

# Actuarial Committee

## Meeting Agenda

Date	Time	Location	Staff Contact
September 3, 2019	9:45 AM	WCIRB California 1221 Broadway, Suite 900 Oakland, CA	David M. Bellusci
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To Members of the Actuarial Committee, WCIRB Members and All Interested Parties:

### I. Approval of Minutes

Meeting held on August 1, 2019

### II. Working Group Meeting Summaries

Claims Working Group Meeting held July 25, 2019

### III. New Business

A. AC19-09-01: 6/30/2019 Experience – Review of Methodologies

B. AC19-09-02: New Medical Benchmarking Reports

### IV. Matters Arising at Time of Meeting

### V. Next Meeting Date: December 5, 2019

### VI. Adjournment

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## Claims Working Group

# Meeting Summary

To: Participants of the Claims Working Group  
Date: August 23, 2019

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**RE: Summary of July 25, 2019 Meeting**

### Discussion Topics

At the meeting, the following topics were discussed.

#### 1. Third Quarter 2019 Review of Diagnostics

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

- a. Claim settlement rates continue to accelerate. The Working Group discussed several key factors which are likely driving the acceleration. These factors include (1) a reduction in the number of liens filed as outstanding liens often result in claims remaining open; (2) a shift in claims handling by both insurers and applicant attorneys with an increased focus on settling claims; (3) continued reductions in opioid use; and (4) a general speed-up at WCAB offices with emphasis on moving claims more quickly through the process and fewer hearings needed for liens. The Working Group noted that these trends are impacting both cumulative trauma (CT) claims and non-CT claims.
- b. Despite indicated increases in cumulative injury claim filings, statewide indemnity claim frequency has been relatively flat to declining. A member suggested that this trend may in part be related to injured workers being somewhat less likely to file an indemnity claim and collect relatively lower indemnity benefits rather than earning their normal wages with opportunities for overtime wage in this high employment economy. Another member suggested that shifts in immigration enforcement efforts may also be having an impact on claim frequency.
- c. Lien filings continue to decrease since the enactment of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) in 2017. A member noted that that the number of lien filings may continue to decrease as fewer physicians appear to be willing to provide out-of-network treatment on a lien basis, particularly with respect to surgeries.
- d. WCIRB survey data shows that the rate of claims involving Medicare-set-asides (MSAs) may be decreasing. Several Members noted that there appears to be a growing trend by which insurers are establishing MSA's but not submitting them to Medicare for approval. Staff agreed to review its survey question related to MSA's to be sure that information is being reported both on claims involving MSA's being submitted to Medicare and those that are not. A Member also mentioned that there does not seem to be a significant number of conditional liens being filed by Medicare for medical benefit reimbursements against California workers' compensation insurers at this time.

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- e. On a preliminary basis, the number of CT claims filed for accident year 2017 indicates a sharp increase throughout the State. The Group did not identify any specific factor driving this increase, although, as in past discussions, they noted that practices related to CT claims common in the Los Angeles Basin show signs of spreading to San Diego and the Central Valley. Staff noted that the CT frequency information for 2017 was very preliminary and agreed to further review the data for potential anomalies.
- f. Average temporary disability duration continues to decline. The Group noted that in addition to the general acceleration of the claims process, with a very tight labor market many employers have an increased emphasis on getting injured workers returned to work quickly.
- g. Indicators of the accident year 2018 average claim severity change are above that of recent prior years. The Group noted that the impact of some of the drivers of recent modest inflationary trends such as the dramatic decline in pharmaceutical cost levels may be diminishing. A Member also suggested that there may be an increase in larger claims with significant upward medical development.

### 2. Update on Medical Severity Trends by Component

The Working Group reviewed the updated medical severity trends by medical component using medical transaction information through December 31, 2018 (service year (SY) 2018) as provided in the meeting materials. The Working Group noted the following:

- Physical therapy, the leading category of physician services, experienced an increase in paid per transaction in 2018. However, staff observed no change in its utilization per claim (as measured by transactions per claim), which contrasts with the 9% increase shown using only first half of SY2018 data. A Working Group member suggested that billing practices, specifically the Multiple Procedure Payment Reduction (MPPR) that cascades the payments for multiple physical therapy procedures provided on the same visit, may have contributed to the different utilization pattern. Staff agreed to further explore the impact of the MPPR on the utilization and costs of physical therapy services.
- Staff presented additional breakdowns for pharmaceuticals showing information on both opioids and non-opioids. The Working Group was advised that the pharmaceutical paid per claim decreased by 80% from 2012 to 2018, and the decline in opioid costs paid per claim was even more pronounced (89%).
- For inpatient costs based on episodes, staff noted that for the first time the paid per episode decreased by 17% while the number of episodes per claim increased in SY2018. Per a suggestion from the Actuarial Committee, staff sought input from the Claims Working Group on the potential reasons for the unexpected pattern. Working Group members were not aware of any factors driving this change but suggested continuing to monitor inpatient cost trends.

### 3. Legislative Cost Monitoring Update

Staff presented an update on the impact of the provisions of Senate Bill No. 1160 (SB 1160) related to utilization review (UR) based on medical transaction information through December 31, 2018. The Working Group was reminded that it had reviewed staff's six-month preliminary evaluation of the impact of the SB 1160 provisions related to UR on medical service utilization and costs at the March 28, 2019 meeting, and recommended also examining the cost level and service utilization after the first 30 days of the date of injury. The Working Group noted the following:

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- Similar to the six-month review, the updated review shows indications of increased utilization of physical therapy (12%) in the first 30 days of the injury date in 2018, suggesting there could be an impact of the SB 1160 provisions related to UR. It was also noted that physical therapy services were also provided earlier; the median time to the first physical therapy decreased by 17% (or 2 days) in 2018 as compared to 2017. The Working Group suggest exploring the extent to which chiropractic services are being billed using physical therapy codes and how the utilization pattern of physical therapy services differs between in-network vs. out-of-network services.
- After the first 30 days, there was no indication of an increased number of transactions for physical therapy in 2018 compared to prior (pre-SB 1160) years. On the contrary, physical therapy was used less after the first 30 days in 2018. Similar patterns were observed during 1 month, 3 months and 6 months after the first 30 days of treatment. However, despite fewer transactions, the cost of physical therapy per claim was up significantly in 2018 compared to 2017.
- The average medical cost containment program (MCCP) cost per claim (used as a proxy for UR costs) at 15 months increased significantly (8%) in 2018 compared to 2017 instead of decreasing as projected. Given that UR costs are only part of the total MCCP cost, it is not immediately clear if UR costs also increased in 2018 or if other components of MCCP costs contributed to the increase. The Working Group suggested the use of UR may differ by geographic region.

Staff then presented an update on the impact of the drug formulary based on the pharmaceutical transactions in the first year of implementation of the formulary (2018). The Working Group noted the following:

- The prescriptions of drugs not subject to prospective UR in accordance with the formulary increased by 43% compared to the pre-2018 level, while the prescriptions of drugs subject to prospective UR declined by 18%. The changing mix of the prescription drugs indicates a shift toward prescribing drugs not subject to prospective UR, potentially reducing UR requests and resulting in lower drug costs.
- The use of opioids, compounds, physician-dispensed drugs and brand name drugs with generic alternatives dropped sharply in 2018. While a number of these pharmaceutical components had been declining prior to the implementation of the formulary, the decline accelerated during 2018, suggestive of the effect of the drug formulary.

#### 4. Legislative, Regulatory and Judicial Update

The Working Group reviewed recently amended legislation as provided in the meeting materials. One Member identified Assembly Bill No. 5 and developments related to the California Consumer Protection Act (CCPA) as being particularly significant to track with regard to employment status determination in workers' compensation and insurer privacy obligations, respectively.

Working Group members also discussed the recently introduced urgency statute, Assembly Bill No.1832, which raises the medical-legal expenses fee schedule conversion factor from \$12.50 to "at least" \$18.75 and requires the DWC to increase the conversion factor quarterly, as necessary to reflect changes in Medicare. The Group also discussed Assembly Bill No. 1107, with one Working Group member noting that it will likely be a two-year bill which will focus on eliminating complexity factors and implementing a flat-fee structure with respect to the QME process.

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Finally, the Working Group discussed the WCAB decision in *Kris Wilson v. Cal Fire & State Fund*. It was noted that the issue in *Kris Wilson* concerned whether an injury may be determined as “catastrophic” supporting an increased impairment rating under the Labor Code (LC) in which the analysis focuses on the nature and specific facts related to the injury. The binding en banc opinion distinguishes a “catastrophic injury” from a “violent act” in LC §4660.1(c)(2) by noting that “violent act” focuses on the mechanism of the injury, while “catastrophic injury” focuses on the nature of the injury.

In the ruling, the WCAB held that the exception for catastrophic injuries in LC §4660.1(c)(2)(B) does not permit consideration of the economic impact of the injury, but rather requires a fact-specific inquiry into the nature of the underlying physical injury. The following factors for consideration include but are not limited to:

- a) The intensity and seriousness of treatment received by the employee that was reasonably required to cure or relieve from the effects of the injury;
- b) The ultimate outcome when the employee’s physical injury is permanent and stationary;
- c) The severity of the physical injury and its impact on the employee’s ability to perform activities of daily living;
- d) Whether the physical injury is closely analogous to one of the injuries specified in the statute: loss of a limb, paralysis, severe burn or severe head injury; and
- e) Whether the physical injury is an incurable and progressive disease

In the discussion, the Group was reminded that in evaluating the impact of the Senate Bill No. 863 (SB 863) restrictions of on the add-ons to permanent disability for psychiatric injuries, the WCIRB estimated overall cost savings of about 0.5%. Staff suggested that this could be an upper limit estimate of the potential impact of Wilson assuming that permanent disability add-ons for psychiatric injuries were to return to the pre-SB 863 level. The Group suggested that this approach could provide a reasonable upper limit estimate, although at least for an interim period, there could also be a resultant increase in allocated loss adjustment expenses.

**Item AC19-09-01**  
**6/30/2019 Experience – Review of Methodologies**

At the August 1, 2019 meeting, the Committee reviewed statewide experience through March 31, 2019 and recommended a series of loss development and trending methodologies for the purposes of the WCIRB's January 1, 2020 Pure Premium Rate Filing. At the August 7, 2017 meeting, the Governing Committee authorized the WCIRB to submit the filing using a loss projection based on the methodologies recommended by the Actuarial Committee. On August 20, 2019, the WCIRB submitted its filing to the California Department of Insurance proposing January 1, 2020 advisory pure premium rates that were on average 5.4% below the average of the approved January 1, 2019 advisory pure premium rates. In the filing, the WCIRB advised that it "will be reviewing accident year experience valued as of June 30, 2019 once it is received and, if authorized by the WCIRB Governing Committee, will amend the pure premium rates proposed in this filing."

Staff has prepared a preliminary analysis of statewide experience through June 30, 2019, which is included in Exhibits 1 through 8. This information reflects insurers writing approximately 100% of the market based on 2018 premium levels. The methodologies used are consistent with those reflected in the January 1, 2020 Pure Premium Rate Filing. Wage and loss levels were projected to January 1, 2021—the approximate midpoint of experience on policies incepting in 2020, and premiums were adjusted to the industry average filed pure premium rate level as of July 1, 2019.

As shown on Exhibit 8, the projected policy year 2020 loss to the industry average filed pure premium ratio based on June 30, 2019 experience and the January 1, 2020 Pure Premium Rate Filing loss projection methodologies is 0.574. The comparable ratio projected based on March 31, 2019 experience as reflected in the January 1, 2020 Pure Premium Rate Filing is 0.583.

Additional supplemental information is included in Exhibits 9 through 12.

**California Workers' Compensation  
Accident Year Experience as of June 30, 2019**

Year	Earned Premium	Paid Indemnity	Indemnity Reserves	Paid Medical**	Medical Reserves	IBNR*	Total Incurred**	Loss Ratio*
1986	3,506,609,097	1,383,252,415	4,884,139	1,141,946,654	32,924,501	18,397,617	2,581,405,326	0.736
1987	4,374,085,383	1,506,018,847	6,898,933	1,332,995,412	44,536,902	50,819,922	2,941,270,016	0.672
1988	5,173,049,472	1,703,156,237	6,286,025	1,540,303,611	34,559,009	38,202,660	3,322,507,542	0.642
1989	5,676,279,371	1,940,016,957	8,320,019	1,795,887,046	49,423,324	41,779,610	3,835,426,956	0.676
1990	5,705,878,797	2,260,322,476	8,038,575	2,043,379,132	46,230,347	63,915,673	4,421,886,203	0.775
1991	5,872,566,346	2,480,295,824	14,674,248	2,199,471,487	51,995,683	60,686,478	4,807,123,720	0.819
1992	5,692,939,950	1,979,129,680	12,305,269	1,763,664,098	49,921,462	63,857,652	3,868,878,161	0.680
1993	5,942,544,967	1,694,882,862	13,248,234	1,513,175,865	67,419,174	41,741,176	3,330,467,311	0.560
1994	5,034,831,820	1,627,847,395	20,089,246	1,464,594,926	85,415,935	44,804,420	3,242,751,922	0.644
1995	3,790,122,732	1,764,200,437	26,409,657	1,617,250,148	97,501,524	51,004,646	3,556,366,412	0.938
1996	3,748,266,525	1,954,637,928	31,626,482	1,713,292,305	102,272,142	64,561,935	3,866,390,792	1.032
1997	3,928,295,572	2,317,159,812	40,223,071	2,009,217,732	133,529,727	94,377,531	4,594,507,873	1.170
1998	4,333,560,338	2,772,700,953	51,977,016	2,635,518,766	228,247,357	182,994,116	5,871,438,208	1.355
1999	4,551,546,853	3,052,496,368	54,096,285	3,027,444,079	177,306,270	257,175,215	6,568,518,217	1.443
2000	5,923,031,823	3,423,776,979	70,305,518	3,549,879,136	222,794,574	403,871,563	7,670,627,770	1.295
2001	10,120,534,867	4,832,315,683	106,077,868	5,339,744,394	391,627,517	607,380,556	11,277,146,018	1.114
2002	13,434,933,190	4,763,043,365	97,907,613	5,461,157,811	336,563,947	880,857,867	11,539,530,603	0.859
2003	19,476,317,174	4,530,781,513	150,666,540	5,024,431,108	361,065,109	1,254,086,293	11,321,030,563	0.581
2004	23,096,787,993	3,195,852,020	128,555,019	4,028,044,034	303,516,934	1,368,734,574	9,024,702,581	0.391
2005	21,398,213,516	2,516,936,242	109,475,660	3,622,953,745	294,719,842	1,115,804,860	7,659,890,349	0.358
2006	17,232,800,048	2,601,371,016	121,390,499	3,725,508,247	322,137,959	782,434,769	7,552,842,490	0.438
2007	13,275,649,610	2,736,199,286	145,755,264	3,992,128,896	371,240,750	836,440,076	8,081,764,272	0.609
2008	10,764,323,955	2,782,037,182	158,118,667	3,982,726,785	380,837,819	508,718,556	7,812,439,009	0.726
2009	8,896,709,168	2,648,316,951	152,440,632	3,781,350,901	362,997,233	509,364,808	7,454,470,525	0.838
2010	9,398,228,398	2,654,426,667	162,870,571	3,857,914,945	355,655,366	592,192,485	7,623,060,034	0.811
2011	10,129,285,077	2,616,739,670	169,686,428	3,485,944,556	381,190,075	796,244,334	7,449,805,063	0.735
2012	11,692,134,220	2,630,605,196	215,558,313	3,346,836,987	429,991,733	981,198,677	7,604,190,906	0.650
2013	14,149,827,161	2,638,552,426	243,531,238	3,167,328,057	460,901,614	1,699,453,460	8,209,766,795	0.580
2014	15,997,914,039	2,703,227,249	334,781,547	3,011,372,167	550,884,658	2,742,370,318	9,342,635,939	0.584
2015	17,059,168,432	2,612,113,379	451,038,313	2,816,044,798	719,002,764	3,441,706,072	10,039,905,326	0.589
2016	17,952,877,787	2,276,639,235	595,863,231	2,462,525,324	895,313,210	3,713,225,430	9,943,566,430	0.554
2017	17,671,411,530	1,712,491,186	855,994,758	1,985,799,374	1,200,557,531	4,278,673,541	10,033,516,390	0.568
2018	17,420,382,001	924,362,383	1,021,303,447	1,299,900,331	1,563,734,807	5,261,257,748	10,070,558,716	0.578
2019	8,181,128,703	99,616,969	318,256,290	177,823,120	640,720,682	3,075,868,858	4,312,285,919	0.527

