Actuarial Committee

Meeting Agenda

Date	Time	Location	Staff Contact
April 3, 2018	9:30 AM	WCIRB California 1221 Broadway, Suite 900 Oakland, CA	David M. Bellusci

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Released: March 27, 2018

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

I. Approval of Minutes

None

II. Working Group Meeting Summaries

Medical Analytics Working Group Meeting held March 16, 2018

III. Unfinished Business

A. AC17-04-04: New Drug Formulary

B. AC18-03-02: 12/31/2017 Experience – Review of Methodologies

IV. New Business

A. AC18-04-01: 12/31/2017 Loss Adjustment Expense Experience Review

B. AC18-04-02: 12/31/2017 Experience – Alternative Loss Projections

C. AC18-04-03: Impact of the Affordable Care Act on California Workers' Compensation

D. AC18-04-04: Impact of Medical Fraud Enforcement

V. Matters Arising at Time of Meeting

VI. Next Meeting Date: June 15, 2018

VII. Adjournment

Notice

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Medical Analytics Working Group

Meeting Summary

To: Participants of the Medical Analytics Working Group
Date: March 23, 2018

RE: Summary of March 16, 2018 Meeting

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

Discussion Topics
At the meeting, the following topics were discussed.

1. Update on WCIRB Study on Chronic Opioid Use
Staff provided a brief update on the recently released WCIRB *Study on Chronic Opioid Use and Weaning in California Workers' Compensation*, that included the revisions and added analytical pieces based on the discussion at the Working Group meeting in October 2017. The Working Group discussed several potential follow-up analyses related to the study. Several members suggested examining the trend in use of opioids early in the life of a claim including early indications for chronic opioid use (e.g., continued use of opioids for 7 days and 31 days) to identify the treatments that may be being used to help prevent claims from high and chronic opioid use. A Member also suggested an analysis of the use of short-term cognitive behavioral therapies or other treatments shortly after a claimant becomes a chronic opioid user. A Member also suggested investigating possibilities of identifying claims with high risks of overdose from opioids, and reviewing the co-prescribing of opioids and suboxone (a treatment for reducing opioid addiction). Staff agreed to provide a plan for a follow-up opioid study for the Working Group to review.

2. Impact of the ACA on California Workers' Compensation Costs
Staff presented the preliminary findings of its Affordable Care Act (ACA) impact analysis included in the meeting materials. The Working Group provided several suggestions. First, a Member suggested re-examining the time from accident date to first physician visit excluding cumulative injury claims since those are often reported well after their assigned injury date. Second, a Member suggested

comparing claims with soft tissue injuries in the 4th quarter to those in the 1st quarter between AY2013 and AY2015 to assess whether there were some seasonality impacts related to group health deductible plans. Finally, a Member suggested comparing use of some drug classes likely impacted by the availability of group health coverage reimbursements in the 4th quarter and 1st quarter between AY2013 and AY2015. Staff agreed to consider the Group's input in the finalized report or subsequent analysis as appropriate.

3. Cost Impact of the MTUS Drug Formulary

Staff presented its preliminary analysis on the cost impact of the Medical Treatment Utilization Schedule (MTUS) drug formulary including the impact on frictional costs and pharmaceutical costs. For the impact analysis on frictional costs, the Working Group provided feedback on the share of the pharmaceutical utilization review (UR). The California Workers' Compensation Institute representative advised that their preliminary analysis suggested about 60% of the exempt drugs would be co-prescribed with non-exempt drugs, leading to less cost savings than initially forecast resulting from the elimination of prospective UR on exempt drugs. The Working Group also discussed different types of UR being done on exempt drugs and noted that only the elimination of UR on exempt drugs that involved "elevated" UR involving a physician would result in significant cost savings. Finally, a Member noted that, at least temporarily, there could be an increase in UR due to the requirement related to 45-day reports on the continued use of non-exempt and non-listed drugs. Staff agreed to review the preliminary projection of the formulary's cost impact on frictional costs in light of the Working Group discussion.

The Working Group next discussed the potential impact of the new formulary on pharmaceutical costs. A Member suggested reviewing the share of prescriptions on opioids, compounds, physician-dispensed drugs, and generic vs. brand name drugs to better understand changes in the share of each drug components' payments to the total payments. Specifically, the Working Group suggested WCIRB staff provide more clarification on physician-dispensed drugs subject to UR and on the reduction in the share of total drug payments on generic drugs between 1st quarter and 2nd quarter of 2016. A Member suggested that the decrease in the share of payments for generics in 2016 was the result of changes in the pharmaceutical fee schedule for certain generic drugs (i.e., Upper Federal Limit prices that reduced the maximum amount paid for many generic drugs) in April 2016.

Staff summarized the assumptions used in the RAND study that estimated the economic impact of the drug formulary, and solicited feedback from the Working Group on the validity and reasonableness of the assumptions. In general, the Working Group did not believe that any prescriptions, either of physician-dispensed drugs subject to UR or of non-exempt and unlisted drugs that were assumed to be eliminated would in fact be eliminated under the formulary. Conversely, the Working Group suggested there could be a larger share (more than 60%) of drugs subject to UR transitioning to pharmacy dispensing and a larger share (more than 50%) of brand names for which generic equivalents are available for transitioning to generics. The Working Group was also generally comfortable with the RAND study's assumed reduction in compounds, and generally agreed with the assumed increase in exempt drug prescriptions. The Working Group was generally comfortable with the estimated reduction in opioid payments, although noting that it would be difficult to attribute the decline solely to the drug formulary given a variety of other factors that are contributing to the steady decline in opioid use.

Staff agreed to share the Working Group's input with the Actuarial Committee for their consideration of the impact of the new formulary on the costs underlying the advisory pure premium rates.

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

Staff presented the impact of indicted/suspended medical providers on historical California workers' compensation costs using the latest published list of indicted/suspended providers by the Division of Workers' Compensation (DWC). The Working Group suggested identifying the date of notice and comparing the level of services provided by these fraudulent providers one year before and one year after the notice of indictment/suspension. Staff agreed to consider refining the analysis in future updates to the extent the notice dates were reasonably available.

5. Update on SB 863 Impacts

Staff presented to the Working Group the updates on the impacts of Senate Bill No. 863 (SB 863) using updated transaction data through the 2nd quarter of 2017 with different levels of maturity.

6. Potential Future WCIRB Medical Analytics Research

The Working Group discussed potential future WCIRB Medical Analytics research topics. In addition to the follow-up analysis on claims with opioid use, a Member suggested reviewing Physical Medicine patterns in greater detail, in particular with respect to the restrictions on utilization review in the first 30 days from the injury beginning with injuries occurring on or after January 1, 2017 that was enacted by Senate Bill No. 1160.

Item AC17-04-04
New Drug Formulary

At the March 19, 2017 meeting, the Committee reviewed a preliminary analysis of the potential impact of the new drug formulary on system costs. An update to the analysis will be presented at the meeting.

Item AC18-03-02
12/31/2017 Experience – Review of Methodologies

At the March 19, 2018 meeting, the Committee reviewed a preliminary summary of accident year experience through December 31, 2017. Exhibits 1 through 8 provide an updated analysis of December 31, 2017 experience. In total, approximately 100% of the market is included. The loss projection methodologies are generally consistent with those reflected in the analysis presented at the March 19, 2018 meeting but also include the updated wage on-leveling methodology to blend the UCLA and California Department of Finance wage level forecasts adopted by the Committee at that meeting. The loss development projection also includes the adjustments to paid medical loss development for the impact of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) recommended by staff and accepted by the Committee at the March 19, 2018 meeting. Wage and loss levels are projected to April 1, 2019—the approximate midpoint of experience on policies incepting during the period from July 1, 2018 through December 31, 2018. For consistency, premiums have been on-leveled to the July 1, 2017 industry average filed pure premium rate level.[1] Other changes from the analysis presented at the March 19, 2018 meeting include revisions to insurer data submissions and updated on-level adjustments to reflect the portion of the impact of SB 1160 and AB 1244 that are not reflected in the adjustments to loss development discussed above.

As shown on Exhibit 8, based on December 31, 2017 accident year experience, the projected loss ratio for policies incepting during the period from July 1, 2018 through December 31, 2018 is 0.581. (This compares to 0.591 presented at the March 19, 2018 meeting and 0.641 reflected in the Amended January 1, 2018 Pure Premium Rate Filing.)

Exhibits 9 through 12 include supplemental information based on December 31, 2017 experience.

[1] In a potential mid-year filing, premiums will be on-leveled to the January 1, 2018 industry average filed pure premium rate level.

California Workers' Compensation

Accident Year Experience as of December 31, 2017

Year	Earned Premium	Paid Indemnity	Indemnity Reserves	Paid Medical**	Medical Reserves	IBNR*	Total Incurred**	Loss Ratio*
1985	2,872,481,605	1,278,631,775	3,801,318	985,105,548	20,819,278	15,785,684	2,304,143,603	0.802
1986	3,506,609,097	1,382,498,583	4,921,029	1,136,208,586	30,611,739	18,656,714	2,572,896,651	0.734
1987	4,374,085,383	1,504,454,210	7,343,851	1,327,185,475	44,615,546	62,218,724	2,945,817,806	0.673
1988	5,173,049,472	1,701,585,119	7,264,460	1,531,873,403	42,714,474	39,723,244	3,323,160,700	0.642
1989	5,674,529,942	1,937,265,938	8,699,942	1,786,669,698	60,106,713	38,650,212	3,831,392,503	0.675
1990	5,698,665,461	2,254,587,062	8,772,390	2,032,192,596	59,311,213	63,414,179	4,418,277,440	0.775
1991	5,863,319,243	2,469,914,939	17,219,332	2,183,376,707	67,884,160	61,120,394	4,799,515,532	0.819
1992	5,681,466,382	1,971,255,132	13,865,986	1,747,340,284	68,636,833	62,404,035	3,863,502,270	0.680
1993	5,928,480,359	1,689,085,606	15,079,809	1,495,940,715	86,686,628	49,241,692	3,336,034,450	0.563
1994	5,022,749,028	1,621,495,191	21,086,862	1,453,280,447	92,554,341	53,579,574	3,241,996,415	0.645
1995	3,778,975,599	1,754,822,231	31,920,000	1,596,765,676	118,162,413	63,096,953	3,564,767,273	0.943
1996	3,736,857,547	1,939,382,391	38,810,192	1,686,732,199	131,003,164	76,263,256	3,872,191,202	1.036
1997	3,916,944,392	2,298,635,565	47,188,277	1,981,090,256	154,785,111	114,967,332	4,596,666,541	1.174
1998	4,322,051,270	2,750,762,041	61,269,775	2,593,745,499	247,950,610	206,463,755	5,860,191,680	1.356
1999	4,537,629,086	3,028,102,322	59,652,249	2,975,488,834	220,192,136	286,445,717	6,569,881,258	1.448
2000	5,905,419,052	3,392,132,457	84,312,884	3,498,395,467	270,510,971	410,174,792	7,655,526,571	1.296
2001	10,094,684,192	4,785,949,210	130,999,900	5,249,256,619	443,963,780	657,070,696	11,267,240,205	1.116
2002	13,405,893,679	4,713,736,453	121,850,957	5,367,039,779	412,537,196	906,799,196	11,521,963,581	0.859
2003	19,429,675,115	4,471,449,092	179,456,688	4,928,233,010	424,521,064	1,300,584,324	11,304,244,178	0.582
2004	23,043,963,090	3,147,857,461	151,935,456	3,942,843,073	377,384,793	1,407,923,498	9,027,944,281	0.392
2005	21,350,709,483	2,472,289,457	137,431,011	3,535,855,543	367,121,182	1,172,421,175	7,685,118,368	0.360
2006	17,205,061,787	2,550,987,645	150,917,654	3,633,158,625	380,718,457	831,837,952	7,547,620,333	0.439
2007	13,252,379,499	2,669,456,070	170,067,245	3,869,472,966	464,412,110	802,629,509	7,976,037,900	0.602
2008	10,744,360,124	2,705,586,885	196,231,383	3,862,354,229	460,978,782	639,134,624	7,864,285,903	0.732
2009	8,877,640,496	2,556,087,276	201,523,415	3,641,128,559	459,244,518	650,643,303	7,508,627,071	0.846
2010	9,398,228,398	2,556,139,899	207,238,245	3,697,701,474	446,921,241	763,312,194	7,671,313,053	0.816
2011	10,129,285,077	2,474,957,007	245,360,689	3,291,858,941	525,390,588	996,030,647	7,533,597,872	0.744
2012	11,692,134,220	2,455,962,956	302,191,596	3,113,269,120	581,852,175	1,244,425,871	7,697,701,718	0.658
2013	14,149,827,161	2,403,972,386	353,527,596	2,869,565,292	655,195,426	2,492,905,327	8,775,166,027	0.620
2014	15,997,914,039	2,303,771,294	515,516,365	2,585,101,891	804,044,607	3,256,521,854	9,464,956,011	0.592
2015	17,064,067,844	1,968,007,624	737,146,391	2,181,815,253	1,088,273,718	4,347,526,049	10,322,769,035	0.605
2016	17,954,631,227	1,268,323,266	917,151,474	1,582,428,381	1,347,318,728	5,386,731,864	10,501,953,713	0.585
2017	17,651,880,283	411,116,129	766,616,762	693,562,149	1,386,625,772	7,546,261,367	10,804,182,179	0.612

* 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

	Age-to-Age (in months)															
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1992																0.999
1993															0.998	0.999
1994														0.997	1.000	1.000
1995													1.000	1.002	1.002	1.000
1996												1.000	1.000	1.000	1.001	1.002
1997											1.002	1.002	1.003	1.002	1.001	1.001
1998										1.004	1.002	1.003	1.004	1.001	1.002	1.001
1999									1.007	1.004	1.002	1.003	1.003	1.002	1.002	1.001
2000								1.008	1.004	1.004	1.005	1.003	1.001	1.004	1.002	1.000
2001							1.014	1.009	1.006	1.007	1.006	1.005	1.003	1.002	1.001	1.002
2002						1.018	1.011	1.010	1.010	1.007	1.005	1.003	1.002	1.002	1.003	
2003					1.033	1.021	1.018	1.015	1.015	1.009	1.006	1.004	1.003	1.002		
2004				1.042	1.041	1.026	1.028	1.018	1.014	1.007	1.007	1.003	1.001			
2005			1.098	1.068	1.053	1.040	1.028	1.016	1.012	1.006	1.005	1.006				
2006		1.247	1.111	1.080	1.053	1.035	1.023	1.015	1.009	1.007	1.004					
2007	1.784	1.273	1.120	1.070	1.049	1.037	1.022	1.012	1.011	1.004						
2008	1.858	1.302	1.136	1.074	1.045	1.030	1.019	1.012	1.009							
2009	1.983	1.293	1.142	1.076	1.048	1.024	1.019	1.014								
2010	1.994	1.315	1.131	1.069	1.045	1.026	1.016									
2011	1.997	1.277	1.133	1.061	1.037	1.022										
2012	1.992	1.279	1.113	1.063	1.041											
2013	1.931	1.259	1.112	1.054												
2014	1.960	1.278	1.115													
2015	1.969	1.261														
2016	1.943															
Selected (a)	1.943	1.261	1.115	1.054	1.041	1.022	1.016	1.014	1.012	1.007	1.006	1.004	1.002	1.002	1.002	1.001
Cumulative	3.301	1.699	1.347	1.208	1.146	1.101	1.078	1.061	1.046	1.034	1.027	1.021	1.017	1.015	1.013	1.011

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and six-year average for the subsequent age-to-age factors.

Incurred Indemnity Loss Development Factors (Continued)

	Age-to-Age (in months)																
Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	ULT/396Inc (b)
1982										1.002	1.000	1.001	1.001				
1983									1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	
1984								1.000	1.001	1.001	1.000	1.001	1.001	1.000	0.999	1.000	
1985							1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
1986						1.001	1.001	1.000	1.001	1.002	1.001	1.000	0.999	1.000	1.000		
1987					0.999	1.000	1.000	1.001	1.002	1.000	1.001	1.001	1.001	1.001			
1988				1.001	1.000	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000				
1989			1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000					
1990		1.001	1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000						
1991	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1992	0.998	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000								
1993	0.999	1.001	1.001	1.001	1.001	1.000	1.000	1.000									
1994	1.001	1.001	1.002	1.000	1.001	1.001	0.999										
1995	1.003	1.001	0.998	1.001	1.000	1.001											
1996	1.003	1.000	1.000	1.000	1.001												
1997	1.000	1.000	1.000	1.000													
1998	1.003	1.001	1.001														
1999	1.000	1.000															
2000	1.002																
Selected (a)	1.002	1.001	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
Cumulative	1.010	1.008	1.008	1.007	1.007	1.006	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003

(b) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

Incurred Medical Loss Development Factors

	Age-to-Age (in months) (b)															
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1992																1.011
1993															1.018	1.007
1994														1.009	1.021	1.011
1995													1.028	1.016	1.005	1.009
1996												1.024	1.018	1.013	1.014	1.005
1997											1.030	1.012	1.015	1.012	1.003	1.007
1998										1.023	1.020	1.017	1.004	1.014	1.008	1.012
1999									1.030	1.019	1.018	1.013	1.011	1.013	1.005	0.999
2000								1.028	1.017	1.024	1.018	1.018	1.012	1.006	0.999	0.995
2001							1.040	1.034	1.035	1.022	1.017	1.015	1.013	1.001	0.997	0.994
2002						1.040	1.036	1.029	1.028	1.022	1.014	1.010	0.999	0.997	1.000	
2003					1.060	1.042	1.042	1.037	1.029	1.018	1.011	1.003	0.998	0.999		
2004				1.081	1.060	1.061	1.043	1.032	1.026	1.012	1.006	1.001	0.997			
2005			1.087	1.074	1.084	1.055	1.045	1.032	1.020	1.006	1.006	0.999				
2006		1.196	1.103	1.081	1.066	1.048	1.040	1.022	1.012	1.000	1.001					
2007	1.518	1.204	1.124	1.081	1.070	1.050	1.032	1.018	1.004	1.008						
2008	1.527	1.212	1.129	1.092	1.061	1.041	1.026	1.010	1.005							
2009	1.604	1.227	1.140	1.087	1.061	1.030	1.016	1.007								
2010	1.620	1.245	1.134	1.077	1.045	1.025	1.012									
2011	1.667	1.222	1.125	1.069	1.034	1.016										
2012	1.592	1.188	1.092	1.056	1.031											
2013	1.559	1.150	1.086	1.040												
2014	1.523	1.159	1.079													
2015	1.511	1.147														
2016	1.499															
Selected (a)	1.499	1.147	1.079	1.040	1.031	1.016	1.012	1.007	1.016	1.011	1.009	1.008	1.005	1.005	1.002	1.002
Cumulative	2.271	1.515	1.321	1.224	1.177	1.142	1.124	1.110	1.103	1.085	1.073	1.064	1.056	1.050	1.045	1.043

(a) Selections are latest year for the 12-to-24 month through 96-to-108 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)

	Age-to-Age (in months)																
Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	ULT/396Inc (c)
1982										1.006	1.004	1.003	1.009				
1983									1.006	1.004	1.002	1.006	1.003	1.004	1.003	0.997	
1984								1.003	1.003	1.002	1.003	1.001	1.003	1.001	0.997	1.000	
1985							1.001	1.003	1.003	1.003	1.005	1.002	1.003	0.998	0.999	0.999	
1986						1.003	1.006	1.005	1.006	1.004	1.005	1.000	1.002	0.998	1.001		
1987					1.003	1.011	0.999	1.007	1.003	1.004	1.005	1.001	0.997	1.001			
1988				1.006	1.005	1.005	1.002	1.005	1.003	1.003	1.002	0.998	0.999				
1989			1.006	1.005	1.005	1.008	1.006	1.000	1.003	0.999	0.999	0.999					
1990		1.007	1.007	1.005	1.003	1.003	1.003	0.997	1.002	1.000	1.000						
1991	1.008	1.005	1.006	1.002	1.003	1.002	1.003	1.001	1.000	0.999							
1992	1.005	1.004	1.002	1.005	1.003	1.005	1.000	0.999	1.002								
1993	1.007	1.011	1.014	1.004	0.999	1.000	0.996	1.000									
1994	1.011	1.004	1.007	1.006	1.001	0.996	0.995										
1995	1.015	0.996	1.006	0.999	1.006	0.992											
1996	1.008	1.005	1.001	0.998	0.999												
1997	1.001	0.994	0.998	0.997													
1998	1.001	1.001	0.994														
1999	0.999	0.995															
2000	0.996																
Selected (a)	1.003	0.999	1.003	1.002	1.002	1.000	1.001	1.000	1.002	1.002	1.003	1.000	1.001	1.000	1.000	0.999	
Cumulative	1.041	1.037	1.038	1.035	1.033	1.031	1.032	1.031	1.031	1.029	1.027	1.024	1.024	1.023	1.023	1.023	1.024

(c) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

Paid Indemnity Loss Development Factors

	Age-to-Age (in months)															
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1992																1.003
1993															1.004	1.003
1994														1.006	1.003	1.003
1995													1.007	1.005	1.005	1.003
1996												1.009	1.006	1.006	1.004	1.004
1997											1.012	1.008	1.007	1.006	1.006	1.005
1998										1.015	1.012	1.009	1.009	1.007	1.006	1.006
1999									1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.004
2000								1.025	1.016	1.013	1.010	1.009	1.008	1.007	1.005	1.004
2001							1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.005	1.005
2002						1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006	
2003					1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008		
2004				1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009			
2005			1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013				
2006		1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016					
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020						
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023							
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031								
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038									
2011	3.208	1.613	1.266	1.144	1.087	1.056										
2012	3.137	1.597	1.262	1.137	1.087											
2013	3.169	1.606	1.260	1.129												
2014	3.229	1.635	1.257													
2015	3.278	1.618														
2016	3.235															
Selected (a)	3.235	1.618	1.257	1.129	1.087	1.056	1.038	1.031	1.025	1.019	1.015	1.012	1.009	1.007	1.005	1.004
Cumulative Unadjusted for Impact of SB 863	10.390	3.212	1.985	1.579	1.399	1.287	1.219	1.174	1.139	1.111	1.089	1.073	1.060	1.051	1.044	1.038
Cumulative Adjusted for Impact of SB 863 (b)	10.931	3.379	2.088	1.661	1.427	---	---	---	---	---	---	---	---	---	---	---

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors.

(b) The 48-to-ultimate factor for accident year 2014 and the 60-to-ultimate factor for accident year 2013 have been adjusted by 5.2% 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)

	Age-to-Age (in months)																	
Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	396Inc/396Pd (c)	ULT/396Inc (d)
1982										1.003	1.000	1.001	1.002				1.003	
1983									1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
1984								1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.005	
1985							1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.005	
1986						1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		1.003	
1987					1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001			1.003	
1988				1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001					
1989			1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001						
1990		1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000							
1991	1.002	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001								
1992	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001									
1993	1.002	1.003	1.003	1.002	1.002	1.001	1.001	1.001										
1994	1.004	1.003	1.003	1.003	1.002	1.002	1.002											
1995	1.005	1.005	1.003	1.003	1.002	1.002												
1996	1.005	1.004	1.003	1.003	1.002													
1997	1.004	1.003	1.003	1.002														
1998	1.006	1.004	1.003															
1999	1.004	1.003																
2000	1.004																	
Selected (a)	1.005	1.003	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.004	
Cumulative	1.034	1.029	1.026	1.023	1.020	1.018	1.016	1.015	1.014	1.013	1.012	1.011	1.010	1.009	1.008	1.008		1.003

(c) Three-year averages of the 396Inc/396Pd factors are selected.

