

#### **Actuarial Committee**

#### **Meeting Agenda**

Date Time Location Staff Contact

August 1, 2019 9:45 AM WCIRB California David M. Bellusci
1221 Broadway, Suite 900
Oakland, CA

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Released: July 25, 2019; Revised July 29, 2019

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

#### I. Approval of Minutes

Meeting held on June 14, 2019

#### II. Working Group Meeting Summaries

None

#### III. Unfinished Business

- A. AC17-12-02: Legislative Cost Monitoring
- B. AC19-06-01: 3/31/2019 Experience Review of Methodologies

#### IV. New Business

- A. AC19-08-01: Third Quarter 2019 Review of Diagnostics
- B. AC19-08-02: 1/1/2020 Filing Loss Adjustment Expense Experience Review
- C. AC19-08-03: 1/1/2020 Filing Review of Alternative Loss Projection Methodologies
- D. AC19-08-04: Impact of Claim Settlement Rate Changes on ALAE Development
- E. AC19-08-05: Review of Loss Development Tail Methodology (sent under separate cover)

#### V. Matters Arising at Time of Meeting

- VI. Next Meeting Date: September 3, 2019
- VII. Adjournment

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#### Item AC17-12-02 Legislative Cost Monitoring

At the December 5, 2018 meeting, the Committee reviewed updated cost monitoring information related to the reforms of Senate Bill No. 863 (SB 863), Senate Bill No. 1160 (SB 1160), and the Medical Treatment Utilization Schedule (MTUS) Drug Formulary adopted pursuant to Assembly Bill No. 1124. At that meeting, it was observed that while the specific SB 863 provisions related to weekly permanent disability (PD) benefit minimums and maximums and changes to PD rating computations appear to have emerged as expected, overall indemnity cost levels in 2013 and 2014 have been flat to declining. As a result, the Committee recommended that staff review the overall impact of SB 863 on indemnity cost levels. The Committee also noted that the review of the utilization review (UR) related provisions of SB 1160 and the MTUS Drug Formulary were preliminary based on six months of data and recommended these reforms be reviewed again once a full year of post-reform data is available.

#### SB 863 Impact on Overall Indemnity Cost Levels

At the March 18, 2019 meeting, the Committee reviewed an initial analysis of the estimated overall impact of SB 863 on indemnity cost levels. The approach presented at the meeting assumed the significant difference between the actual change in indemnity severities for accident years 2013 and 2014 and the change projected based on the measurable provisions of SB 863 and pre-reform trends was primarily attributable to SB 863. However, the Committee noted that other factors, such as changing economic conditions, have likely also dampened recent indemnity cost levels, suggesting that the recommended -10% adjustment to the on-level severity adjustment factors determined on this basis is an upper bound on the magnitude of the SB 863 impact. The Committee also noted that the SB 863 reforms also likely impacted indemnity costs for some pre-2013 accident years which have also experienced a recent speedup in claim settlement and reductions in temporary disability (TD) duration. The Committee recommended that staff further refine the estimated impact by reviewing recent changes in TD duration and average PD ratings.

Exhibit S10.2 of Item AC19-08-01 shows average TD duration based on WCIRB permanent disability claim survey data. In the four years prior to SB 863 (2009 to 2012 at first survey level and 2008 to 2011 at second survey level), average TD duration was declining at a rate of approximately 2% per year. In the four years since SB 863, average TD duration has declined at a rate of approximately 3.25% per year. The additional 1.25% decline in average TD duration over the four-year period results in a total 5% reduction in TD costs or a 2.5% reduction in indemnity costs (TD costs are approximately half of all indemnity costs based on the WCIRB's latest report on losses and expenses).

Exhibit S11 of Item AC19-08-01 shows average PD rating based on WCIRB unit statistical data. Shortly prior to SB 863, median PD ratings had generally been increasing. Over the last several calendar years, average and median PD ratings have declined significantly. This decline correlates with an acceleration in claim settlement rates during this period resulting in earlier settlements of PD claims, which is also related to the recent decline in TD duration discussed above. In addition, Exhibit S11 of Item AC19-08-01 is based on unit statistical data which often includes claims adjusters' estimates of the PD rating rather than the final PD rating. As a result, rather than basing an estimate of the SB 863 impact directly on the observed changes in average or median PD rating estimates, staff believes it is reasonable to judgmentally assume a decline in PD costs due to SB 863 reform related speed-ups in claim settlement and TD duration. Assuming a total 5% reduction in PD costs, consistent with the assumed reduction in TD duration, results in a 2% reduction in overall indemnity costs (PD costs are approximately 40% of all indemnity costs based on the WCIRB's latest report on losses and expenses).