\* Shown for informational purposes only.

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

Source: WCIRB quarterly experience calls



**Incurred Indemnity Loss Development Factors**

Accident Year	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
1993										1.003	1.002	1.001	1.001	1.001	0.999	0.999
1994									1.001	1.001	1.004	1.000	1.003	1.002	1.000	1.001
1995								1.005	1.003	1.003	1.002	1.001	1.000	1.000	1.002	1.002
1996							1.006	1.004	1.005	1.005	1.002	1.002	1.000	1.000	1.002	1.001
1997						1.012	1.005	1.007	1.005	1.004	1.001	1.002	1.002	1.002	1.000	1.001
1998					1.022	1.011	1.008	1.003	1.007	1.002	1.004	1.003	1.004	1.000	1.002	1.001
1999					1.015	1.013	1.008	1.006	1.005	1.005	1.004	1.003	1.004	1.001	1.001	1.001
2000				1.033	1.024	1.015	1.013	1.006	1.005	1.005	1.005	1.002	1.004	1.002	1.001	1.001
2001			1.058	1.024	1.022	1.014	1.013	1.006	1.008	1.008	1.005	1.004	1.002	1.001	1.002	1.001
2002		1.141	1.034	1.035	1.022	1.017	1.010	1.010	1.008	1.007	1.002	1.004	1.002	1.002	1.002	1.002
2003	1.390	1.091	1.066	1.037	1.028	1.016	1.020	1.017	1.010	1.008	1.005	1.003	1.003	1.003	1.002	
2004	1.212	1.117	1.051	1.044	1.032	1.029	1.021	1.015	1.014	1.005	1.005	1.002	1.001	1.004		
2005	1.336	1.129	1.083	1.059	1.047	1.035	1.020	1.013	1.009	1.004	1.005	1.004	1.003	1.001		
2006	1.402	1.158	1.089	1.067	1.044	1.029	1.020	1.008	1.007	1.008	1.004	1.002	1.003	1.003		
2007	1.446	1.171	1.090	1.060	1.040	1.028	1.017	1.012	1.008	1.005	1.004	1.002	1.003	1.003		
2008	1.472	1.200	1.100	1.057	1.034	1.022	1.017	1.009	1.010	1.007	1.004	1.002	1.002	1.002		
2009	1.504	1.190	1.106	1.059	1.035	1.021	1.016	1.011	1.009	1.007	1.005	1.003	1.003	1.003		
2010	1.502	1.199	1.096	1.055	1.030	1.022	1.014	1.013			1.005	1.002	1.001	1.004		
2011	1.487	1.180	1.092	1.046	1.029	1.022	1.014				1.005	1.004	1.003			
2012	1.471	1.174	1.083	1.049	1.029	1.021					1.004	1.003	1.003			
2013	1.453	1.161	1.076	1.041	1.027						1.008	1.007	1.003			
2014	1.464	1.174	1.080	1.043							1.005	1.004	1.002			
2015	1.465	1.150	1.071								1.009	1.009	1.002			
2016	1.437	1.146									1.004	1.002	1.001			
2017	1.429										1.004	1.002	1.003			
Selected (a)	1.429	1.146	1.071	1.043	1.027	1.021	1.014	1.013	1.010	1.006	1.005	1.003	1.003	1.002	1.002	1.001
Cumulative	2.053	1.437	1.254	1.171	1.123	1.093	1.071	1.056	1.042	1.032	1.026	1.021	1.018	1.015	1.013	1.011

(a) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and six-year average for the subsequent age-to-age factors.

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

Accident Year	222/210	234/222	246/234	258/246	270/258	282/270	294/282	306/294	Age-to-Age (in months)						342/330	354/342	366/354	378/366	390/378	402/390	414/402	UL T/414Inc.(b)
1983					1.002	1.000	1.000	1.000	1.000	0.999	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.001		
1984				1.002	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.001		
1985			1.001	1.000	1.001	1.000	1.000	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001		
1986		1.000	1.001	0.999	1.001	1.000	1.001	1.000	1.000	1.002	1.002	1.002	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000		
1987	1.001	1.001	1.000	0.999	1.000	1.001	1.000	1.002	1.001	1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	1.000			
1988	1.001	1.001	1.000	1.000	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1989	1.001	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.000	1.000	1.001						
1990	1.000	1.001	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000						
1991	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001						
1992	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001						
1993	1.000	1.001	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.000						
1994	1.002	1.002	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.002	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000						
1996	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001						
1997	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1998	1.000	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001						
1999	1.000	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	1.000	1.000						
2000	1.002	1.001																				
2001	1.001																					
Selected (a)	1.001	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.001		
Cumulative	1.010	1.009	1.009	1.008	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.006	1.005	1.005	1.005	1.000	1.004	1.003	1.003		

(b) The ULT/414Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

**Incurred Medical Loss Development Factors**

Accident Year	Age-to-Age (in months) (b)															
	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
1993										1.016	1.014	1.014	1.006	1.009	1.018	1.009
1994									1.018	1.013	1.017	1.025	1.022	1.012	1.005	1.010
1995								1.024	1.012	1.022	1.015	1.020	1.015	1.017	1.008	1.012
1996							1.030	1.018	1.020	1.024	1.018	1.019	1.010	1.008	1.006	1.006
1997						1.022	1.028	1.023	1.032	1.019	1.020	1.010	1.010	1.012	1.008	1.003
1998					1.043	1.025	1.029	1.035	1.025	1.018	1.016	1.011	1.011	1.010	1.008	1.008
1999					1.028	1.031	1.039	1.022	1.022	1.019	1.018	1.014	1.010	1.003	0.996	1.000
2000				1.054	1.028	1.041	1.041	1.028	1.032	1.019	1.015	1.019	1.002	0.998	0.997	0.996
2001			1.072	1.041	1.038	1.041	1.034	1.026	1.026	1.018	1.010	1.006	0.997	0.999	1.001	0.998
2002		1.105	1.040	1.043	1.052	1.037	1.034	1.026	1.026	1.018	1.010	1.006	0.997	0.999	1.001	0.998
2003	1.255	1.061	1.057	1.061	1.050	1.043	1.038	1.033	1.024	1.016	1.006	0.999	1.001	0.999	1.002	
2004	1.181	1.103	1.099	1.071	1.060	1.052	1.036	1.029	1.024	1.006	1.003	0.998	0.999	0.999		
2005	1.225	1.112	1.076	1.083	1.065	1.053	1.038	1.026	1.014	1.007	1.000	1.003	0.998			
2006	1.266	1.141	1.092	1.073	1.055	1.050	1.030	1.014	1.004	1.003	1.004	1.003	0.998			
2007	1.293	1.150	1.101	1.074	1.063	1.036	1.025	1.011	1.006	1.003	1.004	1.001				
2008	1.294	1.164	1.106	1.077	1.051	1.031	1.017	1.006	1.006	1.004						
2009	1.322	1.170	1.117	1.072	1.042	1.023	1.009	1.007	1.003							
2010	1.347	1.184	1.096	1.058	1.035	1.017	1.011	1.011								
2011	1.340	1.157	1.090	1.049	1.023	1.015	1.009									
2012	1.282	1.127	1.071	1.044	1.021	1.015										
2013	1.257	1.107	1.061	1.026	1.019											
2014	1.240	1.110	1.050	1.033												
2015	1.247	1.096	1.041													
2016	1.213	1.070														
2017	1.192															
Selected (a)	1.192	1.070	1.041	1.033	1.019	1.015	1.009	1.011	1.010	1.007	1.005	1.004	1.001	1.001	1.001	1.000
Cumulative	1.534	1.287	1.202	1.155	1.118	1.097	1.081	1.072	1.060	1.050	1.043	1.038	1.034	1.033	1.031	1.030

(a) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and six-year average for the subsequent age-to-age factors.

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

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

Accident Year	222/210	234/222	246/234	258/246	270/258	282/270	294/282	306/294	Age-to-Age (in months)					342/330	354/342	366/354	378/366	390/378	402/390	414/402	ULT/414inc (c)
1983					1.001	1.001	1.007	1.003	318/306	330/318				1.004	1.004	1.002	1.004	1.000	1.000	0.997	
1984				1.004	1.004	1.002	1.004	1.001	1.001	1.004	1.001	1.004	1.001	1.001	1.002	1.003	0.997	1.000	1.001	1.000	
1985			1.010	1.004	1.003	0.998	1.004	1.002	1.003	1.005	1.003	1.005	1.003	1.003	1.004	0.999	1.000	0.999	0.999	1.001	
1986		1.009	0.999	1.001	1.006	1.003	1.006	1.007	1.005	1.004	1.004	1.004	1.004	1.004	1.001	1.000	0.998	1.009	0.999		
1987	0.996	1.005	1.002	1.002	1.004	1.010	1.001	1.004	1.003	1.003	1.004	1.004	1.001	1.001	1.001	1.000	1.001	1.003			
1988	1.003	1.005	1.003	1.004	1.005	1.003	1.005	1.003	1.003	1.003	1.003	1.003	1.001	1.001	0.999	0.998	1.000				
1989	1.006	1.008	1.006	1.006	1.006	1.006	1.005	1.000	1.002	0.998	0.998	0.998	0.999	0.999	0.999	1.000					
1990	1.005	1.005	1.007	1.005	1.003	1.003	0.999	1.000	1.001	1.000	1.000	0.998	0.998	0.999	0.999						
1991	1.007	1.005	1.004	1.002	1.004	1.001	1.002	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999						
1992	1.007	0.997	1.007	1.004	1.004	1.002	0.999	0.999	1.002	0.997											
1993	1.004	1.013	1.011	1.002	1.000	0.998	0.996	0.999	0.999												
1994	1.012	1.005	1.006	1.001	1.003	0.993	0.999	0.998													
1995	1.002	1.007	1.002	0.999	0.999	0.997	0.999														
1996	1.008	1.001	0.998	0.999	0.996	0.999															
1997	0.998	0.994	0.998	0.998	1.000																
1998	1.000	0.997	0.999	1.004																	
1999	0.996	1.000	0.998																		
2000	0.998	0.999																			
2001	1.004																				

Selected (a)  
Cumulative

1.001  
1.030

1.000  
1.029

1.000  
1.030

1.000  
1.030

1.000  
1.030

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1.030

1.000  
1.030

(c) The ULT/414inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

**Paid Indemnity Loss Development Factors**

Accident Year	<u>30/18</u>	<u>42/30</u>	<u>54/42</u>	<u>66/54</u>	<u>78/66</u>	<u>90/78</u>	<u>102/90</u>	<u>114/102</u>	<u>126/114</u>	<u>138/126</u>	<u>150/138</u>	<u>162/150</u>	<u>174/162</u>	<u>186/174</u>	<u>198/186</u>	<u>210/198</u>
1993																1.002
1994															1.004	1.004
1995															1.003	1.005
1996															1.004	1.004
1997															1.005	1.004
1998															1.005	1.006
1999															1.005	1.004
2000															1.004	1.004
2001															1.006	1.005
2002															1.004	1.005
2003															1.004	1.005
2004															1.004	1.005
2005															1.004	1.005
2006															1.006	1.006
2007															1.009	1.009
2008															1.008	1.011
2009															1.008	1.010
2010															1.009	1.010
2011															1.009	1.010
2012															1.009	1.010
2013															1.009	1.010
2014															1.009	1.010
2015															1.009	1.010
2016															1.009	1.010
2017															1.009	1.010
Selected (a)	1.991	1.360	1.166	1.095	1.056	1.042	1.035	1.023	1.022	1.017	1.014	1.011	1.009	1.007	1.005	1.005
Cumulative	4.563	2.292	1.685	1.445	1.320	1.250	1.199	1.159	1.133	1.109	1.090	1.074	1.063	1.053	1.046	1.040

(a) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and three-year average for the subsequent age-to-age factors.