(d) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

Paid Medical Loss Development Factors

Unadjusted (a)

Accident Year	Age-to-Age (in months)															
	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1992																1.017
1993															1.013	1.011
1994														1.017	1.013	1.012
1995													1.019	1.018	1.018	1.015
1996												1.023	1.020	1.018	1.016	1.013
1997											1.026	1.022	1.019	1.016	1.014	1.014
1998										1.032	1.030	1.021	1.019	1.019	1.015	1.017
1999									1.032	1.032	1.025	1.025	1.016	1.016	1.018	1.015
2000								1.038	1.031	1.027	1.023	1.020	1.020	1.017	1.013	1.010
2001							1.045	1.038	1.034	1.030	1.022	1.022	1.022	1.017	1.012	1.011
2002						1.054	1.046	1.034	1.032	1.024	1.023	1.018	1.016	1.012	1.011	
2003					1.074	1.057	1.048	1.041	1.030	1.030	1.026	1.019	1.016	1.013		
2004				1.123	1.092	1.070	1.055	1.040	1.036	1.034	1.024	1.018	1.015			
2005			1.209	1.138	1.095	1.073	1.054	1.049	1.038	1.031	1.021	1.019				
2006		1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025	1.020					
2007	2.416	1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031	1.022						
2008	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027							
2009	2.408	1.447	1.251	1.160	1.104	1.067	1.046	1.032								
2010	2.479	1.468	1.265	1.152	1.096	1.066	1.043									
2011	2.580	1.470	1.248	1.145	1.095	1.058										
2012	2.561	1.468	1.247	1.143	1.087											
2013	2.492	1.464	1.239	1.130												
2014	2.518	1.462	1.226													
2015	2.533	1.439														
2016	2.480															

Adjusted (b)

Accident Year	Age-to-Age (in months)															
	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1999																1.016
2000															1.014	1.011
2001														1.018	1.013	1.012
2002													1.018	1.013	1.012	
2003												1.020	1.018	1.014		
2004											1.026	1.019	1.016			
2005										1.033	1.023	1.020				
2006									1.037	1.027	1.022					
2007								1.045	1.033	1.023						
2008							1.055	1.038	1.029							
2009						1.072	1.049	1.034								
2010					1.102	1.070	1.045									
2011				1.154	1.100	1.062										
2012			1.258	1.148	1.091											
2013		1.476	1.243	1.134												
2014	2.544	1.465	1.229													
2015	2.533	1.440														
2016	2.481															
Selected (c)	2.481	1.440	1.229	1.134	1.091	1.062	1.045	1.034	1.033	1.028	1.024	1.020	1.017	1.015	1.013	1.013
Cumulative Unadjusted for Impact of SB 1160	8.516	3.432	2.384	1.939	1.710	1.568	1.476	1.413	1.366	1.322	1.287	1.257	1.233	1.212	1.194	1.179
Cumulative Adjusted for Impact of SB 1160(d)	8.201	3.316	2.319	1.903	1.691	1.558	---	---	---	---	---	---	---	---	---	---

(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 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors.

(d) The cumulative factors for 12, 24, 36, 48, 60, and 72 months are adjusted by -3.7%, -3.4%, -2.7%, -1.9%, -1.1%, and -0.6%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Paid Medical Loss Development Factors (Continued)

Unadjusted (a)

Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	396Inc/396Pd (d)	ULT/396Inc (e)
1982										1.007	1.009	1.006	1.006				1.028	
1983									1.003	1.005	1.004	1.004	1.003	1.004	1.003	1.002	1.032	
1984								1.003	1.004	1.003	1.004	1.004	1.003	1.003	1.002	1.002	1.036	
1985							1.004	1.004	1.003	1.004	1.004	1.004	1.003	1.002	1.003	1.002	1.033	
1986						1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.006	1.004		1.020	
1987					1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.003			1.020	
1988				1.006	1.005	1.005	1.006	1.005	1.005	1.004	1.003	1.003	1.003					
1989			1.007	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.003	1.003						
1990		1.005	1.005	1.005	1.005	1.006	1.004	1.004	1.003	1.002	1.003							
1991	1.007	1.006	1.006	1.005	1.006	1.005	1.006	1.003	1.003	1.003								
1992	1.008	1.007	1.002	1.006	1.008	1.006	1.005	1.005	1.006									
1993	1.011	1.011	1.010	1.013	1.011	1.007	1.006	1.006										
1994	1.013	1.009	1.010	1.010	1.009	1.008	1.007											
1995	1.011	1.016	1.013	1.012	1.009	1.012												
1996	1.014	1.013	1.011	1.009	1.007													
1997	1.014	1.011	1.006	1.006														
1998	1.013	1.010	1.009															
1999	1.012	1.009																
2000	1.009																	

Adjusted (b)

Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	396Inc/396Pd (d)	ULT/396Inc (e)
1982																	1.028	
1983																1.003	1.032	
1984															1.003	1.003	1.036	
1985														1.002	1.003	1.002	1.033	
1986													1.005	1.006	1.005		1.020	
1987												1.004	1.003	1.003			1.020	
1988											1.003	1.003	1.003					
1989										1.004	1.003	1.003						
1990									1.003	1.003	1.003							
1991								1.004	1.004	1.003								
1992							1.005	1.005	1.007									
1993						1.008	1.007	1.007										
1994					1.009	1.009	1.008											
1995				1.013	1.009	1.014												
1996			1.012	1.009	1.007													
1997		1.012	1.007	1.007														
1998	1.014	1.010	1.009															
1999	1.013	1.010																
2000	1.009																	
Selected (c)	1.012	1.011	1.009	1.010	1.008	1.010	1.007	1.005	1.005	1.003	1.003	1.003	1.004	1.004	1.004	1.003	1.028	
Cumulative	1.164	1.150	1.138	1.127	1.116	1.107	1.096	1.088	1.083	1.078	1.074	1.071	1.067	1.063	1.060	1.056		1.024

(d) Six-year averages of the 396Inc/396Pd factors are selected.

(e) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Age 240, Incurred from Age 240 to Ultimate

	Age-to-Age (in months)																			
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	240Inc/240Pd (c)
1991																	1.002	1.002	1.001	1.014
1992																1.003	1.002	1.002	1.002	1.014
1993															1.004	1.003	1.002	1.003	1.003	1.014
1994														1.006	1.003	1.003	1.004	1.003	1.003	1.020
1995													1.007	1.005	1.005	1.003	1.005	1.005	1.003	1.024
1996												1.009	1.006	1.006	1.004	1.004	1.005	1.004	1.003	1.024
1997											1.012	1.008	1.007	1.006	1.006	1.005	1.004	1.003	1.003	1.023
1998										1.015	1.012	1.009	1.009	1.007	1.006	1.006	1.006	1.004	1.003	1.022
1999									1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.004	1.004	1.003		
2000								1.025	1.016	1.013	1.010	1.009	1.008	1.007	1.005	1.004	1.004			
2001							1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.005	1.005				
2002						1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006					
2003					1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008						
2004				1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009							
2005			1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013								
2006		1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016									
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020										
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023											
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031												
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038													
2011	3.208	1.613	1.266	1.144	1.087	1.056														
2012	3.137	1.597	1.262	1.137	1.087															
2013	3.169	1.606	1.260	1.129																
2014	3.229	1.635	1.257																	
2015	3.278	1.618																		
2016	3.235																			
Selected (a)	3.223(d)	1.593(d)	1.240(d)	1.120(d)	1.075(d)	1.048(d)	1.038	1.031	1.025	1.019	1.015	1.012	1.009	1.007	1.005	1.004	1.005	1.003	1.003	1.023
Cumulative Unadjusted for Impact of SB 863	9.858	3.059	1.920	1.548	1.383	1.286	1.228	1.183	1.147	1.119	1.098	1.081	1.068	1.059	1.052	1.046	1.042	1.037	1.034	
Cumulative Adjusted for Impact of SB 863 (b)	10.371	3.218	2.020	1.629	1.410	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 240, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.

(b) The 48-to-ultimate factor for accident year 2014 and the 60-to-ultimate factor for accident year 2013 have been adjusted by 5.2% and 2.0% respectively, for the impacts of SB 863 on indemnity loss development.

(c) A three-year average of the 240Inc/240Pd 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 240, Incurred from Age 240 to Ultimate (Continued)

	Age-to-Age (in months)													
Accident Year	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	ULT/396Inc (e)
1980									1.000	1.000				
1981								1.002	0.999	1.001				
1982							1.002	1.000	1.001	1.001				
1983						1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	
1984					1.000	1.001	1.001	1.000	1.001	1.001	1.000	0.999	1.000	
1985				1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
1986			1.001	1.001	1.000	1.001	1.002	1.001	1.000	0.999	1.000	1.000		
1987		0.999	1.000	1.000	1.001	1.002	1.000	1.001	1.001	1.001	1.001			
1988	1.001	1.000	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000				
1989	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000					
1990	0.999	1.001	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							
1992	1.000	1.001	1.001	1.000	1.000	1.000								
1993	1.001	1.001	1.000	1.000	1.000									
1994	1.000	1.001	1.001	0.999										
1995	1.001	1.000	1.001											
1996	1.000	1.001												
1997	1.000													
Selected (a)	1.000	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
Cumulative	1.007	1.007	1.006	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003

(e) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							122,532
2009						113,152	113,376
2010					116,605	117,000	117,262
2011				116,716	117,486	117,812	118,034
2012			121,957	123,499	124,282	124,718	
2013		126,442	130,329	131,881	132,635		
2014	106,792	132,482	136,722	138,337			
2015	111,241	138,614	142,847				
2016	112,781	141,505					
2017	115,674						

B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-Ultimate
2009						1.002	
2010					1.003	1.002	
2011				1.007	1.003	1.002	
2012			1.013	1.006	1.004		
2013		1.031	1.012	1.006			
2014	1.241	1.032	1.012				
2015	1.246	1.031					
2016	1.255						
Latest Year	1.255	1.031	1.012	1.006	1.004	1.002	
Cumulative	1.328	1.058	1.027	1.015	1.009	1.006	1.004

Acc. Year	2017	2016	2015	2014	2013	2012	2011
Ult. Claim Counts	153,616	149,774	146,714	140,423	133,870	125,439	118,493

C. Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							108,869
2009						95,734	100,426
2010					94,016	100,574	105,653
2011				86,114	96,021	102,634	107,345
2012			77,475	92,797	103,207	110,208	
2013		61,383	84,338	101,272	112,453		
2014	28,714	65,810	90,489	108,293			
2015	30,440	70,748	98,009				
2016	32,472	76,353					
2017	35,912						

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							88.4%
2009						84.1%	88.2%
2010					79.9%	85.4%	89.8%
2011				72.7%	81.0%	86.6%	90.6%
2012			61.8%	74.0%	82.3%	87.9%	
2013		45.9%	63.0%	75.6%	84.0%		
2014	20.4%	46.9%	64.4%	77.1%			
2015	20.7%	48.2%	66.8%				
2016	21.7%	51.0%					
2017	23.4%						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							111,533
2009						100,016	103,129
2010					98,885	103,425	106,643
2011				91,381	99,536	104,105	107,345
2012			83,797	96,737	105,371	110,208	
2013		68,245	89,429	103,239	112,453		
2014	32,828	71,586	93,807	108,293			
2015	34,298	74,793	98,009				
2016	35,014	76,353					
2017	35,912						

F. Average Paid Indemnity per Closed Claim

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							17,004
2009						16,396	18,117
2010					14,670	16,719	18,416
2011				12,212	14,937	16,897	18,402
2012			9,114	12,585	15,148	17,034	
2013		5,330	9,560	12,982	15,428		
2014	2,139	5,637	10,179	13,782			
2015	2,347	6,180	10,886				
2016	2,492	6,556					
2017	2,632						

(a) Ratio of closed indemnity claim counts (Item C) to the estimated ultimate indemnity claim counts (Item B) for that accident year.

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

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

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

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							17,985
2009						17,961	19,077
2010					16,166	17,652	18,774
2011				13,593	15,949	17,354	18,402
2012			10,413	13,500	15,708	17,034	
2013		6,347	10,481	13,383	15,428		
2014	2,382	6,474	10,771	13,782			
2015	2,575	6,721	10,886				
2016	2,636	6,556					
2017	2,632						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							2,005,915
2009						1,796,353	1,967,400
2010					1,598,577	1,825,602	2,002,164
2011				1,242,099	1,587,506	1,806,625	1,975,371
2012			872,540	1,305,961	1,655,118	1,877,279	
2013		433,165	937,332	1,381,601	1,734,908		
2014	78,200	463,416	1,010,344	1,492,449			
2015	88,328	502,717	1,066,953				
2016	92,284	500,535					
2017	94,533						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							630,331
2009						681,876	568,445
2010					738,829	627,845	501,870
2011				797,424	676,036	557,721	444,125
2012			839,235	778,049	647,822	527,534	
2013		710,449	857,691	779,397	628,878		
2014	282,376	741,351	899,481	794,168			
2015	299,459	779,175	900,816				
2016	311,082	768,009					
2017	316,583						

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

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

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

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

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							46,134
2009						39,148	43,895
2010					32,707	38,223	43,231
2011				26,058	31,495	36,745	41,550
2012			18,867	25,342	30,739	36,357	
2013		10,920	18,649	25,463	31,160		
2014	3,617	11,119	19,455	26,434			
2015	3,706	11,481	20,090				
2016	3,874	11,788					
2017	3,969						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							-122,900
2009						-167,669	-118,649
2010					-159,252	-108,973	-42,799
2011				-137,247	-110,704	-54,052	
2012			-119,275	-99,847	-66,519		
2013		-74,934	-94,943	-50,086			
2014	-14,879	-64,225	-64,553				
2015	-14,298	-46,441					
2016	-9,847						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							507,430
2009						514,208	449,796
2010					579,578	518,872	459,072
2011				660,177	565,331	503,668	444,125
2012			719,960	678,202	581,303	527,534	
2013		635,516	762,749	729,311	628,878		
2014	267,497	677,125	834,928	794,168			
2015	285,161	732,734	900,816				
2016	301,236	768,009					
2017	316,583						

(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	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							2,513,346
2009						2,310,560	2,417,196
2010					2,178,155	2,344,474	2,461,235
2011				1,902,276	2,152,837	2,310,293	2,419,496
2012			1,592,500	1,984,163	2,236,421	2,404,812	
2013		1,068,680	1,700,081	2,110,911	2,363,786		
2014	345,697	1,140,541	1,845,272	2,286,617			
2015	373,489	1,235,452	1,967,769				
2016	393,519	1,268,544					
2017	411,116						

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

Accident	Evaluated as of (in months)					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2008						
2009						1.046
2010					1.076	1.050
2011				1.132	1.073	1.047
2012			1.246	1.127	1.075	
2013		1.591	1.242	1.120		
2014	3.299	1.618	1.239			
2015	3.308	1.593				
2016	3.224					
Latest Year	3.224	1.593	1.239	1.120	1.075	1.047
3-Year Average	3.277	1.600	1.242	1.126	1.075	1.048

O. Paid Indemnity Loss Development Factors (i)

Accident	Evaluated as of (in months)					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2009						1.061
2010					1.090	1.060
2011				1.141	1.086	1.056
2012			1.259	1.136	1.088	
2013		1.604	1.259	1.129		
2014	3.235	1.637	1.256			
2015	3.279	1.618				
2016	3.236					

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

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

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

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

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

Accident	Evaluated as of (in months)					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2009						-1.36%
2010					-1.28%	-0.95%
2011				-0.84%	-1.19%	-0.79%
2012			-1.05%	-0.81%	-1.13%	
2013		-0.80%	-1.34%	-0.80%		
2014	1.98%	-1.15%	-1.34%			
2015	0.87%	-1.54%				
2016	-0.39%					

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

Accident	Evaluated as of (in months)					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2009						1.047
2010					1.077	1.050
2011				1.134	1.074	1.048
2012			1.249	1.128	1.075	
2013		1.593	1.243	1.120		
2014	3.293	1.616	1.240			
2015	3.306	1.593				
2016	3.223					
Latest Year	3.223	1.593	1.240	1.120	1.075	1.048
3-Year Average	3.274	1.601	1.244	1.127	1.075	1.048

(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 240, Incurred from Age 240 to Ultimate

	Age-to-Age (in months)																			
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	240Inc/240Pd (c)
1991																	1.007	1.006	1.006	1.055
1992																1.017	1.008	1.007	1.002	1.063
1993															1.013	1.011	1.011	1.011	1.010	1.626
1994														1.017	1.013	1.012	1.013	1.009	1.010	1.671
1995													1.019	1.018	1.018	1.015	1.011	1.016	1.013	1.114
1996												1.023	1.020	1.018	1.016	1.013	1.014	1.013	1.011	1.097
1997											1.026	1.022	1.019	1.016	1.014	1.014	1.014	1.011	1.006	1.088
1998										1.032	1.030	1.021	1.019	1.019	1.015	1.017	1.013	1.010	1.009	1.093
1999									1.032	1.032	1.025	1.025	1.016	1.016	1.018	1.015	1.012	1.009		
2000								1.038	1.031	1.027	1.023	1.020	1.020	1.017	1.013	1.010	1.009			
2001							1.045	1.038	1.034	1.030	1.022	1.022	1.022	1.017	1.012	1.011				
2002						1.054	1.046	1.034	1.032	1.024	1.023	1.018	1.016	1.012	1.011					
2003					1.074	1.057	1.048	1.041	1.030	1.030	1.026	1.019	1.016	1.013						
2004				1.123	1.092	1.070	1.055	1.040	1.036	1.034	1.024	1.018	1.015							
2005			1.209	1.138	1.095	1.073	1.054	1.049	1.038	1.031	1.021	1.019								
2006		1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025	1.020									
2007	2.416	1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031	1.022										
2008	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027											
2009	2.408	1.447	1.251	1.160	1.104	1.067	1.046	1.032												
2010	2.479	1.468	1.265	1.152	1.096	1.066	1.043													
2011	2.580	1.470	1.248	1.145	1.095	1.058														
2012	2.561	1.468	1.247	1.143	1.087															
2013	2.492	1.464	1.239	1.130																
2014	2.518	1.462	1.226																	
2015	2.533	1.439																		
2016	2.480																			

Adjusted (b)	Age-to-Age (in months)																			
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	240Inc/240Pd (c)
1996																			1.012	1.097
1997																		1.012	1.007	1.088
1998																	1.014	1.010	1.009	1.093
1999																1.016	1.013	1.010		
2000															1.014	1.011	1.009			
2001														1.018	1.013	1.012				
2002													1.018	1.013	1.012					
2003												1.020	1.018	1.014						
2004											1.026	1.019	1.016							
2005										1.033	1.023	1.020								
2006									1.037	1.027	1.022									
2007								1.045	1.033	1.023										
2008							1.055	1.038	1.029											
2009						1.072	1.049	1.034												
2010					1.102	1.070	1.045													
2011				1.154	1.100	1.062														
2012			1.258	1.148	1.091															
2013		1.476	1.243	1.134																
2014	2.544	1.465	1.229																	
2015	2.533	1.440																		
2016	2.481																			
Selected (c)	2.482(e)	1.428(e)	1.217(e)	1.126(e)	1.081(e)	1.055(e)	1.045	1.034	1.033	1.028	1.024	1.020	1.017	1.015	1.013	1.013	1.012	1.011	1.009	1.093
Cumulative Unadjusted for Impact of SB 1160	8.202	3.305	2.314	1.902	1.689	1.562	1.481	1.417	1.371	1.327	1.291	1.261	1.237	1.216	1.198	1.183	1.167	1.153	1.141	
Cumulative Adjusted for Impact of SB 1160(f)	7.898	3.193	2.252	1.866	1.671	1.553	---	---	---	---	---	---	---	---	---	---	---	---	---	

(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 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 240, 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 240Inc/240Pd 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 12, 24, 36, 48, 60, and 72 months are adjusted by -3.7%, -3.4%, -2.7%, -1.9%, -1.1%, and -0.6%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Age 240, Incurred from Age 240 to Ultimate (Continued)

	Age-to-Age (in months)													
Accident Year	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	ULT/396Inc (d)
1983													0.997	
1984												0.997	1.000	
1985											0.998	0.999	0.999	
1986										1.002	0.998	1.001		
1987									1.001	0.997	1.001			
1988								1.002	0.998	0.999				
1989							0.999	0.999	0.999					
1990						1.002	1.000	1.000						
1991					1.001	1.000	0.999							
1992				1.000	0.999	1.002								
1993			1.000	0.996	1.000									
1994		1.001	0.996	0.995										
1995	0.999	1.006	0.992											
1996	0.998	0.999												
1997	0.997													
Selected (c)	1.002	1.002	1.000	1.001	1.000	1.002	1.002	1.003	1.000	1.001	1.000	1.000	0.999	
Cumulative	1.035	1.033	1.031	1.032	1.031	1.031	1.029	1.027	1.024	1.024	1.023	1.023	1.023	1.024

(f) The ULT/396Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the most recent evaluation, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							122,532
2009						113,152	113,376
2010					116,605	117,000	117,262
2011				116,716	117,486	117,812	118,034
2012			121,957	123,499	124,282	124,718	
2013		126,442	130,329	131,881	132,635		
2014	106,792	132,482	136,722	138,337			
2015	111,241	138,614	142,847				
2016	112,781	141,505					
2017	115,674						

B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-Ultimate
2009						1.002	
2010					1.003	1.002	
2011				1.007	1.003	1.002	
2012			1.013	1.006	1.004		
2013		1.031	1.012	1.006			
2014	1.241	1.032	1.012				
2015	1.246	1.031					
2016	1.255						
Latest Year	1.255	1.031	1.012	1.006	1.004	1.002	
Cumulative	1.328	1.058	1.027	1.015	1.009	1.006	1.004

Acc. Year	2017	2016	2015	2014	2013	2012	2011
Ult. Claim Counts	153,616	149,774	146,714	140,423	133,870	125,439	118,493

C. Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							108,869
2009						95,734	100,426
2010					94,016	100,574	105,653
2011				86,114	96,021	102,634	107,345
2012			77,475	92,797	103,207	110,208	
2013		61,383	84,338	101,272	112,453		
2014	28,714	65,810	90,489	108,293			
2015	30,440	70,748	98,009				
2016	32,472	76,353					
2017	35,912						

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							88.4%
2009						84.1%	88.2%
2010					79.9%	85.4%	89.8%
2011				72.7%	81.0%	86.6%	90.6%
2012			61.8%	74.0%	82.3%	87.9%	
2013		45.9%	63.0%	75.6%	84.0%		
2014	20.4%	46.9%	64.4%	77.1%			
2015	20.7%	48.2%	66.8%				
2016	21.7%	51.0%					
2017	23.4%						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							111,533
2009						100,016	103,129
2010					98,885	103,425	106,643
2011				91,381	99,536	104,105	107,345
2012			83,797	96,737	105,371	110,208	
2013		68,245	89,429	103,239	112,453		
2014	32,828	71,586	93,807	108,293			
2015	34,298	74,793	98,009				
2016	35,014	76,353					
2017	35,912						

F. Average Paid Medical per Closed Indemnity Claim

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							20,668
2009						20,134	22,644
2010					17,961	20,829	23,448
2011				13,878	17,298	20,267	22,454
2012			10,033	13,818	17,077	19,421	
2013		5,753	10,044	13,644	16,529		
2014	2,393	5,836	10,080	13,689			
2015	2,529	6,272	10,459				
2016	2,737	6,512					
2017	2,921						

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

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

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

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							22,181
2009						22,413	24,111
2010					20,050	22,261	23,992
2011				15,603	18,818	20,926	22,454
2012			11,450	14,972	17,770	19,421	
2013		6,796	11,013	14,112	16,529		
2014	2,642	6,632	10,671	13,689			
2015	2,759	6,766	10,459				
2016	2,878	6,512					
2017	2,921						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							2,473,871
2009						2,241,710	2,486,583
2010					1,982,604	2,302,339	2,558,574
2011				1,425,806	1,873,073	2,178,541	2,410,302
2012			959,457	1,448,333	1,872,425	2,140,333	
2013		463,805	984,881	1,456,941	1,858,692		
2014	86,730	474,768	1,001,031	1,482,378			
2015	94,619	506,066	1,025,062				
2016	100,754	497,244					
2017	104,899						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							968,523
2009						1,021,229	885,474
2010					1,063,283	938,127	768,797
2011				1,043,365	932,771	782,754	631,080
2012			994,992	965,034	826,717	686,986	
2013		827,672	962,054	893,649	731,717		
2014	348,906	822,933	944,311	836,170			
2015	364,097	834,392	907,267				
2016	380,243	831,340					
2017	402,015						

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

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

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

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							70,886
2009						58,630	68,376
2010					47,071	57,112	66,224
2011				34,095	43,455	51,572	59,040
2012			22,368	31,432	39,227	47,346	
2013		12,722	20,918	29,196	36,256		
2014	4,469	12,343	20,425	27,832			
2015	4,506	12,295	20,234				
2016	4,735	12,760					
2017	5,040						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							-188,840
2009						-251,113	-184,821
2010					-229,187	-162,827	-65,562
2011				-179,576	-152,746	-75,862	
2012			-141,412	-123,843	-84,888		
2013		-87,297	-106,495	-57,428			
2014	-18,384	-71,293	-67,770				
2015	-17,385	-49,732					
2016	-12,036						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							779,683
2009						770,116	700,652
2010					834,096	775,300	703,235
2011				863,789	780,025	706,892	631,080
2012			853,579	841,191	741,829	686,986	
2013		740,375	855,559	836,221	731,717		
2014	330,522	751,640	876,540	836,170			
2015	346,712	784,660	907,267				
2016	368,207	831,340					
2017	402,015						

(e) Each amount is equal to the product of [the average monthly medical payment per open indemnity claim] and [the number of months for the current evaluation]. For evaluations indicating claim settlement rate decreases, the average monthly medical payment per open indemnity claim at the prior evaluation is used. For evaluations indicating claim settlement rate increases, the average monthly medical payment per open indemnity claim at the same evaluation is used.

(f) Each amount is equal to [the difference between unadjusted and adjusted closed indemnity claim counts (Items C and E)] multiplied by [the corresponding average paid medical per open indemnity claim for indemnity claims in transition (Item J)].

(g) Each amount is the sum of [paid medical on open indemnity claims (Item I)] and the corresponding [incremental changes in paid medical on open indemnity claims resulting from the impact of changes in indemnity claim settlement rates (Item K)].