<sup>&</sup>lt;sup>1</sup> The change from 2014 to 2015 was tempered by 50% given a change in survey sampling that occurred during this period.

Actuarial Committee Meeting Agenda for August 1, 2019

The combined impact of the estimates above is an additional 4.5% reduction in overall indemnity cost levels resulting from SB 863 beyond the impact of those reform provisions that have been explicitly measured. Given that the reductions in average TD duration and average PD rating appeared to have occurred steadily over the 2012 through 2015 accident years, staff recommends distributing the impact of the 4.5% reduction in indemnity costs uniformly over accident years 2012 through 2015 for purposes of indemnity loss on-leveling.

#### SB 1160 Provisions Related to UR and MTUS Drug Formulary

At the meeting, staff will present an update to the cost impact analysis of SB 1160 provisions related to UR and the new Drug Formulary, both effective January 1, 2018, using medical transaction data through December 31, 2018. Slides outlining the updated analysis are attached.

- Senate Bill No. 1160 (SB 1160) Utilization Review (UR) restrictions in the first 30 days
  - Effective in 2018
  - An updated review of the first year of UR reforms for this meeting
- Assembly Bill No. 1124 Drug Formulary (AB 1124)
  - Effective in 2018
  - An updated review of the first year of post-formulary experience for this meeting



#### **SB 1160 UR Restrictions – Background**

- Effective on injuries occurring on 1/1/2018 or after
- Treatment requests are automatically authorized without prospective UR if:
  - within 30 days of the DOI
  - meet specified conditions
- Conditions to be met:
  - Accepted body part or condition
  - Performed by a member of the Medical Provider Network (MPN) or Health Care Organization (HCO), or by a designated physician
  - Allowed for in MTUS
  - Not one of enumerated treatment types:
    - Non-emergency inpatient or outpatient surgery
    - Psychological treatment services
    - Home health care services
    - Imaging and radiology services (excluding x-rays)
    - o Durable medical equipment ≥ \$250
    - o Electrodiagnostic medicine
    - o Pharmaceuticals not exempted by drug formulary
- Preliminary cost impact analysis of the SB 1160 UR restrictions for 1/1/2017 Pure Premium Rate Filing:
  - Impact on medical +0.1% of the total losses and LAE offset by reduced UR costs



## Review of SB 1160 UR Restrictions – Analysis Based on 12/31/2018 Experience

- WCIRB's medical transaction data
  - Accident dates between 1/1 and 12/31 in 2016, 2017 and 2018
  - Medical services rendered within 30 days of the accident dates
- Identified services excluded from the UR restrictions in the medical data
- Compared the medical service utilization and payments in 2018 vs. 2017
  - Transactions per claim, paid per transaction and paid per claim
  - Assess if there were increases in utilization of certain types of medical services in the first 30 days of treatment
  - Compare utilization of medical services in the first 30 days vs. after 30 days (1, 3 and 6 months)