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

Accident Year	222/210	234/222	246/234	258/246	270/258	282/270	294/282	306/294	318/306	330/318	342/330	354/342	366/354	378/366	390/378	402/390	414/402	414Inc/414Pd (b)	U.L.T/414Inc (c)
1983					1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1984				1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.006	
1985			1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.005	
1986		1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.005	
1987	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.005	
1988	1.002	1.002	1.001	1.001	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1989	1.002	1.002	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1990	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1991	1.002	1.001	1.002	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1992	1.002	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1993	1.003	1.003	1.002	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1994	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1995	1.004	1.004	1.002	1.002	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	1.003	
1996	1.004	1.004	1.004	1.004	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1997	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1998	1.005	1.004	1.003	1.004	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
1999	1.004	1.003	1.003	1.004	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
2000	1.004	1.003	1.003	1.004	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.003	
2001	1.005	1.003	1.027	1.025	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	1.003	

Selected (a)  
Cumulative

1.004  
1.035

1.003  
1.031

1.003  
1.022

1.003  
1.019

1.003  
1.016

1.003  
1.015

1.003  
1.014

1.003  
1.013

(b) Three-year averages of the 414Inc/414Pd factors are selected.  
(c) The U.L.T/414Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

**Paid Medical Loss Development Factors**

Unadjusted (a) Accident Year	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
1993																
1994																
1995																
1996																
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Adjusted (b) Accident Year	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
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2016																
2017																

Selected (c)	1609	1280	1158	1096	1065	1050	1038	1028	1025	1022	1020	1017	1015	1013	1011	1011
Cumulative Unadjusted for Impact of SB 1160	4.151	2.580	2.015	1.740	1.588	1.491	1.420	1.368	1.331	1.298	1.270	1.245	1.225	1.207	1.191	1.178
Cumulative Adjusted for Impact of SB 1160(d)	3.964	2.463	1.947	1.702	1.567	1.484										

- (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 losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.  
 (c) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and three-year average for the subsequent age-to-age factors.  
 (d) The cumulative factors for 30, 42, 54, 66, and 78 months are adjusted by -4.5%, -3.4%, -2.2%, -1.3%, and -0.5%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Paid Medical Loss Development Factors (Continued)

Unadjusted (a) Accident Year	222/210	234/222	246/234	258/246	270/258	282/270	294/282	306/294	318/306	330/318	342/330	354/342	366/354	378/366	390/378	402/390	414/402	414Inc/414Pd (e)	ULT/414Inc (f)
1983					1.006	1.006	1.004	1.004	1.004	1.005	1.004	1.004	1.003	1.004	1.004	1.002	1.004	414Inc/414Pd (e)	ULT/414Inc (f)
1984				1.005	1.004	1.003	1.003	1.003	1.003	1.004	1.003	1.003	1.003	1.003	1.004	1.002	1.004	1.034	
1985			1.004	1.005	1.005	1.006	1.004	1.004	1.003	1.004	1.004	1.003	1.002	1.002	1.003	1.002	1.001	1.029	
1986		1.006	1.005	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.006	1.004	1.005	1.005	1.003	1.002	1.029	
1987		1.007	1.005	1.007	1.005	1.005	1.005	1.005	1.004	1.006	1.004	1.003	1.003	1.005	1.005	1.003	1.002	1.025	
1988	1.008	1.005	1.007	1.005	1.005	1.005	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.003	1.003	1.004	1.018	
1989	1.005	1.007	1.005	1.005	1.006	1.008	1.006	1.005	1.006	1.003	1.003	1.004	1.002	1.003	1.003	1.004	1.003	1.019	
1990	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.003	1.002	1.003	1.003	1.003	1.003	1.003	1.003	1.004		
1991	1.007	1.006	1.005	1.006	1.005	1.006	1.005	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
1992	1.008	1.002	1.006	1.007	1.006	1.006	1.005	1.004	1.005	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006		
1993	1.012	1.010	1.010	1.012	1.010	1.008	1.005	1.006	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1994	1.010	1.010	1.011	1.011	1.007	1.008	1.005	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005		
1995	1.014	1.015	1.012	1.010	1.013	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1996	1.013	1.013	1.010	1.007	1.008	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1997	1.014	1.008	1.006	1.006	1.008	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1998	1.012	1.009	1.007	1.010	1.008	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1999	1.011	1.009	1.007	1.011	1.009	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
2000	1.008	1.007	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009		
2001	1.010																		

Adjusted (b) Accident Year	222/210	234/222	246/234	258/246	270/258	282/270	294/282	306/294	318/306	330/318	342/330	354/342	366/354	378/366	390/378	402/390	414/402	414Inc/414Pd (e)	ULT/414Inc (f)
1983																			
1984																			
1985																			
1986																			
1987																			
1988																			
1989																			
1990																			
1991																			
1992				1.007	1.006	1.005	1.005	1.004	1.006	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007		
1993			1.009	1.011	1.009	1.008	1.006	1.007	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008		
1994		1.010	1.010	1.010	1.007	1.007	1.006	1.004	1.003	1.002	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
1995	1.013	1.014	1.012	1.010	1.014	1.008	1.008	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
1996	1.012	1.013	1.010	1.008	1.009	1.010	1.008	1.007	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008		
1997	1.014	1.008	1.007	1.007	1.009	1.009	1.008	1.006	1.005	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
1998	1.013	1.010	1.008	1.012	1.009	1.009	1.008	1.006	1.005	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
1999	1.011	1.009	1.010	1.012	1.009	1.009	1.008	1.006	1.005	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
2000	1.009	1.008	1.010	1.012	1.009	1.009	1.008	1.006	1.005	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003		
2001	1.011																		

Selected (c)	1.010	1.009	1.008	1.009	1.011	1.009	1.007	1.005	1.006	1.004	1.003	1.003	1.003	1.004	1.004	1.002	1.002	1.026	
Cumulative	1.165	1.153	1.143	1.133	1.123	1.111	1.101	1.094	1.089	1.082	1.078	1.075	1.071	1.067	1.063	1.059	1.057	1.028	

(e) Six-year averages of the 414Inc/414Pd factors are selected.  
(f) The ULT/414Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.



Selected Indemnity Development Factors - Paid to Age 258, Incurred from Age 258 to Ultimate

Accident Year	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198	222/210	234/222	246/234	258/246	258Inc/258Pd (b)
1992																					
1993																					1.012
1994																					1.013
1995																					1.017
1996																					1.021
1997																					1.020
1998																					1.018
1999																					
2000																					
2001																					
2002																					
2003																					
2004																					
2005																					
2006																					
2007																					
2008																					
2009																					
2010																					
2011																					
2012																					
2013																					
2014																					
2015																					
2016																					
2017																					
Selected (a)	1.986(c)	1.337(c)	1.146(c)	1.080(c)	1.049(c)	1.042	1.035	1.023	1.022	1.017	1.014	1.011	1.009	1.007	1.005	1.005	1.004	1.003	1.003	1.003	1.020
Cumulative	4.329	2.179	1.630	1.422	1.318	1.257	1.206	1.165	1.139	1.115	1.096	1.080	1.069	1.059	1.051	1.046	1.041	1.036	1.033	1.030	

- (a) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 258, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (b) A three-year average of the 258Inc/258Pd factor is selected.
- (c) 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 258, Incurred from Age 258 to Ultimate (Continued)**

Accident Year	Age-to-Age (in months)													ULT/414Inc (d)
	<u>270/258</u>	<u>282/270</u>	<u>294/282</u>	<u>306/294</u>	<u>318/306</u>	<u>330/318</u>	<u>342/330</u>	<u>354/342</u>	<u>366/354</u>	<u>378/366</u>	<u>390/378</u>	<u>402/390</u>	<u>414/402</u>	
1983						1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.001	
1984					1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.001	
1985				1.001	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001	
1986			1.001	1.000	1.002	1.002	1.000	0.999	1.000	1.000	1.000	1.000	1.000	
1987		1.001	1.000	1.002	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	
1988	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1989	1.001	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
1991	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	
1992	1.001	1.000	1.000	1.000	1.000	1.001	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	1.000	1.000	1.000	
1994	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1996	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1997	1.001													
Selected (a)	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	
Cumulative	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.005	1.005	1.005	1.004	1.004	1.004	
													1.003	

(d) The ULT/414Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						117,321
2011					117,897	118,120
2012				124,255	124,685	124,908
2013			131,741	132,597	132,985	133,148
2014		136,352	138,245	139,038	139,435	
2015	134,560	142,578	144,025	144,551		
2016	136,972	145,662	147,406			
2017	138,832	146,146				
2018	141,615					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	18-30	30-42	42-54	54-66	66-78	78-Ultimate
2011					1.002	
2012				1.003	1.002	
2013			1.006	1.003	1.001	
2014		1.014	1.006	1.003		
2015	1.060	1.010	1.004			
2016	1.063	1.012				
2017	1.053					
Latest Year	1.053	1.012	1.004	1.003	1.001	
Cumulative	1.078	1.024	1.012	1.008	1.005	1.004

Acc. Year	2018	2017	2016	2015	2014	2013
Ult. Claim Counts	152,615	149,616	149,120	145,700	140,143	133,660

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						103,524
2011					99,768	105,367
2012				98,408	107,068	112,894
2013			93,547	107,519	116,440	122,077
2014		78,795	100,321	114,992	123,746	
2015	54,528	85,663	108,188	122,486		
2016	58,682	91,424	114,384			
2017	62,697	95,642				
2018	64,715					

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						87.8%
2011					84.1%	88.8%
2012				78.5%	85.4%	90.0%
2013			70.0%	80.4%	87.1%	91.3%
2014		56.2%	71.6%	82.1%	88.3%	
2015	37.4%	58.8%	74.3%	84.1%		
2016	39.4%	61.3%	76.7%			
2017	41.9%	63.9%				
2018	42.4%					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						107,661
2011					104,716	108,315
2012				105,411	110,718	114,522
2013			102,525	112,365	118,022	122,077
2014		89,587	107,498	117,815	123,746	
2015	61,783	93,139	111,760	122,486		
2016	63,233	95,325	114,384			
2017	63,443	95,642				
2018	64,715					

F. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						17,658
2011					16,017	17,732
2012				13,949	16,123	17,688
2013			11,388	14,330	16,318	17,710
2014		7,888	12,128	15,202	17,254	
2015	3,970	8,616	12,867	15,876		
2016	4,244	8,798	12,970			
2017	4,306	8,989				
2018	4,650					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						19,050
2011					17,524	18,672
2012				15,682	17,086	18,208
2013			13,200	15,378	16,697	17,710
2014		9,787	13,546	15,836	17,254	
2015	4,756	9,843	13,561	15,876		
2016	4,697	9,398	12,970			
2017	4,378	8,989				
2018	4,650					
2019						

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						2,050,889
2011					1,835,005	2,022,455
2012				1,653,060	1,891,778	2,085,205
2013			1,353,330	1,727,895	1,970,627	2,162,015
2014		876,772	1,456,123	1,865,670	2,135,055	
2015	293,848	916,780	1,515,592	1,944,580		
2016	296,997	895,829	1,483,564			
2017	277,765	859,702				
2018	300,912					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						555,894
2011					611,474	492,015
2012				719,476	591,373	475,094
2013			835,275	705,071	556,881	432,510
2014		872,538	868,268	702,637	547,679	
2015	577,176	893,909	847,319	667,068		
2016	588,346	869,806	793,570			
2017	590,105	853,023				
2018	623,489					

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

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						40,293
2011					33,729	38,582
2012				27,836	33,569	39,545
2013			21,869	28,115	33,659	39,067
2014		15,160	22,895	29,221	34,908	
2015	7,212	15,706	23,644	30,232		
2016	7,515	16,037	24,032			
2017	7,751	16,890				
2018	8,108					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						-166,650
2011					-166,925	-113,702
2012				-194,935	-122,527	-64,379
2013			-196,342	-136,245	-53,248	
2014		-163,602	-164,315	-82,490		
2015	-52,322	-117,418	-84,455			
2016	-34,201	-62,560				
2017	-5,782					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						389,244
2011					444,548	378,313
2012				524,541	468,846	410,715
2013			638,933	568,827	503,633	432,510
2014		708,936	703,952	620,148	547,679	
2015	524,854	776,490	762,864	667,068		
2016	554,146	807,247	793,570			
2017	584,323	853,023				
2018	623,489					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						2,440,133
2011					2,279,553	2,400,769
2012				2,177,601	2,360,624	2,495,920
2013			1,992,263	2,296,722	2,474,260	2,594,526
2014		1,585,708	2,160,075	2,485,817	2,682,734	
2015	818,702	1,693,270	2,278,456	2,611,648		
2016	851,142	1,703,076	2,277,134			
2017	862,088	1,712,726				
2018	924,402					

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2010					
2011					1.053
2012				1.084	1.057
2013			1.153	1.077	1.049
2014		1.362	1.151	1.079	
2015	2.068	1.346	1.146		
2016	2.001	1.337			
2017	1.987				
Latest Year	1.987	1.337	1.146	1.079	1.049
3-Year Average	2.019	1.348	1.150	1.080	1.053

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					1.068
2012				1.108	1.067
2013			1.182	1.094	1.056
2014		1.395	1.175	1.095	
2015	2.056	1.372	1.166		
2016	1.999	1.360			
2017	1.991				

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

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

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

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

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					-1.41%
2012				-2.14%	-0.87%
2013			-2.44%	-1.53%	-0.70%
2014		-2.38%	-2.10%	-1.41%	
2015	0.58%	-1.94%	-1.71%		
2016	0.09%	-1.70%			
2017	-0.24%				

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					1.054
2012				1.084	1.058
2013			1.153	1.078	1.049
2014		1.363	1.151	1.080	
2015	2.068	1.345	1.146		
2016	2.001	1.337			
2017	1.986				
Latest Year	1.986	1.337	1.146	1.080	1.049
3-Year Average	2.018	1.348	1.150	1.081	1.053

(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 258, Incurred from Age 258 to Ultimate

Unadjusted (a) Accident Year	Age-to-Age (in months)															
	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
1992																
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2015																
2016																
2017																

Adjusted (b) Accident Year	Age-to-Age (in months)															
	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
1996																
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2017																

Selected (c)	Age-to-Age (in months)															
	30/18	42/30	54/42	66/54	78/66	90/78	102/90	114/102	126/114	138/126	150/138	162/150	174/162	186/174	198/186	210/198
Cumulative Unadjusted for Impact of SB 1160	1.608(e)	1.267(e)	1.142(e)	1.081(e)	1.058(e)	1.050	1.038	1.028	1.025	1.022	1.020	1.017	1.015	1.013	1.011	1.010
Cumulative Adjusted for Impact of SB 1160(f)	3.924	2.441	1.926	1.686	1.559	1.474	1.404	1.352	1.316	1.283	1.256	1.231	1.211	1.193	1.178	1.164
	3.747	2.331	1.861	1.649	1.539	1.467	---	---	---	---	---	---	---	---	---	---

(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 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. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.  
 (c) Selections are latest year for the 18-to-30 month through 102-to-114 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 258, 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 258Inc/258Pd 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 30, 42, 54, 66, and 78 months are adjusted by -4.5%, -3.4%, -2.2%, -1.3%, and -0.5%, respectively, for the impact of the SB 1160 reductions in future lien filings.