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

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

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							251,028
2009						225,380	227,790
2010					221,335	223,663	226,736
2011				207,660	211,276	214,797	218,367
2012			208,935	214,270	219,641	224,211	
2013		202,240	212,550	220,321	226,737		
2014	150,884	225,283	237,008	244,580			
2015	157,654	238,446	249,181				
2016	168,931	254,110					
2017	186,648						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2008							3,504,581
2009						3,237,206	3,415,025
2010					3,078,076	3,344,823	3,533,825
2011				2,715,385	3,105,484	3,354,485	3,524,053
2012			2,021,971	2,503,793	2,833,896	3,051,530	
2013		1,406,420	2,052,989	2,513,484	2,817,147		
2014	568,136	1,451,691	2,114,579	2,563,128			
2015	598,985	1,529,172	2,181,510				
2016	637,893	1,582,694					
2017	693,562						

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

Accident	Evaluated as of (in months)					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2009						1.055
2010					1.087	1.057
2011				1.144	1.080	1.051
2012			1.238	1.132	1.077	
2013		1.460	1.224	1.121		
2014	2.555	1.457	1.212			
2015	2.553	1.427				
2016	2.481					
Latest Year	2.481	1.427	1.212	1.121	1.077	1.051

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

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

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

P. Paid Medical Loss Development Factors (i)

Accident Year	Evaluated as of (in months) 12-24	24-36	36-48	48-60	60-72	72-84
2009						1.067
2010					1.095	1.066
2011				1.143	1.094	1.058
2012			1.242	1.141	1.086	
2013		1.462	1.234	1.129		
2014	2.519	1.462	1.224			
2015	2.533	1.438				
2016	2.481					

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

Accident Year	Evaluated as of (in months) 12-24	24-36	36-48	48-60	60-72	72-84
2009						-1.15%
2010					-0.78%	-0.90%
2011				0.03%	-1.24%	-0.68%
2012			-0.34%	-0.81%	-0.88%	
2013		-0.14%	-0.82%	-0.71%		
2014	1.42%	-0.34%	-1.00%			
2015	0.79%	-0.83%				
2016	0.02%					

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

Accident Year	Evaluated as of (in months) 12-24	24-36	36-48	48-60	60-72	72-84
2009						1.060
2010					1.093	1.060
2011				1.154	1.086	1.055
2012			1.254	1.139	1.081	
2013		1.474	1.233	1.126		
2014	2.580	1.460	1.217			
2015	2.553	1.428				
2016	2.482					
Latest Year	2.482	1.428	1.217	1.126	1.081	1.055
3-Year Average	2.538	1.454	1.234	1.140	1.087	1.058

(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 December 31, 2017

		Development Factors			
			Cumulative		
	(1)	(2)	(3)	(4)	(5)
Accident Year	Paid or Incurred Loss Ratio(a)	Annual(b)	Unadjusted for Impact of SB 863(b)	Adjusted for Impact of SB 863(b)	Projected Ultimate Loss Ratio
					(5) = (1) x (4)
1985	0.446	1.001	1.003	1.003	0.448
1986	0.396	1.000	1.003	1.003	0.397
1987	0.346	1.000	1.003	1.003	0.347
1988	0.330	1.000	1.003	1.003	0.331
1989	0.343	1.001	1.004	1.004	0.344
1990	0.397	1.001	1.004	1.004	0.399
1991	0.424	1.001	1.005	1.005	0.426
1992	0.349	1.001	1.005	1.005	0.351
1993	0.287	1.000	1.006	1.006	0.289
1994	0.327	1.000	1.006	1.006	0.329
1995	0.473	1.000	1.006	1.006	0.476
1996	0.529	1.001	1.006	1.006	0.533
1997	0.599	1.001	1.007	1.007	0.603
1998	0.651	1.000	1.007	1.007	0.655
1999	0.667	1.003	1.034	1.034	0.690
2000	0.574	1.003	1.037	1.037	0.596
2001	0.474	1.005	1.042	1.042	0.494
2002	0.352	1.004	1.046	1.046	0.368
2003	0.230	1.005	1.052	1.052	0.242
2004	0.137	1.007	1.059	1.059	0.145
2005	0.116	1.009	1.068	1.068	0.124
2006	0.148	1.012	1.081	1.081	0.160
2007	0.201	1.015	1.098	1.098	0.221
2008	0.252	1.019	1.119	1.119	0.282
2009	0.288	1.025	1.147	1.147	0.330
2010	0.272	1.031	1.183	1.183	0.322
2011	0.244	1.038	1.228	1.228	0.300
2012	0.210	1.048	1.286	1.286	0.270
2013	0.170	1.075	1.383	1.410	0.240
2014	0.144	1.120	1.548	1.629	0.235
2015	0.115	1.240	1.920	2.020	0.233
2016	0.071	1.593	3.059	3.218	0.227
2017	0.023	3.223	9.858	10.371	0.242

(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 December 31, 2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Reform Adjusted				
			Development Factors				
				Cumulative			
Accident Year	Unadjusted Paid or Incurred Loss Ratio(a)	Adjusted Paid or Incurred Loss Ratio(b)	Annual(c)	Unadjusted for Reforms(c)	Adjusted for Reforms(c)	Adjusted Developed Loss Ratio(d) (2) x (5)	Projected Ultimate Loss Ratio (1) + ((6) - (2))
1985	0.350	0.350	1.000	1.024	1.024	0.359	0.359
1986	0.333	0.333	0.999	1.023	1.023	0.340	0.340
1987	0.314	0.314	1.000	1.023	1.023	0.321	0.321
1988	0.304	0.304	1.000	1.023	1.023	0.311	0.311
1989	0.325	0.325	1.001	1.024	1.024	0.333	0.333
1990	0.367	0.367	1.000	1.024	1.024	0.376	0.376
1991	0.384	0.384	1.003	1.027	1.027	0.394	0.394
1992	0.320	0.320	1.002	1.029	1.029	0.329	0.329
1993	0.267	0.267	1.002	1.031	1.031	0.275	0.275
1994	0.308	0.308	1.000	1.031	1.031	0.317	0.317
1995	0.454	0.454	1.001	1.032	1.032	0.468	0.468
1996	0.486	0.486	1.000	1.031	1.031	0.502	0.502
1997	0.545	0.545	1.002	1.033	1.033	0.563	0.563
1998	0.657	0.657	1.002	1.035	1.035	0.680	0.680
1999	0.656	0.608	1.009	1.141	1.141	0.693	0.742
2000	0.592	0.549	1.011	1.153	1.153	0.633	0.677
2001	0.520	0.482	1.012	1.167	1.167	0.563	0.601
2002	0.400	0.371	1.013	1.183	1.183	0.439	0.468
2003	0.254	0.235	1.013	1.198	1.198	0.282	0.300
2004	0.171	0.159	1.015	1.216	1.216	0.193	0.205
2005	0.166	0.154	1.017	1.237	1.237	0.191	0.202
2006	0.211	0.197	1.020	1.261	1.261	0.248	0.263
2007	0.292	0.273	1.024	1.291	1.291	0.352	0.371
2008	0.359	0.337	1.028	1.327	1.327	0.447	0.470
2009	0.410	0.386	1.033	1.371	1.371	0.529	0.553
2010	0.393	0.373	1.034	1.417	1.417	0.529	0.549
2011	0.325	0.312	1.045	1.481	1.481	0.462	0.475
2012	0.266	0.259	1.055	1.562	1.553	0.402	0.409
2013	0.203	0.200	1.081	1.689	1.671	0.335	0.337
2014	0.162	0.161	1.126	1.902	1.866	0.300	0.301
2015	0.128	0.128	1.217	2.314	2.252	0.288	0.288
2016	0.088	0.088	1.428	3.305	3.193	0.281	0.281
2017	0.039	0.039	2.482	8.202	7.898	0.310	0.310

(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 December 31, 2017. Reflects an adjustment for SB 863 of -4.2% applied to payments made before January 1, 2013, and adjustments for RBRVS of -2.1% applied to payments made before January 1, 2014, and -1.7% applied to payments made before January 1, 2015. No adjustments are applied to the incurred loss ratios.

(c) 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 Adjustments (a)		(2) Frequency Adjustments (a)	(3) Annual Impact on Indemnity Benefits Due to Wage Inflation (b)		(4a) Annual Cost Impact on Indemnity (c)	(5a) Composite Indemnity Adjustment Factor (d)	
1985	0.0		0.0	2.0		2.0	1.528	
1986	0.0		0.0	1.6		1.6	1.504	
1987	0.0		0.0	1.9		1.9	1.476	
1988	0.0		0.0	1.5		1.5	1.454	
1989	0.0		0.0	1.5		1.5	1.433	
1990	2.3		19.9	1.7		24.7	1.149	
1991	4.9		14.8	0.8		21.4	0.946	
1992	1.8		-8.3	1.6		-5.2	0.998	
1993	0.2		-18.1	0.4		-17.6	1.211	
1994	-5.1		0.2	0.6		-4.3	1.266	
1995	6.3		0.6	1.0		8.0	1.172	
1996	5.3		0.4	1.2		7.0	1.095	
1997	9.7		0.2	1.6		11.7	0.981	
1998	6.5		0.0	1.8		8.4	0.905	
1999	5.7		0.0	2.1		7.9	0.838	
2000	3.9		0.0	3.1		7.1	0.783	
2001	-0.3		0.0	0.2		-0.1	0.783	
2002	-0.7		0.0	0.2		-0.5	0.804	(e)
2003	7.3		0.0	1.1		8.5	0.804	(e)
2004	-6.0		-13.7	1.6		-17.6	1.107	(e)
2005	-31.6		-15.3	1.1		-41.5	1.503	
2006	5.6		-5.7	1.6		1.2	1.486	
2007	1.6		0.0	1.6		3.2	1.439	
2008	4.8		0.6	0.7		6.2	1.356	
2009	0.4		1.4	0.2		2.0	1.329	
2010	0.4		0.0	1.0		1.4	1.311	
2011	0.0		0.0	1.6		1.6	1.290	
2012	0.3		0.0	2.1		2.4	1.260	
2013	2.6		0.2	0.4		3.2	1.220	
2014	7.0		1.5	1.7		10.4	1.105	
2015	0.3		0.0	2.3		2.6	1.077	
2016	0.3		0.0	1.0		1.3	1.064	
2017	0.5		0.0	1.5		2.0	1.043	
2018	0.4		0.0	2.1		2.5		
4/1/2019	0.3	(Annual 0.4)	0.0	1.4	(Annual 1.9)	1.7		

(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) { [Column (1) /100 + 1.0] x [Column (2) /100 + 1.0] x [Column (3) /100 + 1.0] - 1.0 } x 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 4/1/2019 level.

(e) On-level factors for accident years 2002, 2003 and 2004 adjust the portion of permanent disability claims that are estimated to not be subject to the January 1, 2005 PDRS (95% for accident year 2002, 75% for accident year 2003 and 40% for accident year 2004) to the January 1, 2005 PDRS level, and adjust for the corresponding utilization impacts on all 2002, 2003 and 2004 indemnity claims.

Annual Medical Cost Level Change - Non-Legislative

Accident Year	(1) Proportion of Medical Subject to Fee Schedule (a)	(2) Proportion of Medical Not Subject to Fee Schedule (a)	(3) Impact of Fee Schedule Change on Total Medical (b)		(4) Change in Medical CPI (c)		(5) Impact of CPI Change on Total Medical (d)		(6) Annual Non-Legislative Cost Impact on Total Medical (e)
1985	0.665	0.335	2.3%		6.5%		2.2%		4.5%
1986	0.604	0.396	0.0%		9.1%		3.0%		3.0%
1987	0.610	0.390	0.9%		7.4%		2.9%		3.8%
1988	0.649	0.351	0.8%		7.7%		3.0%		3.8%
1989	0.647	0.353	0.0%		8.6%		3.0%		3.0%
1990	0.661	0.339	0.0%		10.4%		3.7%		3.7%
1991	0.631	0.369	0.0%		10.6%		3.6%		3.6%
1992	0.628	0.372	0.0%		8.1%		3.0%		3.0%
1993	0.565	0.435	0.0%		7.3%		2.7%		2.7%
1994	0.691	0.309	-3.6%		4.3%		1.3%	(i)	-2.3%
1995	0.681	0.319	0.0%		3.0%		0.9%		0.9%
1996	0.663	0.337	0.0%		3.0%		1.0%		1.0%
1997	0.643	0.357	0.0%		2.2%		0.7%		0.7%
1998	0.658	0.342	0.0%		2.2%		0.8%		0.8%
1999	0.728	0.272	1.6%		3.3%		0.9%	(ii)	2.5%
2000	0.715	0.285	0.5%		4.3%		1.2%		1.7%
2001	0.722	0.278	1.5%		4.8%		1.4%		2.9%
2002	0.635	0.365	0.6%		5.1%		1.4%		2.0%
2003	0.786	0.214	0.0%		4.8%		1.4%	(iii)	1.4%
2004	0.952	0.048	0.0%		5.0%		0.0%	(iv),(v)	0.0%
2005	0.936	0.064	0.0%		4.8%		0.0%	(v)	0.0%
2006	0.926	0.074	0.0%		4.1%		0.3%		0.3%
2007	0.923	0.077	1.4%		5.3%		0.4%		1.8%
2008	0.896	0.104	-0.1%		4.2%		0.3%		0.2%
2009	0.894	0.106	0.0%		3.6%		0.4%		0.4%
2010	0.895	0.105	0.0%		2.8%		0.3%		0.3%
2011	0.969	0.031	0.0%		3.2%		0.3%		0.3%
2012	0.969	0.031	0.0%		2.7%		0.1%		0.1%
2013	0.938	0.062	0.0%		2.6%		0.1%		0.1%
2014	0.928	0.072	0.4%		4.2%		0.3%		0.7%
2015	0.934	0.066	0.1%		3.1%		0.2%		0.3%
2016	0.919	0.081	0.1%		5.4%		0.4%		0.5%
2017	0.919	0.081	0.1%		2.3%		0.2%		0.3%
2018	0.919	0.081	0.0%		3.3%		0.3%		0.3%
4/1/2019	0.919	0.081	0.0%	(Annual 0.0%)	2.5%	(Annual 3.3%)	0.2%		0.2%

(a) From a Special Carrier Study through 1990. Based on WCIRB's Aggregate Indemnity and Medical Costs Calls for years 1991 through 2012. Based on WCIRB medical transaction data from 2013 onwards. Accident years 2011 and subsequent do not include MCCP costs.

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

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

(d) Adjusted CPI on workers' compensation medical costs that are not subject to fee schedules. The current year impact is the weighted average of 0% and Column (4), with Columns (1) and (2) from prior years as weights. (i) 1993's non-fee proportion is reduced by 13.8% due to the new medical-legal fee schedule enacted in 1994. (ii) 1998's non-fee proportion is reduced by 7.7% due to the Inpatient Hospital Fee Schedule (IHFS) effective 4/1/1999. (iii) 2002's non-fee proportion is reduced by 7.6% due to the new pharmaceutical fee schedule effective 1/1/2003. (iv) 2003's non-fee proportion is reduced by 17.2% due to the outpatient fee schedule effective 1/1/2004. (v) Given the anticipated impact of legislative reform, a 0% inflation rate has been assumed for 2004 and 2005.

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

Annual Medical Cost Level Change - Legislative

Accident Year	(1) Annual Legislative Cost Impact on Medical Severity(a)	(2) Annual Legislative Cost Impact on Medical Due to Frequency Changes(b)	(3) Annual Total Legislative Cost Impact on Medical(c)
1985	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%
1990	-0.7%	19.9%	19.1%
1991	-1.6%	14.7%	12.9%
1992	0.5%	-8.4%	-7.9%
1993	-0.7%	-18.1%	-18.7%
1994	-2.6%	0.3%	-2.3%
1995	0.0%	0.5%	0.5%
1996	0.0%	0.4%	0.4%
1997	0.0%	0.2%	0.2%
1998	12.6%	0.0%	12.6%
1999	12.6%	0.0%	12.6%
2000	7.0%	0.0%	7.0%
2001	6.6%	0.0%	6.6%
2002	-5.6%	0.0%	-5.6%
2003	-6.0%	0.0%	-6.0%
2004	-24.4%	-12.5%	-33.9%
2005	0.0%	-13.9%	-13.9%
2006	0.1%	-5.2%	-5.1%
2007	0.1%	0.0%	0.1%
2008	0.2%	0.3%	0.5%
2009	0.0%	1.0%	1.0%
2010	0.0%	0.0%	0.0%
2011	-2.0%	0.0%	-2.0%
2012	-4.0%	0.0%	-4.0%
2013	-3.2%	0.2%	-3.0%
2014	-2.2%	1.3%	-0.9%
2015	-0.3%	0.0%	-0.3%
2016	-0.4%	0.0%	-0.4%
2017	-0.3%	0.0%	-0.3%
2018	0.0%	0.0%	0.0%
4/1/2019	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) [Column (1) + 1.0] x [Column (2) + 1.0] - 1.0

Total Medical Cost Level Factors

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical(b)	(3) Total Annual Cost Impact on Medical(c)	(4) Composite Medical On-level Factor(d)	
1985	4.5%	0.0%	4.5%	0.967	
1986	3.0%	0.0%	3.0%	0.939	
1987	3.8%	0.0%	3.8%	0.905	
1988	3.8%	0.0%	3.8%	0.872	
1989	3.0%	0.0%	3.0%	0.846	
1990	3.7%	19.1%	23.5%	0.685	
1991	3.6%	12.9%	16.9%	0.586	
1992	3.0%	-7.9%	-5.2%	0.618	
1993	2.7%	-18.7%	-16.5%	0.740	
1994	-2.3%	-2.3%	-4.6%	0.775	
1995	0.9%	0.5%	1.4%	0.765	
1996	1.0%	0.4%	1.4%	0.754	
1997	0.7%	0.2%	0.9%	0.747	
1998	0.8%	12.6%	13.5%	0.658	
1999	2.5%	12.6%	15.4%	0.570	
2000	1.7%	7.0%	8.8%	0.524	
2001	2.9%	6.6%	9.7%	0.478	
2002	2.0%	-5.6%	-3.7%	0.496	
2003	1.4%	-6.0%	-4.7%	0.521	
2004	0.0%	-33.9%	-33.9%	0.787	
2005	0.0%	-13.9%	-13.9%	0.914	
2006	0.3%	-5.1%	-4.8%	0.961	
2007	1.8%	0.1%	1.9%	0.943	
2008	0.2%	0.5%	0.7%	0.936	
2009	0.4%	1.0%	1.4%	0.923	
2010	0.3%	0.0%	0.3%	0.920	
2011	0.3%	-2.0%	-1.7%	0.936	
2012	0.1%	-4.0%	-3.9%	0.974	
2013	0.1%	-3.0%	-2.9%	1.004	
2014	0.7%	-0.9%	-0.2%	1.010	(e)
2015	0.3%	-0.3%	0.0%	1.011	(e)
2016	0.5%	-0.4%	0.1%	1.011	(e)
2017	0.3%	-0.3%	0.0%	1.012	(e)
2018	0.3%	0.0%	0.3%		
4/1/2019	0.2%	0.0%	0.2%		

(a) See Exhibit 4.2, Column (6).
(b) See Exhibit 4.3, Column (3).
(c) Column (3) = [1.0 + Column (1)] x [1.0 + Column (2)] - 1.0.
(d) These factors adjust the annual impact shown in Column (3) to the 4/1/2019 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

Year	Annual Wage Level Change(a)	Factor to a 4/1/2019 Wage Level
1985	5.7	3.220
1986	4.7	3.075
1987	5.6	2.912
1988	4.4	2.789
1989	4.3	2.674
1990	5.0	2.547
1991	2.3	2.490
1992	4.7	2.378
1993	1.2	2.350
1994	1.8	2.308
1995	2.9	2.243
1996	3.4	2.170
1997	4.7	2.072
1998	5.2	1.970
1999	6.2	1.855
2000	9.0	1.702
2001	0.6	1.691
2002	0.5	1.683
2003	3.3	1.629
2004	4.7	1.556
2005	3.1	1.509
2006	4.6	1.443
2007	4.5	1.381
2008	2.1	1.352
2009	0.5	1.346
2010	3.0	1.306
2011	3.1	1.267
2012	4.1	1.217
2013	0.7	1.209
2014	3.3	1.170
2015	4.4	1.121
2016	1.9	1.100
2017	2.9	1.069
Projected:		
2018	4.1	
4/1/2019	2.7	(Annual = 3.6)

(a) Historical wage changes through 2016 are based on Bureau of Labor Statistics data. Forecasts for 2017 to 2019 are based on the average of wage level projections made by the UCLA Anderson School of Business as of December 2017 and those made by the California Department of Finance as of November 2017.

Premium Adjustment Factors

Calendar Year	(1) Factor to a 4/1/2019 Wage Level (a)	(2a) Ratio of Industry Average Charged Rates to Advisory Pure Premium Rates (b)	(2b) Factor to Industry Average Filed Pure Premium Rate Level as of July 1, 2017 (c)	(2c) Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of July 1, 2017 (d)	(3) Adjustment to Remove Surcharge Premium (e)	(4) Average Experience Modification (f)	(5) Off-Balance Correction in Advisory July 1, 2017 Pure Premium Rates	(6) Factor to Adjust for Impact of Premium Resulting from Audits (g)	(7) Composite Premium Adjustment Factor (h)
1985	3.220	---	---	0.974	0.991	0.984	1.026	---	3.078
1986	3.075	---	---	0.890	0.991	0.983	1.026	---	2.688
1987	2.912	---	---	0.782	0.992	0.983	1.026	---	2.240
1988	2.789	---	---	0.700	0.993	0.963	1.026	---	1.961
1989	2.674	---	---	0.689	0.993	0.945	1.026	---	1.886
1990	2.547	---	---	0.672	0.991	0.942	1.026	---	1.754
1991	2.490	---	---	0.622	0.987	0.939	1.026	---	1.586
1992	2.378	---	---	0.597	0.982	0.940	1.026	---	1.445
1993	2.350	---	---	0.589	0.981	0.949	1.026	---	1.394
1994	2.308	---	---	0.675	0.986	0.948	1.026	---	1.579
1995	2.243	---	---	0.913	0.995	0.958	1.026	---	2.073
1996	2.170	1.023	0.970	0.948	1.000	0.935	1.026	---	2.144
1997	2.072	0.989	0.968	0.979	1.000	0.949	1.026	---	2.083
1998	1.970	0.965	1.008	1.045	1.000	0.959	1.026	---	2.091
1999	1.855	0.972	1.019	1.048	1.000	0.954	1.026	---	1.986
2000	1.702	1.005	0.924	0.919	1.000	0.970	1.026	---	1.572
2001	1.691	1.029	0.814	0.791	1.000	0.969	1.026	---	1.346
2002	1.683	1.157	0.728	0.629	1.000	0.991	1.026	---	1.042
2003	1.629	1.267	0.596	0.470	1.000	1.005	1.026	---	0.743
2004	1.556	1.397	0.606	0.434	1.000	0.981	1.026	---	0.671
2005	1.509	1.470	0.729	0.496	1.000	0.982	1.026	---	0.743
2006	1.443	1.447	0.940	0.650	1.000	0.956	1.026	---	0.956
2007	1.381	1.493	1.281	0.858	1.000	0.931	1.026	0.985	1.222
2008	1.352	1.426	1.524	1.069	1.000	0.946	1.026	0.991	1.476
2009	1.346	1.366	1.502	1.100	1.000	0.937	1.026	1.034	1.591
2010	1.306	1.384	1.472	1.064	1.000	0.941	1.026	1.005	1.446
2011	1.267	1.401	1.471	1.050	1.000	0.982	1.026	---	1.321
2012	1.217	1.223	1.213	0.992	1.000	1.000	1.026	---	1.177
2013	1.209	1.138	0.976	0.858	1.000	0.983	1.026	---	1.028
2014	1.170	1.126	0.899	0.798	1.000	0.961	1.026	---	0.948
2015	1.121	1.109	0.874	0.788	1.000	0.951	1.026	---	0.905
2016	1.100	1.147	0.941	0.820	1.000	0.950	1.026	---	0.926
2017	1.069	1.155	1.039	0.900	1.000	0.959	1.026	---	0.977

(a) See Exhibit 5.1.

(b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.

(c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory July 1, 2017 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory July 1, 2017 pure premium rate ($2.00) to the industry average filed pure premium rate as of July 1, 2017 ($2.34).

(d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of July 1, 2017.

(e) Based on unit statistical data.

(f) Based on average promulgated experience modifications. Calendar years 1996 through 2000 include adjustments for the impacts of AB 1913 and SB 1217 (1998).

(g) Based on a comparison of premium reported on a calendar year basis to premium reported on an estimated ultimate policy year basis over the course of two accident years. The factor is applied only for calendar years 2007 to 2010, during which reported premiums were impacted by recessionary economic forces.

