

Actuarial Committee

Meeting Agenda

Date	Time	Location	Staff Contact
August 1, 2018	9:30 AM	WCIRB California 1221 Broadway, Suite 900 Oakland, CA	David M. Bellusci
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To Members of the Actuarial Committee, WCIRB Members and All Interested Parties:

I. Approval of Minutes

Meeting held on June 15, 2018

II. Working Group Meeting Summaries

None

III. Unfinished Business

- A. AC14-08-06: Reform Adjustments to Loss Development
- B. AC17-12-04: Earthquake Study
- C. AC18-06-01: 3/31/2018 Experience – Review of Methodologies

IV. New Business

- A. AC18-08-01: Third Quarter 2018 Review of Diagnostics
- B. AC18-08-02: 1/1/2019 Filing – Loss Adjustment Expense Experience Review
- C. AC18-08-03: 1/1/2019 Filing – Review of Alternative Loss Projection Methodologies
- D. AC18-08-04: Study of Case Reserve-adjusted Loss Development Methodology

V. Matters Arising at Time of Meeting

VI. Next Meeting Date: September 4, 2018

VII. Adjournment

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Item AC14-08-06

Reform Adjustments to Loss Development

For many years, the WCIRB has based its loss development projection on a methodology that adjusts for the estimated impact of various workers' compensation reforms on paid loss development patterns. During a review of these adjustments at the August 5, 2014 meeting, the Committee recommended that these adjustments continue to be reviewed regularly. The previous review was presented at the August 3, 2016 meeting. Staff's most recent analysis of these adjustments is detailed below.

Indemnity Adjustments

The adjustment to indemnity losses for the impact of Senate Bill No. 863 (SB 863) is based on a 2013 WCIRB report on loss development and the WCIRB's standard approach to adjust for the impact of reforms that become effective on a date of injury basis.¹ Table 1 shows the current adjustments for the impact of SB 863 on indemnity loss development for accident years 2013 and 2014 based on the findings of the report.

Table 1: SB 863 Impact on Indemnity Loss Development		
Accident Year	Current Age in Months	Impact on Age-to-Ultimate Development Factor
2013	63	+2.0%
2014	51	+5.0%

Several periods of post-SB 863 loss development are now available. Exhibit 1 compares quarterly age-to-age development for accident years 2013 and 2014 with that projected by the WCIRB's post-SB 863 imputed payment patterns or the alternative "latest year unadjusted" factor. Initially, the factors produced by the imputed payment pattern (approximately for the 12-to-36 month period) on both a quarterly and cumulative basis were generally more accurate than the "latest year unadjusted factor" for both accident years 2013 and 2014. However, during the most recent development periods the factors imputed by the reform-adjusted method have not been more accurate than the "latest year unadjusted" factors. Staff believes this may be related to the recent acceleration in the rate permanent disability claims have been settling. The effect of higher permanent disability benefits provided by SB 863 on paid indemnity patterns may be being offset by the cost savings from closing permanent disability claims earlier.

This analysis is based on a review of emerging paid indemnity development, whereas the adjustments are applied to cumulative development factors since permanent disability claims develop much later than other types of claims. However, staff believes the acceleration in permanent disability claim settlement rates likely has some long-term downward impact on the future paid indemnity development for these accident years, and the earlier closure of permanent disability claims offsets the previously expected long-term increase to paid development from the SB 863 permanent disability benefit increases. In addition, recent paid indemnity development has generally been emerging lower than projected. As a result, staff recommends no longer applying these adjustments to paid indemnity development.

Medical Adjustments

The WCIRB's 2013 report on loss development also discussed the potential impact of the various SB 863 reforms on historical medical payment patterns. Based on the findings of the report and updated SB 863 cost monitoring information, the WCIRB's current development methodology adjusts pre-2013 medical payments by -4.2% based on the estimated impact of SB 863 provisions related to liens, surgical implant hardware, ambulatory surgical centers, and medical provider network strengthening. The WCIRB also

¹ *Impact of Senate Bill No. 863 on Loss Development Patterns*, WCIRB, August 13, 2013.

adjusts paid medical loss development for the impact of the changes to the physician fee schedule based on the resource-based relative value scale (RBRVS), which became effective over a four-year period beginning on January 1, 2014. Specifically, pre-2014 medical payments are adjusted by -2.1% and pre-2015 medical payments are adjusted by -1.7% for the estimated impact of RBRVS on the 2014 and 2015 service years based on current cost monitoring results. No adjustments have been applied for the RBRVS changes effective in 2016 and 2017 given that the latest information has shown the overall impact to be a modest increase in physician costs that has not been significantly distorting paid medical development patterns.

The impact of the SB 863 and RBRVS adjustments on paid medical loss development factors and projected ultimate medical loss ratios is shown in Exhibits 2 and 3, respectively. As shown on Exhibit 2, the adjustments based on the January 1, 2013 SB 863 provisions have a modest impact on the age-to-age factors while the RBRVS adjustments have very little impact on medical loss development. Similarly, as shown on Column D of Exhibit 3, the overall impact of all medical loss development adjustments for SB 863 based on recent evaluations is modest given that it has been several years since the reforms have been implemented. In some instances for older accident years, the adjustments are having a downward impact on the projected ultimate loss ratios, which is counterintuitive to the intended effect of the adjustments. This is attributable to the mechanics of the adjustment in which both the reported paid-to-date medical loss ratios and paid medical loss development factors are adjusted for SB 863 and RBRVS. However, the downward adjustment to reported medical loss ratios is not fully offset by the upward adjustment to the loss development factors. As a result, to a large extent, these adjustments are adding volatility to the projections for these years without achieving their intended effect.

Given that these adjustments are intended to correct for distortions in the emerging paid medical age-to-age factors, retrospectively testing their accuracy is challenging since the emerging development would also include the distortions. Staff addressed this by reviewing paid medical loss ratios as of March 31, 2017 developed forward one-year based on the adjusted and unadjusted paid medical factors, and comparing them to the actual paid medical loss ratios as of March 31, 2018. Exhibit 4 shows the results of this review. Column A of Exhibit 4 shows the reported medical loss ratios as of March 31, 2018. Column B of Exhibit 4 shows paid medical loss ratios projected from March 31, 2017 to March 31, 2018 using latest-year unadjusted factors. Columns C and D of Exhibit 4 show paid medical loss ratios projected from March 31, 2017 to March 31, 2018 using the latest-year factors adjusted for the January 1, 2013 SB 863 provisions and both the January 1, 2013 SB 863 provisions and RBRVS, respectively. In Columns C and D of Exhibit 4, the projected loss ratios were restated at an “actual projected” level, that is the impact of reducing the paid-to-date loss ratio in the adjustment approach was removed.² Based on this review of a single development period, the loss ratios developed using the reform adjustments did not improve the accuracy of the projections and in fact moderately overestimated the actual emerging loss ratios more than the unadjusted estimate.

Given that the SB 863 and RBRVS reform adjustments to paid medical development (a) are only having a modest impact on the medical loss development factors, (b) appear to increase the volatility in the projections for older accident years, and (c) do not appear to improve the overall accuracy of the projection, there is little evidence to support continuing to apply these adjustments to medical loss development. Additionally, these adjustments have had an upward impact on the medical loss development projections and paid and incurred medical development have continued to decline in recent years in part due to decreases in pharmaceutical payments, acceleration in claim settlement rates, independent medical review and independent bill review, and increased efforts to fight fraud. A number of these factors likely also impact the medical loss development tail, which is not contemplated in the current adjustments. As a result, staff recommends no longer applying these adjustments to paid medical development.

² The formula for computing the loss ratios in Columns C and D of Exhibit 4 was: [Adjusted Reported Paid Loss Ratio] x [Adjusted Paid Medical Development Factor] – [Adjusted Reported Paid Loss Ratio] + [Unadjusted Reported Paid Loss Ratio].

The WCIRB's current loss development methodology also adjusts paid medical loss development for the impact of the provisions of Senate Bill No. 1160 and Assembly Bill No. 1244 related to liens. These adjustments were adopted by the Committee at the March 19, 2018 meeting. Given that these adjustments are for fairly recent reforms and were reviewed by the Committee earlier this year, staff did not review these adjustments in this study and continues to recommend their application to paid medical loss development. Staff will continue to review these adjustments with the Committee regularly in future evaluations of experience.

Comparison of Indemnity Loss Development Factors

	Accident Year 2013																Cumulative Factors										
	Age-to-Age Factor																12-36	36-Curr.	12-Curr.								
	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48	48-51	51-54	54-57	57-60	60-63	12-36	36-Curr.	12-Curr.							
Methodology																											
Actual Emergence	1.539	1.353	1.263	1.204	1.159	1.141	1.111	1.096	1.074	1.064	1.052	1.048	1.038	1.033	1.027	1.025	1.021	5.099	1.452	7.404							
Latest Year Unadjusted	1.506	1.361	1.261	1.213	1.164	1.134	1.111	1.091	1.075	1.065	1.054	1.048	1.038	1.036	1.028	1.028	1.025	5.016	1.473	7.386							
Imputed Payment Pattern*	1.506	1.361	1.261	1.213	1.162	1.133	1.110	1.091	1.078	1.068	1.056	1.050	1.033	1.036	1.028	1.028	1.025	4.999	1.479	7.394							
	Difference from Actual																										
Methodology																		12-36	36-Curr.	12-Curr.							
Latest Year Unadjusted	-2.1%	0.6%	-0.2%	0.7%	0.4%	-0.6%	0.0%	-0.5%	0.1%	0.1%	0.2%	0.0%	0.0%	0.2%	0.1%	0.3%	0.3%	-1.6%	1.4%	-0.2%							
Imputed Payment Pattern*	-2.2%	0.6%	-0.1%	0.8%	0.2%	-0.7%	-0.1%	-0.5%	0.3%	0.4%	0.4%	0.2%	-0.4%	0.3%	0.1%	0.3%	0.3%	-2.0%	1.9%	-0.1%							

	Accident Year 2014																Cumulative Factors										
	Age-to-Age Factor																12-36	36-Curr.	12-Curr.								
	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48	48-51	51-54	54-57	57-60	60-63	12-36	36-Curr.	12-Curr.							
Methodology																											
Actual Emergence	1.540	1.364	1.267	1.216	1.170	1.147	1.115	1.092	1.075	1.066	1.050	1.045	1.039					5.287	1.306	6.906							
Latest Year Unadjusted	1.539	1.353	1.263	1.204	1.159	1.141	1.111	1.096	1.074	1.064	1.052	1.048	1.038					5.099	1.307	6.665							
Imputed Payment Pattern*	1.541	1.355	1.265	1.206	1.166	1.146	1.115	1.099	1.079	1.064	1.058	1.051	1.040					5.214	1.326	6.917							
	Difference from Actual																										
Methodology																		12-36	36-Curr.	12-Curr.							
Latest Year Unadjusted	-0.1%	-0.8%	-0.3%	-1.0%	-1.0%	-0.5%	-0.4%	0.4%	0.0%	-0.2%	0.2%	0.3%	-0.1%					-3.6%	0.1%	-3.5%							
Imputed Payment Pattern*	0.1%	-0.7%	-0.2%	-0.9%	-0.3%	0.0%	0.0%	0.6%	0.4%	-0.2%	0.7%	0.6%	0.1%					-1.4%	1.6%	0.2%							

*Imputed based on cumulative paid indemnity development adjusted for the permanent disability benefit changes from SB 863.

Paid Medical Age-to-Age Factors
Comparison of Impacts of Progressive Reform Adjustments

		(A)	(B)	(B) - (A)	(C)	(C) - (B)	(D)	(D) - (C)
		No Reform	Adjusted for		Adjusted for All in		Adjusted for All in	
		Adjustments	SB 863 Reforms		(B) and RBRVS		(C) and RBRVS	
			Effective 1/1/2013	Change	Fee Schedule		Fee Schedule	
Accident	Age-to-Age							
Year	Factor				Effective 1/1/2014	Change	Effective 1/1/2015	Change
2017	27/15	1.875	1.875	0.000	1.875	0.000	1.875	0.000
2016	39/27	1.359	1.359	0.000	1.359	0.000	1.359	0.000
2015	51/39	1.194	1.195	0.001	1.195	0.000	1.195	0.000
2014	63/51	1.111	1.112	0.001	1.112	0.000	1.112	0.000
2013	75/63	1.076	1.078	0.002	1.078	0.000	1.078	0.000
2012	87/75	1.055	1.057	0.002	1.057	0.000	1.057	0.000
2011	99/87	1.039	1.041	0.002	1.041	0.000	1.041	0.000
2010	111/99	1.029	1.031	0.002	1.031	0.000	1.031	0.000
2009	123/111	1.028	1.029	0.001	1.030	0.001	1.031	0.001
2008	135/123	1.024	1.025	0.001	1.026	0.001	1.026	0.000
2007	147/135	1.020	1.021	0.001	1.022	0.000	1.022	0.000
2006	159/147	1.017	1.018	0.001	1.018	0.000	1.019	0.001
2005	171/159	1.015	1.015	0.001	1.016	0.000	1.016	0.000
2004	183/171	1.013	1.014	0.001	1.014	0.000	1.014	0.000
2003	195/183	1.012	1.012	0.000	1.012	0.000	1.013	0.000
2002	207/195	1.012	1.012	0.000	1.012	0.000	1.012	0.000
2001	219/207	1.011	1.011	0.000	1.011	0.000	1.012	0.001
2000	231/219	1.010	1.010	0.000	1.010	0.000	1.010	0.000
1999	243/231	1.008	1.009	0.001	1.009	0.000	1.009	0.000
	243/15	4.854	4.935	0.081	4.948	0.013	4.964	0.016

(B) Reflects adjustment of -4.2% to payments made before January 1, 2013.

(C) Reflects adjustments of -4.2% to payments made before January 1, 2013 and -2.1% to payments made before January 1, 2014.

(D) Reflects adjustments of -4.2% to payments made before January 1, 2013, -2.1% to payments made before January 1, 2014, and -1.7% to payments made before January 1, 2015.

Projected Ultimate Medical Loss Ratios *
Comparison of Impacts of Progressive Reform Adjustments

	(A)	(B)	(B) - (A)	(C)	(C) - (B)	(D)	(D) - (C)
Accident	No Reform	Adjusted for		Adjusted for All in		Adjusted for All in	
Year	Adjustments	SB 863 Reforms	Change	(B) and RBRVS	Change	(C) and RBRVS	Change
		Effective 1/1/2013		Fee Schedule		Fee Schedule	
		Effective 1/1/2013		Effective 1/1/2014		Effective 1/1/2015	
2005	0.204	0.204	-0.001	0.203	0.000	0.203	-0.001
2006	0.266	0.265	-0.001	0.265	0.000	0.264	-0.001
2007	0.374	0.374	0.000	0.373	-0.001	0.372	-0.001
2008	0.472	0.472	0.000	0.471	-0.001	0.469	-0.002
2009	0.554	0.555	0.001	0.554	-0.001	0.552	-0.002
2010	0.548	0.551	0.003	0.550	-0.001	0.548	-0.002
2011	0.472	0.476	0.004	0.476	0.000	0.474	-0.002
2012	0.409	0.414	0.005	0.414	0.000	0.413	-0.002
2013	0.338	0.344	0.006	0.344	0.000	0.343	-0.001
2014	0.303	0.309	0.006	0.310	0.001	0.309	-0.001
2015	0.293	0.299	0.006	0.300	0.001	0.300	0.000
2016	0.288	0.293	0.006	0.294	0.001	0.294	0.000
2017	0.309	0.315	0.006	0.317	0.001	0.317	0.000

* Each projection reflects paid loss development factors, adjusted for the specified reforms, applied through 243 months, and incurred loss development after 243 months.

(B) Reflects adjustment of -4.2% to payments made before January 1, 2013.

(C) Reflects adjustments of -4.2% to payments made before January 1, 2013 and -2.1% to payments made before January 1, 2014

(D) Reflects adjustments of -4.2% to payments made before January 1, 2013, -2.1% to payments made before January 1, 2014, and -1.7% to payments made before January 1, 2015.

Comparison of Estimated versus Actual Medical Paid Loss Ratios

Comparison of Impacts of Reform Adjustments

Accident	(A) Actual	(B) Estimated (Unadj)	(B)-(A) Difference	(C) Estimated (SB 863 2013)	(C)-(A) Difference	(D) Estimated (SB 863 & RBRVS)	(D)-(A) Difference
Year	Loss Ratio	Loss Ratio		Loss Ratio		Loss Ratio	
1999	0.657	0.659	0.002	0.659	0.002	0.659	0.002
2000	0.594	0.597	0.003	0.596	0.002	0.597	0.003
2001	0.521	0.523	0.002	0.523	0.002	0.523	0.002
2002	0.401	0.403	0.002	0.403	0.002	0.403	0.002
2003	0.254	0.255	0.001	0.255	0.001	0.255	0.001
2004	0.172	0.172	0.000	0.172	0.000	0.172	0.000
2005	0.166	0.166	0.000	0.166	0.000	0.166	0.000
2006	0.213	0.213	0.000	0.213	0.000	0.213	0.000
2007	0.294	0.295	0.001	0.295	0.001	0.295	0.001
2008	0.361	0.364	0.003	0.364	0.003	0.364	0.003
2009	0.412	0.414	0.002	0.414	0.002	0.414	0.002
2010	0.397	0.398	0.001	0.398	0.001	0.398	0.001
2011	0.329	0.330	0.001	0.331	0.002	0.331	0.002
2012	0.270	0.272	0.002	0.272	0.002	0.272	0.002
2013	0.207	0.210	0.003	0.210	0.003	0.211	0.004
2014	0.168	0.169	0.001	0.169	0.001	0.170	0.002
2015	0.136	0.139	0.003	0.139	0.003	0.139	0.003
2016	0.098	0.103	0.005	0.103	0.005	0.103	0.005
			0.032		0.032		0.035

(A) Reported paid medical loss ratio based on March 31, 2018 valuation.

(B) Loss ratios based on March 31, 2017 valuation developed to March 31, 2018 using the latest year unadjusted factor.

(C) Loss ratios based on March 31, 2017 valuation developed to March 31, 2018 using latest year adjusted factor for -4.2% to payments made before January 1, 2013.

(D) Loss ratios based on March 31, 2017 valuation developed to March 31, 2018 using latest year adjusted factor for of -4.2% to payments made before January 1, 2013, -2.1% to payments made before January 1, 2014, and -1.7% to payments made before January 1, 2015

Item AC17-12-04

Earthquake Study

At the December 6, 2017 meeting, the Committee reviewed a study of earthquake exposure in California completed by Risk Management Solutions (RMS) on behalf of the WCIRB. In the study, RMS projected that the long-term average earthquake loss per year was \$29 million, with an average loss rate per \$100 of payroll of \$0.005. The RMS study can be accessed at the following link:

https://www.wcirb.com/sites/default/files/documents/rms_earthquake_risk_study_for_wcirb_20171211.pdf

Given the advances in earthquake modeling science and the level of refinement of the exposure information provided to RMS, at the December 6, 2017 meeting, the Actuarial Committee recommended consideration of a provision to reflect average expected losses from the earthquake hazard in advisory pure premium rates.

Item AC18-06-01

3/31/2018 Experience – Review of Methodologies

At the June 15, 2018 meeting, the Committee reviewed a preliminary analysis of statewide experience through March 31, 2018. Exhibits 1 through 8 contain an updated analysis of March 31, 2018 experience. In total, almost 100% of the market is included. Wage and loss levels are 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, 2018.¹

The updated information differs from what was presented at the June 15, 2018 meeting in that this analysis reflects: (a) the inclusion of additional insurer data submissions and insurer data call corrections, (b) updates to the wage level and indemnity claim frequency projections based on UCLA's June 2018 forecasts, and (c) updates to several other on-level adjustments.

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, the methodologies reflected in the July 1, 2018 Pure Premium Rate Filing, and the January 1, 2019 industry average filed pure premium rate level is 0.581. (The projected loss ratio reflected in the analysis presented at the June 15, 2018 meeting was 0.574 and the projected loss ratio reflected in the July 1, 2018 Pure Premium Rate Filing was 0.608.)

Additional supplemental information is included in Exhibits 9 through 12.

¹ In the January 1, 2019 Pure Premium Rate Filing, ratios will be adjusted to the July 1, 2018 industry average filed pure premium rate level.

**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	5,674,529,942	1,937,518,136	8,634,552	1,788,322,786	57,302,851	38,864,263	3,830,642,588	0.675
1990	5,698,665,461	2,254,809,905	9,442,653	2,033,038,225	57,638,798	63,232,646	4,418,162,227	0.775
1991	5,863,319,243	2,470,257,432	17,260,922	2,184,401,966	66,176,080	62,058,054	4,800,154,454	0.819
1992	5,681,466,382	1,971,509,958	13,879,900	1,747,453,669	67,105,401	64,120,268	3,864,069,196	0.680
1993	5,928,480,359	1,689,422,102	14,624,760	1,497,293,087	83,873,750	48,022,964	3,333,236,663	0.562
1994	5,022,749,028	1,621,967,560	21,318,624	1,455,233,134	94,452,979	49,476,648	3,242,448,945	0.646
1995	3,778,975,599	1,755,487,448	31,763,443	1,599,261,803	113,397,226	64,436,431	3,564,346,351	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	46,399,709	1,983,852,636	152,308,753	115,145,386	4,597,175,972	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	58,203,862	2,981,831,430	213,120,646	284,581,250	6,568,110,291	1.447
2000	5,905,419,052	3,395,312,865	81,796,003	3,505,390,396	261,738,518	414,316,554	7,658,554,336	1.297
2001	10,094,684,192	4,791,615,058	127,352,995	5,260,365,409	435,235,785	657,727,021	11,272,296,268	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	177,438,612	4,941,156,061	417,975,091	1,294,015,032	11,308,528,095	0.582
2004	23,043,963,090	3,153,900,835	149,173,369	3,954,760,539	365,721,924	1,404,405,344	9,027,962,011	0.392
2005	21,350,709,483	2,478,059,827	131,915,818	3,547,730,831	362,153,135	1,144,442,878	7,664,302,489	0.359
2006	17,205,061,787	2,558,891,308	147,984,395	3,644,521,258	378,780,691	865,153,611	7,595,331,263	0.441
2007	13,252,379,499	2,679,453,728	161,187,500	3,885,519,314	443,041,750	799,362,580	7,968,564,872	0.601
2008	10,744,360,124	2,715,340,517	192,122,458	3,878,474,050	448,177,701	616,344,368	7,850,459,094	0.731
2009	8,877,640,496	2,569,931,654	190,578,708	3,661,331,053	442,729,635	674,634,040	7,539,205,090	0.849
2010	9,398,228,398	2,576,642,796	200,351,718	3,729,686,151	426,118,670	741,066,837	7,673,866,172	0.817
2011	10,129,285,077	2,503,846,251	233,699,919	3,332,946,874	489,763,393	971,014,085	7,531,270,522	0.744
2012	11,692,134,220	2,490,702,802	282,690,163	3,160,141,086	547,209,416	1,213,966,713	7,694,710,180	0.658
2013	14,149,827,161	2,454,556,905	326,602,278	2,931,066,522	611,640,754	2,231,036,059	8,554,902,518	0.605
2014	15,997,914,039	2,393,293,844	479,918,926	2,679,037,824	742,739,109	3,228,631,783	9,523,621,486	0.595
2015	17,063,477,971	2,108,159,535	678,533,248	2,314,036,432	1,027,814,720	4,251,386,747	10,379,930,682	0.608
2016	17,953,201,345	1,471,493,877	886,143,739	1,756,603,773	1,291,028,640	5,185,710,361	10,590,980,390	0.590
2017	17,672,390,249	632,841,375	894,356,486	991,125,101	1,471,227,157	6,398,216,349	10,387,766,468	0.588
2018	4,406,979,953	18,592,845	106,534,204	33,187,090	251,978,040	2,120,271,785	2,530,563,964	0.574

* 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	0.999	1.001
1995																						1.003	1.001	1.002	1.001
1996																					1.002	1.000	0.999	1.002	1.001
1997																					1.002	1.003	1.002	1.001	1.001
1998																					1.004	1.004	1.000	1.003	1.001
1999																					1.002	1.003	1.002	1.002	1.000
2000																					1.004	1.004	1.002	1.002	1.000
2001																					1.003	1.002	1.003	1.002	1.000
2002																					1.002	1.002	1.002	1.002	1.001
2003																					1.004	1.004	1.003	1.003	1.001
2004																					1.005	1.005	1.005	1.002	1.001
2005																					1.007	1.007	1.003	1.003	1.002
2006																					1.008	1.008	1.003	1.002	1.000
2007																					1.006	1.006	1.003	1.002	1.001
2008																					1.005	1.005	1.003	1.002	1.001
2009																					1.004	1.004	1.003	1.002	1.001
2010																					1.003	1.003	1.002	1.002	1.001
2011																					1.002	1.002	1.002	1.002	1.001
2012																					1.001	1.001	1.001	1.002	1.001
2013																					1.001	1.001	1.001	1.002	1.001
2014																					1.001	1.001	1.001	1.002	1.001
2015																					1.001	1.001	1.001	1.002	1.001
2016																					1.001	1.001	1.001	1.002	1.001
Selected (a)	1.606	1.195	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	2.511	1.564	1.308	1.193	1.138	1.102	1.076	1.058	1.044	1.034	1.027	1.021	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	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 (b)
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			1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001					
1991	1.001	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.001						
1992	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001						
1993	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001						
1994	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000							
1995	1.002	0.999	0.999	1.001	1.000	1.001	1.001	1.000									
1996	1.002	1.001	1.000	1.001	1.001	1.001	1.000	1.001									
1997	1.000	1.000	1.000	0.999													
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>	<u>111/99</u>	<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																1.006
1993															1.013	1.008
1994															1.021	1.011
1995													1.027		1.005	1.010
1996											1.020		1.015		1.012	1.008
1997											1.023		1.009		1.005	1.004
1998										1.021	1.020		1.010		1.007	1.012
1999									1.028	1.018	1.017		1.009		1.003	1.000
2000									1.022	1.022	1.016		1.012		0.998	0.995
2001							1.039	1.035	1.030	1.020	1.018		1.006		0.999	0.996
2002						1.038	1.034	1.028	1.027	1.020	1.013		0.998		0.999	
2003					1.051	1.043	1.040	1.036	1.025	1.019	1.009		0.999			
2004				1.078	1.056	1.062	1.038	1.032	1.026	1.008	1.004		0.999			
2005			1.077	1.080	1.074	1.057	1.040	1.027	1.018	1.005	1.003		0.999			
2006		1.164	1.095	1.076	1.061	1.049	1.037	1.018	1.007	1.003	1.002					
2007	1.357	1.171	1.114	1.078	1.069	1.041	1.028	1.015	1.005	1.004						
2008	1.378	1.189	1.116	1.087	1.058	1.035	1.020	1.009	1.004							
2009	1.431	1.182	1.133	1.080	1.049	1.025	1.014	1.007								
2010	1.431	1.212	1.117	1.068	1.036	1.023	1.012									
2011	1.452	1.185	1.103	1.059	1.025	1.016										
2012	1.391	1.153	1.078	1.052	1.025											
2013	1.353	1.120	1.076	1.032												
2014	1.325	1.135	1.064													
2015	1.314	1.118														
2016	1.288															
Selected (a)	1.288	1.118	1.064	1.032	1.025	1.016	1.012	1.007	1.014	1.010	1.008	1.008	1.004	1.005	1.002	1.003
Cumulative	1.849	1.436	1.284	1.207	1.170	1.141	1.123	1.110	1.102	1.087	1.076	1.067	1.059	1.056	1.051	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	1.005	1.002	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	0.997																

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	1.004	1.002
1994													1.007	1.006	1.003	1.003
1995												1.009	1.007	1.004	1.004	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	1.022	1.020	1.015	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	1.037	1.025	1.019	1.014	1.010	1.009	1.008	
2005			1.200	1.104	1.073	1.057	1.048	1.037	1.025	1.019	1.014	1.012	1.010	1.007	1.006	
2006		1.423	1.197	1.121	1.085	1.062	1.045	1.032	1.026	1.017	1.015					
2007	2.243	1.436	1.211	1.127	1.085	1.061	1.042	1.032	1.025	1.017						
2008	2.279	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	2.467	1.476														
2016	2.402															
Selected (a)	2.402	1.476	1.215	1.111	1.075	1.053	1.036	1.029	1.024	1.018	1.014	1.011	1.008	1.007	1.005	1.005
Cumulative Unadjusted for Impact of SB 863	6.535	2.721	1.843	1.517	1.366	1.270	1.206	1.164	1.132	1.105	1.086	1.071	1.059	1.050	1.043	1.038
Cumulative Adjusted for Impact of SB 863 (b)	6.862	2.857	1.935	1.593	1.393	---	---	---	---	---	---	---	---	---	---	---

- (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	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.000	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	1.002	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	1.001	1.001	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	1.001	1.001	1.003
1997	1.004	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003
1998	1.005	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003
1999	1.004	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003
2000	1.004	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003

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	1.013
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										1.032	1.027	1.021	1.017	1.019	1.018	1.017
1999									1.035	1.030	1.025	1.020	1.016	1.018	1.018	1.014
2000								1.037	1.030	1.026	1.022	1.020	1.016	1.016	1.012	1.011
2001							1.046	1.037	1.033	1.026	1.022	1.026	1.019	1.017	1.012	1.010
2002						1.053	1.043	1.032	1.027	1.024	1.026	1.018	1.015	1.011	1.011	
2003					1.070	1.055	1.045	1.033	1.029	1.033	1.025	1.018	1.015	1.012		
2004				1.121	1.086	1.066	1.047	1.039	1.041	1.031	1.022	1.017	1.014			
2005			1.193	1.123	1.091	1.063	1.053	1.051	1.037	1.029	1.020	1.017				
2006		1.342	1.195	1.126	1.085	1.064	1.057	1.040	1.032	1.023	1.018					
2007	1.851	1.352	1.203	1.120	1.092	1.079	1.051	1.038	1.028	1.021						
2008	1.826	1.359	1.208	1.134	1.098	1.067	1.047	1.033	1.024							
2009	1.876	1.385	1.221	1.150	1.095	1.062	1.042	1.029								
2010	1.926	1.402	1.237	1.133	1.087	1.060	1.039									
2011	1.957	1.401	1.217	1.131	1.082	1.055										
2012	1.983	1.398	1.213	1.128	1.076											
2013	1.939	1.390	1.206	1.111												
2014	1.936	1.387	1.194													
2015	1.955	1.359														
2016	1.875															

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															1.015	1.015
2001														1.018	1.013	1.011
2002													1.016	1.012	1.011	
2003													1.016	1.013		
2004													1.018	1.018		
2005													1.015			
2006													1.018			
2007									1.035	1.025	1.020					
2008						1.051	1.041	1.035	1.030	1.022						
2009						1.066	1.045	1.031	1.025							
2010					1.093	1.064	1.041			1.031	1.024	1.018				
2011				1.138	1.086	1.059				1.035	1.022	1.018				
2012			1.221	1.132	1.080					1.041	1.030	1.025				
2013		1.399	1.209	1.115						1.041	1.030	1.025				
2014	1.947	1.389	1.198							1.041	1.030	1.025				
2015	1.955	1.361								1.041	1.030	1.025				
2016	1.876									1.041	1.030	1.025				

Selected (c) 1.876 1.361 1.198 1.115 1.080 1.059 1.041 1.031 1.030 1.026 1.022 1.018 1.016 1.012 1.012 1.012

Cumulative Unadjusted
for Impact of SB 1160

5.658 3.016 2.216 1.850 1.659 1.536 1.451 1.393 1.352 1.312 1.279 1.251 1.229 1.193 1.178 1.178

Cumulative Adjusted
for Impact of SB 1160(d)

5.455 2.920 2.161 1.818 1.642 1.530 1.442 1.393 1.352 1.312 1.279 1.251 1.229 1.193 1.178 1.178

- (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)															399Inc/399Pd (e)	ULT/399Inc (f)
	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																	
1983																	
1984																	
1985																	
1986																	
1987																	
1988																	
1989																	
1990																	
1991																	
1992																	
1993																	
1994																	
1995																	
1996																	
1997																	
1998																	
1999																	
2000																	

Adjusted (b) Accident Year	Age-to-Age (in months)															399Inc/399Pd (e)	ULT/399Inc (f)
	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																	
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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	1.002	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	1.062	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
1991																
1992																
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2014																
2015																
2016																
Selected (a)	2.383(d)	1.454(d)	1.197(d)	1.102(d)	1.064(d)	1.053	1.036	1.029	1.024	1.018	1.014	1.011	1.008	1.007	1.005	1.003
Cumulative Unadjusted for Impact of SB 863	6.232	2.615	1.799	1.503	1.363	1.282	1.217	1.175	1.142	1.115	1.096	1.080	1.068	1.060	1.053	1.035
Cumulative Adjusted for Impact of SB 863 (b)	6.544	2.746	1.889	1.578	1.391	1.282	1.217	1.175	1.142	1.115	1.096	1.080	1.068	1.060	1.053	1.035

- (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	1.000	1.001	1.001	1.001	1.001	1.000	1.001		
1984					1.001	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	1.001	1.001						
1990	1.000	1.001	1.000	1.000	1.000	1.000	1.000	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	0.999														
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						113,208
2010					116,745	117,073
2011				116,968	117,558	117,857
2012			122,476	123,621	124,309	124,710
2013		127,768	130,829	132,051	132,717	
2014	121,359	134,149	137,213	138,538		
2015	126,919	140,435	143,247			
2016	129,108	143,310				
2017	131,244					

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	1.044	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	152,026	149,552	146,552	140,379	133,805	125,328

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						96,983
2010					95,733	102,072
2011				88,854	97,905	103,937
2012			81,632	95,572	105,032	111,402
2013		67,486	89,006	104,350	114,395	
2014	41,033	72,387	95,178	111,556		
2015	43,751	78,136	103,121			
2016	46,889	83,644				
2017	50,761					

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					81.4%	86.8%
2011				75.0%	82.7%	87.8%
2012			65.1%	76.3%	83.8%	88.9%
2013		50.4%	66.5%	78.0%	85.5%	
2014	29.2%	51.6%	67.8%	79.5%		
2015	29.9%	53.3%	70.4%			
2016	31.4%	55.9%				
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						101,130
2010					100,591	104,585
2011				94,123	101,260	105,280
2012			88,187	99,596	107,148	111,402
2013		74,837	94,152	106,332	114,395	
2014	46,872	78,513	98,777	111,556		
2015	48,933	81,966	103,121			
2016	49,935	83,644				
2017	50,761					

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						16,811
2010					15,194	17,213
2011				12,910	15,538	17,325
2012			10,061	13,293	15,608	17,354
2013		6,320	10,515	13,670	15,874	
2014	2,693	6,724	11,153	14,518		
2015	3,011	7,371	11,886			
2016	3,254	7,703				
2017	3,348					

- (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						18,320
2010					16,719	18,054
2011				14,380	16,508	17,754
2012			11,469	14,233	16,168	17,354
2013		7,521	11,482	14,079	15,874	
2014	3,193	7,704	11,819	14,518		
2015	3,446	7,932	11,886			
2016	3,495	7,703				
2017	3,348					
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						1,852,755
2010					1,681,743	1,888,128
2011				1,353,525	1,671,598	1,869,148
2012			1,011,450	1,417,508	1,732,343	1,933,279
2013		562,826	1,081,081	1,497,095	1,815,889	
2014	149,680	604,870	1,167,413	1,619,620		
2015	168,622	650,126	1,225,677			
2016	174,509	644,309				
2017	169,925					

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						657,072
2010					717,701	590,195
2011				773,623	641,017	525,301
2012			840,142	750,033	628,136	505,446
2013		775,347	852,902	746,935	597,432	
2014	419,348	816,367	894,057	755,837		
2015	447,173	852,645	882,183			
2016	460,181	827,517				
2017	462,978					

(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						40,498
2010					34,157	39,344
2011				27,517	32,617	37,737
2012			20,570	26,741	32,585	37,981
2013		12,862	20,393	26,964	32,607	
2014	5,221	13,218	21,269	28,013		
2015	5,377	13,686	21,985			
2016	5,597	13,869				
2017	5,752					

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						-167,946
2010					-165,934	-98,872
2011				-144,989	-109,397	-50,681
2012			-134,834	-107,605	-68,949	
2013		-94,549	-104,943	-53,443		
2014	-30,483	-80,986	-76,548			
2015	-27,862	-52,419				
2016	-17,049					

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

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						489,125
2010					551,767	491,324
2011				628,634	531,620	474,620
2012			705,308	642,428	559,187	505,446
2013		680,799	747,959	693,492	597,432	
2014	388,865	735,382	817,509	755,837		
2015	419,310	800,227	882,183			
2016	443,133	827,517				
2017	462,978					

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

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

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

M. Adjusted Total Paid Indemnity (in \$000) (h)

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						2,341,880
2010					2,233,510	2,379,452
2011				1,982,158	2,203,218	2,343,768
2012			1,716,758	2,059,936	2,291,530	2,438,725
2013		1,243,625	1,829,040	2,190,587	2,413,321	
2014	538,546	1,340,252	1,984,922	2,375,456		
2015	587,933	1,450,352	2,107,860			
2016	617,642	1,471,826				
2017	632,903					

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

Accident Year	Evaluated as of (in months)				
	15-27	27-39	39-51	51-63	63-75
2009					
2010					1.065
2011				1.112	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	2.383				
Latest Year	2.383	1.453	1.197	1.102	1.064
3-Year Average	2.446	1.468	1.198	1.109	1.064

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)				
	15-27	27-39	39-51	51-63	63-75
2010					1.080
2011				1.126	1.076
2012			1.216	1.122	1.076
2013		1.488	1.215	1.110	
2014	2.459	1.501	1.215		
2015	2.468	1.475			
2016	2.402				

(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					-1.40%
2011				-1.26%	-1.11%
2012			-1.33%	-0.88%	-1.05%
2013		-1.18%	-1.43%	-0.78%	
2014	1.19%	-1.31%	-1.48%		
2015	-0.04%	-1.50%			
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	1.064
2013		1.472	1.199	1.102	
2014	2.484	1.481	1.197		
2015	2.466	1.454			
2016	2.383				
Latest Year	2.383	1.454	1.197	1.102	1.064
3-Year Average	2.444	1.469	1.199	1.110	1.065

(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	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
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2016																

Adjusted (b) 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
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2016																
Selected (c)	1.873(e)	1.349(e)	1.184(e)	1.107(e)	1.071(e)	1.059	1.041	1.031	1.030	1.026	1.022	1.018	1.016	1.014	1.012	1.009
Cumulative Unadjusted for Impact of SB 1160	5.474	2.923	2.167	1.830	1.653	1.544	1.458	1.400	1.358	1.318	1.285	1.257	1.235	1.216	1.199	1.184
Cumulative Adjusted for Impact of SB 1160(f)	5.277	2.829	2.112	1.799	1.636	1.537	---	---	---	---	---	---	---	---	---	---

- (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, 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 243Inc/243Pd 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%, 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						113,208
2010					116,745	117,073
2011				116,968	117,558	117,857
2012			122,476	123,621	124,309	124,710
2013		127,768	130,829	132,051	132,717	
2014	121,359	134,149	137,213	138,538		
2015	126,919	140,435	143,247			
2016	129,108	143,310				
2017	131,244					

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	1.044	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	152,026	149,552	146,552	140,379	133,805	125,328

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						96,983
2010					95,733	102,072
2011				88,854	97,905	103,937
2012			81,632	95,572	105,032	111,402
2013		67,486	89,006	104,350	114,395	
2014	41,033	72,387	95,178	111,556		
2015	43,751	78,136	103,121			
2016	46,889	83,644				
2017	50,761					

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					81.4%	86.8%
2011				75.0%	82.7%	87.8%
2012			65.1%	76.3%	83.8%	88.9%
2013		50.4%	66.5%	78.0%	85.5%	
2014	29.2%	51.6%	67.8%	79.5%		
2015	29.9%	53.3%	70.4%			
2016	31.4%	55.9%				
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						101,130
2010					100,591	104,585
2011				94,123	101,260	105,280
2012			88,187	99,596	107,148	111,402
2013		74,837	94,152	106,332	114,395	
2014	46,872	78,513	98,777	111,556		
2015	48,933	81,966	103,121			
2016	49,935	83,644				
2017	50,761					

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)					
	15	27	39	51	63	75
2009						20,768
2010					18,734	21,587
2011				14,710	18,139	20,846
2012			11,040	14,700	17,650	19,870
2013		6,726	10,989	14,388	17,065	
2014	2,988	6,889	11,013	14,433		
2015	3,253	7,297	11,371			
2016	3,488	7,523				
2017	3,593					

- (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						22,953
2010					20,885	22,884
2011				16,619	19,598	21,482
2012			12,632	15,889	18,359	19,870
2013		7,954	12,029	14,881	17,065	
2014	3,491	7,815	11,687	14,433		
2015	3,674	7,811	11,371			
2016	3,718	7,523				
2017	3,593					

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						2,321,194
2010					2,100,809	2,393,363
2011				1,564,193	1,984,533	2,261,601
2012			1,113,949	1,582,521	1,967,076	2,213,586
2013		595,261	1,132,509	1,582,375	1,952,184	
2014	163,631	613,591	1,154,450	1,610,127		
2015	179,795	640,218	1,172,583			
2016	185,649	629,219				
2017	182,362					

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						988,851
2010					1,034,213	885,141
2011				1,028,157	893,051	741,831
2012			1,005,631	938,580	805,892	658,475
2013		890,962	960,687	869,260	696,788	
2014	513,789	879,610	938,501	799,978		
2015	524,462	891,012	890,070			
2016	555,788	869,952				
2017	571,151					

(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						60,947
2010					49,220	59,006
2011				36,571	45,441	53,292
2012			24,621	33,463	41,806	49,480
2013		14,780	22,970	31,380	38,030	
2014	6,396	14,242	22,327	29,649		
2015	6,306	14,302	22,182			
2016	6,760	14,580				
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						-252,749
2010					-239,113	-148,282
2011				-192,693	-152,409	-71,572
2012			-161,393	-134,655	-88,461	
2013		-108,647	-118,205	-62,195		
2014	-37,348	-87,259	-80,354			
2015	-32,678	-54,777				
2016	-20,590					

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						736,102
2010					795,101	736,859
2011				835,464	740,642	670,260
2012			844,238	803,925	717,430	658,475
2013		782,314	842,482	807,065	696,788	
2014	476,441	792,351	858,147	799,978		
2015	491,784	836,235	890,070			
2016	535,197	869,952				
2017	571,151					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2009						225,967
2010					221,899	224,695
2011				208,588	212,272	215,613
2012			210,462	215,799	220,645	225,036
2013		206,105	214,757	220,869	227,560	
2014	194,315	229,402	239,148	246,056		
2015	204,316	241,684	250,962			
2016	217,446	257,768				
2017	237,656					

N. Adjusted Total Paid Medical (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						3,283,262
2010					3,158,841	3,399,007
2011				2,832,782	3,182,597	3,404,908
2012			2,168,649	2,602,245	2,905,152	3,097,097
2013		1,583,680	2,189,748	2,610,309	2,876,532	
2014	834,386	1,635,343	2,251,745	2,656,161		
2015	875,895	1,718,137	2,313,614			
2016	938,293	1,756,939				
2017	991,169					

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

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					1.076
2011				1.123	1.070
2012			1.200	1.116	1.066
2013		1.383	1.192	1.102	
2014	1.960	1.377	1.180		
2015	1.962	1.347			
2016	1.872				
Latest Year	1.872	1.347	1.180	1.102	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	1.075
2013		1.388	1.203	1.110	
2014	1.935	1.384	1.193		
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				-0.52%	-1.09%
2012			-0.73%	-0.80%	-0.86%
2013		-0.42%	-0.94%	-0.72%	
2014	1.27%	-0.55%	-1.15%		
2015	0.34%	-0.89%			
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	1.123	1.071
2013		1.393	1.198	1.107	
2014	1.972	1.381	1.184		
2015	1.962	1.349			
2016	1.873				
Latest Year	1.873	1.349	1.184	1.107	1.071
3-Year Average	1.936	1.375	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	1.004	1.004	0.347
1988	0.330	1.000	1.005	1.005	0.332
1989	0.343	1.000	1.005	1.005	0.345
1990	0.397	1.001	1.006	1.006	0.400
1991	0.424	1.001	1.006	1.006	0.427
1992	0.349	1.001	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	1.000	1.007	1.007	0.476
1996	0.530	1.001	1.008	1.008	0.534
1997	0.599	1.001	1.008	1.008	0.604
1998	0.651	1.001	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	1.042	1.042	0.495
2002	0.352	1.005	1.047	1.047	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	1.068	1.068	0.124
2006	0.149	1.011	1.080	1.080	0.161
2007	0.202	1.014	1.096	1.096	0.222
2008	0.253	1.018	1.115	1.115	0.282
2009	0.289	1.024	1.142	1.142	0.331
2010	0.274	1.029	1.175	1.175	0.322
2011	0.247	1.036	1.217	1.217	0.301
2012	0.213	1.053	1.282	1.282	0.273
2013	0.173	1.064	1.363	1.391	0.241
2014	0.150	1.102	1.503	1.578	0.236
2015	0.124	1.197	1.799	1.889	0.233
2016	0.082	1.454	2.615	2.746	0.225
2017	0.036	2.383	6.232	6.544	0.234

(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			
				<u>Development Factors</u>			
				<u>Cumulative</u>			
Accident	Unadjusted	Adjusted		Unadjusted for	Adjusted for	Adjusted	Projected
Year	Paid or Incurred	Paid or Incurred	Annual(c)	Reforms(c)	Reforms(c)	Developed	Ultimate
	<u>Loss Ratio(a)</u>	<u>Loss Ratio(b)</u>				<u>Loss Ratio(d)</u>	<u>Loss Ratio</u>
						(2) x (5)	(1) + ((6) - (2))
1986	0.334	0.334	0.999	1.030	1.030	0.344	0.344
1987	0.314	0.314	1.001	1.031	1.031	0.324	0.324
1988	0.304	0.304	1.000	1.031	1.031	0.314	0.314
1989	0.325	0.325	1.001	1.032	1.032	0.336	0.336
1990	0.367	0.367	1.001	1.033	1.033	0.379	0.379
1991	0.384	0.384	1.002	1.035	1.035	0.397	0.397
1992	0.319	0.319	1.002	1.037	1.037	0.331	0.331
1993	0.267	0.267	1.002	1.038	1.038	0.277	0.277
1994	0.309	0.309	1.001	1.039	1.039	0.321	0.321
1995	0.453	0.453	1.001	1.040	1.040	0.471	0.471
1996	0.486	0.486	1.000	1.040	1.040	0.506	0.506
1997	0.545	0.545	1.001	1.041	1.041	0.567	0.567
1998	0.657	0.657	1.002	1.136	1.136	0.747	0.747
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	0.212	0.198	1.018	1.257	1.257	0.248	0.263
2007	0.293	0.274	1.022	1.285	1.285	0.352	0.371
2008	0.361	0.338	1.026	1.318	1.318	0.446	0.469
2009	0.412	0.389	1.030	1.358	1.358	0.528	0.552
2010	0.397	0.377	1.031	1.400	1.400	0.527	0.548
2011	0.329	0.316	1.041	1.458	1.458	0.460	0.473
2012	0.270	0.263	1.059	1.544	1.537	0.404	0.412
2013	0.207	0.205	1.071	1.653	1.636	0.335	0.337
2014	0.167	0.167	1.107	1.830	1.799	0.300	0.301
2015	0.136	0.136	1.184	2.167	2.112	0.286	0.286
2016	0.098	0.098	1.349	2.923	2.829	0.277	0.277
2017	0.056	0.056	1.873	5.474	5.277	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	1.530	
1987	0.0	0.0	1.9	1.9	1.501	
1988	0.0	0.0	1.5	1.5	1.479	
1989	0.0	0.0	1.5	1.5	1.457	
1990	2.3	19.9	1.7	24.7	1.168	
1991	4.9	14.8	0.8	21.4	0.962	
1992	1.8	-8.3	1.6	-5.2	1.015	
1993	0.2	-18.1	0.4	-17.6	1.231	
1994	-5.1	0.2	0.6	-4.3	1.287	
1995	6.3	0.6	1.0	8.0	1.192	
1996	5.3	0.4	1.2	7.0	1.114	
1997	9.7	0.2	1.6	11.7	0.997	
1998	6.5	0.0	1.8	8.4	0.920	
1999	5.7	0.0	2.1	7.9	0.852	
2000	3.9	0.0	3.1	7.1	0.796	
2001	-0.3	0.0	-0.2	-0.5	0.800	
2002	-0.7	0.0	0.4	-0.3	0.819	(e)
2003	7.3	0.0	1.2	8.6	0.818	(e)
2004	-6.0	-13.7	1.7	-17.5	1.126	(e)
2005	-31.6	-15.3	1.1	-41.5	1.529	
2006	5.6	-5.7	1.6	1.2	1.511	
2007	1.6	0.0	1.6	3.2	1.464	
2008	4.8	0.6	0.7	6.2	1.379	
2009	0.4	1.4	0.2	2.0	1.352	
2010	0.4	0.0	1.0	1.4	1.333	
2011	0.0	0.0	1.6	1.6	1.312	
2012	0.3	0.0	2.1	2.4	1.281	
2013	2.6	0.2	0.4	3.2	1.241	
2014	7.0	1.5	1.7	10.4	1.124	
2015	0.3	0.0	2.3	2.6	1.095	
2016	0.3	0.0	1.0	1.3	1.082	
2017	0.5	0.0	1.4	1.9	1.062	
2018	0.4	0.0	2.2	2.6		
2019	0.4	0.0	2.0	2.4		
1/1/2020	0.2 (Annual 0.5)	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	(1) Proportion of Medical Subject to	(2) Proportion of Medical Not Subject to	(3) Impact of Fee Schedule Change on	(4) Change in Medical	(5) Impact of CPI Change on Total	(6) Annual Non-Legislative Cost Impact on
Year	Fee Schedule (a)	Fee Schedule (a)	Total Medical (b)	CPI (c)	Medical (d)	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 MCCC costs.

(b) Based on the WCIRB's evaluation of the cost impact of changes in the medical fee schedules. Includes the 1/1/2014 changes to the physician fee schedule to a resource-based relative value scale (RBRVS) except for the proportion reflected in loss development (See Exhibit 2.4).

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

(d) Adjusted CPI on workers' compensation medical costs that are not subject to fee schedules. The current year impact is the weighted average of 0% and Column (4), with Columns (1) and (2) from prior years as weights. (i) 1993's non-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	-3.9%	0.0%	-3.9%
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%	0.941
1987	3.8%	0.0%	3.8%	0.906
1988	3.8%	0.0%	3.8%	0.873
1989	3.0%	0.0%	3.0%	0.848
1990	3.7%	19.1%	23.5%	0.687
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%	0.742
1994	-2.3%	-2.3%	-4.6%	0.777
1995	0.9%	0.5%	1.4%	0.766
1996	1.0%	0.4%	1.4%	0.756
1997	0.7%	0.2%	0.9%	0.749
1998	0.8%	12.6%	13.5%	0.660
1999	2.5%	12.6%	15.4%	0.572
2000	1.7%	7.0%	8.8%	0.525
2001	2.9%	6.6%	9.7%	0.479
2002	2.0%	-5.6%	-3.7%	0.497
2003	1.4%	-6.0%	-4.7%	0.522
2004	0.0%	-33.9%	-33.9%	0.789
2005	0.0%	-13.9%	-13.9%	0.916
2006	0.3%	-5.1%	-4.8%	0.963
2007	1.8%	0.1%	1.9%	0.945
2008	0.2%	0.5%	0.7%	0.938
2009	0.4%	1.0%	1.4%	0.925
2010	0.3%	0.0%	0.3%	0.922
2011	0.3%	-2.0%	-1.7%	0.938
2012	0.1%	-3.9%	-3.8%	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	3.160
1987	5.6	2.992
1988	4.4	2.866
1989	4.3	2.748
1990	5.0	2.617
1991	2.3	2.558
1992	4.7	2.444
1993	1.2	2.415
1994	1.8	2.372
1995	2.9	2.305
1996	3.4	2.229
1997	4.7	2.129
1998	5.2	2.024
1999	6.2	1.906
2000	9.0	1.748
2001	-0.6	1.759
2002	1.1	1.740
2003	3.6	1.679
2004	5.0	1.599
2005	3.2	1.550
2006	4.6	1.482
2007	4.5	1.418
2008	2.1	1.389
2009	0.5	1.382
2010	3.0	1.342
2011	3.1	1.301
2012	4.1	1.250
2013	0.7	1.241
2014	3.3	1.202
2015	4.4	1.151
2016	1.9	1.130
2017	2.7	1.100
Projected:		
2018	4.2	
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 June 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 Year	Wage Level (a)	Rates (b)	January 1, 2018 (c)	January 1, 2018 (d)	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
1986	3.160	---	---	0.844	0.991	0.983	1.015	---	2.649
1987	2.992	---	---	0.742	0.992	0.983	1.015	---	2.208
1988	2.866	---	---	0.664	0.993	0.963	1.015	---	1.933
1989	2.748	---	---	0.653	0.993	0.945	1.015	---	1.859
1990	2.617	---	---	0.637	0.991	0.942	1.015	---	1.728
1991	2.558	---	---	0.590	0.987	0.939	1.015	---	1.563
1992	2.444	---	---	0.566	0.982	0.940	1.015	---	1.424
1993	2.415	---	---	0.559	0.981	0.949	1.015	---	1.374
1994	2.372	---	---	0.640	0.986	0.948	1.015	---	1.556
1995	2.305	---	---	0.866	0.995	0.958	1.015	---	2.043
1996	2.229	1.023	0.920	0.899	1.000	0.935	1.015	---	2.113
1997	2.129	0.989	0.918	0.928	1.000	0.949	1.015	---	2.052
1998	2.024	0.965	0.956	0.991	1.000	0.959	1.015	---	2.060
1999	1.906	0.972	0.967	0.995	1.000	0.954	1.015	---	1.958
2000	1.748	1.005	0.876	0.872	1.000	0.970	1.015	---	1.548
2001	1.759	1.029	0.772	0.750	1.000	0.969	1.015	---	1.342
2002	1.740	1.157	0.691	0.597	1.000	0.991	1.015	---	1.033
2003	1.679	1.267	0.565	0.446	1.000	1.005	1.015	---	0.734
2004	1.599	1.397	0.575	0.412	1.000	0.981	1.015	---	0.661
2005	1.550	1.470	0.692	0.471	1.000	0.982	1.015	---	0.732
2006	1.482	1.447	0.892	0.616	1.000	0.956	1.015	---	0.941
2007	1.418	1.493	1.215	0.814	1.000	0.931	1.015	0.985	1.203
2008	1.389	1.426	1.446	1.014	1.000	0.946	1.015	0.991	1.453
2009	1.382	1.366	1.425	1.043	1.000	0.937	1.015	1.034	1.567
2010	1.342	1.384	1.397	1.009	1.000	0.941	1.015	1.005	1.425
2011	1.301	1.401	1.396	0.996	1.000	0.982	1.015	---	1.301
2012	1.250	1.223	1.151	0.941	1.000	1.000	1.015	---	1.159
2013	1.241	1.138	0.926	0.814	1.000	0.983	1.015	---	1.012
2014	1.202	1.126	0.853	0.758	1.000	0.961	1.015	---	0.933
2015	1.151	1.109	0.829	0.748	1.000	0.951	1.015	---	0.891
2016	1.130	1.148	0.893	0.778	1.000	0.950	1.015	---	0.911
2017	1.100	1.156	0.986	0.853	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) $(2b) \div (2a)$. 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) $(1) \times (2c) \times (3) \times (6) \div [(4) \times (5)]$ for calendar years 2007 to 2010. $(1) \times (2c) \times (3) \div [(4) \times (5)]$ for all other calendar years.

2017 Accident Year Indemnity Claim Frequency Model
As of PY 2015 1st Set & June 2018 UCLA

AY	Annual %	Annual Log Differences						
	Changes Intra- Class Ind Freq	Intra-Class Indemnity Frequency per \$M Exposure at PY 2016 Level			AY+1 Indemnity	Cumulative	Economic Variables	CalOSHA
	Total	Total	Cumulative	Non-cum.	Benefit Level	Injury Index	(1st Prin. Comp.)	Dummy Variable
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	----	0.172	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	-8.0%	-0.083	-0.029	-0.088	-0.007	0.059	-0.091	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.203	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.024	0.000
2004	-16.7%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.020	0.049	0.040	-0.084	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.308	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.3%	0.013	0.032	0.010	0.003	0.022	0.043	0.000
2012	4.6%	0.045	0.129	0.035	0.022	0.093	0.123	0.000
2013	0.5%	0.005	0.155	-0.015	0.071	0.170	0.151	0.000
2014	0.5%	0.005	0.093	-0.009	0.003	0.102	0.178	0.000
2015	-0.8%	-0.008	0.074	-0.022	0.002	0.096	0.194	0.000
2016*	-2.4%	-0.025	0.012	-0.032	0.004	0.044	0.124	0.000
2017	-0.6%	-0.006	-0.006	-0.006	0.004	0.000	0.140	0.000
2018	-0.6%	-0.006	-0.006	-0.006	0.004	0.000	0.142	0.000
2019	-1.2%	-0.012	-0.012	-0.012	0.004	0.000	0.083	0.000
2020	-2.5%	-0.025	-0.025	-0.025	0.004	0.000	-0.062	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020
Std Err of Y Est	0.040
R Squared	0.575
No. of Observations	38
Degrees of Freedom	33

X Coefficient(s)	0.174	0.282	0.092	-0.132
Std Err of Coef.	0.073	0.062	0.044	0.078

Notes:

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

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

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

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

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

Economic variables are historical through 2017; June 2018 UCLA Anderson Forecasts for 2018 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 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	9,979	---	1.868	18,643	---
1991	10,915	9.4%	1.767	19,284	3.4%
1992	11,014	0.9%	1.708	18,815	-2.4%
1993	11,999	8.9%	1.698	20,375	8.3%
1994	12,964	8.0%	1.779	23,057	13.2%
1995	14,550	12.2%	1.657	24,104	4.5%
1996	16,298	12.0%	1.555	25,337	5.1%
1997	19,343	18.7%	1.395	26,979	6.5%
1998	21,212	9.7%	1.287	27,290	1.2%
1999	23,256	9.6%	1.192	27,723	1.6%
2000	24,674	6.1%	1.113	27,459	-1.0%
2001	27,173	10.1%	1.118	30,392	10.7%
2002	26,254	-3.4%	1.146	30,086	-1.0%
2003	25,845	-1.6%	1.144	29,564	-1.7%
2004	21,090	-18.4%	1.359	28,662	-3.0%
2005	19,038	-9.7%	1.563	29,749	3.8%
2006	20,764	9.1%	1.456	30,241	1.7%
2007	22,563	8.7%	1.411	31,833	5.3%
2008	24,677	9.4%	1.337	32,990	3.6%
2009	25,910	5.0%	1.329	34,433	4.4%
2010	25,578	-1.3%	1.311	33,520	-2.7%
2011	25,241	-1.3%	1.290	32,557	-2.9%
2012	24,972	-1.1%	1.260	31,454	-3.4%
2013	25,103	0.5%	1.223	30,695	-2.4%
2014	26,690	6.3%	1.124	29,995	-2.3%
2015	27,167	1.8%	1.095	29,758	-0.8%
2016	27,033	-0.5%	1.082	29,239	-1.7%
2017	27,248	0.8%	1.062	28,929	-1.1%
(6) Estimated Annual Exponential Trend Based on 1990 to 2017:					1.7%
(7) Estimated Annual Exponential Trend Based on 2005 to 2017:					-0.6%
(8) Estimated Annual Exponential Trend Based on 2013 to 2017:					-1.4%
Selected Indemnity Severity Trend:					0.0%

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

Source: WCIRB experience calls.

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

Accident <u>Year</u>	(1) Estimated Ultimate <u>Severity (a)</u>	(2) Annual <u>% Change</u>	(3) Medical Adjustment <u>Factor (b)</u>	(4) Ultimate On-level <u>Severity</u> (1) x (3)	(5) Annual <u>% Change</u>
1990	8,827	---	0.994	8,773	---
1991	9,486	7.5%	0.975	9,253	5.5%
1992	9,596	1.2%	0.944	9,054	-2.2%
1993	10,637	10.8%	0.927	9,865	9.0%
1994	11,739	10.4%	0.975	11,451	16.1%
1995	13,448	14.6%	0.968	13,020	13.7%
1996	14,455	7.5%	0.958	13,855	6.4%
1997	17,165	18.7%	0.952	16,336	17.9%
1998	23,007	34.0%	0.845	19,435	19.0%
1999	23,866	3.7%	0.728	17,375	-10.6%
2000	26,796	12.3%	0.669	17,934	3.2%
2001	31,859	18.9%	0.611	19,474	8.6%
2002	32,192	1.0%	0.635	20,447	5.0%
2003	30,728	-4.5%	0.668	20,517	0.3%
2004	28,440	-7.4%	0.885	25,168	22.7%
2005	29,310	3.1%	0.887	26,001	3.3%
2006	32,028	9.3%	0.885	28,347	9.0%
2007	35,765	11.7%	0.871	31,164	9.9%
2008	38,919	8.8%	0.871	33,895	8.8%
2009	41,144	5.7%	0.872	35,874	5.8%
2010	41,462	0.8%	0.875	36,283	1.1%
2011	37,799 (c)	---	0.898	33,957 (c)	---
2012	35,748	-5.4%	0.942	33,681	-0.8%
2013	33,266	-6.9%	0.983	32,716	-2.9%
2014	32,046	-3.7%	1.008	32,313	-1.2%
2015	31,386	-2.1%	1.012	31,757	-1.7%
2016	31,192	-0.6%	1.012	31,558	-0.6%
2017	32,205	3.2%	1.013	32,618	3.4%

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 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	29,310	---	26,001	---	27,714	---	24,585	---
2006	32,028	9.3%	28,347	9.0%	29,965	8.1%	26,521	7.9%
2007	35,765	11.7%	31,163	9.9%	33,319	11.2%	29,032	9.5%
2008	38,919	8.8%	33,895	8.8%	35,444	6.4%	30,868	6.3%
2009	41,145	5.7%	35,874	5.8%	37,634	6.2%	32,813	6.3%
2010	41,462	0.8%	36,283	1.1%	37,887	0.7%	33,155	1.0%
2011	41,505	0.1%	37,286	2.8%	37,799	-0.2%	33,957	2.4%
2012	39,173	-5.6%	36,908	-1.0%	35,748	-5.4%	33,681	-0.8%
2013	36,532	-6.7%	35,928	-2.7%	33,266	-6.9%	32,716	-2.9%
2014	35,181	-3.7%	35,473	-1.3%	32,046	-3.7%	32,313	-1.2%
2015	34,382	-2.3%	34,788	-1.9%	31,386	-2.1%	31,757	-1.7%
2016	34,165	-0.6%	34,566	-0.6%	31,192	-0.6%	31,558	-0.6%
2017	35,247	3.2%	35,700	3.3%	32,205	3.2%	32,618	3.4%
Estimated Annual Exponential Trend								
Trend Based on 1990 to 2017:								
Trend Based on 2005 to 2017:								
Trend Based on 2013 to 2017:								
Selected Medical Severity Trend:								
N/A								
1.7%								
-0.3%								
3.0%								

**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	1.530	2.649	0.229
1987	0.347	1.501	2.208	0.236
1988	0.332	1.479	1.933	0.254
1989	0.345	1.457	1.859	0.270
1990	0.400	1.168	1.728	0.270
1991	0.427	0.962	1.563	0.263
1992	0.352	1.015	1.424	0.251
1993	0.289	1.231	1.374	0.259
1994	0.329	1.287	1.556	0.273
1995	0.476	1.192	2.043	0.278
1996	0.534	1.114	2.113	0.281
1997	0.604	0.997	2.052	0.294
1998	0.657	0.920	2.060	0.293
1999	0.691	0.852	1.958	0.301
2000	0.597	0.796	1.548	0.307
2001	0.495	0.800	1.342	0.295
2002	0.369	0.819	1.033	0.292
2003	0.243	0.818	0.734	0.270
2004	0.145	1.126	0.661	0.247
2005	0.124	1.529	0.732	0.259
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projections (d)
2018				0.261
2019				0.258
1/1/2020				0.254

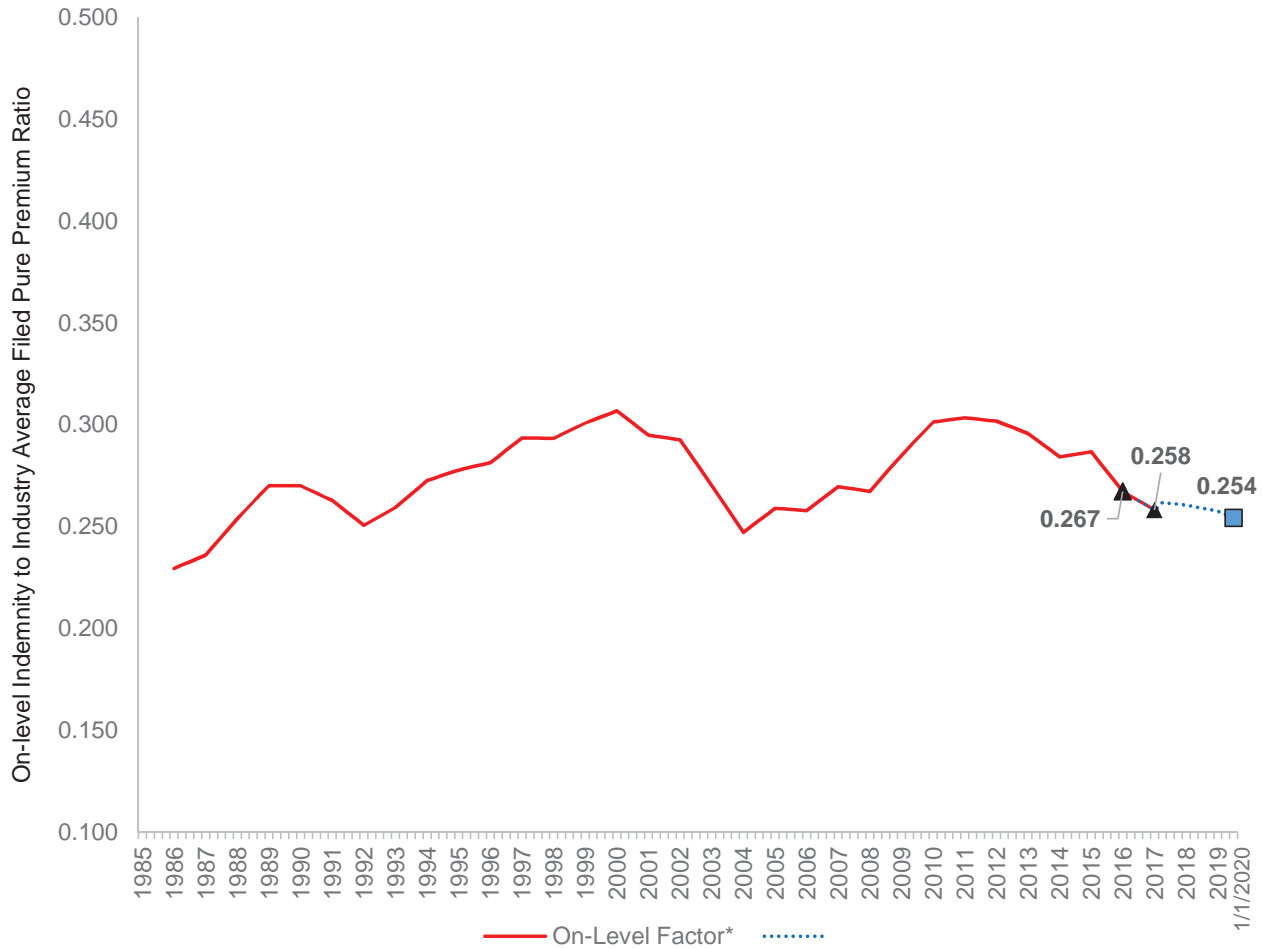
(a) See Exhibit 3.1.