**Selected Medical Development Factors - Paid to Age 258, Incurred from Age 258 to Ultimate (Continued)**

Accident Year	Age-to-Age (in months)															
	<u>270/258</u>	<u>282/270</u>	<u>294/282</u>	<u>306/294</u>	<u>318/306</u>	<u>330/318</u>	<u>342/330</u>	<u>354/342</u>	<u>366/354</u>	<u>378/366</u>	<u>390/378</u>	<u>402/390</u>	<u>414/402</u>	<u>ULT/414Inc (g)</u>		
1983									1.002	1.004	1.000	1.000	0.997			
1984								1.002	1.003	0.997	1.000	1.001	1.000			
1985							1.003	1.004	0.999	1.000	0.999	0.999	1.001			
1986						1.004	1.004	1.001	1.000	0.998	1.009	0.999				
1987					1.003	1.004	1.001	1.001	1.000	1.001	1.003					
1988				1.003	1.003	1.003	1.001	0.999	0.998	1.000						
1989			1.005	1.000	1.002	0.998	0.999	0.999	1.000							
1990		1.003	0.999	1.000	1.001	1.000	0.998	0.999								
1991	1.004	1.001	1.002	1.001	0.999	0.999	0.998	0.999								
1992	1.004	1.002	0.999	0.999	1.002	0.997										
1993	1.000	0.998	0.996	0.999	0.999											
1994	1.003	0.993	0.999	0.998												
1995	0.999	0.997	0.999													
1996	0.996	0.999														
1997	1.000															

Selected (c)  
Cumulative

1.000  
1.028

0.998  
1.028

0.999  
1.030

0.999  
1.030

0.998  
1.028

0.999  
1.027

0.999  
1.027

(g) The UL T/414Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 114-to-126 through 342-to-354 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

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

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						117,321
2011					117,897	118,120
2012				124,255	124,685	124,908
2013			131,741	132,597	132,985	133,148
2014		136,352	138,245	139,038	139,435	
2015	134,560	142,578	144,025	144,551		
2016	136,972	145,662	147,406			
2017	138,832	146,146				
2018	141,615					

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):					
	18-30	30-42	42-54	54-66	66-78	78-Ultimate
2011					1.002	
2012				1.003	1.002	
2013			1.006	1.003	1.001	
2014		1.014	1.006	1.003		
2015	1.060	1.010	1.004			
2016	1.063	1.012				
2017	1.053					
Latest Year	1.053	1.012	1.004	1.003	1.001	
Cumulative	1.078	1.024	1.012	1.008	1.005	1.004
Acc. Year	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Ult. Claim Counts	152,626	149,626	149,131	145,710	140,153	133,670

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						103,524
2011					99,768	105,367
2012				98,408	107,068	112,894
2013			93,547	107,519	116,440	122,077
2014		78,795	100,321	114,992	123,746	
2015	54,528	85,663	108,188	122,486		
2016	58,682	91,424	114,384			
2017	62,697	95,642				
2018	64,715					

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

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

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						87.8%
2011					84.1%	88.8%
2012				78.5%	85.4%	90.0%
2013			70.0%	80.4%	87.1%	91.3%
2014		56.2%	71.6%	82.0%	88.3%	
2015	37.4%	58.8%	74.2%	84.1%		
2016	39.3%	61.3%	76.7%			
2017	41.9%	63.9%				
2018	42.4%					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						107,661
2011					104,716	108,315
2012				105,411	110,718	114,522
2013			102,525	112,365	118,022	122,077
2014		89,587	107,498	117,815	123,746	
2015	61,783	93,139	111,760	122,486		
2016	63,233	95,325	114,384			
2017	63,443	95,642				
2018	64,715					

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						22,232
2011					18,905	21,387
2012				15,447	18,234	20,232
2013			11,922	15,182	17,620	19,306
2014		7,929	11,949	15,073	17,361	
2015	4,186	8,428	12,260	15,215		
2016	4,461	8,485	12,135			
2017	4,551	8,793				
2018	4,686					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						24,439
2011					21,083	22,804
2012				17,665	19,462	20,901
2013			13,926	16,461	18,078	19,306
2014		9,739	13,387	15,776	17,361	
2015	4,928	9,545	12,940	15,215		
2016	4,878	9,017	12,135			
2017	4,620	8,793				
2018	4,686					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						2,631,085
2011					2,207,753	2,469,958
2012				1,862,041	2,154,738	2,393,659
2013			1,427,720	1,849,631	2,133,561	2,356,860
2014		872,482	1,439,098	1,858,656	2,148,339	
2015	304,457	888,981	1,446,124	1,863,598		
2016	308,482	859,553	1,388,030			
2017	293,093	840,985				
2018	303,238					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						847,408
2011					856,448	700,224
2012				906,759	766,942	626,929
2013			937,937	817,770	650,854	517,148
2014		925,204	911,591	754,945	583,517	
2015	659,099	911,114	861,168	693,074		
2016	680,270	891,316	803,462			
2017	693,217	863,806				
2018	724,333					

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

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						61,422
2011					47,242	54,909
2012				35,082	43,535	52,183
2013			24,557	32,609	39,338	46,712
2014		16,075	24,037	31,396	37,193	
2015	8,235	16,008	24,030	31,411		
2016	8,689	16,433	24,331			
2017	9,105	17,104				
2018	9,419					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						-254,042
2011					-233,801	-161,818
2012				-245,678	-158,903	-84,954
2013			-220,474	-158,022	-62,233	
2014		-173,477	-172,514	-88,631		
2015	-59,748	-119,678	-85,836			
2016	-39,544	-64,107				
2017	-6,792					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						593,366
2011					622,647	538,406
2012				661,081	608,039	541,975
2013			717,463	659,748	588,621	517,148
2014		751,727	739,077	666,315	583,517	
2015	599,351	791,436	775,333	693,074		
2016	640,726	827,209	803,462			
2017	686,425	863,806				
2018	724,333					

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

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

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

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						228,109
2011					214,300	218,338
2012				217,663	222,760	226,348
2013			217,259	225,573	228,942	231,718
2014		232,395	242,129	247,792	250,525	
2015	222,976	244,871	253,856	258,557		
2016	237,957	261,759	271,509			
2017	258,557	281,108				
2018	272,406					

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

Accident Year	Evaluated as of (in months)					
	18	30	42	54	66	78
2010						3,498,966
2011					3,304,147	3,498,121
2012				2,740,785	2,985,537	3,161,982
2013			2,362,442	2,734,951	2,951,124	3,105,726
2014		1,856,604	2,420,304	2,772,762	2,982,381	
2015	1,126,784	1,925,287	2,475,313	2,815,228		
2016	1,187,165	1,948,520	2,463,001			
2017	1,238,075	1,985,900				
2018	1,299,977					

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					1.059
2012				1.089	1.059
2013			1.158	1.079	1.052
2014		1.304	1.146	1.076	
2015	1.709	1.286	1.137		
2016	1.641	1.264			
2017	1.604				
Latest Year	1.604	1.264	1.137	1.076	1.052

(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)				
	18-30	30-42	42-54	54-66	66-78
2011					1.071
2012				1.112	1.066
2013			1.178	1.096	1.059
2014		1.320	1.163	1.090	
2015	1.691	1.300	1.153		
2016	1.635	1.277			
2017	1.605				

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					-1.11%
2012				-2.08%	-0.68%
2013			-1.76%	-1.51%	-0.67%
2014		-1.23%	-1.50%	-1.32%	
2015	1.02%	-1.10%	-1.37%		
2016	0.41%	-1.01%			
2017	-0.08%				

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

Accident Year	Evaluated as of (in months)				
	18-30	30-42	42-54	54-66	66-78
2011					1.062
2012				1.096	1.066
2013			1.165	1.088	1.058
2014		1.311	1.155	1.081	
2015	1.711	1.293	1.142		
2016	1.647	1.267			
2017	1.608				
Latest Year	1.608	1.267	1.142	1.081	1.058
3-Year Average	1.655	1.290	1.154	1.088	1.062

- (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 June 30, 2019**

Accident Year	Development Factors			
	(1) Paid or Incurred Loss Ratio(a)	(2) Annual(b)	(3) Cumulative	(4) Projected Ultimate Loss Ratio (4) = (1) x (3)
1986	0.396	1.001	1.004	0.397
1987	0.346	1.000	1.004	0.347
1988	0.330	1.000	1.004	0.332
1989	0.343	1.000	1.005	0.345
1990	0.398	1.001	1.005	0.400
1991	0.425	1.000	1.005	0.427
1992	0.350	1.001	1.006	0.352
1993	0.287	1.000	1.006	0.289
1994	0.327	1.000	1.006	0.329
1995	0.472	1.000	1.006	0.475
1996	0.530	1.000	1.007	0.533
1997	0.600	1.000	1.007	0.604
1998	0.652	1.001	1.007	0.657
1999	0.671	1.003	1.030	0.691
2000	0.578	1.003	1.033	0.597
2001	0.477	1.003	1.036	0.495
2002	0.355	1.004	1.041	0.369
2003	0.233	1.005	1.046	0.243
2004	0.138	1.005	1.051	0.145
2005	0.118	1.007	1.059	0.125
2006	0.151	1.009	1.069	0.161
2007	0.206	1.011	1.080	0.223
2008	0.258	1.014	1.096	0.283
2009	0.298	1.017	1.115	0.332
2010	0.282	1.022	1.139	0.322
2011	0.258	1.023	1.165	0.301
2012	0.225	1.035	1.206	0.271
2013	0.186	1.042	1.257	0.234
2014	0.169	1.049	1.318	0.223
2015	0.153	1.080	1.422	0.218
2016	0.127	1.146	1.630	0.207
2017	0.097	1.337	2.179	0.211
2018	0.053	1.986	4.329	0.230

(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 June 30, 2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<b>Reform Adjusted</b>						
		<b>Development Factors</b>					
		<b>Cumulative</b>					
Accident Year	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)	Projected Ultimate Loss Ratio
						(2) x (5)	(1) + ((6) - (2))
1986	0.335	0.335	0.999	1.027	1.027	0.344	0.344
1987	0.315	0.315	1.000	1.027	1.027	0.323	0.323
1988	0.304	0.304	1.002	1.029	1.029	0.313	0.313
1989	0.325	0.325	1.000	1.029	1.029	0.335	0.335
1990	0.366	0.366	1.000	1.029	1.029	0.377	0.377
1991	0.383	0.383	1.001	1.030	1.030	0.395	0.395
1992	0.319	0.319	1.000	1.030	1.030	0.328	0.328
1993	0.266	0.266	1.000	1.030	1.030	0.274	0.274
1994	0.308	0.308	1.001	1.031	1.031	0.318	0.318
1995	0.452	0.452	1.000	1.031	1.031	0.466	0.466
1996	0.484	0.484	0.999	1.030	1.030	0.499	0.499
1997	0.545	0.545	0.998	1.028	1.028	0.561	0.561
1998	0.661	0.661	1.000	1.028	1.028	0.680	0.680
1999	0.665	0.592	1.009	1.120	1.120	0.664	0.736
2000	0.599	0.534	1.008	1.130	1.130	0.604	0.669
2001	0.528	0.472	1.009	1.140	1.140	0.538	0.594
2002	0.406	0.365	1.010	1.152	1.152	0.420	0.462
2003	0.258	0.232	1.011	1.164	1.164	0.270	0.296
2004	0.174	0.157	1.011	1.178	1.178	0.185	0.202
2005	0.169	0.153	1.013	1.193	1.193	0.183	0.199
2006	0.216	0.196	1.015	1.211	1.211	0.237	0.258
2007	0.301	0.274	1.017	1.231	1.231	0.337	0.364
2008	0.370	0.339	1.020	1.256	1.256	0.425	0.457
2009	0.425	0.392	1.022	1.283	1.283	0.503	0.536
2010	0.410	0.380	1.025	1.316	1.316	0.500	0.530
2011	0.344	0.322	1.028	1.352	1.352	0.436	0.458
2012	0.286	0.270	1.038	1.404	1.404	0.379	0.395
2013	0.224	0.213	1.050	1.474	1.467	0.313	0.323
2014	0.188	0.182	1.058	1.559	1.539	0.281	0.287
2015	0.165	0.162	1.081	1.686	1.649	0.267	0.270
2016	0.137	0.136	1.142	1.926	1.861	0.253	0.254
2017	0.112	0.112	1.267	2.441	2.331	0.261	0.261
2018	0.075	0.075	1.608	3.924	3.747	0.280	0.280