(h) (1)x(2c)x(3)x(6) ÷ [(4)x(5)] for calendar years 2007 to 2010. (1)x(2c)x(3) ÷ [(4)x(5)] for all other calendar years.

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

	Annual %	Annual Log Differences						
	Changes Intra-	Intra-Class Indemnity Frequency			AY+1		Economic	CalOSHA
	Class Ind Freq	per $M Exposure at PY 2016 Level			Indemnity	Cumulative	Variables	Dummy
AY	Total	Total	Cumulative	Non-cum.	Benefit Level	Injury Index	(1st Prin. Comp.)	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	-----	0.173	0.000
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.080	0.000
1981	-3.5%	-0.036	-0.028	-0.036	0.000	0.008	-0.078	0.000
1982	-1.6%	-0.016	0.153	-0.022	0.352	0.175	-0.292	0.000
1983	6.2%	0.060	0.214	0.054	0.081	0.160	0.029	0.000
1984	9.5%	0.091	0.235	0.084	0.000	0.151	0.221	0.000
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.080	0.000
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.077	0.000
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.150	0.000
1988	0.7%	0.007	0.104	0.000	0.000	0.104	0.088	0.000
1989	2.5%	0.024	0.212	0.009	0.046	0.203	0.045	0.000
1990	9.0%	0.087	0.337	0.061	0.071	0.276	-0.120	0.000
1991	0.3%	0.003	0.166	-0.018	0.023	0.184	-0.291	0.000
1992	-11.1%	-0.118	-0.272	-0.098	0.013	-0.174	-0.185	0.068
1993	-14.9%	-0.162	-0.240	-0.153	-0.057	-0.088	-0.022	0.464
1994	-12.8%	-0.136	-0.462	-0.107	0.061	-0.355	0.106	0.173
1995	-4.6%	-0.048	-0.016	-0.050	0.053	0.034	0.092	0.295
1996	-6.8%	-0.070	-0.136	-0.065	0.096	-0.071	0.074	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.137	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.078	0.000
1999	1.5%	0.014	0.100	0.008	0.040	0.092	0.127	0.000
2000	4.0%	0.039	0.071	0.037	-0.003	0.034	0.066	0.000
2001	-6.9%	-0.072	-0.018	-0.076	-0.007	0.059	-0.100	0.000
2002	-2.8%	-0.029	0.001	-0.031	0.060	0.033	-0.197	0.000
2003	-3.2%	-0.032	-0.009	-0.035	-0.065	0.026	-0.022	0.000
2004	-16.9%	-0.185	-0.212	-0.182	-0.398	-0.030	0.098	0.000
2005	-13.6%	-0.147	-0.299	-0.134	0.051	-0.165	0.143	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.090	0.000
2007	-1.6%	-0.017	0.021	-0.020	0.049	0.040	-0.095	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.320	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.414	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.077	0.000
2011	1.3%	0.013	0.033	0.010	0.003	0.022	0.048	0.000
2012	4.7%	0.046	0.130	0.036	0.022	0.094	0.120	0.000
2013	0.6%	0.006	0.155	-0.015	0.071	0.170	0.154	0.000
2014	0.5%	0.005	0.095	-0.009	0.003	0.104	0.172	0.000
2015	-0.6%	-0.006	0.075	-0.020	0.002	0.094	0.192	0.000
2016*	-3.2%	-0.033	0.000	-0.039	0.004	0.040	0.128	0.000
2017	*-0.9%*	*-0.009*	*-0.009*	*-0.009*	*0.004*	*0.000*	0.109	0.000
2018	*-1.3%*	*-0.013*	*-0.013*	*-0.013*	*0.004*	*0.000*	0.066	0.000
2019	*-2.0%*	*-0.020*	*-0.020*	*-0.020*	*0.004*	*0.000*	-0.005	0.000
2020	*-2.1%*	*-0.021*	*-0.021*	*-0.021*	*0.004*	*0.000*	-0.016	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020			
Std Err of Y Est	0.040			
R Squared	0.583			
No. of Observations	38			
Degrees of Freedom	33			
X Coefficient(s)		0.178	0.284	0.094	-0.131
Std Err of Coef.		0.073	0.062	0.044	0.077

Notes:
Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency.
The Indemnity Benefit Level change for Ogilvie & Almaraz / Guzman in 2009-2010 is not leading.
The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits.
The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03.
For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda Item III.
Economic variables are historical through 2016; December 2017 UCLA Anderson Forecasts for 2017 on.
Regression is over AY 1979 through AY 2016. AY 2017 through AY 2020 are projections.
The constant term, -0.020, consists of measured offsets that recognize annual changes in real benefit levels relative to nominal benefit levels and long-term economic growth. Without these offsets, the indemnity benefit level and economic variables would project frequency to increase without bound.
*AY 2016 is preliminary and change is based on a comparison of 2016 accidents on 2015 policies to 2015 accidents on 2014 policies.

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

Accident Year	(1) Estimated Ultimate Severity	(2) Annual % Change	(3) Indemnity Adjustment Factor (a)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	9,968	---	1.837	18,314	---
1991	10,903	9.4%	1.738	18,944	3.4%
1992	11,003	0.9%	1.680	18,484	-2.4%
1993	11,991	9.0%	1.670	20,024	8.3%
1994	12,949	8.0%	1.749	22,649	13.1%
1995	14,532	12.2%	1.629	23,676	4.5%
1996	16,271	12.0%	1.529	24,876	5.1%
1997	19,320	18.7%	1.372	26,501	6.5%
1998	21,169	9.6%	1.265	26,784	1.1%
1999	23,214	9.7%	1.172	27,216	1.6%
2000	24,626	6.1%	1.094	26,951	-1.0%
2001	27,121	10.1%	1.096	29,712	10.2%
2002	26,193	-3.4%	1.125	29,461	-0.8%
2003	25,783	-1.6%	1.124	28,975	-1.6%
2004	21,031	-18.4%	1.336	28,107	-3.0%
2005	18,988	-9.7%	1.537	29,177	3.8%
2006	20,706	9.1%	1.432	29,656	1.6%
2007	22,514	8.7%	1.387	31,238	5.3%
2008	24,667	9.6%	1.315	32,430	3.8%
2009	25,884	4.9%	1.307	33,827	4.3%
2010	25,537	-1.3%	1.289	32,912	-2.7%
2011	25,159	-1.5%	1.268	31,914	-3.0%
2012	24,691	-1.9%	1.239	30,584	-4.2%
2013	24,914	0.9%	1.202	29,958	-2.0%
2014	26,508	6.4%	1.105	29,296	-2.2%
2015	27,090	2.2%	1.077	29,181	-0.4%
2016	27,257	0.6%	1.064	28,992	-0.6%
2017	27,759	1.8%	1.043	28,954	-0.1%

(6) Estimated Annual Exponential Trend Based on 2005 to 2017: -0.6%
(7) Estimated Annual Exponential Trend Based on 2012 to 2017: -1.1%

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 December 31, 2017

Accident Year	(1) Estimated Ultimate Severity (a)	(2) Annual % Change	(3) Medical Adjustment Factor (b)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	8,755	---	1.017	8,905	---
1991	9,419	7.6%	0.998	9,403	5.6%
1992	9,528	1.2%	0.966	9,200	-2.2%
1993	10,570	10.9%	0.949	10,033	9.1%
1994	11,620	9.9%	1.034	12,018	19.8%
1995	13,359	15.0%	1.027	13,716	14.1%
1996	14,335	7.3%	1.016	14,569	6.2%
1997	17,039	18.9%	1.009	17,196	18.0%
1998	20,869	22.5%	0.891	18,589	8.1%
1999	23,743	13.8%	0.772	18,334	-1.4%
2000	26,682	12.4%	0.710	18,941	3.3%
2001	31,724	18.9%	0.648	20,569	8.6%
2002	32,067	1.1%	0.674	21,605	5.0%
2003	30,614	-4.5%	0.708	21,683	0.4%
2004	28,341	-7.4%	0.860	24,380	12.4%
2005	29,244	3.2%	0.861	25,170	3.2%
2006	31,992	9.4%	0.856	27,393	8.8%
2007	35,748	11.7%	0.865	30,906	12.8%
2008	38,971	9.0%	0.869	33,881	9.6%
2009	41,254	5.9%	0.870	35,908	6.0%
2010	41,565	0.8%	0.874	36,311	1.1%
2011	37,893 (c)	---	0.897	33,982 (c)	---
2012	35,510	-6.3%	0.933	33,117	-2.5%
2013	33,212	-6.5%	0.972	32,267	-2.6%
2014	32,061	-3.5%	0.995	31,916	-1.1%
2015	31,508	-1.7%	0.997	31,409	-1.6%
2016	31,683	0.6%	0.994	31,485	0.2%
2017	33,452	5.6%	0.991	33,150	5.3%
			Selected Medical Severity Trend:		3.0%

(a) Estimated ultimate severities for all accident years are derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts. The estimated ultimate medical severities were derived from the projected ultimate loss ratios shown in Exhibit 3.2, column (7).

(b) These adjustment factors are based on Exhibit 4.4, excluding the impact of frequency, and including the impact of SB 863 and SB 1160 provisions applicable to outstanding medical losses.

(c) Severities for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Severities for accident years 2010 and prior do reflect MCCP costs.

Source: WCIRB experience calls.

Projection of Medical Severity Trends by Accident Year
Adjusted to Remove the Cost of Medical Cost Containment Programs (MCCP)
Based on Experience as of December 31, 2017

	MCCP Included				MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Accident Year	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change
2005	29,244	---	25,170	---	27,637	---	23,786	---
2006	31,992	9.4%	27,393	8.8%	29,915	8.2%	25,614	7.7%
2007	35,748	11.7%	30,906	12.8%	33,285	11.3%	28,777	12.3%
2008	38,971	9.0%	33,881	9.6%	35,472	6.6%	30,839	7.2%
2009	41,254	5.9%	35,908	6.0%	37,714	6.3%	32,827	6.4%
2010	41,565	0.8%	36,311	1.1%	37,961	0.7%	33,162	1.0%
2011	41,631	0.2%	37,334	2.8%	37,893	-0.2%	33,982	2.5%
2012	38,933	-6.5%	36,308	-2.7%	35,510	-6.3%	33,117	-2.5%
2013	36,498	-6.3%	35,460	-2.3%	33,212	-6.5%	32,267	-2.6%
2014	35,235	-3.5%	35,076	-1.1%	32,061	-3.5%	31,916	-1.1%
2015	34,577	-1.9%	34,468	-1.7%	31,508	-1.7%	31,409	-1.6%
2016	34,772	0.6%	34,555	0.3%	31,683	0.6%	31,485	0.2%
2017	36,597	5.2%	36,267	5.0%	33,452	5.6%	33,150	5.3%
Estimated Annual Exponential Trend								
Trend Based on 2005 to 2017:				2.1%				1.9%
Trend Based on 2012 to 2017:				-0.3%				-0.2%
						Selected Medical Severity Trend:		3.0%

(a) Estimated ultimate severities for all accident years were derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts.

(b) Adjustments to accident years 2005 through 2010 based on WCIRB's Annual Calls for Direct California Workers' Compensation Aggregate Indemnity and Medical Costs.

(c) Ultimate severities are on-leveled based on adjustment factors shown on Exhibit 6.3.

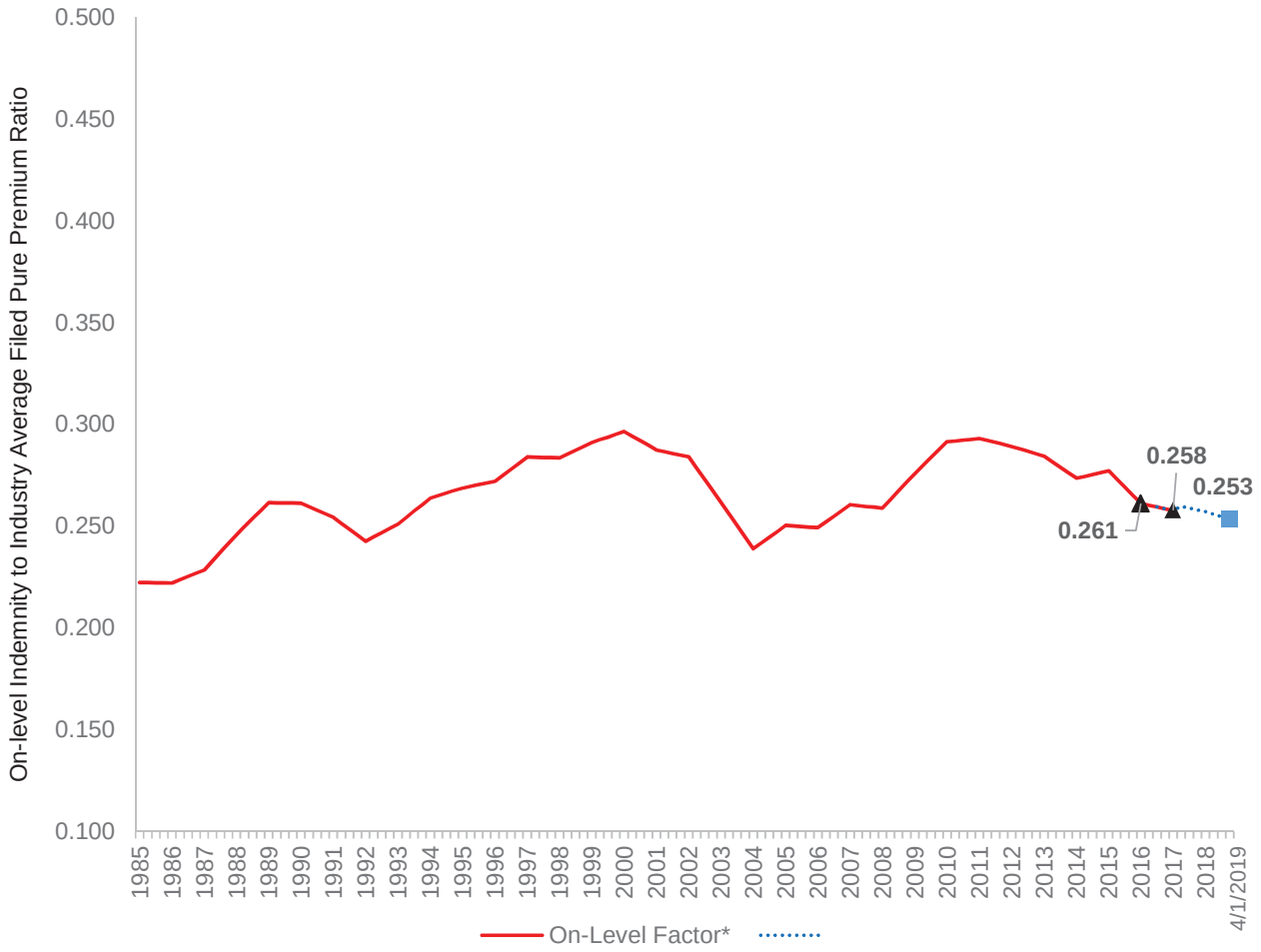
Source: WCIRB experience calls.

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

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)
1985	0.448	1.528	3.078	0.222
1986	0.397	1.504	2.688	0.222
1987	0.347	1.476	2.240	0.228
1988	0.331	1.454	1.961	0.246
1989	0.344	1.433	1.886	0.262
1990	0.399	1.149	1.754	0.261
1991	0.426	0.946	1.586	0.254
1992	0.351	0.998	1.445	0.243
1993	0.289	1.211	1.394	0.251
1994	0.329	1.266	1.579	0.264
1995	0.476	1.172	2.073	0.269
1996	0.533	1.095	2.144	0.272
1997	0.603	0.981	2.083	0.284
1998	0.655	0.905	2.091	0.284
1999	0.690	0.838	1.986	0.291
2000	0.596	0.783	1.572	0.297
2001	0.494	0.783	1.346	0.288
2002	0.368	0.804	1.042	0.284
2003	0.242	0.804	0.743	0.262
2004	0.145	1.107	0.671	0.239
2005	0.124	1.503	0.743	0.250
2006	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.284
2014	0.235	1.105	0.948	0.274
2015	0.233	1.077	0.905	0.277
2016	0.227	1.064	0.926	0.261
2017	0.242	1.043	0.977	0.258
				Projections (d)
2018				0.257
4/1/2019				0.253

(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 and 2019 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 December 31, 2017



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

** The 4/1/2019 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 December 31, 2017

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)×(2)÷(3)
1985	0.359	0.967	3.078	0.113
1986	0.340	0.939	2.688	0.119
1987	0.321	0.905	2.240	0.129
1988	0.311	0.872	1.961	0.138
1989	0.333	0.846	1.886	0.150
1990	0.376	0.685	1.754	0.147
1991	0.394	0.586	1.586	0.146
1992	0.329	0.618	1.445	0.141
1993	0.275	0.740	1.394	0.146
1994	0.317	0.775	1.579	0.156
1995	0.468	0.765	2.073	0.173
1996	0.502	0.754	2.144	0.176
1997	0.563	0.747	2.083	0.202
1998	0.680	0.658	2.091	0.214
1999	0.693	0.570	1.986	0.199
2000	0.633	0.524	1.572	0.211
2001	0.563	0.478	1.346	0.200
2002	0.439	0.496	1.042	0.209
2003	0.282	0.521	0.743	0.198
2004	0.193	0.787	0.671	0.227
2005	0.191	0.914	0.743	0.235
2006	0.248	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.402	0.974	1.177	0.333
2013	0.335	1.004	1.028	0.327
2014	0.300	1.010	0.948	0.320
2015	0.288	1.011	0.905	0.322
2016	0.281	1.011	0.926	0.307
2017	0.310	1.012	0.977	0.321
				Projections (d)
2018				0.326
4/1/2019				0.328

(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.

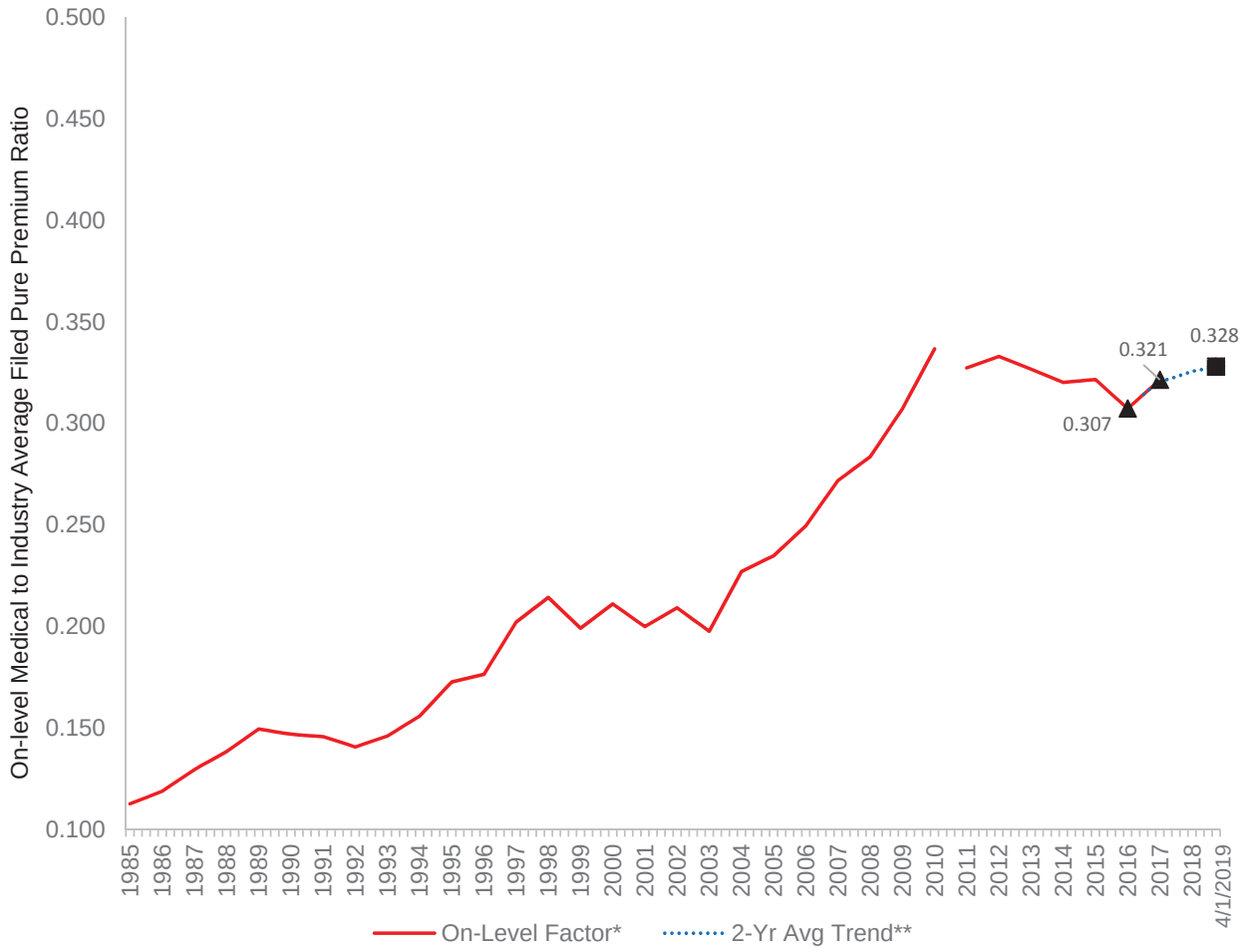
(b) See Exhibit 4.4.