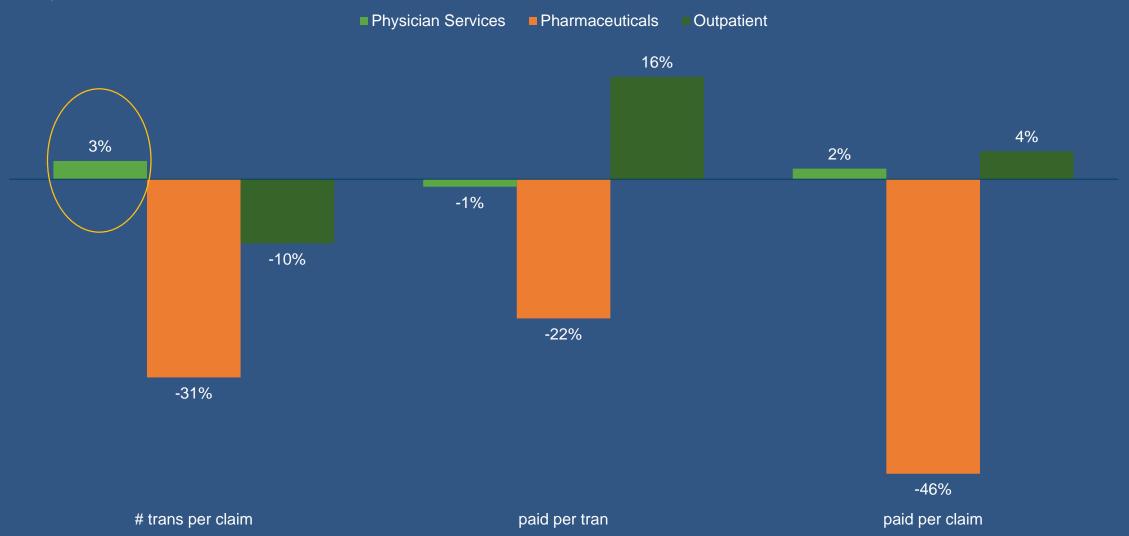


#### **Total Medical Payments and Transactions: AY2018 vs. AY2017**

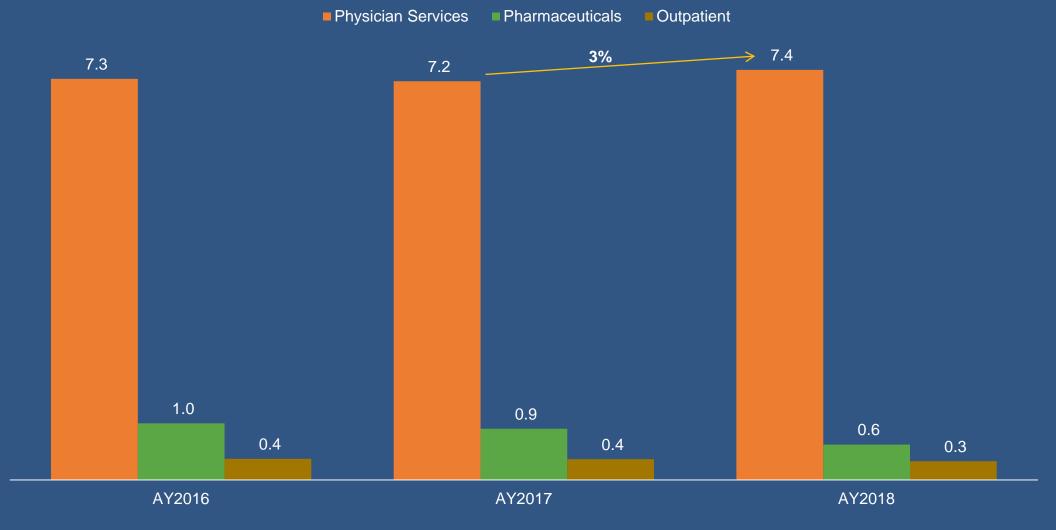
- Within 30 days of the injury
  - Claim count: up by 2%
  - Total paid: up by 4%
    - Paid per transaction: up by 3%
    - Transactions per claim: down by 1%
    - Paid per claim: up by 2%
- Paid MCCP per indemnity claim: up by 9% for AY 2018 at 15 months



## Changes in Transactions and Payments – Three Leading Types of Medical Services AY2018 vs. AY2017 (within 30 days of the accident date)