- (a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
- (b) Based on experience evaluated as of June 30, 2019. Reflects an adjustment for the pharmaceutical cost reductions to restate the historical medical paid-to-date ratios at a 2018 pharmaceutical cost level.
- (c) See Exhibits 2.6.1 and 2.6.2.
- (d) The developed medical loss ratios shown were derived based on an adjustment for pharmaceutical cost reductions. 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)	
1986	0.0	0.0	1.6	1.6	1.567	
1987	0.0	0.0	1.9	1.9	1.538	
1988	0.0	0.0	1.5	1.5	1.515	
1989	0.0	0.0	1.5	1.5	1.493	
1990	2.3	19.9	1.7	24.7	1.197	
1991	4.9	14.8	0.8	21.4	0.986	
1992	1.8	-8.3	1.6	-5.2	1.040	
1993	0.2	-18.1	0.4	-17.6	1.262	
1994	-5.1	0.2	0.6	-4.3	1.319	
1995	6.3	0.6	1.0	8.0	1.221	
1996	5.3	0.4	1.2	7.0	1.141	
1997	9.7	0.2	1.6	11.7	1.022	
1998	6.5	0.0	1.8	8.4	0.943	
1999	5.7	0.0	2.1	7.9	0.874	
2000	3.9	0.0	3.1	7.1	0.815	
2001	-0.3	0.0	0.2	-0.1	0.816	
2002	-0.7	0.0	0.4	-0.3	0.836	(e)
2003	7.3	0.0	1.2	8.6	0.834	(e)
2004	-6.0	-13.7	2.1	-17.2	1.141	(e)
2005	-31.6	-15.3	1.6	-41.2	1.546	
2006	5.6	-5.7	2.2	1.8	1.520	
2007	1.6	0.0	2.1	3.7	1.465	
2008	4.8	0.6	1.0	6.5	1.376	
2009	0.4	1.4	0.2	2.0	1.349	
2010	0.4	0.0	1.5	1.9	1.323	
2011	0.0	0.0	1.4	1.4	1.305	
2012	-0.8	0.0	2.1	1.3	1.289	
2013	1.4	0.2	0.6	2.3	1.260	
2014	5.8	1.5	1.7	9.2	1.154	
2015	-0.8	0.0	2.3	1.4	1.138	
2016	0.3	0.0	1.0	1.3	1.124	
2017	0.5	0.0	2.2	2.7	1.094	
2018	0.4	0.0	2.1	2.5	1.067	
2019	0.4	0.0	2.3	2.7		
2020	0.5	0.0	2.2	2.7		
1/1/2021	0.2 (Annual 0.5)	0.0	1.0 (Annual 2.1)	1.2		

- (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. Values for 2017 and prior have been updated to reflect a recent WCIRB reassessment of the impact of wage inflation on indemnity benefit levels.
- (c)  $\{ [\text{Column (1)} / 100 + 1.0] \times [\text{Column (2)} / 100 + 1.0] \times [\text{Column (3)} / 100 + 1.0] - 1.0 \} \times 100$ .
- (d) These factors represent the combined impact of the annual benefit changes on claim severity shown in Column (1), claim frequencies shown in Column (2) and wage inflation impact on benefits shown in Column (3), adjusted to the 2020 level.
- (e) On-level factors for accident years 2002, 2003 and 2004 adjust the portion of permanent disability claims that are estimated to not be subject to the January 1, 2005 PDRS (95% for accident year 2002, 75% for accident year 2003 and 40% for accident year 2004) to the January 1, 2005 PDRS level, and adjust for the corresponding utilization impacts on all 2002, 2003 and 2004 indemnity claims.

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

Accident Year	(1) Proportion of Medical Subject to Fee Schedule (a)	(2) Proportion of Medical Not Subject to Fee Schedule (a)	(3) Impact of Fee Schedule Change on Total Medical (b)	(4) Change in Medical CPI (c)	(5) Impact of CPI Change on Total Medical (d)	(6) Annual Non-Legislative Cost Impact on Total Medical (e)
1986	0.604	0.396	0.0%	9.1%	3.0%	3.0%
1987	0.610	0.390	0.9%	7.4%	2.9%	3.8%
1988	0.649	0.351	0.8%	7.7%	3.0%	3.8%
1989	0.647	0.353	0.0%	8.6%	3.0%	3.0%
1990	0.661	0.339	0.0%	10.4%	3.7%	3.7%
1991	0.631	0.369	0.0%	10.6%	3.6%	3.6%
1992	0.628	0.372	0.0%	8.1%	3.0%	3.0%
1993	0.565	0.435	0.0%	7.3%	2.7%	2.7%
1994	0.691	0.309	-3.6%	4.3%	1.3% (i)	-2.3%
1995	0.681	0.319	0.0%	3.0%	0.9%	0.9%
1996	0.663	0.337	0.0%	3.0%	1.0%	1.0%
1997	0.643	0.357	0.0%	2.2%	0.7%	0.7%
1998	0.658	0.342	0.0%	2.2%	0.8%	0.8%
1999	0.728	0.272	1.6%	3.3%	0.9% (ii)	2.5%
2000	0.715	0.285	0.5%	4.3%	1.2%	1.7%
2001	0.722	0.278	1.5%	4.8%	1.4%	2.9%
2002	0.635	0.365	0.6%	5.1%	1.4%	2.0%
2003	0.786	0.214	0.0%	4.8%	1.4% (iii)	1.4%
2004	0.952	0.048	0.0%	5.0%	0.0% (iv),(v)	0.0%
2005	0.936	0.064	0.0%	4.8%	0.0% (v)	0.0%
2006	0.926	0.074	0.0%	4.1%	0.3%	0.3%
2007	0.923	0.077	1.4%	5.3%	0.4%	1.8%
2008	0.896	0.104	-0.1%	4.2%	0.3%	0.2%
2009	0.894	0.106	0.0%	3.6%	0.4%	0.4%
2010	0.895	0.105	0.0%	2.8%	0.3%	0.3%
2011	0.969	0.031	0.0%	3.2%	0.3%	0.3%
2012	0.969	0.031	0.0%	2.7%	0.1%	0.1%
2013	0.938	0.062	0.0%	2.6%	0.1%	0.1%
2014	0.928	0.072	0.0%	4.2%	0.3%	0.3%
2015	0.933	0.067	0.0%	3.1%	0.2%	0.2%
2016	0.919	0.081	0.0%	5.4%	0.4%	0.4%
2017	0.906	0.094	0.0%	2.2%	0.2%	0.2%
2018	0.905	0.095	0.0%	2.4%	0.2%	0.2%
2019	0.905	0.095	0.0%	2.8%	0.3%	0.3%
2020	0.905	0.095	0.0%	3.1%	0.3%	0.3%
1/1/2021	0.905	0.095	0.0% (Annual 0.0%)	1.3% (Annual 2.6%)	0.1%	0.1%

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

(b) Based on the WCIRB's evaluation of the cost impact of changes in the medical fee schedules.

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

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

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

**Annual Medical Cost Level Change - Legislative**

Accident Year	(1) Annual Legislative Cost Impact on Medical Severity(a)	(2) Annual Legislative Cost Impact on Medical Due to Frequency Changes(b)	(3) Annual Total Legislative Cost Impact on Medical(c)
1986	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%
1990	-0.7%	19.9%	19.1%
1991	-1.6%	14.7%	12.9%
1992	0.5%	-8.4%	-7.9%
1993	-0.7%	-18.1%	-18.7%
1994	-2.6%	0.3%	-2.3%
1995	0.0%	0.5%	0.5%
1996	0.0%	0.4%	0.4%
1997	0.0%	0.2%	0.2%
1998	12.6%	0.0%	12.6%
1999	12.6%	0.0%	12.6%
2000	7.0%	0.0%	7.0%
2001	6.6%	0.0%	6.6%
2002	-5.6%	0.0%	-5.6%
2003	-6.0%	0.0%	-6.0%
2004	-24.4%	-12.5%	-33.9%
2005	0.0%	-13.9%	-13.9%
2006	0.1%	-5.2%	-5.1%
2007	0.1%	0.0%	0.1%
2008	0.2%	0.3%	0.5%
2009	0.0%	1.0%	1.0%
2010	0.0%	0.0%	0.0%
2011	-2.0%	0.0%	-2.0%
2012	-4.4%	0.0%	-4.4%
2013	-8.2%	0.2%	-8.0%
2014	-5.9%	1.3%	-4.7%
2015	-2.0%	0.0%	-2.0%
2016	-0.5%	0.0%	-0.5%
2017	-0.4%	0.0%	-0.4%
2018	-0.3%	0.0%	-0.3%
2019	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%
1/1/2021	0.0%	0.0%	0.0%

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

**Total Medical Cost Level Factors**

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical(b)	(3) Total Annual Cost Impact on Medical(c)	(4) Composite Medical On-level Factor(d)
1986	3.0%	0.0%	3.0%	0.832
1987	3.8%	0.0%	3.8%	0.802
1988	3.8%	0.0%	3.8%	0.772
1989	3.0%	0.0%	3.0%	0.750
1990	3.7%	19.1%	23.5%	0.607
1991	3.6%	12.9%	16.9%	0.519
1992	3.0%	-7.9%	-5.2%	0.548
1993	2.7%	-18.7%	-16.5%	0.656
1994	-2.3%	-2.3%	-4.6%	0.687
1995	0.9%	0.5%	1.4%	0.678
1996	1.0%	0.4%	1.4%	0.668
1997	0.7%	0.2%	0.9%	0.662
1998	0.8%	12.6%	13.5%	0.583
1999	2.5%	12.6%	15.4%	0.505
2000	1.7%	7.0%	8.8%	0.465
2001	2.9%	6.6%	9.7%	0.423
2002	2.0%	-5.6%	-3.7%	0.440
2003	1.4%	-6.0%	-4.7%	0.461
2004	0.0%	-33.9%	-33.9%	0.698
2005	0.0%	-13.9%	-13.9%	0.810
2006	0.3%	-5.1%	-4.8%	0.851
2007	1.8%	0.1%	1.9%	0.835
2008	0.2%	0.5%	0.7%	0.829
2009	0.4%	1.0%	1.4%	0.818
2010	0.3%	0.0%	0.3%	0.816
2011	0.3%	-2.0%	-1.7%	0.830
2012	0.1%	-4.4%	-4.3%	0.867
2013	0.1%	-8.0%	-7.9%	0.942
2014	0.3%	-4.7%	-4.4%	0.985
2015	0.2%	-2.0%	-1.8%	1.003
2016	0.4%	-0.5%	-0.1%	1.004
2017	0.2%	-0.4%	-0.2%	1.006
2018	0.2%	-0.3%	-0.1%	1.007
2019	0.3%	0.0%	0.3%	
2020	0.3%	0.0%	0.3%	
1/1/2021	0.1%	0.0%	0.1%	

- (a) See Exhibit 4.2, Column (6).
- (b) See Exhibit 4.3, Column (3).
- (c)  $\text{Column (3)} = [1.0 + \text{Column (1)}] \times [1.0 + \text{Column (2)}] - 1.0$ .
- (d) These factors adjust the annual impact shown in Column (3) to the 1/1/2021 level.

### Annual Wage Level Changes

<u>Year</u>	<u>Annual Wage Level Change(a)</u>	<u>Factor to a 1/1/2021 Wage Level</u>
1986	4.7	3.341
1987	5.6	3.164
1988	4.4	3.030
1989	4.3	2.905
1990	5.0	2.767
1991	2.3	2.705
1992	4.7	2.583
1993	1.2	2.553
1994	1.8	2.508
1995	2.9	2.437
1996	3.4	2.357
1997	4.7	2.251
1998	5.2	2.140
1999	6.2	2.015
2000	9.0	1.848
2001	0.6	1.837
2002	1.1	1.817
2003	3.6	1.754
2004	5.0	1.671
2005	3.2	1.619
2006	4.6	1.548
2007	4.5	1.481
2008	2.1	1.451
2009	0.5	1.443
2010	3.0	1.401
2011	2.9	1.362
2012	4.1	1.308
2013	0.8	1.298
2014	3.2	1.258
2015	4.5	1.203
2016	1.9	1.181
2017	4.2	1.133
2018	3.5	1.095
Projected:		
2019	3.9	
2020	3.6	
1/1/2021	1.7	(Annual = 3.5)

(a) Historical wage changes through 2016 are based on Bureau of Labor Statistics data. 2019 wage change is based on California Department of Finance as of April 2019. Forecasts for 2017, 2018 and 2020 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of June 2019 and those made by the California Department of Finance as of April 2019.

Premium Adjustment Factors

	(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)	(6)	(7)
		Ratio of Industry Average Charged Rates to Advisory Pure Premium	Factor to Industry Average Filed Pure Premium Rate Level as of July 1, 2019 (c)	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of July 1, 2019 (d)	Adjustment to Remove Surcharge Premium (e)	Average Experience Modification (f)	Off-Balance Correction in Advisory January 1, 2019 Pure Premium	Factor to Adjust for Impact of Premium Resulting from Audits (g)	Composite Premium Adjustment Factor (h)
Calendar Year	Factor to a 1/1/2021 Wage Level (a)	Rates (b)	July 1, 2019 (c)	July 1, 2019 (d)	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
1986	3.341	---	---	0.722	0.991	0.983	1.017	---	2.391
1987	3.164	---	---	0.635	0.992	0.983	1.017	---	1.992
1988	3.030	---	---	0.568	0.993	0.963	1.017	---	1.744
1989	2.905	---	---	0.559	0.993	0.945	1.017	---	1.677
1990	2.767	---	---	0.545	0.991	0.942	1.017	---	1.560
1991	2.705	---	---	0.504	0.987	0.939	1.017	---	1.410
1992	2.583	---	---	0.484	0.982	0.940	1.017	---	1.285
1993	2.553	---	---	0.478	0.981	0.949	1.017	---	1.240
1994	2.508	---	---	0.547	0.986	0.948	1.017	---	1.404
1995	2.437	---	---	0.741	0.995	0.958	1.017	---	1.844
1996	2.357	1.023	0.787	0.769	1.000	0.935	1.017	---	1.907
1997	2.251	0.989	0.785	0.794	1.000	0.949	1.017	---	1.851
1998	2.140	0.965	0.818	0.848	1.000	0.959	1.017	---	1.860
1999	2.015	0.972	0.827	0.851	1.000	0.954	1.017	---	1.767
2000	1.848	1.005	0.750	0.746	1.000	0.970	1.017	---	1.398
2001	1.837	1.030	0.660	0.641	1.000	0.969	1.017	---	1.195
2002	1.817	1.157	0.591	0.511	1.000	0.991	1.017	---	0.921
2003	1.754	1.266	0.484	0.382	1.000	1.005	1.017	---	0.656
2004	1.671	1.397	0.492	0.352	1.000	0.981	1.017	---	0.590
2005	1.619	1.470	0.592	0.403	1.000	0.982	1.017	---	0.653
2006	1.548	1.447	0.763	0.527	1.000	0.956	1.017	---	0.839
2007	1.481	1.492	1.039	0.696	1.000	0.931	1.017	0.985	1.073
2008	1.451	1.426	1.237	0.867	1.000	0.946	1.017	0.991	1.296
2009	1.443	1.366	1.219	0.892	1.000	0.937	1.017	1.034	1.398
2010	1.401	1.384	1.195	0.863	1.000	0.941	1.017	1.005	1.271
2011	1.362	1.401	1.194	0.852	1.000	0.982	1.017	---	1.162
2012	1.308	1.223	0.984	0.805	1.000	1.000	1.017	---	1.035
2013	1.298	1.138	0.792	0.696	1.000	0.983	1.017	---	0.904
2014	1.258	1.126	0.730	0.648	1.000	0.961	1.017	---	0.834
2015	1.203	1.109	0.709	0.639	1.000	0.951	1.017	---	0.796
2016	1.181	1.148	0.764	0.666	1.000	0.949	1.017	---	0.814
2017	1.133	1.156	0.843	0.729	1.000	0.956	1.017	---	0.850
2018	1.095	1.195	0.955	0.799	1.000	0.958	1.017	---	0.898

- (a) See Exhibit 5.1.
- (b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.
- (c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory January 1, 2019 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2019 pure premium rate (\$1.67) to the industry average filed pure premium rate as of July 1, 2019 (\$1.99).
- (d)  $(2b) \div (2a)$ . This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of July 1, 2019.
- (e) Based on unit statistical data.
- (f) Based on average promulgated experience modifications. Calendar years 1996 through 2000 include adjustments for the impacts of AB 1913 and SB 1217 (1998).
- (g) Based on a comparison of premium reported on a calendar year basis to premium reported on an estimated ultimate policy year basis over the course of two accident years. The factor is applied only for calendar years 2007 to 2010, during which reported premiums were impacted by recessionary economic forces.
- (h)  $(1) \times (2c) \times (3) \times (6) \div [(4) \times (5)]$  for calendar years 2007 to 2010.  $(1) \times (2c) \times (3) \div [(4) \times (5)]$  for all other calendar years.