(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 2016 and 2017 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)

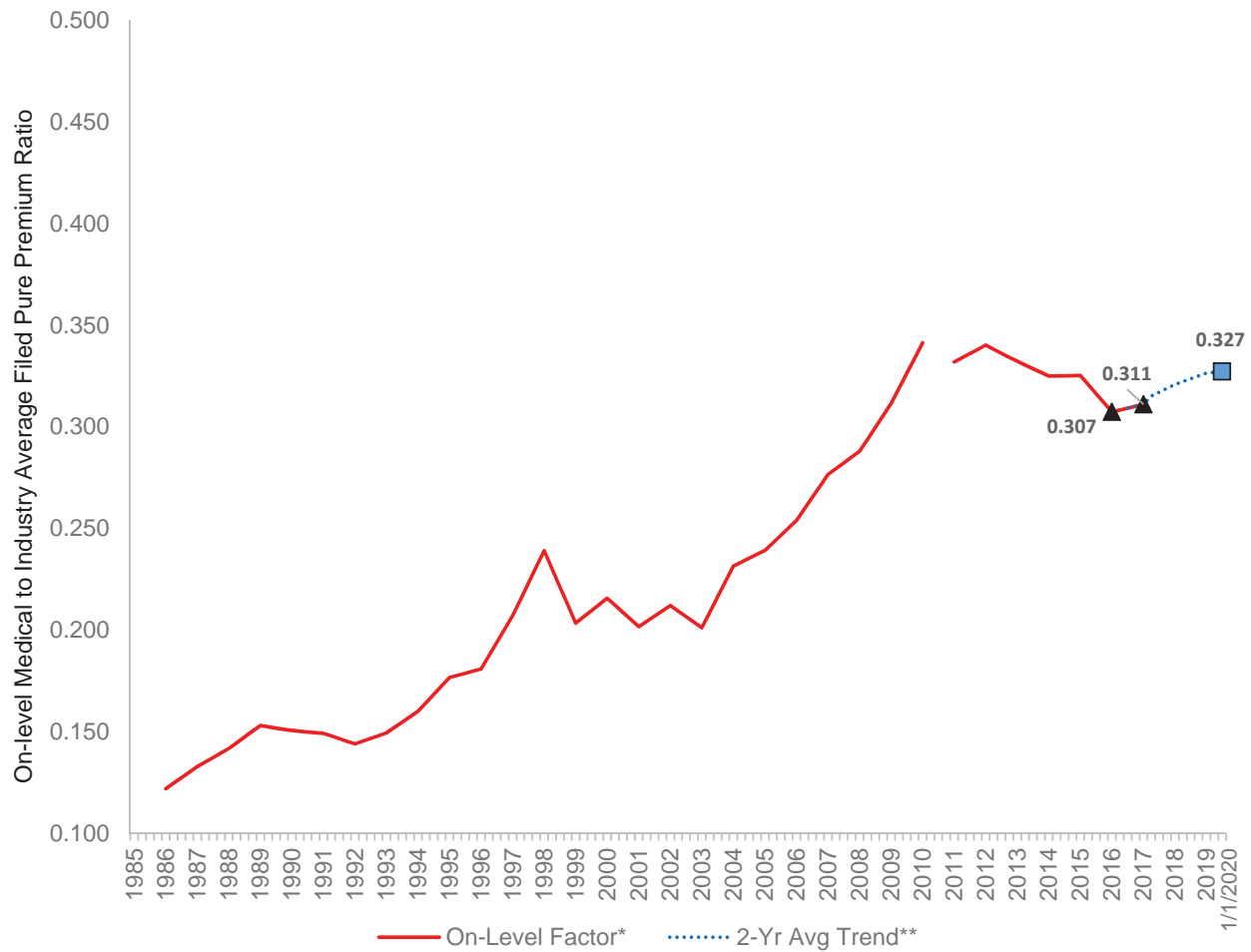
** The 1/1/2020 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2016 and 2017 years.

**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	0.941	2.649	0.122
1987	0.324	0.906	2.208	0.133
1988	0.314	0.873	1.933	0.142
1989	0.336	0.848	1.859	0.153
1990	0.379	0.687	1.728	0.151
1991	0.397	0.587	1.563	0.149
1992	0.331	0.619	1.424	0.144
1993	0.277	0.742	1.374	0.149
1994	0.321	0.777	1.556	0.160
1995	0.471	0.766	2.043	0.177
1996	0.506	0.756	2.113	0.181
1997	0.567	0.749	2.052	0.207
1998	0.747	0.660	2.060	0.239
1999	0.697	0.572	1.958	0.203
2000	0.636	0.525	1.548	0.216
2001	0.565	0.479	1.342	0.202
2002	0.441	0.497	1.033	0.212
2003	0.283	0.522	0.734	0.201
2004	0.194	0.789	0.661	0.231
2005	0.191	0.916	0.732	0.239
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projections (d)
2018				0.321
2019				0.326
1/1/2020				0.327

- (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 2016 and 2017 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)	0.254	0.327	0.581

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	1.035		
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	1.004						
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	1.448
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	1.057	
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	1.007				
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	1.892
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	1.543
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	1.161	
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	1.011						
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	1.737
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	1.433
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	1.036			
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	1.024	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	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	1.001	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	7.706	1.105	1.023	1.010												
2015	8.022	1.106	1.020													
2016	7.717	1.110														
2017	7.812															
	Latest Year															
Age-to-Age																
7.812	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	1.000
Age-to-Ultimate																
9.049	1.158	1.044	1.023	1.013	1.008	1.005	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	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	1.007	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	2.794	1.743	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	1.413	1.140	1.046	1.027	1.017	1.013							
2017	2.823	1.690	1.414	1.129											

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														97.8%	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											95.5%	96.2%	96.7%	97.1%	97.4%	97.8%	98.0%
2000										93.8%	94.9%	95.7%	96.3%	96.8%	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%	95.4%	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%	86.3%	89.1%	91.3%	93.5%	94.8%	95.8%	96.6%	97.2%			
2006				67.1%	76.0%	82.2%	86.0%	89.0%	91.7%	93.4%	94.7%	95.8%	96.6%				
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%	73.8%	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%	51.8%	66.7%	77.3%	84.5%	89.3%										
2013	8.4%	33.4%	52.8%	68.0%	79.0%	86.2%											
2014	6.6%	33.8%	54.0%	69.4%	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																98.4%	98.6%
1995															97.8%	98.2%	98.4%
1996														97.5%	97.8%	98.1%	98.3%
1997													96.9%	97.3%	97.6%	97.8%	98.0%
1998												96.0%	96.6%	97.0%	97.3%	97.6%	97.9%
1999											95.2%	95.9%	96.4%	96.8%	97.2%	97.6%	97.8%
2000										93.5%	94.6%	95.4%	96.0%	96.5%	97.1%	97.4%	97.7%
2001									90.7%	92.4%	93.5%	94.5%	95.2%	96.0%	96.5%	96.9%	97.3%
2002								88.8%	91.1%	92.6%	93.8%	94.8%	95.8%	96.4%	96.9%	97.3%	97.7%
2003							85.9%	89.0%	91.0%	92.7%	94.0%	95.2%	95.9%	96.5%	97.0%	97.4%	
2004						82.2%	86.1%	88.9%	91.1%	92.7%	94.5%	95.4%	96.2%	96.8%	97.3%		
2005					76.4%	82.1%	86.1%	89.1%	91.2%	93.4%	94.7%	95.7%	96.5%	97.1%			
2006				66.5%	75.5%	81.8%	85.8%	88.7%	91.5%	93.3%	94.6%	95.7%	96.5%				
2007			51.8%	65.3%	74.7%	80.9%	85.3%	89.3%	91.7%	93.5%	95.0%	96.0%					
2008		31.4%	49.5%	63.2%	73.0%	79.8%	85.5%	89.2%	91.9%	93.9%	95.2%						
2009	0.7%	29.5%	47.4%	61.4%	71.8%	79.9%	85.2%	89.3%	92.1%	94.0%							
2010	0.7%	29.6%	48.0%	62.1%	73.8%	81.4%	86.8%	90.5%	93.1%								
2011	0.8%	29.4%	48.3%	63.8%	75.0%	82.7%	87.8%	91.3%									
2012	0.8%	29.0%	49.3%	65.1%	76.3%	83.8%	88.9%										
2013	0.9%	29.0%	50.4%	66.5%	78.0%	85.5%											
2014	0.7%	29.2%	51.6%	67.8%	79.5%												
2015	0.8%	29.9%	53.3%	70.4%													
2016	0.8%	31.4%	55.9%														
2017	0.8%	33.4%															
2018	0.9%																

Quarterly Ultimate Settlement Ratios

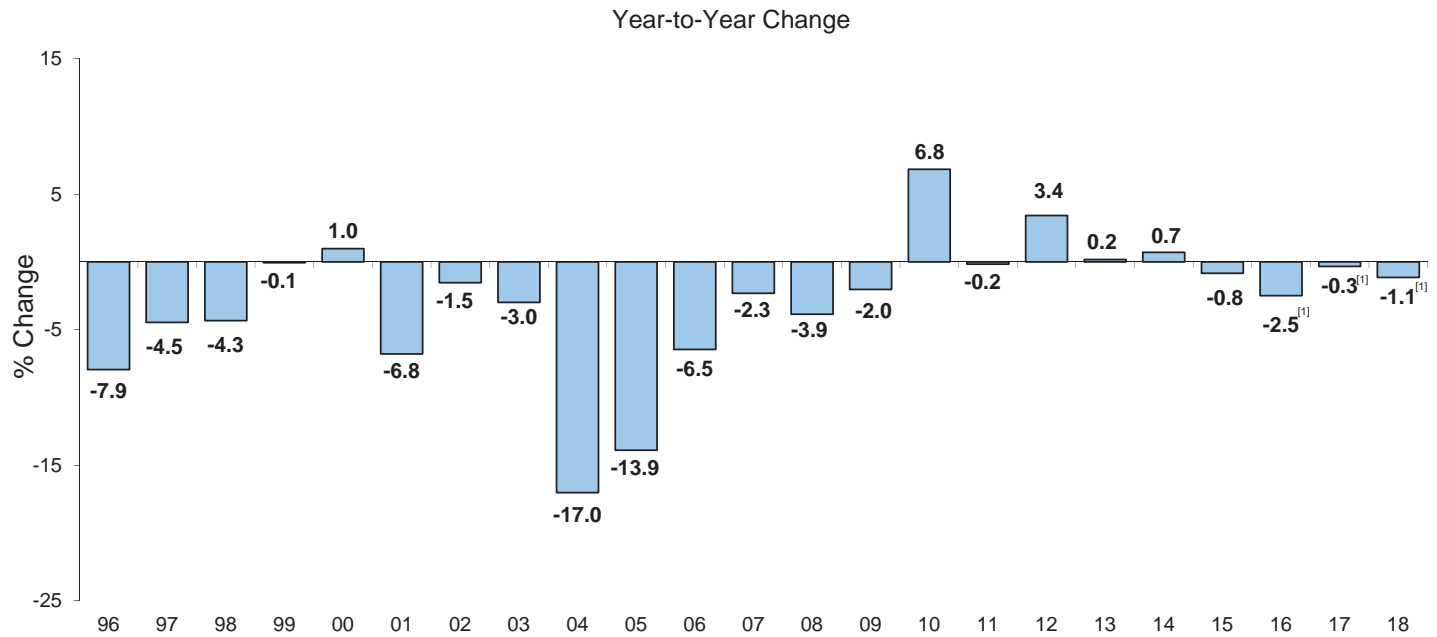
Accident	Evaluated as of (in months):															
Year	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
2009	0.7%	4.7%	12.2%	21.3%	29.7%	35.7%	40.0%	44.0%	47.7%	51.3%	55.0%	58.5%	61.5%	64.6%	67.1%	69.6%
2010	0.7%	4.8%	11.9%	21.1%	29.9%	35.9%	40.3%	44.6%	48.3%	52.3%	55.8%	59.3%	62.5%	65.9%	68.9%	71.8%
2011	0.8%	5.1%	12.0%	21.4%	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%	55.3%	59.4%	63.4%	66.9%	70.2%	73.1%	75.9%
2014	0.8%	4.8%	11.7%	20.7%	29.5%	36.2%	42.0%	47.0%	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%	48.4%	53.5%	58.6%	62.9%	66.9%	70.5%			
2016	0.8%	5.1%	12.3%	21.9%	31.6%	39.3%	45.3%	51.1%	56.1%							
2017	0.8%	5.6%	13.3%	23.8%	33.6%											
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	3.9%	7.3%	8.9%	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%	5.9%	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 AC18-08-01

Third Quarter 2018 Review of Diagnostics

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

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

Please note the following:

1. Permanent disability claims continue to close at a faster rate throughout the state. The percent of claim closures increased 13% from policy year 2009 to policy year 2014 at second report level with the Los Angeles region increasing faster than statewide. The rate at which temporary disability claims close has also recently increased (Exhibit M5).
2. The number of independent medical review (IMR) applications eligible for review are at historically high levels in the first two quarters of 2018 (Exhibit M14).
3. The number of medical-only claims reported each quarter have been increasing steadily over the last four quarters (Exhibit C11).
4. The proportion of indemnity claims involving cumulative trauma in the Los Angeles Basin and San Diego areas have recently been growing modestly while the proportion for the remainder of the state continues to decline. The percent of first unit statistical report claims for accident year 2016 that were reported as involving cumulative injury was 16% for the Los Angeles Basin area, almost 12% for the San Diego area and 6% for the remainder of the state. The percent of indemnity claims involving permanent disability decreased in all regions for the first time since 2013 (Exhibit C17).
5. Despite the increase in cumulative injury claims, the frequency of indemnity claims in the Los Angeles Basin and San Diego regions declined by more than 3% and 4%, respectively, in 2016 (Exhibit C21).
6. Medical severity showed signs of modest decrease in the first quarter of 2018. Accident year 2018 paid medical per claim severity as of the first quarter of 2018 decreased 2.6% over accident year 2017 (Exhibit S4.3). Incremental paid medical severity growth for recent accident years in the first quarter of 2018 was fairly flat after the relatively large increase in the first quarter of 2017 (Exhibit S7).
7. Paid allocated loss adjustment expenses (ALAE) per indemnity claim continues to rise (Exhibit E5). Additionally, the proportion of cumulative paid ALAE to losses are at historically high levels (Exhibit E6).
8. The number of medical-legal reports per claim and the cost per report decreased in service year 2017 by approximately 4% and 11% respectively (Exhibit E13).

Exhibit Numbering Guide July 2018

Exhibit #	Exhibit Name
Market/Claim Characteristics	
M3	Total Incurred Loss Distribution by Insurer
M4	Distribution of Estimated Ultimate Number of Claims by Injury Type
M5	Percentage of Claims Open by Injury Type and Region - First through Third Report Level
M6	Percentage of Claim Count and Average Severity by Method of Settlement
M7	Division of Workers' Compensation (DWC) Distribution of Decisions by Type
M8	Statewide Number of Division of Workers' Compensation (DWC) Quarterly Expedited Hearings
M9	Number of Division of Workers' Compensation (DWC) Quarterly Lien Filed Counts
M10	Medicare Set-aside Costs by Age Interval & Permanent Disability Rating Interval
M14	IMR Filed Counts
Claim Count	
C1	Reported Indemnity and Total Claim Count Development - Statewide
C3	Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims
C4	Reopening Rates Based on Unit Statistical Data & by Injury Type
C5	Closed-Closed Development Based on Unit Statistical Data
C6	California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year as of March 31, 2018
C7	2017 Accident Year Indemnity Claim Frequency Model & Indemnity Claim Frequency History and Projections
C8	California OPRL Injury & Illness Rates
C9	Self-Insured Employers - Claim Frequency
C10	Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness
C11	Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts
C12	Economic Variables
C15	Partial Accident Year Cumulative Injury Indemnity Claim Counts by Policy Year and Report Level
C17	Claim Count Ratios by Region Based on Unit Statistical Data at 1st Report Level
C18	Ratio of Total Indemnity Claim Counts to Total Claim Counts
C19	Distribution of Cumulative Injury Claims by Injury Type
C21	Indemnity Claim Frequency by Geographic Region
Loss Development	
D4	Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year
D6	Comparison of Projected Ultimate Loss Ratios - Accident Year 2011-2016
Claim Severity	
S2	Average Incurred Indemnity Loss Per Reported Indemnity Claim & Incurred Medical Loss per Reported Claim
S3	Average Indemnity Case Outstanding & Outstanding Medical Loss Per Open Indemnity Claim
S4	Average Paid Indemnity & Medical Loss per Indemnity Claim & Average Paid Medical Loss Per Claim
S5	Average Paid Losses per Closed Indemnity Claim
S6	Ratio of Incremental Paid Indemnity & Medical to Indemnity Claims Open During Period
S7	Ratio of Quarterly Paid Medical to Indemnity Claims Inventory Through March 31, 2018
S8	Estimated Ultimate Indemnity & Medical Severities by Injury Type
S10	Changes in the Number of Weeks of Temporary Disability Benefits
S11	Average Permanent Disability Ratings by Type of Loss
S14	Self Insured Employers - Claim Severity
S15	Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness
S16	Claim Counts and Losses on Claims in Excess of \$250,000 & \$500,000 & \$1,000,000
S17	Change in Claims Mix by Injury Description by Policy Year by Part of Body & Nature of Injury & Cause of Injury
S18	Indemnity Claim Frequency by Layer of Incurred Medical at USR 1st
Loss Adjustment Expense	
E1	Summary of Paid LAE Ratios by Insurer Type
E5	Average Paid ALAE Per Reported Indemnity Claim - Private Insurers
E6	Ratio of Cumulative Paid ALAE to Loss - Private Insurers
E7	Percentage of Represented and Unrepresented Permanent Disability Claims by Region
E8	Distribution of Total ALAE & MCCP Components
E9	Applicant Attorney Expense Paid
E10	Median Expense Costs per Represented PD Claim - Private Insurers Only
E13	Changes in the Number and Cost of Medical-Legal Reports
E15	Paid MCCP per Indemnity Claims Inventory Calendar Year

Total Incurred Loss Distribution by Insurer*

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

<u>Group</u>	<u>AY 2013</u> <u>@ 12/31/2013</u>	<u>AY 2014</u> <u>@ 12/31/2014</u>	<u>AY 2015</u> <u>@ 12/31/2015</u>	<u>AY 2016</u> <u>@ 12/31/2016</u>	<u>AY 2017</u> <u>@ 12/31/2017</u>
State Fund	8.7%	10.2%	12.0%	9.5%	10.8%
1	6.9%	7.6%	8.0%	8.0%	8.4%
2	8.6%	8.0%	7.8%	7.6%	6.8%
3	7.5%	6.6%	7.8%	7.4%	6.5%
4	7.9%	7.7%	6.9%	6.8%	5.2%
5	3.2%	3.6%	4.3%	4.7%	4.9%
6	5.6%	3.8%	3.6%	3.6%	3.9%
7	3.8%	3.8%	3.6%	3.6%	3.5%
8	4.8%	4.2%	3.4%	3.2%	3.1%
9	1.6%	2.3%	2.7%	2.9%	2.8%
10	3.2%	3.6%	2.2%	2.2%	2.3%
All Other	38.2%	38.6%	37.8%	40.4%	41.9%

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

<u>Group</u>	<u>AY 2013</u> <u>@ 12/31/2013</u>	<u>AY 2014</u> <u>@ 12/31/2014</u>	<u>AY 2015</u> <u>@ 12/31/2015</u>	<u>AY 2016</u> <u>@ 12/31/2016</u>	<u>AY 2017</u> <u>@ 12/31/2017</u>
1	7.5%	8.5%	9.1%	8.8%	9.4%
2	9.4%	9.0%	8.8%	8.4%	7.6%
3	8.2%	7.4%	8.8%	8.2%	7.2%
4	8.7%	8.6%	7.9%	7.5%	5.8%
5	3.5%	4.0%	4.9%	5.2%	5.5%
6	6.1%	4.3%	4.0%	4.0%	4.4%
7	4.2%	4.2%	4.1%	4.0%	3.9%
8	5.3%	4.6%	3.8%	3.5%	3.4%
9	1.8%	2.5%	3.0%	3.2%	3.1%
10	3.5%	4.0%	2.5%	2.5%	2.6%
All Other	41.9%	43.0%	43.0%	44.7%	47.0%

*Total incurred losses reflect the sum of paid indemnity and medical losses and indemnity and medical case reserves. All entries reflect the paid cost of medical cost containment programs reported for policies with effective dates prior to July 1, 2010.

**Groups are ranked according to accident year 2017 incurred losses.

State Fund is State Compensation Insurance Fund.

Source: WCIRB quarterly calls for experience

Distribution of Estimated Ultimate Number of Claims by Injury Type

I. Distribution of Ultimate Number of Indemnity Claims

Accident <u>Year</u>	Permanent <u>Indemnity**</u>	Temporary <u>Indemnity</u>	<u>Total</u>
2001	53.1%	46.9%	100%
2002	54.4%	45.6%	100%
2003	53.8%	46.2%	100%
2004	49.8%	50.2%	100%
2005	46.2%	53.8%	100%
2006	47.2%	52.8%	100%
2007	48.3%	51.7%	100%
2008	50.6%	49.4%	100%
2009	52.0%	48.0%	100%
2010	51.6%	48.4%	100%
2011	51.4%	48.6%	100%
2012	50.9%	49.1%	100%
2013	51.0%	49.0%	100%
2014	51.7%	48.3%	100%
2015	52.6%	47.4%	100%
2016*	50.9%	49.1%	100%

II. Distribution of Ultimate Number of All Claims

Accident <u>Year</u>	Permanent <u>Indemnity**</u>	Temporary <u>Indemnity</u>	Medical <u>Only</u>	<u>Total</u>
2001	18.0%	15.9%	66.1%	100%
2002	19.0%	15.9%	65.1%	100%
2003	18.7%	16.1%	65.2%	100%
2004	15.6%	15.7%	68.7%	100%
2005	13.5%	15.7%	70.8%	100%
2006	13.6%	15.2%	71.2%	100%
2007	14.3%	15.3%	70.4%	100%
2008	15.6%	15.2%	69.2%	100%
2009	17.2%	15.9%	66.9%	100%
2010	17.8%	16.7%	65.5%	100%
2011	18.3%	17.3%	64.4%	100%
2012	18.5%	17.8%	63.7%	100%
2013	19.1%	18.4%	62.5%	100%
2014	19.4%	18.1%	62.5%	100%
2015	19.7%	17.8%	62.5%	100%
2016*	19.0%	18.4%	62.6%	100%

* Accident year 2016 experience is partial in that it only reflects experience from policy year 2015.

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

Source: WCIRB unit statistical data

Percentage of Claims Open by Injury Type and Region

Permanent Partial & Temporary

		Policy Year							Latest Year Reported Claim Distribution
Report Level	Region*	2009	2010	2011	2012	2013	2014	2015	
Permanent Partial									
1	Bay Area	91%	90%	88%	86%	85%	84%	82%	15%
1	Los Angeles	91%	89%	88%	85%	84%	83%	79%	54%
1	Remainder of CA	89%	88%	87%	84%	82%	82%	80%	31%
	ALL REGIONS COMBINED	90%	89%	88%	85%	84%	83%	80%	100%
2	Bay Area	70%	68%	65%	62%	62%	59%		14%
2	Los Angeles	74%	72%	68%	63%	63%	60%		55%
2	Remainder of CA	69%	67%	63%	61%	60%	57%		30%
	ALL REGIONS COMBINED	72%	70%	66%	62%	62%	59%		100%
3	Bay Area	50%	47%	45%	42%	41%			14%
3	Los Angeles	57%	52%	49%	45%	45%			55%
3	Remainder of CA	50%	46%	43%	41%	39%			31%
	ALL REGIONS COMBINED	54%	50%	47%	44%	42%			100%
Temporary									
Report Level	Region*	2009	2010	2011	2012	2013	2014	2015	Latest Year Reported Claim Distribution
1	Bay Area	44%	44%	44%	46%	44%	41%	40%	18%
1	Los Angeles	49%	50%	49%	51%	53%	50%	49%	46%
1	Remainder of CA	40%	41%	42%	43%	45%	42%	41%	37%
	ALL REGIONS COMBINED	45%	46%	45%	47%	48%	45%	45%	100%
2	Bay Area	23%	26%	26%	27%	23%	23%		17%
2	Los Angeles	31%	32%	32%	33%	32%	30%		46%
2	Remainder of CA	23%	24%	26%	26%	26%	24%		37%
	ALL REGIONS COMBINED	27%	28%	29%	29%	28%	27%		100%
3	Bay Area	14%	14%	15%	15%	13%			17%
3	Los Angeles	21%	22%	21%	20%	19%			46%
3	Remainder of CA	14%	15%	16%	15%	14%			37%
	ALL REGIONS COMBINED	17%	18%	18%	17%	16%			100%

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

Percentage of Claim Count and Average Severity by Method of Settlement

Geographic Region: All Regions Combined

Policy Year 2010							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	60.8%	24,684	29,332	54,016	---	---	---
Stipulated Award	10.9%	18,502	17,236	35,738	---	---	---
All Other Settlements	28.3%	19,628	18,523	38,150	---	---	---
Total/Average	100.0%	22,582	24,959	47,541	---	---	---
Policy Year 2011							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	57.8%	24,578	28,206	52,784	-0.4%	-3.8%	-2.3%
Stipulated Award	11.0%	18,741	16,784	35,526	1.3%	-2.6%	-0.6%
All Other Settlements	31.3%	21,366	20,589	41,955	8.9%	11.2%	10.0%
Total/Average	100.0%	22,933	24,570	47,503	1.6%	-1.6%	-0.1%
Policy Year 2012							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	58.1%	23,200	26,737	49,937	-5.6%	-5.2%	-5.4%
Stipulated Award	11.0%	17,044	15,359	32,403	-9.1%	-8.5%	-8.8%
All Other Settlements	30.9%	20,907	19,983	40,890	-2.2%	-2.9%	-2.5%
Total/Average	100.0%	21,813	23,395	45,209	-4.9%	-4.8%	-4.8%
Policy Year 2013							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	64.1%	24,087	25,999	50,086	3.8%	-2.8%	0.3%
Stipulated Award	11.8%	17,914	14,353	32,267	5.1%	-6.6%	-0.4%
All Other Settlements	24.1%	21,335	19,704	41,039	2.1%	-1.4%	0.4%
Total/Average	100.0%	22,696	23,108	45,804	4.0%	-1.2%	1.3%

Source: closed permanent disability claims from third report level unit statistical data

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

Policy Year 2010							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	54.8%	28,578	30,215	58,793	---	---	---
Stipulated Award	17.3%	19,337	14,290	33,628	---	---	---
All Other Settlements	<u>27.8%</u>	<u>21,423</u>	<u>19,983</u>	<u>41,406</u>	<u>---</u>	<u>---</u>	<u>---</u>
Total/Average	100.0%	24,985	24,607	49,592	---	---	---
Policy Year 2011							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	54.6%	29,056	30,345	59,401	1.7%	0.4%	1.0%
Stipulated Award	12.9%	18,366	15,753	34,119	-5.0%	10.2%	1.5%
All Other Settlements	<u>32.5%</u>	<u>23,236</u>	<u>20,646</u>	<u>43,882</u>	<u>8.5%</u>	<u>3.3%</u>	<u>6.0%</u>
Total/Average	100.0%	25,787	25,313	51,100	3.2%	2.9%	3.0%
Policy Year 2012							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	53.4%	27,688	29,431	57,120	-4.7%	-3.0%	-3.8%
Stipulated Award	14.3%	18,353	14,901	33,254	-0.1%	-5.4%	-2.5%
All Other Settlements	<u>32.4%</u>	<u>23,890</u>	<u>20,435</u>	<u>44,325</u>	<u>2.8%</u>	<u>-1.0%</u>	<u>1.0%</u>
Total/Average	100.0%	25,128	24,447	49,575	-2.6%	-3.4%	-3.0%
Policy Year 2013							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	59.6%	29,892	29,785	59,677	8.0%	1.2%	4.5%
Stipulated Award	14.7%	20,521	14,727	35,248	11.8%	-1.2%	6.0%
All Other Settlements	<u>25.7%</u>	<u>22,750</u>	<u>21,651</u>	<u>44,401</u>	<u>-4.8%</u>	<u>6.0%</u>	<u>0.2%</u>
Total/Average	100.0%	26,683	25,485	52,168	6.2%	4.2%	5.2%

Source: closed permanent disability claims from third report level unit statistical data

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

Policy Year 2010							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	62.0%	23,759	28,835	52,594	---	---	---
Stipulated Award	8.6%	18,292	19,369	37,662	---	---	---
All Other Settlements	29.4%	18,515	17,991	36,506	---	---	---
Total/Average	100.0%	21,750	24,837	46,587	---	---	---
Policy Year 2011							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	58.0%	23,023	26,508	49,531	-3.1%	-8.1%	-5.8%
Stipulated Award	9.8%	18,976	17,627	36,603	3.7%	-9.0%	-2.8%
All Other Settlements	32.2%	20,407	21,147	41,554	10.2%	17.5%	13.8%
Total/Average	100.0%	21,784	23,911	45,695	0.2%	-3.7%	-1.9%
Policy Year 2012							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	58.7%	21,390	24,199	45,589	-7.1%	-8.7%	-8.0%
Stipulated Award	9.8%	16,832	15,488	32,320	-11.3%	-12.1%	-11.7%
All Other Settlements	31.5%	20,201	19,906	40,107	-1.0%	-5.9%	-3.5%
Total/Average	100.0%	20,570	21,996	42,567	-5.6%	-8.0%	-6.8%
Policy Year 2013							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	65.7%	22,163	23,595	45,758	3.6%	-2.5%	0.4%
Stipulated Award	10.3%	17,871	14,939	32,810	6.2%	-3.5%	1.5%
All Other Settlements	24.0%	20,947	19,587	40,534	3.7%	-1.6%	1.1%
Total/Average	100.0%	21,429	21,740	43,169	4.2%	-1.2%	1.4%

**Includes Los Angeles County and remainder of Los Angeles Basin

Source: closed permanent disability claims from third report level unit statistical data

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

Policy Year 2010							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	61.9%	24,433	29,741	54,174	---	---	---
Stipulated Award	11.3%	18,108	16,910	35,018	---	---	---
All Other Settlements	26.8%	20,657	18,697	39,353	---	---	---
Total/Average	100.0%	22,708	25,337	48,045	---	---	---
Policy Year 2011							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	58.7%	25,188	29,996	55,184	3.1%	0.9%	1.9%
Stipulated Award	12.0%	18,615	16,183	34,798	2.8%	-4.3%	-0.6%
All Other Settlements	29.2%	22,134	19,582	41,715	7.1%	4.7%	6.0%
Total/Average	100.0%	23,504	25,290	48,794	3.5%	-0.2%	1.6%
Policy Year 2012							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	59.1%	24,393	29,895	54,288	-3.2%	-0.3%	-1.6%
Stipulated Award	11.6%	16,613	15,433	32,045	-10.8%	-4.6%	-7.9%
All Other Settlements	29.3%	20,682	19,895	40,578	-6.6%	1.6%	-2.7%
Total/Average	100.0%	22,401	25,283	47,684	-4.7%	0.0%	-2.3%
Policy Year 2013							
	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	63.5%	24,961	28,468	53,429	2.3%	-4.8%	-1.6%
Stipulated Award	13.0%	16,719	13,431	30,150	0.6%	-13.0%	-5.9%
All Other Settlements	23.6%	21,316	18,999	40,316	3.1%	-4.5%	-0.6%
Total/Average	100.0%	23,034	24,288	47,322	2.8%	-3.9%	-0.8%

Source: closed permanent disability claims from third report level unit statistical data

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

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

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

Source: DWC via Commission on Health and Safety & Workers' Compensation 2017 Annual Report

Quarterly Expedited Hearings by Region

<u>Time Period</u>	<u>Northern California</u>	<u>Central California</u>	<u>Southern California</u>	<u>Expedited Hearing</u>	<u>Change from Same Quarter in Prior Year</u>
1st Qtr 2011	---	---	---	2,503	---
2nd Qtr 2011	---	---	---	2,098	---
3rd Qtr 2011	---	---	---	2,462	---
4th Qtr 2011	---	---	---	2,439	---
1st Qtr 2012	---	---	---	2,480	-0.9%
2nd Qtr 2012	---	---	---	2,525	20.4%
3rd Qtr 2012	---	---	---	3,786	53.8%
4th Qtr 2012	---	---	---	2,673	9.6%
1st Qtr 2013	---	---	---	3,480	40.3%
2nd Qtr 2013	---	---	---	3,615	43.2%
3rd Qtr 2013	---	---	---	4,109	8.5%
4th Qtr 2013	---	---	---	4,013	50.1%
1st Qtr 2014	---	---	---	3,813	9.6%
2nd Qtr 2014	14.4%	24.6%	60.9%	4,463	23.5%
3rd Qtr 2014	16.6%	23.5%	59.8%	4,404	7.2%
4th Qtr 2014	16.9%	16.8%	66.3%	3,926	-2.2%
1st Qtr 2015	15.9%	18.2%	65.9%	4,062	6.5%
2nd Qtr 2015	18.0%	18.0%	63.9%	3,993	-10.5%
3rd Qtr 2015	17.6%	20.1%	62.3%	4,222	-4.1%
4th Qtr 2015	19.1%	20.3%	60.6%	4,252	8.3%
1st Qtr 2016	18.4%	20.7%	60.8%	4,507	11.0%
2nd Qtr 2016	16.7%	20.5%	62.8%	4,631	16.0%
3rd Qtr 2016	17.5%	20.3%	62.2%	4,764	12.8%
4th Qtr 2016	18.3%	20.1%	61.6%	4,569	7.5%
1st Qtr 2017	19.1%	20.3%	60.6%	4,983	10.6%
2nd Qtr 2017	16.8%	17.8%	65.4%	4,990	7.8%
3rd Qtr 2017	16.8%	15.3%	67.9%	5,041	5.8%
4th Qtr 2017	16.5%	15.3%	68.2%	5,155	12.8%
1st Qtr 2018	20.0%	16.4%	63.6%	5,633	13.0%
2nd Qtr 2018	19.7%	14.8%	65.5%	5,768	15.6%

Source: DWC

Quarterly Expedited Hearings - DOR Reasons by Region

Northern California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	77.4%	18.1%	4.5%
2015	76.4%	19.9%	3.7%
2016	77.6%	19.2%	3.2%
2017	77.5%	20.5%	2.0%
1Q18-2Q18	79.6%	18.6%	1.9%

Central California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	86.8%	12.2%	1.0%
2015	84.6%	14.2%	1.2%
2016	87.3%	12.0%	0.7%
2017	84.8%	14.3%	0.9%
1Q18-2Q18	84.8%	14.9%	0.3%

Southern California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	70.0%	19.4%	10.7%
2015	65.4%	20.5%	14.1%
2016	69.1%	18.9%	12.0%
2017	71.5%	18.6%	9.9%
1Q18-2Q18	74.1%	17.0%	8.9%

Source: DWC

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

<u>Calendar Year</u>	<u>Number of Lien Decisions (in 000s)</u>	<u>Year-to-Year Change</u>
1993	18.4	---
1994	26.3	42.9%
1995	33.6	27.8%
1996	33.9	0.9%
1997	27.1	-20.1%
1998	19.3	-28.8%
1999	17.6	-8.8%
2000	15.1	-14.2%
2001	14.8	-2.0%
2002	16.6	12.2%
2003	16.5	-0.6%
2004	21.2	28.5%
2005	24.3	14.6%
2006	28.3	16.5%
2007	35.2	24.4%
2008*	34.5	-2.0%
2009	28.5	-17.4%
2010	37.1	30.2%
2011	41.4	11.6%
2012	64.3	55.3%
2013	65.8	2.3%
2014	58.3	-11.4%
2015	64.4	10.5%
2016	56.1	-12.9%
2017	52.1	-7.1%

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

Source: DWC via Commission on Health and Safety & Workers' Compensation 2017 Annual Report

Liens Filed Counts*

Counts by Region**

<u>Time Period</u>	<u>Bay Area</u>	<u>Central Coast/ Valley</u>	<u>Los Angeles County</u>	<u>Remainder of LA Basin</u>	<u>Remaining CA Zip Codes</u>	<u>Sacramento</u>	<u>San Diego County</u>	<u>Total</u>
2011	18,723	24,414	283,774	114,554	2,535	3,934	15,922	463,856
1st Qtr 2012	5,490	7,245	97,245	38,034	895	1,248	4,936	155,093
2nd Qtr 2012	5,467	8,970	122,040	44,065	1,102	1,322	4,991	187,957
3rd Qtr 2012	6,434	15,289	207,639	85,152	698	1,407	6,611	323,230
4th Qtr 2012	10,397	25,730	342,549	123,129	1,119	1,557	8,523	513,004
1st Qtr 2013	1,232	2,193	46,830	17,032	230	268	1,312	69,097
2nd Qtr 2013	1,450	1,562	18,947	6,917	211	339	684	30,110
3rd Qtr 2013	1,607	1,795	25,999	9,855	247	410	991	40,904
4th Qtr 2013	1,928	2,025	29,537	10,893	276	358	1,136	46,153
1st Qtr 2014	1,841	2,029	25,668	10,117	239	384	1,165	41,443
2nd Qtr 2014	1,697	2,306	29,417	11,942	265	354	1,263	47,244
3rd Qtr 2014	1,941	1,996	29,665	12,198	355	424	1,378	47,957
4th Qtr 2014	1,690	2,371	34,772	12,469	374	384	1,488	53,548
1st Qtr 2015	2,071	3,058	45,827	18,016	431	488	2,133	72,024
2nd Qtr 2015	2,370	4,218	54,147	22,198	501	500	2,787	86,721
3rd Qtr 2015	2,428	4,977	61,619	24,827	691	526	3,047	98,115
4th Qtr 2015	2,338	4,991	68,843	26,571	686	495	3,085	107,009
1st Qtr 2016	2,884	5,410	67,259	27,326	672	538	3,931	108,020
2nd Qtr 2016	2,543	5,112	66,511	26,852	536	506	3,912	105,972
3rd Qtr 2016	2,243	4,167	45,707	20,136	420	462	3,404	76,539
4th Qtr 2016	1,872	4,433	66,169	25,942	506	397	4,400	103,719
1st Qtr 2017	1,228	1,872	24,947	9,594	334	312	1,380	39,667
2nd Qtr 2017	1,537	2,211	33,194	11,969	349	369	1,764	51,393
3rd Qtr 2017	1,700	2,047	29,215	10,487	298	419	1,149	45,315
4th Qtr 2017	1,535	1,804	26,566	9,914	313	366	1,176	41,674
1st Qtr 2018	1,501	1,575	28,754	10,848	312	406	1,314	44,710
2nd Qtr 2018	1,264	1,538	23,697	9,034	312	338	986	37,169

Counts by Type

<u>Time Period</u>	<u>Interpreter</u>	<u>Medical</u>	<u>Medical-Legal</u>	<u>Copy Service</u>	<u>Other***</u>	<u>Total</u>
2011	28,721	292,982	39,569	539	102,045	463,856
1st Qtr 2012	12,937	85,152	22,931	139	33,934	155,093
2nd Qtr 2012	17,162	106,336	37,440	65	26,954	187,957
3rd Qtr 2012	46,095	182,474	64,912	91	29,658	323,230
4th Qtr 2012	47,427	317,241	80,916	62	67,358	513,004
1st Qtr 2013	2,397	45,631	11,411	11	9,647	69,097
2nd Qtr 2013	831	22,480	587	20	6,192	30,110
3rd Qtr 2013	484	32,356	653	23	7,388	40,904
4th Qtr 2013	378	37,515	537	8	7,715	46,153
1st Qtr 2014	421	33,105	397	16	7,504	41,443
2nd Qtr 2014	275	38,534	320	10	8,105	47,244
3rd Qtr 2014	140	39,810	179	7	7,821	47,957
4th Qtr 2014	156	45,440	160	4	7,788	53,548
1st Qtr 2015	143	60,155	216	18	11,492	72,024
2nd Qtr 2015	152	74,037	268	7	12,257	86,721
3rd Qtr 2015	134	84,290	191	7	13,493	98,115
4th Qtr 2015	101	91,820	236	15	14,837	107,009
1st Qtr 2016	60	93,393	233	5	14,329	108,020
2nd Qtr 2016	90	89,781	467	6	15,628	105,972
3rd Qtr 2016	64	64,924	262	11	11,278	76,539
4th Qtr 2016	94	91,867	68	4	11,686	103,719
1st Qtr 2017	29	33,952	19	3	5,664	39,667
2nd Qtr 2017	33	43,470	34	5	7,851	51,393
3rd Qtr 2017	77	37,815	31	0	7,392	45,315
4th Qtr 2017	65	33,876	18	1	7,714	41,674
1st Qtr 2018	64	36,674	29	2	7,941	44,710
2nd Qtr 2018	103	29,276	22	0	7,768	37,169

* Lien Counts exclude SDI/EDD Liens

** Regions reflect the following WCAB Office mapping: Bay Area - Oakland, San Jose, San Francisco; Central Coast/Valley - Bakersfield, Fresno, Goleta, Grover Beach, Salinas, Stockton; Los Angeles County - Long Beach, Los Angeles, Marina Del Rey, Pomona, Van Nuys; Remainder of LA Basin - Anaheim, Oxnard, Riverside, San Bernardino, Santa Ana; Remaining CA Zip Codes - Eureka, Redding, San Luis Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego

***Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens

Source: EAMS Liens Data

Liens Filed Counts*

Counts by Region**

<u>Month</u>	<u>Bay Area</u>	<u>Central Coast/ Valley</u>	<u>Los Angeles County</u>	<u>Remainder of LA Basin</u>	<u>Remaining CA Zip Codes</u>	<u>Sacramento</u>	<u>San Diego County</u>	<u>Total</u>
Jul-16	769	1,332	14,750	6,021	126	138	1,048	24,184
Aug-16	829	1,419	16,029	7,267	156	177	1,086	26,963
Sep-16	645	1,416	14,928	6,848	138	147	1,270	25,392
Oct-16	625	1,312	15,594	6,313	136	157	1,082	25,219
Nov-16	528	1,224	17,984	7,190	200	86	1,494	28,706
Dec-16	719	1,897	32,591	12,439	170	154	1,824	49,794
Jan-17	210	347	5,362	2,380	69	64	316	8,748
Feb-17	421	598	8,251	3,112	122	118	453	13,075
Mar-17	597	927	11,334	4,102	143	130	611	17,844
Apr-17	474	764	11,573	4,118	110	106	640	17,785
May-17	519	835	11,395	4,175	121	132	573	17,750
Jun-17	544	612	10,226	3,676	118	131	551	15,858
Jul-17	530	548	10,092	3,636	101	130	426	15,463
Aug-17	594	703	10,712	3,690	109	146	412	16,366
Sep-17	576	796	8,411	3,161	88	143	311	13,486
Oct-17	514	773	9,856	3,585	100	128	413	15,369
Nov-17	451	496	8,506	3,214	110	119	371	13,267
Dec-17	570	535	8,204	3,115	103	119	392	13,038
Jan-18	473	565	9,986	3,636	98	123	457	15,338
Feb-18	490	479	8,982	3,451	101	140	481	14,124
Mar-18	538	531	9,786	3,761	113	143	376	15,248
Apr-18	387	546	8,851	3,375	97	90	361	13,707
May-18	477	513	8,380	3,433	112	126	308	13,349
Jun-18	400	479	6,466	2,226	103	122	317	10,113

Counts by Type

<u>Month</u>	<u>Interpreter</u>	<u>Medical</u>	<u>Medical-Legal</u>	<u>Copy Service</u>	<u>Other***</u>	<u>Total</u>
Jul-16	15	20,525	91	6	3,547	24,184
Aug-16	37	22,813	95	5	4,013	26,963
Sep-16	12	21,586	76	0	3,718	25,392
Oct-16	31	21,123	34	2	4,029	25,219
Nov-16	27	25,212	10	1	3,456	28,706
Dec-16	36	45,532	24	1	4,201	49,794
Jan-17	9	7,460	5	2	1,272	8,748
Feb-17	8	11,103	10	1	1,953	13,075
Mar-17	12	15,389	4	0	2,439	17,844
Apr-17	13	15,188	12	3	2,569	17,785
May-17	7	14,838	14	1	2,890	17,750
Jun-17	13	13,444	8	1	2,392	15,858
Jul-17	37	13,022	9	0	2,395	15,463
Aug-17	24	13,599	11	0	2,732	16,366
Sep-17	16	11,194	11	0	2,265	13,486
Oct-17	13	12,692	5	1	2,658	15,369
Nov-17	19	10,666	5	0	2,577	13,267
Dec-17	33	10,518	8	0	2,479	13,038
Jan-18	41	12,695	12	1	2,589	15,338
Feb-18	17	11,551	9	1	2,546	14,124
Mar-18	6	12,428	8	0	2,806	15,248
Apr-18	18	10,714	11	0	2,964	13,707
May-18	25	10,744	8	0	2,572	13,349
Jun-18	60	7,818	3	0	2,232	10,113

* Lien Counts exclude SDI/EDD Liens

** Regions reflect the following WCAB Office mapping: Bay Area - Oakland, San Jose, San Francisco; Central Coast/Valley - Bakersfield, Fresno, Goleta, Grover Beach, Salinas, Stockton; Los Angeles County - Long Beach, Los Angeles, Marina Del Rey, Pomona, Van Nuys; Remainder of LA Basin - Anaheim, Oxnard, Riverside, San Bernardino, Santa Ana; Remaining CA Zip Codes - Eureka, Redding, San Luis Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego

***Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens

Source: EAMS Liens Data

Medicare Set-aside Costs by Age Interval

<u>First Survey Level</u>		Percentage of PD Claims Involving									
		Set-aside Claims				Average				Median	
Accident Year		59 or		60 or		Set-aside Amount		Set-aside Amount		Set-aside Amount	
		Younger	Older	Younger	Older	59 or	60 or	Younger	Older	59 or	60 or
						Younger	Older			Younger	Older
2011	0.9%	10.5%	1.9%	54,190	34,138	22,743	12,634	20,247			
2012	0.5%	6.6%	1.1%	93,330	35,779	44,154	28,224	28,615			
2013	0.8%	11.5%	2.0%	85,397	34,890	28,729	22,656	25,166			
2014	0.8%	9.2%	1.7%	47,245	40,012	41,975	25,230	37,439			
2015	0.1%	7.4%	0.9%	38,145	32,853	38,145	27,533	27,533			
<u>Second Survey Level</u>		Percentage of PD Claims Involving									
		Set-aside Claims				Average				Median	
Accident Year		59 or		60 or		Set-aside Amount		Set-aside Amount		Set-aside Amount	
		Younger	Older	Younger	Older	59 or	60 or	Younger	Older	59 or	60 or
						Younger	Older			Younger	Older
2011	1.6%	16.8%	3.1%	66,781	33,195	31,500	21,755	29,410			
2012	1.3%	14.3%	2.7%	94,412	43,793	37,097	33,038	35,237			
2013	1.5%	16.0%	3.1%	76,734	44,122	40,222	25,672	32,569			
2014	1.9%	15.1%	3.4%	95,430	40,321	52,572	28,736	39,474			

Source: WCIRB Permanent Disability Claim Survey.

Medicare Set-aside Costs By Permanent Disability Rating Interval

First Survey Level												
Percentage of PD Claims Involving Set-aside Claims					Average Set-aside Amount				Median Set-aside Amount			
Accident Year	Less Than 25%	25% to 69%	70% or More	Average	Less Than 25%	25% to 69%	70% or More	Average	Less Than 25%	25% to 69%	70% or More	Average
2011	1.0%	4.1%	5.3%	1.9%	20,777	43,933	576,974	43,194	14,930	28,586	576,974	20,247
2012	0.3%	3.2%	7.4%	1.1%	19,076	51,369	278,838	57,555	16,902	31,609	278,838	28,615
2013	1.0%	3.8%	9.1%	2.0%	33,622	39,803	307,815	53,190	20,994	25,166	204,096	25,166
2014	0.5%	4.0%	10.0%	1.7%	28,092	43,308	90,827	42,880	21,065	37,439	61,277	37,439
2015	0.6%	3.3%	0.0%	0.9%	23,300	46,647	0	33,514	19,477	44,050	N/A	27,533

Second Survey Level												
Percentage of PD Claims Involving Set-aside Claims					Average Set-aside Amount				Median Set-aside Amount			
Accident Year	Less Than 25%	25% to 69%	70% or More	Average	Less Than 25%	25% to 69%	70% or More	Average	Less Than 25%	25% to 69%	70% or More	Average
2011	1.5%	6.7%	9.1%	3.1%	40,316	51,839	88,547	49,020	16,187	32,617	84,036	29,410
2012	1.0%	6.4%	21.1%	2.7%	32,197	54,702	249,859	65,801	23,309	35,237	151,666	35,237
2013	1.3%	6.2%	14.8%	3.1%	26,167	59,207	171,049	58,314	20,509	38,731	174,060	32,569
2014	1.1%	6.8%	29.3%	3.4%	38,337	53,027	217,650	67,392	37,487	37,004	153,195	39,474

Source: WCIRB Permanent Disability Claim Survey.

IMR Filed Counts

Quarterly IMRs Filed

<u>Year & Quarter</u>	<u>IMRs Filed</u>	Change from Same Quarter in <u>Prior Year</u>	<u>Eligible IMRs</u>	Change from Same Quarter in <u>Prior Year</u>
2013 1Q & 2Q	878	---	---	---
2013 3Q	31,950	---	---	---
2013 4Q	51,092	---	---	---
2014 1Q	49,929	---	17,421	---
2014 2Q	60,023	---	24,417	---
2014 3Q	59,678	86.8%	54,959	---
2014 4Q	58,577	14.7%	46,512	---
2015 1Q	61,142	22.5%	36,314	108.4%
2015 2Q	65,418	9.0%	48,628	99.2%
2015 3Q	65,889	10.4%	40,603	-26.1%
2015 4Q	61,330	4.7%	39,950	-14.1%
2016 1Q	60,772	-0.6%	41,023	13.0%
2016 2Q	64,852	-0.9%	44,287	-8.9%
2016 3Q	62,411	-5.3%	43,892	8.1%
2016 4Q	61,318	0.0%	43,618	9.2%
2017 1Q	61,973	2.0%	43,480	6.0%
2017 2Q	62,773	-3.2%	44,489	0.5%
2017 3Q	63,380	1.6%	43,822	-0.2%
2017 4Q	60,124	-1.9%	43,370	-0.6%
2018 1Q	64,533	4.1%	47,336	8.9%
2018 2Q	66,449	5.9%	48,854	9.8%

Yearly IMR Counts

	<u>Original IMR Applications</u>	<u>Duplicates</u>	<u>Ineligible</u>	<u>Total Rejected</u>	<u>Eligible IMRs</u>	Eligible IMR <u>Yearly Change</u>
2013 IMR Counts	83,920	15,560	15,516	31,076	52,844	---
2014 IMR Counts	228,084	56,503	28,272	84,775	143,309	171.2%
2015 IMR Counts	253,776	58,106	30,175	88,281	165,495	15.5%
2016 IMR Counts	249,353	53,314	23,219	76,533	172,820	4.4%
2017 IMR Counts	248,250	55,670	17,419	73,089	175,161	1.4%

Source: DWC Collected from IMR Vendor

DWC Via Commission on Health and Safety & Workers' Compensation 2017 Annual Report

Reported Indemnity Claim Count Development – Statewide

Accident Year	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>
2000									1.000
2001								0.999	0.999
2002							1.000	0.999	1.000
2003						0.998	0.999	0.999	0.999
2004					1.000	0.999	0.999	0.999	1.000
2005				1.001	1.001	1.000	1.001	1.000	1.000
2006			1.008	1.004	1.002	1.001	1.001	1.000	1.001
2007		1.036	1.011	1.006	1.003	1.002	1.000	1.000	1.001
2008	6.226	1.059	1.017	1.009	1.004	1.003	1.001	1.001	1.001
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	7.706	1.105	1.023	1.010					
2015	8.022	1.106	1.020						
2016	7.717	1.110							
2017	7.812								
Latest Year									
I. <u>Age-to-Age</u>									
7.812	1.110	1.020	1.010	1.005	1.003	1.002	1.001	1.000	
II. <u>Age-to-Ultimate</u>									
9.049	1.158	1.044	1.023	1.013	1.008	1.005	1.003	1.002	1.001
III. <u>Estimated Percent of Ultimate Indemnity Claims Reported</u>									
11.1%	86.3%	95.8%	97.7%	98.7%	99.2%	99.5%	99.7%	99.8%	99.9%

Reported Total Claim Count Development – Statewide

Accident Year	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>
2000									1.000
2001								1.000	1.001
2002							1.001	1.001	1.001
2003						1.002	1.001	1.001	1.000
2004					1.004	1.001	1.001	1.000	1.000
2005				1.006	1.001	1.002	1.001	1.001	1.001
2006			1.012	1.004	1.003	1.001	1.001	1.001	1.001
2007		1.040	1.009	1.005	1.003	1.002	1.001	1.001	1.001
2008	6.680	1.041	1.010	1.006	1.003	1.002	1.001	1.001	1.001
2009	7.020	1.044	1.013	1.005	1.004	1.002	1.002	1.001	1.000
2010	7.240	1.047	1.011	1.006	1.003	1.002	1.002	1.001	
2011	7.157	1.050	1.014	1.006	1.003	1.002	1.001		
2012	7.190	1.061	1.013	1.006	1.004	1.002			
2013	7.739	1.054	1.014	1.006	1.003				
2014	7.427	1.059	1.012	1.006					
2015	7.469	1.056	1.012						
2016	7.372	1.058							
2017	7.617								
Latest Year									
I. <u>Age-to-Age</u>									
7.617	1.058	1.012	1.006	1.003	1.002	1.001	1.001	1.000	
II. <u>Age-to-Ultimate</u>									
8.288	1.088	1.029	1.017	1.011	1.007	1.005	1.004	1.003	1.002
III. <u>Estimated Percent of Ultimate Total Claims Reported</u>									
12.1%	91.9%	97.2%	98.4%	99.0%	99.3%	99.5%	99.6%	99.7%	99.8%

Source: WCIRB quarterly calls for experience

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

Accident Year	Development								
	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>
2000									18.5%
2001								19.7%	17.9%
2002							22.8%	20.5%	17.0%
2003						25.7%	22.2%	18.1%	18.3%
2004					28.0%	22.2%	20.3%	19.3%	18.8%
2005				29.9%	24.2%	22.4%	21.2%	19.7%	24.5%
2006			29.2%	27.0%	25.7%	21.6%	21.0%	24.6%	20.5%
2007		28.0%	28.0%	27.2%	24.2%	23.1%	27.0%	22.4%	22.6%
2008	30.8%	26.4%	27.1%	26.6%	25.4%	28.2%	25.5%	25.1%	24.1%
2009	28.9%	25.5%	26.6%	26.9%	28.7%	26.7%	27.3%	26.0%	24.0%
2010	29.1%	26.2%	27.1%	30.7%	29.0%	28.9%	28.6%	26.6%	
2011	28.8%	26.7%	30.0%	31.0%	30.6%	29.4%	29.0%		
2012	28.4%	28.7%	31.2%	31.9%	31.8%	31.4%			
2013	28.3%	30.2%	32.4%	34.2%	34.1%				
2014	28.7%	31.6%	33.5%	36.2%					
2015	29.3%	33.4%	36.5%						
2016	30.8%	35.8%							
2017	32.8%								

Source: WCIRB quarterly calls for experience

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

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
2007	4.5%	8.5%	11.6%	12.4%	9.7%	7.5%	7.7%	6.9%	8.0%	7.1%	9.1%	7.5%	7.4%	7.7%	7.8%
2008	4.7%	8.3%	11.1%	11.2%	9.2%	7.0%	6.6%	6.7%	7.3%	7.5%	8.0%	7.3%	7.3%	7.7%	7.6%
2009	4.0%	7.9%	10.3%	10.6%	8.5%	6.8%	6.6%	6.6%	7.0%	7.7%	7.8%	7.3%	7.9%	7.1%	7.7%
2010	4.1%	7.5%	10.5%	11.2%	8.6%	6.8%	7.2%	6.8%	7.6%	7.4%	7.9%	7.8%	9.1%	8.8%	9.3%
2011	4.3%	7.3%	10.6%	10.7%	8.7%	7.0%	7.3%	7.0%	8.5%	8.3%	9.2%	8.4%	8.5%	9.2%	9.1%
2012	4.3%	7.4%	10.4%	10.5%	9.1%	7.5%	8.2%	7.6%	8.6%	9.2%	9.3%	9.0%	9.3%	9.2%	9.5%
2013	4.2%	7.1%	10.3%	10.6%	9.3%	8.4%	8.6%	8.5%	9.1%	9.2%	9.7%	9.7%	10.1%	9.8%	10.3%
2014	4.1%	7.3%	10.2%	11.1%	9.5%	9.0%	8.8%	8.9%	9.3%	9.7%	10.2%	9.4%	10.9%	10.1%	11.0%
2015	4.0%	7.7%	10.2%	11.6%	10.5%	9.0%	9.3%	9.8%	10.9%	10.4%	10.9%	10.8%			
2016	4.3%	7.6%	10.9%	12.4%	11.4%	9.8%	10.6%	10.2%							
2017	4.8%	8.2%	12.2%	12.9%											

Note: All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 81% to 97% of the total California workers' compensation insured market measured using 2017 earned premium levels).

Source: WCIRB quarterly calls for experience

Reopening Rates Based on Unit Statistical Data

PY/RL	Reopening Rates						
	1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
2001	0.84%	0.50%	0.34%	0.30%	---	---	---
2002	0.92%	0.45%	0.35%	0.33%	0.24%	0.19%	0.16%
2003	0.68%	0.43%	0.38%	0.31%	0.24%	0.23%	0.18%
2004	0.60%	0.40%	0.32%	0.27%	0.27%	0.18%	0.12%
2005	0.63%	0.34%	0.29%	0.29%	0.25%	0.14%	0.11%
2006	0.62%	0.38%	0.39%	0.37%	0.22%	0.15%	0.13%
2007	0.64%	0.60%	0.53%	0.29%	0.23%	0.17%	0.14%
2008	1.24%	0.80%	0.38%	0.32%	0.27%	0.17%	0.14%
2009	1.22%	0.48%	0.40%	0.38%	0.26%	0.19%	
2010	0.74%	0.53%	0.45%	0.35%	0.26%		
2011	0.86%	0.60%	0.48%	0.40%			
2012	0.92%	0.60%	0.54%				
2013	0.89%	0.67%					
2014	0.84%						

PY/RL	Average Incurred for Reopened Claims						
	2nd	3rd	4th	5th	6th	7th	8th
2001	27,368	34,714	44,371	52,850	---	---	---
2002	30,525	32,543	44,273	59,359	63,946	79,544	76,263
2003	23,295	26,362	47,715	50,915	57,195	62,371	72,056
2004	20,348	27,536	35,748	50,349	50,964	71,644	75,968
2005	24,800	30,865	41,020	47,858	59,755	66,347	79,249
2006	25,237	29,803	36,576	45,402	62,900	65,690	76,528
2007	24,977	25,653	36,417	57,370	67,285	75,642	83,655
2008	17,783	22,985	45,903	58,719	65,007	79,550	109,922
2009	19,985	32,723	43,640	56,804	67,492	78,072	
2010	25,513	33,258	47,060	56,399	66,372		
2011	26,482	34,265	45,437	57,611			
2012	26,314	34,862	44,611				
2013	26,914	36,436					
2014	28,634						

Source: WCIRB unit statistical data

Reopening Rates by Injury Type

Permanent Indemnity								Temporary Indemnity							
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8
2001	3.10%	2.54%	1.65%	1.49%	---	---	---	2001	1.55%	0.92%	0.66%	0.43%	---	---	---
2002	6.37%	1.93%	1.74%	1.60%	1.13%	0.92%	0.76%	2002	1.63%	0.92%	0.55%	0.44%	0.25%	0.15%	0.13%
2003	2.51%	2.15%	1.96%	1.66%	1.23%	1.15%	0.86%	2003	1.24%	0.81%	0.62%	0.40%	0.26%	0.16%	0.14%
2004	2.08%	2.33%	1.75%	1.72%	1.57%	1.01%	0.71%	2004	1.11%	0.80%	0.60%	0.34%	0.30%	0.20%	0.10%
2005	2.73%	1.94%	2.00%	1.94%	1.60%	0.87%	0.65%	2005	1.17%	0.67%	0.48%	0.36%	0.28%	0.14%	0.11%
2006	2.34%	2.23%	2.30%	2.27%	1.47%	0.92%	0.77%	2006	1.14%	0.82%	0.57%	0.46%	0.28%	0.18%	0.14%
2007	2.47%	3.03%	2.82%	1.86%	1.32%	0.98%	0.77%	2007	1.20%	0.94%	0.71%	0.40%	0.28%	0.16%	0.13%
2008	4.02%	3.54%	2.17%	1.87%	1.44%	0.86%	0.73%	2008	1.67%	1.12%	0.57%	0.40%	0.29%	0.18%	0.12%
2009	3.81%	2.42%	1.91%	1.80%	1.26%	0.85%		2009	1.80%	0.81%	0.60%	0.47%	0.27%	0.24%	
2010	2.15%	2.23%	2.09%	1.56%	1.15%			2010	1.23%	0.91%	0.64%	0.50%	0.33%		
2011	2.68%	2.38%	2.20%	1.80%				2011	1.55%	1.04%	0.71%	0.51%			
2012	2.68%	2.85%	2.39%					2012	1.51%	0.98%	0.80%				
2013	3.35%	3.07%						2013	1.47%	1.17%					
2014	3.16%							2014	1.45%						

All Indemnity								Medical Only							
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8
2001	1.70%	1.26%	0.99%	0.86%	---	---	---	2001	0.66%	0.30%	0.13%	0.08%	---	---	---
2002	1.97%	1.13%	0.97%	0.93%	0.66%	0.52%	0.44%	2002	0.70%	0.26%	0.13%	0.08%	0.05%	0.04%	0.03%
2003	1.32%	1.10%	1.08%	0.91%	0.69%	0.63%	0.48%	2003	0.56%	0.26%	0.14%	0.08%	0.05%	0.05%	0.05%
2004	1.17%	1.09%	0.94%	0.83%	0.81%	0.54%	0.36%	2004	0.49%	0.23%	0.13%	0.08%	0.08%	0.04%	0.03%
2005	1.28%	0.90%	0.91%	0.91%	0.78%	0.43%	0.33%	2005	0.51%	0.21%	0.11%	0.10%	0.07%	0.03%	0.03%
2006	1.23%	1.09%	1.08%	1.10%	0.74%	0.48%	0.41%	2006	0.50%	0.21%	0.19%	0.14%	0.04%	0.03%	0.03%
2007	1.29%	1.37%	1.35%	0.93%	0.70%	0.51%	0.42%	2007	0.53%	0.42%	0.29%	0.09%	0.06%	0.04%	0.03%
2008	1.86%	1.66%	1.09%	0.97%	0.79%	0.49%	0.41%	2008	1.12%	0.58%	0.16%	0.10%	0.07%	0.04%	0.03%
2009	1.98%	1.19%	1.05%	1.01%	0.71%	0.53%		2009	1.07%	0.29%	0.18%	0.14%	0.07%	0.04%	
2010	1.32%	1.24%	1.16%	0.94%	0.70%			2010	0.62%	0.33%	0.19%	0.10%	0.07%		
2011	1.68%	1.40%	1.25%	1.05%				2011	0.68%	0.36%	0.18%	0.12%			
2012	1.67%	1.50%	1.39%					2012	0.75%	0.30%	0.19%				
2013	1.73%	1.70%						2013	0.68%	0.31%					
2014	1.70%							2014	0.63%						

All Claims							
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8
2001	0.84%	0.50%	0.34%	0.30%	---	---	---
2002	0.92%	0.45%	0.35%	0.33%	0.24%	0.19%	0.16%
2003	0.68%	0.43%	0.38%	0.31%	0.24%	0.23%	0.18%
2004	0.60%	0.40%	0.32%	0.27%	0.27%	0.18%	0.12%
2005	0.63%	0.34%	0.29%	0.29%	0.25%	0.14%	0.11%
2006	0.62%	0.38%	0.39%	0.37%	0.22%	0.15%	0.13%
2007	0.64%	0.60%	0.53%	0.29%	0.23%	0.17%	0.14%
2008	1.24%	0.80%	0.38%	0.32%	0.27%	0.17%	0.14%
2009	1.22%	0.48%	0.40%	0.38%	0.26%	0.19%	
2010	0.74%	0.53%	0.45%	0.35%	0.26%		
2011	0.86%	0.60%	0.48%	0.40%			
2012	0.92%	0.60%	0.54%				
2013	0.89%	0.67%					
2014	0.84%						

Note: Injury types are fixed at denominator age.

Source: WCIRB unit statistical data

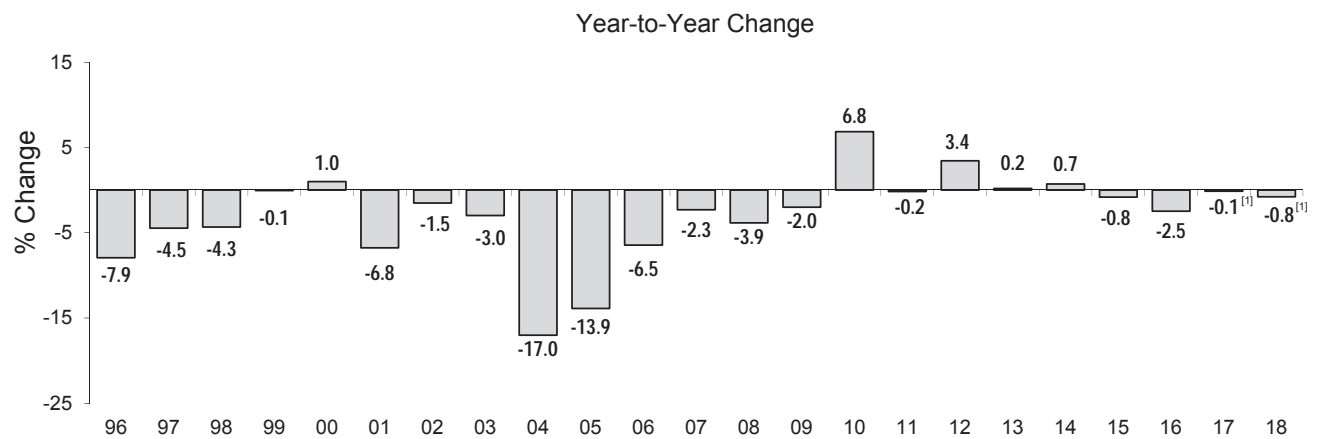
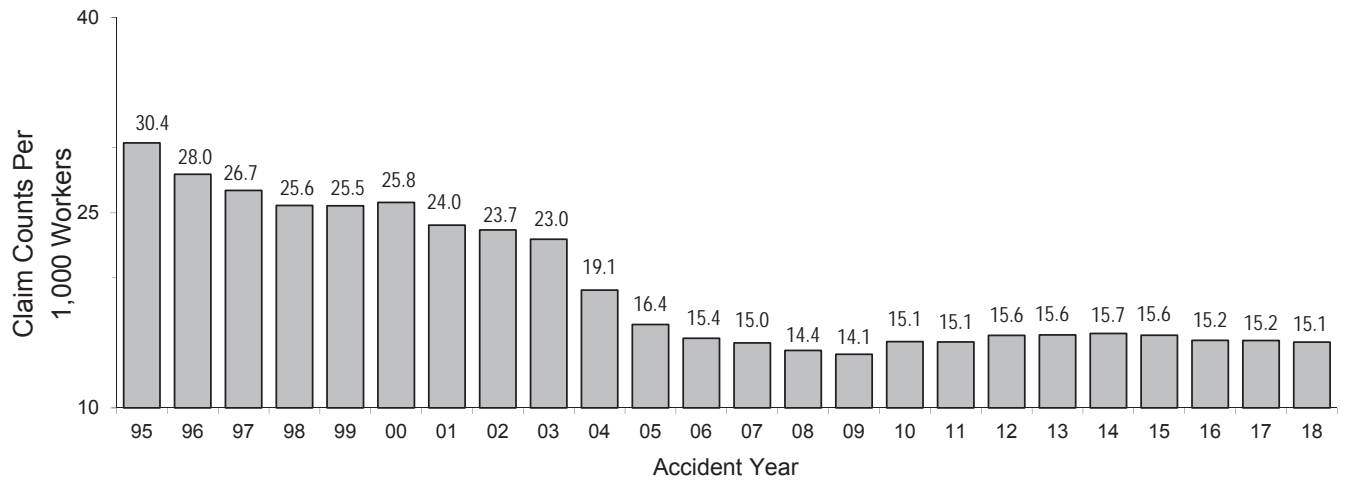
Closed-Closed Development Based on Unit Statistical Data

PY/RL	Developing Closed Claim Rates						
	1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
2001	16.66%	12.58%	9.61%	7.86%	---	---	---
2002	20.85%	13.76%	10.47%	10.22%	14.10%	7.81%	4.53%
2003	24.16%	13.85%	12.12%	18.44%	9.70%	5.04%	5.54%
2004	22.60%	14.45%	21.30%	9.15%	5.26%	5.26%	1.11%
2005	20.78%	20.68%	8.28%	4.98%	4.34%	1.36%	1.11%
2006	27.49%	9.95%	5.46%	4.42%	1.84%	1.49%	1.43%
2007	20.05%	6.62%	5.38%	2.53%	2.36%	1.90%	1.48%
2008	11.84%	6.47%	3.85%	3.43%	2.80%	2.08%	1.58%
2009	11.69%	5.58%	4.72%	3.83%	2.93%	2.23%	
2010	10.20%	6.10%	4.45%	3.36%	2.57%		
2011	10.88%	5.43%	3.76%	2.71%			
2012	10.42%	5.27%	3.97%				
2013	9.95%	5.69%					
2014	9.19%						

Closed-Closed Total Incurred Development as a Percent of Total Incurred Development on All Claims							
PY/RL	1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
2001	0.83%	2.11%	2.95%	6.25%	---	---	---
2002	0.78%	2.28%	5.14%	3.80%	8.49%	6.39%	4.49%
2003	1.43%	2.43%	5.04%	8.44%	6.10%	3.57%	4.00%
2004	1.64%	2.18%	6.20%	4.24%	3.13%	3.65%	3.14%
2005	1.49%	3.49%	2.91%	3.23%	3.48%	3.53%	3.54%
2006	1.93%	1.88%	2.61%	3.12%	3.18%	3.23%	5.20%
2007	1.43%	1.57%	2.46%	3.25%	4.55%	2.93%	5.55%
2008	0.99%	1.62%	2.32%	3.81%	4.41%	6.09%	5.39%
2009	1.01%	1.46%	2.96%	4.18%	4.71%	9.16%	
2010	0.87%	1.94%	3.53%	5.35%	7.31%		
2011	1.05%	2.26%	4.31%	5.75%			
2012	1.32%	3.07%	5.33%				
2013	1.41%	3.52%					
2014	1.62%						

Source: WCIRB unit statistical data

**California Workers' Compensation
Estimated Indemnity Claim Frequency by Accident Year
As of March 31, 2018**



^[1] The 2017 and 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.