(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 and 2019 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 December 31, 2017



* On-level medical to industry average filed pure premium ratios (see Exhibit 7.3)
** The 4/1/2019 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, 2018 and December 31, 2018
Based on Experience as of December 31, 2017

	Indemnity	Medical	Total
1. Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.253	0.328	0.581

Quarterly Incurred Indemnity Loss Development Factors

Through December 31, 2017

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	1.873
12/9									**1.448**	**1.511**	**1.510**	**1.530**	**1.564**	**1.632**	**1.587**	**1.585**	**1.570**	**1.578**	**1.578**	**1.578**
15/12	1.229	1.260	1.268	1.250	1.257	1.238	1.180	1.149	1.189	1.234	1.248	1.293	1.306	1.306	1.303	1.301	1.301	1.313	1.309	
18/15	1.172	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	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	1.135	
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		
30/27	1.078	1.069	1.074	1.082	1.064	1.051	1.040	1.054	1.057	1.072	1.075	1.075	1.080	1.071	1.068	1.067	1.074	1.066		
33/30	1.045	1.058	1.048	1.062	1.047	1.032	1.036	1.042	1.049	1.053	1.059	1.052	1.064	1.053	1.060	1.047	1.055	1.050		
36/33	**1.043**	**1.046**	**1.039**	**1.046**	**1.035**	**1.020**	**1.029**	**1.033**	**1.039**	**1.043**	**1.051**	**1.049**	**1.049**	**1.043**	**1.041**	**1.043**	**1.042**	**1.036**		
39/36	1.038	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036			
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				
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					
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						
78/75	1.007	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.006						
81/78	1.005	1.002	1.003	1.004	1.004	1.005	1.006	1.010	1.009	1.007	1.007	1.006	1.006	1.007						
84/81	**1.003**	**1.003**	**1.005**	**1.003**	**1.006**	**1.006**	**1.007**	**1.008**	**1.005**	**1.009**	**1.006**	**1.004**	**1.007**	**1.005**						
87/84	1.003	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004							
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 December 31, 2017

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	1.739
12/9									**1.453**	**1.443**	**1.466**	**1.454**	**1.488**	**1.521**	**1.484**	**1.500**	**1.482**	**1.451**	**1.487**	**1.447**
15/12	1.144	1.168	1.201	1.207	1.203	1.197	1.132	1.145	1.138	1.182	1.167	1.199	1.206	1.228	1.211	1.207	1.199	1.206	1.215	
18/15	1.093	1.116	1.123	1.144	1.151	1.126	1.086	1.087	1.103	1.106	1.126	1.135	1.129	1.141	1.136	1.117	1.114	1.094	1.095	
21/18	1.078	1.086	1.101	1.122	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.069	
24/21	**1.074**	**1.072**	**1.080**	**1.083**	**1.082**	**1.060**	**1.040**	**1.052**	**1.070**	**1.074**	**1.067**	**1.074**	**1.080**	**1.080**	**1.067**	**1.064**	**1.055**	**1.059**	**1.058**	
27/24	1.044	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.048		
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			
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				
54/51	1.025	1.027	1.017	1.016	1.010	1.012	1.021	1.019	1.022	1.022	1.027	1.023	1.019	1.018	1.015	1.011				
57/54	1.027	1.024	1.014	1.007	1.011	1.017	1.020	1.018	1.019	1.019	1.023	1.020	1.017	1.018	1.013	1.007				
60/57	**1.021**	**1.021**	**1.015**	**1.009**	**1.008**	**1.014**	**1.020**	**1.019**	**1.018**	**1.017**	**1.019**	**1.016**	**1.015**	**1.014**	**1.012**	**1.008**				
63/60	1.014	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.009	1.009					
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						
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							
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 acident year experience calls

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

Quarterly Paid Indemnity Loss Development Factors

Through December 31, 2017

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	2.431
12/9									**1.812**	**1.834**	**1.810**	**1.825**	**1.861**	**1.869**	**1.877**	**1.866**	**1.879**	**1.910**	**1.882**	**1.890**
15/12	1.499	1.536	1.538	1.552	1.550	1.516	1.491	1.456	1.482	1.488	1.481	1.507	1.532	1.539	1.506	1.539	1.540	1.559	1.571	
18/15	1.380	1.399	1.395	1.401	1.403	1.379	1.331	1.306	1.306	1.327	1.332	1.343	1.355	1.361	1.361	1.353	1.364	1.372	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		
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			
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				
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					
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						
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							
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 acident year experience calls

Quarterly Paid Medical Loss Development Factors *

Through December 31, 2017

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	2.238
12/9									**1.716**	**1.765**	**1.731**	**1.723**	**1.756**	**1.746**	**1.763**	**1.736**	**1.750**	**1.705**	**1.752**	**1.735**
15/12	1.453	1.490	1.514	1.547	1.554	1.510	1.437	1.423	1.429	1.444	1.413	1.429	1.445	1.472	1.446	1.443	1.460	1.454	1.479	
18/15	1.241	1.267	1.286	1.310	1.330	1.295	1.243	1.230	1.227	1.259	1.243	1.259	1.268	1.282	1.284	1.263	1.265	1.278	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		
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			
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				
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					
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						
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							
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 acident year experience calls

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

Reported Indemnity Claim Count Development

Accident Year	Development 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
1992																1.000
1993															1.000	1.000
1994														1.000	1.000	1.000
1995													1.001	1.000	1.001	1.000
1996												1.001	1.000	1.000	1.000	1.000
1997											1.000	1.000	1.000	1.000	1.000	1.000
1998										1.000	1.000	1.001	1.000	1.000	1.000	1.000
1999									1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000
2000								1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001							0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002						1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003					0.999	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000		
2004				1.001	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000			
2005			1.003	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000				
2006		1.011	1.004	1.002	1.001	1.000	1.001	1.001	1.001	1.000	1.000					
2007	1.122	1.013	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000						
2008	1.145	1.022	1.011	1.005	1.003	1.001	1.001	1.001	1.000							
2009	1.189	1.028	1.011	1.006	1.004	1.002	1.001	1.001								
2010	1.215	1.029	1.011	1.006	1.003	1.002	1.001									
2011	1.229	1.032	1.013	1.007	1.003	1.002										
2012	1.244	1.034	1.013	1.006	1.004											
2013	1.248	1.031	1.012	1.006												
2014	1.241	1.032	1.012													
2015	1.246	1.031														
2016	1.255															

	Latest 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
Age-to-Age	1.255	1.031	1.012	1.006	1.004	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate	1.328	1.058	1.027	1.015	1.009	1.006	1.004	1.003	1.002	1.002	1.001	1.001	1.002	1.002	1.002	1.002

Quarterly Reported Indemnity Claim Count Development Factors

Accident Year	Development 3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48
2008	2.539	1.651	1.336	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	2.693	1.686	1.384	1.111	1.036	1.021	1.012	1.009	1.007	1.007	1.005	1.004	1.003	1.002	1.002
2010	2.708	1.710	1.409	1.126	1.038	1.022	1.016	1.011	1.008	1.005	1.005	1.003	1.004	1.003	1.001
2011	2.713	1.743	1.425	1.126	1.042	1.026	1.018	1.010	1.010	1.006	1.005	1.004	1.003	1.003	1.002
2012	2.771	1.731	1.422	1.124	1.050	1.028	1.018	1.013	1.009	1.007	1.004	1.004	1.003	1.003	1.002
2013	2.831	1.743	1.422	1.139	1.045	1.027	1.016	1.010	1.009	1.006	1.004	1.004	1.004	1.002	1.002
2014	2.793	1.727	1.425	1.132	1.046	1.025	1.017	1.012	1.010	1.005	1.004	1.004	1.004	1.002	1.002
2015	2.818	1.746	1.417	1.138	1.048	1.024	1.016	1.013	1.008	1.005	1.003				
2016	2.732	1.721	1.413	1.140	1.046	1.027	1.017								
2017	2.823	1.690	1.413												

Reported Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
1992																	99.2%
1993																98.9%	99.0%
1994															98.6%	98.8%	98.9%
1995														98.1%	98.4%	98.5%	98.7%
1996													97.7%	98.0%	98.2%	98.4%	98.6%
1997												97.1%	97.5%	97.7%	98.0%	98.2%	98.4%
1998											96.2%	96.8%	97.1%	97.5%	97.8%	98.0%	98.2%
1999										95.3%	96.1%	96.6%	97.0%	97.3%	97.7%	98.0%	98.1%
2000									93.5%	94.7%	95.5%	96.2%	96.6%	97.2%	97.5%	97.8%	98.0%
2001								90.4%	92.3%	93.6%	94.5%	95.3%	96.1%	96.6%	97.0%	97.4%	97.7%
2002							88.2%	90.8%	92.4%	93.7%	94.7%	95.8%	96.4%	96.9%	97.4%	97.7%	
2003						84.8%	88.4%	90.6%	92.4%	93.7%	95.2%	95.9%	96.4%	97.0%	97.5%		
2004					80.8%	85.3%	88.3%	90.6%	92.4%	94.3%	95.4%	96.1%	96.8%	97.3%			
2005				74.8%	81.3%	85.5%	88.5%	90.8%	93.1%	94.5%	95.5%	96.4%	97.0%				
2006			64.3%	74.3%	81.0%	85.2%	88.3%	91.2%	93.0%	94.3%	95.5%	96.4%					
2007		49.9%	63.6%	73.6%	80.3%	84.7%	88.8%	91.4%	93.2%	94.8%	95.9%						
2008	27.6%	48.2%	61.8%	72.1%	79.2%	85.0%	88.8%	91.5%	93.6%	95.0%							
2009	26.7%	46.3%	60.0%	70.7%	79.1%	84.6%	88.6%	91.7%	93.7%								
2010	26.9%	46.8%	60.7%	72.6%	80.6%	86.0%	90.1%	92.8%									
2011	27.6%	47.2%	62.2%	73.8%	81.7%	87.1%	90.9%										
2012	27.6%	48.1%	63.5%	75.1%	83.0%	88.4%											
2013	27.1%	48.5%	64.7%	76.8%	84.8%												
2014	26.9%	49.7%	66.2%	78.3%													
2015	27.4%	51.0%	68.6%														
2016	28.8%	54.0%															
2017	31.0%																

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
1992																	99.1%
1993																98.8%	98.9%
1994															98.3%	98.5%	98.7%
1995														97.8%	98.0%	98.3%	98.5%
1996													97.4%	97.8%	98.0%	98.2%	98.4%
1997												96.8%	97.2%	97.5%	97.7%	98.0%	98.2%
1998											95.9%	96.5%	96.9%	97.3%	97.5%	97.8%	98.0%
1999										95.0%	95.8%	96.3%	96.7%	97.1%	97.5%	97.8%	98.0%
2000									93.2%	94.4%	95.2%	95.9%	96.4%	97.0%	97.4%	97.6%	97.9%
2001								90.2%	92.1%	93.3%	94.3%	95.1%	95.9%	96.4%	96.8%	97.2%	97.5%
2002							88.2%	90.7%	92.3%	93.6%	94.6%	95.6%	96.3%	96.7%	97.2%	97.6%	
2003						85.0%	88.5%	90.6%	92.3%	93.6%	95.0%	95.7%	96.3%	96.9%	97.3%		
2004					81.0%	85.4%	88.4%	90.6%	92.4%	94.2%	95.2%	95.9%	96.6%	97.2%			
2005				74.6%	81.1%	85.3%	88.4%	90.7%	93.0%	94.4%	95.4%	96.3%	96.9%				
2006			63.5%	73.8%	80.6%	84.9%	88.0%	90.9%	92.8%	94.2%	95.4%	96.3%					
2007		48.4%	62.6%	72.9%	79.8%	84.3%	88.5%	91.2%	93.0%	94.6%	95.8%						
2008	23.0%	46.0%	60.4%	71.1%	78.5%	84.5%	88.4%	91.2%	93.4%	94.9%							
2009	21.3%	43.9%	58.5%	69.7%	78.4%	84.1%	88.2%	91.5%	93.5%								
2010	21.0%	44.3%	59.1%	71.4%	79.9%	85.4%	89.8%	92.5%									
2011	21.2%	44.5%	60.5%	72.7%	81.0%	86.6%	90.6%										
2012	20.9%	45.2%	61.8%	74.0%	82.3%	87.9%											
2013	20.5%	45.9%	63.0%	75.6%	84.0%												
2014	20.4%	46.9%	64.4%	77.1%													
2015	20.7%	48.2%	66.8%														
2016	21.7%	51.0%															
2017	23.4%																

Quarterly Ultimate Settlement Ratios

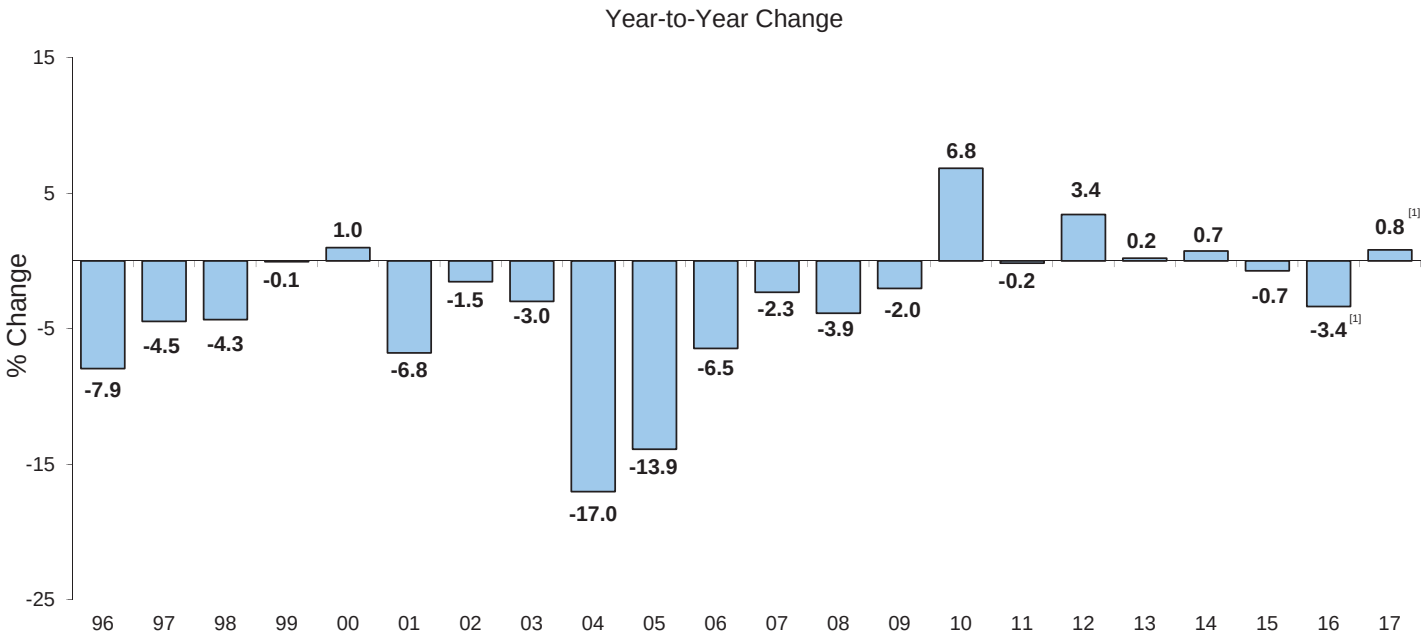
Accident	Evaluated as of (in months):															
Year	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
2008	0.8%	5.5%	13.3%	23.0%	31.6%	37.8%	42.2%	46.1%	49.7%	53.4%	56.8%	60.3%	63.2%	65.9%	68.6%	70.9%
2009	0.7%	4.7%	12.2%	21.2%	29.5%	35.6%	40.0%	43.9%	47.6%	51.2%	55.0%	58.5%	61.5%	64.5%	67.0%	69.6%
2010	0.6%	4.7%	11.8%	21.0%	29.8%	35.8%	40.1%	44.4%	48.2%	52.2%	55.7%	59.2%	62.4%	65.8%	68.8%	71.7%
2011	0.8%	5.1%	11.9%	21.2%	29.7%	35.8%	40.4%	44.7%	48.6%	53.0%	56.9%	60.8%	64.1%	67.2%	70.2%	73.0%
2012	0.8%	5.0%	12.1%	21.2%	29.5%	35.9%	40.8%	45.6%	49.8%	54.1%	58.3%	62.2%	65.6%	68.9%	71.7%	74.4%
2013	0.9%	5.0%	11.8%	20.9%	29.2%	35.9%	41.3%	46.3%	50.9%	55.4%	59.5%	63.4%	67.0%	70.4%	73.3%	76.0%
2014	0.7%	4.7%	11.6%	20.7%	29.4%	36.2%	41.9%	47.1%	51.8%	56.3%	60.6%	64.6%	68.0%	71.5%	74.4%	77.2%
2015	0.8%	4.7%	12.0%	20.9%	30.1%	37.4%	43.0%	48.3%	53.4%	58.5%	62.8%	66.8%				
2016	0.8%	5.1%	12.3%	21.9%	31.6%	39.4%	45.4%	51.2%								
2017	0.9%	5.6%	13.4%	24.0%												

Accident	Quarterly Incremental Change														
Year	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48
2008	4.7%	7.8%	9.7%	8.6%	6.3%	4.4%	3.8%	3.6%	3.7%	3.5%	3.5%	2.9%	2.7%	2.6%	2.4%
2009	4.0%	7.5%	9.0%	8.3%	6.0%	4.4%	4.0%	3.7%	3.7%	3.7%	3.5%	3.0%	3.0%	2.5%	2.5%
2010	4.1%	7.1%	9.2%	8.8%	6.0%	4.4%	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%	6.2%	4.5%	4.4%	3.9%	4.3%	3.9%	4.0%	3.3%	3.0%	3.0%	2.8%
2012	4.2%	7.0%	9.1%	8.3%	6.4%	4.8%	4.9%	4.2%	4.3%	4.2%	3.9%	3.4%	3.2%	2.9%	2.7%
2013	4.1%	6.7%	9.1%	8.4%	6.6%	5.4%	5.0%	4.6%	4.5%	4.1%	3.9%	3.6%	3.3%	2.9%	2.8%
2014	4.0%	6.9%	9.0%	8.8%	6.8%	5.7%	5.1%	4.8%	4.5%	4.3%	4.0%	3.4%	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%				
2016	4.2%	7.2%	9.6%	9.7%	7.8%	6.0%	5.8%								
2017	4.8%	7.8%	10.6%												

Notes All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 85% to 97% 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 estimates is based on comparison of claim counts based on WCIRB accident year experience as of December 31, 2017 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

Item AC18-04-01
12/31/2017 Loss Adjustment Expense Experience Review

The WCIRB's Amended January 1, 2018 Pure Premium Rate Filing included a provision for loss adjustment expenses (LAE) prior to the impact of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) of 33.1%. This amount reflected 10.5% for unallocated loss adjustment expenses (ULAE)[1] and 22.6% for allocated loss adjustment expenses (ALAE), including the cost of medical cost containment programs (MCCP), and was based on calendar year 2016 ULAE data and accident year ALAE and MCCP data evaluated as of March 31, 2017. The updated ULAE and ALAE projections, including MCCP costs, for the July 1, 2018 to December 31, 2018 policy period are summarized separately below.

ULAE Projection
As of this time, the WCIRB does not have available calendar year 2017 ULAE information. However, staff has computed a preliminary updated ULAE projection based on updated frequency and loss projections as of December 31, 2017 using the same methodologies as those reflected in the January 1, 2018 Pure Premium Rate Filing. The projection of ULAE as a percentage of loss based on this approach, before reflecting the impact of SB 1160 and AB 1244 is 11.5%.

SB 1160 and AB 1244, 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 Amended January 1, 2017 Pure Premium Rate Filing, the WCIRB prospectively estimated that SB 1160 and AB 1244 would reduce lien filings by 10%, resulting in a 0.6% decrease in total losses and LAE. This estimate was based on an estimate that lien costs in LAE were 3.4% of total losses and LAE. Using the LAE (excluding MCCP, which does not include lien costs) to loss ratio reflected in the Amended January 1, 2018 Pure Premium Rate Filing of 28.8%, this results in an estimated decrease of 1.6% in total LAE based on the WCIRB's prospective estimate of SB 1160 and AB 1244.[2]

As discussed at the March 19, 2018 meeting, lien filings in 2017 and early 2018 are approximately 40% lower than the pre-SB 1160 and AB 1244 level. As a result, staff recommends a decrease of 2.4% in total costs be reflected for the impact of these reforms as compared to the 0.6% decrease reflected in the latest two annual pure premium rate filings, which translates to a 6.4% decrease in total LAE.[3] Given that the ULAE projection is only based on data through calendar year 2016, which was prior to the January 1, 2017 effective date of the legislation, the impact of SB 1160 and AB 1244 is reflected as a separate adjustment to the projected ULAE ratio. Based on this approach, the December 31, 2017 loss projections included in Item AC18-03-02, and the projection methodologies reflected in the January 1, 2018 Pure Premium Rate Filing, the preliminary ULAE projection is 10.7%.

Table 1 shows the updated preliminary projections of ULAE as a percentage of loss before and after reflecting the estimated impact of SB 1160 and AB 1244.

[1] In the Decision on the January 1, 2018 Pure Premium Rate Filing, the California Department of Insurance reflected a slightly higher ULAE provision due to additional information being collected by the WCIRB in 2018 for use in the January 1, 2019 Pure Premium Rate Filing that will likely generate a somewhat higher ULAE provision.

[2] This adjustment was applied to overall projected loss and loss adjustment expenses and not reflected in the 33.1% LAE provision shown in the Amended January 1, 2018 Pure Premium Rate Filing.

[3] The impact of these reforms on medical costs is reflected in the loss development and on-leveling adjustments reflected in Item AC18-03-02 of this Agenda.

**Table 1: ULAE to Loss Ratio Projections
for Policies Incepting July 1, 2018 through December 31, 2018**

ULAE Projection Method	ULAE Ratio Before Impact of SB 1160 & AB 1244	ULAE Ratio After Impact of SB 1160 & AB 1244
Paid ULAE per Open Indemnity Claim	12.3%	11.5%
Paid ULAE to Paid Losses	10.6%	9.9%
Average of Open Indemnity Claim-Based and Paid Loss-Based Projections	11.5%	**10.7%**

ALAE Projection – Excluding MCCP
The ALAE provision reflected in the WCIRB's Amended January 1, 2018 Pure Premium Rate Filing was based on a methodology that projects future ALAE as a function of the anticipated future number of indemnity claims and private insurer average ALAE per indemnity claim. The WCIRB has updated the ALAE projection based on ALAE data evaluated as of December 31, 2017 as well as updated frequency and loss projections. (These ALAE projections exclude MCCP costs, which are discussed separately below.)

Exhibit 1 shows paid ALAE amounts per reported indemnity claim on a private insurer basis. Exhibits 2.1 and 2.2 show statewide and private insurer annual ALAE severity growth percentages based on estimated ultimate accident year ALAE per indemnity claim, while Exhibit 3 shows private insurer annual growth percentages based on ratios of incremental calendar year paid ALAE per indemnity claims inventory.

Exhibits 4.1 through 4.4 show the ALAE projection excluding MCCP costs, which is based on statewide claim and loss projections and private insurer average ALAE per indemnity claim. The projection shown in Exhibit 4.4 was computed using a 4.0% ALAE severity trend selected based on the approximate average of the private insurer longer-term (post-2005) and shorter-term (five-year) growth rates of (a) estimated ultimate accident year ALAE per indemnity claim (Exhibit 2.2) and (b) incremental paid calendar year ALAE per open indemnity claim (Exhibit 3), which is consistent with the methodology used to select the ALAE severity trend in the last several pure premium rate filings. (The projected ALAE severity trend reflected in the Amended January 1, 2018 Premium Rate Filing was also 4.0%.)

As shown in line (f) of Exhibit 4.4, the preliminary updated projection of ALAE as a percentage of loss, excluding the cost of MCCP and before the impact of SB 1160 and AB 1244, is 19.8% based on December 31, 2017 ALAE experience and the projection methodology reflected in the January 1, 2018 Pure Premium Rate Filing. (This compares to a projected ALAE excluding MCCP costs to loss of 18.3% in the Amended January 1, 2018 Pure Premium Rate Filing.[4])

As discussed above, SB 1160 and AB 1244 is estimated to impact LAE costs. Although ALAE data for accident year 2017 is available, it is currently valued at 12 months and liens are typically not filed on claims until much later. As a result, the impact of SB 1160 and AB 1244 is substantially not yet reflected in the ALAE reported for 2017 and, in addition, it is not clear as to how these lien reforms will impact future ALAE development of older accident years. To reflect the impact of these reforms, as with ULAE, staff recommends including a separate adjustment to the projected ALAE ratio. This adjustment is shown in lines (g) and (h) of Exhibit 4.4. Based on this approach with staff's recommended 40% reduction in lien costs, the preliminary ALAE projection is 18.5%.

[4] The 18.3% ALAE provision was prior to the estimated impact of SB 1160 and AB 1244.

ALAE Projection – MCCP

The ALAE provision reflected in the WCIRB's Amended January 1, 2018 Pure Premium Rate Filing also included a provision for MCCP costs. The projection of MCCP costs was based on a methodology analogous to that used for ALAE excluding MCCP costs and using statewide claim and MCCP cost data. The WCIRB has updated the MCCP cost projection based on MCCP data evaluated as of December 31, 2017 as well as updated frequency and loss projections.

Exhibit 5 shows statewide and private insurer annual MCCP severity growth percentages based on ratios of calendar year paid MCCP costs per indemnity claims inventory. Exhibit 6 shows statewide annual MCCP severity growth percentages based on estimated accident year ultimate MCCP costs per indemnity claim. Exhibits 7.1 and 7.2 show the projection of MCCP costs in ALAE based on statewide data. A 0% MCCP severity trend was selected based on the approximate average rates of growth in (a) statewide calendar year MCCP per indemnity claims inventory from 2009 through 2016 (Exhibit 5) and (b) estimated ultimate accident year MCCP costs per indemnity claim from 2012 through 2017 (Exhibit 6), which is consistent with the methodology used to select the MCCP severity trend in the last several pure premium rate filings.[5] The projected ratio of MCCP to loss based on this methodology is 4.0%. (This compares to a MCCP to loss projection of 4.3% in the Amended January 1, 2018 Pure Premium Rate Filing.)

Table 2 also shows the preliminary projections of ALAE, including the cost of MCCP, as a percentage of loss before and after reflecting the estimated impact of SB 1160 and AB 1244. The preliminary projected ratio of total ALAE to loss is 22.5%.

Table 2: Projections of ALAE to Loss
for Policies Incepting July 1, 2018 through December 31, 2018

ALAE Projection Method	ALAE Ratio Before Impact of SB 1160 & AB 1244	ALAE Ratio After Impact of SB 1160 & AB 1244
Separate Projections of Indemnity Claims and Private Insurer Average ALAE per Indemnity Claim – Excluding MCCP Costs	19.8%	**18.5%**
Separate Projections of Indemnity Claims and Average MCCP Costs per Indemnity Claim	4.0%	**4.0%**
Total Projections of ALAE Including MCCP Costs	23.8%	**22.5%**

The total projected LAE to loss ratio for policies incepting between July 1, 2018 and December 31, 2018, after reflecting the estimated impact of SB 1160 and AB 1244, is 33.2%.

[5] The MCCP severity trend reflected in the Amended January 1, 2018 Pure Premium Rate Filing was also 0%.