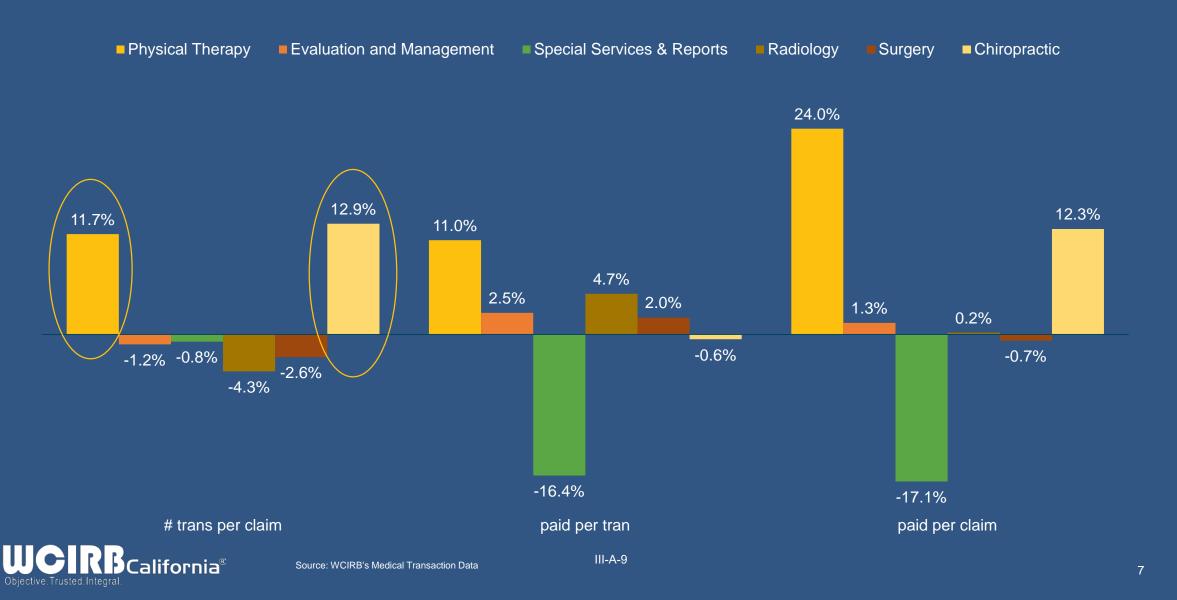


## Number of Transactions per Claim – Three Leading Types of Medical Services (within 30 days of the accident date)





## Changes in Transactions and Payments – Leading Types of Physician Services AY2018 vs. AY2017 (within 30 days of the accident date)

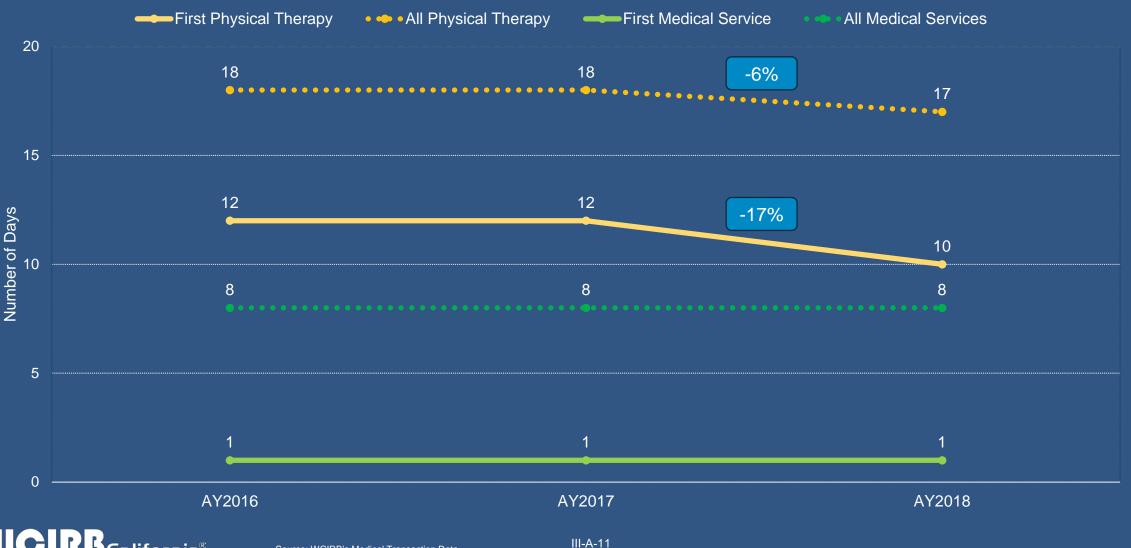


## Number of Transactions per Claim – Leading Types of Physician Services (within 30 days of the accident date)





### Changes in Median Time between Injury Date and Receipt of Physical Therapy (within 30 days of the accident date)



## Changes in Transactions and Payments – Leading Types of Physician Services AY2018 vs. AY2017 (3 months after 30 days of the accident date)