2017 Accident Year Indemnity Claim Frequency Model
As of PY 2015 1st Set & June 2018 UCLA

AY	Annual % Changes Intra- Class Ind Freq	Annual Log Differences						
		Intra-Class Indemnity Frequency per \$M Exposure at PY 2016 Level			AY+1 Indemnity		Economic Variables (1st Prin. Comp.)	CalOSHA Dummy Variable
	Total	Total	Cumulative	Non-cum.	Benefit Level	Cumulative Injury Index		
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	-8.0%	-0.083	-0.029	-0.088	-0.007	0.059	-0.091	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.203	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.024	0.000
2004	-16.7%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.020	0.049	0.040	-0.084	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.308	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.3%	0.013	0.032	0.010	0.003	0.022	0.043	0.000
2012	4.6%	0.045	0.129	0.035	0.022	0.093	0.123	0.000
2013	0.5%	0.005	0.155	-0.015	0.071	0.170	0.151	0.000
2014	0.5%	0.005	0.093	-0.009	0.003	0.102	0.178	0.000
2015	-0.8%	-0.008	0.074	-0.022	0.002	0.096	0.194	0.000
2016*	-2.4%	-0.025	0.012	-0.032	0.004	0.044	0.124	0.000
2017	-0.6%	-0.006	-0.006	-0.006	0.004	0.000	0.140	0.000
2018	-0.6%	-0.006	-0.006	-0.006	0.004	0.000	0.142	0.000
2019	-1.2%	-0.012	-0.012	-0.012	0.004	0.000	0.083	0.000
2020	-2.5%	-0.025	-0.025	-0.025	0.004	0.000	-0.062	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020			
Std Err of Y Est	0.040			
R Squared	0.575			
No. of Observations	38			
Degrees of Freedom	33			
X Coefficient(s)	0.174	0.282	0.092	-0.132
Std Err of Coef.	0.073	0.062	0.044	0.078

Notes:

Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency.
The Indemnity Benefit Level change for Ogilvie & Almaraz / Guzman in 2009-2010 is not leading.
The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits.
The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03.
For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda Item III.
Economic variables are historical through 2017; June 2018 UCLA Anderson Forecasts for 2018 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 change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

Indemnity Claim Frequency History and Projections

AY	Intra-Class Indemnity Claim Frequency(a)	Inter-Class Indemnity Claim Frequency Index(b)	Overall Indemnity Claim Frequency	Annual Percent Changes		
				Intra-Class	Inter-Class	Overall
1979	0.564	0.921	0.680	---	---	---
1980	0.528	0.914	0.631	-6.54%	-0.75%	-7.24%
1981	0.509	0.900	0.599	-3.54%	-1.56%	-5.04%
1982	0.501	0.882	0.578	-1.59%	-2.00%	-3.56%
1983	0.532	0.873	0.607	6.20%	-0.98%	5.17%
1984	0.582	0.871	0.664	9.53%	-0.18%	9.32%
1985	0.594	0.867	0.674	2.05%	-0.51%	1.52%
1986	0.580	0.859	0.652	-2.39%	-0.92%	-3.28%
1987	0.589	0.854	0.658	1.53%	-0.56%	0.97%
1988	0.593	0.854	0.663	0.69%	-0.06%	0.64%
1989	0.608	0.853	0.678	2.47%	-0.08%	2.39%
1990	0.663	0.845	0.733	9.04%	-0.89%	8.07%
1991	0.665	0.832	0.724	0.28%	-1.58%	-1.30%
1992	0.591	0.820	0.634	-11.09%	-1.45%	-12.37%
1993	0.503	0.810	0.533	-14.91%	-1.25%	-15.98%
1994	0.439	0.809	0.465	-12.76%	-0.06%	-12.81%
1995	0.418	0.811	0.444	-4.64%	0.16%	-4.49%
1996	0.390	0.800	0.408	-6.78%	-1.25%	-7.94%
1997	0.377	0.791	0.390	-3.27%	-1.23%	-4.46%
1998	0.363	0.786	0.373	-3.76%	-0.60%	-4.34%
1999	0.368	0.774	0.373	1.45%	-1.48%	-0.05%
2000	0.383	0.752	0.377	4.02%	-2.91%	0.99%
2001	0.353	0.753	0.347	-7.99%	0.13%	-7.87%
2002	0.344	0.763	0.344	-2.31%	1.34%	-1.00%
2003	0.335	0.764	0.335	-2.85%	0.20%	-2.66%
2004	0.279	0.763	0.278	-16.65%	-0.21%	-16.83%
2005	0.241	0.760	0.240	-13.59%	-0.31%	-13.85%
2006	0.227	0.754	0.224	-5.69%	-0.81%	-6.46%
2007	0.224	0.749	0.219	-1.64%	-0.68%	-2.31%
2008	0.217	0.740	0.211	-2.71%	-1.18%	-3.85%
2009	0.217	0.727	0.206	-0.20%	-1.82%	-2.02%
2010	0.236	0.713	0.220	8.87%	-1.87%	6.83%
2011	0.239	0.703	0.220	1.27%	-1.42%	-0.17%
2012	0.250	0.695	0.228	4.65%	-1.19%	3.40%
2013	0.252	0.692	0.228	0.53%	-0.35%	0.18%
2014	0.253	0.694	0.230	0.47%	0.24%	0.71%
2015(c)	0.251	0.693	0.228	-0.77%	-0.07%	-0.84%
2015(d)	0.250	0.693	0.227	---	---	---
2016(e)	0.244	0.693	0.221	-2.42%	-0.07%	-2.49%
2017	0.243	0.698	0.221	-0.64%	0.70%	0.06%
2018	0.241	0.699	0.220	-0.62%	0.17%	-0.45%
2019	0.238	0.697	0.217	-1.17%	-0.29%	-1.45%
2020	0.232	0.696	0.212	-2.48%	-0.14%	-2.61%
PY						
2008	0.217	0.734	0.209			
2009	0.226	0.720	0.213	3.92%	-1.84%	1.96%
2010	0.238	0.708	0.220	5.25%	-1.67%	3.53%
2011	0.244	0.699	0.223	2.82%	-1.32%	1.45%
2012	0.251	0.693	0.228	2.73%	-0.81%	1.91%
2013	0.252	0.693	0.229	0.50%	-0.08%	0.42%
2014	0.252	0.694	0.228	-0.23%	0.10%	-0.13%
2015	0.247	0.693	0.224	-1.68%	-0.07%	-1.75%
2016	0.243	0.695	0.221	-1.62%	0.28%	-1.35%
2017	0.242	0.698	0.221	-0.63%	0.46%	-0.18%
2018	0.240	0.698	0.219	-0.87%	-0.04%	-0.91%
2019	0.236	0.696	0.215	-1.76%	-0.22%	-1.97%

Notes: (a) All frequencies are per \$M exposure at PY 2016 Level.
(b) Index is to AY 1961.
(c) 2015 accidents on 2015 and 2014 policies.
(d) 2015 accidents on 2014 policies only.
(e) AY 2016 percent changes are based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.
(f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

California OPRL Injury & Illness Rates

A	B	C	D	E	F	G	H	I	J	
CY	Total Reportable Incidents	Total Cases(a)	Total Days Away Cases	Ind Proxy/ Incidents	California Avg Ann Employment(b)	Frequency Rates per 1,000 Workers Incidents	"Indemnity"	Annual Change in Frequency Rates Incidents	"Indemnity"	Insured System Overall Ind Freq Change(c)
1992	993.9	456.6	359.8	36.2%	12,171.0	81.7	29.6	---	---	
1993	918.4	425.0	324.8	35.4%	11,964.1	76.8	27.1	-6.0%	-8.2%	-16.0%
1994	902.6	436.7	313.3	34.7%	12,150.9	74.3	25.8	-3.2%	-5.0%	-12.8%
1995	825.3	401.0	278.0	33.7%	12,458.6	66.2	22.3	-10.8%	-13.5%	-4.5%
1996	784.7	384.3	253.3	32.3%	12,739.1	61.6	19.9	-7.0%	-10.9%	-7.9%
1997	809.3	409.8	251.6	31.1%	13,149.1	61.5	19.1	-0.1%	-3.8%	-4.5%
1998	779.5	388.2	241.0	30.9%	13,583.5	57.4	17.7	-6.8%	-7.3%	-4.3%
1999	758.9	370.8	229.1	30.2%	14,135.5	53.7	16.2	-6.4%	-8.6%	-0.1%
2000	787.4	396.4	246.2	31.3%	14,616.5	53.9	16.8	0.3%	3.9%	1.0%
2001	748.2	413.4	259.0	34.6%	14,747.4	50.7	17.6	-5.8%	4.3%	-7.9%
2002	694.1	404.1	231.8	33.4%	14,593.0	47.6	15.9	-6.2%	-9.6%	-1.0%
2003	684.7	387.0	223.5	32.6%	14,301.3	47.9	15.6	0.7%	-1.6%	-2.7%
2004	645.1	367.3	201.4	31.2%	14,383.1	44.9	14.0	-6.3%	-10.4%	-16.8%
2005	629.9	344.1	179.4	28.5%	14,570.7	43.2	12.3	-3.6%	-12.1%	-13.9%
2006	603.0	340.4	171.0	28.4%	14,892.9	40.5	11.5	-6.3%	-6.7%	-6.5%
2007	594.4	328.6	168.2	28.3%	15,428.6	38.5	10.9	-4.8%	-5.1%	-2.3%
2008	541.8	298.4	158.9	29.3%	15,452.7	35.1	10.3	-9.0%	-5.7%	-3.9%
2009	491.9	269.3	142.3	28.9%	14,877.9	33.1	9.6	-5.7%	-7.0%	-2.0%
2010	464.1	257.1	137.4	29.6%	14,255.0	32.6	9.6	-1.5%	0.8%	6.8%
2011	440.9	243.6	134.2	30.4%	13,875.2	31.8	9.7	-2.4%	0.3%	-0.2%
2012	451.5	257.1	140.1	31.0%	14,959.8	30.2	9.4	(b)	(b)	3.4%
2013	468.4	265.0	146.8	31.3%	15,379.0	30.5	9.5	0.9%	1.9%	0.2%
2014	460.7	265.1	142.8	31.0%	15,809.1	29.1	9.0	-4.3%	-5.4%	0.7%
2015	470.6	273.5	144.0	30.6%	16,295.2	28.9	8.8	-0.9%	-2.2%	-0.8%
2016	466.6	272.7	145.9	31.3%	16,718.6	27.9	8.7	-3.4%	-1.2%	-2.5%
	000s	000s	000s	Proxy for	000s	Proxy for	Proxy for	Change in	Change in	
	Broad OSHA		Proxy for	Indemnity		Indemnity	Indemnity	Column G	Column H	
	Definition		Indemnity	to Total		& Med-Only	D / F	Proxy for	Proxy for	
	Proxy for			Ratio		Combined		Indemnity	Indemnity	
	Med & Ind			D / B		B / F		& Med-Only		
	Combined							Combined		

Notes: (a) Cases with days away from work, job restrictions or transfers.
(b) Series Change: OPRL data element was discontinued in 2012. BLS QCEW data element for 2013 and later.
(c) Insured System AY 2016 change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

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

Self-Insured Employers - Claim Frequency

Private Self-Insured Employers										
CY	Number of Cases Reported During Year			Indemnity /Total	Annual Change	Private Employees	Total Frequency	Total Freq.		Ind. Freq
	Medical-Only	Indemnity	Total					Annual Change	Indemnity Frequency	
2001	73,527	46,596	120,123	0.388	---	2,049,611	0.059	---	0.023	---
2002	72,130	46,218	118,348	0.391	0.7%	1,968,800	0.060	2.6%	0.023	3.3%
2003	69,761	46,477	116,238	0.400	2.4%	2,474,025	0.047	-21.8%	0.019	-20.0%
2004	70,630	42,455	113,085	0.375	-6.1%	2,595,470	0.044	-7.3%	0.016	-12.9%
2005	66,467	40,102	106,569	0.376	0.2%	2,814,083	0.038	-13.1%	0.014	-12.9%
2006	69,395	35,570	104,965	0.339	-9.9%	2,681,843	0.039	3.4%	0.013	-6.9%
2007	61,432	30,247	91,679	0.330	-2.6%	2,295,155	0.040	2.1%	0.013	-0.6%
2008	59,764	32,631	92,395	0.353	7.0%	2,393,095	0.039	-3.3%	0.014	3.5%
2009	51,916	29,557	81,473	0.363	2.7%	2,173,519	0.037	-2.9%	0.014	-0.3%
2010	50,039	29,036	79,075	0.367	1.2%	2,145,570	0.037	-1.7%	0.014	-0.5%
2011	48,360	29,026	77,386	0.375	2.1%	2,111,065	0.037	-0.5%	0.014	1.6%
2012	49,492	28,065	77,557	0.362	-3.5%	2,122,757	0.037	-0.3%	0.013	-3.8%
2013	46,442	29,573	76,015	0.389	7.5%	2,088,402	0.036	-0.4%	0.014	7.1%
2014	45,775	30,652	76,427	0.401	3.1%	2,190,516	0.035	-4.1%	0.014	-1.2%
2015	43,785	31,899	75,684	0.421	5.1%	2,259,451	0.033	-4.0%	0.014	0.9%
2016	46,039	32,365	78,404	0.413	-2.1%	2,374,484	0.033	-1.4%	0.014	-3.5%

Public Self-Insured Employers										
FY	Number of Cases Reported During Year			Indemnity /Total	Annual Change	Public Employees	Total Frequency	Total Freq.		Ind. Freq
	Medical-Only	Indemnity	Total					Annual Change	Indemnity Frequency	
2000/2001	65,103	56,168	121,271	0.463	---	1,379,977	0.088	---	0.041	---
2001/2002	65,372	60,688	126,060	0.481	3.9%	1,504,119	0.084	-4.6%	0.040	-0.9%
2002/2003	69,985	65,043	135,028	0.482	0.1%	1,646,055	0.082	-2.1%	0.040	-2.1%
2003/2004	68,563	64,214	132,777	0.484	0.4%	1,804,405	0.074	-10.3%	0.036	-9.9%
2004/2005	69,739	56,265	126,004	0.447	-7.7%	1,764,198	0.071	-2.9%	0.032	-10.4%
2005/2006	66,405	52,524	118,929	0.442	-1.1%	1,670,607	0.071	-0.3%	0.031	-1.4%
2006/2007	65,564	50,664	116,228	0.436	-1.3%	1,842,017	0.063	-11.4%	0.028	-12.5%
2007/2008	70,784	57,618	128,402	0.449	2.9%	1,939,483	0.066	4.9%	0.030	8.0%
2008/2009	68,184	57,595	125,779	0.458	2.0%	2,095,055	0.060	-9.3%	0.027	-7.5%
2009/2010	64,031	57,322	121,353	0.472	3.2%	2,040,413	0.059	-0.9%	0.028	2.2%
2010/2011	61,806	57,201	119,007	0.481	1.8%	1,920,695	0.062	4.2%	0.030	6.0%
2011/2012	61,151	57,461	118,612	0.484	0.8%	1,898,064	0.062	0.9%	0.030	1.7%
2012/2013	60,303	56,398	116,701	0.483	-0.2%	1,891,873	0.062	-1.3%	0.030	-1.5%
2013/2014	58,263	56,858	115,121	0.494	2.2%	2,396,139	0.048	-22.1%	0.024	-20.4%
2014/2015	57,276	57,519	114,795	0.501	1.4%	1,991,021	0.058	20.0%	0.029	21.7%
2015/2016	59,033	56,797	115,830	0.490	-2.1%	2,068,691	0.056	-2.9%	0.027	-5.0%
2016/2017	60,528	55,723	116,251	0.479	-2.2%	2,127,675	0.055	-2.4%	0.026	-4.6%

All Self-Insured Employers											Insured System	
CY	Number of Cases Reported During Year			Indemnity /Total	Annual Change	All Self-Ins. Employees	Total Frequency	Total Freq.		Ind. Freq	AY	Ind. Freq Annual Change
	Medical-Only	Indemnity	Total					Annual Change	Indemnity Frequency			
2001	138,765	105,024	243,789	0.431	---	3,491,659	0.070	---	0.030	---	2001	-7.9%
2002	139,809	109,084	248,892	0.438	1.7%	3,543,887	0.070	0.6%	0.031	2.3%	2002	-1.0%
2003	139,035	111,106	250,141	0.444	1.3%	4,199,255	0.060	-15.2%	0.026	-14.0%	2003	-2.7%
2004	139,781	102,695	242,476	0.424	-4.6%	4,379,772	0.055	-7.1%	0.023	-11.4%	2004	-16.8%
2005	134,539	94,497	229,036	0.413	-2.6%	4,531,486	0.051	-8.7%	0.021	-11.1%	2005	-13.9%
2006	135,380	87,164	222,544	0.392	-5.1%	4,438,155	0.050	-0.8%	0.020	-5.8%	2006	-6.5%
2007	129,606	84,388	213,994	0.394	0.7%	4,185,905	0.051	2.0%	0.020	2.6%	2007	-2.3%
2008	129,248	90,238	219,486	0.411	4.3%	4,410,364	0.050	-2.7%	0.020	1.5%	2008	-3.9%
2009	118,024	87,016	205,039	0.424	3.2%	4,241,253	0.048	-2.9%	0.021	0.3%	2009	-2.0%
2010	112,958	86,298	199,255	0.433	2.1%	4,126,124	0.048	-0.1%	0.021	1.9%	2010	6.8%
2011	109,839	86,357	196,196	0.440	1.6%	4,020,445	0.049	1.1%	0.021	2.7%	2011	-0.2%
2012	110,219	84,995	195,214	0.435	-1.1%	4,017,726	0.049	-0.4%	0.021	-1.5%	2012	3.4%
2013	105,725	86,201	191,926	0.449	3.2%	4,232,408	0.045	-6.7%	0.020	-3.7%	2013	0.2%
2014	103,545	87,841	191,385	0.459	2.2%	4,029,849	0.047	4.7%	0.022	7.0%	2014	0.7%
2015	101,940	89,057	190,997	0.466	1.6%	4,422,931	0.043	-9.1%	0.020	-7.6%	2015	-0.8%
2016	105,820	88,625	194,445	0.456	-2.2%	4,318,799	0.045	4.3%	0.021	1.9%	2016	-2.5%

Notes: Fiscal Year Public data prorated to CYs 50%/50%.
Insured System AY 2016 change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

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

Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness

Policy Year	Report Level	Change in Frequency Hazardousness	Indemnity Frequency Hazardousness Index	Annual % Change in Ind Frequency Attributable to Change in Mix of Exposures
1961	3	1.000000	1.000000	-----
1962	3	0.990262	0.990262	-0.9738
1963	3	0.998718	0.988993	-0.1282
1964	3	0.994304	0.983359	-0.5696
1965	3	0.993875	0.977336	-0.6125
1966	3	0.983584	0.961291	-1.6416
1967	3	0.987626	0.949396	-1.2374
1968	3	0.997512	0.947033	-0.2488
1969	3	0.986390	0.934144	-1.3610
1970	3	0.989966	0.924770	-1.0034
1971	3	1.000824	0.925532	0.0824
1972	3	1.000505	0.926000	0.0505
1973	3	0.998631	0.924732	-0.1369
1974	3	0.986017	0.911802	-1.3983
1975	3	0.984110	0.897313	-1.5890
1976	3	1.004996	0.901796	0.4996
1977	3	1.009490	0.910354	0.9490
1978	3	1.012494	0.921728	1.2494
1979	3	0.997841	0.919739	-0.2159
1980	3	0.988843	0.909477	-1.1157
1981	3	0.981336	0.892503	-1.8664
1982	3	0.979033	0.873790	-2.0967
1983	3	0.997989	0.872032	-0.2011
1984	3	0.998272	0.870525	-0.1728
1985	3	0.992516	0.864010	-0.7484
1986	3	0.989667	0.855082	-1.0333
1987	3	0.997751	0.853159	-0.2249
1988	3	1.000574	0.853649	0.0574
1989	5	0.998212	0.852122	-0.1788
1990	5	0.986184	0.840349	-1.3816
1991	5	0.982822	0.825913	-1.7178
1992	5	0.987393	0.815501	-1.2607
1993	5	0.987562	0.805358	-1.2438
1994	5	1.007382	0.811303	0.7382
1995	5	0.997625	0.809376	-0.2375
1996	5	0.980288	0.793422	-1.9712
1997	5	0.993034	0.787895	-0.6966
1998	5	0.994743	0.783752	-0.5257
1999	5	0.978134	0.766615	-2.1866
2000	5	0.965472	0.740145	-3.4528
2001	5	1.027926	0.760814	2.7926
2002	5	1.002823	0.762962	0.2823
2003	5	1.001398	0.764029	0.1398
2004	5	0.995209	0.760369	-0.4791
2005	5	0.998285	0.759065	-0.1715
2006	5	0.986896	0.749118	-1.3104
2007	5	0.998047	0.747655	-0.1953
2008	5	0.980684	0.733213	-1.9316
2009	5	0.982600	0.720455	-1.7400
2010	5	0.980260	0.706234	-1.9740
2011	5	0.990176	0.699296	-0.9824
2012	Proj to 5th	0.986361	0.689758	-1.3639
2013	Proj to 5th	1.004870	0.693118	0.4870
2014	Proj to 5th	1.000344	0.693356	0.0344
2015	Proj to 5th	0.998372	0.691989	-0.1628

Source: WCIRB unit statistical data

Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts

Calendar Quarter Evaluation	Change in Statewide Incremental Number of Indemnity Claims		Change in Statewide Incremental Number of Medical-Only Claims	
	Change in Quarterly Increment from Same Quarter at Prior	Change in 4-Quarter Increment from Same Quarter at Prior	Change in Quarterly Increment from Same Quarter at Prior	Change in 4-Quarter Increment from Same Quarter at Prior
	<u>Calendar Year</u>	<u>Calendar Year</u>	<u>Calendar Year</u>	<u>Calendar Year</u>
3/31/2007	-2.4%	---	---	---
6/30/2007	-10.2%	---	-13.5%	---
9/30/2007	0.3%	---	1.2%	---
12/31/2007	-13.4%	-6.3%	-19.4%	---
3/31/2008	-5.8%	-7.2%	-14.8%	-11.6%
6/30/2008	-3.9%	-5.7%	-2.8%	-9.0%
9/30/2008	-19.2%	-10.7%	-17.6%	-13.9%
12/31/2008	-16.7%	-11.4%	-3.8%	-10.3%
3/31/2009	-27.1%	-16.8%	-27.5%	-13.2%
6/30/2009	-14.2%	-19.4%	-27.0%	-19.4%
9/30/2009	-8.2%	-16.8%	-16.7%	-19.2%
12/31/2009	2.5%	-12.8%	-15.8%	-22.0%
3/31/2010	7.4%	-4.1%	-5.2%	-17.1%
6/30/2010	3.9%	1.0%	-1.9%	-10.6%
9/30/2010	6.7%	5.1%	-6.3%	-7.6%
12/31/2010	7.2%	6.3%	3.3%	-2.6%
3/31/2011	2.7%	5.1%	-4.1%	-2.3%
6/30/2011	-1.2%	3.8%	-8.9%	-4.1%
9/30/2011	3.4%	2.9%	-1.3%	-2.7%
12/31/2011	4.5%	2.3%	-7.8%	-5.5%
3/31/2012	-0.4%	1.5%	-1.8%	-4.6%
6/30/2012	8.1%	3.9%	0.1%	-2.6%
9/30/2012	5.5%	4.5%	3.2%	-1.5%
12/31/2012	6.7%	5.1%	5.5%	1.8%
3/31/2013	5.2%	6.4%	-4.2%	1.3%
6/30/2013	10.9%	7.1%	9.0%	3.4%
9/30/2013	6.2%	7.3%	-1.9%	2.0%
12/31/2013	5.4%	7.0%	0.5%	0.8%
3/31/2014	8.6%	7.7%	0.6%	1.9%
6/30/2014	-0.2%	4.8%	-5.8%	-1.8%
9/30/2014	1.1%	3.5%	1.3%	-0.9%
12/31/2014	-0.4%	2.0%	1.7%	-0.6%
3/31/2015	-0.5%	0.0%	7.5%	0.9%
6/30/2015	2.4%	0.7%	2.6%	3.1%
9/30/2015	3.1%	1.2%	7.9%	4.9%
12/31/2015	2.7%	2.0%	0.7%	4.6%
3/31/2016	5.3%	3.4%	6.3%	4.4%
6/30/2016	2.7%	3.4%	4.6%	4.8%
9/30/2016	-1.2%	2.3%	-3.3%	1.8%
12/31/2016	0.3%	1.7%	-1.2%	1.3%
3/31/2017	2.7%	1.1%	1.4%	0.2%
6/30/2017	4.0%	1.4%	6.3%	0.7%
9/30/2017	0.9%	2.0%	5.3%	3.0%
12/31/2017	1.6%	2.3%	13.2%	6.6%
3/31/2018	-2.2%	1.1%	2.7%	6.9%

Source: WCIRB quarterly calls for experience

Economic Variables

CY	Aggregate Employment	Unemployment Rate	Annual Log Differences		Economic Variables 1st Prin. Comp.
			Aggregate Employment	Unemployment Rate	
1961	3,962,466	6.90			
1962	4,145,937	5.80	0.045	-0.174	0.178
1963	4,293,126	6.00	0.035	0.034	-0.029
1964	4,425,502	6.00	0.030	0.000	0.004
1965	4,545,829	5.90	0.027	-0.017	0.020
1966	4,793,025	4.90	0.053	-0.186	0.191
1967	4,928,192	5.70	0.028	0.151	-0.146
1968	5,133,597	5.40	0.041	-0.054	0.059
1969	5,368,219	5.20	0.045	-0.038	0.044
1970	5,335,500	7.30	-0.006	0.339	-0.337
1971	5,284,027	8.83	-0.010	0.190	-0.190
1972	6,021,455	7.65	0.131	-0.144	0.161
1973	6,499,433	7.06	0.076	-0.080	0.090
1974	6,708,187	7.34	0.032	0.039	-0.035
1975	6,683,921	9.92	-0.004	0.301	-0.298
1976	7,259,787	9.21	0.083	-0.074	0.085
1977	7,680,467	8.29	0.056	-0.105	0.112
1978	9,201,297	7.15	0.181	-0.148	0.172
1979	9,619,931	6.28	0.044	-0.129	0.134
1980	10,267,320	6.87	0.065	0.090	-0.080
1981	10,406,215	7.45	0.013	0.081	-0.078
1982	10,233,046	9.99	-0.017	0.293	-0.292
1983	10,332,778	9.72	0.010	-0.028	0.029
1984	10,823,902	7.82	0.046	-0.217	0.221
1985	11,176,267	7.25	0.032	-0.076	0.080
1986	11,487,196	6.73	0.027	-0.074	0.077
1987	11,891,541	5.81	0.035	-0.147	0.150
1988	12,358,794	5.35	0.039	-0.083	0.088
1989	12,690,476	5.13	0.026	-0.041	0.045
1990	12,944,553	5.81	0.020	0.124	-0.120
1991	12,780,079	7.78	-0.013	0.292	-0.291
1992	12,580,012	9.36	-0.016	0.185	-0.185
1993	12,480,943	9.56	-0.008	0.021	-0.022
1994	12,613,491	8.60	0.011	-0.105	0.106
1995	12,871,066	7.86	0.020	-0.090	0.092
1996	13,229,156	7.32	0.027	-0.071	0.074
1997	13,623,515	6.40	0.029	-0.134	0.137
1998	14,087,011	5.95	0.033	-0.074	0.078
1999	14,483,963	5.25	0.028	-0.124	0.127
2000	14,996,635	4.94	0.035	-0.062	0.066
2001	15,275,819	5.43	0.018	0.095	-0.091
2002	15,069,281	6.65	-0.014	0.203	-0.203
2003	14,997,539	6.81	-0.005	0.023	-0.024
2004	15,144,880	6.20	0.010	-0.093	0.093
2005	15,425,823	5.40	0.018	-0.139	0.141
2006	15,704,620	4.92	0.018	-0.093	0.095
2007	15,848,576	5.36	0.009	0.087	-0.084
2008	15,693,843	7.31	-0.010	0.310	-0.308
2009	14,815,548	11.15	-0.058	0.423	-0.427
2010	14,669,247	12.22	-0.010	0.091	-0.092
2011	14,827,970	11.72	0.011	-0.042	0.043
2012	15,163,187	10.38	0.022	-0.121	0.123
2013	15,566,096	8.94	0.026	-0.149	0.151
2014	15,994,392	7.50	0.027	-0.176	0.178
2015	16,475,315	6.19	0.030	-0.192	0.194
2016	16,904,536	5.48	0.026	-0.122	0.124
2017	17,240,071	4.77	0.020	-0.138	0.140
2018	17,617,831	4.15	0.022	-0.141	0.142
2019	17,912,507	3.82	0.017	-0.081	0.083
2020	18,046,274	4.08	0.007	0.064	-0.062

Notes: The first principal component is of the annual log difference data from 1962-2017.
The first principal component of the annual log difference of the economic variables is:
1st PC of Econ Variables = -0.1396099 x Aggregate Employment + 0.9902066 x Unemployment Rate

Sources: Government historical labor statistics through 2017
UCLA Anderson forecasts through 2020 are as of June 2018

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

AY	1st Half Partial PY.RL Sources									
	(AY-1).1	(AY-1).2	(AY-1).3	(AY-1).4	(AY-1).5	to (AY-1).6	to (AY-1).7	to (AY-1).8	to (AY-1).9	to (AY-1).10
2004	5,270	5,694	5,936	6,072	6,207	6,468	6,613	6,575	6,557	6,572
2005	3,168	3,715	4,065	4,316	4,645	4,798	4,818	4,846	4,868	4,872
2006	3,020	3,548	3,883	4,178	4,314	4,381	4,367	4,455	4,496	4,506
2007	3,128	3,677	4,057	4,311	4,451	4,514	4,624	4,642	4,668	4,676
2008	2,941	3,665	4,167	4,399	4,549	4,708	4,799	4,835	4,852	
2009	2,954	3,932	4,411	4,643	4,973	5,064	5,124	5,169		
2010	3,306	4,224	4,622	5,130	5,166	5,218	5,272			
2011	3,352	4,343	5,142	5,274	5,401	5,493				
2012	3,673	5,231	5,614	5,885	6,084					
2013	4,734	6,000	6,575	6,770						
2014	5,283	6,685	7,092							
2015	5,313	6,785								
2016	5,205									

AY	1st Half Partial PY.RL Development Factors										1st Half Share of Ttl Ind Fifths
	(AY-1).1 to (AY-1).2	(AY-1).2 to (AY-1).3	(AY-1).3 to (AY-1).4	(AY-1).4 to (AY-1).5	(AY-1).5 to (AY-1).6	(AY-1).6 to (AY-1).7	(AY-1).7 to (AY-1).8	(AY-1).8 to (AY-1).9	(AY-1).9 to (AY-1).10	Final Tenths	
2004	1.081	1.042	1.023	1.022	1.042	1.022	0.994	0.997	1.002	6,572	12.4%
2005	1.173	1.094	1.062	1.076	1.033	1.004	1.006	1.005	1.001	4,872	10.7%
2006	1.175	1.094	1.076	1.033	1.016	0.997	1.020	1.009	1.002	4,506	10.2%
2007	1.176	1.103	1.063	1.032	1.014	1.024	1.004	1.006	1.002	4,676	10.8%
2008	1.246	1.137	1.056	1.034	1.035	1.019	1.007	1.004	1.002	4,861	11.4%
2009	1.331	1.122	1.053	1.071	1.018	1.012	1.009	1.004	1.002	5,197	13.0%
2010	1.278	1.094	1.110	1.007	1.010	1.010	1.009	1.004	1.002	5,347	13.5%
2011	1.296	1.184	1.026	1.024	1.017	1.010	1.009	1.004	1.002	5,629	13.8%
2012	1.424	1.073	1.048	1.034	1.017	1.010	1.009	1.004	1.002	6,340	14.5%
2013	1.267	1.096	1.030	1.034	1.017	1.010	1.009	1.004	1.002	7,293	15.9%
2014	1.265	1.061	1.030	1.034	1.017	1.010	1.009	1.004	1.002	7,867	16.7%
2015	1.277	1.061	1.030	1.034	1.017	1.010	1.009	1.004	1.002	7,985	16.6%
2016	1.277	1.061	1.030	1.034	1.017	1.010	1.009	1.004	1.002	7,823	16.3%

AY	Share of Total Indemnity Count 1st Half Partial PY.RL Sources									
	(AY-1).1	(AY-1).2	(AY-1).3	(AY-1).4	(AY-1).5	to (AY-1).6	to (AY-1).7	to (AY-1).8	to (AY-1).9	to (AY-1).10
2004	10.9%	11.3%	11.8%	12.0%	12.2%	12.4%	12.5%	12.4%	12.4%	12.4%
2005	7.7%	8.7%	9.4%	10.0%	10.4%	10.6%	10.6%	10.7%	10.7%	10.7%
2006	7.3%	8.4%	9.0%	9.5%	9.7%	9.9%	9.9%	10.1%	10.1%	10.2%
2007	7.9%	8.9%	9.6%	10.0%	10.3%	10.4%	10.7%	10.7%	10.8%	10.8%
2008	7.7%	9.1%	9.9%	10.5%	10.8%	11.1%	11.3%	11.4%	11.4%	
2009	8.4%	10.3%	11.4%	11.8%	12.6%	12.8%	12.9%	13.0%		
2010	9.2%	11.1%	11.9%	13.1%	13.1%	13.2%	13.3%			
2011	9.3%	11.2%	12.9%	13.1%	13.4%	13.6%				
2012	9.6%	12.6%	13.2%	13.7%	14.1%					
2013	11.7%	13.6%	14.6%	15.0%						
2014	12.5%	14.7%	15.3%							
2015	12.4%	14.7%								
2016	12.2%									

Source: WCIRB unit statistical data

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

Region	Ratio of Permanent Disability Claims to Indemnity Claims for Accident Year														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	0.400	0.380	0.364	0.316	0.310	0.289	0.294	0.302	0.321	0.334	0.316	0.312	0.322	0.327	<i>0.324</i>
Los Angeles/LA Basin	0.491	0.489	0.467	0.408	0.394	0.397	0.405	0.403	0.406	0.412	0.404	0.389	0.402	0.412	<i>0.398</i>
San Diego	0.484	0.464	0.415	0.345	0.330	0.327	0.333	0.354	0.361	0.364	0.364	0.349	0.371	0.378	<i>0.371</i>
All Other	0.429	0.408	0.373	0.322	0.316	0.297	0.313	0.307	0.332	0.328	0.322	0.303	0.320	0.326	<i>0.301</i>
All Regions	0.455	0.444	0.417	0.361	0.351	0.343	0.354	0.356	0.368	0.372	0.364	0.349	0.364	0.371	<i>0.355</i>

Region	Annual Change														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	---	-5.1%	-4.2%	-13.3%	-1.9%	-6.6%	1.6%	2.8%	6.3%	3.9%	-5.4%	-1.4%	3.3%	1.7%	-0.9%
Los Angeles/LA Basin	---	-0.5%	-4.4%	-12.7%	-3.2%	0.6%	2.0%	-0.4%	0.8%	1.3%	-1.8%	-3.9%	3.4%	2.6%	-3.6%
San Diego	---	-4.0%	-10.6%	-16.9%	-4.2%	-0.9%	1.8%	6.4%	1.8%	1.0%	0.0%	-4.2%	6.2%	2.0%	-1.8%
All Other	---	-4.9%	-8.6%	-13.8%	-1.6%	-6.1%	5.4%	-1.9%	8.0%	-1.2%	-1.8%	-5.9%	5.8%	1.6%	-7.7%
All Regions	---	-2.5%	-6.0%	-13.5%	-2.7%	-2.3%	3.2%	0.5%	3.5%	0.9%	-2.0%	-4.1%	4.2%	2.0%	-4.4%

Region	Ratio of Indemnity Claims to Total Claims for Accident Year														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	0.340	0.347	0.308	0.280	0.285	0.288	0.292	0.301	0.314	0.323	0.317	0.329	0.329	0.335	<i>0.332</i>
Los Angeles/LA Basin	0.358	0.368	0.337	0.306	0.301	0.308	0.314	0.333	0.347	0.354	0.367	0.385	0.390	0.385	<i>0.384</i>
San Diego	0.309	0.309	0.280	0.263	0.261	0.257	0.268	0.278	0.301	0.312	0.326	0.327	0.328	0.325	<i>0.324</i>
All Other	0.346	0.352	0.324	0.299	0.291	0.294	0.298	0.305	0.319	0.328	0.328	0.342	0.338	0.327	<i>0.331</i>
All Regions	0.347	0.354	0.323	0.295	0.291	0.296	0.301	0.315	0.329	0.338	0.344	0.358	0.359	0.354	<i>0.353</i>

Region	Annual Change														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	---	1.9%	-11.3%	-8.9%	1.7%	0.8%	1.4%	3.3%	4.2%	2.9%	-1.8%	3.8%	-0.2%	2.0%	-0.9%
Los Angeles/LA Basin	---	2.6%	-8.5%	-9.1%	-1.8%	2.5%	1.9%	6.1%	4.0%	2.2%	3.8%	4.8%	1.2%	-1.1%	-0.3%
San Diego	---	0.0%	-9.3%	-6.0%	-0.7%	-1.7%	4.4%	3.7%	8.4%	3.5%	4.4%	0.5%	0.3%	-0.9%	-0.4%
All Other	---	1.7%	-7.9%	-7.9%	-2.7%	1.3%	1.3%	2.2%	4.6%	2.8%	0.2%	4.3%	-1.3%	-3.1%	<i>1.0%</i>
All Regions	---	2.1%	-8.9%	-8.5%	-1.3%	1.4%	1.9%	4.4%	4.6%	2.6%	1.9%	4.2%	0.2%	-1.3%	-0.2%

Region	Cumulative Injury Claims per 100 Indemnity Claims for Accident Year														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	8.98	8.91	8.87	7.42	6.51	7.51	7.58	8.19	8.18	8.21	7.73	9.12	8.74	8.04	<i>7.51</i>
Los Angeles/LA Basin	9.76	10.31	10.50	8.01	7.86	8.50	8.92	10.58	11.62	11.26	12.52	14.89	15.62	16.18	<i>16.17</i>
San Diego	8.55	9.05	8.91	6.57	5.99	6.43	6.99	7.28	9.20	8.51	8.77	11.76	12.44	12.22	<i>12.46</i>
All Other	6.29	6.27	6.21	4.48	4.91	4.86	4.88	5.74	6.30	5.94	6.15	7.02	7.12	6.79	<i>6.38</i>
All Regions	8.48	8.75	8.80	6.73	6.59	7.09	7.39	8.58	9.39	9.04	9.69	11.51	11.90	11.89	<i>11.61</i>

Region	Annual Change														
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bay Area	---	-0.7%	-0.5%	-16.4%	-12.2%	15.4%	0.9%	8.0%	-0.1%	0.4%	-5.8%	18.0%	-4.2%	-8.0%	-6.7%
Los Angeles/LA Basin	---	5.6%	1.8%	-23.8%	-1.8%	8.1%	5.0%	18.6%	9.8%	-3.1%	11.2%	18.9%	4.9%	3.6%	-0.1%
San Diego	---	5.9%	-1.5%	-26.2%	-8.9%	7.4%	8.7%	4.1%	26.4%	-7.5%	3.0%	34.2%	5.8%	-1.8%	<i>2.0%</i>
All Other	---	-0.4%	-0.9%	-27.9%	9.7%	-0.9%	0.3%	17.7%	9.7%	-5.8%	3.6%	14.1%	1.5%	-4.7%	-5.9%
All Regions	---	3.2%	0.6%	-23.6%	-2.0%	7.5%	4.3%	16.1%	9.4%	-3.7%	7.2%	18.8%	3.3%	0.0%	-2.3%

Figures in italics are based on preliminary partial data.

Ratio of Total Indemnity Claim Counts to Total Claim Counts

Accident	Evaluated as of (in months):									
Year	<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>
1999										0.335
2000									0.337	0.337
2001								0.341	0.340	0.340
2002							0.357	0.356	0.356	0.355
2003						0.355	0.354	0.354	0.353	0.352
2004					0.319	0.318	0.317	0.317	0.316	0.316
2005				0.294	0.293	0.293	0.292	0.292	0.292	0.292
2006			0.291	0.290	0.290	0.289	0.289	0.289	0.289	0.289
2007		0.297	0.296	0.296	0.297	0.297	0.297	0.297	0.297	0.297
2008	0.322	0.300	0.305	0.307	0.308	0.308	0.308	0.309	0.309	0.309
2009	0.318	0.315	0.326	0.329	0.330	0.331	0.331	0.331	0.331	0.331
2010	0.322	0.328	0.341	0.345	0.346	0.346	0.347	0.347	0.347	
2011	0.318	0.336	0.352	0.356	0.357	0.358	0.358	0.358		
2012	0.317	0.339	0.358	0.362	0.363	0.364	0.364			
2013	0.334	0.352	0.368	0.372	0.373	0.373				
2014	0.337	0.350	0.365	0.369	0.370					
2015	0.325	0.349	0.366	0.369						
2016	0.333	0.349	0.366							
2017	0.327	0.336								
2018	0.316									

Source: WCIRB quarterly calls for experience

Indemnity Claim Frequency Relativities by NAICS Sector

NAICS Sector	NAICS Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
11&21	Agriculture & Mining	2.658	2.645	2.768	2.892	2.893	2.968	2.826	2.896	2.990	3.046	3.292	3.253	3.365	3.433	3.611	3.875
23	Construction	2.536	2.287	2.287	2.338	2.446	2.435	2.336	2.277	2.222	2.146	2.261	2.140	2.219	2.126	2.133	2.088
31	Manufacturing	1.752	1.752	1.772	1.761	1.714	1.740	1.763	1.681	1.630	1.662	1.734	1.771	1.858	1.972	1.973	2.037
42	Wholesale	2.802	2.778	2.820	2.869	2.894	2.901	3.062	2.964	2.954	3.178	3.289	3.499	3.528	3.563	3.608	3.423
44	Retail	1.689	1.667	1.611	1.672	1.750	1.798	1.855	1.962	2.042	2.102	1.992	2.082	1.972	1.968	2.022	2.212
22&48	Utilities & Transportation	3.244	3.154	3.166	3.289	3.632	3.862	3.885	3.795	3.607	3.620	3.540	3.358	3.503	3.564	3.560	3.572
51	Information	0.795	0.757	0.826	0.816	0.764	0.797	0.843	0.922	0.919	0.870	0.769	0.921	0.875	0.907	0.927	0.966
52	Finance	0.408	0.429	0.331	0.345	0.342	0.300	0.353	0.372	0.426	0.395	0.388	0.346	0.293	0.256	0.237	0.215
53	Real Estate	0.820	0.854	0.735	0.757	0.752	0.828	1.037	1.089	1.155	1.109	1.128	1.061	0.997	0.965	0.991	0.945
54	Prof. Services	0.188	0.194	0.194	0.190	0.178	0.178	0.169	0.174	0.157	0.147	0.133	0.115	0.103	0.096	0.093	0.079
56	Administrative	3.190	3.106	3.085	3.110	3.082	3.243	3.245	3.530	3.630	3.741	3.803	3.817	3.927	4.073	4.158	3.922
61	Education	0.757	0.783	0.854	0.686	0.707	0.723	0.698	0.760	0.752	0.741	0.739	0.740	0.686	0.674	0.656	0.634
62	Health	1.255	1.267	1.260	1.186	1.136	1.101	1.184	1.201	1.264	1.283	1.314	1.241	1.227	1.167	1.170	1.167
71	Hospitality	1.974	1.875	1.829	1.841	1.911	2.006	2.104	2.176	2.156	2.221	2.264	2.278	2.234	2.158	2.035	2.076
72	Entertainment	2.220	2.189	2.192	2.114	2.091	2.175	2.222	2.300	2.506	2.703	2.805	3.040	3.191	3.270	3.216	3.133
81	Other Services	1.497	1.494	1.432	1.498	1.484	1.481	1.466	1.504	1.537	1.586	1.628	1.730	1.722	1.770	1.804	1.785
8742	Outside Sales	0.234	0.242	0.267	0.238	0.219	0.207	0.213	0.203	0.222	0.193	0.194	0.184	0.174	0.178	0.172	0.162
92&8810	Clerical & Public Admin.	0.249	0.261	0.251	0.236	0.209	0.194	0.178	0.191	0.195	0.188	0.170	0.176	0.167	0.156	0.148	0.146
Accident Year Total Frequency		0.343	0.332	0.335	0.284	0.242	0.227	0.218	0.204	0.197	0.210	0.207	0.215	0.215	0.217	0.214	0.208

NAICS Sector	NAICS Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
11&21	Agriculture & Mining	---	-0.5%	4.7%	4.5%	0.1%	2.6%	-4.8%	2.5%	3.2%	1.9%	8.1%	-1.2%	3.4%	2.0%	5.2%	7.3%
23	Construction	---	-9.8%	0.0%	2.2%	4.6%	-0.4%	-4.1%	-2.5%	-2.4%	-3.4%	5.3%	-5.3%	3.7%	-4.2%	0.3%	-2.1%
31	Manufacturing	---	0.0%	1.1%	-0.6%	-2.7%	1.5%	1.3%	-4.6%	-3.0%	2.0%	4.3%	2.1%	4.9%	6.1%	0.0%	3.3%
42	Wholesale	---	-0.8%	1.5%	1.8%	0.9%	0.3%	5.6%	-3.2%	-0.3%	7.6%	3.5%	6.4%	0.8%	1.0%	1.3%	-5.1%
44	Retail	---	-1.3%	-3.3%	3.8%	4.6%	2.7%	3.2%	5.8%	4.1%	2.9%	-5.2%	4.5%	-5.3%	-0.2%	2.7%	9.4%
22&48	Utilities & Transportation	---	-2.8%	0.4%	3.9%	10.5%	6.3%	0.6%	-2.3%	-5.0%	0.4%	-2.2%	-5.1%	4.3%	1.7%	-0.1%	0.3%
51	Information	---	-4.8%	9.1%	-1.2%	-6.3%	4.3%	5.7%	9.4%	-0.3%	-5.4%	-11.6%	19.8%	-5.0%	3.6%	2.2%	4.2%
52	Finance	---	5.2%	-22.8%	4.2%	-0.9%	-12.2%	17.7%	5.4%	14.4%	-7.3%	-1.8%	-10.7%	-15.3%	-12.8%	-7.5%	-9.2%
53	Real Estate	---	4.1%	-13.9%	2.9%	-0.6%	10.2%	25.2%	5.1%	6.0%	-4.0%	1.7%	-6.0%	-6.0%	-3.2%	2.7%	-4.7%
54	Prof. Services	---	2.7%	0.1%	-1.8%	-6.1%	0.0%	-5.4%	3.2%	-9.8%	-6.6%	-9.1%	-13.9%	-10.6%	-6.4%	-2.7%	-15.0%
56	Administrative	---	-2.6%	-0.7%	0.8%	-0.9%	5.2%	0.1%	8.8%	2.8%	3.1%	1.6%	0.4%	2.9%	3.7%	2.1%	-5.7%
61	Education	---	3.4%	9.1%	-19.8%	3.1%	2.3%	-3.5%	8.9%	-1.1%	-1.4%	-0.3%	0.2%	-7.3%	-1.7%	-2.7%	-3.4%
62	Health	---	1.0%	-0.5%	-5.9%	-4.2%	-3.0%	7.5%	1.4%	5.2%	1.5%	2.4%	-5.5%	-1.2%	-4.9%	0.3%	-0.2%
71	Hospitality	---	-5.0%	-2.5%	0.7%	3.8%	5.0%	4.9%	3.4%	-0.9%	3.0%	1.9%	0.6%	-1.9%	-3.4%	-5.7%	2.0%
72	Entertainment	---	-1.4%	0.1%	-3.5%	-1.1%	4.0%	2.2%	3.5%	9.0%	7.9%	3.8%	8.4%	5.0%	2.5%	-1.7%	-2.6%
81	Other Services	---	-0.2%	-4.2%	4.6%	-0.9%	-0.2%	-1.0%	2.6%	2.2%	3.2%	2.7%	6.3%	-0.5%	2.8%	1.9%	-1.0%
8742	Outside Sales	---	3.3%	10.3%	-10.9%	-7.7%	-5.5%	2.6%	-4.7%	9.6%	-13.0%	0.1%	-4.7%	-5.8%	2.2%	-3.1%	-5.8%
92&8810	Clerical & Public Admin.	---	4.6%	-3.9%	-5.9%	-11.4%	-7.0%	-8.2%	7.1%	1.8%	-3.2%	-9.8%	3.3%	-4.8%	-6.4%	-5.6%	-0.9%
Accident Year Total Frequency		---	-3.2%	0.8%	-15.2%	-14.7%	-6.3%	-4.1%	-6.3%	-3.2%	6.4%	-1.2%	3.7%	0.2%	0.8%	-1.3%	-2.8%

Figures in italics are based on partial data.

Indemnity Claim Frequency by Geographic Region

Bay Area

Indemnity Claim Frequency per \$100M of Exposure at AY 2015 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	25.24	26.14	26.35	26.35	26.16	2001	---	---	---	---	---
2002	24.23	25.37	25.84	25.73	25.80	2002	-4.0%	-3.0%	-1.9%	-2.4%	-1.4%
2003	23.69	24.80	24.73	24.85	25.11	2003	-2.2%	-2.2%	-4.3%	-3.4%	-2.7%
2004	20.31	20.57	20.70	20.94	20.75	2004	-14.3%	-17.1%	-16.3%	-15.7%	-17.3%
2005	17.38	17.53	17.79	17.70	17.81	2005	-14.4%	-14.8%	-14.1%	-15.5%	-14.2%
2006	16.33	16.65	16.57	16.66	16.55	2006	-6.1%	-5.0%	-6.8%	-5.9%	-7.0%
2007	15.48	15.59	15.75	15.82	15.85	2007	-5.2%	-6.4%	-5.0%	-5.0%	-4.3%
2008	14.18	14.60	14.73	14.85	14.86	2008	-8.4%	-6.3%	-6.5%	-6.1%	-6.2%
2009	13.04	13.39	13.56	13.62	13.66	2009	-8.1%	-8.3%	-8.0%	-8.3%	-8.1%
2010	13.53	14.07	14.21	14.30	14.34	2010	3.8%	5.1%	4.8%	5.0%	5.0%
2011	13.02	13.60	13.80	13.91	13.97	2011	-3.7%	-3.4%	-2.9%	-2.7%	-2.6%
2012	12.98	13.60	13.86	13.94	13.99	2012	-0.3%	0.0%	0.4%	0.2%	0.2%
2013	12.48	13.01	13.18	13.26		2013	-3.9%	-4.3%	-4.9%	-4.9%	
2014	12.42	12.92	13.04			2014	-0.4%	-0.7%	-1.0%		
2015	12.31	12.92				2015	-0.9%	0.0%			
2016	11.55					2016	-6.2%				

Los Angeles/L.A. Basin

Indemnity Claim Frequency per \$100M of Exposure at AY 2015 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	34.51	36.02	36.80	37.11	37.43	2001	---	---	---	---	---
2002	33.99	36.91	37.42	37.73	37.70	2002	-1.5%	2.5%	1.7%	1.7%	0.7%
2003	34.92	36.44	36.65	36.67	36.71	2003	2.7%	-1.3%	-2.1%	-2.8%	-2.6%
2004	29.26	30.01	30.03	30.20	30.39	2004	-16.2%	-17.7%	-18.1%	-17.6%	-17.2%
2005	24.54	25.21	25.53	25.75	26.05	2005	-16.1%	-16.0%	-15.0%	-14.7%	-14.3%
2006	23.14	23.90	24.24	24.53	24.53	2006	-5.7%	-5.2%	-5.1%	-4.8%	-5.8%
2007	22.41	23.36	23.76	23.89	23.95	2007	-3.2%	-2.3%	-2.0%	-2.6%	-2.3%
2008	21.55	22.80	23.18	23.32	23.43	2008	-3.8%	-2.4%	-2.4%	-2.4%	-2.2%
2009	21.33	22.68	23.12	23.35	23.45	2009	-1.0%	-0.5%	-0.3%	0.1%	0.1%
2010	23.05	24.34	24.86	25.09	25.20	2010	8.0%	7.3%	7.5%	7.4%	7.4%
2011	22.89	24.53	25.11	25.36	25.50	2011	-0.7%	0.8%	1.0%	1.1%	1.2%
2012	24.56	26.38	26.96	27.22	27.37	2012	7.3%	7.5%	7.4%	7.4%	7.3%
2013	25.13	26.86	27.35	27.60		2013	2.3%	1.8%	1.5%	1.4%	
2014	25.86	27.48	28.10			2014	2.9%	2.3%	2.7%		
2015	25.59	28.18				2015	-1.1%	2.5%			
2016	24.85					2016	-2.9%				

San Diego

Indemnity Claim Frequency per \$100M of Exposure at AY 2015 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	36.13	37.16	37.56	37.95	38.29	2001	---	---	---	---	---
2002	33.49	35.12	35.45	35.72	35.78	2002	-7.3%	-5.5%	-5.6%	-5.9%	-6.6%
2003	31.77	32.60	32.89	32.82	33.09	2003	-5.1%	-7.2%	-7.2%	-8.1%	-7.5%
2004	26.58	27.35	27.47	27.58	27.32	2004	-16.3%	-16.1%	-16.5%	-16.0%	-17.4%
2005	23.37	23.67	23.71	23.54	23.51	2005	-12.1%	-13.5%	-13.7%	-14.6%	-13.9%
2006	21.83	21.67	21.64	21.54	21.53	2006	-6.6%	-8.4%	-8.8%	-8.5%	-8.5%
2007	20.98	21.19	21.11	20.71	20.73	2007	-3.9%	-2.2%	-2.4%	-3.9%	-3.7%
2008	19.19	19.62	19.81	19.34	19.44	2008	-8.5%	-7.4%	-6.1%	-6.6%	-6.2%
2009	17.77	18.57	18.79	18.90	18.98	2009	-7.4%	-5.4%	-5.2%	-2.3%	-2.3%
2010	19.67	20.42	20.61	20.74	20.84	2010	10.7%	10.0%	9.7%	9.8%	9.8%
2011	19.28	19.97	20.25	20.26	20.31	2011	-2.0%	-2.2%	-1.8%	-2.3%	-2.5%
2012	19.79	20.59	20.66	20.77	20.84	2012	2.6%	3.1%	2.0%	2.5%	2.6%
2013	18.98	19.57	19.77	19.89		2013	-4.1%	-4.9%	-4.3%	-4.3%	
2014	19.49	20.28	20.40			2014	2.6%	3.6%	3.2%		
2015	20.00	21.20				2015	2.6%	4.5%			
2016	19.14					2016	-4.3%				

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

Indemnity Claim Frequency by Geographic Region

All Other

Indemnity Claim Frequency per \$100M of Exposure at AY 2015 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	43.41	44.33	44.65	44.18	43.83	2001	---	---	---	---	---
2002	41.38	43.73	43.12	42.75	42.91	2002	-4.7%	-1.4%	-3.4%	-3.2%	-2.1%
2003	41.80	42.11	41.75	41.84	41.59	2003	1.0%	-3.7%	-3.2%	-2.1%	-3.1%
2004	36.22	36.52	36.51	36.13	35.57	2004	-13.3%	-13.3%	-12.5%	-13.6%	-14.5%
2005	31.51	31.96	31.69	31.48	31.80	2005	-13.0%	-12.5%	-13.2%	-12.9%	-10.6%
2006	29.21	29.32	29.21	29.42	29.32	2006	-7.3%	-8.3%	-7.8%	-6.5%	-7.8%
2007	27.79	28.08	28.40	28.46	28.66	2007	-4.9%	-4.2%	-2.8%	-3.3%	-2.2%
2008	25.59	26.39	26.52	27.06	27.20	2008	-7.9%	-6.0%	-6.6%	-4.9%	-5.1%
2009	25.06	25.94	26.44	26.67	26.78	2009	-2.1%	-1.7%	-0.3%	-1.4%	-1.5%
2010	26.24	27.66	28.06	28.27	28.40	2010	4.7%	6.6%	6.1%	6.0%	6.0%
2011	26.16	27.51	27.99	28.21	28.25	2011	-0.3%	-0.5%	-0.2%	-0.2%	-0.5%
2012	26.49	27.80	28.30	28.43	28.52	2012	1.3%	1.1%	1.1%	0.8%	0.9%
2013	26.83	28.12	28.43	28.68		2013	1.3%	1.1%	0.5%	0.9%	
2014	26.31	27.54	28.04			2014	-1.9%	-2.0%	-1.4%		
2015	25.84	27.55				2015	-1.8%	0.0%			
2016	26.32					2016	1.9%				

All Regions

Indemnity Claim Frequency per \$100M of Exposure at AY 2015 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	34.31	35.47	35.97	36.01	36.03	2001	---	---	---	---	---
2002	33.22	35.45	35.66	35.70	35.75	2002	-3.2%	-0.1%	-0.8%	-0.9%	-0.8%
2003	33.50	34.58	34.58	34.64	34.68	2003	0.8%	-2.5%	-3.0%	-3.0%	-3.0%
2004	28.40	28.92	28.97	29.03	28.92	2004	-15.2%	-16.3%	-16.2%	-16.2%	-16.6%
2005	24.21	24.67	24.82	24.84	25.06	2005	-14.7%	-14.7%	-14.3%	-14.4%	-13.3%
2006	22.68	23.11	23.21	23.40	23.35	2006	-6.3%	-6.3%	-6.5%	-5.8%	-6.8%
2007	21.76	22.28	22.57	22.63	22.71	2007	-4.1%	-3.6%	-2.8%	-3.3%	-2.8%
2008	20.39	21.26	21.51	21.69	21.78	2008	-6.3%	-4.6%	-4.7%	-4.1%	-4.1%
2009	19.73	20.67	21.04	21.22	21.30	2009	-3.2%	-2.8%	-2.2%	-2.2%	-2.2%
2010	20.99	22.07	22.44	22.62	22.71	2010	6.4%	6.7%	6.6%	6.6%	6.6%
2011	20.73	21.95	22.38	22.57	22.66	2011	-1.2%	-0.6%	-0.2%	-0.2%	-0.2%
2012	21.49	22.78	23.22	23.39	23.50	2012	3.7%	3.8%	3.7%	3.7%	3.7%
2013	21.53	22.74	23.08	23.27		2013	0.2%	-0.2%	-0.6%	-0.5%	
2014	21.70	22.86	23.27			2014	0.8%	0.5%	0.8%		
2015	21.42	23.15				2015	-1.3%	1.3%			
2016	20.83					2016	-2.8%				

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

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

Accident Year	Paid Indemnity Development								
	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>
1993									0.403
1994								0.320	0.228
1995							0.367	0.279	0.231
1996						0.395	0.307	0.275	0.217
1997					0.447	0.360	0.320	0.227	0.210
1998				0.533	0.396	0.345	0.283	0.211	0.217
1999			0.660	0.481	0.433	0.347	0.277	0.264	0.232
2000		0.809	0.582	0.517	0.402	0.352	0.289	0.297	0.244
2001	3.220	0.797	0.675	0.539	0.400	0.388	0.334	0.282	0.245
2002	3.214	0.813	0.620	0.488	0.460	0.406	0.355	0.291	0.245
2003	3.147	0.759	0.586	0.548	0.462	0.381	0.296	0.268	0.256
2004	2.953	0.594	0.602	0.472	0.398	0.357	0.290	0.305	0.291
2005	2.579	0.807	0.621	0.532	0.419	0.363	0.325	0.313	0.302
2006	3.896	0.852	0.635	0.500	0.433	0.382	0.339	0.303	0.269
2007	4.279	0.897	0.656	0.516	0.445	0.394	0.351	0.307	0.282
2008	4.586	0.954	0.705	0.567	0.478	0.416	0.349	0.326	0.251
2009	5.179	0.959	0.697	0.578	0.481	0.423	0.366	0.339	0.318
2010	5.650	0.974	0.738	0.602	0.511	0.455	0.409	0.371	
2011	6.001	0.956	0.690	0.573	0.489	0.435	0.418		
2012	6.175	0.986	0.716	0.587	0.532	0.471			
2013	6.149	0.941	0.741	0.637	0.546				
2014	6.155	0.996	0.792	0.650					
2015	6.019	0.998	0.752						
2016	6.096	1.005							
2017	6.095								

Accident Year	Paid Medical Development								
	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>
1993									0.247
1994								0.235	0.189
1995							0.266	0.216	0.203
1996						0.295	0.264	0.259	0.173
1997					0.374	0.320	0.287	0.215	0.150
1998				0.432	0.361	0.324	0.221	0.177	0.171
1999			0.604	0.451	0.419	0.292	0.223	0.196	0.222
2000		0.805	0.568	0.477	0.333	0.260	0.223	0.262	0.196
2001	3.912	0.921	0.636	0.473	0.313	0.295	0.289	0.240	0.210
2002	4.430	0.870	0.545	0.378	0.351	0.353	0.278	0.252	0.209
2003	4.058	0.772	0.428	0.385	0.374	0.302	0.262	0.239	0.207
2004	3.375	0.574	0.453	0.423	0.369	0.307	0.274	0.234	0.226
2005	2.981	0.574	0.457	0.414	0.375	0.333	0.261	0.269	0.241
2006	3.903	0.621	0.489	0.407	0.359	0.323	0.285	0.254	0.202
2007	3.798	0.651	0.504	0.440	0.365	0.339	0.305	0.242	0.206
2008	4.032	0.672	0.526	0.465	0.409	0.351	0.288	0.243	0.201
2009	4.400	0.685	0.526	0.479	0.415	0.346	0.282	0.236	0.200
2010	4.624	0.700	0.577	0.510	0.414	0.353	0.321	0.270	
2011	4.282	0.707	0.540	0.461	0.396	0.333	0.303		
2012	4.414	0.690	0.534	0.465	0.410	0.340			
2013	4.380	0.649	0.521	0.469	0.384				
2014	4.508	0.667	0.549	0.473					
2015	4.428	0.650	0.508						
2016	4.525	0.624							
2017	4.674								

All Entries reflect the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of March 31, 2018
Accident Year 2012 Projected to 75 Months [1]**

Indemnity

Methodology	Based on Experience Evaluated as of (in months):					Current
	15	27	39	51	63	
3-Year Avg. Incurred	0.254	0.252	0.247	0.241	0.239	0.237
Latest Year Incurred	0.255	0.248	0.245	0.238	0.238	0.237
Latest Yr. Inc. Adj. for Case Reserves	0.294	0.272	0.259	0.247	0.241	0.237
3-Year Avg. Paid	0.243	0.249	0.246	0.242	0.240	0.237
Latest Year Paid	0.253	0.248	0.244	0.241	0.239	0.237
Reform-Adj. Paid ^[2]	0.253	0.248	0.244	0.241	0.239	0.237
Latest Yr. Pd. Adj. for Settlement ^[3]	0.254	0.244	0.239	0.238	0.237	0.237

Difference from Actual 75-Month Loss Ratio

	15	27	39	51	63	Current
3-Year Avg. Incurred	7.1%	6.3%	4.3%	1.5%	0.9%	0.0%
Latest Year Incurred	7.4%	4.7%	3.4%	0.4%	0.3%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	23.9%	14.8%	9.4%	4.1%	1.9%	0.0%
3-Year Avg. Paid	2.3%	5.2%	3.7%	2.1%	1.0%	0.0%
Latest Year Paid	6.5%	4.6%	2.8%	1.8%	0.6%	0.0%
Reform-Adj. Paid	6.5%	4.6%	2.8%	1.8%	0.6%	0.0%
Latest Yr. Pd. Adj. for Settlement	7.0%	3.0%	0.9%	0.2%	-0.1%	0.0%

Medical

Methodology	Based on Experience Evaluated as of (in months):					Current
	15	27	39	51	63	
3-Year Avg. Incurred	0.380	0.366	0.351	0.331	0.322	0.317
Latest Year Incurred	0.396	0.360	0.340	0.325	0.319	0.317
Latest Yr. Inc. Adj. for Case Reserves	0.380	0.364	0.343	0.327	0.325	0.317
3-Year Avg. Paid	0.309	0.328	0.332	0.328	0.323	0.317
Latest Year Paid	0.325	0.340	0.328	0.324	0.321	0.317
Reform-Adj. Paid ^[2]	0.306	0.334	0.322	0.317	0.311	0.308
Latest Yr. Pd. Adj. for Settlement ^[3]	0.308	0.330	0.317	0.313	0.309	0.308

Difference from Actual 75-Month Loss Ratio

	15	27	39	51	63	Current
3-Year Avg. Incurred	19.8%	15.4%	10.6%	4.5%	1.6%	0.0%
Latest Year Incurred	25.0%	13.5%	7.2%	2.4%	0.6%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	19.7%	14.9%	8.2%	3.3%	2.6%	0.0%
3-Year Avg. Paid	-2.7%	3.5%	4.8%	3.3%	1.8%	0.0%
Latest Year Paid	2.4%	7.2%	3.5%	2.1%	1.2%	0.0%
Reform-Adj. Paid	-0.6%	8.5%	4.6%	3.1%	1.2%	0.0%
Latest Yr. Pd. Adj. for Settlement	0.1%	7.3%	3.1%	1.9%	0.4%	0.0%

[1] Each loss ratio is projected to incurred losses at 75 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 75 months.

[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 863 reforms and RBRVS.

[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of March 31, 2018
Accident Year 2013 Projected to 63 Months [1]**

Indemnity

Methodology	Based on Experience Evaluated as of (in months):				
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>Current</u>
3-Year Avg. Incurred	0.220	0.211	0.202	0.199	0.197
Latest Year Incurred	0.217	0.207	0.198	0.200	0.197
Latest Yr. Inc. Adj. for Case Reserves	0.251	0.222	0.212	0.205	0.197
3-Year Avg. Paid	0.209	0.205	0.203	0.200	0.197
Latest Year Paid	0.209	0.201	0.201	0.199	0.197
Reform-Adj. Paid ^[2]	0.209	0.201	0.201	0.199	0.197
Latest Yr. Pd. Adj. for Settlement ^[3]	0.205	0.198	0.198	0.197	0.197

Difference from Actual 63-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>Current</u>
3-Year Avg. Incurred	11.7%	7.2%	2.8%	1.5%	0.0%
Latest Year Incurred	10.4%	5.3%	0.9%	1.6%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	27.5%	12.7%	8.0%	4.2%	0.0%
3-Year Avg. Paid	6.3%	4.1%	3.3%	1.9%	0.0%
Latest Year Paid	6.2%	2.4%	2.3%	1.4%	0.0%
Reform-Adj. Paid	6.2%	2.4%	2.3%	1.4%	0.0%
Latest Yr. Pd. Adj. for Settlement	4.5%	0.8%	0.8%	0.5%	0.0%

Medical

Methodology	Based on Experience Evaluated as of (in months):				
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>Current</u>
3-Year Avg. Incurred	0.309	0.290	0.266	0.258	0.250
Latest Year Incurred	0.298	0.276	0.258	0.256	0.250
Latest Yr. Inc. Adj. for Case Reserves	0.308	0.276	0.269	0.258	0.250
3-Year Avg. Paid	0.264	0.265	0.261	0.256	0.250
Latest Year Paid	0.276	0.262	0.258	0.255	0.250
Reform-Adj. Paid ^[2]	0.281	0.263	0.257	0.252	0.247
Latest Yr. Pd. Adj. for Settlement ^[3]	0.277	0.260	0.254	0.250	0.247

Difference from Actual 63-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>Current</u>
3-Year Avg. Incurred	23.5%	15.8%	6.2%	3.0%	0.0%
Latest Year Incurred	19.1%	10.3%	3.1%	2.2%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	23.0%	10.3%	7.4%	3.1%	0.0%
3-Year Avg. Paid	5.5%	5.9%	4.3%	2.2%	0.0%
Latest Year Paid	10.2%	4.5%	2.8%	1.9%	0.0%
Reform-Adj. Paid	13.7%	6.3%	4.2%	2.0%	0.0%
Latest Yr. Pd. Adj. for Settlement	12.4%	5.2%	3.0%	1.2%	0.0%

[1] Each loss ratio is projected to incurred losses at 63 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 63 months.

[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 863 reforms and RBRVS.