2018 Accident Year Indemnity Claim Frequency Model  
As of PY 2016 1st Set & June 2019 UCLA

AY	Annual % Changes Intra- Class Ind Freq	Annual Log Differences						
		Intra-Class Indemnity Frequency per \$M Exposure at FY 2017 Level			AY+1 Indemnity Benefit Level	Cumulative Injury Index	Economic Variables (1st Prin. Comp.)	CalOSHA Dummy Variable
		Total	Cumulative	Non-cum.				
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	----	0.043	0.000
1970	1.8%	0.018	----	----	0.000	----	-0.337	0.000
1971	1.5%	0.015	----	----	0.162	----	-0.186	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	----	-0.300	0.000
1976	0.8%	0.008	----	----	0.063	----	0.085	0.000
1977	4.3%	0.042	----	----	0.001	----	0.112	0.000
1978	-8.7%	-0.091	----	----	0.000	----	0.172	0.000
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.081	0.000
1981	-3.5%	-0.036	-0.028	-0.036	0.000	0.008	-0.079	0.000
1982	-1.6%	-0.016	0.153	-0.022	0.352	0.175	-0.294	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	0.222	0.000
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.081	0.000
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.078	0.000
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.151	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	-0.121	0.000
1991	0.3%	0.003	0.166	-0.018	0.023	0.184	-0.293	0.000
1992	-11.1%	-0.118	-0.272	-0.098	0.013	-0.174	-0.186	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	0.075	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.138	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	0.128	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	-0.101	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.202	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.023	0.000
2004	-16.6%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.019	0.049	0.040	-0.084	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.308	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.0%	0.010	0.030	0.008	0.003	0.022	0.043	0.000
2012	4.6%	0.045	0.126	0.035	0.025	0.091	0.123	0.000
2013	0.5%	0.005	0.139	-0.013	0.071	0.152	0.151	0.000
2014	0.1%	0.001	0.069	-0.009	0.003	0.078	0.178	0.000
2015	-0.7%	-0.007	0.051	-0.017	0.002	0.068	0.194	0.000
2016	-3.3%	-0.034	0.035	-0.046	0.004	0.081	0.082	0.000
2017*	-1.7%	-0.017	0.079	-0.036	0.004	0.115	0.078	0.000
2018	0.1%	0.001	0.001	0.001	0.003	0.000	0.216	0.000
2019	-1.9%	-0.019	-0.019	-0.019	0.004	0.000	0.005	0.000
2020	-2.0%	-0.020	-0.020	-0.020	0.004	0.000	-0.005	0.000
2021	-2.2%	-0.022	-0.022	-0.022	0.004	0.000	-0.030	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant	-0.020
Std Err of Y Est	0.040
R Squared	0.575
No. of Observations	39
Degrees of Freedom	34

X Coefficient(s)	0.178	0.282	0.093	-0.131
Std Err of Coef.	0.072	0.061	0.043	0.076

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 2018; June 2019 UCLA Anderson Forecasts for 2019 on.  
Regression is over AY 1979 through AY 2017. AY 2018 through AY 2021 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 2017 change is based on a comparison of 2017 accidents on 2016 policies to 2016 accidents on 2015 policies.

**Projection of Indemnity Severity Trends by Accident Year  
Based on Experience as of June 30, 2019**

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	9,973	---	1.914	19,092	---
1991	10,911	9.4%	1.810	19,754	3.5%
1992	11,013	0.9%	1.750	19,277	-2.4%
1993	11,988	8.9%	1.740	20,859	8.2%
1994	12,953	8.0%	1.823	23,608	13.2%
1995	14,520	12.1%	1.698	24,649	4.4%
1996	16,286	12.2%	1.593	25,944	5.3%
1997	19,337	18.7%	1.429	27,638	6.5%
1998	21,202	9.6%	1.318	27,951	1.1%
1999	23,245	9.6%	1.222	28,396	1.6%
2000	24,680	6.2%	1.140	28,144	-0.9%
2001	27,164	10.1%	1.142	31,008	10.2%
2002	26,275	-3.3%	1.169	30,721	-0.9%
2003	25,906	-1.4%	1.166	30,196	-1.7%
2004	21,134	-18.4%	1.377	29,101	-3.6%
2005	19,108	-9.6%	1.581	30,204	3.8%
2006	20,834	9.0%	1.465	30,515	1.0%
2007	22,643	8.7%	1.412	31,972	4.8%
2008	24,759	9.3%	1.334	33,028	3.3%
2009	25,966	4.9%	1.326	34,431	4.2%
2010	25,497	-1.8%	1.301	33,176	-3.6%
2011	25,220	-1.1%	1.283	32,362	-2.5%
2012	24,802	-1.7%	1.267	31,433	-2.9%
2013	24,404	-1.6%	1.242	30,305	-3.6%
2014	25,205	3.3%	1.154	29,094	-4.0%
2015	25,487	1.1%	1.138	29,000	-0.3%
2016	24,886	-2.4%	1.124	27,961	-3.6%
2017	24,938	0.2%	1.094	27,288	-2.4%
2018	26,212	5.1%	1.067	27,969	2.5%

(6) Estimated Annual Exponential Trend Based on 1990 to 2018: 1.3%

(7) Estimated Annual Exponential Trend Based on 2005 to 2018: -1.2%

(8) Estimated Annual Exponential Trend Based on 2014 to 2018: -1.4%

Selected Indemnity Severity Trend: -0.5%

(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 June 30, 2019**

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	8,781	---	0.909	7,985	---
1991	9,429	7.4%	0.892	8,411	5.3%
1992	9,513	0.9%	0.862	8,198	-2.5%
1993	10,529	10.7%	0.845	8,898	8.5%
1994	11,634	10.5%	0.888	10,331	16.1%
1995	13,318	14.5%	0.880	11,722	13.5%
1996	14,260	7.1%	0.871	12,426	6.0%
1997	16,953	18.9%	0.865	14,670	18.1%
1998	20,843	22.9%	0.762	15,891	8.3%
1999	23,559	13.0%	0.661	15,563	-2.1%
2000	26,344	11.8%	0.607	15,993	2.8%
2001	31,329	18.9%	0.553	17,338	8.4%
2002	31,627	1.0%	0.575	18,178	4.8%
2003	30,174	-4.6%	0.603	18,195	0.1%
2004	27,874	-7.6%	0.798	22,233	22.2%
2005	28,710	3.0%	0.798	22,900	3.0%
2006	31,318	9.1%	0.794	24,880	8.6%
2007	34,964	11.6%	0.780	27,258	9.6%
2008	37,786	8.1%	0.777	29,341	7.6%
2009	39,833	5.4%	0.773	30,808	5.0%
2010	40,008	0.4%	0.771	30,851	0.1%
2011	36,425 (c)	---	0.793	28,870 (c)	---
2012	34,253	-6.0%	0.837	28,669	-0.7%
2013	31,866	-7.0%	0.921	29,344	2.4%
2014	30,541	-4.2%	0.980	29,926	2.0%
2015	29,720	-2.7%	1.003	29,808	-0.4%
2016	28,590	-3.8%	1.004	28,704	-3.7%
2017	28,728	0.5%	1.006	28,901	0.7%
2018	29,700	3.4%	1.007	29,908	3.5%

Selected Medical Severity Trend: 2.5%

- (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 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 June 30, 2019**

(1) Accident Year	MCCP Included				MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change	Estimated Ultimate Severity (a)	Annual % Change	Ultimate On-Level Severity (c)	Annual % Change
2005	28,710	---	22,900	---	27,211	---	21,704	---
2006	31,318	9.1%	24,880	8.6%	29,370	7.9%	23,333	7.5%
2007	34,963	11.6%	27,258	9.6%	32,650	11.2%	25,454	9.1%
2008	37,785	8.1%	29,341	7.6%	34,493	5.6%	26,784	5.2%
2009	39,833	5.4%	30,808	5.0%	36,522	5.9%	28,247	5.5%
2010	40,008	0.4%	30,851	0.1%	36,646	0.3%	28,258	0.0%
2011	39,902	-0.3%	31,625	2.5%	36,425	-0.6%	28,870	2.2%
2012	37,477	-6.1%	31,368	-0.8%	34,253	-6.0%	28,669	-0.7%
2013	34,951	-6.7%	32,185	2.6%	31,866	-7.0%	29,344	2.4%
2014	33,491	-4.2%	32,816	2.0%	30,541	-4.2%	29,926	2.0%
2015	32,521	-2.9%	32,617	-0.6%	29,720	-2.7%	29,808	-0.4%
2016	31,246	-3.9%	31,371	-3.8%	28,590	-3.8%	28,704	-3.7%
2017	31,486	0.8%	31,675	1.0%	28,728	0.5%	28,901	0.7%
2018	32,807	4.2%	33,037	4.3%	29,700	3.4%	29,908	3.5%

**Estimated Annual Exponential Trend**

Trend Based on 1990 to 2018:

Trend Based on 2005 to 2018:

Trend Based on 2014 to 2018:

5.7%  
2.2%  
-0.2%

**Selected Medical Severity Trend:**

2.5%

(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 June 30, 2019**

Accident Year	(1) Developed Indemnity Loss Ratio(a)	(2) Composite Indemnity Adjustment Factor(b)	(3) Composite Premium Adjustment Factor(c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1)×(2)÷(3)
1986	0.397	1.567	2.391	0.261
1987	0.347	1.538	1.992	0.268
1988	0.332	1.515	1.744	0.288
1989	0.345	1.493	1.677	0.307
1990	0.400	1.197	1.560	0.307
1991	0.427	0.986	1.410	0.299
1992	0.352	1.040	1.285	0.285
1993	0.289	1.262	1.240	0.294
1994	0.329	1.319	1.404	0.309
1995	0.475	1.221	1.844	0.315
1996	0.533	1.141	1.907	0.319
1997	0.604	1.022	1.851	0.334
1998	0.657	0.943	1.860	0.333
1999	0.691	0.874	1.767	0.342
2000	0.597	0.815	1.398	0.348
2001	0.495	0.816	1.195	0.338
2002	0.369	0.836	0.921	0.335
2003	0.243	0.834	0.656	0.309
2004	0.145	1.141	0.590	0.281
2005	0.125	1.546	0.653	0.295
2006	0.161	1.520	0.839	0.292
2007	0.223	1.465	1.073	0.304
2008	0.283	1.376	1.296	0.301
2009	0.332	1.349	1.398	0.320
2010	0.322	1.323	1.271	0.335
2011	0.301	1.305	1.162	0.338
2012	0.271	1.289	1.035	0.338
2013	0.234	1.260	0.904	0.327
2014	0.223	1.154	0.834	0.308
2015	0.218	1.138	0.796	0.312
2016	0.207	1.124	0.814	0.285
2017	0.211	1.094	0.850	0.272
2018	0.230	1.067	0.898	0.273
				Projections (d)
2019				0.266
2020				0.259
1/1/2021				0.255