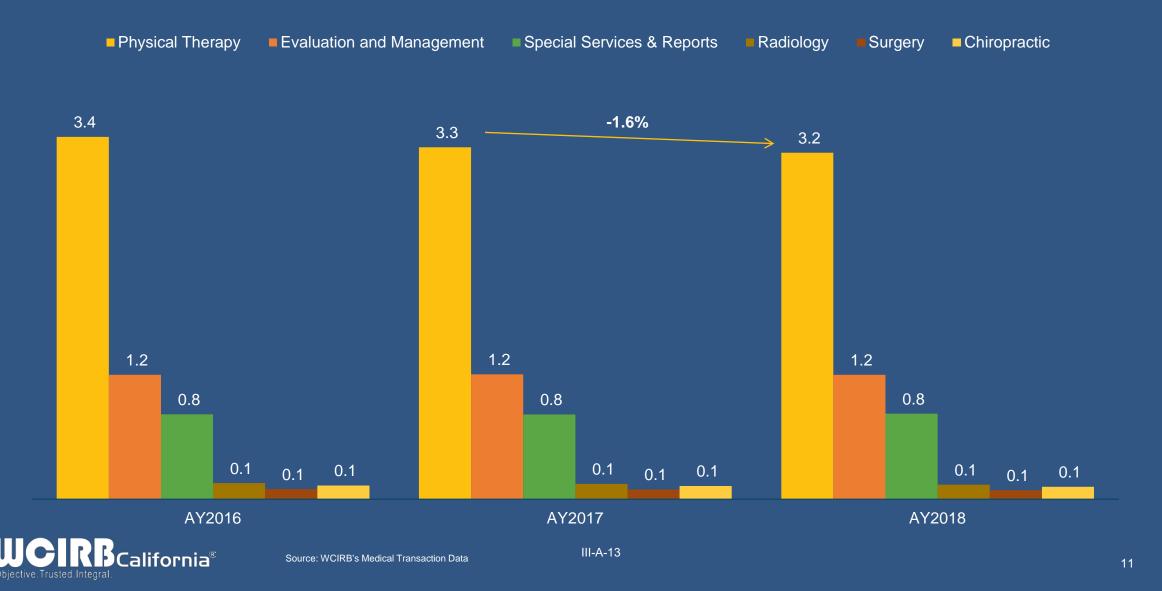
As of July 7, 2019



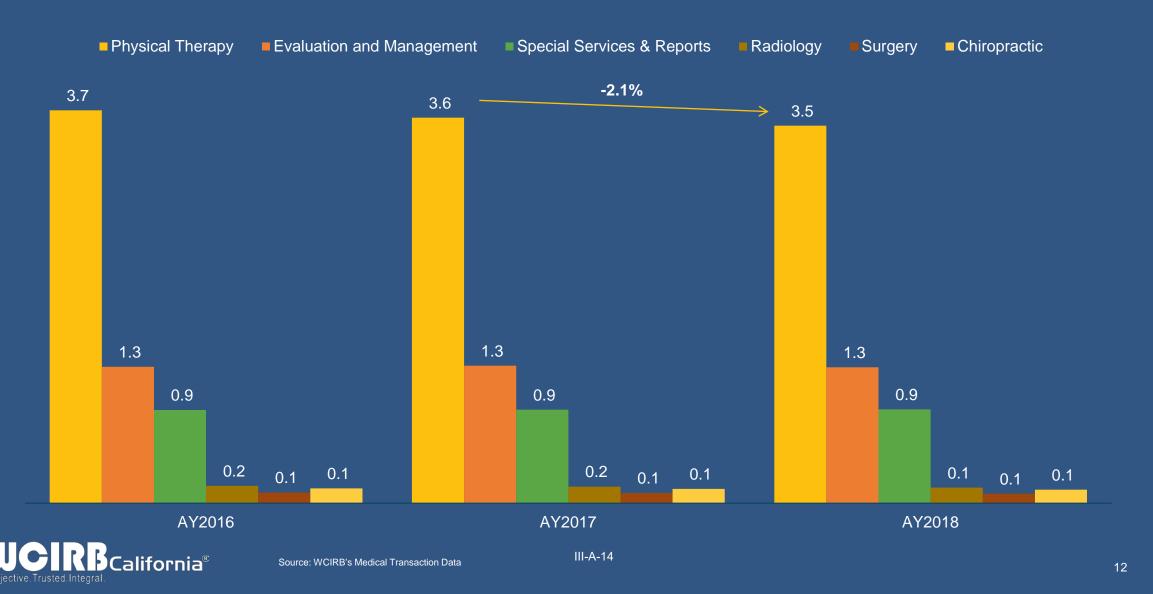
Source: WCIRB's Medical Transaction Data