[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of March 31, 2018
Accident Year 2014 Projected to 51 Months [1]**

Indemnity

Methodology	Based on Experience Evaluated as of (in months):			
	<u>15</u>	<u>27</u>	<u>39</u>	<u>Current</u>
3-Year Avg. Incurred	0.186	0.180	0.180	0.180
Latest Year Incurred	0.179	0.176	0.179	0.180
Latest Yr. Inc. Adj. for Case Reserves	0.208	0.193	0.183	0.180
3-Year Avg. Paid	0.178	0.180	0.181	0.180
Latest Year Paid	0.173	0.179	0.180	0.180
Reform-Adj. Paid ^[2]	0.173	0.179	0.180	0.180
Latest Yr. Pd. Adj. for Settlement ^[3]	0.172	0.177	0.179	0.180

Difference from Actual 51-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>39</u>	<u>Current</u>
3-Year Avg. Incurred	3.7%	0.0%	0.1%	0.0%
Latest Year Incurred	-0.3%	-2.2%	-0.3%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	15.5%	7.3%	2.0%	0.0%
3-Year Avg. Paid	-0.9%	0.0%	0.5%	0.0%
Latest Year Paid	-3.4%	-0.3%	0.2%	0.0%
Reform-Adj. Paid	-3.4%	-0.3%	0.2%	0.0%
Latest Yr. Pd. Adj. for Settlement	-4.4%	-1.5%	-0.5%	0.0%

Medical

Methodology	Based on Experience Evaluated as of (in months):			
	<u>15</u>	<u>27</u>	<u>39</u>	<u>Current</u>
3-Year Avg. Incurred	0.249	0.225	0.218	0.214
Latest Year Incurred	0.231	0.214	0.216	0.214
Latest Yr. Inc. Adj. for Case Reserves	0.240	0.226	0.219	0.214
3-Year Avg. Paid	0.225	0.221	0.217	0.214
Latest Year Paid	0.220	0.218	0.216	0.214
Reform-Adj. Paid ^[2]	0.224	0.220	0.217	0.213
Latest Yr. Pd. Adj. for Settlement ^[3]	0.222	0.219	0.216	0.213

Difference from Actual 51-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>39</u>	<u>Current</u>
3-Year Avg. Incurred	16.1%	4.9%	2.0%	0.0%
Latest Year Incurred	8.0%	-0.1%	1.1%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	12.3%	5.4%	2.4%	0.0%
3-Year Avg. Paid	4.9%	3.2%	1.5%	0.0%
Latest Year Paid	3.0%	1.9%	1.1%	0.0%
Reform-Adj. Paid	5.1%	3.4%	1.6%	0.0%
Latest Yr. Pd. Adj. for Settlement	4.4%	2.7%	1.2%	0.0%

[1] Each loss ratio is projected to incurred losses at 51 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 51 months.

[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 863 reforms and RBRVS.

[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of March 31, 2018
Accident Year 2015 Projected to 39 Months [1]**

Indemnity

<u>Methodology</u>	Based on Experience Evaluated as of (in months):		
	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	0.166	0.166	0.163
Latest Year Incurred	0.164	0.167	0.163
Latest Yr. Inc. Adj. for Case Reserves	0.177	0.168	0.163
3-Year Avg. Paid	0.161	0.165	0.163
Latest Year Paid	0.164	0.166	0.163
Reform-Adj. Paid ^[2]	0.164	0.166	0.163
Latest Yr. Pd. Adj. for Settlement ^[3]	0.163	0.164	0.163

Difference from Actual 39-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	1.7%	1.5%	0.0%
Latest Year Incurred	0.2%	2.3%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	8.5%	3.0%	0.0%
3-Year Avg. Paid	-1.4%	0.8%	0.0%
Latest Year Paid	0.4%	1.5%	0.0%
Reform-Adj. Paid	0.4%	1.5%	0.0%
Latest Yr. Pd. Adj. for Settlement	-0.2%	0.6%	0.0%

Medical

	Based on Experience Evaluated as of (in months):		
	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	0.208	0.199	0.196
Latest Year Incurred	0.198	0.199	0.196
Latest Yr. Inc. Adj. for Case Reserves	0.203	0.197	0.196
3-Year Avg. Paid	0.201	0.200	0.196
Latest Year Paid	0.198	0.200	0.196
Reform-Adj. Paid ^[2]	0.202	0.201	0.196
Latest Yr. Pd. Adj. for Settlement ^[3]	0.201	0.200	0.196

Difference from Actual 39-Month Loss Ratio

	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	6.3%	1.4%	0.0%
Latest Year Incurred	0.9%	1.4%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	3.6%	0.4%	0.0%
3-Year Avg. Paid	2.5%	2.2%	0.0%
Latest Year Paid	1.2%	1.8%	0.0%
Reform-Adj. Paid	3.0%	2.4%	0.0%
Latest Yr. Pd. Adj. for Settlement	2.7%	1.8%	0.0%

[1] Each loss ratio is projected to incurred losses at 39 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 39 months.

[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 863 reforms and RBRVS.

[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of March 31, 2018
Accident Year 2016 Projected to 27 Months [1]**

Indemnity

<u>Methodology</u>	<u>Based on Experience Evaluated as of (in months):</u>	
	<u>15</u>	<u>Current</u>
3-Year Avg. Incurred	0.132	0.131
Latest Year Incurred	0.133	0.131
Latest Yr. Inc. Adj. for Case Reserves	0.139	0.131
3-Year Avg. Paid	0.133	0.131
Latest Year Paid	0.135	0.131
Reform-Adj. Paid ^[2]	0.135	0.131
Latest Yr. Pd. Adj. for Settlement ^[3]	0.134	0.131

Difference from Actual 27-Month Loss Ratio

	<u>15</u>	<u>Current</u>
3-Year Avg. Incurred	0.8%	0.0%
Latest Year Incurred	1.4%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	5.6%	0.0%
3-Year Avg. Paid	1.4%	0.0%
Latest Year Paid	2.7%	0.0%
Reform-Adj. Paid	2.7%	0.0%
Latest Yr. Pd. Adj. for Settlement	2.2%	0.0%

Medical

	<u>Based on Experience Evaluated as of (in months):</u>	
	<u>15</u>	<u>Current</u>
3-Year Avg. Incurred	0.175	0.170
Latest Year Incurred	0.173	0.170
Latest Yr. Inc. Adj. for Case Reserves	0.174	0.170
3-Year Avg. Paid	0.176	0.170
Latest Year Paid	0.177	0.170
Reform-Adj. Paid ^[2]	0.178	0.170
Latest Yr. Pd. Adj. for Settlement ^[3]	0.178	0.170

Difference from Actual 27-Month Loss Ratio

	<u>15</u>	<u>Current</u>
3-Year Avg. Incurred	3.2%	0.0%
Latest Year Incurred	1.9%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	2.1%	0.0%
3-Year Avg. Paid	3.5%	0.0%
Latest Year Paid	4.1%	0.0%
Reform-Adj. Paid	5.0%	0.0%
Latest Yr. Pd. Adj. for Settlement	4.8%	0.0%

[1] Each loss ratio is projected to incurred losses at 27 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 27 months.

[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 863 reforms and RBRVS.

[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

Average Incurred Indemnity Loss per Reported Indemnity Claim
As of March 31, 2018

Accident Year	Evaluated as of (in months):									
	<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>
1993										11,696
1994									12,439	12,562
1995								14,084	14,289	14,493
1996						15,855	16,251	16,583	16,693	
1997					17,733	18,312	18,748	18,895	18,917	
1998				18,866	19,860	20,567	20,883	20,896	20,986	
1999			18,978	20,626	21,720	22,205	22,363	22,534	22,649	
2000		16,945	20,161	22,029	22,807	23,088	23,328	23,574	23,723	
2001		11,469	17,825	21,950	23,900	24,436	24,916	25,390	25,754	25,944
2002	9,079	11,463	18,098	21,275	22,257	22,842	23,485	23,936	24,179	24,437
2003	9,119	12,151	18,242	20,360	21,667	22,709	23,419	23,867	24,363	24,789
2004	8,693	11,670	14,396	16,437	17,493	18,228	18,928	19,441	19,945	20,250
2005	9,444	8,777	12,102	14,090	15,284	16,228	17,021	17,674	18,063	18,351
2006	6,923	8,801	13,007	15,330	16,784	17,956	18,847	19,377	19,744	19,976
2007	6,690	9,233	13,933	16,740	18,373	19,534	20,370	20,938	21,392	21,628
2008	6,473	9,873	15,055	18,430	20,386	21,577	22,427	22,948	23,328	23,554
2009	6,466	10,235	15,774	19,007	21,190	22,420	23,300	23,759	24,112	24,418
2010	6,237	10,153	15,470	18,899	20,752	21,902	22,649	23,117	23,490	
2011	6,217	10,615	15,899	18,833	20,619	21,589	22,202	22,684		
2012	6,209	10,641	15,670	18,573	20,097	21,166	21,805			
2013	6,529	10,727	15,608	18,280	19,789	20,623				
2014	6,293	10,779	15,854	18,962	20,597					
2015	6,891	11,268	16,603	19,451						
2016	6,841	11,370	16,455							
2017	7,017	11,637								
2018	7,372									

Accident Year	Annual Change									
	<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>
1994										7.4%
1995									14.9%	15.4%
1996								15.4%	16.1%	15.2%
1997							15.5%	15.4%	13.9%	13.3%
1998						12.0%	12.3%	11.4%	10.6%	10.9%
1999					9.3%	9.4%	8.0%	7.1%	7.8%	7.9%
2000				6.2%	6.8%	5.0%	4.0%	4.3%	4.6%	4.7%
2001			5.2%	8.9%	8.5%	7.1%	7.9%	8.8%	9.2%	9.4%
2002		-0.1%	1.5%	-3.1%	-6.9%	-6.5%	-5.7%	-5.7%	-6.1%	-5.8%
2003	0.4%	6.0%	0.8%	-4.3%	-2.6%	-0.6%	-0.3%	-0.3%	0.8%	1.4%
2004	-4.7%	-4.0%	-21.1%	-19.3%	-19.3%	-19.7%	-19.2%	-18.5%	-18.1%	-18.3%
2005	8.6%	-24.8%	-15.9%	-14.3%	-12.6%	-11.0%	-10.1%	-9.1%	-9.4%	-9.4%
2006	-26.7%	0.3%	7.5%	8.8%	9.8%	10.6%	10.7%	9.6%	9.3%	8.9%
2007	-3.4%	4.9%	7.1%	9.2%	9.5%	8.8%	8.1%	8.1%	8.4%	8.3%
2008	-3.3%	6.9%	8.1%	10.1%	11.0%	10.5%	10.1%	9.6%	9.0%	8.9%
2009	-0.1%	3.7%	4.8%	3.1%	3.9%	3.9%	3.9%	3.5%	3.4%	3.7%
2010	-3.5%	-0.8%	-1.9%	-0.6%	-2.1%	-2.3%	-2.8%	-2.7%	-2.6%	
2011	-0.3%	4.5%	2.8%	-0.4%	-0.6%	-1.4%	-2.0%	-1.9%		
2012	-0.1%	0.2%	-1.4%	-1.4%	-2.5%	-2.0%	-1.8%			
2013	5.2%	0.8%	-0.4%	-1.6%	-1.5%	-2.6%				
2014	-3.6%	0.5%	1.6%	3.7%	4.1%					
2015	9.5%	4.5%	4.7%	2.6%						
2016	-0.7%	0.9%	-0.9%							
2017	2.6%	2.3%								
2018	5.1%									

Annual Trend*										
All-Year	-1.7%	0.2%	-0.2%	-0.3%	-0.2%	0.1%	0.8%	1.6%	2.5%	3.4%
R ²	0.358	0.012	0.006	0.015	0.007	0.004	0.100	0.251	0.387	0.489
5-Year	3.4%	2.2%	1.6%	0.9%	-0.6%	-2.0%	-1.0%	1.7%	4.8%	7.6%
R ²	0.852	0.942	0.779	0.336	0.193	0.992	0.450	0.310	0.798	0.984

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Incurred Medical Loss per Reported Claim
As of March 31, 2018

Accident Year	Evaluated as of (in months):									
	<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>
1998									6,014	6,159
1999								6,763	6,966	7,279
2000							7,404	7,622	8,013	8,182
2001						8,279	8,574	8,994	9,354	9,690
2002					8,300	8,567	9,074	9,423	9,755	10,041
2003				7,514	7,918	8,392	8,813	9,191	9,567	9,911
2004			5,333	5,913	6,474	6,958	7,349	7,801	8,102	8,357
2005		4,169	5,015	5,705	6,118	6,597	7,079	7,493	7,789	7,978
2006	4,026	4,246	5,487	6,321	6,889	7,398	7,854	8,230	8,512	8,656
2007	4,065	4,708	6,153	7,109	7,884	8,492	9,064	9,395	9,654	9,793
2008	4,177	5,177	6,839	8,047	8,958	9,712	10,229	10,573	10,777	10,871
2009	4,399	5,699	7,806	9,115	10,269	11,010	11,525	11,800	11,945	12,019
2010	4,430	5,918	8,109	9,707	10,730	11,421	11,803	12,044	12,172	
2011	4,849	6,402	8,837	10,258	11,234	11,851	12,118	12,292		
2012	4,830	6,542	8,681	9,939	10,699	11,206	11,470			
2013	5,170	6,600	8,610	9,585	10,267	10,572				
2014	4,836	6,407	8,162	9,195	9,752					
2015	4,969	6,531	8,254	9,172						
2016	4,995	6,655	8,220							
2017	5,064	6,538								
2018	5,359									

Accident Year	Annual Change									
	<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>
1999									15.8%	18.2%
2000								12.7%	15.0%	12.4%
2001							15.8%	18.0%	16.7%	18.4%
2002						3.5%	5.8%	4.8%	4.3%	3.6%
2003					-4.6%	-2.0%	-2.9%	-2.5%	-1.9%	-1.3%
2004				-21.3%	-18.2%	-17.1%	-16.6%	-15.1%	-15.3%	-15.7%
2005			-6.0%	-3.5%	-5.5%	-5.2%	-3.7%	-3.9%	-3.9%	-4.5%
2006		1.9%	9.4%	10.8%	12.6%	12.1%	10.9%	9.8%	9.3%	8.5%
2007	1.0%	10.9%	12.1%	12.5%	14.4%	14.8%	15.4%	14.1%	13.4%	13.1%
2008	2.8%	10.0%	11.1%	13.2%	13.6%	14.4%	12.9%	12.5%	11.6%	11.0%
2009	5.3%	10.1%	14.1%	13.3%	14.6%	13.4%	12.7%	11.6%	10.8%	10.6%
2010	0.7%	3.8%	3.9%	6.5%	4.5%	3.7%	2.4%	2.1%	1.9%	
2011	9.5%	8.2%	9.0%	5.7%	4.7%	3.8%	2.7%	2.1%		
2012	-0.4%	2.2%	-1.8%	-3.1%	-4.8%	-5.4%	-5.3%			
2013	7.0%	0.9%	-0.8%	-3.6%	-4.0%	-5.7%				
2014	-6.5%	-2.9%	-5.2%	-4.1%	-5.0%					
2015	2.8%	1.9%	1.1%	-0.3%						
2016	0.5%	1.9%	-0.4%							
2017	1.4%	-1.8%								
2018	5.8%									

Annual Trend*										
All-Year	2.3%	4.1%	4.7%	4.4%	4.1%	3.9%	4.0%	4.2%	4.3%	3.8%
R ²	0.870	0.811	0.749	0.648	0.569	0.569	0.624	0.667	0.661	0.548
5-Year	2.3%	0.2%	-1.5%	-3.0%	-2.8%	-1.0%	2.8%	6.9%	9.7%	11.0%
R ²	0.870	0.045	0.700	0.956	0.698	0.140	0.463	0.878	0.955	0.997

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Indemnity Case Outstanding per Open Indemnity Claim
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	3	15	27	39	51	63	75	87	99	111
1993										21,861
1994									24,959	27,188
1995								26,829	29,262	32,409
1996							27,414	30,941	34,311	33,765
1997						26,726	29,286	32,191	32,500	32,887
1998					23,712	27,994	31,268	32,235	32,131	33,316
1999				21,833	24,919	27,426	28,055	28,551	29,339	30,663
2000			19,366	22,071	23,938	24,244	23,773	24,780	25,451	26,295
2001		12,531	18,074	20,529	20,650	19,941	20,010	21,321	23,099	23,868
2002	8,692	12,465	18,094	18,122	16,832	16,423	17,526	18,673	19,423	21,252
2003	8,892	12,829	16,821	15,287	15,528	17,050	18,995	21,102	24,284	27,941
2004	8,472	12,113	12,540	13,268	14,330	16,033	18,188	20,756	23,473	24,741
2005	9,113	8,154	10,186	11,586	12,932	15,309	18,370	21,797	23,156	25,886
2006	6,544	7,873	11,216	13,125	15,248	18,363	20,956	22,476	25,376	26,988
2007	6,158	8,259	11,844	14,372	16,495	18,511	20,599	23,880	27,073	29,066
2008	5,896	8,619	12,350	15,118	16,885	18,339	21,346	23,963	26,734	30,381
2009	5,873	9,021	13,025	14,850	17,052	19,210	21,618	23,542	25,841	28,544
2010	5,654	9,007	12,644	14,814	16,522	18,319	20,281	22,298	24,875	
2011	5,649	9,664	13,232	15,292	17,562	19,140	20,880	23,251		
2012	5,651	9,575	12,984	15,099	16,548	18,864	21,083			
2013	6,080	9,605	13,167	14,412	15,873	17,668				
2014	5,736	9,682	13,333	15,373	17,713					
2015	6,396	10,235	14,496	16,906						
2016	6,305	10,401	14,855							
2017	6,495	11,113								
2018	6,856									

Accident	Annual Change									
Year	3	15	27	39	51	63	75	87	99	111
1994										24.4%
1995									17.2%	19.2%
1996								15.3%	17.3%	4.2%
1997							6.8%	4.0%	-5.3%	-2.6%
1998						4.7%	6.8%	0.1%	-1.1%	1.3%
1999					5.1%	-2.0%	-10.3%	-11.4%	-8.7%	-8.0%
2000				1.1%	-3.9%	-11.6%	-15.3%	-13.2%	-13.3%	-14.2%
2001			-6.7%	-7.0%	-13.7%	-17.7%	-15.8%	-14.0%	-9.2%	-9.2%
2002		-0.5%	0.1%	-11.7%	-18.5%	-17.6%	-12.4%	-12.4%	-15.9%	-11.0%
2003	2.3%	2.9%	-7.0%	-15.6%	-7.7%	3.8%	8.4%	13.0%	25.0%	31.5%
2004	-4.7%	-5.6%	-25.4%	-13.2%	-7.7%	-6.0%	-4.2%	-1.6%	-3.3%	-11.5%
2005	7.6%	-32.7%	-18.8%	-12.7%	-9.8%	-4.5%	1.0%	5.0%	-1.3%	4.6%
2006	-28.2%	-3.4%	10.1%	13.3%	17.9%	19.9%	14.1%	3.1%	9.6%	4.3%
2007	-5.9%	4.9%	5.6%	9.5%	8.2%	0.8%	-1.7%	6.2%	6.7%	7.7%
2008	-4.3%	4.4%	4.3%	5.2%	2.4%	-0.9%	3.6%	0.3%	-1.3%	4.5%
2009	-0.4%	4.7%	5.5%	-1.8%	1.0%	4.8%	1.3%	-1.8%	-3.3%	-6.0%
2010	-3.7%	-0.2%	-2.9%	-0.2%	-3.1%	-4.6%	-6.2%	-5.3%	-3.7%	
2011	-0.1%	7.3%	4.7%	3.2%	6.3%	4.5%	3.0%	4.3%		
2012	0.0%	-0.9%	-1.9%	-1.3%	-5.8%	-1.4%	1.0%			
2013	7.6%	0.3%	1.4%	-4.6%	-4.1%	-6.3%				
2014	-5.7%	0.8%	1.3%	6.7%	11.6%					
2015	11.5%	5.7%	8.7%	10.0%						
2016	-1.4%	1.6%	2.5%							
2017	3.0%	6.8%								
2018	5.6%									

Annual Trend*										
All-Year	-2.0%	-0.8%	-1.3%	-1.6%	-1.9%	-2.2%	-2.0%	-1.9%	-1.2%	-0.3%
R ²	0.365	0.060	0.144	0.216	0.277	0.364	0.353	0.347	0.190	0.009
5-Year	3.8%	3.7%	3.7%	2.2%	0.4%	-1.4%	-0.6%	-1.2%	-0.9%	3.2%
R ²	0.823	0.938	0.897	0.353	0.017	0.388	0.151	0.465	0.150	0.622

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Medical Case Outstanding per Open Indemnity Claim
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	3	15	27	39	51	63	75	87	99	111
1993										37,305
1994									33,872	43,352
1995								35,380	43,734	54,527
1996							28,909	34,601	45,462	50,331
1997						23,104	30,321	41,397	48,500	54,488
1998					19,637	28,028	38,683	44,405	50,509	60,166
1999				15,634	21,047	28,040	33,578	39,734	48,804	64,777
2000			13,930	17,733	22,884	27,783	31,567	38,910	51,090	59,239
2001		11,331	14,288	17,411	20,270	23,489	28,557	36,944	47,002	59,208
2002	11,367	12,688	14,991	16,604	18,059	21,307	28,299	35,537	44,490	53,997
2003	12,343	12,445	14,405	15,457	18,575	23,357	30,704	39,076	48,685	61,364
2004	12,049	12,427	13,051	15,568	20,171	26,495	32,444	42,691	51,363	60,503
2005	14,005	12,484	14,739	18,624	22,096	27,574	36,013	46,471	54,227	65,022
2006	11,445	12,482	16,780	21,484	25,879	32,506	39,275	47,581	59,207	67,129
2007	12,436	13,873	18,230	22,492	28,305	34,737	43,393	52,382	62,225	71,586
2008	12,492	14,588	18,781	23,705	28,629	35,588	44,585	53,642	62,987	70,956
2009	13,128	15,235	20,209	24,060	30,290	36,811	43,863	51,619	59,010	66,255
2010	13,067	15,498	20,001	24,815	29,906	36,067	41,910	47,771	53,088	
2011	14,828	16,928	21,872	26,390	32,299	38,976	43,553	48,739		
2012	14,640	17,196	21,145	25,236	29,462	34,916	40,790			
2013	15,187	16,591	20,960	23,669	28,405	33,045				
2014	13,578	16,171	19,577	22,989	27,366					
2015	14,511	16,882	20,643	25,607						
2016	14,285	17,397	21,642							
2017	14,427	18,281								
2018	16,217									

Accident	Annual Change									
Year	3	15	27	39	51	63	75	87	99	111
1994										16.2%
1995									29.1%	25.8%
1996								-2.2%	4.0%	-7.7%
1997							4.9%	19.6%	6.7%	8.3%
1998						21.3%	27.6%	7.3%	4.1%	10.4%
1999					7.2%	0.0%	-13.2%	-10.5%	-3.4%	7.7%
2000				13.4%	8.7%	-0.9%	-6.0%	-2.1%	4.7%	-8.6%
2001			2.6%	-1.8%	-11.4%	-15.5%	-9.5%	-5.1%	-8.0%	-0.1%
2002		12.0%	4.9%	-4.6%	-10.9%	-9.3%	-0.9%	-3.8%	-5.3%	-8.8%
2003	8.6%	-1.9%	-3.9%	-6.9%	2.9%	9.6%	8.5%	10.0%	9.4%	13.6%
2004	-2.4%	-0.1%	-9.4%	0.7%	8.6%	13.4%	5.7%	9.3%	5.5%	-1.4%
2005	16.2%	0.5%	12.9%	19.6%	9.5%	4.1%	11.0%	8.9%	5.6%	7.5%
2006	-18.3%	0.0%	13.9%	15.4%	17.1%	17.9%	9.1%	2.4%	9.2%	3.2%
2007	8.7%	11.1%	8.6%	4.7%	9.4%	6.9%	10.5%	10.1%	5.1%	6.6%
2008	0.4%	5.2%	3.0%	5.4%	1.1%	2.4%	2.7%	2.4%	1.2%	-0.9%
2009	5.1%	4.4%	7.6%	1.5%	5.8%	3.4%	-1.6%	-3.8%	-6.3%	-6.6%
2010	-0.5%	1.7%	-1.0%	3.1%	-1.3%	-2.0%	-4.5%	-7.5%	-10.0%	
2011	13.5%	9.2%	9.4%	6.3%	8.0%	8.1%	3.9%	2.0%		
2012	-1.3%	1.6%	-3.3%	-4.4%	-8.8%	-10.4%	-6.3%			
2013	3.7%	-3.5%	-0.9%	-6.2%	-3.6%	-5.4%				
2014	-10.6%	-2.5%	-6.6%	-2.9%	-3.7%					
2015	6.9%	4.4%	5.4%	11.4%						
2016	-1.6%	3.1%	4.8%							
2017	1.0%	5.1%								
2018	12.4%									

Annual Trend*										
All-Year	1.7%	2.9%	3.3%	3.5%	3.2%	3.0%	2.6%	2.3%	2.5%	2.9%
R ²	0.680	0.914	0.817	0.766	0.685	0.614	0.601	0.649	0.655	0.708
5-Year	3.6%	2.7%	0.3%	-1.5%	-3.0%	-2.5%	-1.8%	-2.6%	-2.7%	0.9%
R ²	0.721	0.800	0.017	0.180	0.606	0.410	0.647	0.701	0.404	0.119

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Paid Indemnity Loss per Reported Indemnity Claim
As of March 31, 2018

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>
1993										11,164
1994									11,528	11,717
1995								12,733	13,089	13,346
1996							13,856	14,444	14,916	15,254
1997						14,847	15,822	16,579	17,044	17,406
1998					14,676	16,249	17,427	18,274	18,785	19,223
1999				12,976	15,786	17,739	19,053	19,878	20,496	20,968
2000			8,723	13,412	16,683	18,717	20,079	20,931	21,626	22,102
2001		3,540	9,121	14,494	18,355	20,463	21,942	22,942	23,644	24,171
2002	787	3,597	9,112	14,441	17,631	19,662	20,948	21,854	22,470	22,890
2003	785	3,730	9,515	14,423	17,509	19,424	20,706	21,533	22,180	22,761
2004	760	3,752	8,027	11,678	13,921	15,339	16,376	17,127	17,852	18,466
2005	835	3,441	7,296	10,222	12,261	13,513	14,493	15,303	16,043	16,657
2006	771	3,635	7,798	11,017	13,119	14,682	15,920	16,899	17,642	18,196
2007	883	3,869	8,378	11,877	14,304	16,069	17,391	18,429	19,188	19,795
2008	908	4,220	9,048	13,057	15,974	18,003	19,440	20,451	21,237	21,731
2009	928	4,208	9,203	13,477	16,545	18,687	20,206	21,302	22,101	22,733
2010	903	4,173	9,172	13,503	16,579	18,601	20,051	21,065	21,802	
2011	976	4,247	9,380	13,518	16,388	18,391	19,736	20,724		
2012	967	4,343	9,417	13,543	16,344	18,241	19,555			
2013	972	4,341	9,402	13,671	16,459	18,184				
2014	935	4,373	9,715	14,252	17,147					
2015	973	4,561	10,173	14,715						
2016	997	4,746	10,270							
2017	1,001	4,822								
2018	1,095									

Accident	Annual Change									
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>
1994										5.0%
1995									13.5%	13.9%
1996								13.4%	14.0%	14.3%
1997							14.2%	14.8%	14.3%	14.1%
1998						9.4%	10.1%	10.2%	10.2%	10.4%
1999					7.6%	9.2%	9.3%	8.8%	9.1%	9.1%
2000				3.4%	5.7%	5.5%	5.4%	5.3%	5.5%	5.4%
2001			4.6%	8.1%	10.0%	9.3%	9.3%	9.6%	9.3%	9.4%
2002		1.6%	-0.1%	-0.4%	-3.9%	-3.9%	-4.5%	-4.7%	-5.0%	-5.3%
2003	-0.3%	3.7%	4.4%	-0.1%	-0.7%	-1.2%	-1.2%	-1.5%	-1.3%	-0.6%
2004	-3.2%	0.6%	-15.6%	-19.0%	-20.5%	-21.0%	-20.9%	-20.5%	-19.5%	-18.9%
2005	9.9%	-8.3%	-9.1%	-12.5%	-11.9%	-11.9%	-11.5%	-10.6%	-10.1%	-9.8%
2006	-7.7%	5.6%	6.9%	7.8%	7.0%	8.6%	9.8%	10.4%	10.0%	9.2%
2007	14.6%	6.4%	7.4%	7.8%	9.0%	9.4%	9.2%	9.1%	8.8%	8.8%
2008	2.9%	9.1%	8.0%	9.9%	11.7%	12.0%	11.8%	11.0%	10.7%	9.8%
2009	2.2%	-0.3%	1.7%	3.2%	3.6%	3.8%	3.9%	4.2%	4.1%	4.6%
2010	-2.7%	-0.8%	-0.3%	0.2%	0.2%	-0.5%	-0.8%	-1.1%	-1.4%	
2011	8.1%	1.8%	2.3%	0.1%	-1.1%	-1.1%	-1.6%	-1.6%		
2012	-0.9%	2.3%	0.4%	0.2%	-0.3%	-0.8%	-0.9%			
2013	0.5%	-0.1%	-0.2%	0.9%	0.7%	-0.3%				
2014	-3.8%	0.7%	3.3%	4.2%	4.2%					
2015	4.0%	4.3%	4.7%	3.2%						
2016	2.5%	4.1%	1.0%							
2017	0.4%	1.6%								
2018	9.5%									

Annual Trend*										
All-Year	2.0%	2.0%	1.0%	0.4%	0.2%	0.4%	0.9%	1.6%	2.5%	3.3%
R ²	0.859	0.896	0.328	0.040	0.009	0.027	0.113	0.243	0.372	0.471
5-Year	3.5%	3.0%	2.6%	2.2%	0.7%	-0.7%	-0.1%	2.7%	5.8%	8.3%
R ²	0.875	0.960	0.913	0.874	0.337	0.969	0.013	0.519	0.857	0.989

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Indemnity Claim
As of March 31, 2018

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>
2000										19,513
2001									21,973	22,883
2002								21,286	22,293	23,113
2003							19,205	20,369	21,422	22,344
2004						15,727	17,187	18,439	19,567	20,597
2005					14,112	16,006	17,614	18,876	20,227	21,358
2006				13,015	15,785	17,971	19,817	21,358	22,670	23,642
2007			10,433	14,502	17,704	20,169	22,298	24,184	25,494	26,505
2008		6,026	11,439	15,919	19,621	22,554	24,893	26,629	27,941	28,877
2009	899	6,179	11,863	16,808	20,887	24,158	26,527	28,225	29,434	30,329
2010	919	6,083	11,817	17,014	21,288	24,210	26,383	27,998	29,104	
2011	935	5,555	11,301	16,231	19,953	22,704	24,678	26,082		
2012	781	5,553	10,978	15,518	18,957	21,396	23,030			
2013	836	5,423	10,522	14,821	17,953	19,960				
2014	944	5,250	10,277	14,479	17,397					
2015	1,015	5,253	10,405	14,399						
2016	935	5,572	10,461							
2017	1,214	5,741								
2018	1,156									

Accident	Annual Change									
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>
2001										17.3%
2002									1.5%	1.0%
2003								-4.3%	-3.9%	-3.3%
2004							-10.5%	-9.5%	-8.7%	-7.8%
2005						1.8%	2.5%	2.4%	3.4%	3.7%
2006					11.9%	12.3%	12.5%	13.1%	12.1%	10.7%
2007				11.4%	12.2%	12.2%	12.5%	13.2%	12.5%	12.1%
2008			9.6%	9.8%	10.8%	11.8%	11.6%	10.1%	9.6%	8.9%
2009		2.5%	3.7%	5.6%	6.5%	7.1%	6.6%	6.0%	5.3%	5.0%
2010**	2.2%	-1.6%	-0.4%	1.2%	1.9%	0.2%	-0.5%	-0.8%	-1.1%	
2011**	1.8%	-8.7%	-4.4%	-4.6%	-6.3%	-6.2%	-6.5%	-6.8%		
2012	-16.5%	0.0%	-2.9%	-4.4%	-5.0%	-5.8%	-6.7%			
2013	7.0%	-2.3%	-4.1%	-4.5%	-5.3%	-6.7%				
2014	13.0%	-3.2%	-2.3%	-2.3%	-3.1%					
2015	7.5%	0.1%	1.2%	-0.5%						
2016	-7.9%	6.1%	0.5%							
2017	29.9%	3.0%								
2018	-4.8%									

Annual Trend*										
All-Year	3.2%	-1.3%	-1.0%	0.2%	2.0%	3.7%	4.4%	4.5%	4.2%	4.0%
R ²	0.489	0.425	0.328	0.003	0.210	0.480	0.654	0.697	0.666	0.686
5-Year	6.0%	1.8%	-1.1%	-3.0%	-5.0%	-4.9%	-2.3%	2.0%	6.6%	9.4%
R ²	0.607	0.506	0.461	0.924	0.988	0.934	0.390	0.260	0.865	0.981

*Trend is based on an exponential distribution.

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

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Claim**
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	3	15	27	39	51	63	75	87	99	111
1998									4,950	5,136
1999								5,608	5,835	6,091
2000							6,071	6,367	6,702	6,959
2001						6,688	7,132	7,550	7,893	8,196
2002					6,530	7,100	7,613	8,012	8,361	8,643
2003				5,384	6,153	6,794	7,262	7,665	8,024	8,341
2004			3,235	4,143	4,878	5,450	5,913	6,301	6,654	6,978
2005		1,784	2,986	3,886	4,616	5,176	5,642	6,016	6,408	6,737
2006	426	1,863	3,225	4,281	5,093	5,725	6,267	6,714	7,094	7,377
2007	365	2,038	3,629	4,858	5,818	6,562	7,202	7,762	8,152	8,454
2008	410	2,328	4,074	5,484	6,656	7,575	8,305	8,849	9,257	9,556
2009	492	2,495	4,479	6,164	7,543	8,644	9,446	10,015	10,424	10,723
2010	511	2,553	4,714	6,592	8,119	9,169	9,942	10,520	10,922	
2011	518	2,667	5,051	6,997	8,453	9,520	10,276	10,819		
2012	521	2,712	5,043	6,896	8,273	9,236	9,885			
2013	544	2,719	4,977	6,773	8,046	8,869				
2014	571	2,668	4,873	6,599	7,780					
2015	604	2,668	4,904	6,527						
2016	580	2,788	4,919							
2017	690	2,775								
2018	672									

Accident	Annual Change									
Year	3	15	27	39	51	63	75	87	99	111
1999									17.9%	18.6%
2000								13.5%	14.9%	14.2%
2001							17.5%	18.6%	17.8%	17.8%
2002						6.2%	6.7%	6.1%	5.9%	5.5%
2003					-5.8%	-4.3%	-4.6%	-4.3%	-4.0%	-3.5%
2004				-23.1%	-20.7%	-19.8%	-18.6%	-17.8%	-17.1%	-16.3%
2005			-7.7%	-6.2%	-5.4%	-5.0%	-4.6%	-4.5%	-3.7%	-3.5%
2006		4.4%	8.0%	10.2%	10.3%	10.6%	11.1%	11.6%	10.7%	9.5%
2007	-14.5%	9.4%	12.5%	13.5%	14.2%	14.6%	14.9%	15.6%	14.9%	14.6%
2008	12.5%	14.2%	12.2%	12.9%	14.4%	15.4%	15.3%	14.0%	13.6%	13.0%
2009	19.9%	7.2%	9.9%	12.4%	13.3%	14.1%	13.7%	13.2%	12.6%	12.2%
2010	3.8%	2.3%	5.2%	6.9%	7.6%	6.1%	5.3%	5.0%	4.8%	
2011	1.4%	4.5%	7.2%	6.1%	4.1%	3.8%	3.4%	2.8%		
2012	0.5%	1.7%	-0.2%	-1.4%	-2.1%	-3.0%	-3.8%			
2013	4.4%	0.2%	-1.3%	-1.8%	-2.8%	-4.0%				
2014	4.9%	-1.9%	-2.1%	-2.6%	-3.3%					
2015	5.9%	0.0%	0.6%	-1.1%						
2016	-4.1%	4.5%	0.3%							
2017	19.0%	-0.5%								
2018	-2.6%									

Annual Trend*										
All-Year	4.6%	3.6%	4.6%	4.5%	4.2%	4.0%	4.2%	4.5%	4.8%	4.3%
R ²	0.887	0.775	0.792	0.667	0.567	0.538	0.582	0.623	0.649	0.570
5-Year	4.7%	0.9%	-0.6%	-1.8%	-1.3%	0.6%	4.4%	8.7%	11.7%	12.6%
R ²	0.705	0.413	0.566	0.986	0.468	0.061	0.673	0.923	0.975	0.997

*Trend is based on an exponential distribution.

**All entries reflect the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience

Average Paid Indemnity Loss per Closed Indemnity Claim**
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	3	15	27	39	51	63	75	87	99	111
1993										10,229
1994									10,370	10,647
1995								11,119	11,554	11,955
1996							11,930	12,500	13,054	13,481
1997						12,383	13,340	14,283	14,843	15,316
1998					11,528	13,180	14,635	15,583	16,356	16,936
1999				9,204	12,334	14,424	16,032	17,129	17,904	18,655
2000			4,144	8,860	12,490	14,931	16,841	17,940	18,803	19,535
2001		1,334	4,067	9,027	13,564	16,435	17,776	19,107	20,115	20,867
2002	1,005	1,247	3,794	9,235	13,599	15,622	17,183	18,496	19,422	19,935
2003	859	1,451	4,633	10,564	13,291	15,600	17,186	18,248	18,883	19,582
2004	609	1,732	4,683	7,701	10,467	12,280	13,531	14,264	15,017	15,796
2005	524	1,642	3,481	6,432	9,006	10,578	11,666	12,524	13,410	14,447
2006	664	1,694	3,941	7,046	9,597	11,370	12,684	13,928	15,117	15,977
2007	883	1,628	4,322	7,583	10,213	12,165	13,858	15,374	16,481	17,434
2008	529	1,929	4,699	8,323	11,309	13,723	15,915	17,321	18,545	19,439
2009	576	1,973	4,919	8,715	11,987	14,835	16,814	18,485	19,668	20,602
2010	576	1,944	5,025	8,946	12,552	15,184	17,211	18,730	19,837	
2011	568	2,175	5,379	9,476	12,881	15,534	17,325	18,703		
2012	615	2,250	5,926	10,039	13,296	15,608	17,354			
2013	577	2,622	6,339	10,507	13,670	15,874				
2014	655	2,703	6,723	11,153	14,518					
2015	720	3,011	7,371	11,886						
2016	704	3,254	7,703							
2017	725	3,348								
2018	800									

Accident	Annual Change									
Year	3	15	27	39	51	63	75	87	99	111
1994										4.1%
1995									11.4%	12.3%
1996								12.4%	13.0%	12.8%
1997							11.8%	14.3%	13.7%	13.6%
1998						6.4%	9.7%	9.1%	10.2%	10.6%
1999					7.0%	9.4%	9.5%	9.9%	9.5%	10.1%
2000				-3.7%	1.3%	3.5%	5.1%	4.7%	5.0%	4.7%
2001			-1.8%	1.9%	8.6%	10.1%	5.5%	6.5%	7.0%	6.8%
2002		-6.5%	-6.7%	2.3%	0.3%	-4.9%	-3.3%	-3.2%	-3.4%	-4.5%
2003	-14.6%	16.4%	22.1%	14.4%	-2.3%	-0.1%	0.0%	-1.3%	-2.8%	-1.8%
2004	-29.1%	19.3%	1.1%	-27.1%	-21.2%	-21.3%	-21.3%	-21.8%	-20.5%	-19.3%
2005	-13.9%	-5.2%	-25.7%	-16.5%	-14.0%	-13.9%	-13.8%	-12.2%	-10.7%	-8.5%
2006	26.7%	3.1%	13.2%	9.5%	6.6%	7.5%	8.7%	11.2%	12.7%	10.6%
2007	33.0%	-3.9%	9.7%	7.6%	6.4%	7.0%	9.3%	10.4%	9.0%	9.1%
2008	-40.1%	18.5%	8.7%	9.7%	10.7%	12.8%	14.8%	12.7%	12.5%	11.5%
2009	9.0%	2.3%	4.7%	4.7%	6.0%	8.1%	5.7%	6.7%	6.1%	6.0%
2010	0.0%	-1.4%	2.2%	2.7%	4.7%	2.4%	2.4%	1.3%	0.9%	
2011	-1.4%	11.9%	7.0%	5.9%	2.6%	2.3%	0.7%	-0.1%		
2012	8.1%	3.5%	10.2%	5.9%	3.2%	0.5%	0.2%			
2013	-6.2%	16.5%	7.0%	4.7%	2.8%	1.7%				
2014	13.7%	3.1%	6.1%	6.1%	6.2%					
2015	9.9%	11.4%	9.6%	6.6%						
2016	-2.3%	8.1%	4.5%							
2017	3.0%	2.9%								
2018	10.4%									

Annual Trend*										
All-Year	-0.4%	6.1%	4.3%	1.4%	0.6%	0.6%	1.0%	1.7%	2.4%	3.1%
R ²	0.011	0.957	0.792	0.193	0.045	0.047	0.122	0.242	0.368	0.471
5-Year	4.1%	7.0%	7.0%	5.7%	3.6%	1.6%	2.1%	4.8%	7.5%	9.5%
R ²	0.801	0.962	0.992	0.997	0.968	0.958	0.781	0.778	0.927	0.993

*Trend is based on an exponential distribution.

**Paid indemnity losses used in the severity calculations above represent paid indemnity losses on closed claims only.

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Closed Indemnity Claim***
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	3	15	27	39	51	63	75	87	99	111
2000										15,951
2001									17,721	18,647
2002								17,184	18,317	19,083
2003							15,241	16,319	17,218	18,144
2004						11,529	12,902	13,994	15,010	16,157
2005					9,590	11,367	12,898	13,958	15,333	17,027
2006				7,867	10,439	12,621	14,413	16,073	17,825	19,136
2007			5,476	8,705	11,644	13,971	16,179	18,601	20,335	21,986
2008		3,408	6,017	9,735	12,977	15,941	19,037	21,157	23,097	24,548
2009	1,866	3,272	6,264	10,252	14,145	17,973	20,772	23,193	25,000	26,459
2010	1,985	3,218	6,562	10,771	15,171	18,746	21,585	23,938	25,577	
2011	1,067	2,647	6,119	10,663	14,726	18,138	20,846	22,900		
2012	746	2,819	6,556	10,968	14,699	17,650	19,870			
2013	703	2,979	6,720	10,985	14,388	17,065				
2014	696	2,997	6,889	11,013	14,433					
2015	856	3,253	7,297	11,371						
2016	702	3,488	7,523							
2017	973	3,593								
2018	984									

Accident	Annual Change									
Year	3	15	27	39	51	63	75	87	99	111
2001										16.9%
2002									3.4%	2.3%
2003								-5.0%	-6.0%	-4.9%
2004							-15.3%	-14.2%	-12.8%	-11.0%
2005						-1.4%	0.0%	-0.3%	2.2%	5.4%
2006					8.9%	11.0%	11.8%	15.2%	16.3%	12.4%
2007				10.7%	11.5%	10.7%	12.2%	15.7%	14.1%	14.9%
2008			9.9%	11.8%	11.4%	14.1%	17.7%	13.7%	13.6%	11.7%
2009		-4.0%	4.1%	5.3%	9.0%	12.7%	9.1%	9.6%	8.2%	7.8%
2010**	6.4%	-1.7%	4.7%	5.1%	7.3%	4.3%	3.9%	3.2%	2.3%	
2011**	-46.2%	-17.7%	-6.7%	-1.0%	-2.9%	-3.2%	-3.4%	-4.3%		
2012	-30.1%	6.5%	7.1%	2.9%	-0.2%	-2.7%	-4.7%			
2013	-5.7%	5.7%	2.5%	0.2%	-2.1%	-3.3%				
2014	-0.9%	0.6%	2.5%	0.3%	0.3%					
2015	23.0%	8.5%	5.9%	3.3%						
2016	-18.0%	7.2%	3.1%							
2017	38.6%	3.0%								
2018	1.2%									

Annual Trend*										
All-Year	-7.3%	0.9%	3.0%	3.6%	4.7%	5.9%	6.0%	5.7%	5.0%	4.6%
R ²	0.347	0.071	0.885	0.785	0.732	0.783	0.752	0.675	0.595	0.632
5-Year	8.5%	5.4%	3.6%	1.3%	-1.2%	-1.6%	0.9%	5.5%	9.7%	12.0%
R ²	0.589	0.949	0.974	0.846	0.846	0.560	0.084	0.709	0.942	0.990

*Trend is based on an exponential distribution.

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

***Paid medical losses used in the severity calculations above represent paid medical losses on closed indemnity claims only.

Source: WCIRB quarterly calls for experience

Ratio of Incremental Paid Indemnity to Indemnity Claims Open During the Period
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	0-3	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
1993										7,782
1994									6,776	5,453
1995								8,265	7,251	6,524
1996							8,832	8,203	8,262	7,203
1997						9,857	9,258	9,085	7,110	6,664
1998					10,460	9,111	9,371	8,636	6,637	6,841
1999				11,218	10,311	10,347	9,266	7,596	7,369	6,778
2000			8,938	11,083	10,941	9,354	8,380	6,827	7,231	6,200
2001		3,470	8,853	11,377	10,792	8,097	7,609	6,681	6,042	5,669
2002	787	3,515	8,788	10,847	8,648	7,597	6,639	6,230	5,421	4,761
2003	785	3,654	8,875	9,591	8,160	7,158	6,535	5,655	5,703	6,275
2004	760	3,670	6,650	7,323	6,257	5,695	5,724	5,292	6,388	6,853
2005	835	3,344	6,010	6,246	6,133	5,394	5,551	5,938	6,813	7,022
2006	771	3,553	6,407	6,998	6,479	6,554	6,985	7,061	6,777	6,781
2007	883	3,768	7,019	7,566	7,289	7,259	7,191	7,204	7,279	7,558
2008	908	4,112	7,502	8,407	8,395	7,931	7,530	7,370	7,699	6,597
2009	928	4,109	7,667	8,693	8,424	8,062	8,007	7,820	7,870	8,187
2010	903	4,083	7,726	8,899	8,656	8,239	8,233	8,140	8,177	
2011	976	4,158	8,002	8,661	8,512	8,525	8,227	8,576		
2012	967	4,257	7,975	8,824	8,630	8,604	8,702			
2013	972	4,266	7,847	9,284	8,940	8,458				
2014	935	4,288	8,299	10,064	9,683					
2015	973	4,482	8,789	10,432						
2016	997	4,661	8,910							
2017	1,001	4,739								
2018	1,095									

Accident	Annual Change									
Year	0-3	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
1994										-29.9%
1995									7.0%	19.6%
1996								-0.8%	13.9%	10.4%
1997							4.8%	10.8%	-13.9%	-7.5%
1998						-7.6%	1.2%	-4.9%	-6.7%	2.7%
1999					-1.4%	13.6%	-1.1%	-12.0%	11.0%	-0.9%
2000				-1.2%	6.1%	-9.6%	-9.6%	-10.1%	-1.9%	-8.5%
2001				2.7%	-1.4%	-13.4%	-9.2%	-2.1%	-16.4%	-8.6%
2002		1.3%	-0.7%	-4.7%	-19.9%	-6.2%	-12.8%	-6.7%	-10.3%	-16.0%
2003	-0.3%	3.9%	1.0%	-11.6%	-5.6%	-5.8%	-1.6%	-9.2%	5.2%	31.8%
2004	-3.2%	0.4%	-25.1%	-23.6%	-23.3%	-20.4%	-12.4%	-6.4%	12.0%	9.2%
2005	9.9%	-8.9%	-9.6%	-14.7%	-2.0%	-5.3%	-3.0%	12.2%	6.6%	2.5%
2006	-7.7%	6.2%	6.6%	12.0%	5.6%	21.5%	25.9%	18.9%	-0.5%	-3.4%
2007	14.6%	6.1%	9.6%	8.1%	12.5%	10.8%	2.9%	2.0%	7.4%	11.5%
2008	2.9%	9.1%	6.9%	11.1%	15.2%	9.3%	4.7%	2.3%	5.8%	-12.7%
2009	2.2%	-0.1%	2.2%	3.4%	0.3%	1.7%	6.3%	6.1%	2.2%	24.1%
2010	-2.7%	-0.6%	0.8%	2.4%	2.8%	2.2%	2.8%	4.1%	3.9%	
2011	8.1%	1.8%	3.6%	-2.7%	-1.7%	3.5%	-0.1%	5.4%		
2012	-0.9%	2.4%	-0.3%	1.9%	1.4%	0.9%	5.8%			
2013	0.5%	0.2%	-1.6%	5.2%	3.6%	-1.7%				
2014	-3.8%	0.5%	5.8%	8.4%	8.3%					
2015	4.0%	4.5%	5.9%	3.7%						
2016	2.5%	4.0%	1.4%							
2017	0.4%	1.7%								
2018	9.5%									

Annual Trend*										
All-Year	2.0%	2.0%	0.2%	-0.6%	-0.8%	-0.8%	-0.8%	-0.5%	0.3%	0.5%
R ²	0.859	0.894	0.010	0.030	0.053	0.049	0.057	0.024	0.019	0.039
5-Year	3.5%	3.0%	3.4%	5.2%	2.8%	1.4%	3.2%	4.6%	4.6%	2.8%
R ²	0.875	0.954	0.874	0.963	0.691	0.678	0.907	0.986	0.958	0.254

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Ratio of Incremental Paid Medical to Indemnity Claims Open During the Period**
As of March 31, 2018

Accident	Evaluated as of (in months):									
Year	0-3	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
2001										9,882
2002									8,934	9,256
2003								8,036	9,399	10,100
2004							8,064	8,862	10,002	11,511
2005						8,135	9,073	9,236	12,437	12,951
2006					8,516	9,152	10,401	11,089	11,938	11,827
2007				8,810	9,584	10,121	11,508	13,072	12,519	12,548
2008			8,518	9,441	10,643	11,424	12,173	12,557	12,764	12,281
2009		6,100	8,886	10,113	11,185	12,228	12,415	12,056	11,851	11,573
2010	919	6,006	9,025	10,731	11,980	11,850	12,279	12,869	12,226	
2011	935	5,484	9,071	10,324	11,000	11,655	12,012	12,130		
2012	781	5,503	8,667	9,742	10,563	11,013	10,794			
2013	836	5,376	8,046	9,400	10,027	9,810				
2014	944	5,171	7,966	9,380	9,765					
2015	1,015	5,175	8,217	9,237						
2016	935	5,503	8,088							
2017	1,214	5,639								
2018	1,156									

Accident	Annual Change									
Year	0-3	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
2002										-6.3%
2003									5.2%	9.1%
2004								10.3%	6.4%	14.0%
2005							12.5%	4.2%	24.3%	12.5%
2006						12.5%	14.6%	20.1%	-4.0%	-8.7%
2007					12.5%	10.6%	10.6%	17.9%	4.9%	6.1%
2008				7.2%	11.0%	12.9%	5.8%	-3.9%	2.0%	-2.1%
2009			4.3%	7.1%	5.1%	7.0%	2.0%	-4.0%	-7.2%	-5.8%
2010**		-1.6%	1.6%	6.1%	7.1%	-3.1%	-1.1%	6.7%	3.2%	
2011**	1.8%	-8.7%	0.5%	-3.8%	-8.2%	-1.6%	-2.2%	-5.7%		
2012	-16.5%	0.3%	-4.5%	-5.6%	-4.0%	-5.5%	-10.1%			
2013	7.0%	-2.3%	-7.2%	-3.5%	-5.1%	-10.9%				
2014	13.0%	-3.8%	-1.0%	-0.2%	-2.6%					
2015	7.5%	0.1%	3.1%	-1.5%						
2016	-7.9%	6.3%	-1.6%							
2017	29.9%	2.5%								
2018	-4.8%									

Annual Trend*										
All-Year	3.8%	-1.3%	-1.3%	-0.1%	1.1%	2.7%	4.1%	5.9%	4.2%	3.3%
R ²	0.536	0.357	0.523	0.003	0.088	0.297	0.533	0.736	0.665	0.572
5-Year	6.0%	1.6%	-1.2%	-2.6%	-4.9%	-5.0%	-2.7%	-1.2%	-0.1%	-1.9%
R ²	0.607	0.429	0.309	0.851	0.963	0.878	0.580	0.309	0.001	0.431

*Trend is based on an exponential distribution.

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

Source: WCIRB quarterly calls for experience

Ratio of Quarterly Paid Medical to Indemnity Claims Inventory*
Through March 31, 2018

Development	Evaluation Years													
Period	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
3/0	1,104	1,201	1,147	1,289	1,553	1,615	1,714	1,601	1,587	1,676	1,850	1,740	2,105	2,128
6/3	2,100	2,477	2,330	2,870	3,029	3,071	3,139	3,000	3,013	2,887	3,176	3,173	3,356	
9/6	2,048	2,440	2,517	2,952	3,160	3,137	3,108	3,148	3,269	3,087	3,082	3,194	3,310	
12/9	2,174	2,431	2,697	3,012	3,075	3,134	3,065	3,243	3,033	2,987	2,949	3,175	3,361	
12/0	4,282	4,839	5,103	6,035	6,228	6,172	6,076	6,139	6,065	5,905	5,986	6,217	6,547	
15/12	2,257	2,284	2,571	2,927	3,040	3,131	3,159	3,354	3,316	3,070	3,128	3,136	3,406	3,438
18/15	2,096	2,430	2,186	2,680	2,784	2,924	2,982	3,221	3,187	2,840	2,877	3,019	3,038	
21/18	1,751	1,881	2,168	2,474	2,616	2,711	2,802	2,975	2,914	2,827	2,816	2,832	2,790	
24/21	1,669	1,834	2,190	2,407	2,537	2,603	2,738	3,035	2,929	2,751	2,723	2,771	2,868	
24/12	6,361	6,360	7,576	8,762	9,141	9,420	9,576	10,215	9,966	9,297	9,241	9,362	9,482	
27/24	1,720	1,495	1,728	2,214	2,353	2,531	2,563	2,740	3,022	2,858	2,781	2,809	2,887	2,804
30/27	1,653	1,865	1,801	2,337	2,607	2,708	2,857	2,988	3,162	3,035	3,033	3,066	3,013	
33/30	1,544	1,632	1,807	2,342	2,560	2,770	2,912	3,100	3,196	3,176	2,997	2,996	2,923	
36/33	1,591	1,704	1,965	2,389	2,596	2,731	2,889	3,406	3,308	3,122	3,141	3,039	3,035	
36/24	5,781	5,540	6,452	8,158	8,942	9,452	9,861	10,661	11,007	10,475	10,136	10,082	9,878	
39/36	1,670	1,471	1,710	2,032	2,278	2,500	2,680	3,019	3,258	3,170	3,261	3,022	3,033	3,110
42/39	1,602	1,981	1,791	2,146	2,524	2,786	2,944	3,124	3,539	3,461	3,361	3,124	3,256	
45/42	1,595	1,646	1,836	2,166	2,517	2,735	3,083	3,246	3,427	3,691	3,368	3,243	3,005	
48/45	1,634	1,812	1,953	2,251	2,551	2,913	3,072	3,411	3,629	3,436	3,356	3,368	3,131	
48/36	5,676	5,551	6,360	7,478	8,645	9,621	10,316	11,224	12,024	11,854	11,412	10,770	10,460	

Development	Year-to-Year Change													
Period	04-to-05	05-to-06	06-to-07	07-to-08	08-to-09	09-to-10	10-to-11	11-to-12	12-to-13	13-to-14	14-to-15	15-to-16	16-to-17	17-to-18
3/0	50.7%	8.8%	-4.6%	12.4%	20.5%	4.0%	6.1%	-6.6%	-0.8%	5.6%	10.4%	-5.9%	21.0%	1.1%
6/3	11.6%	17.9%	-6.0%	23.2%	5.5%	1.4%	2.2%	-4.4%	0.4%	-4.2%	10.0%	-0.1%	5.8%	
9/6	-1.6%	19.1%	3.1%	17.3%	7.0%	-0.7%	-0.9%	1.3%	3.9%	-5.6%	-0.1%	3.6%	3.6%	
12/9	5.3%	11.8%	11.0%	11.7%	2.1%	1.9%	-2.2%	5.8%	-6.5%	-1.5%	-1.3%	7.7%	5.9%	
12/0	8.4%	13.0%	5.5%	18.2%	3.2%	-0.9%	-1.5%	1.0%	-1.2%	-2.6%	1.4%	3.9%	5.3%	
15/12	-17.4%	1.2%	12.6%	13.8%	3.9%	3.0%	0.9%	6.2%	-1.1%	-7.4%	1.9%	0.2%	8.6%	0.9%
18/15	-20.6%	15.9%	-10.1%	22.6%	3.9%	5.0%	2.0%	8.0%	-1.1%	-10.9%	1.3%	5.0%	0.6%	
21/18	-21.4%	7.4%	15.3%	14.1%	5.8%	3.6%	3.4%	6.2%	-2.1%	-3.0%	-0.4%	0.6%	-1.5%	
24/21	-11.9%	9.8%	19.4%	9.9%	5.4%	2.6%	5.2%	10.8%	-3.5%	-6.1%	-1.0%	1.8%	3.5%	
24/12	-17.8%	0.0%	19.1%	15.7%	4.3%	3.0%	1.7%	6.7%	-2.4%	-6.7%	-0.6%	1.3%	1.3%	
27/24	-24.8%	-13.1%	15.6%	28.1%	6.3%	7.6%	1.2%	6.9%	10.3%	-5.4%	-2.7%	1.0%	2.8%	-2.9%
30/27	-27.0%	12.8%	-3.5%	29.8%	11.5%	3.9%	5.5%	4.6%	5.8%	-4.0%	-0.1%	1.1%	-1.7%	
33/30	-23.2%	5.7%	10.7%	29.6%	9.3%	8.2%	5.1%	6.5%	3.1%	-0.6%	-5.7%	0.0%	-2.4%	
36/33	-12.7%	7.1%	15.3%	21.6%	8.7%	5.2%	5.8%	17.9%	-2.9%	-5.6%	0.6%	-3.2%	-0.1%	
36/24	-22.3%	-4.2%	16.5%	26.4%	9.6%	5.7%	4.3%	8.1%	3.2%	-4.8%	-3.2%	-0.5%	-2.0%	
39/36	-18.8%	-11.9%	16.2%	18.8%	12.1%	9.8%	7.2%	12.6%	7.9%	-2.7%	2.9%	-7.3%	0.4%	2.5%
42/39	-23.0%	23.7%	-9.6%	19.8%	17.6%	10.4%	5.7%	6.1%	13.3%	-2.2%	-2.9%	-7.1%	4.2%	
45/42	-17.4%	3.2%	11.5%	18.0%	16.2%	8.7%	12.7%	5.3%	5.6%	7.7%	-8.7%	-3.7%	-7.3%	
48/45	-11.1%	10.9%	7.8%	15.2%	13.3%	14.2%	5.4%	11.0%	6.4%	-5.3%	-2.3%	0.3%	-7.0%	
48/36	-17.2%	-2.2%	14.6%	17.6%	15.6%	11.3%	7.2%	8.8%	7.1%	-1.4%	-3.7%	-5.6%	-2.9%	

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

Source: WCIRB accident year experience calls.

Estimated Ultimate Severities by Injury Type

Indemnity Severity Adjusted to PY 2019 Benefit Level					Medical Severity Adjusted to PY 2019 Benefit Level**								
Accident Year	Ultimate Indemnity Severity		Permanent		Accident Year	Ultimate Medical Severity**			Permanent			Medical	
	Permanent	Temporary	Permanent	Temporary		Permanent	Temporary	Only	Permanent	Temporary	Only		
2001	43,898	3,925	46,434	5,961	2001	47,006	4,935	765	30,622	3,215	498		
2002	41,900	3,927	45,846	5,995	2002	48,017	5,352	856	32,486	3,215	579		
2003	41,307	4,171	47,672	5,883	2003	47,409	5,636	915	33,651	4,000	649		
2004	35,504	4,116	50,971	5,668	2004	48,281	5,369	841	45,331	5,041	790		
2005	34,072	3,843	58,424	5,199	2005	52,901	5,358	856	49,669	5,031	804		
2006	36,720	3,854	57,982	5,081	2006	56,955	5,515	880	53,261	5,157	823		
2007	39,233	4,135	59,465	5,333	2007	62,005	6,302	963	56,902	5,783	884		
2008	41,360	4,562	56,648	5,767	2008	64,442	6,793	1,044	58,902	6,209	955		
2009	41,440	5,190	56,465	6,515	2009	64,829	7,719	1,154	59,021	7,028	1,050		
2010	40,113	6,061	53,922	7,496	2010	62,709	8,834	1,185	56,919	8,018	1,076		
2011	38,461	6,484	50,888	7,893	2011	57,038	8,684	1,132	52,671	8,019	1,045		
2012	37,895	6,909	48,977	8,210	2012	53,818	8,697	1,133	51,716	8,357	1,088		
2013	36,649	7,277	45,691	8,584	2013	50,119	8,460	1,153	49,704	8,390	1,143		
2014	38,121	7,389	42,671	8,427	2014	47,436	8,180	1,232	47,939	8,267	1,245		
2015	39,034	7,764	42,606	8,611	2015	47,526	8,534	1,264	48,087	8,635	1,279		
2016*	39,148	8,214	42,213	8,977	2016*	46,930	8,827	1,316	47,481	8,931	1,332		

Accident Year	Annual Change		Annual Change		Accident Year	Annual Change			Annual Change		
2001	---	---	---	---	2001	---	---	---	---	---	---
2002	-4.6%	0.1%	-1.3%	0.6%	2002	2.1%	8.5%	11.9%	6.1%	12.6%	16.2%
2003	-1.4%	6.2%	4.0%	-1.9%	2003	-1.3%	5.3%	6.8%	3.6%	10.5%	12.1%
2004	-14.0%	-1.3%	6.9%	-3.7%	2004	1.8%	-4.7%	-8.0%	34.7%	26.0%	21.7%
2005	-4.0%	-6.6%	14.6%	-8.3%	2005	9.6%	-0.2%	1.7%	9.6%	-0.2%	1.7%
2006	7.8%	0.3%	-0.8%	-2.3%	2006	7.7%	2.9%	2.8%	7.2%	2.5%	2.4%
2007	6.8%	7.3%	2.6%	5.0%	2007	8.9%	14.3%	9.4%	6.8%	12.1%	7.4%
2008	5.4%	10.3%	-4.7%	8.1%	2008	3.9%	7.8%	8.5%	3.5%	7.4%	8.0%
2009	0.2%	13.8%	-0.3%	13.0%	2009	0.6%	13.6%	10.5%	0.2%	13.2%	10.0%
2010	-3.2%	16.8%	-4.5%	15.1%	2010	-3.3%	14.4%	2.7%	-3.6%	14.1%	2.4%
2011	-4.1%	7.0%	-5.6%	5.3%	2011	-9.0%	-1.7%	-4.5%	-7.5%	0.0%	-2.8%
2012	-1.5%	6.6%	-3.8%	4.0%	2012	-5.6%	0.1%	0.1%	-1.8%	4.2%	4.1%
2013	-3.3%	5.3%	-6.7%	4.6%	2013	-6.9%	-2.7%	1.8%	-3.9%	0.4%	5.1%
2014	4.0%	1.5%	-6.6%	-1.8%	2014	-5.4%	-3.3%	6.9%	-3.6%	-1.5%	8.9%
2015	2.4%	5.1%	-0.2%	2.2%	2015	0.2%	4.3%	2.6%	0.3%	4.4%	2.7%
2016*	0.3%	5.8%	-0.9%	4.3%	2016*	-1.3%	3.4%	4.1%	-1.3%	3.4%	4.1%

* Accident year 2016 experience is partial in that it only reflects experience from policy year 2015.

** Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident year 2012 and forward exclude the paid cost of medical cost containment programs.

Source: WCIRB unit statistical data

Changes in the Number of Weeks of Temporary Disability Benefits

First Survey Level

<u>Accident Year</u>	<u>Average TD Duration</u>	<u>Change</u>	<u>Median TD Duration</u>	<u>Change</u>
2004	51.2	-----	39.1	-----
2005	56.5	10.3%	46.3	18.5%
2006	58.8	4.2%	49.4	6.8%
2007	62.9	6.9%	56.0	13.3%
2008	67.1	6.8%	63.2	12.8%
2009	64.6	-3.8%	58.3	-7.7%
2010	61.5	-4.7%	54.7	-6.1%
2011	59.3	-3.6%	48.6	-11.2%
2012	58.6	-1.3%	48.9	0.7%
2013	55.6	-5.1%	48.6	-0.6%
2014	55.3	-0.6%	50.2	3.1%
2015	49.1	-11.2%	41.5	-17.3%

Second Survey Level

<u>Accident Year</u>	<u>Average TD Duration</u>	<u>Change</u>	<u>Median TD Duration</u>	<u>Change</u>
2003	53.8	-----	42.5	-----
2004	51.3	-4.7%	41.0	-3.5%
2005	56.3	9.9%	49.5	20.8%
2006	57.8	2.6%	50.2	1.4%
2007	63.1	9.2%	57.3	14.1%
2008	68.3	8.2%	65.5	14.4%
2009	65.4	-4.3%	60.7	-7.3%
2010	60.0	-8.2%	54.9	-9.5%
2011	61.6	2.5%	51.8	-5.7%
2012	57.2	-7.1%	50.9	-1.7%
2013	58.0	1.4%	50.8	-0.3%
2014	55.5	-4.3%	50.1	-1.3%

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

Average Permanent Disability Ratings by Type of Loss

All Permanent Disability Claims						Cumulative Permanent Disability Claims						Non-Cumulative Permanent Disability Claims					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2001	18.7	23.5	26.3	26.9	27.0	2001	16.9	21.4	23.8	24.4	24.6	2001	18.9	23.8	26.6	27.1	27.3
2002	18.8	23.6	24.9	25.5	25.3	2002	16.9	20.4	21.5	22.1	22.2	2002	19.0	24.0	25.3	25.9	25.7
2003	19.8	22.1	23.4	23.1	22.8	2003	17.4	19.2	20.3	20.2	20.2	2003	20.1	22.5	23.8	23.5	23.1
2004	16.3	18.2	18.9	18.5	18.4	2004	15.0	16.0	16.7	16.5	16.8	2004	16.5	18.5	19.1	18.8	18.6
2005	12.5	14.7	15.9	16.3	17.0	2005	10.8	12.8	14.6	15.5	16.6	2005	12.6	14.8	16.0	16.4	17.1
2006	11.8	14.3	15.6	16.7	17.3	2006	10.3	12.8	14.8	16.2	16.9	2006	12.0	14.5	15.7	16.8	17.3
2007	11.9	14.5	16.5	17.4	18.0	2007	10.7	13.3	15.5	16.6	17.5	2007	12.0	14.6	16.6	17.5	18.1
2008	12.0	15.0	16.8	17.7	17.8	2008	11.4	13.9	15.7	17.0	17.3	2008	12.0	15.1	16.9	17.8	17.9
2009	12.5	15.2	16.8	17.3	17.3	2009	11.5	14.0	15.8	16.3	16.6	2009	12.6	15.3	16.9	17.4	17.4
2010	12.7	15.0	15.9	16.2	16.7	2010	12.5	14.9	15.4	15.8	16.5	2010	12.7	15.1	15.9	16.2	16.7
2011	12.7	14.4	15.1	15.8	16.4	2011	11.8	13.5	14.2	14.9	15.7	2011	12.7	14.6	15.2	16.0	16.5
2012	11.7	13.1	14.2	15.0		2012	10.9	12.1	13.2	14.0		2012	11.8	13.2	14.4	15.2	
2013	11.2	12.8	13.9			2013	10.3	11.5	12.5			2013	11.3	13.1	14.2		
2014	10.7	12.3				2014	10.1	11.0				2014	10.9	12.6			
2015	10.1					2015	9.4					2015	10.3				

Count of Permanent Disability Claims						Count of Permanent Disability Claims						Count of Permanent Disability Claims					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2001	86,866	96,753	101,760	104,639	104,977	2001	7,629	10,374	10,871	11,366	11,403	2001	79,237	86,379	90,889	93,273	93,574
2002	83,512	96,104	100,986	101,707	102,286	2002	9,172	10,951	11,677	11,871	12,050	2002	74,340	85,153	89,309	89,836	90,236
2003	72,220	82,602	85,033	86,288	87,321	2003	7,774	9,258	9,679	10,033	10,248	2003	64,446	73,344	75,354	76,255	77,073
2004	55,302	61,487	64,917	66,484	69,382	2004	5,102	6,015	6,685	7,129	7,865	2004	50,200	55,472	58,232	59,355	61,517
2005	44,534	52,460	55,964	59,841	60,676	2005	3,424	4,536	5,237	6,014	6,438	2005	41,110	47,924	50,727	53,827	54,238
2006	41,898	50,585	56,984	58,701	60,092	2006	3,290	4,635	5,552	6,081	6,438	2006	38,608	45,950	51,432	52,620	53,654
2007	39,690	52,600	56,745	59,422	60,491	2007	3,209	4,723	5,691	6,203	6,515	2007	36,481	47,877	51,054	53,219	53,976
2008	39,044	49,862	55,409	57,557	58,356	2008	3,343	4,944	5,987	6,512	6,853	2008	35,701	44,918	49,422	51,045	51,503
2009	38,426	50,342	54,881	56,391	58,291	2009	3,736	5,528	6,591	7,239	7,783	2009	34,690	44,814	48,290	49,152	50,508
2010	39,642	51,516	56,149	58,623	59,612	2010	3,951	5,750	6,763	7,622	8,174	2010	35,691	45,766	49,386	51,001	51,438
2011	41,611	52,864	57,781	59,942	60,371	2011	4,225	6,237	7,625	8,478	8,979	2011	37,386	46,627	50,156	51,464	51,392
2012	40,786	53,155	59,170	61,076		2012	4,990	7,469	9,039	9,864		2012	35,796	45,686	50,131	51,212	
2013	41,885	55,985	62,808			2013	6,321	9,348	11,029			2013	35,564	46,637	51,779		
2014	44,909	59,186				2014	7,167	10,530				2014	37,742	48,656			
2015	46,233					2015	7,905					2015	38,328				

Median Permanent Disability Rating						Median Permanent Disability Rating						Median Permanent Disability Rating					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2001	15	20	23	24	24	2001	15	18	20	20	21	2001	15	20	24	24	25
2002	15	20	22	23	23	2002	15	17	18	19	19	2002	16	21	22	23	23
2003	17	19	20	20	20	2003	15	15	15	15	15	2003	17	20	20	20	20
2004	13	15	15	15	15	2004	11	12	13	13	13	2004	13	15	15	15	15
2005	10	10	12	12	13	2005	8	10	10	11	12	2005	10	11	12	13	13
2006	9	10	12	13	13	2006	7	9	10	11	12	2006	9	11	12	13	13
2007	9	11	13	13	14	2007	8	10	11	12	12	2007	10	11	13	14	14
2008	10	11	13	14	14	2008	9	10	11	12	12	2008	10	12	13	14	14
2009	10	11	13	13	14	2009	10	10	11	12	12	2009	10	11	13	14	14
2010	10	11	12	13	13	2010	10	11	11	12	12	2010	10	11	12	13	14
2011	10	11	12	13	13	2011	10	10	11	11	12	2011	10	11	12	13	13
2012	10	10	11	12	12	2012	9	10	10	10	10	2012	10	10	11	12	12
2013	9	10	10	10		2013	8	9	9	10		2013	9	10	10	11	
2014	9	10				2014	8	8	8			2014	9	10			
2015	8					2015	7					2015	8				

Note: Cumulative claims include both cumulative and occupational disease claims.