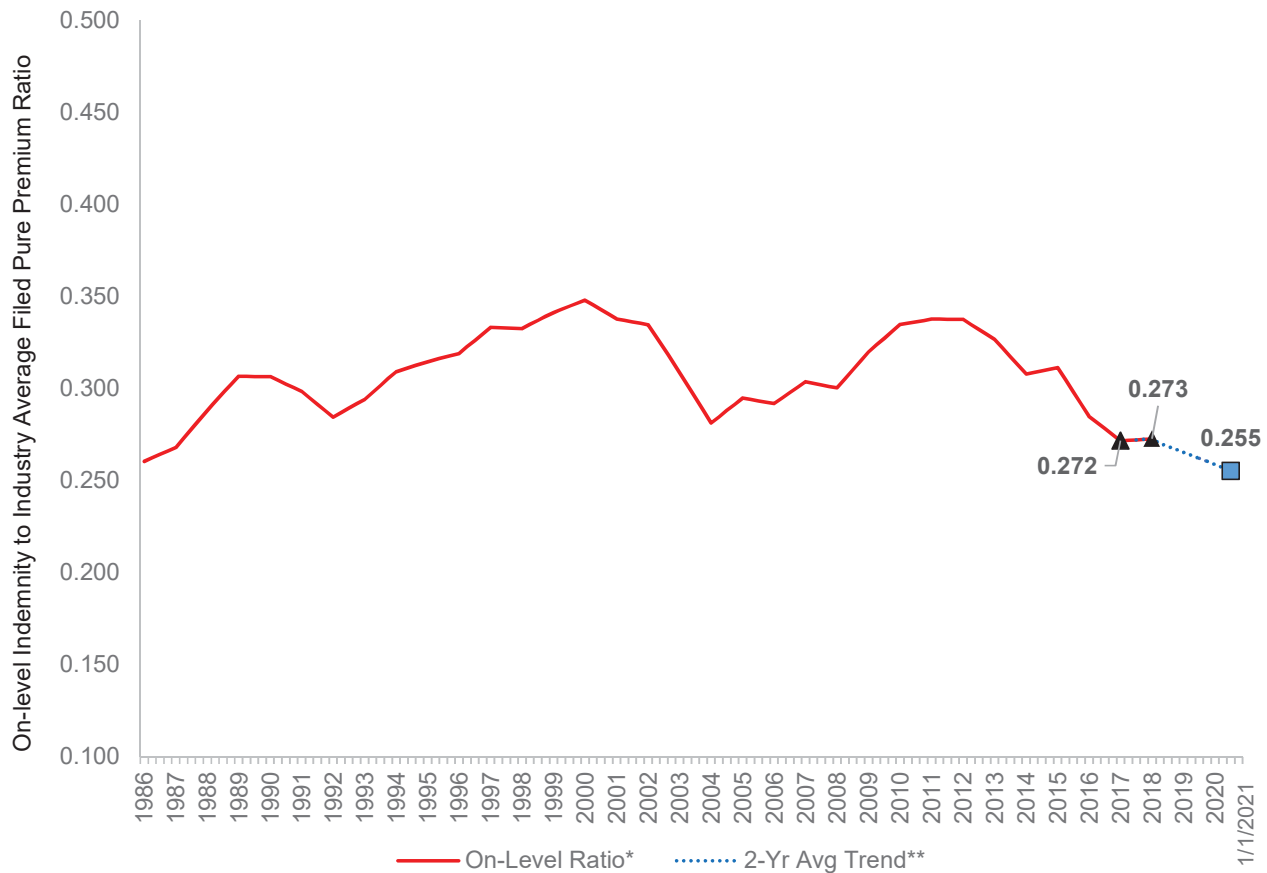
(a) See Exhibit 3.1.

(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 2018 from Exhibit 12, and projected frequency trends for accident years 2019 through 2021 from Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

**On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios  
Based on Experience as of June 30, 2019**



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

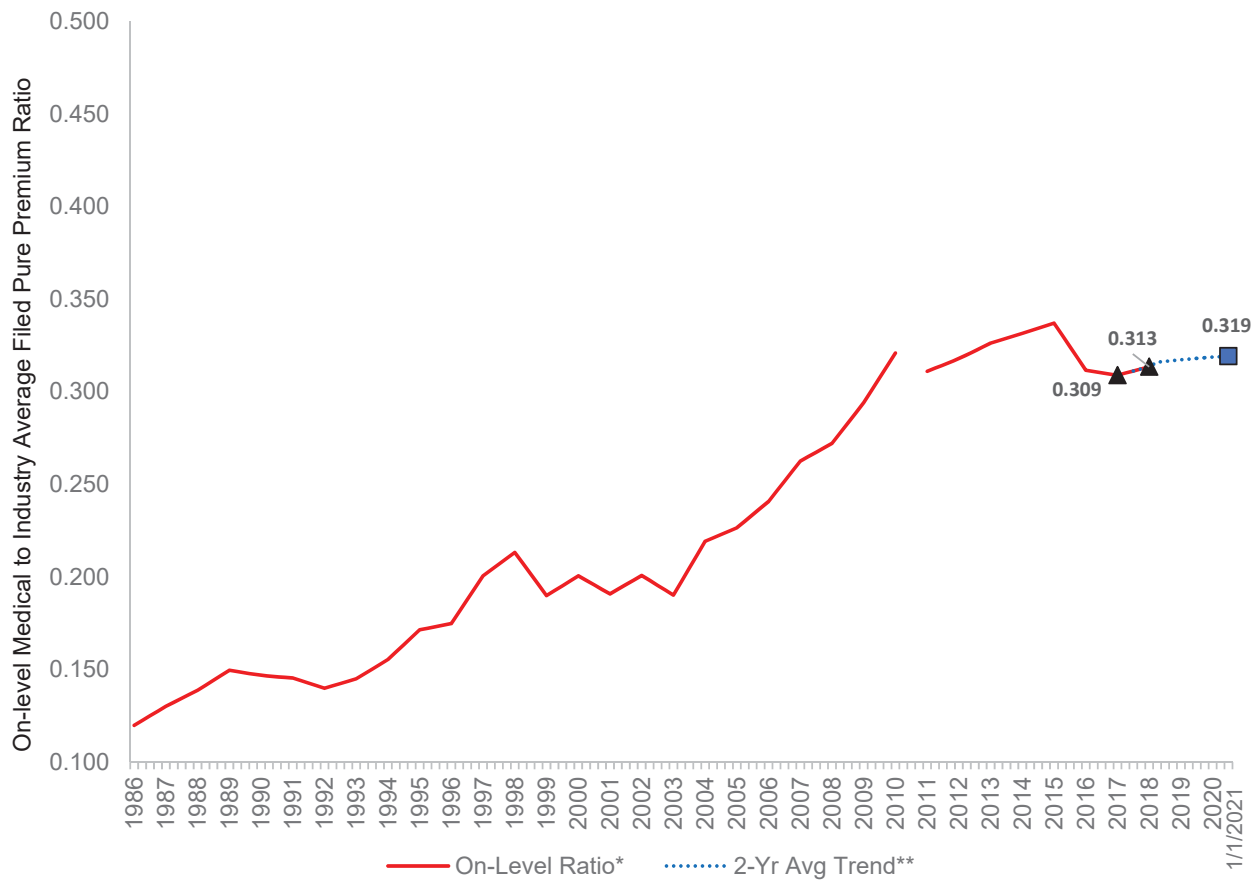
\*\* The 1/1/2021 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2017 and 2018 years.

**Projected On-Level Accident Year  
Medical Loss to Industry Average Filed Pure Premium Ratios  
Based on Experience as of June 30, 2019**

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)
1986	0.344	0.832	2.391	0.120
1987	0.323	0.802	1.992	0.130
1988	0.313	0.772	1.744	0.139
1989	0.335	0.750	1.677	0.150
1990	0.377	0.607	1.560	0.147
1991	0.395	0.519	1.410	0.145
1992	0.328	0.548	1.285	0.140
1993	0.274	0.656	1.240	0.145
1994	0.318	0.687	1.404	0.155
1995	0.466	0.678	1.844	0.171
1996	0.499	0.668	1.907	0.175
1997	0.561	0.662	1.851	0.201
1998	0.680	0.583	1.860	0.213
1999	0.664	0.505	1.767	0.190
2000	0.604	0.465	1.398	0.201
2001	0.538	0.423	1.195	0.191
2002	0.420	0.440	0.921	0.201
2003	0.270	0.461	0.656	0.190
2004	0.185	0.698	0.590	0.219
2005	0.183	0.810	0.653	0.227
2006	0.237	0.851	0.839	0.241
2007	0.337	0.835	1.073	0.263
2008	0.425	0.829	1.296	0.272
2009	0.503	0.818	1.398	0.294
2010	0.500	0.816	1.271	0.321
2011	0.436	0.830	1.162	0.311
2012	0.379	0.867	1.035	0.318
2013	0.313	0.942	0.904	0.326
2014	0.281	0.985	0.834	0.331
2015	0.267	1.003	0.796	0.337
2016	0.253	1.004	0.814	0.312
2017	0.261	1.006	0.850	0.309
2018	0.280	1.007	0.898	0.313
				Projections (d)
2019				0.317
2020				0.319
1/1/2021				0.319

- (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 2018 from Exhibit 12, and projected frequency trends for accident years 2019 through 2021 from Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 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 June 30, 2019**



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

\*\* The 1/1/2021 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2017 and 2018 years.



**Indicated Loss to Industry Average Filed Pure Premium Ratios  
For Policies with Effective Dates between January 1, 2020 and December 31, 2020  
Based on Experience as of June 30, 2019**

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.255	0.319	0.574

Quarterly Incurred Indemnity Loss Development Factors  
Through June 30, 2019

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	2018	2019	
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	3.200	3.227	
9/6									1.656	1.776	1.820	1.848	1.904	2.001	1.966	1.940	1.960	1.948	1.945	1.874	1.998		
12/9									1.448	1.511	1.510	1.530	1.564	1.632	1.587	1.585	1.570	1.578	1.578	1.580	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	1.298	1.298		
18/15	1.172	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	1.189	1.177	1.183		
21/18	1.145	1.140	1.150	1.148	1.153	1.127	1.066	1.096	1.117	1.128	1.139	1.153	1.140	1.146	1.141	1.141	1.132	1.137	1.134	1.138			
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	1.100			
27/24	1.074	1.096	1.093	1.100	1.094	1.073	1.045	1.070	1.082	1.081	1.088	1.089	1.091	1.085	1.087	1.081	1.082	1.087	1.079	1.078			
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	1.064	1.059			
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	1.047				
36/33	1.043	1.046	1.039	1.046	1.035	1.020	1.029	1.033	1.039	1.043	1.051	1.049	1.049	1.043	1.041	1.043	1.042	1.035	1.037				
39/36	1.038	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036	1.031	1.028				
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	1.027	1.027				
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	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	1.016					
51/48	1.022	1.017	1.018	1.015	1.010	1.016	1.010	1.018	1.021	1.018	1.022	1.023	1.021	1.018	1.017	1.015	1.019	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	1.014	1.013					
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	1.014						
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	1.011						
63/60	1.012	1.012	1.007	1.007	1.008	1.008	1.010	1.014	1.013	1.015	1.011	1.014	1.014	1.009	1.012	1.009	1.010						
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	1.009	1.008						
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	1.007							
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	1.006							
75/72	1.006	1.004	1.004	1.005	1.003	1.005	1.007	1.010	1.011	1.010	1.010	1.008	1.007	1.004	1.006	1.007							
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	1.005	1.007							
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	1.005								
84/81	1.003	1.003	1.005	1.003	1.006	1.006	1.007	1.008	1.005	1.009	1.006	1.004	1.007	1.004	1.007								
87/84	1.003	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004	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	1.005	1.004								
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	1.005									
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	1.003									

Source: WCIRB accident year experience calls

Quarterly Incurred Medical Loss Development Factors \*  
Through June 30, 2019

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	2018	2019
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	2.891	2.830
9/6									1.650	1.744	1.717	1.807	1.800	1.827	1.833	1.819	1.840	1.884	1.755	1.741	1.820	
12/9									1.453	1.443	1.466	1.454	1.488	1.521	1.484	1.500	1.482	1.451	1.487	1.448	1.459	
15/12	1.144	1.168	1.201	1.207	1.203	1.197	1.132	1.145	1.138	1.182	1.167	1.199	1.206	1.228	1.211	1.207	1.199	1.206	1.215	1.185	1.191	
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	1.087	1.096	
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	1.069		
24/21	1.074	1.072	1.080	1.083	1.082	1.060	1.040	1.052	1.070	1.074	1.067	1.074	1.080	1.080	1.067	1.064	1.055	1.059	1.057	1.046		
27/24	1.044	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.048	1.041	1.036		
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	1.032	1.028		
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	1.026			
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	1.021			
39/36	1.029	1.032	1.034	1.037	1.018	1.012	1.028	1.025	1.027	1.029	1.033	1.031	1.040	1.039	1.027	1.021	1.023	1.022	1.011			
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	1.017	1.010			
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	1.015				
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	1.008				
51/48	1.019	1.020	1.024	1.014	1.009	1.013	1.018	1.015	1.020	1.021	1.021	1.026	1.024	1.019	1.014	1.013	1.010	1.008				
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	1.009	1.009				
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	1.009					
60/57	1.021	1.021	1.015	1.009	1.008	1.014	1.020	1.019	1.018	1.017	1.019	1.016	1.015	1.014	1.012	1.007	1.007					
63/60	1.014	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.009	1.009	1.005	1.008					
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	1.006	1.010					
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	1.005						
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	1.005						
75/72	1.015	1.008	1.006	1.008	1.010	1.009	1.012	1.012	1.011	1.018	1.013	1.008	1.006	1.001	1.003	1.006						
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	1.005	1.003						
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	1.004							
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	1.003							
87/84	1.005	1.008	1.008	1.010	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.003	1.001	1.002							
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	1.006	1.006							
93/90	1.006	1.007	1.015	1.009	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003	1.002								
96/93	1.007	1.007	1.010	1.012	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003	1.002	1.001								

Source: WCIRB accident year experience calls

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

Quarterly Paid Indemnity Loss Development Factors  
Through June 30, 2019

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	2018	2019
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	4.987	5.082
9/6									2.259	2.375	2.377	2.398	2.452	2.432	2.484	2.462	2.462	2.484	2.456	2.445	2.538	
12/9									1.812	1.834	1.810	1.825	1.861	1.869	1.877	1.866	1.879	1.910	1.882	1.892	1.891	
15/12	1.499	1.536	1.538	1.552	1.550	1.516	1.491	1.456	1.482	1.488	1.481	1.507	1.532	1.539	1.506	1.539	1.540	1.559	1.571	1.544	1.527	
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	1.358	1.354	
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	1.260		
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	1.205		
27/24	1.186	1.199	1.203	1.200	1.205	1.186	1.140	1.142	1.151	1.149	1.153	1.162	1.165	1.168	1.164	1.159	1.170	1.176	1.161	1.159		
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	1.137	1.131		
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	1.104			
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	1.088			
39/36	1.074	1.081	1.081	1.092	1.087	1.072	1.070	1.066	1.064	1.067	1.074	1.078	1.077	1.073	1.075	1.074	1.075	1.071	1.068			
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	1.062	1.060			
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	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	1.041				
51/48	1.039	1.038	1.043	1.044	1.036	1.035	1.033	1.036	1.036	1.037	1.042	1.042	1.043	1.039	1.038	1.038	1.039	1.035				
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	1.032	1.031				
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	1.028					
60/57	1.025	1.030	1.027	1.026	1.024	1.024	1.024	1.024	1.028	1.029	1.029	1.032	1.027	1.030	1.028	1.025	1.025					
63/60	1.023	1.026	1.024	1.021	1.022	1.019	1.019	1.021	1.023	1.025	1.025	1.024	1.026	1.025	1.025	1.021	1.021					
66/63	1.023	1.023	1.023	1.021	1.019	1.019	1.019	1.020	1.025	1.025	1.025	1.025	1.023	1.022	1.022	1.018	1.018					
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	1.017						
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	1.019	1.016	1.014					
75/72	1.015	1.016	1.015	1.014	1.012	1.012	1.013	1.015	1.019	1.018	1.016	1.016	1.017	1.015	1.014	1.012						
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	1.013	1.011						
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	1.011							
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	1.011							
87/84	1.012	1.010	1.008	1.010	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010	1.011	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	1.010	1.009							
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	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	1.010								