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## Number of Transactions per Claim – Leading Types of Physician Services (3 months after 30 days of the accident date)



## Number of Transactions per Claim – Leading Types of Physician Services (4 months after the accident date regardless of first 30 days)



### Paid Medical Cost Containment Program Costs per Claim

As of March 31, 2019





Legislative Cost Monitoring Update

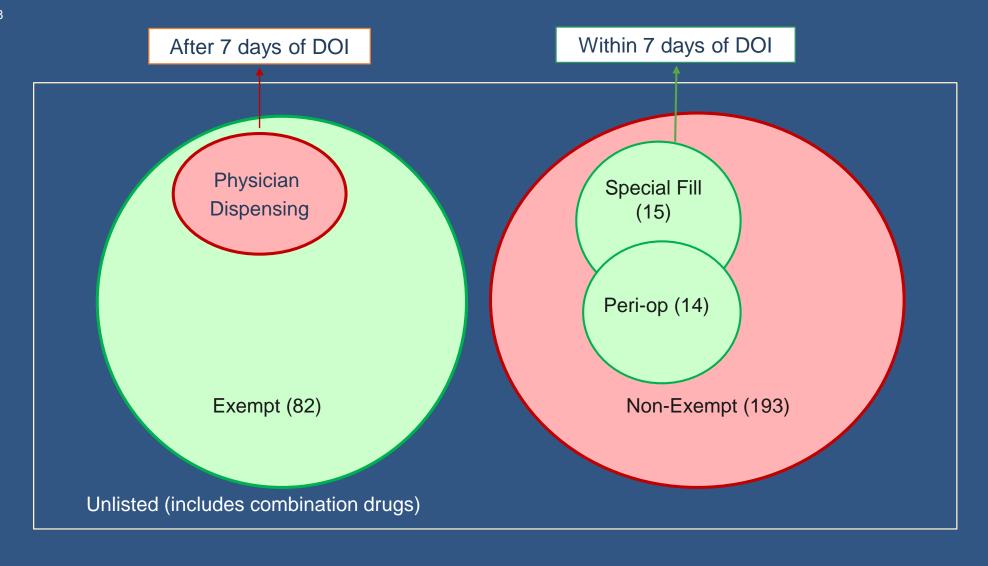
## Overview of AB 1124 Drug Formulary – Analysis Based on 12/31/2018 Experience

- AB 1124 required the DWC to adopt an evidence-based drug formulary in the California workers' compensation system.
- Primary goals of the Formulary:
  - Regulate prescribing of opioids
  - Reduce frictional costs (from UR and IMR) in the system
  - Ensure medically necessary and timely medications for injured workers
- The new MTUS Drug Formulary became effective January 1, 2018.
- Preliminary cost impact analysis of the drug formulary for 7/1/2018 Pure Premium Rate Filing:
  - Impact on frictional costs (UR and IMR)
    - Approximately -0.1% of the total losses and LAE
  - Impact on pharmaceutical costs opioids, compounds, physician dispensing and brand name drugs
    - Approximately -0.4% of the total losses and LAE (10% reduction in pharmaceutical costs)