Source: WCIIRB unit statistical data

Self-Insured Employers - Claim Severity

Private Self-Insured Employers				
CY	Medical Paid	Indemnity Cases Open During Year	Paid Medical on Open Ind Claims	Annual Change
2001	655,349,356	128,723	5,091	---
2002	789,748,542	129,147	6,115	20.1%
2003	930,788,004	130,323	7,142	16.8%
2004	802,856,921	132,488	6,060	-15.2%
2005	688,918,290	124,757	5,522	-8.9%
2006	800,826,010	115,054	6,960	26.0%
2007	676,050,168	105,671	6,398	-8.1%
2008	733,149,220	102,990	7,119	11.3%
2009	761,740,423	98,642	7,722	8.5%
2010	760,504,505	97,135	7,829	1.4%
2011	758,672,255	95,946	7,907	1.0%
2012	752,732,652	94,591	7,958	0.6%
2013	814,214,051	95,263	8,547	7.4%
2014	918,409,257	93,850	9,786	14.5%
2015	786,278,830	90,382	8,700	-11.1%
2016	787,771,330	85,563	9,207	5.8%

Public Self-Insured Employers				
FY	Medical Paid	Indemnity Cases Open During Year	Paid Medical on Open Ind Claims	Annual Change
2000/2001	603,567,334	148,040	4,077	---
2001/2002	736,531,748	153,231	4,807	17.9%
2002/2003	872,925,555	166,835	5,232	8.9%
2003/2004	932,492,476	176,127	5,294	1.2%
2004/2005	777,579,644	171,938	4,522	-14.6%
2005/2006	768,887,952	163,511	4,702	4.0%
2006/2007	779,028,256	159,524	4,883	3.9%
2007/2008	887,316,859	173,348	5,119	4.8%
2008/2009	949,449,769	170,751	5,560	8.6%
2009/2010	978,954,150	171,444	5,710	2.7%
2010/2011	1,043,538,851	173,585	6,012	5.3%
2011/2012	1,073,241,078	177,309	6,053	0.7%
2012/2013	1,045,517,623	179,375	5,829	-3.7%
2013/2014	1,086,439,359	178,788	6,077	4.3%
2014/2015	1,102,863,683	181,993	6,060	-0.3%
2015/2016	1,097,857,099	180,467	6,083	0.4%
2016/2017	1,046,637,539	178,746	5,855	-3.7%

All Self-Insured Employers					Insured System at 1st Report		
CY	Medical Paid	Indemnity Cases Open During Year	Paid Medical on Open Ind Claims	Annual Change	AY	Paid Medical Severity on Ind Claims	Annual Change
2001	1,325,398,897	279,359	4,744	---	2001	6,203	---
2002	1,594,477,194	289,180	5,514	16.2%	2002	7,255	17.0%
2003	1,833,497,020	301,804	6,075	10.2%	2003	7,203	-0.7%
2004	1,657,892,981	306,521	5,409	-11.0%	2004	5,970	-17.1%
2005	1,462,152,088	292,482	4,999	-7.6%	2005	5,906	-1.1%
2006	1,574,784,114	276,572	5,694	13.9%	2006	6,270	6.2%
2007	1,509,222,726	272,107	5,546	-2.6%	2007	6,922	10.4%
2008	1,651,532,534	275,040	6,005	8.3%	2008	7,605	9.9%
2009	1,725,942,383	269,740	6,399	6.6%	2009	7,925	4.2%
2010	1,771,751,006	269,650	6,571	2.7%	2010	7,946	0.3%
2011	1,817,062,220	271,393	6,695	1.9%	2011	7,462	-6.1%
2012	1,812,112,003	272,933	6,639	-0.8%	2012	7,238	-3.0%
2013	1,880,192,542	274,345	6,853	3.2%	2013	7,085	-2.1%
2014	2,013,060,778	274,241	7,340	7.1%	2014	6,995	-1.3%
2015	1,886,639,221	271,612	6,946	-5.4%	2015	7,036	0.6%
2016	1,860,018,649	265,170	7,014	1.0%	2016	6,253	1.3%

Notes: Fiscal Year Public data prorated to CYs 50%/50%.
Insured System AY 2016 change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

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

Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness

Policy Year	Report Level	Indemnity Claim Severity			Total Claim Severity		
		Change in Severity Hazardousness	Severity Hazardousness Index	Annual % Change Attributable to Change in Industrial Mix	Change in Severity Hazardousness	Severity Hazardousness Index	Annual % Change Attributable to Change in Industrial Mix
1993	5	1.0000	1.0000	---	1.0000	1.0000	---
1994	5	1.0010	1.0010	0.10%	0.9986	0.9986	-0.14%
1995	5	1.0007	1.0017	0.07%	1.0013	0.9998	0.13%
1996	5	0.9988	1.0005	-0.12%	0.9993	0.9991	-0.07%
1997	5	1.0032	1.0036	0.32%	1.0045	1.0036	0.45%
1998	5	1.0037	1.0074	0.37%	1.0050	1.0086	0.50%
1999	5	1.0023	1.0096	0.23%	1.0011	1.0097	0.11%
2000	5	1.0016	1.0112	0.16%	1.0009	1.0107	0.09%
2001	5	1.0031	1.0144	0.31%	1.0001	1.0108	0.01%
2002	5	0.9984	1.0128	-0.16%	0.9996	1.0104	-0.04%
2003	5	1.0042	1.0170	0.42%	1.0071	1.0176	0.71%
2004	5	1.0020	1.0190	0.20%	1.0048	1.0224	0.48%
2005	5	1.0010	1.0201	0.10%	1.0027	1.0252	0.27%
2006	5	0.9965	1.0165	-0.35%	0.9917	1.0167	-0.83%
2007	5	0.9935	1.0098	-0.65%	0.9861	1.0025	-1.39%
2008	5	0.9908	1.0005	-0.92%	0.9845	0.9870	-1.55%
2009	5	0.9884	0.9889	-1.16%	0.9832	0.9704	-1.68%
2010	5	0.9961	0.9851	-0.39%	0.9938	0.9644	-0.62%
2011	5	0.9996	0.9847	-0.04%	1.0014	0.9657	0.14%
2012	Proj 5	0.9973	0.9820	-0.27%	0.9979	0.9636	-0.21%
2013	Proj 5	1.0012	0.9832	0.12%	1.0030	0.9665	0.30%
2014	Proj 5	1.0016	0.9848	0.16%	1.0065	0.9728	0.65%
2015	Proj 5	0.9998	0.9845	-0.02%	1.0026	0.9754	0.26%

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

Source: WCIRB unit statistical data

Claim Counts and Losses on Claims in Excess of \$250,000

PV/RL	Number of Claims in Excess of \$250,000								% of Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	602	1,282	2,109	2,980	3,838	4,500	4,866	5,232	2002	0.112%	0.227%	0.372%	0.525%	0.672%	0.790%	0.925%
2003	540	928	1,550	2,323	3,104	3,589	4,071	4,395	2003	0.107%	0.177%	0.295%	0.441%	0.588%	0.681%	0.839%
2004	472	719	1,163	1,741	2,296	2,874	3,273	3,547	2004	0.098%	0.146%	0.235%	0.351%	0.463%	0.561%	0.711%
2005	496	783	1,292	1,921	2,657	3,169	3,504	3,762	2005	0.109%	0.168%	0.276%	0.409%	0.567%	0.676%	0.805%
2006	667	1,036	1,673	2,401	3,108	3,603	3,984	4,211	2006	0.153%	0.233%	0.374%	0.536%	0.692%	0.801%	0.935%
2007	666	1,189	2,092	3,015	3,755	4,319	4,641	4,842	2007	0.161%	0.282%	0.449%	0.707%	0.880%	1.010%	1.131%
2008	653	1,260	2,099	3,077	3,878	4,389	4,685	4,753	2008	0.182%	0.342%	0.566%	0.826%	1.038%	1.173%	1.288%
2009	604	1,219	2,111	3,083	3,784	4,226	4,363		2009	0.182%	0.359%	0.616%	0.896%	1.097%	1.223%	1.290%
2010	588	1,167	1,951	2,806	3,376	3,662			2010	0.175%	0.339%	0.562%	0.804%	0.965%	1.077%	
2011	653	1,205	1,919	2,654	3,064				2011	0.194%	0.348%	0.549%	0.756%	0.895%		
2012	668	1,127	1,729	2,206					2012	0.194%	0.319%	0.484%	0.629%			
2013	709	1,119	1,649						2013	0.200%	0.308%	0.457%				
2014	704	1,120							2014	0.192%	0.301%					
2015	680								2015	0.181%						

PV/RL	% of Indemnity Incurred on Claims in Excess of \$250,000								% of Medical Incurred on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	4.35%	6.36%	9.13%	12.64%	16.07%	18.67%	20.07%	21.84%	2002	10.02%	12.42%	15.41%	18.77%	22.93%	26.16%	28.53%
2003	5.80%	7.10%	9.89%	13.19%	16.47%	18.55%	21.16%	22.92%	2003	11.23%	12.96%	15.75%	19.79%	23.77%	26.34%	28.17%
2004	6.58%	7.79%	9.70%	13.11%	15.78%	19.69%	22.24%	24.01%	2004	11.21%	12.93%	16.17%	19.88%	23.28%	28.00%	31.31%
2005	7.95%	8.27%	11.00%	15.00%	19.77%	23.04%	25.51%	27.31%	2005	12.87%	15.04%	17.09%	20.69%	26.00%	30.09%	33.79%
2006	11.02%	11.47%	14.89%	18.94%	22.71%	25.75%	28.08%	29.89%	2006	14.59%	16.50%	19.82%	23.83%	28.06%	31.56%	35.48%
2007	10.15%	11.62%	16.22%	20.89%	24.90%	27.50%	29.41%	30.54%	2007	13.37%	15.89%	20.71%	26.16%	30.13%	33.64%	37.30%
2008	9.37%	11.20%	15.22%	20.28%	24.26%	27.11%	28.70%	30.03%	2008	12.95%	15.33%	19.43%	24.70%	29.07%	32.32%	35.48%
2009	9.06%	10.45%	15.09%	19.60%	23.44%	26.26%	27.60%		2009	12.52%	15.39%	19.88%	24.82%	28.64%	31.58%	
2010	9.14%	10.82%	13.89%	18.16%	21.17%	23.10%			2010	13.20%	15.70%	19.02%	23.15%	26.43%	28.54%	
2011	9.46%	10.54%	13.48%	17.23%	19.72%				2011	13.48%	15.29%	18.56%	22.30%	24.93%		
2012	9.02%	9.77%	12.43%	15.36%					2012	14.07%	15.09%	17.82%	20.51%			
2013	7.59%	8.80%	11.31%						2013	11.75%	12.35%	15.22%				
2014	8.55%	9.46%							2014	13.96%	14.51%					
2015	8.64%								2015	13.26%						

PV/RL	Average Severity on Claims in Excess of \$250,000								Median Severity on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	717,062	592,893	508,878	481,072	488,305	488,121	511,322	529,239	2002	353,274	323,567	319,385	330,745	342,220	352,489	377,161
2003	830,287	697,511	579,912	531,520	513,563	511,184	536,729	548,977	2003	379,473	344,966	331,543	327,919	336,352	350,688	374,592
2004	751,890	695,515	597,861	550,994	520,593	538,976	553,349	569,398	2004	384,864	353,041	327,682	333,000	341,796	356,039	376,147
2005	739,367	668,592	545,833	501,441	498,380	513,170	526,835	543,666	2005	380,882	341,967	326,677	331,078	341,764	348,959	365,877
2006	685,716	633,586	554,027	517,029	504,508	515,982	527,649	538,512	2006	350,752	340,665	334,409	334,408	342,606	352,011	363,123
2007	656,706	573,916	507,392	494,503	494,898	501,434	512,282	520,029	2007	354,608	327,574	328,110	332,740	343,611	355,134	364,251
2008	617,586	515,370	466,652	456,502	457,438	469,921	477,594	487,706	2008	360,069	325,004	323,876	328,550	337,081	346,627	365,739
2009	649,166	525,815	479,951	458,056	463,534	478,018	481,724		2009	358,189	325,000	320,631	328,483	337,178	341,476	357,019
2010	711,521	584,687	502,343	474,264	477,077	475,656			2010	348,145	322,140	320,430	320,987	330,255	337,919	
2011	687,390	560,645	499,168	478,213	472,919				2011	348,769	315,896	313,946	320,441	325,198		
2012	704,191	587,234	522,780	503,620					2012	348,892	326,282	317,420	318,644			
2013	579,816	507,683	478,365						2013	337,549	325,027	324,573				
2014	711,664	596,970							2014	361,832	336,376					
2015	726,078								2015	351,618						

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

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

PY/RL	Number of Claims in Excess of \$500,000								% of Claims in Excess of \$500,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	171	245	324	481	696	960	1,214	1,449	2002	0.032%	0.043%	0.057%	0.085%	0.122%	0.169%	0.256%
2003	174	218	300	431	584	800	1,065	1,275	2003	0.034%	0.042%	0.057%	0.082%	0.111%	0.152%	0.243%
2004	159	198	243	342	453	680	874	1,010	2004	0.033%	0.040%	0.049%	0.069%	0.091%	0.137%	0.204%
2005	160	184	238	349	532	704	880	1,003	2005	0.035%	0.040%	0.051%	0.074%	0.113%	0.150%	0.214%
2006	186	257	347	505	679	851	1,038	1,149	2006	0.043%	0.056%	0.078%	0.113%	0.151%	0.189%	0.255%
2007	187	260	368	528	741	964	1,139	1,255	2007	0.045%	0.062%	0.087%	0.124%	0.174%	0.225%	0.293%
2008	178	233	340	526	726	940	1,084	1,164	2008	0.050%	0.063%	0.092%	0.141%	0.194%	0.251%	0.316%
2009	173	234	335	504	705	842	938		2009	0.052%	0.065%	0.098%	0.146%	0.204%	0.244%	
2010	161	222	317	422	573	697			2010	0.048%	0.065%	0.091%	0.121%	0.164%	0.205%	
2011	179	232	308	442	542				2011	0.053%	0.067%	0.087%	0.126%	0.158%		
2012	187	237	294	365					2012	0.054%	0.067%	0.082%	0.104%			
2013	178	210	258						2013	0.050%	0.058%	0.072%				
2014	213	261							2014	0.058%	0.070%					
2015	186								2015	0.049%						

PY/RL	% of Indemnity Incurred on Claims in Excess of \$500,000								% of Medical Incurred on Claims in Excess of \$500,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	2.13%	2.53%	3.05%	4.21%	5.73%	7.37%	8.79%	10.46%	2002	7.40%	7.93%	8.24%	9.14%	11.40%	13.48%	17.49%
2003	3.77%	3.91%	4.68%	5.55%	6.57%	7.94%	10.04%	11.78%	2003	8.53%	8.91%	9.31%	10.81%	12.38%	13.91%	18.91%
2004	3.89%	4.47%	4.52%	5.96%	6.76%	9.41%	11.48%	13.00%	2004	8.47%	9.09%	10.06%	11.10%	11.97%	15.26%	19.82%
2005	4.18%	3.64%	4.10%	5.96%	7.94%	9.92%	12.04%	13.53%	2005	9.77%	10.47%	9.92%	10.55%	13.10%	15.72%	17.78%
2006	5.03%	5.21%	6.38%	8.00%	9.55%	11.68%	13.56%	15.24%	2006	10.86%	11.37%	11.63%	12.88%	14.71%	16.83%	20.32%
2007	4.80%	5.10%	6.17%	7.74%	10.09%	11.61%	13.34%	14.46%	2007	9.57%	9.85%	10.75%	12.92%	14.72%	17.07%	18.83%
2008	4.10%	4.26%	5.18%	7.24%	9.06%	11.12%	12.24%	13.52%	2008	8.84%	8.36%	8.94%	10.75%	12.65%	14.95%	16.59%
2009	4.70%	3.88%	5.23%	6.47%	8.49%	10.35%	11.28%		2009	8.61%	8.67%	9.58%	10.93%	12.87%	14.85%	15.76%
2010	4.82%	4.54%	4.95%	6.23%	7.60%	8.68%			2010	9.54%	9.71%	9.85%	10.73%	12.41%	13.54%	
2011	4.91%	4.41%	4.72%	5.99%	6.87%				2011	9.66%	9.20%	9.72%	10.96%	12.08%		
2012	4.46%	4.18%	4.72%	5.76%					2012	10.28%	9.58%	9.83%	10.64%			
2013	2.84%	3.10%	3.60%						2013	7.83%	6.93%	7.56%				
2014	4.35%	4.09%							2014	10.40%	9.58%					
2015	4.48%								2015	9.80%						

PY/RL	Average Severity on Claims in Excess of \$500,000								Median Severity on Claims in Excess of \$500,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	1,686,788	1,741,153	1,532,015	1,276,041	1,183,599	1,092,089	1,032,729	1,020,705	2002	885,388	776,001	749,290	689,322	686,961	686,474	714,772
2003	1,870,525	1,903,826	1,638,500	1,426,187	1,292,676	1,122,403	1,093,521	1,059,376	2003	866,728	914,390	821,735	742,737	729,204	700,913	711,672
2004	1,572,672	1,687,615	1,635,033	1,466,714	1,278,692	1,188,341	1,142,355	1,142,140	2004	827,255	875,244	772,132	760,725	715,829	713,607	720,782
2005	1,587,235	1,778,172	1,525,931	1,290,030	1,165,364	1,133,478	1,088,311	1,111,789	2005	825,368	814,506	710,326	704,717	711,051	700,997	697,792
2006	1,602,470	1,566,036	1,422,051	1,225,576	1,125,012	1,103,038	1,068,071	1,075,001	2006	810,488	782,910	739,379	713,205	711,000	701,420	695,728
2007	1,493,459	1,469,841	1,356,962	1,271,855	1,150,320	1,072,957	1,045,187	1,036,145	2007	805,589	744,439	712,814	696,427	684,367	677,511	685,018
2008	1,377,062	1,369,040	1,203,209	1,085,961	1,008,698	973,190	955,105	956,303	2008	844,408	776,176	722,571	683,487	665,759	670,404	683,218
2009	1,443,063	1,379,530	1,318,329	1,126,985	1,041,463	1,063,152	1,016,038		2009	829,140	747,484	713,222	676,704	657,838	662,532	673,897
2010	1,729,192	1,708,498	1,436,361	1,329,843	1,210,278	1,097,667			2010	893,022	784,927	702,366	689,490	702,851	686,542	
2011	1,644,554	1,578,653	1,443,159	1,263,429	1,162,426				2011	893,546	775,642	735,663	692,450	684,826		
2012	1,668,685	1,590,226	1,515,563	1,421,416					2012	889,984	791,723	769,498	740,885			
2013	1,336,704	1,319,046	1,314,553						2013	760,344	763,671	736,311				
2014	1,590,101	1,493,329							2014	861,815	838,286					
2015	1,777,658								2015	823,044						

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

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

PY/RL	Number of Claims in Excess of \$1,000,000								% of Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	71	96	119	135	173	221	265	336	0.013%	0.017%	0.021%	0.024%	0.030%	0.037%	0.047%	0.059%
2003	73	95	114	135	161	194	248	315	0.014%	0.018%	0.022%	0.026%	0.030%	0.033%	0.047%	0.060%
2004	57	85	96	109	109	165	216	252	0.012%	0.017%	0.019%	0.022%	0.022%	0.033%	0.044%	0.051%
2005	58	72	74	95	132	173	208	245	0.013%	0.015%	0.016%	0.020%	0.028%	0.037%	0.044%	0.052%
2006	66	87	110	145	173	216	258	287	0.015%	0.020%	0.025%	0.032%	0.035%	0.048%	0.057%	0.064%
2007	66	81	109	133	158	200	234	267	0.016%	0.019%	0.026%	0.031%	0.037%	0.047%	0.055%	0.062%
2008	69	82	102	125	167	213	242	264	0.019%	0.022%	0.027%	0.034%	0.045%	0.057%	0.065%	0.072%
2009	65	81	98	121	150	174	201		0.020%	0.024%	0.029%	0.035%	0.043%	0.050%	0.059%	
2010	70	84	100	122	147	158			0.021%	0.024%	0.029%	0.035%	0.042%	0.046%		
2011	72	85	94	109	126				0.021%	0.025%	0.027%	0.031%	0.037%			
2012	82	86	99	110					0.024%	0.024%	0.028%	0.031%				
2013	63	70	85						0.018%	0.019%	0.024%					
2014	91	106							0.025%	0.028%						
2015	80								0.021%							

PY/RL	% of Indemnity Incurred on Claims in Excess of \$1,000,000								% of Medical Incurred on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	1.40%	1.62%	1.83%	2.19%	2.68%	3.25%	3.63%	4.33%	5.81%	6.41%	6.44%	7.12%	7.31%	7.88%	8.48%	9.36%
2003	2.87%	2.93%	3.27%	3.40%	3.65%	3.91%	4.82%	5.78%	6.84%	7.22%	7.12%	7.66%	8.13%	8.06%	9.50%	10.22%
2004	2.48%	3.21%	3.09%	3.74%	3.73%	5.04%	6.15%	7.04%	6.37%	7.20%	7.89%	7.93%	7.48%	9.04%	10.13%	11.26%
2005	2.49%	2.30%	2.31%	3.06%	4.09%	5.16%	6.16%	7.06%	7.42%	8.49%	7.44%	7.05%	7.77%	9.07%	9.75%	11.27%
2006	3.02%	3.08%	3.73%	4.26%	4.83%	5.86%	6.76%	7.89%	8.25%	8.56%	8.27%	8.40%	8.65%	9.71%	10.53%	11.15%
2007	2.94%	2.96%	3.42%	4.00%	4.97%	5.35%	6.11%	6.57%	7.04%	7.11%	7.55%	8.38%	8.43%	9.19%	9.67%	10.38%
2008	2.46%	2.53%	2.88%	3.72%	4.37%	5.28%	5.44%	6.14%	6.40%	5.95%	5.75%	5.95%	6.57%	7.26%	7.89%	8.25%
2009	2.80%	2.10%	2.84%	3.12%	3.74%	4.86%	5.13%		6.38%	6.28%	6.59%	6.50%	6.92%	7.89%	8.00%	
2010	3.63%	3.15%	2.97%	3.60%	3.81%	4.00%			7.47%	7.59%	7.13%	7.32%	7.87%	7.69%		
2011	3.45%	2.98%	2.77%	3.03%	3.18%				7.38%	6.90%	6.90%	7.06%	7.36%			
2012	3.06%	2.58%	2.77%	3.29%					8.17%	7.29%	7.38%	7.52%				
2013	1.66%	1.79%	2.12%						5.50%	4.79%	5.27%					
2014	2.81%	2.56%							8.23%	7.37%						
2015	3.20%								7.93%							

PY/RL	Average Severity on Claims in Excess of \$1,000,000								Median Severity on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
2002	3,105,446	3,422,845	3,060,518	2,891,297	2,799,369	2,544,865	2,367,659	2,171,072	1,982,089	2,570,630	2,077,245	1,760,458	1,760,458	1,604,620	1,436,815	1,414,360
2003	3,523,470	3,460,312	3,204,876	3,081,799	2,922,506	2,543,782	2,487,580	2,242,340	2,346,394	2,313,505	2,282,077	2,173,422	1,756,000	1,666,325	1,533,770	1,489,999
2004	3,161,316	2,995,729	3,135,046	3,169,113	3,201,987	2,812,364	2,576,725	2,561,543	2,129,170	2,051,638	2,242,484	2,120,000	2,095,911	1,882,020	1,721,976	1,605,699
2005	3,171,764	3,525,423	3,473,114	2,982,927	2,674,595	2,581,158	2,468,930	2,498,814	1,980,755	2,160,065	2,089,211	1,864,346	1,735,305	1,666,100	1,645,929	1,664,019
2006	3,268,599	3,304,753	3,033,739	2,630,292	2,484,351	2,402,523	2,306,095	2,316,982	1,932,648	2,120,827	2,180,971	1,742,043	1,742,043	1,561,145	1,435,234	1,445,338
2007	2,989,854	3,230,890	3,023,941	3,083,910	2,953,510	2,658,515	2,523,329	2,416,604	1,953,016	2,285,514	1,732,523	1,838,481	1,933,372	1,587,337	1,616,302	1,577,628
2008	2,474,424	2,646,652	2,479,616	2,470,854	2,224,164	2,070,407	1,989,235	1,953,110	1,913,000	1,898,126	1,830,410	1,762,740	1,618,687	1,495,782	1,398,833	1,433,079
2009	2,709,780	2,719,407	2,923,444	2,642,982	2,485,767	2,633,315	2,325,280		1,988,779	1,711,957	1,833,872	1,682,373	1,512,298	1,445,376	1,444,734	
2010	3,085,031	3,438,423	3,153,270	3,001,492	2,809,145	2,593,098			2,153,329	2,215,829	1,946,786	1,814,410	1,779,631	1,765,880		
2011	3,062,899	3,150,573	3,207,977	3,099,384	2,836,298				2,133,690	1,945,519	1,948,017	1,950,524	1,634,185			
2012	2,934,667	3,186,651	3,185,008	3,147,769					1,748,313	1,981,094	2,005,409					
2013	2,566,288	2,620,572	2,662,547						1,749,237	1,835,395	1,767,043					
2014	2,825,150	2,694,273							1,854,543	1,986,862						
2015	3,251,305								1,873,825							

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

Change in Claims Mix by Injury Description by Policy Year
Part of Body

Rank	Code	Description	Percentage of Claims										
			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	90	Multiple Body Parts - Multiple Body Parts	14.4%	13.6%	13.7%	12.8%	13.9%	14.6%	15.9%	15.7%	15.5%	15.1%	16.1%
2	42	Trunk - Lower Back Area	15.0%	15.0%	14.9%	15.8%	15.7%	15.4%	14.9%	15.1%	15.1%	15.0%	13.8%
3	53	Lower Extremities - Knee	9.1%	9.1%	9.4%	9.5%	8.9%	8.8%	8.7%	9.1%	9.0%	9.0%	8.8%
4	38	Upper Extremities - Shoulder(s)	5.6%	5.9%	6.2%	7.1%	7.0%	6.9%	7.0%	7.9%	8.4%	8.7%	8.7%
5	36	Upper Extremities - Finger(s)	5.5%	5.4%	5.4%	5.2%	4.8%	4.7%	4.5%	4.2%	4.4%	4.3%	4.3%
6	34	Upper Extremities - Wrist	6.6%	6.6%	6.5%	5.8%	6.3%	6.1%	6.1%	5.0%	4.4%	4.4%	4.2%
7	35	Upper Extremities - Hand	4.0%	4.1%	4.0%	3.8%	3.7%	3.8%	3.9%	3.8%	3.7%	3.8%	3.7%
8	55	Lower Extremities - Ankle	3.3%	3.5%	3.4%	3.4%	3.1%	3.1%	3.1%	3.2%	3.2%	3.2%	3.3%
9	61	Trunk - Abdomen Including Groin	2.7%	2.6%	2.7%	2.8%	2.5%	2.5%	2.5%	2.7%	2.6%	2.7%	2.6%
10	56	Lower Extremities - Foot	2.6%	2.7%	2.8%	2.5%	2.3%	2.3%	2.2%	2.2%	2.3%	2.3%	2.4%
11	91	Multiple Body Parts - Body Systems and Multiple Body	0.4%	0.5%	0.6%	0.8%	0.8%	0.8%	1.0%	1.4%	1.6%	1.4%	2.3%
12	33	Upper Extremities - Lower Arm	1.9%	2.0%	1.9%	1.9%	1.9%	1.9%	2.1%	2.1%	1.9%	2.0%	2.0%
13	32	Upper Extremities - Elbow	2.0%	2.0%	2.0%	2.0%	1.9%	1.8%	1.8%	1.9%	2.0%	2.0%	1.9%
14	30	Upper Extremities - Multiple Upper Extremities	3.2%	2.9%	2.6%	2.4%	2.5%	2.5%	2.4%	2.3%	2.3%	2.1%	1.9%
15	41	Trunk - Upper Back Area	1.5%	1.4%	1.4%	1.4%	1.3%	1.3%	1.4%	1.6%	1.8%	1.8%	1.7%
16	31	Upper Extremities - Upper Arm	1.9%	2.1%	2.0%	2.1%	2.5%	2.4%	2.4%	1.9%	1.7%	1.7%	1.7%
17	54	Lower Extremities - Lower Leg	1.7%	1.7%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.6%
18	25	Neck - Soft Tissue	0.8%	0.8%	1.0%	1.3%	1.6%	1.7%	1.5%	1.4%	1.5%	1.6%	1.3%
19	66	Multiple Body Parts - No Physical Injury	0.7%	0.7%	0.9%	1.1%	1.3%	1.4%	1.2%	1.4%	1.2%	1.2%	1.3%
20	65	Multiple Body Parts - Insufficient Info to Classify	1.5%	1.1%	1.0%	1.3%	1.4%	1.5%	1.4%	1.4%	1.1%	1.1%	1.3%
		All Other	15.8%	16.2%	15.7%	15.6%	15.3%	14.9%	14.4%	14.4%	14.7%	15.0%	14.9%
		TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Change in Claims Mix by Injury Description by Policy Year
Nature of Injury

Rank	Code	Description	Percentage of Claims										
			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	52	Strain or Tear	33.6%	31.7%	29.4%	30.3%	30.7%	31.2%	30.0%	32.8%	33.6%	33.7%	33.8%
2	49	Sprain or Tear	8.4%	9.9%	11.1%	12.4%	13.6%	13.2%	13.2%	11.6%	10.9%	11.0%	10.4%
3	59	All Other Specific Injuries, NOC	11.4%	12.7%	15.0%	13.0%	13.3%	12.9%	14.5%	12.5%	10.9%	9.6%	8.8%
4	80	All Other Cumulative Injury, NOC	7.5%	6.4%	5.7%	5.2%	5.4%	5.6%	5.9%	6.9%	8.3%	8.8%	9.0%
5	28	Fracture	8.8%	9.1%	8.9%	8.5%	7.7%	7.5%	7.2%	6.8%	6.6%	6.7%	7.1%
6	10	Contusion	6.5%	6.9%	6.7%	7.0%	6.7%	6.7%	6.3%	6.5%	6.5%	6.8%	6.9%
7	90	Multiple Physical Injuries Only	2.4%	2.0%	1.8%	1.9%	2.5%	2.6%	3.0%	3.8%	4.6%	4.4%	4.8%
8	40	Laceration	5.0%	5.0%	4.8%	4.5%	3.9%	3.9%	3.9%	3.7%	3.5%	3.6%	3.7%
9	37	Inflammation	2.7%	2.9%	3.0%	3.0%	2.8%	2.8%	2.8%	2.7%	2.6%	2.4%	2.6%
10	34	Hernia	2.3%	2.2%	2.2%	2.1%	1.9%	1.8%	1.8%	1.8%	1.7%	1.7%	1.6%
11	16	Dislocation	1.3%	1.4%	1.6%	1.6%	1.4%	1.3%	1.3%	1.2%	1.2%	1.4%	1.4%
12	77	Mental Stress	1.2%	1.3%	1.4%	1.7%	1.9%	1.9%	1.7%	1.5%	1.5%	1.4%	1.4%
13	78	Carpal Tunnel Syndrome	1.8%	1.7%	1.6%	1.5%	1.4%	1.4%	1.4%	1.2%	1.2%	1.1%	1.1%
14	91	Multiple Injuries Including Both Physical and Psychological	0.4%	0.4%	0.5%	0.8%	1.0%	0.9%	1.0%	1.1%	1.1%	1.1%	1.1%
15	13	Crushing	1.1%	1.1%	1.1%	1.0%	0.9%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%
16	41	Myocardial Infarction	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.4%	0.4%	0.5%	0.6%	0.6%
17	4	Burn	0.7%	0.7%	0.6%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
18	43	Puncture	0.8%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.6%
19	46	Rupture	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	0.6%	0.5%
20	2	Amputation	0.8%	0.8%	0.8%	0.7%	0.6%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%
		All Other	2.6%	2.5%	2.5%	2.6%	2.6%	2.8%	2.6%	2.5%	2.5%	2.5%	2.6%
		TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Change in Claims Mix by Injury Description by Policy Year
Cause of Injury

			Percentage of Claims										
Rank	Code	Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	56	Strain by - Lifting	13.2%	12.9%	13.2%	13.0%	13.1%	12.8%	12.3%	12.2%	11.7%	11.6%	11.3%
2	98	Cumulative, NOC	6.6%	5.4%	5.1%	5.8%	6.3%	6.5%	7.3%	8.2%	8.9%	9.1%	9.6%
3	99	Other - Miscellaneous, NOC	8.9%	8.7%	7.6%	7.5%	8.4%	8.9%	9.8%	10.1%	12.1%	11.8%	8.6%
4	60	Strain or Injury By, NOC	8.1%	8.5%	8.6%	8.8%	8.7%	8.4%	8.7%	8.4%	8.4%	8.2%	8.4%
5	97	Strain by - Repetitive Motion	5.0%	5.1%	5.4%	5.6%	6.3%	6.4%	6.6%	7.3%	7.5%	7.8%	8.0%
6	31	Fall, Slip or Trip Injury, NOC	6.1%	6.5%	7.0%	7.1%	6.6%	6.1%	5.7%	5.6%	5.3%	5.4%	5.9%
7	29	Fall - On Same Level	4.7%	4.8%	5.2%	4.9%	5.3%	5.7%	5.4%	5.0%	4.9%	4.9%	5.4%
8	57	Strain by - Pushing or Pulling	4.3%	4.3%	4.3%	4.6%	4.6%	4.6%	4.5%	4.4%	4.3%	4.3%	4.5%
9	75	Struck or Injured By - Falling or Flying Object	2.8%	2.9%	3.0%	2.7%	2.6%	2.7%	2.6%	2.6%	2.3%	2.5%	2.5%
10	25	Fall - From Different Level (Elevation)	3.3%	3.2%	3.0%	2.8%	2.6%	2.6%	2.5%	2.6%	2.4%	2.5%	2.5%
11	26	Fall - From Ladder or Scaffolding	3.2%	3.1%	3.0%	2.8%	2.4%	2.6%	2.3%	2.1%	2.1%	2.1%	2.3%
12	53	Strain by - Twisting	1.6%	1.7%	1.8%	2.0%	1.9%	1.9%	2.0%	2.2%	2.2%	2.2%	2.2%
13	45	Strain by - Holding or Carrying	1.7%	1.7%	1.7%	1.6%	1.6%	1.4%	1.5%	1.4%	1.4%	1.4%	1.6%
14	55	Motor Vehicle - Collision or Sideswipe with Another Vehicle	1.8%	1.8%	1.6%	1.5%	1.6%	1.8%	1.9%	1.9%	1.6%	1.5%	1.6%
15	81	Struck or Injured By, NOC	1.5%	1.7%	1.9%	1.7%	1.5%	1.5%	1.6%	1.6%	1.6%	1.4%	1.6%
16	79	Fall - From Liquid or Grease Spills	1.4%	1.5%	1.5%	1.4%	1.3%	1.4%	1.3%	1.3%	1.3%	1.3%	1.3%
17	27	Struck or Injured By - Object Being Lifted or Handled	1.6%	1.6%	1.7%	1.7%	1.7%	1.6%	1.5%	1.4%	1.3%	1.3%	1.4%
18	90	Struck or Stepped On - Stationary Object	0.5%	0.6%	0.8%	1.0%	1.1%	1.3%	1.2%	1.1%	0.9%	0.9%	1.0%
19	68	Strain by - Reaching	1.2%	1.2%	1.2%	1.3%	1.3%	1.2%	1.3%	1.2%	1.2%	1.2%	1.2%
20	33	Motor Vehicle, NOC	0.9%	1.0%	1.0%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%
		All Other	21.7%	21.8%	21.4%	21.0%	19.9%	19.4%	19.1%	18.3%	17.5%	17.5%	18.1%
		TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Indemnity Claim Frequency by Layer of Incurred Medical at USR 1st

Indemnity Claim Frequency per \$1M of Exposure at 2015 Wage Level

Accident Year	Layer of Incurred Medical				
	0 2,499	2,500 9,999	10,000 24,999	25,000 & Over	All Claims
2001	0.1156	0.0914	0.0877	0.0970	0.3918
2002	0.1037	0.0836	0.0870	0.1064	0.3807
2003	0.1019	0.0857	0.0910	0.1095	0.3881
2004	0.0917	0.0749	0.0801	0.0810	0.3276
2005	0.0834	0.0628	0.0654	0.0651	0.2768
2006	0.0764	0.0582	0.0601	0.0651	0.2598
2007	0.0704	0.0529	0.0576	0.0686	0.2495
2008	0.0609	0.0475	0.0560	0.0712	0.2355
2009	0.0555	0.0456	0.0554	0.0718	0.2283
2010	0.0580	0.0487	0.0596	0.0766	0.2429
2011	0.0593	0.0479	0.0576	0.0743	0.2391
2012	0.0610	0.0496	0.0599	0.0768	0.2473
2013	0.0604	0.0496	0.0612	0.0761	0.2472
2014	0.0609	0.0514	0.0624	0.0756	0.2502
2015	0.0595	0.0515	0.0621	0.0743	0.2473
2016	0.0596	0.0540	0.0647	0.0702	0.2486

Accident Year	Annual Change				
	0 2,499	2,500 9,999	10,000 24,999	25,000 & Over	All Claims
2002	-10.3%	-8.6%	-0.8%	9.7%	-2.8%
2003	-1.7%	2.6%	4.6%	2.9%	2.0%
2004	-10.1%	-12.6%	-11.9%	-26.0%	-15.6%
2005	-9.1%	-16.1%	-18.3%	-19.5%	-15.5%
2006	-8.4%	-7.4%	-8.2%	0.0%	-6.1%
2007	-7.9%	-9.1%	-4.1%	5.3%	-4.0%
2008	-13.5%	-10.3%	-2.8%	3.8%	-5.6%
2009	-8.9%	-3.9%	-1.1%	0.9%	-3.1%
2010	4.6%	6.7%	7.6%	6.7%	6.4%
2011	2.3%	-1.5%	-3.5%	-3.0%	-1.6%
2012	3.0%	3.4%	4.1%	3.4%	3.5%
2013	-1.1%	0.0%	2.1%	-0.9%	0.0%
2014	0.8%	3.6%	2.0%	-0.7%	1.2%
2015	-2.3%	0.3%	-0.5%	-1.8%	-1.2%
2016	0.3%	5.0%	4.1%	-5.4%	0.5%

Accident Year	Percent of Annual Change Attributable to Each Layer				
	0 2,499	2,500 9,999	10,000 24,999	25,000 & Over	All Claims
2002	-3.0%	-2.0%	-0.2%	2.4%	-2.8%
2003	-0.5%	0.6%	1.0%	0.8%	2.0%
2004	-2.6%	-2.8%	-2.8%	-7.3%	-15.6%
2005	-2.5%	-3.7%	-4.5%	-4.8%	-15.5%
2006	-2.5%	-1.7%	-1.9%	0.0%	-6.1%
2007	-2.3%	-2.0%	-0.9%	1.3%	-4.0%
2008	-3.8%	-2.2%	-0.6%	1.0%	-5.6%
2009	-2.3%	-0.8%	-0.3%	0.3%	-3.1%
2010	1.1%	1.3%	1.8%	2.1%	6.4%
2011	0.5%	-0.3%	-0.8%	-1.0%	-1.6%
2012	0.7%	0.7%	1.0%	1.0%	3.5%
2013	-0.3%	0.0%	0.5%	-0.3%	0.0%
2014	0.2%	0.7%	0.5%	-0.2%	1.2%
2015	-0.6%	0.1%	-0.1%	-0.5%	-1.2%
2016	0.1%	1.0%	1.0%	-1.6%	0.5%

Indemnity Claim Count Distribution

Accident Year	Layer of Incurred Medical				
	0 2,499	2,500 9,999	10,000 24,999	25,000 & Over	All Claims
2001	29.5%	23.3%	22.4%	24.8%	100.0%
2002	27.3%	21.9%	22.9%	27.9%	100.0%
2003	26.3%	22.1%	23.4%	28.2%	100.0%
2004	28.0%	22.9%	24.5%	24.7%	100.0%
2005	30.1%	22.7%	23.6%	23.5%	100.0%
2006	29.4%	22.4%	23.1%	25.1%	100.0%
2007	28.2%	21.2%	23.1%	27.5%	100.0%
2008	25.8%	20.1%	23.8%	30.2%	100.0%
2009	24.3%	20.0%	24.3%	31.5%	100.0%
2010	23.9%	20.0%	24.5%	31.5%	100.0%
2011	24.8%	20.0%	24.1%	31.1%	100.0%
2012	24.7%	20.0%	24.2%	31.1%	100.0%
2013	24.4%	20.1%	24.7%	30.8%	100.0%
2014	24.3%	20.5%	24.9%	30.2%	100.0%
2015	24.0%	20.8%	25.1%	30.0%	100.0%
2016	24.0%	21.7%	26.0%	28.3%	100.0%

Note: Figures in italics are based on a partial accident year.
Source: WCIRB unit statistical data

Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>Other CA</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2003	3.6%	---	---	10.4%	13.9%
2004	4.2%	---	---	10.1%	13.4%
2005	4.8%	---	---	10.5%	13.6%
2006	5.1%	---	---	11.9%	15.1%
2007	5.4%	13.3%	15.4%	12.3%	15.2%
2008	5.6%	11.5%	13.3%	11.1%	13.1%
2009	6.2%	15.7%	14.8%	12.8%	14.9%
2010 ^[1]	5.9%	14.1%	15.5%	13.3%	15.3%
2011 ^[1]	5.9%	15.9%	17.3%	14.9%	17.2%
2012 ^[1]	6.3%	15.2%	19.1%	16.2%	18.6%
2013 ^[1]	5.9%	15.4%	20.0%	17.0%	19.5%
2014 ^[1]	8.4%	17.8%	21.3%	19.0%	20.8%
2015 ^[1]	10.1%	18.0%	22.6%	20.5%	21.9%
2016 ^[1]	11.0%	17.9%	22.3%	20.4%	21.6%
2017 ^[1]	10.8%	19.9%	22.7%	20.8%	22.2%

Paid ULAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>Other CA</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2010	27.9%	17.3%	6.4%	12.3%	7.9%
2011	28.9%	15.9%	6.5%	11.9%	7.7%
2012	45.0% ^[2]	15.0%	6.4%	14.8% ^[2]	7.5%
2013	21.8%	16.3%	7.2%	10.7%	8.2%
2014	28.8%	14.7%	6.4%	10.6%	7.4%
2015	35.1%	14.9%	7.1%	11.6%	8.3%
2016	37.6%	14.4%	6.6%	11.3%	7.9%
2017	25.6%	15.7%	7.5%	10.9%	8.8%

Paid LAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>Other CA</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2010	33.8%	31.4%	22.0%	25.6%	23.3%
2011	34.8%	31.8%	23.8%	26.8%	24.8%
2012	51.3% ^[2]	30.3%	25.5%	31.0% ^[2]	26.1%
2013	27.7%	31.7%	27.2%	27.7%	27.7%
2014	37.2%	32.5%	27.7%	29.6%	28.3%
2015	45.2%	33.0%	29.7%	32.1%	30.2%
2016	48.6%	32.3%	28.9%	31.7%	29.5%
2017	36.4%	35.6%	30.2%	31.7%	31.0%

Notes: ^[1] Medical Cost Containment Program (MCCP) costs on claims covered by policies incepting prior to July 1, 2010 are considered medical loss; those on claims covered by policies incepting July 1, 2010 and beyond are considered allocated loss adjustment expenses.

^[2] 2012 figure includes a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

Source: WCIRB expense calls

Average Paid ALAE^[1] per Reported Indemnity Claim - Private Insurers
As of March 31, 2018

Accident Year	Evaluated as of (in months):									
	<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>
1993										2,016
1994									1,975	2,015
1995								2,099	2,171	2,220
1996							2,323	2,449	2,522	2,619
1997						2,658	2,856	2,985	3,150	3,267
1998					2,674	2,997	3,226	3,513	3,708	3,858
1999				2,301	2,842	3,164	3,555	3,817	4,033	4,108
2000			1,748	2,658	3,296	3,825	4,224	4,567	4,727	4,913
2001		691	1,898	2,845	4,042	4,650	5,173	5,500	5,787	5,983
2002	267	864	2,086	3,605	4,489	5,217	5,693	6,053	6,296	6,486
2003	100	835	2,532	3,809	4,851	5,553	6,045	6,385	6,655	6,866
2004	66	831	2,249	3,572	4,541	5,197	5,660	6,017	6,277	6,479
2005	66	759	2,063	3,264	4,173	4,808	5,297	5,662	5,951	6,208
2006	107	777	2,165	3,397	4,303	5,000	5,526	5,909	6,253	6,516
2007	68	834	2,329	3,592	4,605	5,376	5,977	6,466	6,818	7,100
2008	86	943	2,481	3,937	5,106	5,979	6,654	7,157	7,537	7,800
2009	148	1,024	2,812	4,443	5,728	6,711	7,434	7,981	8,361	8,638
2010	85	1,110	2,969	4,607	5,897	6,832	7,543	8,034	8,375	
2011	86	1,122	2,960	4,575	5,865	6,826	7,466	7,929		
2012	87	1,141	3,069	4,795	6,101	6,988	7,606			
2013	103	1,224	3,338	5,044	6,248	7,056				
2014	116	1,371	3,545	5,211	6,347					
2015	104	1,465	3,648	5,255						
2016	113	1,497	3,720							
2017	128	1,580								
2018	152									

Accident Year	Annual Change									
	<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>
1994										0.0%
1995									9.9%	10.2%
1996								16.7%	16.2%	18.0%
1997							22.9%	21.9%	24.9%	24.7%
1998						12.8%	13.0%	17.7%	17.7%	18.1%
1999					6.2%	5.6%	10.2%	8.6%	8.8%	6.5%
2000				15.5%	16.0%	20.9%	18.8%	19.7%	17.2%	19.6%
2001			8.6%	7.0%	22.6%	21.6%	22.5%	20.4%	22.4%	21.8%
2002		25.1%	9.9%	26.7%	11.1%	12.2%	10.0%	10.0%	8.8%	8.4%
2003	-62.8%	-3.4%	21.3%	5.7%	8.1%	6.4%	6.2%	5.5%	5.7%	5.9%
2004	-33.7%	-0.5%	-11.2%	-6.2%	-6.4%	-6.4%	-6.4%	-5.8%	-5.7%	-5.6%
2005	-0.5%	-8.6%	-8.3%	-8.6%	-8.1%	-7.5%	-6.4%	-5.9%	-5.2%	-4.2%
2006	62.7%	2.4%	5.0%	4.1%	3.1%	4.0%	4.3%	4.4%	5.1%	5.0%
2007	-36.1%	7.3%	7.6%	5.7%	7.0%	7.5%	8.2%	9.4%	9.0%	9.0%
2008	26.4%	13.1%	6.5%	9.6%	10.9%	11.2%	11.3%	10.7%	10.5%	9.9%
2009	71.9%	8.6%	13.4%	12.9%	12.2%	12.2%	11.7%	11.5%	10.9%	10.7%
2010	-42.6%	8.4%	5.6%	3.7%	3.0%	1.8%	1.5%	0.7%	0.2%	
2011	0.5%	1.1%	-0.3%	-0.7%	-0.5%	-0.1%	-1.0%	-1.3%		
2012	1.8%	1.7%	3.7%	4.8%	4.0%	2.4%	1.9%			
2013	18.2%	7.2%	8.8%	5.2%	2.4%	1.0%				
2014	12.4%	12.1%	6.2%	3.3%	1.6%					
2015	-10.2%	6.8%	2.9%	0.8%						
2016	8.6%	2.2%	2.0%							
2017	13.9%	5.5%								
2018	18.5%									

Annual Trend ^[2]										
All-Year	0.9%	5.1%	4.6%	4.6%	5.0%	5.8%	6.9%	8.0%	9.1%	9.8%
R ²	0.018	0.916	0.917	0.883	0.861	0.859	0.861	0.870	0.889	0.908
14-Year	4.1%	6.0%	4.5%	3.7%	3.6%	4.1%	5.0%	5.8%	6.8%	8.1%
R ²	0.424	0.963	0.864	0.826	0.830	0.826	0.822	0.845	0.862	0.860
5-Year	7.9%	6.2%	4.9%	3.7%	2.1%	1.2%	2.8%	5.4%	8.2%	8.8%
R ²	0.671	0.931	0.922	0.947	0.917	0.938	0.611	0.764	0.948	0.985

^[1] All paid ALAE exclude the paid cost of medical cost containment programs.

^[2] Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

Ratio of Cumulative Paid ALAE to Loss - Private Insurers

As of March 31, 2018

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>
2000	0.040	0.072	0.088	0.093	0.098	0.100	0.103	0.107	0.107	0.109
2001	0.054	0.082	0.098	0.105	0.109	0.114	0.118	0.119	0.121	0.122
2002	0.147	0.086	0.104	0.118	0.125	0.132	0.134	0.137	0.137	0.138
2003	0.055	0.085	0.113	0.126	0.136	0.141	0.144	0.146	0.147	0.148
2004	0.044	0.085	0.119	0.139	0.150	0.155	0.158	0.159	0.160	0.160
2005	0.035	0.077	0.113	0.133	0.144	0.149	0.153	0.155	0.155	0.156
2006	0.050	0.076	0.112	0.129	0.138	0.143	0.146	0.148	0.150	0.152
2007	0.032	0.077	0.112	0.127	0.136	0.142	0.145	0.148	0.149	0.150
2008	0.037	0.078	0.110	0.127	0.137	0.142	0.146	0.148	0.149	0.150
2009	0.059	0.084	0.124	0.140	0.148	0.153	0.157	0.159	0.159	0.159
2010	0.033	0.094	0.133	0.145	0.152	0.157	0.160	0.159	0.160	
2011	0.034	0.101	0.136	0.150	0.157	0.161	0.162	0.164		
2012	0.037	0.101	0.141	0.155	0.163	0.166	0.169			
2013	0.043	0.111	0.152	0.163	0.170	0.174				
2014	0.060	0.122	0.160	0.170	0.174					
2015	0.040	0.128	0.164	0.172						
2016	0.047	0.127	0.167							
2017	0.048	0.130								
2018	0.052									

Accident	Annual Change									
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>
2001	34.0%	14.1%	11.6%	13.0%	10.7%	14.1%	14.1%	11.6%	13.2%	12.4%
2002	171.4%	4.9%	5.6%	12.4%	15.4%	15.8%	13.7%	14.7%	13.2%	13.5%
2003	-62.8%	-1.7%	9.5%	7.3%	8.6%	7.2%	7.7%	6.9%	7.4%	7.2%
2004	-19.0%	0.2%	4.9%	10.2%	10.1%	10.1%	9.3%	9.1%	8.4%	7.8%
2005	-20.5%	-9.3%	-4.9%	-4.0%	-4.1%	-3.8%	-3.2%	-3.0%	-2.8%	-2.6%
2006	42.4%	-1.7%	-1.2%	-3.5%	-4.2%	-4.2%	-4.2%	-4.0%	-3.4%	-2.7%
2007	-36.7%	1.8%	0.1%	-1.7%	-1.5%	-0.8%	-0.6%	-0.3%	-0.4%	-0.9%
2008	16.2%	0.5%	-1.5%	0.3%	0.8%	0.1%	0.1%	0.0%	0.0%	-0.2%
2009	58.8%	8.7%	12.2%	10.6%	8.7%	8.0%	7.5%	7.3%	6.1%	6.3%
2010	-43.4%	11.7%	7.9%	3.7%	2.7%	2.3%	2.0%	0.4%	0.9%	
2011	1.0%	7.2%	2.3%	3.4%	3.1%	2.6%	1.6%	2.7%		
2012	9.2%	-0.4%	3.5%	3.1%	3.5%	3.3%	4.1%			
2013	15.9%	9.8%	7.8%	5.4%	4.3%	4.7%				
2014	41.5%	10.0%	5.4%	3.8%	2.7%					
2015	-33.6%	4.9%	2.2%	1.3%						
2016	16.5%	-0.7%	1.9%							
2017	2.3%	2.6%								
2018	9.1%									

Note: All paid ALAE exclude the paid cost of medical cost containment programs. Accident years 2010 and prior paid loss include the paid cost of medical cost containment programs.

Source: WCIRB accident year experience calls.

Percentage of Represented Permanent Disability Claims by Region and Loss Type
First and Second Survey Level, Open Claims Only

First Survey Level

% of Represented	Northern		Southern		CT Claims		Non-CT Claims	
	California		California					
AY 2011	66.9%		80.3%		88.0%		73.9%	
AY 2012	68.1%		81.8%		89.7%		75.3%	
AY 2013	69.5%		83.5%		91.5%		76.8%	
AY 2014	68.6%		82.4%		90.3%		75.8%	
AY 2015	67.0%		80.4%		88.1%		74.0%	

Second Survey Level

% of Represented	Northern		Southern		CT Claims		Non-CT Claims	
	California		California					
AY 2011	69.8%		83.8%		91.9%		77.1%	
AY 2012	72.0%		86.4%		94.7%		79.5%	
AY 2013	72.2%		86.7%		95.1%		79.8%	
AY 2014	69.6%		83.6%		91.7%		77.0%	

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

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

Distribution of Total ALAE & M CCP Components - Private Insurers

<u>Calendar Year</u>	<u>M CCP</u>	<u>Defense Expense</u>	<u>Other Paid ALAE</u>	<u>Paid ALAE</u>
2005	20.2%	54.9%	24.9%	100.0%
2006	22.6%	44.3%	33.1%	100.0%
2007	24.2%	49.0%	26.8%	100.0%
2008	31.8%	43.0%	25.2%	100.0%
2009	27.8%	45.4%	26.8%	100.0%
2010	27.7%	45.4%	26.9%	100.0%
2011	27.3%	46.1%	26.6%	100.0%
2012	27.7%	46.3%	26.0%	100.0%
2013	28.1%	47.2%	24.7%	100.0%
2014	28.4%	44.6%	26.9%	100.0%
2015	28.4%	42.3%	29.4%	100.0%
2016	26.5%	43.3%	30.2%	100.0%
2017	24.7%	45.9%	29.4%	100.0%

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

Applicant Attorney Expense Paid - Private Insurers

Calendar Year	Applicant Attorney Amounts paid (in \$millions)	Incurred Losses (in \$millions)	Applicant Attorney Expenses Paid as a Percent of <u>Incurred Losses</u>
2003	192	10,423	1.8%
2004	249	9,073	2.7%
2005	228	7,559	3.0%
2006	209	5,540	3.8%
2007	196	5,444	3.6%
2008	177	5,711	3.1%
2009	221	5,700	3.9%
2010	253	6,260	4.0%
2011	280	7,500	3.7%
2012	340	8,533	4.0%
2013	353	9,501	3.7%
2014	330	9,632	3.4%
2015	327	9,405	3.5%
2016	354	9,617	3.7%
2017	348	8,913	3.9%

Source: WCIRB expense calls and quarterly calls for experience

Median Expense Costs per Open Represented PD Claim
Private Insurers Only

First Survey Level

		Type of Expense	
		ALAE	
		Defense <u>Expense</u>	Remaining <u>ALAE</u>
Northern California			Applicant Attorney <u>Expense</u>
	AY 2012	4,478	1,043
	AY 2013	4,684	425
	AY 2014	4,755	525
	AY 2015	4,898	317
			2,228
			3,108
			3,603
			4,569
Southern California			
	AY 2012	5,717	1,593
	AY 2013	5,565	1,778
	AY 2014	5,367	1,089
	AY 2015	4,760	576
			3,189
			2,758
			3,532
			4,459

Second Survey Level

		Type of Expense	
		ALAE	
		Defense <u>Expense</u>	Remaining <u>ALAE</u>
Northern California			Applicant Attorney <u>Expense</u>
	AY 2011	6,428	1,126
	AY 2012	5,579	1,952
	AY 2013	5,747	871
	AY 2014	5,905	516
			4,096
			3,944
			4,394
			5,759
Southern California			
	AY 2011	6,933	1,708
	AY 2012	7,087	1,976
	AY 2013	6,824	1,918
	AY 2014	6,485	1,242
			4,669
			4,400
			4,393
			5,633

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

Source: WCIRB Permanent Disability Claim Survey

Data is recast from survey proportions to true proportions. Excludes \$0 paid amounts.

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

Service Year	Number of Med-Legal Reports by Service Year							
	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2013	56,933	15,782	27,450	100,165	---	---	---	---
2014	63,209	17,103	27,757	108,069	11.0%	8.4%	1.1%	7.9%
2015	64,827	16,969	27,657	109,453	2.6%	-0.8%	-0.4%	1.3%
2016	70,313	20,881	28,290	119,484	8.5%	23.1%	2.3%	9.2%
2017	67,054	20,345	27,657	115,056	-4.6%	-2.6%	-2.2%	-3.7%

Service Year	Number of Med-Legal Reports per Claim ^[1] by Service Year							
	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2013	0.21	0.21	0.25	0.22	---	---	---	---
2014	0.22	0.23	0.25	0.23	6.5%	7.5%	0.3%	4.9%
2015	0.22	0.24	0.25	0.23	-2.7%	7.6%	0.4%	-0.5%
2016	0.23	0.28	0.25	0.24	8.3%	13.7%	-0.2%	7.2%
2017	0.23	0.26	0.24	0.24	-2.7%	-6.3%	-5.6%	-3.9%

Service Year	Med-Legal Payment per report by Service Year on All Claims ^[2]							
	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2013	\$1,689	\$1,064	\$1,305	\$1,485	---	---	---	---
2014	\$1,859	\$1,222	\$1,382	\$1,636	10.1%	14.8%	6.0%	10.1%
2015	\$1,821	\$1,285	\$1,368	\$1,624	-2.0%	5.1%	-1.1%	-0.8%
2016	\$1,878	\$1,244	\$1,354	\$1,643	3.1%	-3.2%	-1.0%	1.2%
2017	\$1,692	\$1,029	\$1,242	\$1,467	-9.9%	-17.3%	-8.3%	-10.7%

^[1] Includes claims with any medical transaction for the service year.

^[2] Includes services on all claims on the 10 most recent accident years for the service year and where payment for the service was made within the same service year.

Source: WCIRB medical data call (MDC).

Average Paid MCCP^[1] per Reported Indemnity Claim - Statewide
As of March 31, 2018

Accident Year	Evaluated as of (in months):						
	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2012	194	868	1,430	1,710	1,915	2,050	2,143
2013	184	806	1,287	1,598	1,786	1,905	
2014	163	750	1,270	1,577	1,755		
2015	173	758	1,257	1,525			
2016	154	733	1,170				
2017	166	713					
2018	173						

Accident Year	Annual Change					
	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>
2013	-5.4%	-7.1%	-10.0%	-6.6%	-6.7%	-7.1%
2014	-11.2%	-6.9%	-1.3%	-1.3%	-1.7%	
2015	6.1%	1.0%	-1.0%	-3.3%		
2016	-10.7%	-3.3%	-6.9%			
2017	7.9%	-2.7%				
2018	3.7%					

Annual Trend^[1]

All-Year	-2.1%	-3.5%	-4.2%	-3.5%	-4.3%
R ²	0.371	0.879	0.870	0.915	0.894

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

Item AC18-08-02

1/1/2019 Filing – Loss Adjustment Expense Experience Review

Staff has developed the indicated policy year 2019 ratio of loss adjustment expense (LAE) to loss based on calendar year unallocated loss adjustment expense (ULAE) experience through calendar year 2017, accident year allocated loss adjustment expense (ALAE) experience as of March 31, 2018, and projection methodologies generally consistent with those reflected in the WCIRB's January 1, 2018 and July 1, 2018 Pure Premium Rate Filings. The indicated policy year 2019 ULAE and ALAE projections, including projections for the cost of medical cost containment programs (MCCP), are summarized separately below.

ULAE Projection

Beginning with the WCIRB's 2015 Expense Call, the WCIRB has collected information related to (a) negative "service fee" type adjustments that are sometimes reflected in reported countrywide ULAE, (b) losses on claims on large deductible policies and/or handled by third party administrators (TPA) for which the associated claims handling costs are not reported in countrywide ULAE amounts, and (c) various countrywide loss and ULAE amounts consistent with what is reported by insurers on the Insurance Expense Exhibit.¹ This information is used to more accurately reflect the cost of handling claims in California primarily for insurers that make use of TPAs or make other adjustments to countrywide reported ULAE costs that ultimately are apportioned to California.

The approach to derive the adjusted calendar year California paid ULAE for ratemaking purposes, as reflected in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings, involves several steps. First, reported negative "service fee" type adjustments to ULAE were added back into the reported countrywide paid ULAE amount. Second, countrywide paid losses on large deductible policies and/or claims handled by TPAs for which the associated claims handling costs were not reported in countrywide ULAE were subtracted from the countrywide paid losses. This adjustment was applied to losses gross or net of deductible amounts depending on whether the insurer reported ULAE costs on a gross or net basis. Third, the adjusted countrywide paid ULAE ratio was derived based on the ratio of adjusted countrywide paid ULAE computed in the first step described above to adjusted countrywide paid losses computed in the second step. Fourth, the adjusted countrywide paid ULAE was derived by multiplying the adjusted countrywide paid ULAE ratio by the reported countrywide paid losses.

In prior pure premium rate filings, the adjusted countrywide paid ULAE derived as described above was apportioned to California based on California's share of countrywide paid losses. At the September 5, 2017 meeting, the Committee reviewed a number of alternative bases of apportioning countrywide ULAE to California. At that meeting, the Committee noted that open indemnity claim counts were (a) more highly correlated with paid ULAE than were paid losses and (b) more responsive to the longer duration of claims in California.² As a result, the Committee adopted modifications to the WCIRB's Expense Call to collect information on countrywide indemnity claim counts open at the end of the previous calendar year. This information was collected on the 2017 Expense Call for the purposes of apportioning adjusted countrywide paid ULAE to California for calendar year 2017 (i.e., countrywide open indemnity claim counts as of December 31, 2016). For a number of the larger insurers, staff collected similar information in order to apportion calendar year 2016 adjusted countywide paid ULAE to California based on open indemnity claim counts (i.e., countrywide open indemnity claim counts as of December 31, 2015).

Table 1 shows ratios of calendar year paid ULAE to paid losses for "national" insurers³ based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts as well as

¹ See Item AC15-03-07 of the June 12, 2015 and August 6, 2015 Actuarial Committee Agendas for more information.

² See Item AC17-09-02 of the September 5, 2017 Actuarial Committee Agenda.

³ Insurers writing less than 80% of their total workers' compensation business in California.

those derived using the prior apportionment basis of paid losses. Paid ULAE ratios using the open indemnity claim count basis of apportionment for “national” insurers are much more comparable to ratios for other private insurers that primarily write workers’ compensation business in California than ratios based on paid losses. The ULAE amounts reflected in the ULAE projections shown in Exhibits 1 through 9 were determined using this method to apportion countrywide ULAE to California.

Table 1: Calendar Year Ratios of ULAE to Loss

Calendar Year	National Insurers		California-focused Private Insurers
	Paid Loss Basis	Open Indemnity Count Basis	
2016	10.2%	12.8%	14.2%
2017	11.1%	14.1%	15.7%

For a number of insurers, the negative “service fee” type adjustments to ULAE do not apply and the reported countrywide ULAE reflects all claims handling costs on large deductible policies or related to claims handled by TPAs. In these instances, the approach described above simplifies to apportioning the reported countrywide ULAE to California based on California’s share of the insurer’s countrywide open indemnity claim counts. Although staff believes open indemnity claim counts is a reasonable measure to apportion countrywide ULAE to California, some insurers may use a more detailed and accurate method to derive the California ULAE. As a result and as in prior pure premium rate filings, for these insurers, the California paid ULAE as reported on the WCIRB’s Expense Call was used in deriving the ratios of California paid ULAE to paid losses in lieu of the formulaic approach discussed above.

Exhibit 1 shows calendar year paid ALAE and ULAE as ratios to paid losses by type of insurer. Calendar years 2016 and 2017 ULAE has been computed as described above and includes an apportionment of countrywide ULAE to California based on open indemnity claim counts. Calendar year 2015 ULAE is adjusted as described above but reflects an apportionment of countrywide ULAE to California based on paid losses. In addition, as discussed at prior meetings and reflected in prior pure premium rate filings, the ULAE for calendar years 2013 and 2014 also reflect partial adjustments for the issues addressed by the changes to the Expense Call for several large national insurers. As a result of these adjustments and enhancements, the ULAE ratios shown on Exhibit 1 for “national” insurers have become increasingly comparable to those for other private insurers since 2013. Also, as discussed at prior meetings, ULAE ratios for State Compensation Insurance Fund (State Fund) are much higher than those of other insurers.

Exhibits 2.1 and 2.2 show the average calendar year paid ULAE per open indemnity claim for all insurers and private insurers, respectively. The ULAE severities for calendar years 2016 and 2017 shown on Exhibit 2 were computed based on the approach described above using the new Expense Call information and, as a result, are not comparable to the ULAE severities for prior years, which for 2013 through 2015 only reflect the adjustments discussed above in part and apportionment to California based on paid losses and prior to 2013 are based solely on the California ULAE reported by insurers.

Exhibits 3.1 through 3.5 show the policy year 2019 projection of ULAE to loss based on the relationship of calendar year statewide paid ULAE to the number of indemnity claims open at the beginning of the calendar year. This methodology assumes that ULAE paid is a function of the volume of claims handled by claims adjusters. Exhibit 4 shows an analogous projection based on statewide claim count and loss projections but using the estimated paid ULAE per open indemnity claim based on the experience of private insurers only. The ULAE projections shown in Exhibits 3.5 and 4 are based on the average of ULAE severities from the latest two calendar years since those years reflect the apportionment of countrywide ULAE to California based on open indemnity claim counts. As in the July 1, 2018 Pure Premium Rate Filing, the projected ULAE severity trend was based on the average of the UCLA

Anderson Forecast and California Department of Finance projected annual growth rates in California wage levels.

Exhibit 5 shows the projection of policy year 2019 ULAE based on the relationship of statewide calendar ULAE paid to statewide calendar year paid losses. Exhibit 6 shows an analogous projection based on statewide loss to premium information and paid ULAE to paid loss ratios based on the experience of private insurers only. As with the ULAE projections shown in Exhibits 3 and 4, the projected ratios of ULAE to losses shown in Exhibits 5 and 6 are based on the average of calendar years 2016 and 2017.