Average Paid ALAE[1] per Reported Indemnity Claim - Private Insurers
As of December 31, 2017

Accident Year	Evaluated as of (in months): 12	24	36	48	60	72	84	96	108	120
1993										2,038
1994									2,011	2,042
1995								2,154	2,209	2,255
1996							2,424	2,522	2,596	2,678
1997						2,821	2,979	3,117	3,241	3,353
1998					2,948	3,221	3,445	3,672	3,833	3,950
1999				2,754	3,143	3,475	3,760	3,997	4,165	4,207
2000			2,486	3,174	3,714	4,163	4,519	4,765	4,873	5,020
2001		1,716	2,892	3,841	4,531	5,071	5,498	5,725	5,943	6,111
2002	683	1,886	3,270	4,297	5,061	5,615	5,970	6,241	6,442	6,606
2003	629	2,075	3,524	4,628	5,403	5,943	6,315	6,603	6,823	7,017
2004	539	1,913	3,283	4,376	5,055	5,567	5,946	6,224	6,438	6,635
2005	502	1,744	3,008	3,974	4,679	5,200	5,589	5,893	6,157	6,371
2006	524	1,842	3,119	4,111	4,857	5,422	5,851	6,174	6,455	6,673
2007	565	1,964	3,309	4,402	5,224	5,857	6,374	6,747	7,041	7,255
2008	609	2,110	3,612	4,867	5,797	6,513	7,049	7,458	7,741	7,956
2009	668	2,382	4,084	5,457	6,502	7,283	7,870	8,279	8,574	
2010	732	2,526	4,239	5,614	6,631	7,393	7,927	8,300		
2011	747	2,524	4,204	5,589	6,631	7,325	7,830			
2012	752	2,592	4,403	5,830	6,790	7,471				
2013	802	2,846	4,684	5,985	6,895					
2014	903	3,072	4,833	6,116						
2015	994	3,137	4,929							
2016	982	3,249								
2017	1,059									

Accident Year	Annual Change 12	24	36	48	60	72	84	96	108	120
1994										0.2%
1995									9.8%	10.5%
1996								17.1%	17.5%	18.8%
1997							22.9%	23.6%	24.8%	25.2%
1998						14.2%	15.6%	17.8%	18.3%	17.8%
1999					6.6%	7.9%	9.1%	8.8%	8.6%	6.5%
2000				15.2%	18.2%	19.8%	20.2%	19.2%	17.0%	19.3%
2001			16.3%	21.0%	22.0%	21.8%	21.7%	20.2%	22.0%	21.7%
2002		9.9%	13.1%	11.9%	11.7%	10.7%	8.6%	9.0%	8.4%	8.1%
2003	-7.9%	10.0%	7.8%	7.7%	6.8%	5.8%	5.8%	5.8%	5.9%	6.2%
2004	-14.3%	-7.8%	-6.8%	-5.5%	-6.4%	-6.3%	-5.8%	-5.8%	-5.6%	-5.5%
2005	-6.9%	-8.8%	-8.4%	-9.2%	-7.4%	-6.6%	-6.0%	-5.3%	-4.4%	-4.0%
2006	4.4%	5.6%	3.7%	3.5%	3.8%	4.3%	4.7%	4.8%	4.9%	4.7%
2007	8.0%	6.6%	6.1%	7.1%	7.6%	8.0%	8.9%	9.3%	9.1%	8.7%
2008	7.7%	7.4%	9.1%	10.6%	11.0%	11.2%	10.6%	10.5%	9.9%	9.7%
2009	9.8%	12.9%	13.1%	12.1%	12.2%	11.8%	11.6%	11.0%	10.8%	
2010	9.5%	6.0%	3.8%	2.9%	2.0%	1.5%	0.7%	0.3%		
2011	2.1%	-0.1%	-0.8%	-0.4%	0.0%	-0.9%	-1.2%			
2012	0.7%	2.7%	4.7%	4.3%	2.4%	2.0%				
2013	6.6%	9.8%	6.4%	2.7%	1.5%					
2014	12.6%	8.0%	3.2%	2.2%						
2015	10.0%	2.1%	2.0%							
2016	-1.2%	3.6%								
2017	7.8%									

Annual Trend[2]										
All-Year	4.4%	4.4%	4.1%	4.6%	5.3%	6.1%	7.2%	8.5%	9.5%	10.2%
R^2	0.760	0.895	0.882	0.852	0.849	0.856	0.860	0.872	0.888	0.902
13-Year	6.5%	5.5%	4.1%	3.6%	3.6%	4.2%	5.2%	6.0%	7.0%	8.3%
R^2	0.984	0.957	0.848	0.795	0.804	0.814	0.814	0.842	0.851	0.841
5-Year	6.6%	5.6%	4.2%	2.4%	1.4%	2.8%	5.4%	8.3%	8.8%	5.1%
R^2	0.890	0.927	0.964	0.929	0.948	0.626	0.770	0.949	0.985	0.772

[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] @12/31/17 (in $000) (1)	Paid ALAE Cumulative Development Factors[2] (2)	Estimated Ult. ALAE (in $000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/17 (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	449,025	1.046	469,662	249,750	1.000	249,784	1,880	---
1992	348,747	1.049	365,744	198,433	1.000	198,470	1,843	-2.0%
1993	254,237	1.051	267,299	156,142	1.000	156,168	1,712	-7.1%
1994	238,632	1.056	251,946	143,729	1.000	143,767	1,752	2.4%
1995	265,866	1.060	281,905	135,172	1.001	135,254	2,084	18.9%
1996	311,292	1.067	332,086	133,140	1.001	133,250	2,492	19.6%
1997	396,598	1.073	425,441	137,296	1.001	137,442	3,095	24.2%
1998	574,058	1.080	620,053	147,467	1.001	147,664	4,199	35.7%
1999	627,130	1.089	682,934	148,649	1.002	148,882	4,587	9.2%
2000	776,621	1.097	852,294	161,971	1.002	162,220	5,254	14.5%
2001	977,756	1.107	1,082,387	185,669	1.002	185,955	5,821	10.8%
2002	1,037,522	1.117	1,158,926	194,693	1.002	195,039	5,942	2.1%
2003	1,044,289	1.128	1,177,513	184,197	1.002	184,525	6,381	7.4%
2004	878,970	1.139	1,000,872	158,914	1.002	159,181	6,288	-1.5%
2005	778,810	1.152	897,540	139,523	1.002	139,736	6,423	2.2%
2006	812,952	1.171	952,314	133,245	1.001	133,436	7,137	11.1%
2007	864,456	1.194	1,032,074	130,207	1.001	130,389	7,915	10.9%
2008	898,722	1.222	1,097,790	122,921	1.002	123,118	8,917	12.6%
2009	917,246	1.257	1,152,805	113,611	1.002	113,842	10,126	13.6%
2010	941,663	1.303	1,227,125	118,241	1.003	118,550	10,351	2.2%
2011	914,372	1.367	1,249,852	120,311	1.004	120,779	10,348	0.0%
2012	925,831	1.465	1,356,441	127,215	1.006	127,951	10,601	2.4%
2013	901,149	1.619	1,458,790	134,824	1.009	136,079	10,720	1.1%
2014	822,380	1.878	1,544,412	139,489	1.015	141,593	10,907	1.7%
2015	679,104	2.412	1,637,964	142,902	1.027	146,771	11,160	2.3%
2016	445,600	3.924	1,748,593	141,505	1.058	149,774	11,675	4.6%
2017	118,024	16.478	1,944,861	115,674	1.328	153,616	12,661	8.4%

Estimated Annual Exponential Trend Based on:		R^2
2005 to 2017	4.9%	0.858
2012 to 2017	3.4%	0.876

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 4.2.

[3] See Exhibit 4.1.

Estimated Ultimate ALAE Per Indemnity Claim - Private Insurers

Acc. Year	Paid ALAE[1] @12/31/17 (in $000) (1)	Cumulative Development Factors[2] (2)	Estimated Ultimate ALAE (in $000) (3)=(1)x(2)	Indemnity Claim Counts @12/31/17 (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	414,465	1.046	433,514	175,290	1.000	175,319	2,473	---
1992	318,559	1.049	334,085	141,916	1.000	141,950	2,354	-4.8%
1993	235,980	1.051	248,104	113,531	1.000	113,553	2,185	-7.2%
1994	218,964	1.056	231,180	105,415	1.000	105,455	2,192	0.3%
1995	240,354	1.060	254,854	101,326	1.001	101,418	2,513	14.6%
1996	286,461	1.067	305,597	103,179	1.001	103,304	2,958	17.7%
1997	363,110	1.073	389,518	104,739	1.001	104,893	3,713	25.5%
1998	500,735	1.080	540,855	112,441	1.002	112,639	4,802	29.3%
1999	550,819	1.089	599,832	116,353	1.002	116,591	5,145	7.1%
2000	654,033	1.097	717,762	118,405	1.002	118,658	6,049	17.6%
2001	775,794	1.107	858,813	113,935	1.002	114,185	7,521	24.3%
2002	815,231	1.117	910,624	112,956	1.003	113,249	8,041	6.9%
2003	824,542	1.128	929,732	108,299	1.003	108,595	8,561	6.5%
2004	707,176	1.139	805,253	99,380	1.003	99,685	8,078	-5.6%
2005	660,931	1.152	761,691	97,230	1.003	97,561	7,807	-3.4%
2006	725,731	1.171	850,141	104,213	1.004	104,613	8,126	4.1%
2007	795,730	1.194	950,022	107,276	1.004	107,733	8,818	8.5%
2008	839,242	1.222	1,025,134	105,493	1.005	106,010	9,670	9.7%
2009	863,658	1.257	1,085,455	100,727	1.006	101,339	10,711	10.8%
2010	898,554	1.303	1,170,948	108,471	1.007	109,262	10,717	0.1%
2011	880,183	1.367	1,203,118	112,573	1.009	113,590	10,592	-1.2%
2012	896,663	1.465	1,313,706	120,714	1.012	122,118	10,758	1.6%
2013	868,983	1.619	1,406,720	126,851	1.016	128,873	10,916	1.5%
2014	785,941	1.878	1,475,980	128,916	1.023	131,901	11,190	2.5%
2015	651,920	2.412	1,572,396	132,288	1.038	137,316	11,451	2.3%
2016	431,104	3.924	1,691,709	132,691	1.075	142,610	11,862	3.6%
2017	114,679	16.478	1,889,736	108,307	1.364	147,742	12,791	7.8%

Estimated Annual Exponential Trend Based on:		R^2
2005 to 2017	3.6%	0.876
2012 to 2017	3.3%	0.917
Average:	3.4%	

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 4.2

[3] Based on analogous Exhibit 4.1, 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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1989	917	1,055	923	1,167	1,027	1,221	1,236	1,525	1,530	1,368	1,669	1,811	1,518
1990	1,449	1,198	1,086	1,406	1,138	1,341	1,386	1,584	1,777	1,496	1,551	1,939	1,696
1991	1,323	1,120	1,203	1,481	1,384	1,577	1,308	1,678	1,541	1,714	1,443	2,158	2,071
1992	1,740	1,485	1,507	1,647	1,477	1,718	1,434	1,579	1,633	1,501	1,927	1,643	1,836
1993	1,532	1,630	1,677	1,945	1,450	1,732	1,788	1,932	1,934	1,802	2,097	2,287	2,095
1994	1,750	1,784	1,748	1,864	1,389	1,514	1,774	1,830	1,812	1,804	1,775	1,909	1,646
1995	1,638	1,649	1,771	1,866	1,682	2,022	1,602	1,996	2,144	1,998	2,184	2,363	2,018
1996	2,010	2,006	2,003	2,040	1,938	1,755	1,868	2,035	2,244	2,008	2,177	2,199	1,977
1997	2,276	2,503	2,463	2,343	2,268	2,196	2,281	2,489	2,350	1,951	2,311	2,198	2,417
1998	2,835	2,604	2,405	2,426	2,374	2,398	2,338	2,401	2,362	2,306	2,327	2,535	2,561
1999	2,415	2,752	2,526	2,468	2,806	2,659	2,600	2,662	2,452	2,130	2,323	2,504	2,260
2000	2,479	2,861	2,658	2,699	2,806	2,773	2,781	2,841	2,670	2,530	2,807	2,759	2,549
2001	2,332	2,618	2,918	2,644	2,756	2,707	2,730	2,841	3,113	3,290	3,051	2,880	2,658
2002	2,522	2,746	3,081	2,881	2,976	2,949	3,029	2,959	3,285	3,428	3,238	3,267	3,163
2003	2,548	2,818	3,077	3,014	3,007	3,226	3,208	3,518	3,604	3,687	3,679	3,360	3,069
2004	1,816	2,562	2,919	3,062	3,170	3,256	3,156	3,084	3,462	3,556	3,519	3,235	3,079
2005	498	1,692	2,493	2,877	3,084	3,227	3,286	3,267	3,580	3,568	3,686	3,802	3,509
2006		529	1,815	2,675	2,969	3,220	3,478	3,468	3,489	3,511	3,563	3,250	3,213
2007			572	1,987	2,752	3,155	3,398	3,572	3,756	3,671	3,786	3,511	3,482
2008				620	2,095	2,976	3,480	3,559	3,716	3,840	3,959	3,715	3,730
2009					674	2,380	3,307	3,620	3,797	3,964	4,052	3,892	3,860
2010						746	2,542	3,411	3,684	3,888	4,139	4,066	4,033
2011							766	2,569	3,342	3,825	4,121	3,988	4,128
2012								773	2,593	3,610	4,033	4,009	4,178
2013									791	2,844	3,690	3,836	4,098
2014										909	3,031	3,650	3,999
2015											995	3,035	3,832
2016												982	3,228
2017													1,059
ALAE per Claim	1,852	1,915	1,979	2,047	2,160	2,318	2,480	2,563	2,639	2,797	2,974	2,911	3,006
Annual Change	-6.1%	3.4%	3.4%	3.4%	5.5%	7.3%	7.0%	3.4%	3.0%	6.0%	6.3%	-2.1%	3.3%

Estimated Annual Exponential Trend Based on Payment Year:		R^2
2006-2017	4.6%	0.992
2012-2017	3.3%	0.886
Average:	4.0%	

[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 January 1 of Year N and newly-reported indemnity claims between January 1 of year N and December 31 of year N.

Source: WCIRB quarterly calls for experience

Reported Indemnity Claim Count Development - Statewide

Accident Year	Age-to-Age Development (in months): 12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180
1989														1.001
1990													1.001	1.001
1991												1.001	1.001	1.000
1992											1.001	1.001	1.001	1.001
1993										1.001	1.001	1.001	1.001	1.000
1994									1.001	1.001	1.001	1.001	1.000	1.000
1995								1.002	1.001	1.001	1.001	1.000	1.001	1.000
1996							1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000
1997						1.002	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000
1998					1.004	1.003	1.002	1.001	1.001	1.000	1.000	1.001	1.000	1.000
1999				1.003	1.005	1.002	1.002	1.000	1.000	1.000	1.001	1.000	1.000	1.000
2000			0.997	1.009	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001		1.024	1.019	1.007	1.004	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.252	1.031	1.010	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.202	1.018	1.010	1.001	0.999	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000
2004	1.149	1.021	1.003	1.001	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	
2005	1.162	1.010	1.003	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000		
2006	1.126	1.011	1.005	1.002	1.001	1.000	1.001	1.001	1.001	1.000	1.000			
2007	1.122	1.014	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000				
2008	1.146	1.022	1.011	1.005	1.003	1.001	1.001	1.001	1.000					
2009	1.192	1.029	1.011	1.006	1.003	1.002	1.001	1.001						
2010	1.216	1.030	1.011	1.006	1.004	1.002	1.001							
2011	1.233	1.032	1.013	1.007	1.003	1.002								
2012	1.243	1.035	1.013	1.006	1.004									
2013	1.248	1.031	1.012	1.006										
2014	1.240	1.032	1.012											
2015	1.246	1.031												
2016	1.255													
I. Age-to-Age (Latest Year)	1.255	1.031	1.012	1.006	1.004	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
II. Age-to-Ultimate	1.328	1.058	1.027	1.015	1.009	1.006	1.004	1.003	1.002	1.002	1.001	1.001	1.002	1.002

Accident Year	Age-to-Age Development (in months): 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	1.001	1.002	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1990	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1991	1.004	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	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	1.000	1.000	1.000	1.000										
2000	1.000	1.000	1.000											
2001	1.000	1.000												
2002	1.000													
I. Age-to-Age (Latest Year)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
II. Age-to-Ultimate	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000

Source: WCIRB quarterly calls for experience

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

Accident	Age-to-Age Development (in months):															
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204
1985							1.067	1.003	1.014	1.013	1.010	1.009	1.008	1.004	1.011	1.003
1986						1.068	1.038	1.001	1.018	1.014	1.010	1.008	1.009	1.010	1.005	1.006
1987					1.100	1.056	1.035	1.024	1.016	1.013	1.009	1.012	1.009	1.006	1.006	1.005
1988				1.173	1.096	1.055	1.035	1.023	1.016	1.011	1.010	1.014	1.005	1.004	1.004	1.005
1989			1.354	1.179	1.110	1.063	1.062	1.029	1.017	1.012	1.008	1.004	1.006	1.005	1.006	1.005
1990		1.821	1.337	1.169	1.085	1.068	1.034	1.020	1.015	1.010	1.007	1.006	1.006	1.006	1.005	1.006
1991	4.164	1.713	1.300	1.130	1.081	1.052	1.026	1.018	1.012	1.017	1.008	1.005	1.005	1.005	1.007	1.004
1992	3.520	1.633	1.249	1.132	1.079	1.048	1.028	1.020	1.023	1.010	1.008	1.006	1.007	1.005	1.006	0.998
1993	3.175	1.633	1.276	1.147	1.081	1.052	1.034	1.034	1.021	1.015	1.013	1.010	1.011	1.010	0.998	1.006
1994	3.203	1.645	1.284	1.125	1.085	1.055	1.046	1.027	1.020	1.017	1.015	1.017	1.014	0.999	1.008	1.007
1995	3.403	1.700	1.264	1.182	1.088	1.065	1.045	1.040	1.031	1.021	1.020	1.017	1.003	1.012	1.012	1.008
1996	3.178	1.610	1.331	1.144	1.094	1.073	1.064	1.048	1.033	1.028	1.022	1.002	1.014	1.010	1.009	1.010
1997	3.071	1.678	1.256	1.151	1.111	1.088	1.071	1.042	1.035	1.027	1.002	1.017	1.013	1.012	1.012	1.010
1998	3.629	1.644	1.273	1.176	1.126	1.093	1.071	1.045	1.032	1.007	1.021	1.017	1.014	1.014	1.012	1.012
1999	3.413	1.743	1.335	1.189	1.134	1.086	1.066	1.045	1.017	1.029	1.021	1.018	1.016	1.013	1.013	1.010
2000	4.244	1.779	1.357	1.208	1.121	1.091	1.057	1.030	1.033	1.025	1.021	1.019	1.015	1.014	1.012	1.011
2001	4.001	1.797	1.384	1.182	1.121	1.084	1.044	1.039	1.028	1.024	1.020	1.017	1.017	1.014	1.011	1.009
2002	3.822	1.805	1.318	1.177	1.109	1.064	1.047	1.032	1.026	1.021	1.018	1.017	1.014	1.012	1.009	
2003	3.950	1.705	1.329	1.171	1.101	1.063	1.045	1.034	1.029	1.023	1.020	1.017	1.013	1.010		
2004	4.073	1.734	1.339	1.161	1.101	1.069	1.048	1.036	1.030	1.025	1.020	1.015	1.012			
2005	3.932	1.740	1.330	1.181	1.113	1.079	1.056	1.044	1.035	1.028	1.022	1.016				
2006	3.976	1.727	1.330	1.186	1.120	1.081	1.060	1.046	1.035	1.025	1.019					
2007	3.956	1.716	1.340	1.194	1.126	1.088	1.060	1.045	1.031	1.023						
2008	4.015	1.758	1.367	1.199	1.126	1.085	1.060	1.040	1.029							
2009	4.322	1.775	1.354	1.199	1.126	1.083	1.054	1.037								
2010	4.300	1.737	1.342	1.190	1.120	1.075	1.049									
2011	4.233	1.728	1.350	1.195	1.109	1.072										
2012	4.323	1.765	1.343	1.173	1.105											
2013	4.504	1.704	1.296	1.160												
2014	4.281	1.629	1.284													
2015	3.990	1.627														
2016	4.199															
	Latest Year															
Age-to-Age	4.199	1.627	1.284	1.160	1.105	1.072	1.049	1.037	1.029	1.023	1.019	1.016	1.012	1.010	1.009	1.009
Cumulative	16.478	3.924	2.412	1.878	1.619	1.465	1.367	1.303	1.257	1.222	1.194	1.171	1.152	1.139	1.128	1.117
	3-Year Arithmetics Average															
Age-to-Age	4.157	1.653	1.308	1.176	1.111	1.077	1.054	1.041	1.032	1.025	1.021	1.016	1.013	1.012	1.011	1.010
Cumulative	17.660	4.248	2.569	1.965	1.671	1.503	1.396	1.324	1.272	1.233	1.203	1.179	1.160	1.145	1.131	1.119
	Average Excluding High & Low															
Age-to-Age	3.888	1.713	1.320	1.172	1.106	1.071	1.050	1.033	1.025	1.019	1.015	1.013	1.011	1.009	1.008	1.007
Cumulative	16.175	4.161	2.429	1.839	1.569	1.418	1.323	1.260	1.220	1.190	1.168	1.151	1.136	1.124	1.114	1.105

Accident	Age-to-Age Development (in months):															
Year	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396
1985	1.004	1.006	1.005	1.003	1.005	1.005	0.999	1.036	1.004	1.004	1.004	1.004	1.006	1.004	1.003	1.003
1986	1.005	1.005	1.005	1.006	1.005	0.999	1.039	1.005	1.005	1.006	1.006	1.007	1.006	1.005	1.004	
1987	1.005	1.005	1.006	1.007	0.998	1.024	1.006	1.005	1.004	1.005	1.006	1.005	1.004	1.004		
1988	1.004	1.005	1.005	1.009	1.008	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003			
1989	1.005	1.004	1.002	1.003	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003				
1990	1.005	1.001	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.002					
1991	1.000	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.003						
1992	1.003	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.003							
1993	1.007	1.006	1.006	1.006	1.005	1.005	1.005	1.004								
1994	1.008	1.007	1.006	1.006	1.006	1.005	1.004									
1995	1.009	1.009	1.008	1.008	1.008	1.006										
1996	1.009	1.008	1.007	1.007	1.006											
1997	1.008	1.008	1.007	1.007												
1998	1.010	1.010	1.008													
1999	1.010	1.008														
2000	1.009															
	Latest Year															
Age-to-Age	1.009	1.008	1.008	1.007	1.006	1.006	1.004	1.004	1.003	1.003	1.002	1.003	1.003	1.004	1.004	1.003
Cumulative	1.107	1.097	1.089	1.080	1.073	1.067	1.060	1.056	1.051	1.049	*1.046*	*1.043*	*1.040*	*1.037*	*1.035*	*1.032*
	3-Year Arithmetic Average															
Age-to-Age	1.010	1.009	1.008	1.007	1.006	1.006	1.004	1.003	1.003	1.003	1.003	1.004	1.004	1.004	1.004	1.003
Cumulative	1.108	1.097	1.088	1.080	1.072	1.066	1.060	1.055	1.052	1.049	*1.046*	*1.043*	*1.040*	*1.037*	*1.035*	*1.032*
	Average Excluding High & Low															
Age-to-Age	1.006	1.006	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.005	1.004		
Cumulative	1.097	1.090	1.084	1.078	1.072	1.067	1.063	1.058	1.054	1.050	*1.046*	*1.043*	*1.040*	*1.037*	*1.035*	*1.032*

Note: Factors in italics are based on an inverse power curve fit to the "3-Year Arithmetic Average" factors using the 108-to-120 through 312-to-324 valuations.
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	9.954	6.672	8.927
6 - 9					2.427	3.016	2.765	2.630	3.023	3.176	3.213	3.058	3.168	3.187	3.048	3.044
9 12					2.022	2.078	2.021	2.034	2.077	2.165	2.114	2.132	2.160	2.134	2.085	2.127
12 - 15					1.653	1.627	1.687	1.724	1.737	1.701	1.713	1.785	1.740	1.703	1.771	
15 - 18					1.415	1.486	1.494	1.509	1.482	1.486	1.510	1.495	1.489	1.469	1.484	
18 - 21				1.318	1.357	1.328	1.289	1.326	1.334	1.343	1.338	1.361	1.330	1.304	1.305	
21 24				1.249	1.255	1.234	1.237	1.255	1.253	1.248	1.249	1.241	1.239	1.222	1.225	
24 - 27				1.192	1.187	1.191	1.190	1.197	1.189	1.186	1.205	1.190	1.170	1.182		
27 - 30				1.151	1.165	1.167	1.172	1.170	1.158	1.163	1.164	1.158	1.145	1.140		
30 - 33			1.127	1.145	1.128	1.119	1.135	1.138	1.133	1.131	1.138	1.123	1.113	1.109		
33 36			1.113	1.110	1.107	1.103	1.111	1.114	1.113	1.108	1.106	1.101	1.093	1.088		
36 - 39			1.093	1.087	1.093	1.090	1.097	1.094	1.091	1.095	1.093	1.082	1.083			
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	1.072	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				
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					
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						
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							
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	1.012	1.011	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									
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	1.007	1.007	1.006										

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

Source: WCIRB quarterly calls for experience.

