-06-03

Classification Payroll Limitations

Historically, given the wide dispersion of payroll among highly compensated employees and concerns as to the lack of correlation of exposure to loss at very high wage levels, limitations on an individual's annual payroll for workers' compensation purposes have been applied in California for certain types of highly compensated employees. Currently, the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* (USRP) limits the annual payroll for executive officers, partners, individual employers and members of a limited liability company to a maximum of \$128,700 per year.¹ In addition, the same annual payroll limitation is applied to select employees in classifications with many highly compensated employees and great variability in wages. These classifications include 9181, *Athletic Teams or Athletic Facilities – players, umpires, referees and game officials*, 9610, *Motion Pictures – production*, 7610, *Radio, Television or Commercial Broadcasting Stations*, 9156, *Theaters – dance, opera and theater companies*, and 9151, *Theaters – musical entertainment*.

At the May 8, 2018 meeting, the Classification and Rating (C & R) Committee recommended that individual employee annual payrolls in five additional classifications be subject to the USRP annual payroll limitation. Given the impact of this change on employers with operations in the affected classifications as well as on producers, premium auditors and underwriters and the need to develop an appropriate adjustment to the advisory pure premium rates in these classifications, the C & R Committee recommended including these changes in the January 1, 2019 Regulatory Filing with a proposed effective date of January 1, 2020. A summary of these proposed changes as well as the process staff is contemplating to develop appropriate advisory pure premium rate adjustments for January 1, 2020 advisory pure premium rates will be presented at the meeting.

¹ The limit is adjusted annually for wage inflation.

Item AC18-06-04
Demo of WCIRB Inquiry Data Tool

The WCIRB Inquiry data tool allows insurer members to access statewide aggregate data, unit statistical data, and medical transaction data and perform benchmarking and other analyses. The WCIRB recently updated the WCIRB Inquiry tool to take advantage of the latest software and to include a drilldown benchmarking tool on medical transaction data. A demo of the WCIRB Inquiry tool will be presented at the meeting.