As in the last several pure premium rate filings, the projected ratio of ULAE to losses has been based on the average of the projections resulting from the two methodologies described above based on statewide data and average ULAE costs from private insurers (see Exhibits 4 and 6). (The ULAE experience of State Fund has been excluded for reasons that have been discussed at prior Committee meetings and in prior pure premium rate filings and California Department of Insurance decisions.) The preliminary policy year 2019 ULAE projection based on this approach is 13.0%. For comparison purposes, the policy year 2019 ULAE projection based on this approach and using paid losses as the basis for apportioning countrywide ULAE to California (the basis reflected in the July 1, 2018 Pure Premium Rate Filing) is 10.7%, and the projected ULAE to loss ratio reflected in the July 1, 2018 Pure Premium Rate Filing was 11.4%.

Table 2 shows the projected ratio of ULAE to losses based on the WCIRB's current methodology using statewide data and private insurer average ULAE. Table 1 also shows alternative ULAE projections based on (a) the WCIRB's current methodology but projected based on calendar year 2017 only as shown in Exhibits 7 and 8, (b) the projection of ULAE paid to a weighted number of indemnity claims as shown in Exhibit 9, and (c) projections based on recent calendar year ratios of paid ULAE to paid losses.

Table 2: Projections of Policy Year 2019 ULAE to Loss

ULAE Projection Method	Statewide with Private Insurer Average ULAE
Current WCIRB Methodology	
Paid ULAE per Open Indemnity Claim Applied to the Latest Two Years	14.2%
Paid ULAE to Paid Losses Applied to the Latest Two Years	11.8%
Average of Open Indemnity Claim-Based and Paid Loss-Based Projections	13.0%
Alternative Methodologies	
Paid ULAE per Open Indemnity Claim Applied to the Latest Year Only	14.8%
Paid ULAE to Paid Losses Applied to the Latest Year Only	12.3%
Paid ULAE per Weighted Open Indemnity Claim Applied to the Latest Two Years	13.7%
Latest Two Calendar Year Paid ULAE to Loss Ratios	13.7%
Latest Calendar Year Paid ULAE to Loss Ratio	14.4%

ALAE Projection – Excluding MCCP Costs

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

Beginning in 2016, the cost of independent medical review (IMR) and independent bill review (IBR) is no longer reported in the MCCC component of ALAE but is still included in total reported ALAE. As a result, ALAE excluding MCCC costs paid in 2016 and later include the cost of IMR and IBR while ALAE excluding MCCC costs paid prior to 2016 do not include IMR and IBR costs (the converse is true for MCCC costs). In order to correct for this potential distortion in ALAE and MCCC payment patterns, as in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings, the paid ALAE and MCCC amounts shown in Exhibits 10 through 24 have been adjusted such that all IMR and IBR costs paid prior to 2016 are excluded from MCCC costs but continue to be included in other ALAE costs.

Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244), which became effective in 2017, included several provisions related to lien filings. As discussed at prior meetings and in prior pure premium rate filings, liens incur significant LAE costs in addition to the settlement costs paid to the lien claimant. In the July 1, 2018 Pure Premium Rate Filing, the WCIRB estimated that SB 1160 and AB 1244 have reduced lien filings by approximately 40%, which results in a 6.4% reduction in ALAE (excluding MCCC) costs.⁴ Given that liens are generally filed much later in the life of claims, accident year 2016 and 2017 ALAE costs are for the most part not yet at a post-reform level. As a result, staff has continued to reflect the 6.4% reduction in ALAE costs in the projections of the policy year 2019 ALAE ratio.⁵

Exhibit 10 shows private insurer average paid ALAE per reported indemnity claim by accident year. Exhibits 11.1 and 11.2 show statewide and private insurer annual ALAE severity growth percentages based on the estimated ultimate ALAE per indemnity claim, while Exhibit 12 shows private insurer annual ALAE growth percentages based on ratios of incremental calendar year paid ALAE per indemnity claims inventory.

Exhibits 13.1 through 13.4 show the ALAE projection, excluding MCCC costs, on a statewide basis. Exhibit 14 shows the ALAE projection, excluding MCCC costs, based on statewide claim and loss projections and private insurer average ALAE per indemnity claim. The projections in both Exhibits 13.4 and 14 were computed using a 3.5% ALAE severity trend which, as in the last several pure premium rate filings, was selected based on averaging the shorter-term (since 2013) and longer-term (since 2005) average private insurer ALAE severity growth rates shown in Exhibits 11.2 and 12.⁶

As shown in Exhibit 14, the preliminary projected ratio of ALAE (excluding MCCC) to loss based on statewide data and private insurer average ALAE costs (the methodology reflected in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings) and after reflecting the impact of SB 1160 and AB 1244 is 17.9%. For comparison purposes, the projected ALAE to loss ratio reflected in the July 1, 2018 Pure Premium Rate Filing was 18.5%.

For informational purposes, the WCIRB has computed additional ALAE projections (excluding MCCC) based on a number of alternative methodologies with underlying assumptions that differ from those reflected in the WCIRB's current ALAE projection methodology. Specifically, ALAE projections based on the following methodologies and using statewide data with private insurer ALAE have been included:

1. Projected Ultimate ALAE per Indemnity Claim and Future Number of Indemnity Claims – Projection Based on the Latest Year – Exhibit 15
2. Latest Year Paid ALAE Ratio Development Compared to Losses – Projection Based on the Average of the Latest Two Years – Exhibit 16

⁴ See Item AC18-04-01 of the April 3, 2018 Actuarial Committee Agenda for more detail.

⁵ As discussed at the April 3, 2018 Actuarial Committee meeting, given that lien-related disputes continue to occur on more recent claims and incur ULAE costs, no adjustment for SB 1160 and AB 1244 has been applied to the projected ULAE ratio.

⁶ The projected ALAE severity trend reflected in the July 1, 2018 Premium Rate Filing was 4.0%.

3. Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses – Projection Based on the Average of the Latest Two Years – Exhibits 17.1 and 17.2

The policy year 2019 ALAE projections derived based on the approach used in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings and each of the alternative ALAE projection methodologies are shown in Table 3.⁷

Table 3: Projections of Policy Year 2019 ALAE (Excluding MCCP) to Loss

ALAE Projection Method	Statewide with Private Insurer Average ALAE
Current WCIRB Methodology	
Projected Ultimate ALAE per Indemnity Claim – Trend Applied to the Latest Two Years	17.9%
Alternative Methodologies	
Projected Ultimate ALAE per Indemnity Claim – Trend Applied to the Latest Year	18.3%
Latest Year Paid ALAE Ratio Development Compared to Losses – Projection Based on Latest Two Years	18.0%
Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses – Projection Based on Latest Two Years	16.8%

ALAE Projection – MCCP Costs

As in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings, the projection of MCCP costs is based on a methodology analogous to that used for ALAE excluding MCCP costs and using statewide claim and MCCP cost data.

As discussed for ALAE excluding MCCP costs above, MCCP costs paid prior to 2016 include the cost of IMR and IBR while MCCP costs paid in 2016 and later do not include IMR and IBR costs. If no adjustment is made, paid MCCP cost development patterns would be distorted. In order to correct for this potential distortion, the MCCP amounts shown in Exhibits 18 through 24 have been adjusted such that all IMR and IBR costs paid prior to 2016 are excluded from MCCP costs.

Exhibit 18 shows statewide average paid MCCP per reported indemnity claim by accident year. Exhibit 19 shows statewide and private insurer annual MCCP severity growth percentages based on ratios of calendar year paid MCCP costs per indemnity claims inventory. Exhibit 20 shows statewide annual MCCP severity growth percentages based on estimated accident year ultimate MCCP costs per indemnity claim.

Exhibits 21.1 and 21.2 show the projection of MCCP costs based on statewide data. Projected MCCP development through 75 months is based on the latest year paid MCCP age-to-age factor, while projected MCCP development after 75 months is based on the selected paid medical 75-to-ultimate development factor.⁸ Exhibit 21.2 shows the projected policy year 2019 ratio of MCCP to loss based on applying separate frequency and severity trends to the latest two years' projected ultimate indemnity claim counts and ultimate MCCP per indemnity claim. The MCCP severity trend based on the

⁷ All projections shown in Table 3 also reflect the impact of SB 1160 and AB 1244 on ALAE costs.

⁸ See Exhibit 2.6.1 of Item AC18-06-01 of this Agenda. These factors do not reflect the adjustments for SB 1160 and AB 1244 applied to the cumulative medical development factors as these reforms were not projected to impact MCCP cost development.

approximate average rates of growth in (a) statewide calendar year M CCP per indemnity claims inventory from 2009 through 2017 (see Exhibit 19) and (b) estimated ultimate accident year M CCP costs per indemnity claim from 2011 through 2017 (see Exhibit 20) (the methodology used in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings) is -1%.⁹ The preliminary projected ratio of M CCP to loss based on this methodology is 3.8%. For comparison purposes, the projected M CCP to loss ratio reflected in the July 1, 2018 Pure Premium Rate Filing was 4.0%.

For informational purposes, the WCIRB has computed additional M CCP cost projections based on a number of alternative methodologies with underlying assumptions that differ from those reflected in the WCIRB's current M CCP projection methodology. Specifically, M CCP cost projections based on the following methodologies have been included:

1. Projected Ultimate M CCP per Indemnity Claim and Future Number of Indemnity Claims – Projection Based on the Latest Year – Exhibit 22
2. Projected Ultimate M CCP per Indemnity Claim and Future Number of Indemnity Claims – Trend Based on Calendar Year Paid M CCP per Open Indemnity Claim Applied to the Latest Two Years – Exhibit 23
3. Projected Ultimate M CCP per Indemnity Claim and Future Number of Indemnity Claims – Trend Based on Accident Year Ultimate M CCP per Indemnity Claim Applied to the Latest Two Years – Exhibit 24

The policy year 2019 M CCP cost projections derived based on the approach used in the January 1, 2018 and July 1, 2018 Pure Premium Rate Filings and each of the alternative M CCP projection methodologies are shown in Table 4.

Table 4: Projections of Policy Year 2019 M CCP to Loss

M CCP Projection Method	Statewide M CCP Ratio
Current WCIRB Methodology	
Projected Ultimate M CCP per Indemnity Claim – Trend Applied to the Latest Two Years	3.8%
Alternative Methodologies	
Projected Ultimate M CCP per Indemnity Claim – Trend Applied to the Latest Year	3.8%
Projected Ultimate M CCP per Indemnity Claim – Trend Based on CY Paid M CCP per Open Indemnity Claim and Applied to the Latest Two Years	4.3%
Projected Ultimate M CCP per Indemnity Claim – Trend Based on AY Ultimate M CCP per Indemnity Claim and Applied to the Latest Two Years	3.3%

The total preliminary ratio of LAE to losses for policy year 2019 based on data evaluated as of March 31, 2018 and the projection methodologies described above is 34.7%. For comparison purposes, the projected total LAE to loss ratio reflected in the July 1, 2018 Pure Premium Rate Filing was 33.9%.

⁹ The projected M CCP severity trend reflected in the July 1, 2018 Premium Rate Filing was 0%.

Summary of Paid LAE Ratios by Insurer Type

Paid ALAE to Paid Loss Ratios^[1]

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2007	5.4%	13.3%	15.4%	12.3%	15.2%
2008	5.6%	11.5%	13.3%	11.1%	13.1%
2009	6.2%	15.7%	14.8%	12.8%	14.9%
2010	5.9%	14.1%	15.5%	13.3%	15.3%
2011	5.9%	15.9%	17.3%	14.9%	17.2%
2012	6.3%	15.2%	19.1%	16.2%	18.6%
2013	5.9%	15.4%	20.0%	17.0%	19.5%
2014	8.4%	17.8%	21.3%	19.0%	20.8%
2015	10.1%	18.0%	22.6%	20.5%	21.9%
2016	11.0%	17.9%	22.3%	20.4%	21.6%
2017	10.8%	19.9%	22.7%	20.8%	22.2%

Paid ULAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2010	27.9%	17.3%	6.4%	12.3%	7.9%
2011	28.9%	15.9%	6.5%	11.9%	7.7%
2012	45.0% ^[2]	15.0%	6.4%	14.8% ^[2]	7.5%
2013 ^[3]	21.8%	16.3%	8.5%	11.7%	9.4%
2014 ^[3]	28.8%	14.7%	7.7%	11.6%	8.6%
2015 ^[4]	35.1%	14.8%	10.2%	13.9%	10.9%
2016 ^[4]	37.6%	14.2%	12.8%	15.9%	13.0%
2017 ^[4]	25.6%	15.7%	14.1%	15.8%	14.4%

Paid LAE to Paid Loss Ratios

<u>CY</u>	<u>State Fund</u>	<u>CA Private Insurers</u>	<u>National</u>	<u>Statewide</u>	<u>Private Insurers</u>
2010	33.8%	31.4%	22.0%	25.6%	23.3%
2011	34.8%	31.8%	23.8%	26.8%	24.8%
2012	51.3% ^[2]	30.3%	25.5%	31.0% ^[2]	26.1%
2013 ^[3]	27.7%	31.7%	28.5%	28.6%	28.9%
2014 ^[3]	37.2%	32.5%	29.0%	30.6%	29.4%
2015 ^[4]	45.2%	32.8%	32.8%	34.3%	32.8%
2016 ^[4]	48.6%	32.1%	35.1%	36.3%	34.7%
2017 ^[4]	36.4%	35.6%	36.8%	36.6%	36.6%

Notes: ^[1] Medical Cost Containment Program (MCCP) costs on claims covered by policies incepting prior to July 1, 2010 are considered medical loss; those on claims covered by policies incepting July 1, 2010 and beyond are considered allocated loss adjustment expenses.

^[2] 2012 figure includes a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

^[3] 2013 and 2014 ratios included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.

^[4] Reflects adjustments based on the Expense Call for ULAE costs related to deductible policies and third party administrators. 2015 adjusted ratio is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 and 2017 adjusted ratios are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Source: WCIRB expense calls and quarterly calls for experience

Calendar Year ULAE Paid Per Open Indemnity Claim - Statewide

<u>Calendar Year</u>	<u>ULAE Paid (in Millions)</u> (a)	<u>Number of Open Indemnity Claims at Beginning of the Year</u> (b)	<u>Number of Indemnity Claims Reported During Year</u> (c)	<u>ULAE Paid Per Open Indemnity Claim</u> (d)	<u>Annual Change</u> (e)
2010	844	360,624	117,135	2,339	---
2011	847	360,339	122,817	2,352	0.5%
2012	792	360,391	127,623	2,199	-6.5%
2013 (f)	982	365,706	138,294	2,685	
2014 (f)	950	366,420	143,220	2,592	-3.5%
2015 (g)	1,127	367,959	145,031	3,062	
2016 (g)	1,302	366,248	148,045	3,555	
2017 (g)	1,304	358,240	152,266	3,641	2.4%

Notes:

- (a) Calendar year ULAE paid is based on WCIRB expense calls. All figures in each calendar year contain information from the same combination of insurers that submitted both the ULAE and claim count data for that calendar year. Therefore, each calendar year may contain a different mix of insurers. Calendar year 2012 ULAE paid amount shown excludes the impact of a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.
- (b), (c) Based on WCIRB accident year experience calls. Column (c) is for information only.
- (d) (a)/(b) x 1,000,000.
- (f) 2013 and 2014 paid ULAE included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.
- (g) Reflects adjustments for ULAE costs related to deductible policies and third party administrators based on the Expense Call. 2015 paid ULAE is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 and 2017 paid ULAE are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Calendar Year ULAE Paid Per Open Indemnity Claim - Private Insurers

<u>Calendar Year</u>	<u>ULAE Paid (in Millions)</u>	<u>Number of Open Indemnity Claims at Beginning of the Year</u>	<u>Number of Indemnity Claims Reported During Year</u>	<u>ULAE Paid Per Open Indemnity Claim</u>	<u>Annual Change</u>
	(a)	(b)	(c)	(d)	(e)
2010	432	257,439	107,734	1,676	---
2011	450	267,152	116,356	1,684	0.5%
2012	474	279,015	122,080	1,698	0.8%
2013 (f)	644	294,011	131,749	2,192	
2014 (f)	598	307,227	133,061	1,947	-11.2%
2015 (g)	774	311,192	134,739	2,487	
2016 (g)	948	310,274	139,966	3,054	
2017 (g)	1,041	307,108	145,515	3,391	11.0%

Notes:

- (a) Calendar year ULAE paid is based on WCIRB expense calls. All figures in each calendar year contain information from the same combination of private insurers that submitted both the ULAE and claim count data for that calendar year. Therefore, each calendar year may contain a different mix of private insurers.
- (b), (c) Based on WCIRB accident year experience calls. Column (c) is for information only.
- (d) (a)/(b) x 1,000,000.
- (f) 2013 and 2014 paid ULAE included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.
- (g) Reflects adjustments for ULAE costs related to deductible policies and third party administrators based on the Expense Call. 2015 paid ULAE is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 and 2017 paid ULAE are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Reported Indemnity Claim Count Development - Statewide

Accident	Age-to-Age Development (in months):													
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1993														1.001
1994													1.001	1.000
1995												1.001	1.000	1.004
1996											1.001	1.001	1.001	1.000
1997										1.001	1.000	1.000	1.000	1.000
1998									1.001	1.000	1.000	1.000	1.001	1.000
1999								1.001	1.002	1.000	1.000	1.000	1.000	1.000
2000							1.000	0.998	1.000	1.000	1.000	1.001	1.000	1.000
2001						0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002					0.999	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003				0.999	1.008	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000
2004			1.001	1.000	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	
2005		1.007	1.004	1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000		
2006	1.115	1.013	1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000			
2007	1.125	1.015	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000				
2008	1.153	1.023	1.011	1.005	1.003	1.001	1.001	1.001	1.000					
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	1.001						
2010	1.220	1.030	1.011	1.006	1.004	1.002	1.001							
2011	1.230	1.033	1.014	1.007	1.003	1.002								
2012	1.241	1.035	1.013	1.006	1.003									
2013	1.240	1.031	1.012	1.006										
2014	1.239	1.032	1.012											
2015	1.246	1.031												
2016	1.255													
I. <u>Age-to-Age (Latest Year)</u>														
	1.255	1.031	1.012	1.006	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
II. <u>Age-to-Ultimate</u>														
	1.328	1.059	1.027	1.015	1.010	1.006	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002
III. <u>Estimated Percent of Ultimate Indemnity Claims Reported</u>														
	75.3%	94.5%	97.4%	98.5%	99.0%	99.4%	99.6%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Accident	Age-to-Age Development (in months):													
Year	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348
1989				1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990			1.001	0.999	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	
1991		1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1992	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1995	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1996	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1997	1.000	1.000	1.000	1.000	1.000	1.000								
1998	1.000	1.000	1.000	1.000	1.000									
1999	1.001	1.000	1.000	1.000										
2000	1.000	1.000	1.000											
2001	1.000	1.000												
2002	1.000													
I. <u>Age-to-Age (Latest Year)</u>														
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
II. <u>Age-to-Ultimate</u>														
	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000
III. <u>Estimated Percent of Ultimate Indemnity Claims Reported</u>														
	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: WCIRB quarterly calls for experience

Ultimate Indemnity Claim Settlement Ratios - Statewide

Accident Year	Evaluated as of (in months):													
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>
1994														96.9%
1995													95.7%	95.2%
1996												94.9%	93.9%	97.4%
1997											95.2%	95.2%	97.0%	97.3%
1998										94.8%	94.2%	96.6%	97.0%	97.4%
1999									93.6%	92.9%	96.1%	96.7%	97.2%	97.4%
2000								91.0%	92.1%	95.4%	96.3%	97.0%	97.5%	98.0%
2001							86.5%	90.8%	93.7%	95.0%	96.0%	96.8%	97.6%	96.9%
2002						81.9%	88.6%	91.6%	93.2%	94.5%	95.4%	96.5%	96.6%	96.7%
2003					75.9%	85.2%	89.1%	91.3%	93.0%	94.2%	95.6%	96.0%	96.2%	96.8%
2004				68.9%	80.3%	85.7%	88.7%	90.9%	92.6%	94.5%	95.3%	96.0%	96.6%	97.1%
2005			58.8%	73.7%	81.4%	85.6%	88.7%	91.0%	93.3%	94.6%	95.5%	96.2%	96.8%	
2006		45.5%	62.9%	74.1%	81.0%	85.3%	88.4%	91.3%	93.1%	94.4%	95.4%	96.2%		
2007	21.8%	47.7%	62.9%	73.3%	80.2%	84.8%	89.0%	91.6%	93.2%	94.6%	95.7%			
2008	22.8%	46.5%	61.3%	72.2%	79.6%	85.8%	89.6%	91.9%	93.5%	94.8%				
2009	21.7%	44.9%	60.1%	71.3%	80.2%	85.9%	89.8%	91.6%	93.5%					
2010	21.6%	46.0%	60.8%	73.4%	81.9%	87.1%	89.9%	92.4%						
2011	21.9%	45.7%	62.0%	74.4%	82.4%	86.7%	90.4%							
2012	21.7%	46.7%	63.5%	75.4%	82.4%	87.7%								
2013	21.1%	47.0%	63.8%	75.8%	83.9%									
2014	20.8%	47.0%	64.4%	77.0%										
2015	20.7%	48.1%	66.7%											
2016	21.6%	50.9%												
2017	23.3%													

Accident Year	Evaluated as of (in months):													
	<u>180</u>	<u>192</u>	<u>204</u>	<u>216</u>	<u>228</u>	<u>240</u>	<u>252</u>	<u>264</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>
1989					98.2%	98.5%	99.4%	99.4%	99.5%	99.5%	99.6%	99.6%	99.5%	99.6%
1990				97.7%	98.0%	99.0%	99.0%	99.1%	99.1%	99.2%	99.3%	99.3%	99.4%	99.4%
1991			97.0%	97.2%	98.8%	98.8%	98.9%	98.9%	99.0%	99.0%	99.1%	99.2%	99.2%	
1992		96.9%	97.0%	98.7%	98.7%	98.8%	98.8%	98.9%	98.9%	99.0%	99.1%	99.2%		
1993	96.7%	97.1%	98.5%	98.6%	98.7%	98.7%	98.8%	98.9%	98.9%	99.0%	99.0%			
1994	96.8%	98.3%	98.5%	98.6%	98.4%	98.5%	98.6%	98.6%	98.7%	98.8%				
1995	97.8%	98.0%	98.2%	97.8%	98.0%	98.1%	98.1%	98.2%	98.3%					
1996	97.6%	97.8%	97.2%	97.4%	97.6%	97.5%	97.7%	97.7%						
1997	97.6%	97.1%	97.4%	97.5%	97.6%	97.7%	97.9%							
1998	97.4%	97.7%	97.8%	97.7%	97.9%	98.0%								
1999	97.8%	97.8%	97.7%	98.0%	98.2%									
2000	97.5%	97.4%	97.7%	97.9%										
2001		96.8%	97.2%	97.5%										
2002	97.1%	97.5%												
2003	97.3%													

Source: WCIRB quarterly calls for experience

Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide
As of December 31, 2017

Selected Indemnity Claim Reporting and Closure Patterns - As of 12/31/2017					Cumulative Indemnity Claim Counts				
Year	Percent Reported	Percent Closed	Percent Open	AY	Open Year	Reported @ 12/31/17	Open @ 12/31/17	Estimated Ultimate(d)	Annual Change
	(a)	(b)	(c)	(1)	(2)	(3)	(4)	(5)	(6)
1	75.3%	23.3%	52.0%	1989	29	222,646	876	222,665	
2	94.5%	50.9%	43.6%	1990	28	248,850	1,469	248,892	
3	97.3%	66.7%	30.6%	1991	27	249,750	1,917	249,826	
4	98.5%	77.0%	21.5%	1992	26	198,433	1,613	198,513	
5	99.0%	83.9%	15.2%	1993	25	156,142	1,449	156,203	
6	99.4%	87.7%	11.7%	1994	24	143,729	1,692	143,805	
7	99.6%	90.4%	9.2%	1995	23	135,172	2,197	135,299	
8	99.7%	92.4%	7.3%	1996	22	133,140	2,858	133,294	
9	99.8%	93.5%	6.3%	1997	21	137,296	2,756	137,495	
10	99.8%	94.8%	5.0%	1998	20	147,467	2,711	147,725	
11	99.8%	95.7%	4.1%	1999	19	148,649	2,411	148,948	
12	99.8%	96.2%	3.6%	2000	18	161,971	3,081	162,304	
13	99.8%	96.8%	3.0%	2001	17	185,669	4,307	186,052	
14	99.8%	97.1%	2.7%	2002	16	194,693	4,410	195,141	
15	99.8%	97.3%	2.5%	2003	15	184,190	4,614	184,615	
16	99.8%	97.5%	2.3%	2004	14	158,908	4,260	159,257	
17	99.8%	97.5%	2.3%	2005	13	139,515	4,135	139,800	
18	99.8%	97.9%	1.9%	2006	12	133,221	4,818	133,480	
19	99.8%	98.2%	1.6%	2007	11	130,200	5,365	130,445	
20	99.8%	98.0%	1.8%	2008	10	122,915	6,128	123,165	
21	99.9%	97.9%	2.0%	2009	9	113,609	7,134	113,884	
22	99.9%	97.7%	2.1%	2010	8	118,238	8,620	118,592	
23	99.9%	98.3%	1.6%	2011	7	120,315	11,082	120,828	
24	99.9%	98.8%	1.2%	2012	6	127,167	14,929	127,963	
25	100.0%	99.0%	0.9%	2013	5	134,809	20,657	136,116	
26	100.0%	99.1%	0.8%	2014	4	139,479	30,447	141,611	
27	100.0%	99.2%	0.8%	2015	3	142,900	44,984	146,792	
28	100.0%	99.4%	0.6%	2016	2	141,451	65,260	149,741	
29	100.0%	99.6%	0.4%	2017	1	115,705	79,857	153,690	
								Projected(e)	
				2018				152,999	-0.5%
				2019				150,780	-1.5%
				2020				146,845	-2.6%
				Total		4,486,229	346,037		

Notes:

- (a) See Exhibit 3.1.
- (b) See Exhibit 3.2.
- (c) (a) - (b).
- (d) Estimated based on number of reported indemnity claims as of December 31, 2017 (column (3)) and selected reporting pattern (column (a)).
- (e) Estimated based on projected frequency trends for accident years 2018 to 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.

Estimated Number of Open Indemnity Claims - Statewide
Based on Selected Reporting and Closure Patterns - As of December 31, 2017

AY	Estimated Number of Reported Indemnity Claims(a)			Estimated Number of Open Indemnity Claims(b)			Estimated Number of Indemnity Claims Opened During(c)		
	@12/31/18	@12/31/19	@12/31/20	@12/31/18	@12/31/19	@12/31/20	2018	2019	2020
1989	222,646	222,646	222,646	876	876	876	0	0	0
1990	248,871	248,871	248,871	979	979	979	21	0	0
1991	249,783	249,804	249,804	1,474	983	983	33	21	0
1992	198,453	198,479	198,496	1,523	1,171	781	20	26	17
1993	156,140	156,155	156,176	1,269	1,199	922	-2	16	21
1994	143,749	143,747	143,761	1,334	1,168	1,104	20	-2	14
1995	135,228	135,247	135,245	1,592	1,255	1,099	56	19	-2
1996	133,169	133,223	133,242	2,164	1,568	1,237	29	55	19
1997	137,336	137,366	137,422	2,948	2,233	1,618	40	29	56
1998	147,511	147,554	147,586	2,961	3,168	2,399	44	43	32
1999	148,688	148,733	148,776	2,734	2,986	3,194	39	44	44
2000	161,978	162,020	162,069	2,627	2,979	3,253	7	43	48
2001	185,671	185,679	185,728	3,532	3,011	3,415	2	7	49
2002	194,739	194,742	194,749	4,517	3,705	3,159	46	2	8
2003	184,191	184,235	184,237	4,172	4,273	3,505	1	44	2
2004	158,890	158,891	158,928	3,980	3,599	3,686	-18	1	38
2005	139,494	139,478	139,479	3,740	3,494	3,159	-21	-16	1
2006	133,208	133,188	133,172	3,948	3,571	3,336	-13	-20	-15
2007	130,192	130,179	130,159	4,709	3,858	3,490	-8	-13	-20
2008	122,934	122,927	122,914	5,066	4,446	3,643	19	-7	-12
2009	113,652	113,670	113,663	5,666	4,684	4,111	43	17	-7
2010	118,306	118,351	118,369	7,429	5,900	4,878	68	45	18
2011	120,468	120,537	120,583	8,783	7,569	6,012	153	69	46
2012	127,419	127,581	127,654	11,736	9,301	8,016	252	162	73
2013	135,270	135,538	135,710	15,880	12,484	9,894	461	268	172
2014	140,251	140,730	141,009	21,491	16,522	12,988	772	479	279
2015	144,582	145,383	145,879	31,561	22,277	17,126	1,682	800	497
2016	145,771	147,487	148,304	45,888	32,195	22,725	4,320	1,716	816
2017	145,181	149,615	151,377	66,981	47,098	33,044	29,476	4,434	1,761
<u>Projected</u>									
2018	115,184	144,528	148,942	79,498	66,679	46,886	115,184	29,344	4,414
2019		113,514	142,432		78,345	65,713		113,514	28,918
2020			110,551			76,300			110,551
Total	4,638,955	4,790,097	4,937,936	351,059	353,577	353,528	152,726	151,142	147,839
(d) Open Claims at Beginning of the Year:							346,037	351,059	353,577
(e) "Weighted" Open Claims:							651,489	653,342	649,255

Notes:

- (a), (b) Estimated based on the projected number of indemnity claims and selected reporting and closure patterns (see Exhibit 3.3).
- (c) Based on the difference in the estimated numbers of reported indemnity claims between two consecutive December 31 evaluations.
- (d) Based on the number of indemnity claims still open as of the previous year-end. For example, the number of open indemnity claims at the beginning of calendar year 2018 is the total number of indemnity claims from all accident years that were open as of December 31, 2017 (see column (4) total on Exhibit 3.3).
- (e) The "weighted" number of open claims is the sum of the number of open claims at the beginning of the year and twice the number of claims opened during the year.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

<u>Calendar Year</u>	<u>Number of Open Indemnity Claims at Beginning of the Year</u>	<u>ULAE Paid Per Open Indemnity Claim</u>	<u>ULAE Paid (\$000)</u>
	(a)	(b)	(c)
2010	360,624	2,339	843,664
2011	360,339	2,352	847,365
2012	360,391	2,199	792,426
2013	365,706	2,685	981,911
2014	366,420	2,592	949,860
2015	367,959	3,062	1,126,836
2016	366,248	3,555	1,302,068
2017	358,240	3,640	1,303,848
Projected			
2018	346,037	3,796	1,313,623
2019	351,059	3,944	1,384,438
2020	353,577	4,070	1,439,000
(d) Projected ULAE Paid (\$000):			1,566,414
(e) Calendar Year 2017 Earned Premium (\$000):			17,672,390
(f) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.581
(g) Premium Adjustment Factor for Calendar Year 2017:			0.964
(h) Projected Losses (\$000): (e) x (f) x (g)			9,898,023
(i) Projected Ratio of ULAE to Losses: (d)/(h)			15.8%

Notes:

- (a) Calendar years 2010 to 2017 are from column (b) of Exhibit 2.1, and 2018 to 2020 are from line (d), Exhibit 3.4.
- (b) Calendar years 2010 to 2017 are from column (d) of Exhibit 2.1. Calendar years 2018 to 2020 are projected based on applying the California average annual wage level changes of 2.7%, 4.2%, 3.9% and 3.2% for 2017 to 2020 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the ULAE paid per open indemnity claim from averaging 2016 and 2017.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2019 and 2020, projected 3.3 years to the approximate average midpoint of ultimate ULAE payments on 2019 policies, based on applying the an average annual change of 3.2% for 2020 and 2021 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2017.
- (f) See Exhibit 8 of Item AC18-06-01.
- (g) See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

<u>Calendar Year</u>	<u>Number of Open Indemnity Claims at Beginning of the Year</u> (a)	<u>ULAE Paid Per Open Indemnity Claim</u> (b)	<u>ULAE Paid (\$000)</u> (c)
2010	360,624	1,676	604,510
2011	360,339	1,684	606,894
2012	360,391	1,698	612,112
2013	365,706	2,192	801,569
2014	366,420	1,947	713,493
2015	367,959	2,487	915,125
2016	366,248	3,054	1,118,558
2017	358,240	3,391	1,214,844
Projected			
2018	346,037	3,399	1,176,149
2019	351,059	3,531	1,239,553
2020	353,577	3,644	1,288,405
(d) Projected ULAE Paid (\$000):			1,402,485
(e) Calendar Year 2017 Earned Premium (\$000):			17,672,390
(f) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.581
(g) Premium Adjustment Factor for Calendar Year 2017:			0.964
(h) Projected Losses (\$000): (e) x (f) x (g)			9,898,023
(i) Projected Ratio of ULAE to Losses: (d)/(h)			14.2%

Notes:

- (a) Calendar years 2010 to 2017 are from column (b) of Exhibit 2.1, and 2018 to 2020 are from line (d), Exhibit 3.4.
- (b) Calendar years 2010 to 2017 are from column (d) of Exhibit 2.1. Calendar years 2018 to 2020 are projected based on applying the California average annual wage level changes of 2.7%, 4.2%, 3.9% and 3.2% for 2017 to 2020 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the ULAE paid per open indemnity claim from averaging 2016 and 2017.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2019 and 2020, projected 3.3 years to the approximate average midpoint of ultimate ULAE payments on 2019 policies, based on applying the an average annual change of 3.2% for 2020 and 2021 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2017.
- (f) See Exhibit 8 of Item AC18-06-01.
- (g) See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Ratio of ULAE Paid to Paid Losses
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Calendar Year	Paid ULAE as % of Paid Losses (a)	Paid Loss as % of Premium (b)	Paid ULAE as % of Premium (c)=(a) x (b)
2010	0.121	72.7%	8.8%
2011	0.116	70.1%	8.1%
2012	0.101	65.3%	6.6%
2013	0.117	58.5%	6.8%
2014	0.116	50.5%	5.9%
2015	0.139	48.0%	6.6%
2016	0.159	46.0%	7.3%
2017	0.158	46.8%	7.4%
Projected			
2018	0.158 ¹	48.4% ²	7.7% ³
2019	0.158 ¹	48.3% ²	7.6% ³
2020	0.158 ¹	47.9% ²	7.6% ³
(d) Projected ULAE Paid to CY2017 Earned Premium Ratio: (Average of calendar years 2019 and 2020 in column (a))			7.6%
(e) Projected Loss to Industry Average Filed Pure Premium Ratio ⁴ :			0.581
(f) Premium Adjustment Factor for Calendar Year 2017 ⁵ :			0.964
(g) Projected Ratio of ULAE to Losses: (d) / [(e) x (f)]			13.6%

Notes:

¹ Based on averaging of the 2016 and 2017 paid ULAE to paid loss ratios.

² Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2017 experience.

³ (a) x (b).

⁴ See Exhibit 8 of AC18-06-01.

⁵ See Exhibit 5.2 of AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide
Based on Private Insurers ULAE Paid to Paid Losses Ratio
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Calendar Year	Paid ULAE as % of Paid Losses ¹ (c)	Paid Loss as % of Premium (b)	Paid ULAE as % of Premium (c)=(a) x (b)
2010	0.079	72.7%	5.8%
2011	0.077	70.1%	5.4%
2012	0.075	65.3%	4.9%
2013	0.094	58.5%	5.5%
2014	0.086	50.5%	4.3%
2015	0.109	48.0%	5.2%
2016	0.130	46.0%	6.0%
2017	0.144	46.8%	6.7%
Projected			
¹ 2018	0.137 ²	48.4% ³	6.6% ⁴
¹ 2019	0.137 ²	48.3% ³	6.6% ⁴
¹ 2020	0.137 ²	47.9% ³	6.6% ⁴
(d) Projected ULAE Paid to CY2017 Earned Premium Ratio: (Average of calendar years 2019 and 2020 in column (a))			6.6%
(e) Projected Loss to Industry Average Filed Pure Premium Ratio ⁵ :			0.581
(f) Premium Adjustment Factor for Calendar Year 2017 ⁶ :			0.964
(g) Projected Ratio of ULAE to Losses: (d) / [(e) x (f)]			11.8%

Notes:

¹ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.

² Based on averaging of the 2016 and 2017 paid ULAE to paid loss ratios.

³ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2017 experience.

⁴ (b) x (c).

⁵ See Exhibit 8 of AC18-06-01.

⁶ See Exhibit 5.2 of AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Trend from Latest Year
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Calendar Year	Number of Open Indemnity Claims at Beginning of the Year	ULAE Paid Per Open Indemnity Claim	ULAE Paid (\$000)
	(a)	(b)	(c)
2010	360,624	1,676	604,510
2011	360,339	1,684	606,894
2012	360,391	1,698	612,112
2013	365,706	2,192	801,569
2014	366,420	1,947	713,493
2015	367,959	2,487	915,125
2016	366,248	3,054	1,118,558
2017	358,240	3,390	1,214,304
Projected			
2018	346,037	3,530	1,221,632
2019	351,059	3,667	1,287,488
2020	353,577	3,785	1,338,229
(d) Projected ULAE Paid (\$000):			1,465,929
(e) Calendar Year 2017 Earned Premium (\$000):			17,672,390
(f) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.581
(g) Premium Adjustment Factor for Calendar Year 2017:			0.964
(h) Projected Losses (\$000): (e) x (f) x (g)			9,898,023
(i) Projected Ratio of ULAE to Losses: (d)/(h)			14.8%

Notes:

- (a) Calendar years 2000 to 2017 are from column (b) of Exhibit 2.1, and 2018 to 2020 are from line (d), Exhibit 3.4.
- (b) Calendar years 2010 to 2017 are from column (d) of Exhibit 2.1. Calendar years 2018 to 2020 are projected based on applying the California average annual wage level changes of 4.2%, 3.9% and 3.2% for 2018 to 2020 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the 2017 ULAE paid per open indemnity claim.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2019 and 2020, projected 3.3 years to the approximate average midpoint of ultimate ULAE payments on 2019 policies, based on applying the an average annual change of 3.2% for 2020 and 2021 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2017.
- (f) See Exhibit 8 of Item AC18-06-01.
- (g) See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide

Based on Private Insurers ULAE Paid to Paid Losses Ratio - Trend from Latest Year
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Calendar Year	Paid ULAE as % of Paid Losses ¹ (a)	Paid Loss as % of Premium (b)	Paid ULAE as % of Premium (c)=(a) x (b)
2010	0.079	72.7%	5.8%
2011	0.077	70.1%	5.4%
2012	0.075	65.3%	4.9%
2013	0.094	58.5%	5.5%
2014	0.086	50.5%	4.3%
2015	0.109	48.0%	5.2%
2016	0.130	46.0%	6.0%
2017	0.144	46.8%	6.7%
Projected			
2018	0.144 ²	48.4% ³	7.0% ⁴
2019	0.144 ²	48.3% ³	7.0% ⁴
2020	0.144 ²	47.9% ³	6.9% ⁴
(d) Projected ULAE Paid to CY2017 Earned Premium Ratio: (Average of calendar years 2019 and 2020 in column (a))			6.9%
(e) Projected Loss to Industry Average Filed Pure Premium Ratio ⁵ :			0.581
(f) Premium Adjustment Factor for Calendar Year 2017 ⁶ :			0.964
(g) Projected Ratio of ULAE to Losses: (d) / [(e) x (f)]			12.3%

Notes:

¹ Based on private insurers ULAE to paid loss ratio. See Exhibit 1.

² Based on 2017 paid ULAE to paid loss ratio.

³ Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2017 experience.

⁴ (b) x (c).

⁵ See Exhibit 8 of AC18-06-01.

⁶ See Exhibit 5.2 of AC18-06-01.

Projected Ratio of ULAE to Loss - Statewide

Based on Estimated Calendar Year ULAE Paid per Weighted Open Indemnity Claim for Private Insurers
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Calendar Year	Weighted Number of Open Indemnity Claims	ULAE Paid Per Weighted Open Indemnity Claim	ULAE Paid (\$000)
	(a)	(b)	(c)
2010	594,894	913	542,859
2011	605,973	900	545,458
2012	615,637	906	557,651
2013	642,294	1,156	742,428
2014	652,860	1,043	681,195
2015	658,021	1,333	877,041
2016	662,338	1,606	1,063,420
2017	662,772	1,740	1,153,472
<u>Projected</u>			
2018	651,489	1,765	1,149,722
2019	653,342	1,833	1,197,767
2020	649,255	1,892	1,228,372
(d) Projected ULAE Paid (\$000):			1,354,506
(e) Calendar Year 2017 Earned Premium (\$000):			17,672,390
(f) Projected Loss to Industry Average Filed Pure Premium Ratio:			0.581
(g) Premium Adjustment Factor for Calendar Year 2017:			0.964
(h) Projected Losses (\$000): (e) x (f) x (g)			9,898,023
(i) Projected Ratio of ULAE to Losses : (d)/(h)			13.7%

Notes:

- (a) Calendar years 2000 to 2017 are based on columns (b)+[2.0 x (c)] of Exhibit 2.1, and 2018 to 2020 are from line (e), Exhibit 3.4.
- (b) Calendar years 2010 to 2017 are from column (a) of Exhibit 2.2 divided by columns (b)+[2.0 x (c)] of Exhibit 2.2, multiplied by 1,000,000. Calendar years 2018 to 2020 are projected based on applying the California average annual wage level changes of 2.7%, 4.2%, 3.9% and 3.2% for 2017 to 2020 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per weighted open indemnity claim from averaging 2016 to 2017.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2019 and 2020, projected 3.3 years to the approximate average midpoint of ultimate ULAE payments on 2019 policies, based on applying the an average annual change of 3.2% for 2020 and 2021 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2017.
- (f) See Exhibit 8 of Item AC18-06-01.
- (g) See Exhibit 5.2 of Item AC18-06-01.

Average Paid ALAE^[1] per Reported Indemnity Claim - Private Insurers
As of March 31, 2018

Accident Year	Evaluated as of (in months):									
	3	15	27	39	51	63	75	87	99	111
1993										2,016
1994									1,975	2,015
1995								2,099	2,171	2,220
1996							2,323	2,449	2,522	2,619
1997						2,658	2,856	2,985	3,150	3,267
1998					2,674	2,997	3,226	3,513	3,708	3,858
1999				2,301	2,842	3,164	3,555	3,817	4,033	4,108
2000			1,748	2,658	3,296	3,825	4,224	4,567	4,727	4,913
2001		691	1,898	2,845	4,042	4,650	5,173	5,500	5,787	5,983
2002	267	864	2,086	3,605	4,489	5,217	5,693	6,053	6,296	6,486
2003	100	835	2,532	3,809	4,851	5,553	6,045	6,385	6,655	6,866
2004	66	831	2,249	3,572	4,541	5,197	5,660	6,017	6,277	6,479
2005	66	759	2,063	3,264	4,173	4,808	5,297	5,662	5,951	6,208
2006	107	777	2,165	3,397	4,303	5,000	5,526	5,909	6,253	6,516
2007	68	834	2,329	3,592	4,605	5,376	5,977	6,466	6,818	7,100
2008	86	943	2,481	3,937	5,106	5,979	6,654	7,157	7,537	7,800
2009	148	1,024	2,812	4,443	5,728	6,711	7,434	7,981	8,361	8,638
2010	85	1,110	2,969	4,607	5,897	6,832	7,543	8,034	8,375	
2011	86	1,122	2,960	4,574	5,862	6,822	7,464	7,927		
2012	87	1,141	3,068	4,791	6,096	6,985	7,603			
2013	103	1,223	3,335	5,040	6,245	7,054				
2014	116	1,371	3,544	5,210	6,346					
2015	104	1,465	3,648	5,255						
2016	113	1,497	3,720							
2017	128	1,580								
2018	152									

Accident Year	Annual Change									
	3	15	27	39	51	63	75	87	99	111
1994										0.0%
1995									9.9%	10.2%
1996								16.7%	16.2%	18.0%
1997							22.9%	21.9%	24.9%	24.7%
1998						12.8%	13.0%	17.7%	17.7%	18.1%
1999					6.2%	5.6%	10.2%	8.6%	8.8%	6.5%
2000				15.5%	16.0%	20.9%	18.8%	19.7%	17.2%	19.6%
2001			8.6%	7.0%	22.6%	21.6%	22.5%	20.4%	22.4%	21.8%
2002		25.1%	9.9%	26.7%	11.1%	12.2%	10.0%	10.0%	8.8%	8.4%
2003	-62.8%	-3.4%	21.3%	5.7%	8.1%	6.4%	6.2%	5.5%	5.7%	5.9%
2004	-33.7%	-0.5%	-11.2%	-6.2%	-6.4%	-6.4%	-6.4%	-5.8%	-5.7%	-5.6%
2005	-0.5%	-8.6%	-8.3%	-8.6%	-8.1%	-7.5%	-6.4%	-5.9%	-5.2%	-4.2%
2006	62.7%	2.4%	5.0%	4.1%	3.1%	4.0%	4.3%	4.4%	5.1%	5.0%
2007	-36.1%	7.3%	7.6%	5.7%	7.0%	7.5%	8.2%	9.4%	9.0%	9.0%
2008	26.4%	13.1%	6.5%	9.6%	10.9%	11.2%	11.3%	10.7%	10.5%	9.9%
2009	71.9%	8.6%	13.4%	12.9%	12.2%	12.2%	11.7%	11.5%	10.9%	10.7%
2010	-42.6%	8.4%	5.6%	3.7%	3.0%	1.8%	1.5%	0.7%	0.2%	
2011	0.5%	1.1%	-0.3%	-0.7%	-0.6%	-0.1%	-1.0%	-1.3%		
2012	1.8%	1.7%	3.7%	4.7%	4.0%	2.4%	1.9%			
2013	18.2%	7.2%	8.7%	5.2%	2.5%	1.0%				
2014	12.4%	12.1%	6.3%	3.4%	1.6%					
2015	-10.2%	6.9%	2.9%	0.9%						
2016	8.6%	2.2%	2.0%							
2017	13.9%	5.5%								
2018	18.5%									

Annual Trend ^[2]										
All-Year	0.9%	5.1%	4.6%	4.6%	5.0%	5.8%	6.9%	8.0%	9.1%	9.8%
R ²	0.018	0.916	0.917	0.883	0.861	0.859	0.861	0.870	0.889	0.908
14-Year	4.1%	6.0%	4.5%	3.7%	3.6%	4.1%	5.0%	5.8%	6.8%	8.1%
R ²	0.424	0.963	0.864	0.825	0.829	0.826	0.822	0.844	0.862	0.860
5-Year	7.9%	6.2%	4.9%	3.7%	2.1%	1.2%	2.7%	5.4%	8.2%	8.8%
R ²	0.671	0.931	0.924	0.949	0.916	0.933	0.608	0.763	0.948	0.985

^[1] All paid ALAE exclude the paid cost of medical cost containment programs.

^[2] Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

Estimated Ultimate ALAE Per Indemnity Claim - Statewide

Acc. Year	Paid ALAE ^[1] @ 3/31/18 (in \$000) (1)	Paid ALAE Cumulative Development Factors ^[2] (2)	Estimated Ult. ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @ 3/31/18 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ult. ALAE Per Indemnity Claim (7)=(3)/(6)x1000	Annual Change
1991	449,353	1.046	470,162	249,754	1.000	249,774	1,882	---
1992	348,967	1.050	366,312	198,452	1.000	198,456	1,846	-1.9%
1993	254,565	1.052	267,923	156,142	1.000	156,142	1,716	-7.0%
1994	238,972	1.057	252,528	143,741	1.000	143,748	1,757	2.4%
1995	266,384	1.061	282,718	135,182	1.000	135,228	2,091	19.0%
1996	311,901	1.068	333,012	133,134	1.000	133,169	2,501	19.6%
1997	397,287	1.073	426,434	137,288	1.000	137,310	3,106	24.2%
1998	575,128	1.080	621,296	147,461	1.000	147,489	4,213	35.6%
1999	628,184	1.089	683,953	148,662	1.000	148,689	4,600	9.2%
2000	778,274	1.097	853,482	161,978	1.000	161,992	5,269	14.5%
2001	980,065	1.106	1,083,978	185,684	1.000	185,674	5,838	10.8%
2002	1,040,004	1.116	1,160,445	194,699	1.000	194,734	5,959	2.1%
2003	1,046,852	1.126	1,178,880	184,179	1.002	184,467	6,391	7.2%
2004	881,556	1.137	1,002,047	158,918	1.001	159,137	6,297	-1.5%
2005	781,534	1.150	898,636	139,513	1.001	139,681	6,434	2.2%
2006	816,529	1.168	954,013	133,200	1.001	133,341	7,155	11.2%
2007	868,972	1.190	1,033,970	130,220	1.001	130,332	7,933	10.9%
2008	904,424	1.216	1,099,336	122,918	1.001	123,064	8,933	12.6%
2009	924,673	1.248	1,154,262	113,619	1.001	113,778	10,145	13.6%
2010	951,219	1.291	1,227,877	118,288	1.002	118,493	10,362	2.1%
2011	927,151	1.348	1,249,799	120,379	1.003	120,726	10,352	-0.1%
2012	943,285	1.435	1,353,910	127,211	1.005	127,844	10,590	2.3%
2013	923,940	1.568	1,448,657	134,906	1.008	136,015	10,651	0.6%
2014	856,466	1.781	1,525,731	139,690	1.013	141,549	10,779	1.2%
2015	728,422	2.197	1,600,549	143,302	1.023	146,611	10,917	1.3%
2016	518,049	3.244	1,680,479	143,310	1.044	149,555	11,237	2.9%
2017	200,707	9.018	1,809,915	131,245	1.158	152,030	11,905	5.9%

Estimated Annual Exponential Trend Based on:

	R²
2005 to 2017	4.4% 0.811
2013 to 2017	2.7% 0.885

Notes:

^[1] All paid ALAE exclude the paid cost of medical cost containment programs.

^[2] Based on private insurers latest year paid ALAE age-to-age development from Exhibit 13.1.

^[3] See Exhibit 13.3.

Estimated Ultimate ALAE Per Indemnity Claim - Private Insurers

Acc. Year	Paid ALAE ^[1] @3/31/17 (in \$000) (1)	Cumulative Development Factors ^[2] (2)	Estimated Ultimate ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @3/31/17 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate ALAE Per Indemnity Claim (7)=(3)/(6)x1000	Annual Change
1991	414,738	1.046	433,944	175,293	1.000	175,312	2,475	---
1992	318,683	1.050	334,523	141,934	1.000	141,935	2,357	-4.8%
1993	236,248	1.052	248,644	113,534	1.000	113,535	2,190	-7.1%
1994	219,226	1.057	231,662	105,426	1.000	105,440	2,197	0.3%
1995	240,766	1.061	255,528	101,337	1.000	101,387	2,520	14.7%
1996	286,968	1.068	306,391	103,174	1.000	103,211	2,969	17.8%
1997	363,688	1.073	390,370	104,728	1.000	104,745	3,727	25.5%
1998	501,628	1.080	541,895	112,436	1.000	112,456	4,819	29.3%
1999	551,664	1.089	600,639	116,363	1.000	116,389	5,161	7.1%
2000	655,355	1.097	718,685	118,410	1.000	118,432	6,068	17.6%
2001	777,451	1.106	859,882	113,951	1.000	113,951	7,546	24.4%
2002	816,972	1.116	911,584	112,961	1.000	113,001	8,067	6.9%
2003	826,061	1.126	930,243	108,288	1.002	108,543	8,570	6.2%
2004	708,976	1.137	805,879	99,388	1.003	99,642	8,088	-5.6%
2005	662,970	1.150	762,307	97,235	1.003	97,514	7,817	-3.3%
2006	728,664	1.168	851,353	104,178	1.003	104,520	8,145	4.2%
2007	799,582	1.190	951,404	107,292	1.003	107,658	8,837	8.5%
2008	844,272	1.216	1,026,221	105,499	1.004	105,931	9,688	9.6%
2009	870,313	1.248	1,086,405	100,756	1.005	101,259	10,729	10.7%
2010	907,177	1.291	1,171,026	108,531	1.006	109,176	10,726	0.0%
2011	891,946	1.348	1,202,342	112,654	1.008	113,516	10,592	-1.3%
2012	912,912	1.435	1,310,316	120,730	1.010	121,993	10,741	1.4%
2013	890,026	1.568	1,395,483	126,949	1.014	128,778	10,836	0.9%
2014	817,392	1.781	1,456,123	129,182	1.021	131,849	11,044	1.9%
2015	698,287	2.197	1,534,334	132,795	1.033	137,208	11,183	1.3%
2016	500,690	3.244	1,624,167	134,549	1.058	142,382	11,407	2.0%
2017	194,945	9.018	1,757,959	123,405	1.184	146,071	12,035	5.5%

Estimated Annual Exponential Trend Based on:

		R²
2005 to 2017	3.1%	0.821
2013 to 2017	2.5%	0.910

Notes:

^[1] All paid ALAE exclude the paid cost of medical cost containment programs.

^[2] Based on the latest year paid ALAE age-to-age development from Exhibit 13.1

^[3] Based on analogous Exhibit 13.3, applicable to private insurers only.

Ratio of Accident Year Incremental Paid ALAE⁽¹⁾ to Indemnity Claims Inventory⁽²⁾
By Payment Year - Private Insurers

Acc. Year	Payment Year														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1989	1,007	1,076	635	1,143	1,062	1,029	1,125	1,143	1,344	1,524	1,471	1,497	1,635	1,947	1,424
1990	1,315	1,572	987	2,157	1,139	1,274	1,193	1,355	1,542	1,432	1,812	1,584	1,630	1,833	1,655
1991	1,370	1,729	834	1,697	1,577	1,256	1,495	1,388	1,574	1,438	1,789	1,648	1,425	2,204	2,142
1992	1,478	1,724	1,416	1,837	1,653	1,405	1,827	1,389	1,669	1,502	1,636	1,587	1,834	1,772	1,952
1993	1,741	2,105	1,502	2,157	1,833	1,541	1,927	1,664	1,886	1,800	1,951	1,979	2,176	2,318	2,039
1994	1,410	1,470	1,686	1,932	1,717	1,617	1,646	1,576	1,632	1,833	1,663	2,110	1,707	1,845	1,679
1995	2,175	1,618	1,671	1,766	1,849	1,766	1,916	1,772	1,672	2,033	2,051	2,112	2,009	2,468	2,034
1996	2,839	2,166	2,027	1,997	1,979	1,947	1,946	1,686	2,011	2,085	2,144	2,076	2,312	2,141	1,952
1997	3,218	2,600	2,378	2,409	2,347	2,287	2,314	2,225	2,414	2,353	2,147	2,220	2,266	2,342	2,319
1998	3,042	2,979	2,556	2,484	2,502	2,336	2,432	2,381	2,277	2,340	2,344	2,320	2,512	2,391	2,578
1999	2,736	2,646	2,529	2,629	2,403	2,646	2,804	2,545	2,698	2,641	2,332	2,142	2,399	2,573	2,168
2000	2,473	2,283	2,525	2,805	2,720	2,864	2,854	2,740	2,803	2,842	2,539	2,580	2,828	2,698	2,634
2001	2,103	2,964	2,284	2,764	2,811	2,873	2,654	2,736	2,755	2,778	2,801	3,276	3,199	2,676	2,692
2002	1,956	2,799	2,537	2,873	2,910	3,083	2,899	2,967	3,021	2,915	3,015	3,416	3,259	3,272	3,230
2003	864	2,334	2,577	2,881	2,947	3,058	3,032	3,216	3,224	3,546	3,397	3,579	3,720	3,259	3,064
2004	67	820	2,100	2,676	3,009	3,077	3,145	3,263	3,130	3,060	3,306	3,544	3,410	3,157	3,075
2005		69	768	1,986	2,649	2,916	3,070	3,251	3,284	3,317	3,438	3,532	3,882	3,561	3,613
2006			106	782	2,162	2,758	2,992	3,243	3,474	3,296	3,404	3,575	3,457	3,210	3,275
2007				71	846	2,333	2,807	3,192	3,452	3,603	3,686	3,603	3,811	3,574	3,455
2008					85	939	2,399	3,110	3,500	3,591	3,702	3,827	3,954	3,469	3,725
2009						150	1,034	2,742	3,391	3,644	3,820	3,939	4,059	3,461	3,819
2010							87	1,129	2,898	3,450	3,743	3,891	4,161	3,722	3,981
2011								88	1,147	2,879	3,460	3,863	4,141	3,889	4,125
2012									90	1,147	3,007	3,687	4,041	3,930	4,153
2013										101	1,237	3,221	3,732	3,868	4,049
2014											144	1,375	3,360	3,767	3,938
2015												104	1,468	3,424	3,813
2016													113	1,496	3,566
2017														128	1,579
2018															152
ALAE per Claim	1,751	2,013	1,846	1,951	1,977	2,104	2,184	2,354	2,506	2,565	2,670	2,852	2,975	2,917	2,997
Annual Change	9.7%	15.0%	-8.3%	5.7%	1.4%	6.4%	3.8%	7.8%	6.5%	2.4%	4.1%	6.8%	4.3%	-2.0%	2.8%
Estimated Annual Exponential Trend Based on Payment Year:											R²				
2006-2018										4.5%	0.976				
2013-2018										3.1%	0.850				

⁽¹⁾ All paid ALAE exclude the paid cost of medical cost containment programs.

⁽²⁾ Indemnity claims inventory is the sum of indemnity claims open as of April 1 of Year N-1 and newly-reported indemnity claims between April 1 of year N-1 and March 31 of year N.

Source: WCIRB quarterly calls for experience

Paid Allocated Loss Adjustment Expense Development - Private Insurers
As of March 31, 2018

Accident	Age-to-Age Development (in months):															
Year	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159	159-171	171-183	183-195	195-207
1985						1.059	1.035	1.023	1.013	1.036	1.009	1.008	1.010	1.006	1.011	1.003
1986					1.101	1.055	1.036	1.023	1.017	1.010	1.011	1.009	1.009	1.010	1.005	1.005
1987				1.154	1.086	1.051	1.031	1.022	1.015	1.012	1.009	1.013	1.010	1.006	1.004	1.004
1988			1.292	1.145	1.085	1.048	1.033	1.021	1.014	1.011	1.011	1.014	1.004	1.004	1.004	1.004
1989		1.705	1.299	1.148	1.102	1.079	1.040	1.026	1.017	1.011	1.007	1.004	1.005	1.005	1.004	1.005
1990	2.957	1.627	1.276	1.149	1.097	1.046	1.032	1.020	1.014	1.009	1.007	1.006	1.005	1.005	1.006	1.006
1991	2.921	1.552	1.252	1.128	1.062	1.047	1.025	1.017	1.012	1.007	1.007	1.005	1.005	1.005	1.006	1.005
1992	2.511	1.512	1.229	1.102	1.074	1.045	1.027	1.018	1.011	1.009	1.007	1.007	1.008	1.005	1.006	1.005
1993	2.417	1.527	1.218	1.127	1.076	1.047	1.032	1.028	1.017	1.014	1.010	1.012	1.011	1.009	1.008	1.006
1994	2.485	1.498	1.231	1.117	1.082	1.045	1.036	1.023	1.020	1.014	1.019	1.017	1.013	1.011	1.008	1.007
1995	2.550	1.569	1.237	1.132	1.072	1.046	1.038	1.030	1.022	1.022	1.019	1.017	1.015	1.013	1.010	1.009
1996	2.454	1.490	1.239	1.114	1.072	1.056	1.046	1.036	1.031	1.026	1.021	1.017	1.014	1.008	1.011	1.009
1997	2.424	1.511	1.194	1.112	1.081	1.064	1.051	1.040	1.033	1.025	1.020	1.016	1.013	1.013	1.011	1.009
1998	2.618	1.463	1.229	1.139	1.102	1.083	1.055	1.041	1.028	1.023	1.020	1.017	1.014	1.013	1.011	1.011
1999	2.514	1.559	1.256	1.152	1.111	1.076	1.058	1.039	1.033	1.027	1.020	1.018	1.015	1.013	1.011	1.011
2000	2.801	1.593	1.262	1.166	1.110	1.079	1.051	1.042	1.030	1.024	1.020	1.018	1.015	1.014	1.013	1.010
2001	3.053	1.597	1.291	1.156	1.108	1.075	1.052	1.034	1.028	1.023	1.019	1.016	1.017	1.014	1.010	1.009
2002	2.790	1.592	1.261	1.153	1.102	1.064	1.040	1.031	1.025	1.020	1.017	1.016	1.013	1.011	1.009	
2003	2.931	1.550	1.267	1.155	1.088	1.057	1.042	1.032	1.028	1.022	1.019	1.017	1.012	1.009		
2004	2.785	1.572	1.282	1.149	1.090	1.064	1.045	1.033	1.029	1.024	1.019	1.014	1.012			
2005	2.741	1.599	1.285	1.157	1.104	1.072	1.053	1.042	1.032	1.027	1.020	1.016				
2006	2.879	1.591	1.278	1.166	1.108	1.075	1.056	1.043	1.032	1.023	1.018					
2007	2.902	1.571	1.291	1.173	1.116	1.081	1.054	1.043	1.029	1.022						
2008	2.833	1.621	1.311	1.177	1.115	1.077	1.055	1.037	1.027							
2009	3.006	1.623	1.303	1.178	1.112	1.076	1.050	1.034								
2010	2.944	1.591	1.295	1.166	1.108	1.068	1.044									
2011	2.943	1.595	1.297	1.170	1.098	1.065										
2012	3.042	1.603	1.286	1.153	1.092											
2013	2.998	1.552	1.253	1.136												
2014	2.881	1.509	1.233													
2015	2.781	1.476														
2016	2.780															

	<u>Latest Year</u>														
Age-to-Age	2.780	1.476	1.233	1.136	1.092	1.065	1.044	1.034	1.027	1.022	1.018	1.016	1.012	1.009	1.009
Cumulative	9.018	3.244	2.197	1.781	1.568	1.435	1.348	1.291	1.248	1.216	1.190	1.168	1.150	1.137	1.126
	<u>3-Year Arithmetics Average</u>														
Age-to-Age	2.814	1.512	1.257	1.153	1.100	1.070	1.050	1.038	1.030	1.024	1.019	1.016	1.012	1.012	1.011
Cumulative	9.983	3.548	2.346	1.866	1.618	1.471	1.376	1.311	1.263	1.227	1.198	1.175	1.157	1.143	1.130
	<u>Average Excluding High & Low</u>														
Age-to-Age	2.779	1.563	1.266	1.148	1.095	1.063	1.043	1.031	1.023	1.019	1.015	1.014	1.011	1.009	1.008
Cumulative	9.617	3.461	2.214	1.749	1.524	1.392	1.309	1.255	1.217	1.190	1.167	1.150	1.135	1.122	1.112

Accident	Age-to-Age Development (in months):																
Year	195-207	207-219	219-231	231-243	243-255	255-267	267-279	279-291	291-303	303-315	315-327	327-339	339-351	351-363	363-375	375-387	387-399
1985	1.003	1.005	1.005	1.004	1.003	1.005	1.006	1.005	1.003	1.004	1.004	1.004	1.004	1.006	1.004	1.003	1.003
1986	1.005	1.004	1.005	1.007	1.003	1.006	1.005	1.004	1.005	1.005	1.006	1.007	1.006	1.006	1.005	1.004	
1987	1.004	1.004	1.006	1.006	1.008	1.004	1.004	1.006	1.005	1.004	1.005	1.006	1.004	1.004	1.004		
1988	1.004	1.004	1.005	1.005	1.005	1.003	1.005	1.004	1.004	1.005	1.004	1.004	1.003	1.003			
1989	1.005	1.004	1.004	1.004	1.003	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003				
1990	1.006	1.004	1.004	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.002					
1991	1.005	1.003	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.003						
1992	1.005	1.003	1.004	1.004	1.003	1.003	1.003	1.003	1.003	1.003							
1993	1.006	1.006	1.007	1.006	1.006	1.005	1.005	1.005	1.004								
1994	1.007	1.007	1.007	1.006	1.007	1.005	1.005	1.004									
1995	1.009	1.009	1.009	1.008	1.007	1.008	1.006										
1996	1.009	1.009	1.008	1.008	1.006	1.005											
1997	1.009	1.008	1.008	1.007	1.006												
1998	1.011	1.011	1.009	1.008													
1999	1.011	1.009	1.007														
2000	1.010	1.009															
2001	1.009																

	<u>Latest Year</u>																
Age-to-Age	1.009	1.009	1.007	1.008	1.006	1.005	1.006	1.004	1.004	1.003	1.003	1.002	1.003	1.003	1.004	1.004	1.003
Cumulative	1.116	1.106	1.097	1.089	1.080	1.073	1.068	1.061	1.057	1.052	1.050	1.046	1.043	1.040	1.038	1.035	1.033
	<u>3-Year Arithmetics Average</u>																
Age-to-Age	1.010	1.010	1.008	1.008	1.007	1.006	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.004	1.004	1.004	1.003
Cumulative	1.118	1.107	1.096	1.088	1.079	1.072	1.066	1.060	1.056	1.053	1.050	1.046	1.043	1.040	1.038	1.035	1.033
	<u>Average Excluding High & Low</u>																
Age-to-Age	1.007	1.006	1.006	1.006	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.005	1.004		
Cumulative	1.103	1.096	1.089	1.082	1.076	1.071	1.066	1.062	1.057	1.054	1.050	1.046	1.043	1.040	1.038	1.035	1.033

Note: Factors in italics are based on powerlaw fit to the "3-Year Arithmetics Average" factors.

Source: WCIRB accident year experience calls. Excludes MCCP costs.

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

Age in Months	Accident Year															
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
3 - 6						7.976	7.570	5.434	9.136	8.769	8.694	8.580	6.325	9.969	8.973	8.931
6 - 9					2.427	3.016	2.765	2.630	3.023	3.176	3.213	3.058	3.168	3.182	3.155	3.050
9 - 12					2.022	2.078	2.021	2.034	2.077	2.165	2.114	2.132	2.160	2.111	2.100	2.130
12 - 15					1.653	1.627	1.687	1.724	1.737	1.701	1.713	1.785	1.738	1.712	1.773	1.697
15 - 18					1.415	1.486	1.494	1.509	1.482	1.486	1.510	1.495	1.491	1.473	1.488	
18 - 21				1.318	1.357	1.328	1.289	1.326	1.334	1.343	1.338	1.361	1.330	1.306	1.307	
21 - 24				1.249	1.255	1.234	1.237	1.255	1.253	1.248	1.249	1.241	1.239	1.223	1.226	
24 - 27				1.192	1.187	1.191	1.190	1.197	1.189	1.186	1.205	1.188	1.170	1.182	1.166	
27 - 30				1.151	1.165	1.167	1.172	1.170	1.158	1.163	1.164	1.158	1.145	1.141		
30 - 33			1.127	1.145	1.128	1.119	1.135	1.138	1.133	1.131	1.138	1.124	1.113	1.110		
33 - 36			1.113	1.110	1.107	1.103	1.111	1.114	1.113	1.108	1.106	1.102	1.093	1.088		
36 - 39			1.093	1.087	1.093	1.090	1.097	1.094	1.091	1.095	1.094	1.082	1.083	1.072		
39 - 42			1.076	1.083	1.083	1.086	1.096	1.082	1.083	1.083	1.083	1.074	1.070			
42 - 45		1.063	1.077	1.068	1.063	1.069	1.069	1.074	1.069	1.073	1.071	1.059	1.056			
45 - 48		1.059	1.057	1.058	1.057	1.059	1.063	1.064	1.062	1.061	1.058	1.053	1.050			
48 - 51		1.049	1.039	1.050	1.050	1.050	1.052	1.053	1.053	1.052	1.048	1.046	1.040			
51 - 54		1.043	1.044	1.048	1.049	1.050	1.049	1.050	1.048	1.050	1.044	1.041				
54 - 57	1.038	1.045	1.037	1.037	1.038	1.043	1.045	1.043	1.040	1.044	1.037	1.034				
57 - 60	1.037	1.025	1.032	1.034	1.037	1.038	1.039	1.039	1.036	1.037	1.034	1.030				
60 - 63	1.031	1.027	1.028	1.030	1.032	1.032	1.034	1.034	1.032	1.030	1.030	1.024				
63 - 66	1.029	1.025	1.025	1.030	1.030	1.031	1.033	1.031	1.031	1.028	1.028					
66 - 69	1.027	1.023	1.022	1.026	1.027	1.029	1.028	1.028	1.028	1.024	1.023					
69 - 72	1.018	1.021	1.022	1.023	1.025	1.028	1.026	1.026	1.023	1.022	1.020					
72 - 75	1.014	1.017	1.018	1.021	1.022	1.023	1.023	1.022	1.021	1.020	1.018					
75 - 78	1.018	1.018	1.019	1.020	1.020	1.023	1.022	1.022	1.020	1.019						
78 - 81	1.017	1.013	1.015	1.019	1.019	1.020	1.020	1.020	1.017	1.017						
81 - 84	1.015	1.013	1.015	1.017	1.018	1.019	1.018	1.017	1.016	1.014						
84 - 87	1.014	1.011	1.013	1.015	1.016	1.016	1.016	1.015	1.014	1.013						
87 - 90	1.013	1.012	1.012	1.014	1.015	1.015	1.016	1.014	1.012							
90 - 93	1.010	1.011	1.011	1.013	1.014	1.014	1.014	1.012	1.012							
93 - 96	1.010	1.011	1.011	1.013	1.013	1.013	1.013	1.012	1.010							
96 - 99	1.007	1.009	1.010	1.012	1.012	1.011	1.011	1.010	1.010							
99 - 102	1.008	1.009	1.009	1.012	1.012	1.012	1.011	1.009								
102 - 105	1.007	1.008	1.008	1.010	1.012	1.011	1.009	1.009								
105 - 108	1.008	1.008	1.008	1.010	1.010	1.010	1.008	1.008								
108 - 111	1.007	1.007	1.008	1.009	1.009	1.009	1.008	1.008								
111 - 114	1.007	1.008	1.008	1.009	1.009	1.008	1.007									
114 - 117	1.006	1.007	1.007	1.009	1.008	1.007	1.007									
117 - 120	1.006	1.007	1.007	1.008	1.008	1.007	1.006									
120 - 123	1.006	1.006	1.007	1.006	1.007	1.006	1.006									

[1] All paid allocated loss adjustment expense exclude the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience.