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 July 1, 2018 and December 31, 2018

Acc. Year	Indemnity Claim Counts @12/31/17	Cumulative Count Development Factors[2]	Estimated Ultimate Ind. Counts	Estimated Ult. ALAE Per Indemnity Claim[3]	Estimated Ult. ALAE (in $000)
	(1)	(2)	(3)=(1)x(2)	(4)	(5)=(3)x(4)
1991	249,750	1.000	249,784	2,473	617,646
1992	198,433	1.000	198,470	2,354	467,108
1993	156,142	1.000	156,168	2,185	341,215
1994	143,729	1.000	143,767	2,192	315,168
1995	135,172	1.001	135,254	2,513	339,881
1996	133,140	1.001	133,250	2,958	394,185
1997	137,296	1.001	137,442	3,713	510,387
1998	147,467	1.001	147,664	4,802	709,031
1999	148,649	1.002	148,882	5,145	765,959
2000	161,971	1.002	162,220	6,049	981,269
2001	185,669	1.002	185,955	7,521	1,398,609
2002	194,693	1.002	195,039	8,041	1,568,292
2003	184,197	1.002	184,525	8,561	1,579,804
2004	158,914	1.002	159,181	8,078	1,285,860
2005	139,523	1.002	139,736	7,807	1,090,958
2006	133,245	1.001	133,436	8,126	1,084,366
2007	130,207	1.001	130,389	8,818	1,149,810
2008	122,921	1.002	123,118	9,670	1,190,568
2009	113,611	1.002	113,842	10,711	1,219,377
2010	118,241	1.003	118,550	10,717	1,270,486
2011	120,311	1.004	120,779	10,592	1,279,268
2012	127,215	1.006	127,951	10,758	1,376,457
2013	134,824	1.009	136,079	10,916	1,485,380
2014	139,489	1.015	141,593	11,190	1,584,431
2015	142,902	1.027	146,771	11,451	1,680,664
2016	141,505	1.058	149,774	11,862	1,776,695
2017	115,674	1.328	153,616	12,791	1,964,875

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

	Ult. Ind. Counts[4]	Ult. ALAE per Ind. Counts[5]	Ultimate ALAE[6]
2018	149,949	13,066	1,959,301
4/1/2019	147,558	13,457	1,985,623

(a)	Projected ALAE Incurred ($000):	1,985,623
(b)	Calendar Year 2017 Earned Premium[7] ($000):	17,651,880
(c)	Projected Loss to Industry Average Filed Pure Premium Ratio[8]:	0.581
(d)	Premium Adjustment Factor for Calendar Year 2017[9]:	0.977
(e)	Projected Losses ($000): (b) x (c) x (d)	10,023,173
(f)	Ratio of ALAE to Losses Prior to Impact of SB 1160 and AB 1244: (a) / (e)	19.8%
(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)]	18.5%

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 4.1.

[3] Based on estimated ultimate ALAE per indemnity for private insures from Exhibit 2.2.

[4] Estimated based on projected frequency trends for accident years 2018 and 2019. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.

[5] Severity is projected by applying an annual growth rate of 4.0%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 2.2 and (ii) paid ALAE per open indemnity claim from Exhibit 3, 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 December 31, 2017.

[8] See Exhibit 8 of Agenda Item AC18-03-02.

[9] See Exhibit 8 of Agenda Item AC18-03-02.

[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.

Paid MCCP per Indemnity Claims Inventory[1] by Calendar Year

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

[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 @12/31/17 (in $000) (1)	Cumulative Development Factors[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/17 (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	304,977	1.481	451,664	120,311	1.004	120,779	3,740	---
2012	280,001	1.553	434,788	127,215	1.006	127,951	3,398	-9.1%
2013	261,926	1.639	429,426	134,824	1.009	136,079	3,156	-7.1%
2014	242,755	1.777	431,347	139,489	1.015	141,593	3,046	-3.5%
2015	209,895	2.035	427,222	142,902	1.027	146,771	2,911	-4.5%
2016	154,314	2.648	408,575	141,505	1.058	149,774	2,728	-6.3%
2017	65,206	6.377	415,828	115,674	1.328	153,616	2,707	-0.8%
					Estimated Annual Exponential Trend		2012 - 2017:	-4.5%
							R^2:	0.971

Notes:

[1] Based on MCCP development through 72 months from Exhibit 7.1. 84-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC18-03-02.

[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 4.1.

Paid MCCP Development Factors - Statewide

Quarterly Development

Age in Months	Accident Year 2012	2013	2014	2015	2016	2017
3 - 6	5.634	5.808	6.037	5.591	6.063	5.484
6 - 9	2.377	2.422	2.361	2.447	2.387	2.387
9 - 12	1.762	1.770	1.738	1.740	1.713	1.780
12 - 15	1.474	1.411	1.444	1.467	1.477	
15 - 18	1.279	1.252	1.278	1.279	1.241	
18 - 21	1.170	1.155	1.179	1.174	1.169	
21 - 24	1.128	1.119	1.117	1.117	1.124	
24 - 27	1.083	1.098	1.117	1.095		
27 - 30	1.077	1.081	1.089	1.072		
30 - 33	1.050	1.067	1.068	1.061		
33 - 36	1.045	1.054	1.052	1.045		
36 - 39	1.047	1.054	1.043			
39 - 42	1.035	1.044	1.036			
42 - 45	1.035	1.035	1.033			
45 - 48	1.031	1.027	1.026			
48 - 51	1.031	1.023				
51 - 54	1.025	1.023				
54 - 57	1.022	1.019				
57 - 60	1.017	1.016				
60 - 63	1.015					
63 - 66	1.016					
66 - 69	1.013					
69 - 72	1.011					

Annual Development

Age in Months	Accident Year 2012	2013	2014	2015	2016	
12 - 24	2.489	2.282	2.430	2.461	2.409	
24 - 36	1.279	1.334	1.367	1.301		
36 - 48	1.157	1.169	1.145			
48 - 60	1.097	1.084				
60 - 72	1.056					
	12-24	24-36	36-48	48-60	60-72	72-Ult.
Age-to-Age[1]	2.409	1.301	1.145	1.084	1.056	
Age -to-Ult.[2]	6.377	2.648	2.035	1.777	1.639	1.553

Notes:

[1] Based on Latest Year.

[2] 72-to-Ult. is based on selected paid medical 72-to-ultimate development factor on Exhibit 3.2 of Agenda Item AC18-03-02.

Source: WCIRB quarterly calls for experience.

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

Accident Year	Paid MCCP @12/31/17 (in $000) (1)	Cumulative Development Factors[1] (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @12/31/17 (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	304,977	1.481	451,664	120,311	1.004	120,779	3,740	---
2012	280,001	1.553	434,788	127,215	1.006	127,951	3,398	-9.1%
2013	261,926	1.639	429,426	134,824	1.009	136,079	3,156	-7.1%
2014	242,755	1.777	431,347	139,489	1.015	141,593	3,046	-3.5%
2015	209,895	2.035	427,222	142,902	1.027	146,771	2,911	-4.5%
2016	154,314	2.648	408,575	141,505	1.058	149,774	2,728	-6.3%
2017	65,206	6.377	415,828	115,674	1.328	153,616	2,707	-0.8%

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

	Ultimate MCCP[5]	Ult. Ind. Counts[3]	Ult.MCCP per Ind. Counts[4]
2018	407,477	149,949	2,717
4/1/2019	400,981	147,558	2,717

(a) Projected MCCP ($000):	400,981
(b) Calendar Year 2017 Earned Premium[6] ($000):	17,651,880
(c) Projected Loss to Industry Average Filed Pure Premium Ratio[7]:	0.581
(d) Premium Adjustment Factor for Calendar Year 2017[8]:	0.977
(e) Projected Losses ($000): (b) x (c) x (d)	10,023,173
(f) Projected Ratio of MCCP to Losses: (a)/(e)	4.0%

Notes:

[1] Based on MCCP development through 72 months from Exhibit 7.1. 84-to-ultimate development factor is based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC18-03-02.
[2] Based on the latest year indemnity claim count age-to-age development from Exhibit 4.1.
[3] Estimated based on projected frequency trends for accident years 2018 and 2019. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2016 and 2017.
[4] Severity is projected by applying an annual growth rate of 0% 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 December 31, 2017.
[7] See Exhibit 8 of Agenda Item AC18-03-02.
[8] See Exhibit 5.2 of Agenda Item AC18-03-02.

Item AC18-04-02
12/31/2017 Experience – Alternative Loss Projections

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

Loss Development Methodologies
The loss development projections based on the methodology reflected in the WCIRB's summary analysis of December 31, 2017 experience, included in Item AC18-03-02 of this Agenda, were based on a combination of (a) latest year reform-adjusted paid loss development factors through 108 months with adjustments for changes in claim settlement rates applied through 84 months, (b) three-year average reform-adjusted paid loss development factors from 108 months through 240 months, and (c) six-year average (unadjusted) incurred loss development factors after 240 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 December 31, 2017 experience, derived using the following loss development methodologies and the trending methodology reflected in the analysis included in Item AC18-03-02 of this Agenda are included:[1]

1. 3-Year Average Unadjusted Incurred Loss Development – Exhibits 1.1 through 1.3.

2. Latest Year Unadjusted Incurred Loss Development – Exhibits 2.1 through 2.3.

3. Latest Year Incurred Loss Development Adjusted for Changes in Case Reserve Levels – Exhibits 3.1 through 3.11.

4. 3-Year Average Unadjusted Paid Loss Development – Exhibits 4.1 through 4.3.

5. Latest Year Unadjusted Paid Loss Development – Exhibits 5.1 through 5.3.

6. Latest Year Paid Loss Development Adjusted for Reforms – Exhibits 6.1 through 6.3.

7. 3-Year Average Paid Loss Development Adjusted for Changes in Claim Settlement Rates and Reforms – Exhibits 7.1 through 7.3.

A summary of the July 1, 2018 through December 31, 2018 policy period loss ratio projections based on the alternative loss development methodologies described above is shown in Table 1.

[1] All methodologies reflect three-year average loss development factors applied after 108 months. All paid loss development methodologies reflect six-year average incurred loss development factors applied after 240 months. Methodologies adjusted for reforms include the impacts of SB 863, SB 1160 and AB 1244.

Table 1: Projected Loss Ratios for Policies Incepting between July 1, 2018 and December 31, 2018 Based on Alternative Loss Development Methodologies[2]

Loss Development Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
1/1/2018 Filing Methodology			
Latest Year Adjusted for Reforms and Changes in Claim Settlement Rates	**0.253**	**0.328**	**0.581**
Alternative Methodologies			
Incurred Methodologies			
3-Year Average (Unadjusted)	0.234	0.295	0.529
Latest Year (Unadjusted)	0.231	0.280	0.511
Latest Year Adjusted for Changes in Case Reserve Levels	0.234	0.283	0.517
Paid Methodologies			
3-Year Average (Unadjusted)	0.260	0.355	0.615
Latest Year (Unadjusted)	0.255	0.337	0.592
Latest Year Adjusted for Reforms	0.269	0.342	0.611
3-Year Average Adjusted for Changes in Claim Settlement Rates and Reforms	0.259	0.350	0.609

Trending Methodologies
The trending projections reflected in the summary analysis of December 31, 2017 experience, included in Item AC18-03-02 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 12-month frequency change for accident year 2017 and the WCIRB's claim frequency model forecasts for accident years 2018 and 2019. The severity growth estimates were based on a review of longer-term and more recent indemnity and medical severity growth rates.

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 advisory pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on December 31, 2017 experience, derived using the loss development methodologies reflected in the analysis included in Item AC18-03-02 of this Agenda and the following trending methodologies have been included:

1. Separate Projections of Frequency and Severity Growth Applied to the Latest Year Only – Exhibits 8.1 and 8.2.

[2] All methodologies reflect three-year average loss development factors applied after 108 months. All paid loss development methodologies reflect six-year average incurred loss development factors applied after 240 months. Methodologies adjusted for reforms include the impacts of SB 863, SB 1160 and AB 1244.

2. 5-Year On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios and then Averaged – Exhibits 9.1 and 9.2.

3. 5-Year On-Level Loss Ratio Exponential Trend Applied to the Latest Year Only – Exhibits 10.1 and 10.2.

4. 5-Year Fitted On-Level Loss Ratio Exponential Trend – Exhibits 11.1 and 11.2.

A summary of the July 1, 2018 through December 31, 2018 policy period loss ratio projections based on the alternative trending methodologies is shown in Table 2.

Table 2: Projected Loss Ratios for Policies Incepting between July 1, 2018 and December 31, 2018 Based on Alternative Trending Methodologies

Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
1/1/2018 Filing Methodology			
Separate Projections of Frequency and Severity, with Indemnity Severity at 0% and Medical Severity at +3%, Applied to the Latest Two Years	**0.253**	**0.328**	**0.581**
Alternative Methodologies			
Separate Projections of Frequency and Severity Applied to the Latest Year	0.251	0.329	0.580
5-Year On-level Loss Ratio Exponential Trend Applied to the Latest Two Years	0.246	0.307	0.553
5-Year On-level Loss Ratio Exponential Trend Applied to the Latest Year	0.247	0.315	0.562
5-Year Fitted On-level Loss Ratio Exponential Trend	0.248	0.308	0.556

Developed Loss Ratio Unadjusted 3-Year Average Incurred Development Factors
Based on Experience as of December 31, 2017

	(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 (1) x (3)	Developed Loss Ratio	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	1.004	1.021	0.160	0.233	1.008	1.064	0.248	0.409
2007	0.214	1.006	1.027	0.220	0.327	1.009	1.073	0.351	0.571
2008	0.270	1.007	1.034	0.279	0.402	1.011	1.085	0.437	0.716
2009	0.311	1.012	1.046	0.325	0.462	1.016	1.103	0.509	0.834
2010	0.294	1.013	1.059	0.311	0.441	1.012	1.115	0.492	0.803
2011	0.269	1.018	1.078	0.290	0.377	1.018	1.136	0.428	0.718
2012	0.236	1.024	1.104	0.260	0.316	1.024	1.162	0.367	0.628
2013	0.195	1.041	1.149	0.224	0.249	1.037	1.205	0.300	0.524
2014	0.176	1.059	1.218	0.215	0.212	1.055	1.271	0.269	0.484
2015	0.159	1.113	1.356	0.215	0.192	1.086	1.380	0.264	0.479
2016	0.122	1.266	1.716	0.209	0.163	1.152	1.590	0.259	0.468
2017	0.067	1.957	3.359	0.224	0.118	1.511	2.402	0.283	0.507

(a) Based on AC18-03-02, 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 AC18-03-02, Exhibit 2.1.
(c) Based on AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.220	1.439	1.222	0.259
2008	0.279	1.356	1.476	0.257
2009	0.325	1.329	1.591	0.271
2010	0.311	1.311	1.446	0.282
2011	0.290	1.290	1.321	0.283
2012	0.260	1.260	1.177	0.279
2013	0.224	1.220	1.028	0.266
2014	0.215	1.105	0.948	0.250
2015	0.215	1.077	0.905	0.256
2016	0.209	1.064	0.926	0.240
2017	0.224	1.043	0.977	0.239
				Projected (d)
2018				0.237
4/1/2019				0.234

(a) See Exhibit 1.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.861	0.956	0.224
2007	0.351	0.866	1.222	0.249
2008	0.437	0.866	1.476	0.256
2009	0.509	0.854	1.591	0.273
2010	0.492	0.851	1.446	0.289
2011	0.428	0.866	1.321	0.281
2012	0.367	0.893	1.177	0.279
2013	0.300	0.958	1.028	0.280
2014	0.269	0.998	0.948	0.284
2015	0.264	0.997	0.905	0.291
2016	0.259	0.994	0.926	0.278
2017	0.283	0.991	0.977	0.287
				Projected (d)
2018				0.293
4/1/2019				0.295

(a) See Exhibit 1.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

	(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 (1) x (3)	Developed Loss Ratio	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	1.004	1.021	0.160	0.233	1.008	1.064	0.248	0.409
2007	0.214	1.006	1.027	0.220	0.327	1.009	1.073	0.351	0.571
2008	0.270	1.007	1.034	0.279	0.402	1.011	1.085	0.437	0.716
2009	0.311	1.012	1.046	0.325	0.462	1.016	1.103	0.509	0.834
2010	0.294	1.014	1.061	0.312	0.441	1.007	1.110	0.490	0.801
2011	0.269	1.016	1.078	0.289	0.377	1.012	1.124	0.423	0.713
2012	0.236	1.022	1.101	0.260	0.316	1.016	1.142	0.361	0.621
2013	0.195	1.041	1.146	0.223	0.249	1.031	1.177	0.293	0.517
2014	0.176	1.054	1.208	0.213	0.212	1.040	1.224	0.259	0.472
2015	0.159	1.115	1.347	0.214	0.192	1.079	1.321	0.253	0.467
2016	0.122	1.261	1.699	0.207	0.163	1.147	1.515	0.247	0.454
2017	0.067	1.943	3.301	0.220	0.118	1.499	2.271	0.268	0.488

(a) Based on AC18-03-02, 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 AC18-03-02, Exhibit 2.1.
(c) Based on AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.220	1.439	1.222	0.259
2008	0.279	1.356	1.476	0.257
2009	0.325	1.329	1.591	0.271
2010	0.312	1.311	1.446	0.283
2011	0.289	1.290	1.321	0.283
2012	0.260	1.260	1.177	0.278
2013	0.223	1.220	1.028	0.265
2014	0.213	1.105	0.948	0.248
2015	0.214	1.077	0.905	0.254
2016	0.207	1.064	0.926	0.238
2017	0.220	1.043	0.977	0.235
				Projected (d)
2018				0.234
4/1/2019				0.231

(a) See Exhibit 2.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.861	0.956	0.224
2007	0.351	0.866	1.222	0.249
2008	0.437	0.866	1.476	0.256
2009	0.509	0.854	1.591	0.273
2010	0.490	0.851	1.446	0.288
2011	0.423	0.866	1.321	0.278
2012	0.361	0.893	1.177	0.274
2013	0.293	0.958	1.028	0.273
2014	0.259	0.998	0.948	0.273
2015	0.253	0.997	0.905	0.279
2016	0.247	0.994	0.926	0.265
2017	0.268	0.991	0.977	0.271
				Projected (d)
2018				0.278
4/1/2019				0.280

(a) See Exhibit 2.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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)						
Year	12	24	36	48	60	72	84
2006							22,095
2007						19,889	23,912
2008					18,178	20,795	23,237
2009				16,543	18,787	21,050	22,535
2010			14,380	16,232	17,878	19,803	21,945
2011		12,649	14,737	17,101	18,821	20,710	22,724
2012	8,203	12,471	14,660	16,172	18,365	20,656	
2013	8,525	12,429	14,268	15,677	17,358		
2014	8,409	12,765	14,959	17,079			
2015	8,896	13,694	16,436				
2016	9,128	14,080					
2017	9,611						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							18,401
2007						17,615	19,688
2008					16,348	19,185	21,017
2009				13,840	17,551	20,144	22,260
2010			9,774	14,321	17,774	20,258	22,313
2011		5,338	10,259	14,564	17,813	20,151	21,946
2012	2,126	5,849	10,614	14,656	17,640	19,837	
2013	2,369	6,025	10,808	14,676	17,441		
2014	2,223	5,857	10,576	14,319			
2015	2,377	6,258	11,025				
2016	2,492	6,556					
2017	2,581						
Annual Trend (b):	3.5%	3.5%	2.1%	0.7%	1.0%	2.2%	3.8%

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							23,952
2007						21,261	24,551
2008					17,344	21,792	25,165
2009				15,684	17,777	22,337	25,794
2010			14,712	16,077	18,222	22,896	26,439
2011		12,445	15,080	16,478	18,677	23,468	27,100
2012	8,330	12,756	15,457	16,890	19,144	24,055	
2013	8,539	13,075	15,843	17,313	19,623		
2014	8,752	13,402	16,239	17,745			
2015	8,971	13,737	16,645				
2016	9,195	14,080					
2017	9,425						

(a) Represents average paid indemnity on closed claims only. All evaluations are brought to the accident year 2016 benefit level based on benefit factors shown in AC18-03-02, Exhibit 4.1, excluding utilization impacts.

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

(c) Latest evaluation for each accident year is brought to the accident year 2016 benefit level based on benefit factors shown in AC18-03-02, 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 2.5%.

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

D. Indemnity Open Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							15,575
2007						19,925	14,501
2008					25,430	18,307	13,663
2009				32,840	23,560	17,418	12,950
2010			45,063	31,807	22,589	16,426	11,609
2011		58,965	43,522	30,602	21,465	15,178	10,689
2012	68,641	61,195	44,482	30,702	21,075	14,510	
2013	73,840	65,059	45,991	30,609	20,182		
2014	78,078	66,672	46,233	30,044			
2015	80,801	67,866	44,838				
2016	80,309	65,152					
2017	79,762						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							373,061
2007						423,621	356,015
2008					441,054	398,961	343,828
2009				515,081	418,827	389,070	334,030
2010			662,963	511,340	411,615	376,082	306,927
2011		733,807	656,304	504,274	400,910	356,196	289,668
2012	571,797	780,598	687,550	518,569	403,466	349,032	
2013	630,489	850,631	728,642	529,923	396,029		
2014	683,340	893,514	750,787	533,145			
2015	724,851	932,253	746,337				
2016	738,448	917,346					
2017	751,754						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							2,987,171
2007						2,894,913	3,085,995
2008					2,649,722	2,894,732	3,067,201
2009				2,190,412	2,532,055	2,766,289	2,933,896
2010			1,748,753	2,238,449	2,566,259	2,798,131	2,965,539
2011		1,083,140	1,744,189	2,205,127	2,516,630	2,733,274	2,885,389
2012	359,313	1,131,172	1,799,641	2,266,107	2,574,987	2,800,489	
2013	368,898	1,173,022	1,881,124	2,367,408	2,672,267		
2014	357,224	1,155,745	1,891,626	2,375,850			
2015	375,633	1,231,856	1,992,813				
2016	392,003	1,268,544					
2017	403,146						

(d) Each amount is derived as the product of the indemnity open claim counts (Item D) and the adjusted average indemnity case reserves per open claim (Item C).
(e) Brought to accident year 2016 benefit level based on benefit factors shown in AC18-03-02, 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	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							3,360,232
2007						3,318,534	3,442,010
2008					3,090,776	3,293,693	3,411,030
2009				2,705,494	2,950,882	3,155,360	3,267,926
2010			2,411,715	2,749,789	2,977,874	3,174,212	3,272,466
2011		1,816,947	2,400,493	2,709,402	2,917,539	3,089,470	3,175,057
2012	931,111	1,911,771	2,487,191	2,784,675	2,978,453	3,149,522	
2013	999,387	2,023,653	2,609,766	2,897,331	3,068,296		
2014	1,040,565	2,049,259	2,642,414	2,908,995			
2015	1,100,484	2,164,109	2,739,150				
2016	1,130,451	2,185,890					
2017	1,154,900						

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

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.037
2008					1.066	1.036
2009				1.091	1.069	1.036
2010			1.140	1.083	1.066	1.031
2011		1.321	1.129	1.077	1.059	1.028
2012	2.053	1.301	1.120	1.070	1.057	
2013	2.025	1.290	1.110	1.059		
2014	1.969	1.289	1.101			
2015	1.967	1.266				
2016	1.934					
Latest Year	1.934	1.266	1.101	1.059	1.057	1.028

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

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.037
2008					1.045	1.028
2009				1.076	1.046	1.024
2010			1.130	1.067	1.045	1.026
2011		1.272	1.128	1.060	1.037	1.022
2012	1.990	1.267	1.111	1.064	1.041	
2013	1.932	1.257	1.109	1.054		
2014	1.963	1.279	1.114			
2015	1.969	1.261				
2016	1.943					

(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	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						0.01%
2008					2.00%	0.74%
2009				1.34%	2.25%	1.19%
2010			0.88%	1.51%	2.03%	0.51%
2011		3.87%	0.10%	1.61%	2.15%	0.60%
2012	3.18%	2.69%	0.73%	0.55%	1.59%	
2013	4.83%	2.62%	0.07%	0.43%		
2014	0.34%	0.78%	-1.22%			
2015	-0.13%	0.41%				
2016	-0.48%					

K. Indemnity Incurred Loss Development Factors Adjusted for Changes in Case Reserve Adequacy (i)

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.037
2008					1.066	1.038
2009				1.090	1.072	1.036
2010			1.141	1.085	1.066	1.031
2011		1.326	1.134	1.078	1.059	1.028
2012	2.055	1.313	1.121	1.069	1.058	
2013	2.024	1.292	1.113	1.059		
2014	1.967	1.288	1.101			
2015	1.966	1.266				
2016	1.934					
Latest Year	1.934	1.266	1.101	1.059	1.058	1.028

(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 AC18-03-02, 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	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							45,250
2007						40,367	51,343
2008					34,052	42,493	51,305
2009				28,671	35,041	42,138	49,211
2010			23,566	28,974	34,580	40,374	46,779
2011		20,441	24,986	30,822	37,688	42,820	48,688
2012	16,029	20,299	24,281	28,497	33,675	39,770	
2013	15,773	19,983	23,004	27,449	32,120		
2014	15,366	18,930	22,197	26,604			
2015	15,939	19,672	24,262				
2016	16,398	20,683					
2017	17,385						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							6,018
2007						6,472	7,002
2008					6,775	7,498	8,028
2009				6,637	7,718	8,503	9,059
2010			5,635	7,118	8,168	8,922	9,494
2011		4,203	6,117	7,567	8,616	9,406	9,933
2012	1,989	4,349	6,214	7,632	8,634	9,328	
2013	2,081	4,407	6,288	7,653	8,569		
2014	2,051	4,391	6,255	7,551			
2015	2,069	4,418	6,192				
2016	2,136	4,465					
2017	2,159						
Annual Trend (b):	1.4%	1.0%	1.6%	2.5%	4.6%	7.6%	10.6%

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							37,156
2007						31,290	38,642
2008					26,027	32,542	40,188
2009				21,954	27,068	33,844	41,796
2010			20,003	22,832	28,150	35,198	43,467
2011		17,000	20,804	23,746	29,276	36,605	45,206
2012	14,249	17,680	21,636	24,696	30,447	38,070	
2013	14,819	18,387	22,501	25,683	31,665		
2014	15,412	19,123	23,401	26,711			
2015	16,028	19,888	24,337				
2016	16,669	20,683					
2017	17,336						

(a) Represents average paid medical on all claims. All evaluations are brought to the accident year 2016 benefit level based on benefit factors shown in AC18-03-02, Exhibit 4.4, excluding utilization impacts.