Source: WCIRB accident year experience calls

Quarterly Paid Medical Loss Development Factors \*  
Through June 30, 2019

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	2018	2019
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	5.462	4.985
9/6									2.348	2.381	2.348	2.375	2.361	2.327	2.398	2.498	2.428	2.287	2.326	2.249	2.351	
12/9									1.716	1.765	1.731	1.723	1.756	1.746	1.763	1.736	1.750	1.705	1.752	1.737	1.719	
15/12	1.453	1.490	1.514	1.547	1.554	1.510	1.437	1.423	1.429	1.444	1.413	1.429	1.445	1.472	1.446	1.443	1.460	1.454	1.479	1.434	1.425	
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	1.250	1.245	
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	1.170		
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	1.131		
27/24	1.096	1.108	1.121	1.128	1.123	1.093	1.090	1.093	1.106	1.107	1.110	1.112	1.119	1.120	1.123	1.122	1.122	1.124	1.111	1.111		
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	1.100	1.092		
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	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	1.067			
39/36	1.051	1.059	1.060	1.061	1.049	1.044	1.053	1.056	1.057	1.059	1.061	1.066	1.071	1.066	1.069	1.065	1.064	1.061	1.055			
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	1.057	1.049			
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	1.044				
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	1.040				
51/48	1.030	1.035	1.037	1.034	1.031	1.030	1.033	1.037	1.036	1.036	1.039	1.041	1.043	1.040	1.039	1.038	1.037	1.032				
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	1.032	1.029				
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	1.026					
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	1.022					
63/60	1.023	1.025	1.022	1.019	1.019	1.020	1.024	1.024	1.024	1.024	1.027	1.027	1.026	1.027	1.025	1.022	1.022					
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	1.021	1.018					
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	1.017						
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	1.015						
75/72	1.017	1.016	1.014	1.015	1.015	1.014	1.018	1.020	1.019	1.019	1.018	1.018	1.018	1.015	1.015	1.013						
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	1.015	1.013						
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	1.012							
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	1.013							
87/84	1.013	1.011	1.010	1.012	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.011	1.012	1.010							
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	1.012	1.009							
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	1.009								
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	1.009								

Source: WCIRB accident year experience calls

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

Reported Indemnity Claim Count Development

Accident	Development															
Year	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174	174-186	186-198
1994																1.000
1995															1.001	1.000
1996														1.000	1.000	1.000
1997													1.000	1.000	1.000	1.000
1998												1.001	1.000	1.000	1.000	1.000
1999											1.000	1.000	1.000	1.000	1.000	1.000
2000										1.000	1.000	1.000	1.001	1.000	1.000	1.000
2001									1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002								1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2003							0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004						1.000	0.999	0.999	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2005					1.002	1.001	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000		
2006				1.003	1.001	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000		
2007			1.009	1.005	1.003	1.002	1.000	1.000	1.001	1.000	1.000	1.000				
2008		1.040	1.013	1.008	1.003	1.002	1.001	1.002	1.001	1.000	1.000					
2009	2.682	1.050	1.018	1.008	1.004	1.002	1.003	1.001	1.000	1.000						
2010	2.831	1.057	1.018	1.008	1.005	1.004	1.002	1.000	1.000							
2011	2.897	1.068	1.019	1.009	1.006	1.002	1.001	1.000								
2012	2.936	1.073	1.019	1.011	1.003	1.002	1.001									
2013	2.980	1.065	1.021	1.006	1.003	1.001										
2014	2.917	1.073	1.014	1.006	1.003											
2015	2.996	1.060	1.010	1.004												
2016	2.907	1.063	1.012													
2017	2.821	1.053														
2018	2.882															
Latest Year																
Age-to-Age																
2.882	1.053	1.012	1.004	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate																
3.106	1.078	1.024	1.012	1.008	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.002	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	1.008	1.006	1.004	1.003	1.003	1.002	1.003	1.002
2009	2.681	1.683	1.382	1.109	1.036	1.021	1.012	1.009	1.007	1.007	1.005	1.004	1.003	1.002	1.002
2010	2.688	1.708	1.407	1.124	1.037	1.021	1.015	1.011	1.008	1.005	1.005	1.003	1.004	1.003	1.001
2011	2.691	1.738	1.424	1.123	1.041	1.026	1.018	1.010	1.010	1.006	1.005	1.004	1.004	1.003	1.002
2012	2.749	1.727	1.420	1.123	1.050	1.028	1.018	1.012	1.010	1.007	1.004	1.004	1.003	1.007	1.001
2013	2.821	1.739	1.421	1.138	1.045	1.027	1.016	1.010	1.009	1.013	1.003	1.003	1.003	1.001	1.002
2014	2.778	1.723	1.421	1.130	1.045	1.037	1.015	1.010	1.008	1.004	1.003	1.003	1.003	1.002	1.002
2015	2.794	1.778	1.411	1.133	1.044	1.022	1.014	1.012	1.007	1.004	1.002	1.002	1.001	1.001	1.001
2016	2.733	1.717	1.409	1.139	1.042	1.025	1.016	1.011	1.009	1.004	1.003	1.002	1.002		
2017	2.821	1.686	1.412	1.125	1.039	1.023	1.012	1.008	1.007						
2018	2.802	1.729	1.411	1.133	1.043										
2019	2.779														

Reported Indemnity Claim Settlement Ratios

Accident																
Year	18	30	42	54	66	78	90	102	114	126	138	150	162	174	186	198
1994																98.8%
1995															98.5%	98.6%
1996														98.1%	98.3%	98.5%
1997													97.6%	97.9%	98.1%	98.3%
1998												96.9%	97.3%	97.6%	97.9%	98.1%
1999											96.3%	96.8%	97.2%	97.5%	97.8%	98.0%
2000										95.1%	95.9%	96.4%	96.9%	97.4%	97.7%	97.9%
2001									92.9%	94.0%	94.9%	95.7%	96.3%	96.8%	97.2%	97.5%
2002								91.6%	93.1%	94.3%	95.3%	96.1%	96.7%	97.1%	97.6%	97.9%
2003							89.5%	91.5%	93.2%	94.5%	95.5%	96.1%	96.7%	97.3%	97.7%	98.1%
2004						86.8%	89.5%	91.6%	93.4%	94.9%	95.8%	96.4%	97.0%	97.5%	98.0%	
2005					83.4%	87.1%	89.8%	92.0%	93.8%	95.0%	95.9%	96.7%	97.3%	97.8%		
2006				77.8%	83.2%	86.9%	89.8%	92.2%	93.7%	95.0%	96.0%	96.8%	97.4%			
2007			68.8%	77.2%	82.6%	86.7%	90.1%	92.3%	94.1%	95.4%	96.4%	97.1%				
2008		55.0%	67.3%	75.9%	82.1%	87.0%	90.2%	92.8%	94.4%	95.6%	96.7%					
2009	38.7%	53.1%	65.8%	75.0%	81.9%	86.7%	90.3%	92.8%	94.6%	95.9%						
2010	39.0%	54.0%	66.8%	76.8%	83.4%	88.2%	91.6%	93.9%	95.4%							
2011	39.5%	54.6%	68.2%	78.0%	84.6%	89.2%	92.5%	94.7%								
2012	39.5%	55.7%	69.7%	79.2%	85.9%	90.4%	93.4%									
2013	39.1%	57.0%	71.0%	81.1%	87.6%	91.7%										
2014	39.8%	57.8%	72.6%	82.7%	88.7%											
2015	40.5%	60.1%	75.1%	84.7%												
2016	42.8%	62.8%	77.6%													
2017	45.2%	65.4%														
2018	45.7%															
2019																

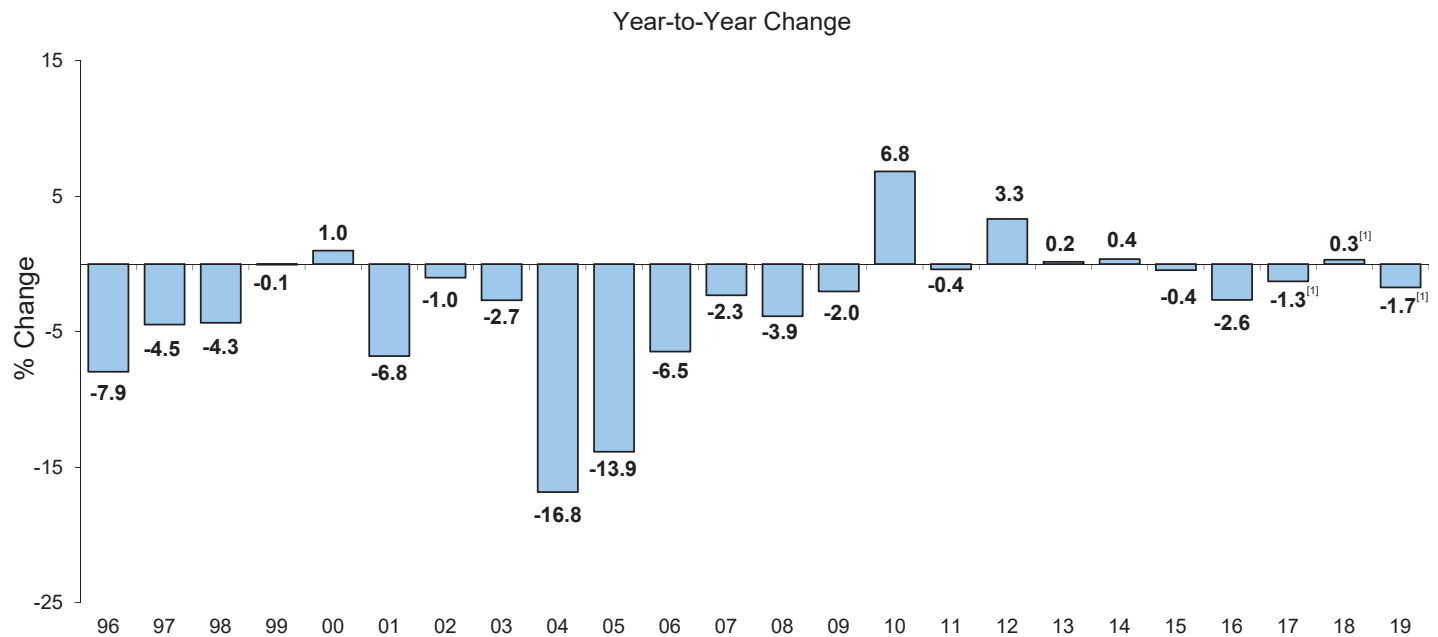


Estimated Ultimate Indemnity Claim Settlement Ratios

Accident																
Year	18	30	42	54	66	78	90	102	114	126	138	150	162	174	186	198
1994																98.6%
1995															98.2%	98.4%
1996														97.8%	98.1%	98.3%
1997													97.2%	97.5%	97.7%	98.0%
1998												96.6%	97.0%	97.4%	97.7%	97.9%
1999											96.0%	96.5%	96.9%	97.3%	97.6%	97.8%
2000										94.8%	95.6%	96.1%	96.7%	97.1%	97.5%	97.7%
2001									92.6%	93.7%	94.6%	95.4%	96.1%	96.6%	97.0%	97.3%
2002								91.5%	93.0%	94.1%	95.2%	96.0%	96.5%	97.0%	97.4%	97.7%
2003							89.6%	91.5%	93.0%	94.4%	95.4%	96.0%	96.6%	97.1%	97.5%	97.9%
2004						86.9%	89.5%	91.5%	93.3%	94.7%	95.6%	96.3%	96.9%	97.4%	97.9%	
2005					83.2%	86.9%	89.7%	91.8%	93.6%	94.9%	95.8%	96.6%	97.2%	97.7%		
2006				77.4%	82.8%	86.6%	89.5%	91.9%	93.5%	94.9%	95.9%	96.6%	97.3%			
2007			67.9%	76.5%	82.1%	86.3%	89.8%	92.0%	93.9%	95.2%	96.2%	97.0%				
2008		53.2%	65.9%	75.0%	81.3%	86.4%	89.8%	92.4%	94.2%	95.4%	96.5%					
2009	35.5%	51.1%	64.5%	74.0%	81.2%	86.1%	90.0%	92.5%	94.3%	95.7%						
2010	35.5%	51.9%	65.4%	75.8%	82.7%	87.8%	91.3%	93.6%	95.2%							
2011	35.5%	52.5%	66.8%	77.1%	84.1%	88.8%	92.2%	94.4%								
2012	35.4%	53.6%	68.3%	78.5%	85.4%	90.0%	93.1%									
2013	35.5%	55.0%	70.0%	80.4%	87.1%	91.3%										
2014	36.1%	56.2%	71.6%	82.1%	88.3%											
2015	37.4%	58.8%	74.3%	84.1%												
2016	39.4%	61.3%	76.7%													
2017	41.9%	63.9%														
2018	42.4%															

Source: WCIRB quarterly calls for experience

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



<sup>[1]</sup> The 2016-2017 estimate is based on partial year unit statistical data. The 2017-2018 and 2018-2019 estimates are based on comparison of claim counts based on WCIRB accident year experience as of June 30, 2019 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

**Item AC19-09-02**  
**New Medical Benchmarking Reports**

The WCIRB has developed an enhanced set of quarterly medical benchmarking reports that are provided to insurer members submitting medical transaction data. A brief demo of the new reports will be provided at the meeting.