Reported Indemnity Claim Count Development - Statewide

Acciden	Age-to-Age Development (in months):														
Year	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159	159-171	171-183	183-195
1992															1.000
1993														1.000	1.000
1994													1.000	1.000	1.000
1995												1.000	1.000	1.001	1.001
1996											1.001	1.000	1.000	1.000	1.000
1997										1.000	1.000	1.000	1.000	1.000	1.000
1998									1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999								1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2000							1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.000	1.000
2001						1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002					1.000	1.000	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2003				1.000	0.998	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004			1.000	1.000	0.999	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000		
2005		1.005	1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2006	1.029	1.008	1.004	1.002	1.001	1.001	1.000	1.001	1.001	1.000	1.000				
2007	1.036	1.012	1.006	1.003	1.002	1.000	1.000	1.001	1.001	1.000					
2008	1.059	1.017	1.009	1.004	1.003	1.002	1.001	1.001	1.000						
2009	1.083	1.023	1.009	1.005	1.003	1.002	1.002	1.000							
2010	1.091	1.022	1.010	1.006	1.003	1.002	1.001								
2011	1.102	1.027	1.011	1.005	1.003	1.002									
2012	1.120	1.026	1.010	1.006	1.003										
2013	1.101	1.024	1.009	1.005											
2014	1.105	1.023	1.010												
2015	1.106	1.020													
2016	1.110														
I. Age-to-Age (Latest Year)															
	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
II. Age-to-Ultimate															
	1.158	1.044	1.023	1.013	1.008	1.005	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.002

Acciden	Age-to-Age Development (in months):													
Year	195-207	207-219	219-231	231-243	243-255	255-267	267-279	279-291	291-303	303-315	315-327	327-339	339-351	
1989	1.001	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000	1.000										
1999	1.000	1.000	1.000											
2000	1.000	1.000												
2001	1.000													
I. <u>Age-to-Age (Latest Year)</u>														
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
II. <u>Age-to-Ultimate</u>														
	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000

Source: WCIRB quarterly calls for experience

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and ALAE Severity
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Acc. Year	Paid ALAE ^[1] @3/31/18 (in \$000)	Paid ALAE Cumulative Development Factors ^[2] (2)	Estimated Ult. ALAE (in \$000) (3)=(1)x(2)	Indemnity Claim Counts @3/31/18 (4)	Cumulative Count Development Factors ^[3] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ult. ALAE Per Indemnity Claim (7)=(3)/(6)x1000
1991	449,353	1.046	470,162	249,754	1.000	249,774	1,882
1992	348,967	1.050	366,312	198,452	1.000	198,456	1,846
1993	254,565	1.052	267,923	156,142	1.000	156,142	1,716
1994	238,972	1.057	252,528	143,741	1.000	143,748	1,757
1995	266,384	1.061	282,718	135,182	1.000	135,228	2,091
1996	311,901	1.068	333,012	133,134	1.000	133,169	2,501
1997	397,287	1.073	426,434	137,288	1.000	137,310	3,106
1998	575,128	1.080	621,296	147,461	1.000	147,489	4,213
1999	628,184	1.089	683,953	148,662	1.000	148,689	4,600
2000	778,274	1.097	853,482	161,978	1.000	161,992	5,269
2001	980,065	1.106	1,083,978	185,684	1.000	185,674	5,838
2002	1,040,004	1.116	1,160,445	194,699	1.000	194,734	5,959
2003	1,046,852	1.126	1,178,880	184,179	1.002	184,467	6,391
2004	881,556	1.137	1,002,047	158,918	1.001	159,137	6,297
2005	781,534	1.150	898,636	139,513	1.001	139,681	6,434
2006	816,529	1.168	954,013	133,200	1.001	133,341	7,155
2007	868,972	1.190	1,033,970	130,220	1.001	130,332	7,933
2008	904,424	1.216	1,099,336	122,918	1.001	123,064	8,933
2009	924,673	1.248	1,154,262	113,619	1.001	113,778	10,145
2010	951,219	1.291	1,227,877	118,288	1.002	118,493	10,362
2011	927,151	1.348	1,249,799	120,379	1.003	120,726	10,352
2012	943,285	1.435	1,353,910	127,211	1.005	127,844	10,590
2013	923,940	1.568	1,448,657	134,906	1.008	136,015	10,651
2014	856,466	1.781	1,525,731	139,690	1.013	141,549	10,779
2015	728,422	2.197	1,600,549	143,302	1.023	146,611	10,917
2016	518,049	3.244	1,680,479	143,310	1.044	149,555	11,237
2017	200,707	9.018	1,809,915	131,245	1.158	152,030	11,905

Projected Based on 2-Year Average of 2016 and 2017:

	Ultimate ALAE ^[6]	Ult. Ind. Counts ^[4]	Ult. ALAE per Ind. Counts ^[5]
2018	1,825,375	149,876	12,179
2019	1,861,868	147,703	12,606
1/1/2020	1,869,288	145,762	12,824

(a) Projected ALAE Incurred (\$000):	1,869,288
(b) Calendar Year 2017 Earned Premium ^[7] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[9] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a) / (e)	18.9%
(g) Impact of SB 1160 and AB 1244 ^[10]	-6.4%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]	17.7%

Notes:

- [1] All paid ALAE exclude the paid cost of medical cost containment programs.
- [2] Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 13.1.
- [3] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
- [4] Estimated based on projected frequency trends for accident years 2017 to 2020. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit 12 of Item AC18-06-01 for accident year 2017 and Exhibit C7.2 of Item AC18-08-01 for accident years 2018 through 2020). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
- [5] Severity is projected by applying an annual growth rate of 3.5%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 11.2 and (ii) paid ALAE per open indemnity claim from Exhibit 12, to the ultimate ALAE severity estimated from averaging 2016 and 2017.
- [6] Column(6) x Column(7) / 1,000.
- [7] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- [8] See Exhibit 8 of Item AC18-06-01.
- [9] See Exhibit 5.2 of Item AC18-06-01.
- [10] Based on Attachment C of the WCIRB's Amended January 1, 2017 Pure Premium Rate Filing and an updated 40% reduction in lien filings.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Acc. Year	Indemnity Claim Counts @3/31/18	Cumulative Count Development Factors ^[2]	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE Per Indemnity Claim ^[3]	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
	(1)	(2)		(4)	
1991	249,754	1.000	249,774	2,475	618,257
1992	198,452	1.000	198,456	2,357	467,737
1993	156,142	1.000	156,142	2,190	341,955
1994	143,741	1.000	143,748	2,197	315,830
1995	135,182	1.000	135,228	2,520	340,819
1996	133,134	1.000	133,169	2,969	395,323
1997	137,288	1.000	137,310	3,727	511,737
1998	147,461	1.000	147,489	4,819	710,709
1999	148,662	1.000	148,689	5,161	767,326
2000	161,978	1.000	161,992	6,068	983,025
2001	185,684	1.000	185,674	7,546	1,401,107
2002	194,699	1.000	194,734	8,067	1,570,929
2003	184,179	1.002	184,467	8,570	1,580,928
2004	158,918	1.001	159,137	8,088	1,287,065
2005	139,513	1.001	139,681	7,817	1,091,936
2006	133,200	1.001	133,341	8,145	1,086,106
2007	130,220	1.001	130,332	8,837	1,151,782
2008	122,918	1.001	123,064	9,688	1,192,196
2009	113,619	1.001	113,778	10,729	1,220,720
2010	118,288	1.002	118,493	10,726	1,270,964
2011	120,379	1.003	120,726	10,592	1,278,713
2012	127,211	1.005	127,844	10,741	1,373,163
2013	134,906	1.008	136,015	10,836	1,473,903
2014	139,690	1.013	141,549	11,044	1,563,248
2015	143,302	1.023	146,611	11,183	1,639,482
2016	143,310	1.044	149,555	11,407	1,705,988
2017	131,245	1.158	152,030	12,035	1,829,672

Projected Based on 2-Year Average of 2016 and 2017:

	Ult. Ind. Counts ^[4]	Ult. ALAE per Ind. Counts ^[5]	Ultimate ALAE ^[6]
2018	149,876	12,338	1,849,147
2019	147,703	12,770	1,886,116
1/1/2020	145,762	12,991	1,893,633

(a) Projected ALAE Incurred (\$000):	1,893,633
(b) Calendar Year 2017 Earned Premium ^[7] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[9] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a) / (e)	19.1%
(g) Impact of SB 1160 and AB 1244 ^[10]	-6.4%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]	17.9%

Notes:

- ^[1] All paid ALAE exclude the paid cost of medical cost containment programs.
- ^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3..
- ^[3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 11.2.
- ^[4] Estimated based on projected frequency trends for accident years 2017 to 2020. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see Exhibit 12 of Item AC18-06-01 for accident year 2017 and Exhibit C7.2 of Item AC18-08-01 for accident years 2018 through 2020). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
- ^[5] Severity is projected by applying an annual growth rate of 3.5%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 11.2 and (ii) paid ALAE per open indemnity claim from Exhibit 12, to the ultimate ALAE severity estimated from averaging 2016 and 2017.
- ^[6] Column(6) x Column(7) / 1,000.
- ^[7] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- ^[8] See Exhibit 8 of Item AC18-06-01.
- ^[9] See Exhibit 5.2 of Item AC18-06-01.
- ^[10] Based on Attachment C of the WCIRB's Amended January 1, 2017 Pure Premium Rate Filing and an updated 40% reduction in lien filings.

Projected Ratio of ALAE^[1] to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity - Trend from Latest Year
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Acc. Year	Indemnity Claim Counts @3/31/18 (1)	Cumulative Count Development Factors ^[2] (2)	Estimated Ultimate Ind. Counts (3)=(1)x(2)	Estimated Ult. ALAE Per Indemnity Claim ^[3] (4)	Estimated Ult. ALAE (in \$000) (5)=(3)x(4)
1991	249,754	1.000	249,774	2,475	618,257
1992	198,452	1.000	198,456	2,357	467,737
1993	156,142	1.000	156,142	2,190	341,955
1994	143,741	1.000	143,748	2,197	315,830
1995	135,182	1.000	135,228	2,520	340,819
1996	133,134	1.000	133,169	2,969	395,323
1997	137,288	1.000	137,310	3,727	511,737
1998	147,461	1.000	147,489	4,819	710,709
1999	148,662	1.000	148,689	5,161	767,326
2000	161,978	1.000	161,992	6,068	983,025
2001	185,684	1.000	185,674	7,546	1,401,107
2002	194,699	1.000	194,734	8,067	1,570,929
2003	184,179	1.002	184,467	8,570	1,580,928
2004	158,918	1.001	159,137	8,088	1,287,065
2005	139,513	1.001	139,681	7,817	1,091,936
2006	133,200	1.001	133,341	8,145	1,086,106
2007	130,220	1.001	130,332	8,837	1,151,782
2008	122,918	1.001	123,064	9,688	1,192,196
2009	113,619	1.001	113,778	10,729	1,220,720
2010	118,288	1.002	118,493	10,726	1,270,964
2011	120,379	1.003	120,726	10,592	1,278,713
2012	127,211	1.005	127,844	10,741	1,373,163
2013	134,906	1.008	136,015	10,836	1,473,903
2014	139,690	1.013	141,549	11,044	1,563,248
2015	143,302	1.023	146,611	11,183	1,639,482
2016	143,310	1.044	149,555	11,407	1,705,988
2017	131,245	1.158	152,030	12,035	1,829,672

Projected Based on Latest Year

	Ult. Ind. Counts ^[4]	Ult. ALAE per Ind. Counts ^[5]	Ultimate ALAE ^[6]
2018	151,346	12,456	1,885,189
2019	149,152	12,892	1,922,879
1/1/2020	147,192	13,116	1,930,542

(a) Projected ALAE Incurred (\$000):	1,930,542
(b) Calendar Year 2017 Earned Premium ^[7] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[8] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[9] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a) / (e)	19.5%
(g) Impact of SB 1160 and AB 1244 ^[10]	-6.4%
(h) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (f) x [1.0 + (g)]	18.3%

Notes:

- ^[1] All paid ALAE exclude the paid cost of medical cost containment programs.
^[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
^[3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 11.2.
^[4] Estimated based on projected frequency trends for accident years 2018 to 2020. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency (see see Exhibit C7.2 in Item AC18-08-01). These frequency trends were then applied to the 2017 ultimate indemnity claim counts.
^[5] Severity is projected by applying an annual growth rate of 3.5%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 11.2 and (ii) paid ALAE per open indemnity claim from Exhibit 12, to the 2017 ultimate ALAE severity.
^[6] Column(6) x Column(7) / 1,000.
^[7] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
^[8] See Exhibit 8 of Item AC18-06-01.
^[9] See Exhibit 5.2 of Item AC18-06-01.
^[10] Based on Attachment C of the WCIRB's Amended January 1, 2017 Pure Premium Rate Filing and an updated 40%

Projected Ultimate ALAE as a Percent of Ultimate Losses
Using Private Insurers Ultimate ALAE and Statewide Ultimate Losses
For Policies with Effective Dates between January 1, 2019 and December 31, 2019
Latest Year Development Factors

Accident Year	Paid ALAE as % of Premium at 3/31/18 (1)	Development Factors (2)	Ultimate ALAE as % of Premium (3)	Ultimate On-level Indemnity as % of Premium (4)	Ultimate On-level Medical as % of Premium (5)	Ultimate ALAE as % of Ultimate On-level Loss (6)
1988	4.0%	1.038	4.2%	49.1%	27.4%	5.5%
1989	5.9%	1.040	6.1%	50.2%	28.5%	7.8%
1990	7.3%	1.043	7.6%	46.7%	26.0%	10.5%
1991	9.1%	1.046	9.5%	41.1%	23.3%	14.7%
1992	7.1%	1.050	7.4%	35.7%	20.5%	13.2%
1993	4.9%	1.052	5.2%	35.6%	20.5%	9.3%
1994	5.2%	1.057	5.5%	42.4%	24.9%	8.1%
1995	7.9%	1.061	8.3%	56.8%	36.1%	9.0%
1996	9.3%	1.068	10.0%	59.4%	38.2%	10.2%
1997	10.9%	1.073	11.7%	60.2%	42.5%	11.4%
1998	13.8%	1.080	15.0%	60.4%	49.3%	13.6%
1999	14.6%	1.089	15.9%	58.9%	39.8%	16.1%
2000	13.1%	1.097	14.4%	47.5%	33.4%	17.8%
2001	11.7%	1.106	13.0%	39.6%	27.1%	19.4%
2002	10.1%	1.116	11.3%	30.2%	21.9%	21.6%
2003	6.9%	1.126	7.8%	19.8%	14.8%	22.5%
2004	4.7%	1.137	5.4%	16.3%	15.3%	17.0%
2005	4.3%	1.150	5.0%	19.0%	17.5%	13.6%
2006	5.3%	1.168	6.2%	24.3%	23.9%	12.9%
2007	7.3%	1.190	8.7%	32.4%	33.3%	13.3%
2008	9.3%	1.216	11.3%	38.8%	41.9%	14.0%
2009	11.4%	1.248	14.2%	44.7%	48.8%	15.2%
2010	11.0%	1.291	14.2%	42.9%	48.6%	15.5%
2011	9.8%	1.348	13.2%	39.5%	43.2%	16.0%
2012	8.5%	1.435	12.2%	35.0%	39.4%	16.4%
2013	6.8%	1.568	10.7%	29.9%	33.6%	16.8%
2014	5.7%	1.781	10.2%	26.5%	30.3%	17.9%
2015	4.5%	2.197	9.9%	25.6%	29.0%	18.2%
2016	3.0%	3.244	9.9%	24.3%	28.0%	18.9%
2017	1.2%	9.018	10.8%	24.9%	30.0%	19.6%

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

Prior to Impact of SB 1160 and AB 1244:

19.2%

(8) Impact of SB 1160 and AB 1244

-6.4%

(9) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244:

(7) x [1.0 + (8)]

18.0%

Notes:

- (1) Based on accident year paid ALAE and calendar year earned premium information. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
- (2) Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 13.1.
- (3) = (1) x (2).
- (4), (5) Based on Exhibits 7.1 and 7.3 of Item AC18-06-01. MCCP costs are not included in the medical ratios shown for accident years 2011 to 2017.
- (6) = (3) / [(4) + (5)].
- (7) Based on averaging 2016 and 2017.
- (8) Based on Attachment C of the WCIRB's Amended January 1, 2017 Pure Premium Rate Filing and an updated 40% reduction in lien filings.

Development of Paid Allocated Loss Adjustment Expenses as a Percent of Paid Indemnity^[1]

Accident Year	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159	159-171	171-183	Paid ALAE ^[2] 183-Ult	Paid Indemnity ^[3] 183-Ult
1986														1.008		
1987													1.008	1.004		
1988												1.011	1.001	1.001		
1989											1.003	1.001	1.002	1.003		
1990											1.001	1.001	1.001	1.002		
1991									1.002	1.000	1.001	1.000	1.003	1.001		
1992								1.003	1.006	1.005	1.005	1.007	1.007	1.005		
1993							1.008	1.006	1.004	1.004	1.010	1.009	1.007	1.006		
1994							1.008	1.004	1.003	1.009	1.009	1.008	1.008	1.007		
1995							1.007	1.009	1.009	1.009	1.009	1.008	1.006	1.004		
1996							1.002	1.011	1.013	1.013	1.009	1.008	1.006	1.007		
1997							1.005	1.012	1.013	1.010	1.009	1.008	1.006	1.006		
1998			0.955	0.990	1.005	1.002	1.002	1.012	1.015	1.010	1.009	1.008	1.006	1.006		
1999		0.918	1.000	1.020	1.023	1.031	1.021	1.016	1.009	1.007	1.010	1.008	1.006	1.006		
2000		1.020	1.015	1.002	1.030	1.031	1.020	1.017	1.015	1.012	1.010	1.009	1.007	1.007		
2001		1.106	0.980	1.022	1.033	1.035	1.029	1.021	1.015	1.012	1.010	1.009	1.007	1.007		
2002		1.001	0.990	1.026	1.038	1.034	1.020	1.012	1.007	1.006	1.006	1.006	1.006	1.005		
2003		1.111	1.011	1.050	1.042	1.023	1.017	1.013	1.006	1.002	1.004	1.007	1.003	1.001		
2004		1.250	1.102	1.077	1.042	1.021	1.018	1.003	0.999	1.002	1.005	1.003	1.004			
2005		1.282	1.134	1.071	1.048	1.029	1.014	1.004	1.007	1.008	1.006	1.006	1.004			
2006		1.302	1.118	1.068	1.040	1.021	1.012	1.011	1.006	1.006	1.006	1.003				
2007		1.294	1.094	1.066	1.041	1.029	1.019	1.012	1.004	1.004	1.003					
2008		1.243	1.104	1.063	1.040	1.030	1.022	1.014	1.006	1.004						
2009		1.269	1.083	1.052	1.037	1.026	1.019	1.010	1.006	1.004						
2010		1.227	1.057	1.044	1.033	1.025	1.015	1.008								
2011		1.209	1.077	1.057	1.037	1.021	1.011									
2012		1.255	1.085	1.055	1.028											
2013		1.257	1.042	1.030	1.023											
2014		1.173	1.005	1.015												
2015		1.127	1.000													
2016		1.157														

Latest Year Development

Age to Age	1.157	1.000	1.015	1.023	1.016	1.011	1.008	1.005	1.006	1.004	1.003	1.004	1.004	1.001		
Age-to-Ult.	1.369	1.183	1.183	1.165	1.139	1.121	1.109	1.100	1.094	1.088	1.083	1.080	1.075	1.071	1.126	1.053

3-Year Arithmetics Average Development

Age to Age	1.153	1.016	1.034	1.029	1.021	1.015	1.011	1.009	1.005	1.006	1.005	1.005	1.004	1.005		
Age-to-Ult.	1.455	1.262	1.242	1.202	1.168	1.145	1.128	1.116	1.106	1.100	1.093	1.088	1.083	1.079	1.130	1.053

Average Excluding High & Low

Age to Age	1.186	1.048	1.040	1.031	1.023	1.018	1.013	1.010	1.008	1.007	1.006	1.006	1.005	1.005		
Age-to-Ult.	1.556	1.311	1.252	1.203	1.167	1.140	1.120	1.106	1.096	1.088	1.080	1.074	1.067	1.062	1.112	1.053

Notes:

^[1] Due to relatively sparse data and differing mixes of insurers represented in each factor, each factor shown is the ratio of the paid ALAE development factor to the paid indemnity development factor. The paid ALAE development is based on the private insurers' paid ALAE development from Exhibit 13.1, the paid indemnity development factors are from Exhibits 2.5.1 and 2.5.2 of Item AC18-06-01.

^[2] Based on the private insurers year paid ALAE age-to-age development from Exhibit 13.1.

^[3] Based on Exhibit 3.1 of Item AC18-06-01.

Projected Ultimate ALAE as a Percent of Ultimate Losses
For Policies with Effective Dates between January 1, 2019 and December 31, 2019
Using Paid ALAE as a Percent of Paid Indemnity for Private Insurers
Latest Year Development Factors

Accident Year	Paid ALAE as a Percent of Paid Indemnity at 3/31/18 (1)	Development Factors (2)	Ultimate ALAE as a Percent of Ultimate Indemnity (3)	Indemnity On-level Factors (4)	Ultimate ALAE as a Percent of Ultimate On-level Indemnity (5)
2003	32.1%	1.126	36.2%	0.818	44.2%
2004	36.8%	1.071	39.5%	1.126	35.0%
2005	39.0%	1.075	42.0%	1.529	27.4%
2006	37.5%	1.080	40.5%	1.511	26.8%
2007	37.4%	1.083	40.6%	1.464	27.7%
2008	36.8%	1.088	40.1%	1.379	29.1%
2009	38.8%	1.094	42.4%	1.352	31.4%
2010	38.9%	1.100	42.7%	1.333	32.1%
2011	38.7%	1.109	42.9%	1.312	32.7%
2012	39.1%	1.121	43.8%	1.281	34.2%
2013	39.0%	1.139	44.4%	1.241	35.8%
2014	37.5%	1.165	43.6%	1.124	38.8%
2015	36.2%	1.183	42.8%	1.095	39.1%
2016	36.5%	1.183	43.1%	1.082	39.9%
2017	32.9%	1.369	45.0%	1.062	42.4%

	Projected:
(6) ALAE as Percent of On-level Indemnity:	41.1%
(7) Indicated Indemnity to Industry Average Filed Pure Premium Ratio:	0.254
(8) Indicated Medical to Industry Average Filed Pure Premium Ratio:	0.327
(9) ALAE as Percent of Total Losses Prior to Impact of SB 1160 and AB 1244:	18.0%
(10) Impact of SB 1160 and AB 1244	-6.4%
(11) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (9) x [1.0 + (10)]	16.8%

Notes:

- (1) Based on accident year paid ALAE information. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
- (2) See Exhibit 17.1.
- (3) = (1) x (2).
- (4) From Exhibit 4.1 of Item AC18-06-01.
- (5) = (3) / (4).
- (6) Projected by averaging 2016 and 2017.
- (7), (8) From Exhibit 8 of Item AC18-06-01.
- (9) = (6) x (7) / [(7) + (8)].
- (10) Based on Attachment C of the WCIRB's Amended January 1, 2017 Pure Premium Rate Filing and an updated 40% reduction in lien filings.

Average Paid M CCP^[1] per Reported Indemnity Claim - Statewide
As of March 31, 2018

Accident	Evaluated as of (in months):						
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2012	194	868	1,431	1,714	1,920	2,053	2,146
2013	184	806	1,290	1,602	1,788	1,907	
2014	163	751	1,271	1,578	1,755		
2015	173	758	1,257	1,525			
2016	154	733	1,170				
2017	166	713					
2018	173						

Accident	Annual Change						
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	
2013	-5.4%	-7.1%	-9.8%	-6.6%	-6.9%	-7.1%	
2014	-11.2%	-6.9%	-1.5%	-1.5%	-1.9%		
2015	6.1%	0.9%	-1.1%	-3.3%			
2016	-10.7%	-3.3%	-6.9%				
2017	7.9%	-2.7%					
2018	3.7%						

<u>Annual Trend^[1]</u>						
All-Year	-2.1%	-3.5%	-4.2%	-3.6%	-4.4%	
R ²	0.371	0.882	0.878	0.924	0.898	

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

Paid M CCP per Indemnity Claims Inventory^[1] by Calendar Year

Calendar Year	Private Insurer		Statewide	
	Paid M CCP per Indemnity Claim Adjusted to Remove IMR/IBR Fees	Year-to-Year Change	Paid M CCP per Indemnity Claim Adjusted to Remove IMR/IBR Fees	Year-to-Year Change
2005	\$469	---	---	---
2006	\$559	19.3%	---	---
2007	\$631	12.8%	\$433	---
2008	\$953	51.0%	\$673	55.4%
2009	\$830	-13.0%	\$665	-1.2%
2010	\$888	7.0%	\$733	10.2%
2011	\$931	4.8%	\$786	7.1%
2012	\$983	5.6%	\$841	7.1%
2013	\$1,012	3.0%	\$892	6.0%
2014	\$910	-10.0%	\$817	-8.3%
2015	\$998	9.6%	\$900	10.2%
2016	\$1,011	1.3%	\$906	0.6%
2017	\$946	-6.4%	\$820	-9.4%

Estimated Annual Exponential Trend Based on:

2005-2017	5.3%	---
R ²	0.634	---
2009-2017	1.6%	2.9%
R ²	0.441	0.585

^[1] Indemnity claims inventory is the sum of indemnity claims open as of January 1 of Year N and newly-reported indemnity claims between January 1 of year N and December 31 of year N.

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

Estimated Ultimate MCCP Per Indemnity Claim - Statewide

Accident Year	Paid MCCP @3/31/18 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @3/31/18 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP Per Indemnity Claim (7)=(3)/(6) x 1000	Annual change
2011	307,229	1.458	447,803	120,379	1.003	120,726	3,709	---
2012	282,688	1.544	436,343	127,211	1.005	127,844	3,413	-8.0%
2013	265,839	1.621	430,968	134,906	1.008	136,015	3,169	-7.2%
2014	248,826	1.743	433,632	139,690	1.013	141,549	3,063	-3.3%
2015	218,217	1.962	428,090	143,302	1.023	146,611	2,920	-4.7%
2016	167,461	2.424	405,852	143,310	1.044	149,555	2,714	-7.1%
2017	93,648	4.288	401,606	131,245	1.158	152,030	2,642	-2.7%
Estimated Annual Exponential Trend							2011 - 2017: R ² :	-5.4% 0.982
							2013 - 2017: R ² :	-4.7% 0.980

Notes:

- [1] Based on MCCP development through 63 months from Exhibit 21.1, 75-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC18-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.

Paid MCCP Development Factors - Statewide

Quarterly Development						
Age in Months	Accident Year					
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
3 - 6	5.632	5.757	6.037	5.591	6.063	5.482
6 - 9	2.340	2.367	2.361	2.447	2.387	2.388
9 - 12	1.703	1.712	1.738	1.740	1.713	1.776
12 - 15	1.414	1.361	1.444	1.467	1.477	1.440
15 - 18	1.207	1.201	1.278	1.279	1.241	
18 - 21	1.089	1.120	1.179	1.174	1.169	
21 - 24	1.040	1.092	1.117	1.117	1.124	
24 - 27	0.997	1.069	1.117	1.095	1.085	
27 - 30	0.993	1.066	1.089	1.072		
30 - 33	0.977	1.069	1.068	1.061		
33 - 36	0.979	1.054	1.052	1.045		
36 - 39	0.983	1.054	1.043	1.040		
39 - 42	0.981	1.044	1.036			
42 - 45	0.992	1.035	1.033			
45 - 48	1.031	1.027	1.026			
48 - 51	1.031	1.023	1.025			
51 - 54	1.025	1.023				
54 - 57	1.022	1.019				
57 - 60	1.017	1.016				
60 - 63	1.015	1.015				
63 - 66	1.016					
66 - 69	1.013					
69 - 72	1.011					
72 - 75	1.010					
Annual Development						
Age in Months	Accident Year					
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
15 - 27	1.830	1.776	1.882	1.837	1.769	
27 - 39	1.237	1.280	1.277	1.235		
39 - 51	1.138	1.136	1.126			
51 - 63	1.080	1.075				
63 - 75	1.050					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-Ult.</u>
Age-to-Age ^[1]	1.769	1.235	1.126	1.075	1.050	
Age -to-Ult. ^[2]	4.288	2.424	1.962	1.743	1.621	1.544

Notes:

[1] Based on Latest Year.

[2] 75-to-Ult. is based on selected paid medical 75-to-ultimate development factor on Exhibit 3.2 of Item AC18-06-01.

Projected Ratio of M CCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and M CCP Severity
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Accident Year	Paid M CCP @3/31/18 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate M CCP (3)=(1)x(2) (4)	Indemnity Claim Counts @3/31/18 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5) (6)	Estimated Ultimate M CCP Per Indemnity Claim (7)=(3)/(6) x 1000 (7)	Annual change
2011	307,229	1.458	447,803	120,379	1.003	120,726	3,709	---
2012	282,688	1.544	436,343	127,211	1.005	127,844	3,413	-8.0%
2013	265,839	1.621	430,968	134,906	1.008	136,015	3,169	-7.2%
2014	248,826	1.743	433,632	139,690	1.013	141,549	3,063	-3.3%
2015	218,217	1.962	428,090	143,302	1.023	146,611	2,920	-4.7%
2016	167,461	2.424	405,852	143,310	1.044	149,555	2,714	-7.1%
2017	93,648	4.288	401,606	131,245	1.158	152,030	2,642	-2.7%

Projected Based on 2-Year Average of 2016 and 2017:

	Ultimate M CCP ^[5]	Ult. Ind. Counts ^[3]	Ult. M CCP per Ind. Counts ^[4]
2018	395,292	149,876	2,637
2019	385,665	147,703	2,611
1/1/2020	378,691	145,762	2,598

(a) Projected M CCP (\$000):	378,691
(b) Calendar Year 2017 Earned Premium ^[6] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[7] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[8] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Projected Ratio of M CCP to Losses: (a)/(e)	3.8%

Notes:

- [1] Based on M CCP development through 75 months from Exhibit 21.1, 75-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC18-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
- [3] Estimated based on projected frequency trends for accident years 2017 to 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit 12 of Item AC18-06-01 for accident year 2017 and Exhibit C7.2 of Item AC18-08-01 for accident years 2018 through 2020). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
- [4] Severity is projected by applying an annual growth rate of -1.0% to the ultimate M CCP severity estimated from averaging 2016 and 2017.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid M CCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- [7] See Exhibit 8 of Item AC18-06-01.
- [8] See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity - Trend from Latest Year
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Accident Year	Paid MCCP @3/31/18 (in \$000) (1)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @3/31/18 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP Per Indemnity Claim (7)=(3)/(6) x 1000	Annual change
2011	307,229	1.458	447,803	120,379	1.003	120,726	3,709	---
2012	282,688	1.544	436,343	127,211	1.005	127,844	3,413	-8.0%
2013	265,839	1.621	430,968	134,906	1.008	136,015	3,169	-7.2%
2014	248,826	1.743	433,632	139,690	1.013	141,549	3,063	-3.3%
2015	218,217	1.962	428,090	143,302	1.023	146,611	2,920	-4.7%
2016	167,461	2.424	405,852	143,310	1.044	149,555	2,714	-7.1%
2017	93,648	4.288	401,606	131,245	1.158	152,030	2,642	-2.7%

Projected Based on Latest Year:

	Ultimate MCCP ^[5]	Ult. Ind. Counts ^[3]	Ult. MCCP per Ind. Counts ^[4]
2018	395,801	151,346	2,615
2019	386,161	149,152	2,589
1/1/2020	379,178	147,192	2,576

(a) Projected MCCP (\$000):	379,178
(b) Calendar Year 2017 Earned Premium ^[6] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[7] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[8] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.8%

Notes:

- [1] Based on MCCP development through 63 months from Exhibit 21.1, 75-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC18-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
- [3] Estimated based on projected frequency trends for accident years 2018 to 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit C7.2 of Item AC18-08-01). These frequency trends were then applied to the 2017 ultimate indemnity claim counts.
- [4] Severity is projected by applying an annual growth rate of -1.0% to the 2017 ultimate MCCP severity.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- [7] See Exhibit 8 of Item AC18-06-01.
- [8] See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of M CCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and M CCP Severity with Calendar Year Trend
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Accident Year	Paid MCCP	Cumulative Development Factors ^[1]	Estimated Ultimate MCCP	Indemnity Claim Counts @3/31/18	Cumulative Count Development Factors ^[2]	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP Per Indemnity	Annual change
	@3/31/18							
	(in \$000)							
	(1)						(2)	
	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	(7)=(3)/(6) x 1000			
2011	307,229	1.458	447,803	120,379	1.003	120,726	3,709	---
2012	282,688	1.544	436,343	127,211	1.005	127,844	3,413	-8.0%
2013	265,839	1.621	430,968	134,906	1.008	136,015	3,169	-7.2%
2014	248,826	1.743	433,632	139,690	1.013	141,549	3,063	-3.3%
2015	218,217	1.962	428,090	143,302	1.023	146,611	2,920	-4.7%
2016	167,461	2.424	405,852	143,310	1.044	149,555	2,714	-7.1%
2017	93,648	4.288	401,606	131,245	1.158	152,030	2,642	-2.7%

Projected Based on 2-Year Average of 2016 and 2017:

	Ultimate M CCP ^[5]	Ult. Ind. Counts ^[3]	Ult. M CCP per Ind. Counts ^[4]
2018	419,012	149,876	2,796
2019	424,903	147,703	2,877
1/1/2020	425,353	145,762	2,918

(a) Projected M CCP (\$000):	425,353
(b) Calendar Year 2017 Earned Premium ^[6] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[7] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[8] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Projected Ratio of M CCP to Losses: (a)/(e)	4.3%

Notes:

- [1] Based on M CCP development through 75 months from Exhibit 21.1. 75-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC18-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
- [3] Estimated based on projected frequency trends for accident years 2017 to 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit 12 of Item AC18-06-01 for accident year 2017 and Exhibit C7.2 of Item AC18-08-01 for accident years 2018 through 2020). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
- [4] Severity is projected by applying an annual growth rate of 2.9% (see Exhibit 19) to the ultimate M CCP severity estimated from averaging 2016 and 2017.
- [6] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid M CCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- [7] See Exhibit 8 of Item AC18-06-01.
- [8] See Exhibit 5.2 of Item AC18-06-01.

Projected Ratio of MCCP to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and Estimated Longer-Term Accident Year MCCP Severity
For Policies with Effective Dates between January 1, 2019 and December 31, 2019

Accident Year	Paid MCCP @3/31/18 (in \$000)	Cumulative Development Factors ^[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @3/31/18 (4)	Cumulative Count Development Factors ^[2] (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP Per Indemnity Claim (7)=(3)/(6) x 1000	Annual change
2011	307,229	1.458	447,803	120,379	1.003	120,726	3,709	---
2012	282,688	1.544	436,343	127,211	1.005	127,844	3,413	-8.0%
2013	265,839	1.621	430,968	134,906	1.008	136,015	3,169	-7.2%
2014	248,826	1.743	433,632	139,690	1.013	141,549	3,063	-3.3%
2015	218,217	1.962	428,090	143,302	1.023	146,611	2,920	-4.7%
2016	167,461	2.424	405,852	143,310	1.044	149,555	2,714	-7.1%
2017	93,648	4.288	401,606	131,245	1.158	152,030	2,642	-2.7%

Projected Based on 2-Year Average of 2016 and 2017:

	Ultimate MCCP ^[5]	Ult. Ind. Counts ^[3]	Ult. MCCP per Ind. Counts ^[4]
2018	369,175	149,876	2,463
2019	344,124	147,703	2,330
1/1/2020	330,282	145,762	2,266

(a) Projected MCCP (\$000):	330,282
(b) Calendar Year 2017 Earned Premium ^[6] (\$000):	17,672,390
(c) Projected Loss to Industry Average Filed Pure Premium Ratio ^[7] :	0.581
(d) Premium Adjustment Factor for Calendar Year 2017 ^[8] :	0.964
(e) Projected Losses (\$000): (b) x (c) x (d)	9,895,300
(f) Projected Ratio of MCCP to Losses: (a)/(e)	3.3%

Notes:

- [1] Based on MCCP development through 75 months from Exhibit 21.1, 75-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Item AC18-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 13.3.
- [3] Estimated based on projected frequency trends for accident years 2017 to 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency (see Exhibit 12 of Item AC18-06-01 for accident year 2017 and Exhibit C7.2 of Item AC18-08-01 for accident years 2018 through 2020). These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
- [4] Severity is projected by applying an annual growth rate of -5.4% (see Exhibit 20) to the ultimate MCCP severity estimated from averaging 2016 and 2017.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2017 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2018.
- [7] See Exhibit 8 of Item AC18-06-01.
- [8] See Exhibit 5.2 of Item AC18-06-01.

Item AC18-08-03

1/1/2019 Filing – Review of Alternative Loss Projection Methodologies

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

Loss Development Methodologies

The loss development projections based on the methodology reflected in the WCIRB's July 1, 2018 Pure Premium Rate Filing as well as the summary analysis of March 31, 2018 experience, included in Item AC18-06-01 of this Agenda, were based on a combination of (a) latest year reform-adjusted paid loss development factors through 111 months with adjustments for changes in claim settlement rates applied through 75 months, (b) three-year average reform-adjusted paid loss development factors from 111 months through 243 months, and (c) six-year average (unadjusted) incurred loss development factors after 243 months. Attached for the Committee's review are a number of alternative loss development projections based on methodologies that have been included, for informational purposes, in prior pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on March 31, 2018 experience, derived using the following loss development methodologies and the trending methodology reflected in the analysis included in Item AC18-06-01 of this Agenda are included:¹

1. 3-Year Average Unadjusted Incurred Loss Development – Exhibits 1.1 through 1.3.
2. Latest Year Unadjusted Incurred Loss Development – Exhibits 2.1 through 2.3.
3. 3-Year Average Incurred Loss Development Adjusted for Changes in Case Reserve Levels² – Exhibits 3.1 through 3.11.
4. Latest Year Incurred Loss Development Adjusted for Changes in Case Reserve Levels³ – Exhibits 4.1 through 4.3.
5. Latest Year Incurred Loss Development Adjusted for Changes in Insurer Mix – Exhibits 5.1 through 5.3.
6. 3-Year Average Unadjusted Paid Loss Development – Exhibits 6.1 through 6.3.
7. Latest Year Unadjusted Paid Loss Development – Exhibits 7.1 through 7.3.
8. Latest Year Paid Loss Development Adjusted for Reforms – Exhibits 8.1 through 8.3.
9. 3-Year Average Paid Loss Development Adjusted for Changes in Claim Settlement Rates and Reforms – Exhibits 9.1 through 9.3.
10. Latest Year Paid Loss Development Adjusted for Changes in Insurer Mix – Exhibits 10.1 through 10.3.
11. Expected Loss Ratio with a Bornheutter-Ferguson (BF) Adjustment Based on Paid Loss Development to 27 Months with Latest Year Paid Loss Development Adjusted for Reforms after 27 Months – Exhibits 11.1 through 11.5.

¹ All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect six-year average incurred loss development factors applied after 243 months.

² See Item AC18-08-04 of this Agenda for a detailed discussion of this methodology.

³ See Item AC18-08-04 of this Agenda for a detailed discussion of this methodology.

A summary of the preliminary policy year 2019 loss ratio projections based on the alternative loss development methodologies described above is shown in Table 1.

**Table 1: Projected Policy Year 2019 Loss Ratios
Based on Alternative Loss Development Methodologies⁴**

Loss Development Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Current WCIRB Methodology			
Latest Year Paid Adjusted for Reforms and Changes in Claim Settlement Rates	0.254	0.327	0.581
Alternative Methodologies			
<u>Incurred Methodologies</u>			
3-Year Average (Unadjusted)	0.237	0.297	0.534
Latest Year (Unadjusted)	0.234	0.282	0.516
3-Year Average Adjusted for Changes in Case Reserve Levels	0.244	0.295	0.539
Latest Year Adjusted for Changes in Case Reserve Levels	0.233	0.277	0.510
Latest Year Adjusted for Changes in Insurer Mix	0.235	0.280	0.515
<u>Paid Methodologies</u>			
3-Year Average (Unadjusted)	0.264	0.356	0.620
Latest Year (Unadjusted)	0.255	0.335	0.590
Latest Year Adjusted for Reforms	0.268	0.340	0.608
3-Year Average Adjusted for Changes in Claim Settlement Rates and Reforms	0.263	0.349	0.612
Latest Year Adjusted for Changes in Insurer Mix	0.253	0.331	0.584
BF Paid to 27 Months; Latest Year Reform-Adjusted after 27 Months	0.255	0.325	0.580
<u>Hybrid Methodologies</u>			
75% Applied to Latest Year Reform and Claim Settlement Rate-adjusted Paid; 25% Applied to Latest Year Unadjusted Incurred ⁵	0.249	0.316	0.565

⁴ All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect three-year average incurred loss development factors applied after 243 months.

⁵ The loss development methodology reflected in the California Department of Insurance Decision on the July 1, 2018 Pure Premium Rate Filing.

Trending Methodologies

The trending projections reflected in the summary analysis of March 31, 2018 experience, included in Item AC18-06-01 of this Agenda, were based on the average of the latest two years' on-level loss ratios with separate projections of claim frequency and claim severity growth applied. The claim frequency growth estimates were based on the preliminary 15-month frequency change for accident year 2017 and the WCIRB's indemnity claim frequency model projections for accident years 2018 through 2020. The severity growth estimates of 0% for indemnity and 3% for medical were consistent with those reflected in the July 1, 2018 Pure Premium Rate Filing and were selected based on a review of short-term and long-term growth in claim severities.

Attached for the Committee's review are a number of alternative trending projections based on methodologies that have been included, for informational purposes, in prior pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on March 31, 2018 experience, derived using the loss development methodologies reflected in the analysis included in Item AC18-06-01 of this Agenda and the following trending methodologies are included:

1. Separate Projections of Frequency and Severity (0% for Indemnity; 3% for Medical) Growth Applied to the Latest Year Only – Exhibits 12.1 and 12.2.
2. Separate Projections of Frequency and the Long-Term (1990 to 2017) Average Severity Growth Applied to the Latest Two Years – Exhibits 13.1 and 13.2.
3. Separate Projections of Frequency and the Short-Term (2013 to 2017) Average Severity Growth Applied to the Latest Two Years – Exhibits 14.1 and 14.2.
4. Separate Projections of Frequency and 1% Medical Severity Growth Applied to the Latest Two Years – Exhibit 15.⁶
5. Long-Term (1990 to 2017) On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios – Exhibits 16.1 and 16.2.
6. Short-Term (2013 to 2017) On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios – Exhibits 17.1 and 17.2.
7. Short-Term (2013 to 2017) Fitted On-Level Loss Ratio Exponential Trend – Exhibits 18.1 and 18.2.

A summary of the preliminary policy year 2019 loss ratio projections based on the alternative trending methodologies described above is shown in Table 2.

⁶ The trending methodology reflected in the California Department of Insurance's Decision on the July 1, 2018 Pure Premium Rate Filing.

**Table 2: Projected Policy Year 2019 Loss Ratios
Based on Alternative Trending Methodologies**

Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Current WCIRB Methodology			
Separate Projections of Frequency and Severity (0% for Indemnity; 3% for Medical) Applied to the Latest Two Years	0.254	0.327	0.581
Alternative Methodologies			
Separate Projections of Frequency and Severity (0% for Indemnity; 3% for Medical) Applied to the Latest Year	0.250	0.325	0.575
Separate Projections of Frequency and Long-Term (1990 to 2017) Severity Applied to the Latest Two Years	0.268	0.357	0.625
Separate Projections of Frequency and Short-Term (2013 to 2017) Severity Applied to the Latest Two Years	0.244	0.296	0.540
Separate Projections of Frequency and 1% Medical Severity Applied to the Latest Two Years	0.254	0.308	0.562
Long-Term (1990 to 2017) On-level Loss Ratio Exponential Trend Applied to the Latest Two Years	0.263	0.346	0.609
Short-Term (2013 to 2017) On-level Loss Ratio Exponential Trend Applied to the Latest Two Years	0.237	0.291	0.528
Short-Term (2013 to 2017) Fitted On-level Loss Ratio Exponential Trend	0.239	0.294	0.533

**Developed Loss Ratio Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Incurred	Annual	Cumulative		Reported Incurred	Annual	Cumulative		Total
	Loss Ratio	Development	Development	Developed	Loss Ratio	Development	Development	Developed	Developed
	<u>Ex IBNR(a)</u>	<u>Factor(b)</u>	<u>Factor</u>	<u>Loss Ratio</u>	<u>Ex IBNR(a)</u>	<u>Factor(c)</u>	<u>Factor</u>	<u>Loss Ratio</u>	<u>Loss Ratio</u>
				(1) x (3)				(5) x (7)	(4) + (8)
2006	0.157	1.003	1.021	0.161	0.234	1.008	1.067	0.250	0.410
2007	0.214	1.006	1.027	0.220	0.327	1.008	1.076	0.351	0.572
2008	0.271	1.006	1.034	0.280	0.403	1.010	1.087	0.438	0.717
2009	0.311	1.010	1.044	0.325	0.462	1.014	1.102	0.509	0.834
2010	0.295	1.012	1.057	0.312	0.442	1.010	1.113	0.492	0.805
2011	0.270	1.017	1.075	0.290	0.377	1.015	1.130	0.427	0.717
2012	0.237	1.023	1.099	0.261	0.317	1.021	1.155	0.366	0.627
2013	0.197	1.034	1.136	0.223	0.250	1.029	1.188	0.297	0.521
2014	0.180	1.053	1.197	0.215	0.214	1.048	1.244	0.266	0.481
2015	0.163	1.094	1.310	0.214	0.196	1.073	1.335	0.261	0.475
2016	0.131	1.207	1.580	0.208	0.170	1.124	1.501	0.255	0.462
2017	0.086	1.620	2.561	0.221	0.139	1.309	1.964	0.274	0.495

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Based on AC18-06-01, Exhibit 2.1.
- (c) Based on AC18-06-01, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.220	1.464	1.203	0.268
2008	0.280	1.379	1.453	0.265
2009	0.325	1.352	1.567	0.280
2010	0.312	1.333	1.425	0.292
2011	0.290	1.312	1.301	0.293
2012	0.261	1.281	1.159	0.288
2013	0.223	1.241	1.012	0.274
2014	0.215	1.124	0.933	0.259
2015	0.214	1.095	0.891	0.263
2016	0.208	1.082	0.911	0.246
2017	0.221	1.062	0.964	0.244
				Projected (d)
2018				0.243
2019				0.240
1/1/2020				0.237

(a) See Exhibit 1.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical <u>Loss Ratio(a)</u>	(2) Composite Medical <u>Adjustment Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.250	0.863	0.941	0.229
2007	0.351	0.868	1.203	0.254
2008	0.438	0.867	1.453	0.261
2009	0.509	0.855	1.567	0.278
2010	0.492	0.853	1.425	0.295
2011	0.427	0.868	1.301	0.285
2012	0.366	0.894	1.159	0.283
2013	0.297	0.961	1.012	0.282
2014	0.266	1.000	0.933	0.285
2015	0.261	1.000	0.891	0.293
2016	0.255	0.996	0.911	0.279
2017	0.274	0.994	0.964	0.282
				Projected (d)
2018				0.291
2019				0.296
1/1/2020				0.297

(a) See Exhibit 1.1.

(b) Based on AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

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

**Developed Loss Ratio Unadjusted Latest Year Incurred Development Factors
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)
2006	0.157	1.003	1.021	0.161	0.234	1.008	1.067	0.250	0.410
2007	0.214	1.006	1.027	0.220	0.327	1.008	1.076	0.351	0.572
2008	0.271	1.006	1.034	0.280	0.403	1.010	1.087	0.438	0.717
2009	0.311	1.010	1.044	0.325	0.462	1.014	1.102	0.509	0.834
2010	0.295	1.013	1.058	0.313	0.442	1.007	1.110	0.491	0.803
2011	0.270	1.017	1.076	0.291	0.377	1.012	1.123	0.424	0.715
2012	0.237	1.024	1.102	0.261	0.317	1.016	1.141	0.362	0.623
2013	0.197	1.033	1.138	0.224	0.250	1.025	1.170	0.293	0.517
2014	0.180	1.048	1.193	0.214	0.214	1.032	1.207	0.258	0.472
2015	0.163	1.097	1.308	0.214	0.196	1.064	1.284	0.252	0.465
2016	0.131	1.195	1.564	0.205	0.170	1.118	1.436	0.244	0.449
2017	0.086	1.606	2.511	0.217	0.139	1.288	1.849	0.258	0.475

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Based on AC18-06-01, Exhibit 2.1.
- (c) Based on AC18-06-01, Exhibit 2.2.

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

Accident Year	(1) Developed Indemnity <u>Loss Ratio(a)</u>	(2) Composite Indemnity <u>Adjustment Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.220	1.464	1.203	0.268
2008	0.280	1.379	1.453	0.265
2009	0.325	1.352	1.567	0.280
2010	0.313	1.333	1.425	0.292
2011	0.291	1.312	1.301	0.293
2012	0.261	1.281	1.159	0.289
2013	0.224	1.241	1.012	0.274
2014	0.214	1.124	0.933	0.258
2015	0.214	1.095	0.891	0.263
2016	0.205	1.082	0.911	0.244
2017	0.217	1.062	0.964	0.239
				Projected (d)
2018				0.240
2019				0.237
1/1/2020				0.234

(a) See Exhibit 2.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

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

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.250	0.863	0.941	0.229
2007	0.351	0.868	1.203	0.254
2008	0.438	0.867	1.453	0.261
2009	0.509	0.855	1.567	0.278
2010	0.491	0.853	1.425	0.294
2011	0.424	0.868	1.301	0.283
2012	0.362	0.894	1.159	0.279
2013	0.293	0.961	1.012	0.278
2014	0.258	1.000	0.933	0.277
2015	0.252	1.000	0.891	0.282
2016	0.244	0.996	0.911	0.266
2017	0.258	0.994	0.964	0.266
				Projected (d)
2018				0.276
2019				0.281
1/1/2020				0.282
(a)	See Exhibit 2.1.			
(b)	Based on AC18-06-01, Exhibit 4.4.			
(c)	See AC18-06-01, Exhibit 5.2.			
(d)	These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.			
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.			

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

A. Indemnity Case Reserves Per Open Claim

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						20,589
2008					18,343	21,326
2009				17,082	19,209	21,593
2010			14,769	16,464	18,274	20,284
2011		13,230	15,296	17,558	19,157	20,880
2012	9,558	12,959	14,987	16,546	18,864	21,083
2013	9,593	13,131	14,432	15,873	17,668	
2014	9,668	13,335	15,373	17,713		
2015	10,235	14,496	16,906			
2016	10,401	14,855				
2017	11,113					

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						18,403
2008					17,262	20,030
2009				14,968	18,545	21,042
2010			11,019	15,497	18,755	21,247
2011		6,557	11,544	15,685	18,877	21,049
2012	2,687	7,057	11,936	15,770	18,517	20,589
2013	3,004	7,279	12,110	15,744	18,282	
2014	2,851	7,118	11,806	15,368		
2015	3,107	7,605	12,263			
2016	3,315	7,848				
2017	3,348					

Annual Trend (b): 4.3% 3.2% 1.8% 0.5% 0.8% 2.1%

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						22,655
2008					18,431	23,108
2009				16,982	18,799	23,570
2010			15,798	17,322	19,175	24,042
2011		13,707	16,114	17,669	19,559	24,522
2012	10,065	13,981	16,437	18,022	19,950	25,013
2013	10,266	14,261	16,765	18,382	20,349	
2014	10,472	14,546	17,101	18,750		
2015	10,681	14,837	17,443			
2016	10,895	15,134				
2017	11,113					

(a) Represents average paid indemnity on closed claims only. All evaluations are brought to the accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.1, excluding utilization impacts.

(b) Trend is based on a 6-year exponential distribution.

(c) Latest evaluation for each accident year is brought to the accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.1, excluding utilization impacts. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average indemnity case reserves by the selected annual paid indemnity severity trend on closed claims (Item B) of 2%.

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

D. Indemnity Open Claim Counts

Accident	Evaluated as of (in months)					
Year	15	27	39	51	63	75
2007						18,790
2008					23,815	17,150
2009				30,636	21,981	16,225
2010			41,915	29,321	21,012	15,001
2011		55,644	40,181	28,114	19,653	13,920
2012	70,374	57,609	40,844	28,048	19,277	13,308
2013	77,335	60,282	41,823	27,701	18,322	
2014	80,326	61,763	42,035	26,982		
2015	83,167	62,299	40,126			
2016	82,219	59,666				
2017	80,483					

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

Accident	Evaluated as of (in months)					
Year	15	27	39	51	63	75
2007						425,680
2008					438,923	396,308
2009				520,270	413,227	382,417
2010			662,180	507,895	402,907	360,644
2011		762,713	647,486	496,734	384,387	341,351
2012	708,321	805,435	671,331	505,485	384,574	332,870
2013	793,951	859,659	701,174	509,210	372,832	
2014	841,155	898,392	718,824	505,913		
2015	888,327	924,317	699,903			
2016	895,761	902,957				
2017	894,385					

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

Accident	Evaluated as of (in months)					
Year	15	27	39	51	63	75
2007						3,001,774
2008					2,766,145	2,995,090
2009				2,324,942	2,639,786	2,863,170
2010			1,916,695	2,376,940	2,681,405	2,897,236
2011		1,288,707	1,905,450	2,333,557	2,626,987	2,825,976
2012	549,819	1,336,673	1,971,121	2,397,053	2,690,110	2,893,276
2013	580,020	1,384,231	2,060,160	2,503,137	2,779,464	
2014	560,858	1,379,363	2,070,028	2,514,473		
2015	597,276	1,473,954	2,174,746			
2016	624,248	1,499,446				
2017	632,903					

(d) Each amount is derived as the product of the indemnity open claim counts (Item D) and the adjusted average indemnity case reserves per open claim (Item C).

(e) Brought to accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.1, excluding utilization impacts.

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

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

G. Adjusted Total Indemnity Incurred (in \$000) (f)

Accident Year	Evaluated as of (in months)				
	15	27	39	51	63
2007					
2008					3,427,454
2009					3,391,399
2010				2,845,212	3,053,014
2011		2,051,420	2,578,874	2,884,835	3,084,312
2012	1,258,140	2,142,108	2,552,936	2,830,290	3,011,374
2013	1,373,971	2,243,890	2,642,452	2,902,538	3,074,684
2014	1,402,014	2,277,754	2,761,334	3,012,348	3,152,296
2015	1,485,603	2,277,754	2,788,852	3,020,387	
2016	1,520,010	2,398,271	2,874,648		
2017	1,527,288	2,402,403			

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

Accident Year	Age-to-Age Development (in months):				
	15-27	27-39	39-51	51-63	63-75
2008					1.058
2009				1.073	1.063
2010			1.119	1.069	1.056
2011		1.244	1.109	1.064	1.052
2012	1.703	1.234	1.098	1.059	1.049
2013	1.633	1.231	1.091	1.046	
2014	1.625	1.224	1.083		
2015	1.614	1.199			
2016	1.581				
Latest Year	1.581	1.199	1.083	1.046	1.049

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

Accident Year	Age-to-Age Development (in months):				
	15-27	27-39	39-51	51-63	63-75
2008					1.042
2009				1.063	1.042
2010			1.109	1.061	1.037
2011		1.215	1.106	1.052	1.031
2012	1.649	1.214	1.093	1.059	1.034
2013	1.601	1.200	1.092	1.047	
2014	1.628	1.223	1.097		
2015	1.630	1.195			
2016	1.606				

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

(g) Development factors are based on incurred losses adjusted to a common benefit level and from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item H.

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

**Incurred Indemnity Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

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

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>
2008					1.54%
2009				0.93%	2.01%
2010			0.88%	0.73%	1.84%
2011		2.44%	0.24%	1.18%	2.05%
2012	3.26%	1.64%	0.51%	0.03%	1.52%
2013	2.04%	2.54%	-0.12%	-0.09%	
2014	-0.20%	0.08%	-1.25%		
2015	-0.99%	0.31%			
2016	-1.61%				

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

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>
2008					1.059
2009				1.077	1.064
2010			1.122	1.070	1.056
2011		1.255	1.112	1.065	1.052
2012	1.716	1.238	1.099	1.059	1.049
2013	1.637	1.232	1.092	1.047	
2014	1.622	1.225	1.083		
2015	1.614	1.199			
2016	1.580				
Latest Year	1.580	1.199	1.083	1.047	1.049
3-Year Average	1.605	1.218	1.091	1.057	1.052

- (h) Each factor represents the change in age-to-age development factors from Item I to those in Item H.
- (i) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item J)] and [the incurred indemnity age-to-age development factors from AC18-06-01, Exhibit 2.1.1].

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

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

A. Medical Case Reserves Per Open Indemnity Claim

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>
2007						43,380
2008					35,599	44,527
2009				30,381	36,856	43,738
2010			24,707	29,810	36,016	41,901
2011		21,842	26,397	32,193	38,970	43,553
2012	17,161	21,130	25,070	29,446	34,916	40,790
2013	16,574	20,863	23,682	28,405	33,045	
2014	16,145	19,577	22,989	27,366		
2015	16,882	20,643	25,607			
2016	17,397	21,642				
2017	18,281					

B. Average Paid Medical Loss Per Claim Adjusted to the Common Benefit Level (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>
2007						6,119
2008					6,445	7,070
2009				6,392	7,329	8,010
2010			5,575	6,870	7,756	8,406
2011		4,351	6,027	7,276	8,189	8,839
2012	2,416	4,489	6,134	7,337	8,191	8,766
2013	2,599	4,752	6,463	7,678	8,464	
2014	2,684	4,905	6,642	7,831		
2015	2,684	4,933	6,564			
2016	2,796	4,932				
2017	2,775					

Annual Trend (b): 2.6% 2.7% 3.4% 4.0% 5.1% 7.5%

C. Medical Case Reserves per Open Indemnity Claim Adjusted by Paid Medical Severity Trend (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>
2007						29,732
2008					25,921	30,921
2009				22,642	26,957	32,158
2010			21,173	23,548	28,036	33,444
2011		17,836	22,020	24,490	29,157	34,782
2012	15,026	18,550	22,901	25,469	30,324	36,173
2013	15,627	19,292	23,817	26,488	31,536	
2014	16,252	20,063	24,770	27,547		
2015	16,902	20,866	25,761			
2016	17,578	21,701				
2017	18,281					

(a) Represents average paid medical on all claims. All evaluations are brought to the accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.4, excluding utilization impacts.

(b) Trend is based on a 6-year exponential distribution.

(c) Latest evaluation for each accident year is brought to the accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.4, excluding utilization impacts. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average medical case reserves by the selected annual paid medical severity trend on all claims (Item B) of 4%.

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

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

D. Total Medical Case Reserves Adjusted to the Common Benefit Level and by Paid Medical Severity Trend (in

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						558,649
2008					617,299	530,301
2009				693,654	592,555	521,747
2010			887,476	690,433	589,085	501,688
2011		992,489	884,799	688,500	573,027	484,161
2012	1,057,405	1,068,631	935,372	714,368	584,546	481,389
2013	1,208,476	1,162,938	996,108	733,743	577,811	
2014	1,305,430	1,239,166	1,041,205	743,286		
2015	1,405,671	1,299,924	1,033,676			
2016	1,445,227	1,294,783				
2017	1,471,301					

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						2,678,391
2008					2,552,350	2,805,574
2009				2,172,695	2,500,308	2,738,260
2010			1,860,619	2,306,856	2,613,125	2,838,687
2011		1,395,989	1,960,630	2,381,261	2,689,229	2,908,746
2012	678,530	1,346,149	1,877,674	2,269,617	2,554,289	2,746,537
2013	766,055	1,480,187	2,055,178	2,473,253	2,745,215	
2014	836,207	1,618,322	2,240,549	2,673,733		
2015	876,340	1,713,111	2,327,522			
2016	939,338	1,761,693				
2017	991,169					

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2007						3,237,040
2008					3,169,649	3,335,875
2009				2,866,349	3,092,863	3,260,006
2010			2,748,096	2,997,289	3,202,210	3,340,375
2011		2,388,477	2,845,429	3,069,761	3,262,256	3,392,907
2012	1,735,935	2,414,781	2,813,046	2,983,985	3,138,836	3,227,926
2013	1,974,531	2,643,125	3,051,285	3,206,996	3,323,026	
2014	2,141,638	2,857,488	3,281,754	3,417,020		
2015	2,282,011	3,013,035	3,361,198			
2016	2,384,565	3,056,477				
2017	2,462,470					

(d) Each amount is derived as the product of the indemnity open claim counts (Exhibit 3.2, Item D) and the adjusted average medical case reserves per open claim (Item C).

(e) Brought to accident year 2017 benefit level based on benefit factors shown in AC18-06-01, Exhibit 4.4, excluding utilization impacts.

(f) Each amount is the sum of the adjusted total medical case reserves (Item D) and the adjusted total medical paid losses (Item E).

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

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

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

Accident Year	Age-to-Age Development (in months):				
	15-27	27-39	39-51	51-63	63-75
2008					1.052
2009				1.079	1.054
2010			1.091	1.068	1.043
2011		1.191	1.079	1.063	1.040
2012	1.391	1.165	1.061	1.052	1.028
2013	1.339	1.154	1.051	1.036	
2014	1.334	1.148	1.041		
2015	1.320	1.116			
2016	1.282				
Latest Year	1.282	1.116	1.041	1.036	1.028

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

Accident Year	Age-to-Age Development (in months):				
	15-27	27-39	39-51	51-63	63-75
2008					1.055
2009				1.076	1.048
2010			1.113	1.068	1.036
2011		1.177	1.100	1.060	1.025
2012	1.386	1.148	1.078	1.050	1.024
2013	1.347	1.119	1.075	1.031	
2014	1.324	1.133	1.063		
2015	1.314	1.118			
2016	1.288				

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

Accident Year	Age-to-Age Development (in months):				
	15-27	27-39	39-51	51-63	63-75
2008					-0.29%
2009				0.27%	0.58%
2010			-2.02%	0.03%	0.69%
2011		1.24%	-1.91%	0.30%	1.51%
2012	0.33%	1.43%	-1.57%	0.21%	0.39%
2013	-0.66%	3.13%	-2.19%	0.54%	
2014	0.78%	1.34%	-2.09%		
2015	0.50%	-0.20%			
2016	-0.46%				

(g) Development factors are based on incurred losses adjusted to a common benefit level and from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item G.

(h) Each factor represents the change in age-to-age development factors from Item H to those in Item G.

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

**Incurred Medical Loss Development Factors
Adjusted for Changes in Case Reserve Adequacy**

J. Medical Incurred Loss Development Factors After Adjustment for Changes in Case Reserve

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>
2008					1.055
2009				1.083	1.055
2010			1.094	1.068	1.043
2011		1.200	1.082	1.062	1.040
2012	1.396	1.170	1.061	1.054	1.029
2013	1.344	1.155	1.052	1.038	
2014	1.335	1.150	1.042		
2015	1.321	1.116			
2016	1.282				
Latest Year	1.282	1.116	1.042	1.038	1.029
3-Year Average	1.313	1.140	1.052	1.051	1.038

- (i) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item I)] and [the incurred medical age-to-age development factors from AC18-06-01, Exhibit 2.2.1].

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

**Developed Loss Ratios Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)
2006	0.157	1.003	1.021	0.161	0.234	1.008	1.067	0.250	0.410
2007	0.214	1.006	1.027	0.220	0.327	1.008	1.076	0.351	0.572
2008	0.271	1.006	1.034	0.280	0.403	1.010	1.087	0.438	0.717
2009	0.311	1.010	1.044	0.325	0.462	1.014	1.102	0.509	0.834
2010	0.295	1.013	1.058	0.313	0.442	1.007	1.110	0.491	0.803
2011	0.270	1.017	1.076	0.291	0.377	1.012	1.123	0.424	0.715
2012	0.237	1.024	1.102	0.261	0.317	1.016	1.141	0.362	0.623
2013	0.197	1.052	1.159	0.228	0.250	1.038	1.184	0.296	0.524
2014	0.180	1.057	1.226	0.220	0.214	1.051	1.245	0.266	0.486
2015	0.163	1.091	1.338	0.218	0.196	1.052	1.309	0.256	0.475
2016	0.131	1.218	1.630	0.214	0.170	1.140	1.493	0.253	0.467
2017	0.086	1.605	2.616	0.226	0.139	1.313	1.959	0.273	0.499

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in indemnity case reserve levels based on estimated annual severity trends on closed indemnity claims based on 3-year average selections (see Exhibit 3.4, Item K). Age-to-age factors for developing accident years prior to 2013 are selected as the age-to-age factors shown in AC18-06-01, Exhibit 2.1.
- (c) Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in medical case reserve levels based on estimated annual medical severity trends on all claims based on 3-year average selections (see Exhibit 3.8, Item J). Age-to-age factors for developing accident years prior to 2013 are selected as the age-to-age factors shown in AC18-06-01, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Indemnity Average Case Reserve Levels
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.220	1.464	1.203	0.268
2008	0.280	1.379	1.453	0.265
2009	0.325	1.352	1.567	0.280
2010	0.313	1.333	1.425	0.292
2011	0.291	1.312	1.301	0.293
2012	0.261	1.281	1.159	0.289
2013	0.228	1.241	1.012	0.279
2014	0.220	1.124	0.933	0.265
2015	0.218	1.095	0.891	0.268
2016	0.214	1.082	0.911	0.254
2017	0.226	1.062	0.964	0.249
				Projected (d)
2018				0.250
2019				0.247
1/1/2020				0.244

(a) See Exhibit 3.9.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using 3-Year Average Incurred Development Factors
Adjusted for Changes in Medical Average Case Reserve Levels
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.250	0.863	0.941	0.229
2007	0.351	0.868	1.203	0.254
2008	0.438	0.867	1.453	0.261
2009	0.509	0.855	1.567	0.278
2010	0.491	0.853	1.425	0.294
2011	0.424	0.868	1.301	0.283
2012	0.362	0.894	1.159	0.279
2013	0.296	0.961	1.012	0.281
2014	0.266	1.000	0.933	0.285
2015	0.256	1.000	0.891	0.288
2016	0.253	0.996	0.911	0.277
2017	0.273	0.994	0.964	0.281
				Projected (d)
2018				0.290
2019				0.295
1/1/2020				0.295
(a)	See Exhibit 3.9.			
(b)	Based on AC18-06-01, Exhibit 4.4.			
(c)	See AC18-06-01, Exhibit 5.2.			
(d)	These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.			
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.			

**Developed Loss Ratios Using Latest Year Incurred Development Factors
Adjusted for Changes in Average Case Reserve Levels
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Incurred Loss Ratio Ex IBNR(a)	Annual Development Factor(c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)
2006	0.157	1.003	1.021	0.161	0.234	1.008	1.067	0.250	0.410
2007	0.214	1.006	1.027	0.220	0.327	1.008	1.076	0.351	0.572
2008	0.271	1.006	1.034	0.280	0.403	1.010	1.087	0.438	0.717
2009	0.311	1.010	1.044	0.325	0.462	1.014	1.102	0.509	0.834
2010	0.295	1.013	1.058	0.313	0.442	1.007	1.110	0.491	0.803
2011	0.270	1.017	1.076	0.291	0.377	1.012	1.123	0.424	0.715
2012	0.237	1.024	1.102	0.261	0.317	1.016	1.141	0.362	0.623
2013	0.197	1.049	1.155	0.227	0.250	1.029	1.174	0.294	0.521
2014	0.180	1.047	1.210	0.217	0.214	1.038	1.218	0.261	0.478
2015	0.163	1.083	1.311	0.214	0.196	1.042	1.269	0.249	0.463
2016	0.131	1.199	1.571	0.206	0.170	1.116	1.416	0.240	0.447
2017	0.086	1.580	2.482	0.215	0.139	1.282	1.815	0.253	0.467

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in indemnity case reserve levels based on estimated annual severity trends on closed indemnity claims (see Exhibit 3.4, Item K). Age-to-age factors for developing accident years prior to 2013 are selected as the age-to-age factors shown in AC18-06-01, Exhibit 2.1.
- (c) Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in medical case reserve levels based on estimated annual medical severity trends on all claims (see Exhibit 3.8, Item J). Age-to-age factors for developing accident years prior to 2013 are selected as the age-to-age factors shown in AC18-06-01, Exhibit 2.2.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Latest Year Incurred Development Factors
Adjusted for Changes in Indemnity Average Case Reserve Levels
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.220	1.464	1.203	0.268
2008	0.280	1.379	1.453	0.265
2009	0.325	1.352	1.567	0.280
2010	0.313	1.333	1.425	0.292
2011	0.291	1.312	1.301	0.293
2012	0.261	1.281	1.159	0.289
2013	0.227	1.241	1.012	0.278
2014	0.217	1.124	0.933	0.262
2015	0.214	1.095	0.891	0.263
2016	0.206	1.082	0.911	0.245
2017	0.215	1.062	0.964	0.236
				Projected (d)
2018				0.239
2019				0.236
1/1/2020				0.233

(a) See Exhibit 4.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Latest Year Incurred Development Factors
Adjusted for Changes in Medical Average Case Reserve Levels
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.250	0.863	0.941	0.229
2007	0.351	0.868	1.203	0.254
2008	0.438	0.867	1.453	0.261
2009	0.509	0.855	1.567	0.278
2010	0.491	0.853	1.425	0.294
2011	0.424	0.868	1.301	0.283
2012	0.362	0.894	1.159	0.279
2013	0.294	0.961	1.012	0.279
2014	0.261	1.000	0.933	0.279
2015	0.249	1.000	0.891	0.279
2016	0.240	0.996	0.911	0.263
2017	0.253	0.994	0.964	0.261
Projected (d)				
2018				0.272
2019				0.276
1/1/2020				0.277
(a)	See Exhibit 4.1.			
(b)	Based on AC18-06-01, Exhibit 4.4.			
(c)	See AC18-06-01, Exhibit 5.2.			
(d)	These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.			
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.			