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

(c) Latest evaluation for each accident year is brought to the accident year 2016 benefit level based on benefit factors shown in AC18-03-02, 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 $000) (d)

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							578,716
2007						623,462	560,356
2008					661,857	595,762	549,094
2009				720,985	637,700	589,495	541,253
2010			901,411	726,222	635,891	578,155	504,613
2011		1,002,421	905,416	726,668	628,416	555,597	483,208
2012	978,050	1,081,945	962,403	758,202	641,678	552,391	
2013	1,094,223	1,196,267	1,034,847	786,142	639,068		
2014	1,203,302	1,274,963	1,081,904	802,496			
2015	1,295,078	1,349,708	1,091,230				
2016	1,338,680	1,347,562					
2017	1,382,745						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							2,767,121
2007						2,831,847	3,066,964
2008					2,681,899	2,975,046	3,188,776
2009				2,254,183	2,631,309	2,905,540	3,100,665
2010			1,878,023	2,387,568	2,750,037	3,011,848	3,210,842
2011		1,342,052	1,985,567	2,473,755	2,828,302	3,093,568	3,272,037
2012	504,977	1,293,198	1,896,485	2,356,344	2,688,694	2,921,027	
2013	547,407	1,363,495	1,993,099	2,460,400	2,777,292		
2014	570,785	1,437,994	2,101,779	2,573,380			
2015	600,586	1,521,244	2,188,266				
2016	638,037	1,582,694					
2017	691,621						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2006							3,345,837
2007						3,455,309	3,627,321
2008					3,343,755	3,570,808	3,737,870
2009				2,975,168	3,269,009	3,495,035	3,641,918
2010			2,779,434	3,113,790	3,385,928	3,590,003	3,715,455
2011		2,344,473	2,890,984	3,200,423	3,456,718	3,649,165	3,755,245
2012	1,483,027	2,375,143	2,858,889	3,114,546	3,330,372	3,473,418	
2013	1,641,630	2,559,762	3,027,946	3,246,542	3,416,361		
2014	1,774,087	2,712,957	3,183,683	3,375,876			
2015	1,895,665	2,870,952	3,279,496				
2016	1,976,717	2,930,255					
2017	2,074,366						

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

(e) Brought to accident year 2016 benefit level based on benefit factors shown in AC18-03-02, 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	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.050
2008					1.068	1.047
2009				1.099	1.069	1.042
2010			1.120	1.087	1.060	1.035
2011		1.233	1.107	1.080	1.056	1.029
2012	1.602	1.204	1.089	1.069	1.043	
2013	1.559	1.183	1.072	1.052		
2014	1.529	1.174	1.060			
2015	1.514	1.142				
2016	1.482					
Latest Year	1.482	1.142	1.060	1.052	1.043	1.029

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

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.051
2008					1.061	1.039
2009				1.087	1.056	1.030
2010			1.134	1.073	1.045	1.025
2011		1.217	1.118	1.069	1.033	1.016
2012	1.593	1.181	1.090	1.055	1.031	
2013	1.560	1.148	1.083	1.039		
2014	1.524	1.158	1.078			
2015	1.512	1.146				
2016	1.499					

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

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						-0.07%
2008					0.65%	0.77%
2009				1.09%	1.22%	1.19%
2010			-1.21%	1.38%	1.51%	1.00%
2011		1.32%	-1.01%	1.07%	2.21%	1.31%
2012	0.53%	1.96%	-0.05%	1.40%	1.13%	
2013	-0.05%	3.06%	-1.02%	1.30%		
2014	0.36%	1.35%	-1.62%			
2015	0.20%	-0.37%				
2016	-1.10%					

(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 Adequacy (i)

Accident	Age-to-Age Development (in months):					
Year	12-24	24-36	36-48	48-60	60-72	72-84
2007						1.049
2008					1.068	1.049
2009				1.099	1.074	1.042
2010			1.120	1.092	1.061	1.035
2011		1.238	1.114	1.080	1.057	1.029
2012	1.600	1.211	1.092	1.071	1.043	
2013	1.558	1.185	1.075	1.054		
2014	1.528	1.175	1.062			
2015	1.514	1.143				
2016	1.482					
Latest Year	1.482	1.143	1.062	1.054	1.043	1.029

(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 AC18-03-02, Exhibit 2.2.1].

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

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

	(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 (1) x (3)	Developed Loss Ratio	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	1.004	1.021	0.160	0.233	1.008	1.064	0.248	0.409
2007	0.214	1.006	1.027	0.220	0.327	1.009	1.073	0.351	0.571
2008	0.270	1.007	1.034	0.279	0.402	1.011	1.085	0.437	0.716
2009	0.311	1.012	1.046	0.325	0.462	1.016	1.103	0.509	0.834
2010	0.294	1.014	1.061	0.312	0.441	1.007	1.110	0.490	0.801
2011	0.269	1.016	1.078	0.289	0.377	1.012	1.124	0.423	0.713
2012	0.236	1.028	1.108	0.261	0.316	1.029	1.157	0.366	0.627
2013	0.195	1.058	1.172	0.228	0.249	1.043	1.206	0.300	0.529
2014	0.176	1.059	1.240	0.219	0.212	1.054	1.270	0.269	0.488
2015	0.159	1.101	1.366	0.217	0.192	1.062	1.349	0.258	0.475
2016	0.122	1.266	1.730	0.211	0.163	1.143	1.541	0.251	0.462
2017	0.067	1.934	3.345	0.223	0.118	1.482	2.285	0.269	0.492

(a) Based on AC18-03-02, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

(b) Age-to-age factors for developing accident years 2012 to 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 2012 are selected as the age-to-age factors shown in AC18-03-02, Exhibit 2.1.

(c) Age-to-age factors for developing accident years 2012 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 K). Age-to-age factors for developing accident years prior to 2012 are selected as the age-to-age factors shown in AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.220	1.439	1.222	0.259
2008	0.279	1.356	1.476	0.257
2009	0.325	1.329	1.591	0.271
2010	0.312	1.311	1.446	0.283
2011	0.289	1.290	1.321	0.283
2012	0.261	1.260	1.177	0.280
2013	0.228	1.220	1.028	0.271
2014	0.219	1.105	0.948	0.255
2015	0.217	1.077	0.905	0.258
2016	0.211	1.064	0.926	0.242
2017	0.223	1.043	0.977	0.238
				Projected (d)
2018				0.238
4/1/2019				0.234

(a) See Exhibit 3.9.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.861	0.956	0.224
2007	0.351	0.866	1.222	0.249
2008	0.437	0.866	1.476	0.256
2009	0.509	0.854	1.591	0.273
2010	0.490	0.851	1.446	0.288
2011	0.423	0.866	1.321	0.278
2012	0.366	0.893	1.177	0.277
2013	0.300	0.958	1.028	0.280
2014	0.269	0.998	0.948	0.283
2015	0.258	0.997	0.905	0.285
2016	0.251	0.994	0.926	0.270
2017	0.269	0.991	0.977	0.273
				Projected (d)
2018				0.281
4/1/2019				0.283

(a) See Exhibit 3.9.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

	(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 (1) x (3)	Developed Loss Ratio	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	0.148	1.012	1.081	0.160	0.211	1.019	1.252	0.264	0.425
2007	0.201	1.015	1.098	0.221	0.292	1.022	1.279	0.373	0.595
2008	0.252	1.019	1.119	0.282	0.359	1.026	1.312	0.472	0.753
2009	0.288	1.025	1.147	0.330	0.410	1.031	1.352	0.555	0.885
2010	0.272	1.030	1.182	0.322	0.393	1.036	1.401	0.551	0.873
2011	0.244	1.041	1.230	0.301	0.325	1.047	1.466	0.477	0.777
2012	0.210	1.059	1.303	0.274	0.266	1.064	1.560	0.415	0.689
2013	0.170	1.088	1.418	0.241	0.203	1.093	1.704	0.346	0.587
2014	0.144	1.137	1.612	0.232	0.162	1.139	1.942	0.314	0.546
2015	0.115	1.260	2.030	0.234	0.128	1.237	2.403	0.307	0.541
2016	0.071	1.620	3.288	0.232	0.088	1.455	3.496	0.308	0.540
2017	0.023	3.247	10.678	0.249	0.039	2.510	8.776	0.345	0.594

(a) Based on AC18-03-02, Exhibit 1.
(b) Age-to-age factors are selected as three-year averages based on AC18-03-02, Exhibit 2.5.
(c) Age-to-age factors are selected as three-year averages based on AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.291
2011	0.301	1.290	1.321	0.294
2012	0.274	1.260	1.177	0.293
2013	0.241	1.220	1.028	0.286
2014	0.232	1.105	0.948	0.271
2015	0.234	1.077	0.905	0.279
2016	0.232	1.064	0.926	0.267
2017	0.249	1.043	0.977	0.265
				Projected (d)
2018				0.264
4/1/2019				0.260

(a) See Exhibit 4.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.264	0.861	0.956	0.238
2007	0.373	0.866	1.222	0.265
2008	0.472	0.866	1.476	0.277
2009	0.555	0.854	1.591	0.297
2010	0.551	0.851	1.446	0.324
2011	0.477	0.866	1.321	0.312
2012	0.415	0.893	1.177	0.315
2013	0.346	0.958	1.028	0.322
2014	0.314	0.998	0.948	0.330
2015	0.307	0.997	0.905	0.338
2016	0.308	0.994	0.926	0.331
2017	0.345	0.991	0.977	0.350
				Projected (d)
2018				0.352
4/1/2019				0.355

(a) See Exhibit 4.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

	(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 (1) x (3)	Developed Loss Ratio	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	0.148	1.012	1.081	0.160	0.211	1.019	1.252	0.264	0.425
2007	0.201	1.015	1.098	0.221	0.292	1.022	1.279	0.373	0.595
2008	0.252	1.019	1.119	0.282	0.359	1.026	1.312	0.472	0.753
2009	0.288	1.025	1.147	0.330	0.410	1.031	1.352	0.555	0.885
2010	0.272	1.031	1.183	0.322	0.393	1.032	1.396	0.549	0.871
2011	0.244	1.038	1.228	0.300	0.325	1.043	1.456	0.473	0.773
2012	0.210	1.056	1.297	0.272	0.266	1.058	1.540	0.410	0.682
2013	0.170	1.087	1.410	0.239	0.203	1.087	1.674	0.339	0.579
2014	0.144	1.129	1.591	0.229	0.162	1.130	1.892	0.306	0.535
2015	0.115	1.257	2.000	0.231	0.128	1.226	2.319	0.297	0.527
2016	0.071	1.618	3.236	0.229	0.088	1.439	3.337	0.294	0.523
2017	0.023	3.235	10.470	0.244	0.039	2.480	8.277	0.325	0.569

(a) Based on AC18-03-02, Exhibit 1.

(b) Age-to-age factors are selected as latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors based on AC18-03-02, Exhibit 2.5.

(c) Age-to-age factors are selected as latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors based on AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.272	1.260	1.177	0.292
2013	0.239	1.220	1.028	0.284
2014	0.229	1.105	0.948	0.267
2015	0.231	1.077	0.905	0.274
2016	0.229	1.064	0.926	0.263
2017	0.244	1.043	0.977	0.260
				Projected (d)
2018				0.259
4/1/2019				0.255

(a) See Exhibit 5.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.264	0.861	0.956	0.238
2007	0.373	0.866	1.222	0.265
2008	0.472	0.866	1.476	0.277
2009	0.555	0.854	1.591	0.297
2010	0.549	0.851	1.446	0.323
2011	0.473	0.866	1.321	0.310
2012	0.410	0.893	1.177	0.311
2013	0.339	0.958	1.028	0.316
2014	0.306	0.998	0.948	0.322
2015	0.297	0.997	0.905	0.327
2016	0.294	0.994	0.926	0.316
2017	0.325	0.991	0.977	0.330
				Projected (d)
2018				0.334
4/1/2019				0.337

(a) See Exhibit 5.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
						Adjusted				
Accident Year	Paid Loss Ratio(a)	Development Factors Annual(b)	Development Factors Cumulative(b)	Developed Loss Ratio (1) x (3)	Paid Loss Ratio(a)	Paid Loss Ratio(c)	Development Factors Annual(d)	Development Factors Cumulative(d)	Developed Loss Ratio (6) x (8)	Total Developed Loss Ratio (4) + (9)
2006	0.148	1.012	1.081	0.160	0.211	0.197	1.020	1.261	0.248	0.409
2007	0.201	1.015	1.098	0.221	0.292	0.273	1.024	1.291	0.352	0.573
2008	0.252	1.019	1.119	0.282	0.359	0.337	1.028	1.327	0.447	0.729
2009	0.288	1.025	1.147	0.330	0.410	0.386	1.033	1.371	0.529	0.860
2010	0.272	1.031	1.183	0.322	0.393	0.373	1.034	1.417	0.529	0.851
2011	0.244	1.038	1.228	0.300	0.325	0.312	1.045	1.481	0.462	0.762
2012	0.210	1.056	1.297	0.272	0.266	0.259	1.062	1.563	0.405	0.677
2013	0.170	1.087	1.438	0.244	0.203	0.200	1.091	1.697	0.340	0.584
2014	0.144	1.129	1.674	0.241	0.162	0.161	1.134	1.909	0.307	0.548
2015	0.115	1.257	2.104	0.243	0.128	0.128	1.229	2.327	0.298	0.540
2016	0.071	1.618	3.405	0.241	0.088	0.088	1.440	3.327	0.293	0.534
2017	0.023	3.235	11.015	0.257	0.039	0.039	2.481	8.228	0.323	0.580

(a) Based on AC18-03-02, Exhibit 1. For medical, Paid MCCP costs are excluded from accident years 2011 and subsequent. Column 5 is shown for informational purposes only.
(b) Based on AC18-03-02, Exhibit 2.5.1 and includes adjustments for SB 863. Does not reflect any adjustment for changes in claim settlement rates.

(c) See AC18-03-02, Exhibit 3.2, Column (2).
(d) Based on AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.272	1.260	1.177	0.292
2013	0.244	1.220	1.028	0.290
2014	0.241	1.105	0.948	0.281
2015	0.243	1.077	0.905	0.289
2016	0.241	1.064	0.926	0.276
2017	0.257	1.043	0.977	0.274
				Projected (d)
2018				0.273
4/1/2019				0.269

(a) See Exhibit 6.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.405	0.974	1.177	0.335
2013	0.340	1.004	1.028	0.332
2014	0.307	1.010	0.948	0.328
2015	0.298	1.011	0.905	0.332
2016	0.293	1.011	0.926	0.320
2017	0.323	1.012	0.977	0.335
				Projected (d)
2018				0.339
4/1/2019				0.342

(a) See Exhibit 6.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indemnity				Medical					
						Adjusted				
Accident Year	Paid Loss Ratio(a)	Development Factors Annual(b)	Development Factors Cumulative(b)	Developed Loss Ratio (1) x (3)	Paid Loss Ratio(a)	Paid Loss Ratio(c)	Development Factors Annual(d)	Development Factors Cumulative(d)	Developed Loss Ratio (6) x (8)	Total Developed Loss Ratio (4) + (9)
2006	0.148	1.012	1.081	0.160	0.211	0.197	1.020	1.261	0.248	0.409
2007	0.201	1.015	1.098	0.221	0.292	0.273	1.024	1.291	0.352	0.573
2008	0.252	1.019	1.119	0.282	0.359	0.337	1.028	1.327	0.447	0.729
2009	0.288	1.025	1.147	0.330	0.410	0.386	1.033	1.371	0.529	0.860
2010	0.272	1.031	1.183	0.322	0.393	0.373	1.034	1.417	0.529	0.851
2011	0.244	1.038	1.228	0.300	0.325	0.312	1.045	1.481	0.462	0.762
2012	0.210	1.048	1.287	0.270	0.266	0.259	1.058	1.558	0.403	0.674
2013	0.170	1.075	1.411	0.240	0.203	0.200	1.087	1.685	0.337	0.577
2014	0.144	1.127	1.641	0.236	0.162	0.161	1.140	1.905	0.307	0.543
2015	0.115	1.244	2.042	0.235	0.128	0.128	1.234	2.332	0.298	0.534
2016	0.071	1.601	3.268	0.231	0.088	0.088	1.454	3.367	0.297	0.528
2017	0.023	3.274	10.700	0.249	0.039	0.039	2.538	8.519	0.335	0.584

(a) Based on AC18-03-02, Exhibit 1. Column 5 is shown for informational purposes only.
(b) Age-to-age factors for developing accident years 2011 to 2016 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC18-03-02, Exhibit 2.5.8, Item Q). The cumulative loss development factors for developing accident years 2012 through 2016 are adjusted for the impact of SB 863 (see AC18-03-02, Exhibit 2.5.1).
(c) See AC18-03-02, Exhibit 3.2, Column (2).
(d) Based on AC18-03-02, Exhibits 2.6.1 and includes adjustments for SB 863 and SB 1160. Age-to-age factors for developing accident years 2011 to 2016 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.285
2014	0.236	1.105	0.948	0.276
2015	0.235	1.077	0.905	0.280
2016	0.231	1.064	0.926	0.265
2017	0.249	1.043	0.977	0.266
				Projected (d)
2018				0.263
4/1/2019				0.259

(a) See Exhibit 7.1.
(b) Based on AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.403	0.974	1.177	0.334
2013	0.337	1.004	1.028	0.329
2014	0.307	1.010	0.948	0.327
2015	0.298	1.011	0.905	0.333
2016	0.297	1.011	0.926	0.324
2017	0.335	1.012	0.977	0.347
				Projected (d)
2018				0.347
4/1/2019				0.350

(a) See Exhibit 7.1.
(b) Based on AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, the actual frequency trend for accident year 2017 from AC18-03-02, Exhibit 12, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.284
2014	0.235	1.105	0.948	0.274
2015	0.233	1.077	0.905	0.277
2016	0.227	1.064	0.926	0.261
2017	0.242	1.043	0.977	0.258
				Projected(d)
2018				0.254
4/1/2019				0.251

(a) See AC18-03-02, Exhibit 3.1.
(b) See AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC18-03-02, Exhibit 6.2, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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 December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.402	0.974	1.177	0.333
2013	0.335	1.004	1.028	0.327
2014	0.300	1.010	0.948	0.320
2015	0.288	1.011	0.905	0.322
2016	0.281	1.011	0.926	0.307
2017	0.310	1.012	0.977	0.321
				Projected(d)
2018				0.327
4/1/2019				0.329

(a) See AC18-03-02, Exhibit 3.2.
(b) See AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected based on an estimated annual medical severity trend from AC18-03-02, Exhibit 6.4, and projected frequency trends for accident years 2018 and 2019 from AC18-03-02, 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
Five-Year Exponential Loss Ratio Trend
Based on Experience as of December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.284
2014	0.235	1.105	0.948	0.274
2015	0.233	1.077	0.905	0.277
2016	0.227	1.064	0.926	0.261
2017	0.242	1.043	0.977	0.258
				Projected(d)
2018				0.251
4/1/2019				0.246

(a) See AC18-03-02, Exhibit 3.1.
(b) See AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately -2.3% based on the 2012 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
Five-Year Exponential Loss Ratio Trend
Based on Experience as of December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.402	0.974	1.177	0.333
2013	0.335	1.004	1.028	0.327
2014	0.300	1.010	0.948	0.320
2015	0.288	1.011	0.905	0.322
2016	0.281	1.011	0.926	0.307
2017	0.310	1.012	0.977	0.321
				Projected(d)
2018				0.309
4/1/2019				0.307

(a) See AC18-03-02, Exhibit 3.2.
(b) See AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately -1.1% based on the 2012 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
Five-Year Exponential Loss Ratio Trend
Applied to Accident Year 2017
Based on Experience as of December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.284
2014	0.235	1.105	0.948	0.274
2015	0.233	1.077	0.905	0.277
2016	0.227	1.064	0.926	0.261
2017	0.242	1.043	0.977	0.258
				Projected(d)
2018				0.252
4/1/2019				0.247

(a) See AC18-03-02, Exhibit 3.1.
(b) See AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately -2.3% based on the 2012 to 2017 on-level indemnity to industry average filed pure premium ratios to the 2017 on-level indemnity to industry average filed pure premium ratio.

Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Five-Year Exponential Loss Ratio Trend
Applied to Accident Year 2017
Based on Experience as of December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.402	0.974	1.177	0.333
2013	0.335	1.004	1.028	0.327
2014	0.300	1.010	0.948	0.320
2015	0.288	1.011	0.905	0.322
2016	0.281	1.011	0.926	0.307
2017	0.310	1.012	0.977	0.321
				Projected(d)
2018				0.318
4/1/2019				0.315

(a) See AC18-03-02, Exhibit 3.2.
(b) See AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by separately applying an exponential trend of approximately -1.1% based on the 2012 to 2017 on-level medical to industry average filed pure premium ratios to the 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.

Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Five-Year Fitted Exponential Loss Ratio Trend
Based on Experience as of December 31, 2017

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	0.160	1.486	0.956	0.249
2007	0.221	1.439	1.222	0.261
2008	0.282	1.356	1.476	0.259
2009	0.330	1.329	1.591	0.276
2010	0.322	1.311	1.446	0.292
2011	0.300	1.290	1.321	0.293
2012	0.270	1.260	1.177	0.289
2013	0.240	1.220	1.028	0.284
2014	0.235	1.105	0.948	0.274
2015	0.233	1.077	0.905	0.277
2016	0.227	1.064	0.926	0.261
2017	0.242	1.043	0.977	0.258
				Projected(d)
2018				0.252
4/1/2019				0.248

(a) See AC18-03-02, Exhibit 3.1.
(b) See AC18-03-02, Exhibit 4.1.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by fitting an exponential trend to the 2012 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
Five-Year Fitted Exponential Loss Ratio Trend
Based on Experience as of December 31, 2017

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	0.961	0.956	0.250
2007	0.352	0.943	1.222	0.272
2008	0.447	0.936	1.476	0.284
2009	0.529	0.923	1.591	0.307
2010	0.529	0.920	1.446	0.337
2011	0.462	0.936	1.321	0.327
2012	0.402	0.974	1.177	0.333
2013	0.335	1.004	1.028	0.327
2014	0.300	1.010	0.948	0.320
2015	0.288	1.011	0.905	0.322
2016	0.281	1.011	0.926	0.307
2017	0.310	1.012	0.977	0.321
				Projected(d)
2018				0.310
4/1/2019				0.308

(a) See AC18-03-02, Exhibit 3.2.
(b) See AC18-03-02, Exhibit 4.4.
(c) See AC18-03-02, Exhibit 5.2.
(d) These on-level ratios were projected by fitting an exponential trend to the 2012 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 AC18-04-03
Impact of the Affordable Care Act on California Workers' Compensation

The Patient Protection and Affordable Care Act (ACA) was signed into law by President Obama in 2010. The ACA, which included an expansion of Medicaid (Medi-Cal) in California, has significantly increased access to health care benefits for both workers and the general California population, which could impact the California workers' compensation system.

At the December 4, 2013 meeting, the Committee discussed potential system components such as access to care, fee schedule discounting, frequency of workers' compensation claims, particularly for types of claims for which it may not be fully clear that the arising injury was work-related, and comorbidities that may be impacted by the ACA. WCIRB staff has completed a preliminary analysis of potential ACA impacts on the California workers' compensation system and will summarize the findings at the meeting.

Item AC18-04-04
Impact of Medical Fraud Enforcement

Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) enacted in 2016 included a number of provisions related to providers indicted or convicted of fraud. At the December 6, 2017 meeting, the Committee discussed an analysis of the level of medical services provided by parties that have subsequently been indicted for fraud.

An updated analysis on the amount of medical costs generated by providers indicted for fraud or suspended by the Division of Workers' Compensation will be presented at the meeting.