**Developed Loss Ratio Using Latest Year Incurred Loss Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Incurred Loss Ratio <u>Ex IBNR(a)</u>	Annual Development <u>Factor</u>	Cumulative Development <u>Factor(b)</u>	Developed Loss Ratio(c)	Reported Incurred Loss Ratio <u>Ex IBNR(a)</u>	Annual Development <u>Factor</u>	Cumulative Development <u>Factor(d)</u>	Developed Loss Ratio(c)	Total Developed Loss Ratio (4) + (8)
2006	0.157	---	0.976	0.153	0.234	---	1.038	0.243	0.396
2007	0.214	---	0.997	0.214	0.327	---	1.056	0.345	0.558
2008	0.271	---	1.028	0.278	0.403	---	1.095	0.441	0.719
2009	0.311	---	1.051	0.327	0.462	---	1.115	0.516	0.843
2010	0.295	---	1.075	0.318	0.442	---	1.129	0.499	0.817
2011	0.270	---	1.088	0.294	0.377	---	1.127	0.425	0.719
2012	0.237	---	1.112	0.264	0.317	---	1.147	0.364	0.627
2013	0.197	---	1.144	0.225	0.250	---	1.171	0.293	0.518
2014	0.180	---	1.203	0.216	0.214	---	1.212	0.259	0.475
2015	0.163	---	1.312	0.214	0.196	---	1.280	0.251	0.465
2016	0.131	---	1.578	0.207	0.170	---	1.434	0.243	0.451
2017	0.086	---	2.524	0.218	0.139	---	1.833	0.255	0.474

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Column (4) divided by Column (1).
- (c) Developed loss ratios were derived by averaging the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2017 earned premium at the advisory pure premium rate level.
- (d) Column (8) divided by Column (5).

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Incurred Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.153	1.511	0.941	0.246
2007	0.214	1.464	1.203	0.260
2008	0.278	1.379	1.453	0.264
2009	0.327	1.352	1.567	0.282
2010	0.318	1.333	1.425	0.297
2011	0.294	1.312	1.301	0.296
2012	0.264	1.281	1.159	0.291
2013	0.225	1.241	1.012	0.276
2014	0.216	1.124	0.933	0.260
2015	0.214	1.095	0.891	0.263
2016	0.207	1.082	0.911	0.246
2017	0.218	1.062	0.964	0.240
				Projected (d)
2018				0.241
2019				0.238
1/1/2020				0.235

(a) See Exhibit 5.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Incurred Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.243	0.863	0.941	0.222
2007	0.345	0.868	1.203	0.249
2008	0.441	0.867	1.453	0.263
2009	0.516	0.855	1.567	0.281
2010	0.499	0.853	1.425	0.299
2011	0.425	0.868	1.301	0.284
2012	0.364	0.894	1.159	0.281
2013	0.293	0.961	1.012	0.278
2014	0.259	1.000	0.933	0.278
2015	0.251	1.000	0.891	0.281
2016	0.243	0.996	0.911	0.266
2017	0.255	0.994	0.964	0.263
				Projected (d)
2018				0.275
2019				0.280
1/1/2020				0.280
(a)	See Exhibit 5.1.			
(b)	Based on AC18-06-01, Exhibit 4.4.			
(c)	See AC18-06-01, Exhibit 5.2.			
(d)	These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.			
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.			

**Developed Loss Ratio Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Indemnity				Medical			
Accident Year	Reported Paid Loss Ratio(a)	Annual Development Factor(b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Paid Loss Ratio(a)	Annual Development Factor(c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)
2006	0.149	1.011	1.080	0.161	0.212	1.017	1.250	0.265	0.425
2007	0.202	1.014	1.096	0.222	0.293	1.020	1.275	0.374	0.595
2008	0.253	1.018	1.115	0.282	0.361	1.024	1.306	0.471	0.753
2009	0.289	1.024	1.142	0.331	0.412	1.028	1.342	0.554	0.884
2010	0.274	1.029	1.174	0.322	0.397	1.033	1.387	0.550	0.872
2011	0.247	1.038	1.220	0.301	0.329	1.043	1.446	0.476	0.777
2012	0.213	1.054	1.285	0.274	0.270	1.059	1.531	0.414	0.688
2013	0.173	1.077	1.385	0.240	0.207	1.082	1.656	0.343	0.583
2014	0.150	1.121	1.552	0.232	0.167	1.123	1.861	0.312	0.544
2015	0.124	1.217	1.888	0.233	0.136	1.204	2.241	0.304	0.537
2016	0.082	1.489	2.811	0.230	0.098	1.379	3.090	0.302	0.533
2017	0.036	2.441	6.864	0.246	0.056	1.922	5.938	0.333	0.579

(a) Based on AC18-06-01, Exhibit 1.

(b) Age-to-age factors are selected as three-year averages based on AC18-06-01, Exhibit 2.5.

(c) Age-to-age factors are selected as three-year averages based on AC18-06-01, Exhibit 2.6. These factors have not been adjusted for any reforms.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.304
2012	0.274	1.281	1.159	0.303
2013	0.240	1.241	1.012	0.294
2014	0.232	1.124	0.933	0.280
2015	0.233	1.095	0.891	0.287
2016	0.230	1.082	0.911	0.274
2017	0.246	1.062	0.964	0.271
				Projected (d)
2018				0.270
2019				0.267
1/1/2020				0.264

(a) See Exhibit 6.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted 3-Year Average Paid Development Factors
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.265	0.863	0.941	0.243
2007	0.374	0.868	1.203	0.270
2008	0.471	0.867	1.453	0.281
2009	0.554	0.855	1.567	0.302
2010	0.550	0.853	1.425	0.329
2011	0.476	0.868	1.301	0.317
2012	0.414	0.894	1.159	0.319
2013	0.343	0.961	1.012	0.326
2014	0.312	1.000	0.933	0.334
2015	0.304	1.000	0.891	0.341
2016	0.302	0.996	0.911	0.331
2017	0.333	0.994	0.964	0.343
				Projected (d)
2018				0.350
2019				0.356
1/1/2020				0.356

- (a) See Exhibit 6.1.
- (b) Based on AC18-06-01, Exhibit 4.4.
- (c) See AC18-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.
- (e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratio Unadjusted Latest Year Paid Development Factors
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Reported Paid Loss Ratio(a)	Annual Development Factor(b)	Cumulative Development Factor	Developed Loss Ratio (1) x (3)	Reported Paid Loss Ratio(a)	Annual Development Factor(c)	Cumulative Development Factor	Developed Loss Ratio (5) x (7)	Total Developed Loss Ratio (4) + (8)
2006	0.149	1.011	1.080	0.161	0.212	1.017	1.250	0.265	0.425
2007	0.202	1.014	1.096	0.222	0.293	1.020	1.275	0.374	0.595
2008	0.253	1.018	1.115	0.282	0.361	1.024	1.306	0.471	0.753
2009	0.289	1.024	1.142	0.331	0.412	1.028	1.342	0.554	0.884
2010	0.274	1.029	1.175	0.322	0.397	1.029	1.381	0.548	0.870
2011	0.247	1.036	1.217	0.301	0.329	1.039	1.435	0.472	0.773
2012	0.213	1.053	1.282	0.273	0.270	1.055	1.514	0.409	0.682
2013	0.173	1.075	1.378	0.239	0.207	1.076	1.629	0.337	0.576
2014	0.150	1.111	1.531	0.229	0.167	1.111	1.810	0.303	0.532
2015	0.124	1.215	1.860	0.230	0.136	1.194	2.161	0.293	0.523
2016	0.082	1.476	2.745	0.225	0.098	1.359	2.937	0.287	0.512
2017	0.036	2.402	6.594	0.236	0.056	1.875	5.506	0.309	0.545

- (a) Based on AC18-06-01, Exhibit 1.
 (b) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC18-06-01, Exhibit 2.5.
 (c) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC18-06-01, Exhibit 2.6. These factors have not been adjusted for any reforms.

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

Accident Year	(1) Developed Indemnity <u>Loss Ratio(a)</u>	(2) Composite Indemnity <u>Adjustment Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.239	1.241	1.012	0.293
2014	0.229	1.124	0.933	0.276
2015	0.230	1.095	0.891	0.282
2016	0.225	1.082	0.911	0.267
2017	0.236	1.062	0.964	0.260
				Projected (d)
2018				0.262
2019				0.258
1/1/2020				0.255

(a) See Exhibit 7.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

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

Accident Year	(1) Developed Medical <u>Loss Ratio(a)</u>	(2) Composite Medical <u>Adjustment Factor(b)</u>	(3) Composite Premium <u>Adjustment Factor(c)</u>	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.265	0.863	0.941	0.243
2007	0.374	0.868	1.203	0.270
2008	0.471	0.867	1.453	0.281
2009	0.554	0.855	1.567	0.302
2010	0.548	0.853	1.425	0.328
2011	0.472	0.868	1.301	0.315
2012	0.409	0.894	1.159	0.316
2013	0.337	0.961	1.012	0.320
2014	0.303	1.000	0.933	0.325
2015	0.293	1.000	0.891	0.329
2016	0.287	0.996	0.911	0.314
2017	0.309	0.994	0.964	0.318
				Projected (d)
2018				0.328
2019				0.334
1/1/2020				0.335
(a)	See Exhibit 7.1.			
(b)	Based on AC18-06-01, Exhibit 4.4.			
(c)	See AC18-06-01, Exhibit 5.2.			
(d)	These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.			
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.			

**Developed Loss Ratios Adjusted for the Impact of Reforms
Based on Paid Latest Year Selections
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
					Adjusted					
Accident Year	Paid Loss Ratio(a)	Development Factors		Developed Loss Ratio	Paid Loss Ratio(a)	Paid Loss Ratio(c)	Development Factors		Developed Loss Ratio	Total Developed Loss Ratio
		Annual(b)	Cumulative(b)	(1) x (3)			Annual(d)	Cumulative(d)	(6) x (8)	(4) + (9)
2006	0.149	1.011	1.080	0.161	0.212	0.198	1.018	1.257	0.248	0.409
2007	0.202	1.014	1.096	0.222	0.293	0.274	1.022	1.285	0.352	0.574
2008	0.253	1.018	1.115	0.282	0.361	0.338	1.026	1.318	0.446	0.728
2009	0.289	1.024	1.142	0.331	0.412	0.389	1.030	1.358	0.528	0.858
2010	0.274	1.029	1.175	0.322	0.397	0.377	1.031	1.400	0.527	0.849
2011	0.247	1.036	1.217	0.301	0.329	0.316	1.041	1.458	0.460	0.761
2012	0.213	1.053	1.282	0.273	0.270	0.263	1.059	1.537	0.404	0.677
2013	0.173	1.075	1.405	0.244	0.207	0.205	1.080	1.650	0.338	0.581
2014	0.150	1.111	1.607	0.240	0.167	0.167	1.115	1.827	0.305	0.545
2015	0.124	1.215	1.953	0.241	0.136	0.136	1.198	2.171	0.294	0.536
2016	0.082	1.476	2.882	0.236	0.098	0.098	1.361	2.934	0.287	0.523
2017	0.036	2.402	6.924	0.248	0.056	0.056	1.876	5.481	0.307	0.555

- (a) Based on AC18-06-01, Exhibit 1. For medical, Paid M CCP costs are excluded from accident years 2011 and subsequent. Column 5 is shown for informational purposes only.
- (b) Based on AC18-06-01, Exhibit 2.5.1 and includes adjustments for SB 863. Does not reflect any adjustment for changes in claim settlement rates.
- (c) See AC18-06-01, Exhibit 3.2, Column (2).
- (d) Based on AC18-06-01, Exhibit 2.6.1 and includes adjustments for SB 863 and SB 1160. Does not reflect any adjustment for changes in claim settlement rates.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Latest Year Paid Development Adjusted for Reforms
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.244	1.241	1.012	0.299
2014	0.240	1.124	0.933	0.290
2015	0.241	1.095	0.891	0.296
2016	0.236	1.082	0.911	0.280
2017	0.248	1.062	0.964	0.273
				Projected (d)
2018				0.275
2019				0.271
1/1/2020				0.268

(a) See Exhibit 8.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Latest Year Paid Development Adjusted for Reforms
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.338	1.005	1.012	0.335
2014	0.305	1.011	0.933	0.330
2015	0.294	1.012	0.891	0.334
2016	0.287	1.012	0.911	0.319
2017	0.307	1.013	0.964	0.323
				Projected (d)
2018				0.333
2019				0.339
1/1/2020				0.340

(a) See Exhibit 8.1.

(b) Based on AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Indemnity					Medical			
							Adjusted			
Accident Year	Paid Loss Ratio(a)	Development Factors		Developed Loss Ratio	Paid Loss Ratio(a)	Paid Loss Ratio(c)	Development Factors		Developed Loss Ratio	Total Developed Loss Ratio
		Annual(b)	Cumulative(b)	(1) x (3)			Annual(d)	Cumulative(d)	(6) x (8)	(4) + (9)
2006	0.149	1.011	1.080	0.161	0.212	0.198	1.018	1.257	0.248	0.409
2007	0.202	1.014	1.096	0.222	0.293	0.274	1.022	1.285	0.352	0.574
2008	0.253	1.018	1.115	0.282	0.361	0.338	1.026	1.318	0.446	0.728
2009	0.289	1.024	1.142	0.331	0.412	0.389	1.030	1.358	0.528	0.858
2010	0.274	1.029	1.174	0.322	0.397	0.377	1.031	1.400	0.527	0.849
2011	0.247	1.036	1.217	0.301	0.329	0.316	1.041	1.458	0.460	0.761
2012	0.213	1.053	1.281	0.273	0.270	0.263	1.059	1.537	0.404	0.677
2013	0.173	1.065	1.391	0.241	0.207	0.205	1.076	1.644	0.336	0.578
2014	0.150	1.110	1.589	0.238	0.167	0.167	1.121	1.829	0.305	0.543
2015	0.124	1.199	1.906	0.236	0.136	0.136	1.198	2.174	0.295	0.530
2016	0.082	1.469	2.801	0.230	0.098	0.098	1.375	2.966	0.290	0.520
2017	0.036	2.444	6.846	0.245	0.056	0.056	1.936	5.718	0.321	0.566

- (a) Based on AC18-06-01, Exhibit 1. Column 5 is shown for informational purposes only.
- (b) Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC18-06-01, Exhibit 2.5.8, Item Q). The cumulative loss development factors for developing accident years 2013 through 2017 are adjusted for the impact of SB 863 (see AC18-06-01, Exhibit 2.5.1).
- (c) See AC18-06-01, Exhibit 3.2, Column (2).
- (d) Based on AC18-06-01, Exhibits 2.6.1 and includes adjustments for SB 863 and SB 1160. Age-to-age factors for developing accident years 2013 to 2017 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC18-06-01, Exhibit 2.6.8, Item R).

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)
Accident Year	Developed Indemnity Loss Ratio(a)	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.238	1.124	0.933	0.286
2015	0.236	1.095	0.891	0.289
2016	0.230	1.082	0.911	0.272
2017	0.245	1.062	0.964	0.270
				Projected (d)
2018				0.269
2019				0.266
1/1/2020				0.263

(a) See Exhibit 9.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates
Based on 3-Year Average Selections
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.336	1.005	1.012	0.334
2014	0.305	1.011	0.933	0.331
2015	0.295	1.012	0.891	0.335
2016	0.290	1.012	0.911	0.322
2017	0.321	1.013	0.964	0.337
<hr/>				
				Projected (d)
2018				0.342
2019				0.348
1/1/2020				0.349

(a) See Exhibit 9.1.

(b) Based on AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Developed Loss Ratio Using Latest Year Paid Loss Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Indemnity				Medical				
Accident Year	Paid Loss Ratio(a)	Annual Development Factor	Cumulative Development Factor(b)	Developed Loss Ratio(c)	Paid Loss Ratio(a)	Annual Development Factor	Cumulative Development Factor(d)	Developed Loss Ratio(c)	Total Developed Loss Ratio (4) + (8)
2006	0.149	---	1.035	0.154	0.234	---	1.106	0.259	0.412
2007	0.202	---	1.062	0.215	0.327	---	1.127	0.368	0.583
2008	0.253	---	1.106	0.279	0.403	---	1.171	0.472	0.751
2009	0.289	---	1.142	0.331	0.462	---	1.204	0.557	0.887
2010	0.274	---	1.184	0.325	0.442	---	1.252	0.554	0.878
2011	0.247	---	1.218	0.301	0.377	---	1.244	0.470	0.771
2012	0.213	---	1.276	0.272	0.317	---	1.282	0.407	0.678
2013	0.173	---	1.368	0.237	0.250	---	1.333	0.334	0.571
2014	0.150	---	1.528	0.229	0.214	---	1.408	0.301	0.530
2015	0.124	---	1.846	0.228	0.196	---	1.482	0.290	0.518
2016	0.082	---	2.729	0.224	0.170	---	1.674	0.284	0.508
2017	0.036	---	6.540	0.234	0.139	---	2.190	0.305	0.539

- (a) Based on AC18-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.
- (b) Column (4) divided by Column (1).
- (c) Developed loss ratios were derived by averaging the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by Calendar year 2017 earned premium at the advisory pure premium rate level.
- (d) Column (8) divided by Column (5).

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Paid Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.154	1.511	0.941	0.247
2007	0.215	1.464	1.203	0.261
2008	0.279	1.379	1.453	0.265
2009	0.331	1.352	1.567	0.285
2010	0.325	1.333	1.425	0.304
2011	0.301	1.312	1.301	0.304
2012	0.272	1.281	1.159	0.300
2013	0.237	1.241	1.012	0.291
2014	0.229	1.124	0.933	0.275
2015	0.228	1.095	0.891	0.280
2016	0.224	1.082	0.911	0.265
2017	0.234	1.062	0.964	0.258
				Projected (d)
2018				0.260
2019				0.257
1/1/2020				0.253

(a) See Exhibit 10.1.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Using Unadjusted Paid Development Factors
Adjusted for Insurer Mix
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.259	0.863	0.941	0.237
2007	0.368	0.868	1.203	0.266
2008	0.472	0.867	1.453	0.281
2009	0.557	0.855	1.567	0.304
2010	0.554	0.853	1.425	0.331
2011	0.470	0.868	1.301	0.313
2012	0.407	0.894	1.159	0.314
2013	0.334	0.961	1.012	0.317
2014	0.301	1.000	0.933	0.323
2015	0.290	1.000	0.891	0.326
2016	0.284	0.996	0.911	0.311
2017	0.305	0.994	0.964	0.315
				Projected (d)
2018				0.324
2019				0.330
1/1/2020				0.331

- (a) See Exhibit 10.1.
- (b) Based on AC18-06-01, Exhibit 4.4.
- (c) See AC18-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.
- (e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

**Projected Indemnity Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method
Accident Year 2017 Indemnity Projected from 15 Months to 27 Months**

1. AY 2017 Reported Paid Indemnity Loss Ratio at 15 Months (Based on Exhibit 1 of AC18-06-01)	0.036
2. Reported Paid Indemnity Loss Ratios at 27 Months for ELR	
a) AY 2015 (Based on March 31, 2017 Experience)	0.084
b) AY 2016 (Based on Exhibit 1 of AC18-06-01)	0.082
3. Frequency Adjustments to AY 2017 (Based on Exhibit 12 of AC18-06-01)	
a) AY 2015-2016 Frequency Change	-3.4%
b) AY 2016-2017 Frequency Change	-0.3%
4. Average Indemnity Severity Change, AY 2011-2016 (Based on Exhibit 6.2 of AC18-06-01)	-2.1%
5. Composite Indemnity On-Level Adjustment Factors (Based on Exhibit 4.1 of AC18-06-01)	
a) AY 2015 to Current	1.095
b) AY 2016 to Current	1.082
c) AY 2017 to Current	1.062
6. Composite Premium On-Level Adjustment Factors (Based on Exhibit 5.2 of AC18-06-01)	
a) AY 2015 to Current	0.891
b) AY 2016 to Current	0.911
c) AY 2017 to Current	0.964
7. AY 2017 Expected Paid Indemnity Loss Ratio at 27 Months	
a) Projected from 2015 = (2a) * [1 + (3a)] * [1 + (4)]^2 * [(5a) / (5c)] / [(6a) / (6c)]	0.086
b) Projected from 2016 = (2b) * [1 + (3b)] * [1 + (4)] * [(5b) / (5c)] / [(6b) / (6c)]	0.086
c) Average of 2015 and 2016 Projections = [(7a) + (7b)] / 2	0.086
8. Projected Indemnity 15-to-27 Paid Development Factor (Based on Exhibit 2.5.1 of AC18-06-01)	2.383
9. Projected AY 2017 Paid Indemnity Loss Ratio at 27 Months = (1) + (7c) * [1 - 1 / (8)]	0.086

**Projected Medical Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method
Accident Year 2017 Medical Projected from 15 Months to 27 Months**

	Adjusted for <u>Reforms¹</u>
1. AY 2017 Reported Paid Medical Loss Ratio at 15 Months (Based on Exhibit 1 of AC18-06-01)	0.056
2. Reported Paid Medical Loss Ratios at 27 Months for ELR	
a) AY 2015 (Based on March 31, 2017 Experience)	0.100
b) AY 2016 (Based on Exhibit 1 of AC18-06-01)	0.098
3. Frequency Adjustments to AY 2017 (Based on Exhibit 12 of AC18-06-01)	
a) AY 2015-2016 Frequency Change	-3.4%
b) AY 2016-2017 Frequency Change	-0.3%
4. Average Medical Severity Change, AY 2011-2016 (Based on Exhibit 6.4 of AC18-06-01)	-1.6%
5. Composite Medical On-Level Adjustment Factors (Based on Exhibit 4.4 of AC18-06-01)	
a) AY 2015 to Current	1.012
b) AY 2016 to Current	1.012
c) AY 2017 to Current	1.013
6. Composite Premium On-Level Adjustment Factors (Based on Exhibit 5.2 of AC18-06-01)	
a) AY 2015 to Current	0.891
b) AY 2016 to Current	0.911
c) AY 2017 to Current	0.964
7. AY 2017 Expected Paid Medical Loss Ratio at 27 Months	
a) Projected from 2015 = (2a) * [1 + (3a)] * [1 + (3b)] * [1 + (4)]^2 * [(5a) / (5c)] / [(6a) / (6c)]	0.100
b) Projected from 2016 = (2b) * [1 + (3b)] * [1 + (4)] * [(5b) / (5c)] / [(6b) / (6c)]	0.101
c) Average of 2015 and 2016 Projections = [(7a) + (7b)] / 2	0.101
8. Projected Medical 15-to-27 Paid Development Factor (Based on Exhibit 2.6.1 of AC18-06-01)	1.873
9. Projected AY 2017 Paid Medical Loss Ratio at 27 Months = (1) + (7c) * [1 - 1 / (8)]	0.103

¹ Based on experience evaluated as of March 31, 2018. Reflects adjustments for SB 863 and SB 1160.

**Developed Loss Ratios Using Latest Year Reform Adjusted Development Factors - BF Adjusted Age 15 Loss Ratio
Based on Experience as of March 31, 2018**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity					Medical				
			Cumulative Dev. Factor			Adjusted				
Accident	Reported	Annual	Unadjusted	Adjusted	Developed	Paid	Development Factors		Developed	Total
Year	Paid	Development	Unadjusted	Adjusted	Loss Ratio	Loss Ratio(c)	Annual(d)	Cumulative	Loss Ratio	Developed
	Loss Ratio(a)	Factor(b)	for SB863	for SB863	Loss Ratio (1) x (4)	Loss Ratio(c)	Annual(d)	Cumulative	Loss Ratio (6) x (8)	Loss Ratio (5) + (9)
2006	0.149	1.011	1.080	1.080	0.161	0.198	1.018	1.257	0.248	0.409
2007	0.202	1.014	1.096	1.096	0.222	0.274	1.022	1.285	0.352	0.574
2008	0.253	1.018	1.115	1.115	0.282	0.338	1.026	1.318	0.446	0.728
2009	0.289	1.024	1.142	1.142	0.331	0.389	1.030	1.358	0.528	0.858
2010	0.274	1.029	1.175	1.175	0.322	0.377	1.031	1.400	0.527	0.849
2011	0.247	1.036	1.217	1.217	0.301	0.316	1.041	1.458	0.460	0.761
2012	0.213	1.053	1.282	1.282	0.273	0.263	1.059	1.537	0.404	0.677
2013	0.173	1.064	1.363	1.391	0.241	0.205	1.071	1.644	0.336	0.578
2014	0.150	1.102	1.503	1.578	0.236	0.167	1.107	1.829	0.305	0.541
2015	0.124	1.197	1.799	1.889	0.233	0.136	1.184	2.174	0.295	0.528
2016	0.082	1.454	2.615	2.746	0.225	0.098	1.349	2.829	0.277	0.502
2017	0.086		2.615	2.746	0.236	0.103		2.829	0.292	0.528

(a) Based on AC18-06-01, Exhibit 1. The 2017 indemnity loss ratio is based on Exhibit 11.1.

(b) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC18-06-01, Exhibit 2.5.

(c) Based on experience evaluated as of March 31, 2018. Reflects adjustments for SB 863 and SB 1160. The 2017 medical loss ratio is based on Exhibit 11.2.

(d) Age-to-age factors are selected as latest year for for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC18-06-01, Exhibit 2.6. Reflects an adjustment for SB 863 and SB 1160.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months
Based on Experience as of March 31, 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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.236	1.062	0.964	0.260
				Projected (d)
2018				0.262
2019				0.258
1/1/2020				0.255

(a) See Exhibit 11.3.

(b) Based on AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.336	1.005	1.012	0.334
2014	0.305	1.011	0.933	0.331
2015	0.295	1.012	0.891	0.335
2016	0.277	1.012	0.911	0.307
2017	0.292	1.013	0.964	0.307
				Projected (d)
2018				0.319
2019				0.324
1/1/2020				0.325

- (a) See Exhibit 11.3.
(b) Based on AC18-06-01, Exhibit 4.4.
(c) See AC18-06-01, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.
(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Year 2017
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.257
2019				0.254
1/1/2020				0.250

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-06-01, Exhibit 6.2, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 on-level ratio.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Severity Trends
Applied to Accident Year 2017
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.318
2019				0.324
1/1/2020				0.325

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-06-01, Exhibit 6.4, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 on-level ratio.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.268
2019				0.269
1/1/2020				0.268

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on the 1990-2017 annual indemnity severity trend of 1.7%, the actual frequency change for 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Long-Term Severity Trends
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.335
2019				0.351
1/1/2020				0.357

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on the 1990-2017 annual medical severity trend of 6.0%, the actual frequency change for 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.255
2019				0.248
1/1/2020				0.244

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on the 2013-2017 annual indemnity severity trend of -1.4%, the actual frequency change for 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Separate Applications of Frequency and Short-Term Severity Trends
Based on Experience as of March 31, 2018**

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.305
2019				0.300
1/1/2020				0.296

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on the 2013-2017 annual medical severity trend of -0.4%, the actual frequency change for 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).
Accident years 2010 and prior do reflect paid MCCP costs.

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

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.311
2019				0.311
1/1/2020				0.308

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated medical severity trend of 1.0%, the actual frequency change for 2017 from AC18-06-01, Exhibit 12, and projected frequency trends for accident years 2018 to 2020 from AC18-06-01, Exhibit 6.1; these trends were then separately applied to the 2016 and 2017 on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).
Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Long-Term Exponential Loss Ratio Trend
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) x (2) ÷ (3)
1990	0.400	1.168	1.728	0.270
1991	0.427	0.962	1.563	0.263
1992	0.352	1.015	1.424	0.251
1993	0.289	1.231	1.374	0.259
1994	0.329	1.287	1.556	0.273
1995	0.476	1.192	2.043	0.278
1996	0.534	1.114	2.113	0.281
1997	0.604	0.997	2.052	0.294
1998	0.657	0.920	2.060	0.293
1999	0.691	0.852	1.958	0.301
2000	0.597	0.796	1.548	0.307
2001	0.495	0.800	1.342	0.295
2002	0.369	0.819	1.033	0.292
2003	0.243	0.818	0.734	0.270
2004	0.145	1.126	0.661	0.247
2005	0.124	1.529	0.732	0.259
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.263
2019				0.263
1/1/2020				0.263

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by separately applying an exponential trend of approximately 0.1% based on the 1990 to 2017 on-level indemnity to industry average filed pure premium ratios to each of the 2016 and 2017 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

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

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)	(5) On-Level Medical to Industry Average Filed Pure Premium Ratio(f)
1990	0.379	0.687	1.728	0.151	0.151
1991	0.397	0.587	1.563	0.149	0.149
1992	0.331	0.619	1.424	0.144	0.144
1993	0.277	0.742	1.374	0.149	0.149
1994	0.321	0.777	1.556	0.160	0.160
1995	0.471	0.766	2.043	0.177	0.177
1996	0.506	0.756	2.113	0.181	0.181
1997	0.567	0.749	2.052	0.207	0.207
1998	0.747	0.660	2.060	0.239	0.239
1999	0.697	0.572	1.958	0.203	0.203
2000	0.636	0.525	1.548	0.216	0.216
2001	0.565	0.479	1.342	0.202	0.202
2002	0.441	0.497	1.033	0.212	0.212
2003	0.283	0.522	0.734	0.201	0.201
2004	0.194	0.789	0.661	0.231	0.231
2005	0.191	0.916	0.732	0.239	0.239
2006	0.248	0.963	0.941	0.254	0.254
2007	0.352	0.945	1.203	0.277	0.277
2008	0.446	0.938	1.453	0.288	0.288
2009	0.528	0.925	1.567	0.311	0.311
2010	0.527	0.922	1.425	0.341	0.341
2011	0.460	0.938	1.301	0.332	0.365
2012	0.404	0.975	1.159	0.340	0.374
2013	0.335	1.005	1.012	0.332	0.365
2014	0.300	1.011	0.933	0.325	0.357
2015	0.286	1.012	0.891	0.325	0.356
2016	0.277	1.012	0.911	0.307	0.337
2017	0.296	1.013	0.964	0.311	0.340
Projected(d)					
2018				0.327	
2019				0.339	
1/1/2020				0.346	

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by separately applying an exponential trend of approximately 3.8% based on the 1990 to 2017 on-level medical to industry average filed pure premium ratios (including MCCP costs) to each of the 2016 and 2017 on-level medical to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

(f) Medical costs include the paid cost of medical cost containment programs (MCCP) for all accident years for selecting the loss ratio trend.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Short-Term Exponential Loss Ratio Trend
Based on Experience as of 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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.250
2019				0.241
1/1/2020				0.237

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by separately applying an exponential trend of approximately -3.3% based on the 2013 to 2017 on-level indemnity to industry average filed pure premium ratios to each of the 2016 and 2017 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

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

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.300
2019				0.294
1/1/2020				0.291

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by separately applying an exponential trend of approximately -2.0% based on the 2013 to 2017 on-level medical to industry average filed pure premium ratios to each of the 2016 and 2017 on-level medical to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Short-Term Fitted Exponential Loss Ratio Trend
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) x (2) ÷ (3)
2006	0.161	1.511	0.941	0.258
2007	0.222	1.464	1.203	0.270
2008	0.282	1.379	1.453	0.267
2009	0.331	1.352	1.567	0.285
2010	0.322	1.333	1.425	0.301
2011	0.301	1.312	1.301	0.303
2012	0.273	1.281	1.159	0.302
2013	0.241	1.241	1.012	0.296
2014	0.236	1.124	0.933	0.284
2015	0.233	1.095	0.891	0.287
2016	0.225	1.082	0.911	0.267
2017	0.234	1.062	0.964	0.258
				Projected(d)
2018				0.252
2019				0.243
1/1/2020				0.239

(a) See AC18-06-01, Exhibit 3.1.

(b) See AC18-06-01, Exhibit 4.1.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by fitting an exponential trend to the 2013 to 2017 on-level indemnity to industry average filed pure premium ratios.

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

Accident Year	(1) Developed Medical Loss Ratio(a)	(2) Composite Medical Adjustment Factor(b)	(3) Composite Medical Adjustment Factor(c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2006	0.248	0.963	0.941	0.254
2007	0.352	0.945	1.203	0.277
2008	0.446	0.938	1.453	0.288
2009	0.528	0.925	1.567	0.311
2010	0.527	0.922	1.425	0.341
2011	0.460	0.938	1.301	0.332
2012	0.404	0.975	1.159	0.340
2013	0.335	1.005	1.012	0.332
2014	0.300	1.011	0.933	0.325
2015	0.286	1.012	0.891	0.325
2016	0.277	1.012	0.911	0.307
2017	0.296	1.013	0.964	0.311
				Projected(d)
2018				0.303
2019				0.297
1/1/2020				0.294

(a) See AC18-06-01, Exhibit 3.2.

(b) See AC18-06-01, Exhibit 4.4.

(c) See AC18-06-01, Exhibit 5.2.

(d) These on-level ratios were projected by fitting an exponential trend to the 2013 to 2017 on-level medical to industry average filed pure premium ratios.

(e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

Item AC18-08-04

Study of Case Reserve-Adjusted Loss Development Methodology

For a number of years, the Committee's regular review of alternative loss development methodologies has included a review of an incurred loss development methodology that adjusts for changes in case reserve levels. This methodology has been based on the Berquist-Sherman approach to adjust for changes in case reserve adequacy.¹ Given that it has been many years since the WCIRB reviewed the assumptions and mechanics of this approach in detail and that there were indications that recent case reserve adequacy level shifts were likely affecting incurred development patterns, at the December 6, 2017 meeting, the Committee recommended that staff undertake such a review. Staff's analysis of this methodology is summarized below.

Overview of Methodology

The Berquist-Sherman approach for adjusting incurred loss development for changes in case reserve levels is intended to correct for distortions in incurred loss development patterns that can occur when case reserves become significantly more or less adequate. Potential shifts in case reserve levels are primarily evaluated by comparing changes in average case reserves per open claim to changes in average paid losses per closed claim. If there is a difference between the rates of change in these two measures, then case reserves are becoming either more or less adequate. If not adjusted for, this change may distort incurred loss development patterns as it would project the one-time shift in case reserve levels into the future in the incurred loss development factors.

In order to adjust for the potential distortion caused by a shift in case reserve adequacy, the Berquist-Sherman method begins with the latest calendar year of average case reserves per open claim at each maturity (which are assumed to be post-shift) and applies a "deflation" factor to each of those severities using an estimated inflation rate to restate the average case reserves for prior accident years. The selected trend rate in the original approach is based on the average annual change in average paid per closed claim, which is assumed to be unaffected by the shift in case reserve adequacy. The restated average case reserves are then multiplied by the number of open claims for each year and maturity and added to the corresponding paid loss amounts to create an adjusted incurred loss triangle from which adjusted incurred loss development factors can be computed.

The complexities around California workers' compensation have required some modifications to the application of the original Berquist-Sherman approach to this system. First, given the significant impact reforms and other system changes have had on claim costs over the last several years, average rates of growth computed based on unadjusted case reserves per open claim or paid losses per closed claim can be significantly affected. As a result, in applying this method, the WCIRB has on-leveled the losses (both paid and incurred) used in the methodology. Second, even after on-leveling for the impact of reforms and other changes on costs, rates of growth in claim severities have not been consistent over time or consistent between paid losses and incurred losses. As a result, in applying this method, the WCIRB has judgmentally selected a trend rate to apply to the case reserves per open indemnity claim based on a review of recent growth in on-level paid losses per closed claim. Finally, rather than adjusting the entire triangle of average case reserves, the WCIRB has historically only applied this adjustment to the less mature development periods.

Study Approach

This adjustment is generally only appropriate in an environment in which case reserve levels are shifting, typically measured as a difference in trends between case reserves per open claim and paid losses per closed claim. Exhibits 1.1 and 1.2 show changes in average reported case reserves per open indemnity

¹ *Loss Reserve Adequacy Testing: A Comprehensive, Systematic Approach*, James R. Berquist and Richard E. Sherman, 1977 *Proceedings of the Casualty Actuarial Society*, Volume LXIV.

claim. Exhibits 2.1 and 2.2 show changes in average reported paid per closed indemnity claim. Exhibit 3 shows the differences in the annual changes between these two measures. (All data in these exhibits is as of December 31, 2017.) As shown in Exhibit 3, changes in average case reserve levels can differ significantly from the change in average paid per closed claim. The original Berquist-Sherman approach assumes a shift in case reserve adequacy as a calendar year effect. However, as shown in Exhibit 3, the differences in the change in average paid per closed claim and average case reserves per open claim are also significant on an accident year basis, with average case outstanding trends significantly less than average paid per closed claim trends for the 1996 through 2002 and 2006 through 2009 accident years and significantly greater for the 2003 through 2005 accident years. It is not coincidental that these are also periods of reform or significant change in the California workers' compensation system. These differences may also be impacted by the mix of large and small claims within an accident year as well as changes in the insurer mix, particularly at late maturities. These accident year effects are not fully contemplated by the WCIRB's current Berquist-Sherman approach, which assumes changes to be consistent in these measures except during calendar year periods of case reserve adequacy shifts.

In order to correct for some of the issues that may distort the review of average paid and average case reserve data, staff reviewed a number of alternative diagnostic measures. Exhibit 4 shows the difference across accident years in the comparisons shown in Exhibit 3, i.e., the development of the difference between case reserves per open claim and paid per closed claim over time. Exhibits 5.1 and 5.2 show age-to-age development of average case reserves per open claim and the annual change in the age-to-age factor. Although changes in average case reserve development can also be impacted by large adjustments to individual claims, in general this measure can help identify calendar periods of shifting case reserve levels. As shown in Exhibit 4 and Exhibit 5.2 for medical, there has been a general downward shift in average case reserve levels since 2014, particularly for later maturities, which had been preceded by a relatively more stable period.

Staff attempted to retrospectively test the current adjustment approach as well as alternative approaches. However, this was challenging for several reasons. First, loss development projections are based on data from all insurers writing business in California, and shifts in case reserve levels can differ in timing and magnitude by insurer. As a result, these shifts can span more than a single calendar period when using statewide data. This can impact the "actual emerging" development during the next period that is typically used in a retrospective test, which may also be impacted by the shift. A longer-term view is needed to effectively test the accuracy of these adjustments. However, this is problematic since a longer-term view requires the use of very old accident years, which have been significantly impacted by several reforms and other system changes in addition to shifts in case reserve adequacy. Due to these concerns, staff instead focused on the relative impact of the adjustments compared to the unadjusted incurred and unadjusted paid method as well as each method's relative stability over time.

The primary components of this methodology review were (a) the data used in the methodology, (b) the average case reserve inflation assumption, and (c) the number of periods and years to which the adjustment should be applied.

Review of Data Used

The principal data used in the adjustment to incurred indemnity development is the average paid per closed indemnity claim, average case outstanding per open indemnity claim, and the number of open and closed indemnity claims. For medical, the adjustment has in the past been based on total claim counts rather than closed indemnity claim counts inasmuch as paid medical losses on closed indemnity claims was not reported to the WCIRB until more recent years. In addition, paid medical on closed claims for accident years 2010 through 2012 are impacted by the change to the reporting requirements for medical cost containment program (MCCP) costs for those years. There are now several calendar periods of paid medical per closed indemnity claim data available. Additionally, staff believes the impact of the MCCP data change on this adjustment is now small given that 2010 through 2012 have matured. As a result, staff recommends basing the adjustment for medical using indemnity claims similar to how the adjustment

is applied for indemnity losses. Reviews of changes in average paid medical costs for accident years 2010 through 2012 will continue to be based on paid medical per total claim (adjusted to include all paid M CCP costs) for consistency of comparison (as shown in Exhibit 2.2).

In order to select the appropriate severity inflation assumption, the WCIRB has historically on-leveled the average paid per closed claim data so that reform impacts are not reflected in the trend. For consistency, the case reserves per open claim have also been on-leveled prior to applying the selected trend factor. The same accident year on-level adjustments have been applied to both the average paid per closed claim and average case reserves per open claim at every maturity, which are based on the on-level factors applied to the projected loss ratios but removing claim frequency impacts and including the impact of any reforms that are applied in the loss development adjustments. Staff believes this may not be the optimal approach given that reforms likely impact paid losses and case reserves differently and the impact also likely differs by maturity. However, as discussed at prior Committee meetings, assessing the impact of reforms on case reserves is very challenging in that detailed data on the drivers of changes in case reserves is not available and the impact on case reserves also likely differs significantly by insurer. In addition, staff plans to review the on-leveling approach to medical losses later this year given that medical reforms typically are effective on a date-of-service basis rather than an accident date basis. As a result, staff does not recommend any changes to the on-level factors used in this approach at this time. Instead, staff reviewed a number of alternative approaches that potentially do not require on-leveling to select an inflation factor.

Review of Inflation Assumption

The current approach to select the inflation rate to apply to the average case reserves in the case reserve-adjusted methodology is based on a review of average paid per closed claim adjusted to a common benefit level. Staff has typically judgmentally selected the inflation rate based on applying a six-year exponential trend to the average paid per closed claim at each evaluation used in the adjustment (currently the six earliest evaluations) and then taking the average of the annual exponential trend rates across these evaluations. This approach is judgmental and may not be ideal in that (a) the on-level adjustments applied to the paid per closed severities may not be appropriate as discussed above, (b) a single rate of inflation may not be appropriate at all maturities given that each maturity includes a mix of different accident years, and (c) it is dependent on judgmentally selecting a number of years to include in the exponential trend and the number of evaluations for which the adjustment is applied.

Staff reviewed several alternative approaches to selecting the inflation rate used in this adjustment that rely on different assumptions than the current approach. The approaches reviewed are summarized in Exhibits 6.1 and 6.2 and described below.

- A. The current approach, which selects a single trend for all periods based on a six-year average exponential trend of on-level paid per closed indemnity claim² at each maturity and averaging the annual trend rates across all maturities, applying it to on-leveled average case reserves per open claim, and using latest year factors (Single Trend – Latest Yr).
- B. Method A using three-year average factors (Single Trend – 3-Yr Avg).
- C. A single trend for all periods selected based on the selected indemnity or medical severity trend from the most recent pure premium rate filing available at the time of that analysis, applying it to reported (not on-leveled) average case reserves per open claim, and using latest year factors (Filing Trend – Latest Yr).

² For this method and the alternative methods for medical, paid medical per closed indemnity claim was used. For comparison, projections based on paid medical per total claim (the WCIRB's prior approach to the medical adjustment) are also shown in Exhibit 6.2.

- D. A different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (i.e., applying the annual changes shown on the lower section of Exhibits 2.1 and 2.2), applying it to reported (not on-leveled) average case reserves per open claim, and using latest year factors (Trend by Year / Age – Latest Yr).
- E. Method D using three-year average factors (Trend by Year / Age – 3-Yr Avg).
- F. A different annual trend selected for each maturity based on a six-year average exponential trend of on-level paid per closed indemnity claim at each maturity, applying it to on-leveled average case reserves per open claim, and using latest year factors (Trend by Age – Latest Yr).
- G. Method F using three-year average factors (Trend by Age – 3-Yr Avg).
- H. The latest-year unadjusted incurred method (Latest Year Unadj Incurred).
- I. The latest-year unadjusted paid method (adjusted to an incurred basis as described below) (Latest Year Unadj Paid).

Exhibits 6.1 and 6.2 show projected cumulative incurred loss development factors adjusted for changes in case reserve levels using the various alternative approaches described above. The resulting development factors were compared to the factors projected by the unadjusted latest year incurred loss development methodology as well as those projected by the latest year paid loss development methodology. In order to show the paid loss development factors on a comparable basis to the incurred factors, they were divided by the ratio of incurred losses to paid losses for the accident year at the denominator (earlier) age in the cumulative development factor and multiplied by the ratio of incurred losses to paid losses for the accident year at the numerator (later) age in the cumulative development factor. The development factors for each approach were also reviewed for stability over time based on the standard deviation.

Generally, the approach that applies a different annual trend at each accident year and maturity (method D described above) produced projected factors that were more in between those produced by the latest year unadjusted incurred method and latest year unadjusted paid method when compared to the current approach and the other approaches reviewed. This method was also generally more stable than the current approach for the most recent three years, though less stable over the latest five years, and for 2013 and 2014 in particular. However, during this period, the factors projected by the latest year unadjusted incurred method were not very different from those projected by the unadjusted paid method and all of the alternative case reserve-adjusted methods were significantly different than either of the unadjusted methods for these years. This is likely due to the recent reforms being more quickly reflected in the unadjusted methods rather than the case reserve-adjusted methods, which rely heavily on historical changes in average case reserves and average paid per closed claim.

Method D above also has the advantage of requiring fewer assumptions since it does not require on-leveling of average case reserve or paid loss amounts nor does it require judgmentally selecting a period on which to base the average rate of growth. This method is also very responsive to the accident year effect on average claim severities by applying these directly by year and age. As a result, staff believes this approach may be more appropriate for adjusting for changes in average case reserve levels in incurred loss development compared to the current approach that selects a single trend rate for all periods.

Review of Development Periods and Years Applied

The current approach applies the adjustment for changes in case reserve levels to incurred loss development through approximately 72 months. Although loss development for this period is more leveraged than other more mature periods, shifts in average case reserve levels can significantly impact

incurred development in later periods as shown in Exhibits 4 and 5. In fact, the most recent shift in average case reserve levels is more pronounced during the 84-month through 156-month period than in the 12-month through 72-month period.

Exhibits 6.1 and 6.2 show cumulative incurred loss development factors adjusted for the alternative inflation assumption methods described above for different development periods. Exhibit 7 shows adjusted incurred medical age-to-age factors based on staff's recommended approach of applying a different annual trend at each accident year and maturity based on the observed changes in average paid per closed indemnity claim. These adjustments continue to address the differences between unadjusted paid and incurred development through approximately 156 months. However, the adjustments appear to add more volatility when applied after 156 months given the relatively few claims that are open at these later periods. Given this and the fact that significant calendar year shifts in average case reserves continue to occur at later maturities (see Exhibits 4 and 5), staff recommends applying the adjustment to incurred loss development through 156 months when reviewing this alternative method.

When loss development factors have been volatile, the WCIRB generally bases the loss development projection on a multi-year average of age-to-age factors rather than on the latest year's factor. In the case reserve adequacy-adjusted loss development method, since average case reserves have been adjusted to a common adequacy level, changes in the adjusted incurred age-to-age factors should be mostly related to volatility rather than shifts in incurred development patterns. Exhibits 6.1 and 6.2 show projected incurred development factors based on a three-year average for a number of the alternative methods, which are often, but not always, more stable than the corresponding methods based on the latest year's factor. As a result, staff recommends continuing to review projections from this methodology based on a three-year average as well as the latest year.

In conclusion, staff recommends basing adjustments to incurred loss development for changes in case reserve levels on (a) reviews of incremental changes in average paid per closed indemnity claim and average case reserves per open claim for both indemnity and medical, (b) directly applying the reported changes in average paid per closed indemnity claim to the latest calendar year average case reserves per open claim individually by accident year and maturity, and (c) applying this adjustment through 156 months. Table 1 shows projected ultimate medical loss ratios for accident years 2016 and 2017 based on December 31, 2017 experience and using the latest-year unadjusted incurred and unadjusted paid methods and the case reserve level-adjusted method based on the prior approach and staff's recommended approach using both a latest-year and three-year average method.

Table 1: Projected Ultimate Medical Loss Ratios based on December 31, 2017 Experience		
Methodology	AY 2016 Projection	AY 2017 Projection
Latest Year Unadjusted Incurred	0.247	0.268
Latest Year Unadjusted Paid	0.294	0.325
Latest Year Incurred Adjusted for Changes in Case Reserves – Prior Approach	0.251	0.269
Latest Year Incurred Adjusted for Changes in Case Reserves – Recommended Approach	0.255	0.280
3-Year Average Incurred Adjusted for Changes in Case Reserves – Recommended Approach	0.282	0.308

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

Trend is based on an exponential distribution.
Source: WCRB Quarterly calls for experience

Trend is based on an exponential distribution.
Source: WCI RB Quarterly calls for experience

Source: WCIRB Quarterly calls for experience

^aTrend is based on an exponential distribution.
^bPaid medical per closed claim severities for accident year 2010 and 2011 only reflect the paid cost of medical cost containment programs (MCCP) attributable to policies with effective dates prior to July 1, 2010. The annual changes for accident year 2010, 2011, 2012 are based on paid medical per total claim for consistency and do not compare to the severities shown above for these years.
Source: WCIRB Quarterly calls for experience

Comparison of Annual Change of Average Indemnity Case Outstanding per Open Indemnity Claim to Annual Change of Average Indemnity Paid per Closed Indemnity Claim*

Accident Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
1990																												
1991																												
1992																												
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Comparison of Annual Change of Average Medical Case Outstanding per Open Indemnity Claim to Annual Change of Average Medical Paid per Closed Indemnity Claim*

Accident Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
1990																												
1991																												
1992																												
1993																												
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* Each value is equal to: (1.0 + [Chang in Average Case Outstanding per Open Indemnity Claim]) / (1.0 + [Change in Average Paid per Closed Indemnity Claim]) - 1.0. the more extreme differences have been highlighted.

Accident Year Incremental Change in the Difference between the Change of Average Indemnity Case Outstanding per Open Indemnity Claim and the Change of Average Indemnity Paid per Closed Indemnity Claim*

Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
1990																											
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2013																											
2014																											
2015																											
2016																											

Calendar Year Average Change

Age	2017	2016	2015	2014	2013	2012	2011
12-84	1.8%	2.0%	-1.1%	1.6%	0.5%	-2.9%	-4.3%
84-156	-2.8%	-1.1%	-1.4%	-1.6%	-1.1%	-3.5%	1.1%
156-288	0.0%	1.9%	2.0%	-4.0%	3.0%	---	---

Accident Year Incremental Change in the Difference between the Change of Average Medical Case Outstanding per Open Indemnity Claim and the Change of Average Medical Paid per Closed Indemnity Claim*

Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
1990																											
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2015																											
2016																											

Calendar Year Average Change

Age	2017	2016	2015	2014	2013	2012	2011
12-84	4.2%	0.2%	-3.2%	-0.6%	-0.7%	-3.2%	-3.3%
84-156	-1.5%	3.3%	-3.4%	-4.8%	-0.5%	-2.4%	-0.8%
156-288	-3.3%	1.9%	-4.4%	-1.7%	-1.3%	---	---

* Each value is equal to the incremental difference across accident years in the comparisons shown in Exhibit 3. The more extreme changes have been highlighted.

Age-to-age Development of Average Indemnity Case Outstanding per Open Indemnity Claim

Accident Year	Evaluated as of (in months):															
	As of December 31, 2017															
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204
1989																
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2012																
2013																
2014																
2015																
2016																

Calendar Year Cumulative Development

Age	2017	2015	2014	2013	2012	2011
12-84	2,888	2,745	2,509	2,742	2,756	3,078
84-156	1,548	1,908	1,303	1,408	1,809	1,561
156-288	1,110	1,081	0,893	0,714	1,119	---

Annual Change in Development of Average Indemnity Case Outstanding per Open Indemnity Claim

Accident Year	Evaluated as of (in months):															
	As of December 31, 2017															
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204
1989																
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2014																
2015																
2016																

Calendar Year Average Change

Age	2017	2016	2015	2014	2013	2012	2011
12-84	0.9%	1.5%	-1.4%	-2.1%	2.2%	-1.8%	-3.1%
84-156	-3.4%	6.6%	-1.3%	-4.1%	2.6%	-1.0%	4.6%
156-288	0.3%	1.9%	2.2%	-3.9%	3.6%	---	---

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Projected Cumulative Indemnity Incurred Development Factors

Methodology:

Methodology:	Age	Calendar Year							Std. Dev.		Difference from the Latest Year Unadjusted Paid ²								
		2017	2016	2015	2014	2013	2012	2011	2010	3-Yr	5-Yr	2017	2016	2015	2014	2013	2012	2011	2010
Incurred Adj. for Case Reserves:																			
A. Single Trend - Latest Yr	12-84	3.104	3.365	3.530	3.866	3.700	3.788	3.457	2.985	0.215	0.295	-5.1%	-1.1%	6.7%	18.0%	7.9%	2.4%	1.8%	-3.9%
B. Single Trend - 3-Yr Avg	12-84	3.330	3.584	3.698	3.785	3.647	3.399	3.045	2.767	0.188	0.172	1.8%	5.4%	11.8%	15.5%	6.4%	-8.1%	-10.3%	-10.9%
C. Filing Trend - Latest Yr	12-84	2.968	3.159	3.254	3.529	3.565	3.824	3.593	3.385	0.146	0.252	-9.3%	-7.1%	-1.6%	7.7%	4.0%	3.4%	5.8%	9.0%
D. Trend by Year / Age - Latest Yr	12-84	3.141	3.338	3.263	3.966	3.762	3.886	3.348	3.179	0.099	0.352	-4.0%	-1.8%	-1.3%	21.0%	9.7%	5.0%	-1.4%	2.4%
E. Trend by Year / Age - 3-Yr Avg	12-84	3.249	3.515	3.657	3.872	3.666	3.468	3.116	2.743	0.207	0.230	-0.7%	3.3%	10.6%	18.1%	6.9%	-6.3%	-8.3%	-11.7%
F. Trend by Age - Latest Yr	12-84	3.114	3.368	3.513	3.833	3.701	3.852	3.531	3.074	0.202	0.282	-4.8%	-1.0%	6.2%	16.9%	7.9%	4.1%	4.0%	-1.0%
G. Trend by Age - 3-Yr Avg	12-84	3.329	3.568	3.681	3.796	3.695	3.476	3.141	2.889	0.180	0.179	1.7%	4.9%	11.3%	15.8%	7.8%	-6.1%	-7.5%	-7.0%
H. Latest Year Unadj. Incurred	12-84	3.063	3.165	3.118	3.229	3.355	3.497	3.432	3.374	0.051	0.112	-6.4%	-6.9%	-5.7%	-1.5%	-2.1%	-5.5%	1.1%	8.6%
I. Latest Year Unadj. Paid ¹	12-84	3.271	3.401	3.308	3.278	3.428	3.700	3.396	3.106	0.067	0.073	---	---	---	---	---	---	---	---
Incurred Adj. for Case Reserves:																			
A. Single Trend - Latest Yr	84-156	1.077	1.050	1.078	1.065	1.038	1.039	1.013	1.068	0.016	0.018	-2.4%	-4.5%	-0.5%	-0.4%	-3.7%	-0.1%	-0.1%	4.7%
B. Single Trend - 3-Yr Avg	84-156	1.069	1.065	1.061	1.048	1.031	1.040	1.052	1.083	0.004	0.016	-3.2%	-3.2%	-2.1%	-2.0%	-4.4%	0.0%	3.8%	6.2%
C. Filing Trend - Latest Yr	84-156	1.065	1.032	1.054	1.038	1.026	1.042	1.022	1.094	0.017	0.016	-3.5%	-6.2%	-2.7%	-3.0%	-4.8%	0.2%	0.8%	7.2%
D. Trend by Year / Age - Latest Yr	84-156	1.075	1.057	1.080	1.051	1.014	1.012	1.027	1.072	0.012	0.026	-2.6%	-3.9%	-0.4%	-1.7%	-6.0%	-2.7%	1.3%	5.1%
E. Trend by Year / Age - 3-Yr Avg	84-156	1.071	1.062	1.048	1.026	1.018	1.037	1.059	1.088	0.011	0.023	-3.0%	-3.4%	-3.3%	-4.1%	-5.5%	-0.3%	4.4%	6.7%
F. Trend by Age - Latest Yr	84-156	1.088	1.053	1.070	1.042	1.006	1.015	0.999	1.068	0.017	0.031	-1.4%	-4.2%	-1.3%	-2.5%	-6.6%	-2.4%	-1.5%	4.7%
G. Trend by Age - 3-Yr Avg	84-156	1.070	1.055	1.040	1.022	1.008	1.027	1.049	1.086	0.015	0.025	-3.0%	-4.0%	-4.1%	-4.5%	-6.5%	-1.2%	3.5%	6.5%
H. Latest Year Unadj. Incurred	84-156	1.054	1.058	1.058	1.067	1.074	1.079	1.070	1.044	0.002	0.008	-4.5%	-3.8%	-2.3%	-0.3%	-0.3%	3.8%	5.5%	2.3%
I. Latest Year Unadj. Paid ¹	84-156	1.104	1.100	1.084	1.069	1.078	1.040	1.014	1.020	0.011	0.015	---	---	---	---	---	---	---	---
Incurred Adj. for Case Reserves:																			
A. Single Trend - Latest Yr	156-288	1.001	1.016	1.032	1.049	1.035	1.031	---	---	0.016	---	-0.4%	1.5%	2.4%	3.1%	2.8%	2.3%	---	---
B. Single Trend - 3-Yr Avg	156-288	1.016	1.032	1.038	1.038	---	---	---	---	0.011	---	1.1%	3.1%	3.1%	2.1%	---	---	---	---
C. Filing Trend - Latest Yr	156-288	0.993	1.006	1.019	1.035	1.029	1.033	---	---	0.013	---	-1.2%	0.5%	1.2%	1.8%	2.3%	2.5%	---	---
D. Trend by Year / Age - Latest Yr	156-288	1.009	1.012	1.024	1.048	1.033	---	---	---	0.008	---	0.4%	1.1%	1.6%	3.0%	2.6%	---	---	---
E. Trend by Year / Age - 3-Yr Avg	156-288	1.015	1.028	1.035	---	---	---	---	---	0.010	---	1.0%	2.7%	2.7%	---	---	---	---	---
F. Trend by Age - Latest Yr	156-288	0.997	1.012	---	---	---	---	---	---	---	---	-0.8%	1.1%	---	---	---	---	---	---
G. Trend by Age - 3-Yr Avg	156-288	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H. Latest Year Unadj. Incurred	156-288	1.012	1.008	1.012	1.010	1.014	1.012	---	---	0.002	0.002	0.7%	0.7%	0.5%	-0.7%	0.7%	0.4%	---	---
I. Latest Year Unadj. Paid ¹	156-288	1.005	1.001	1.007	1.017	1.007	1.008	1.002	0.987	0.003	0.006	---	---	---	---	---	---	---	---

¹ Paid cumulative development factors are converted using the incurred to paid ratios at the beginning and ending ages.
² Highlighted numbers are less than 3% in absolute differences.

Projected Cumulative Medical Incurred Development Factors

Methodology	Age	Calendar Year							Std. Dev.		Std. Dev.	Difference from the Latest Year								Unadjusted Paid ²	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		2017	2016	2015	2014	2013	2012	2011	2010	3-Yr		5-Yr	2016	2015	2014	2013	2012	2011	2010												
Incurred Adj. for Case Reserves:																															
Single Trend (Total Counts)																															
A. Single Trend - Latest Yr	12-84	2.038	2.342	2.509	2.776	2.879	3.035	2.790	---	0.239	0.339	-7.1%	1.4%	8.2%	16.1%	11.8%	19.1%	14.1%	---												
B. Single Trend - 3-Yr Avg	12-84	2.098	2.365	2.509	2.749	2.879	3.035	2.818	---	0.208	0.310	-4.4%	2.4%	8.2%	15.0%	11.8%	19.1%	15.3%	---												
C. Filing Trend - Latest Yr	12-84	2.320	2.538	2.710	2.887	2.911	---	---	---	0.196	0.248	5.7%	9.9%	16.9%	20.8%	13.0%	---	---	---												
D. Trend by Year / Age - Latest Yr	12-84	2.015	2.235	2.388	2.674	2.893	3.098	2.852	2.838	0.188	0.348	-8.2%	-3.2%	3.0%	11.8%	12.3%	21.5%	16.7%	12.2%												
E. Trend by Year / Age - Latest Yr	12-84	2.063	2.241	2.353	2.842	2.989	3.030	2.786	---	0.146	0.399	-6.0%	-3.0%	1.5%	18.9%	16.1%	18.9%	14.0%	---												
F. Trend by Year / Age - 3-Yr Avg	12-84	2.218	2.469	2.719	2.954	2.935	---	---	---	0.250	0.315	1.0%	6.9%	17.3%	23.6%	14.0%	---	---	---												
G. Trend by Age - Latest Yr	12-84	2.084	2.333	2.461	2.692	2.819	2.994	2.772	---	0.192	0.291	-5.1%	1.0%	6.1%	12.6%	9.5%	17.4%	13.4%	---												
H. Trend by Age - 3-Yr Avg	12-84	2.288	2.492	2.655	2.834	2.861	---	---	---	0.184	0.241	4.3%	7.9%	14.5%	18.5%	11.1%	---	---	---												
I. Latest Year Unadj. Incurred	12-84	2.021	2.129	2.201	2.479	2.672	2.897	2.728	2.717	0.090	0.268	-7.9%	-7.8%	-5.1%	3.7%	3.7%	13.6%	11.6%	7.4%												
J. Latest Year Unadj. Paid ¹	12-84	2.195	2.310	2.318	2.391	2.576	2.549	2.445	2.528	0.069	0.140	---	---	---	---	---	---	---	---												
Incurred Adj. for Case Reserves:																															
Single Trend (Total Counts)																															
A. Single Trend - Latest Yr	84-156	1.083	1.098	1.128	1.131	1.104	1.169	1.157	---	0.023	0.020	-3.3%	-4.4%	-1.8%	-2.2%	-5.0%	4.2%	2.5%	---												
B. Single Trend - 3-Yr Avg	84-156	1.094	1.102	1.128	1.126	1.104	1.169	1.162	---	0.018	0.015	-2.3%	-4.0%	-1.8%	-2.6%	-5.0%	4.2%	3.0%	---												
C. Filing Trend - Latest Yr	84-156	1.067	1.056	1.112	1.118	1.134	1.226	1.217	1.261	0.007	0.015	-1.0%	-2.6%	-2.5%	-1.9%	-1.4%	---	---	---												
D. Trend by Year / Age - Latest Yr	84-156	1.113	1.097	1.144	1.144	1.103	1.151	1.158	---	0.030	0.034	-4.7%	-8.0%	-3.2%	-3.3%	-2.4%	9.3%	7.8%	10.6%												
E. Trend by Year / Age - 3-Yr Avg	84-156	1.118	1.128	1.131	1.133	1.138	---	---	---	0.024	0.022	-0.6%	-4.4%	-0.4%	-1.0%	-5.1%	2.6%	2.6%	---												
F. Trend by Age - Latest Yr	84-156	1.119	1.124	1.140	1.124	1.094	1.157	1.147	---	0.007	0.007	-0.1%	-1.7%	-1.6%	-1.9%	-2.1%	---	---	---												
G. Trend by Age - 3-Yr Avg	84-156	1.128	1.130	1.120	1.125	1.133	---	---	---	0.011	0.017	0.0%	-2.1%	-0.8%	-2.7%	-5.9%	3.1%	1.6%	---												
H. Latest Year Unadj. Incurred	84-156	1.032	1.037	1.073	1.112	1.154	1.174	1.172	1.177	0.022	0.051	-7.8%	-9.6%	-6.6%	-3.8%	-0.7%	4.7%	3.9%	3.1%												
I. Latest Year Unadj. Paid ¹	84-156	1.120	1.148	1.149	1.156	1.162	1.122	1.128	1.141	0.017	0.016	---	---	---	---	---	---	---	---												
Incurred Adj. for Case Reserves:																															
Single Trend (Total Counts)																															
A. Single Trend - Latest Yr	156-288	1.065	1.078	1.173	1.204	1.183	1.176	---	---	0.059	---	-0.8%	1.4%	9.4%	12.2%	13.9%	13.9%	---	---												
B. Single Trend - 3-Yr Avg	156-288	1.078	1.083	1.173	1.199	1.183	1.176	---	---	0.054	---	0.4%	1.8%	9.4%	11.7%	13.9%	13.9%	---	---												
C. Filing Trend - Latest Yr	156-288	1.111	1.151	1.185	1.186	---	---	---	---	0.037	---	3.5%	8.2%	10.5%	10.6%	---	---	---	---												
D. Trend by Year / Age - Latest Yr	156-288	1.047	1.038	1.078	1.085	1.087	1.121	---	---	0.021	---	-2.5%	-2.4%	0.4%	1.1%	4.6%	8.6%	---	---												
E. Trend by Year / Age - 3-Yr Avg	156-288	1.100	1.121	1.174	1.205	1.165	---	---	---	0.038	---	2.4%	5.4%	9.4%	12.3%	12.1%	---	---	---												
F. Trend by Age - Latest Yr	156-288	1.132	1.167	1.182	---	---	---	---	---	0.026	---	5.4%	9.7%	10.2%	---	---	---	---	---												
G. Trend by Age - 3-Yr Avg	156-288	1.092	1.084	---	---	---	---	---	---	---	---	1.6%	2.0%	---	---	---	---	---	---												
H. Latest Year Unadj. Incurred	156-288	0.959	0.981	0.994	1.063	1.065	1.086	---	---	0.018	0.049	-10.7%	-7.7%	-7.3%	-1.0%	2.5%	5.2%	---	---												
I. Latest Year Unadj. Paid ¹	156-288	1.074	1.064	1.073	1.073	1.039	1.032	1.020	0.994	0.006	0.015	---	---	---	---	---	---	---	---												

¹ Paid cumulative development factors are converted using the incurred to paid ratios at the beginning and ending ages.

² Highlighted numbers are less than 3% in absolute differences.

Accident Year	Incurred Medical Loss Development Factors Adjusted for Changes in Case Reserve Adequacy Based on Applying Separate Trends by Year and Age using Paid per Closed Indemnity Claim																											
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	
1991																					1.012	1.012	1.011	1.007	1.007	1.007	1.007	
1992																				0.998	0.980	1.000	1.001	1.001	0.999	0.999	0.996	
1993																			0.980	0.980	0.982	0.990	0.990	0.991	0.991			
1994																			1.001	1.018	1.014	1.005	1.000	0.998	1.005			
1995																	0.997	0.995	1.003	1.004	1.008	0.999	1.003					
1996																1.031	1.041	1.026	1.025	1.021	1.024	1.015						
1997															1.013	1.017	1.015	1.018	1.021	1.015	1.015							
1998														1.019	1.010	1.009	1.006	0.996	0.991	0.997								
1999													1.041	1.043	1.033	1.042	1.040	1.038	1.033									
2000												1.039	1.030	1.032	1.031	1.024	1.019	1.013										
2001											1.032	1.036	1.030	1.025	1.021	1.011	1.012											
2002									1.058	1.051	1.043	1.043	1.036	1.027	1.020													
2003								1.013	1.010	1.002	1.011	1.006	0.999	1.001														
2004								1.014	1.020	1.003	1.013	1.006	0.994															
2005									0.988	0.988	0.997	0.984	0.989															
2006									0.994	0.992	1.034	1.035	1.023															
2007									1.034	1.034	1.042	1.034																
2008									1.102	1.087	1.063	1.057	1.040	1.020														
2009										1.160	1.112	1.083	1.074	1.055	1.033													
2010										1.150	1.107	1.091	1.054	1.038	1.031													
2011							1.249			1.228	1.137	1.080	1.039	1.024	1.013													
2012							1.680			1.260	1.160	1.102	1.065															
2013							1.637			1.199	1.107	1.060	1.035															
2014							1.615			1.190	1.100	1.045																
2015							1.479			1.146	1.048																	
2016							1.539																					
2017							1.520																					
Latest Year	1.520	1.159	1.048	1.045	1.035	1.033	1.013	1.031	1.028	1.023	0.999	1.014	0.989	0.999	1.001	1.020	1.012	1.013	1.033	0.997	1.015	1.015	1.003	1.005	0.995	0.996	1.007	
3-Yr Avg.	1.512	1.165	1.085	1.069	1.046	1.037	1.035	1.035	1.024	1.016	1.003	1.001	0.996	1.011	1.016	1.019	1.024	1.016	1.015	1.011	1.016	1.005	0.997	0.998	1.001			