### MTUS Drug List – 275 Drug Ingredients (initial version)

As of January 2018



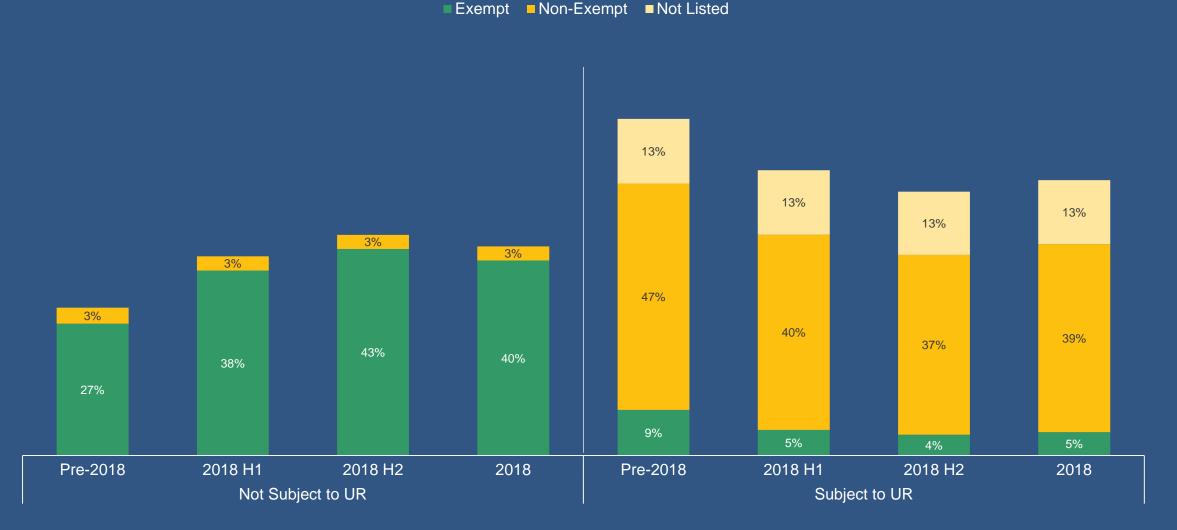


### **Changes Made to the MTUS Drug List**

- MTUS drug list has been updated quarterly to reflect changes in the MTUS treatment guidelines.
- Drugs added and deleted from the MTUS list since 1/1/2018 for treatment of:
  - Eye disorders
  - Chronic pain and those addressed in the Opioid Guidelines
  - Traumatic brain injury (effective 2/15/2019)
  - Post-traumatic stress disorder (effective 8/1/2019)
- The Pharmacy Therapeutics Committee plans to add a unique drug identifier to facilitate drug mapping.

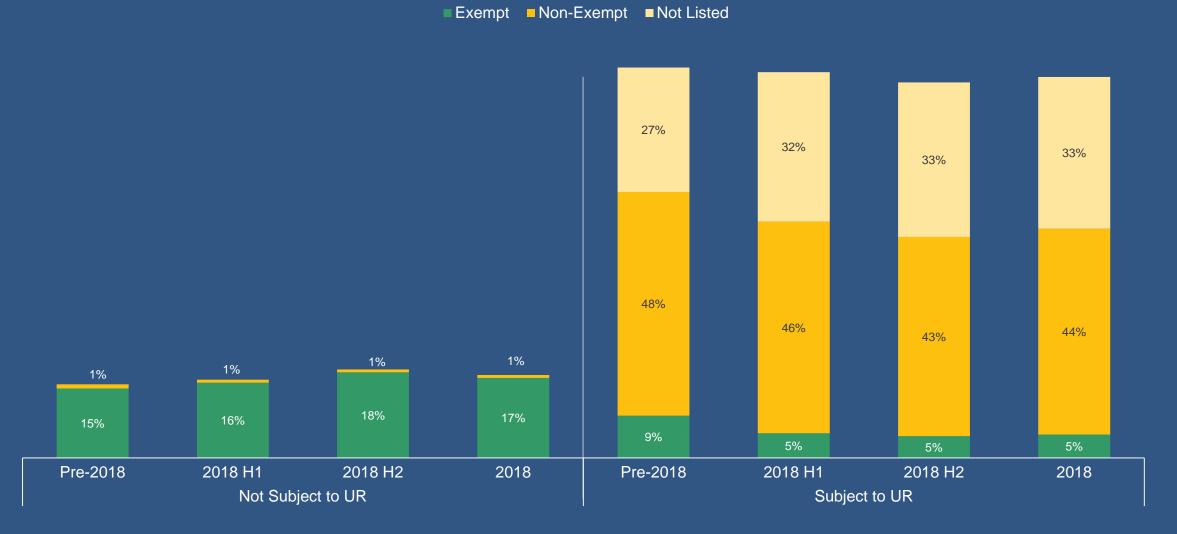


### **Share of Pharmaceutical Transactions by the Drug Formulary Category**





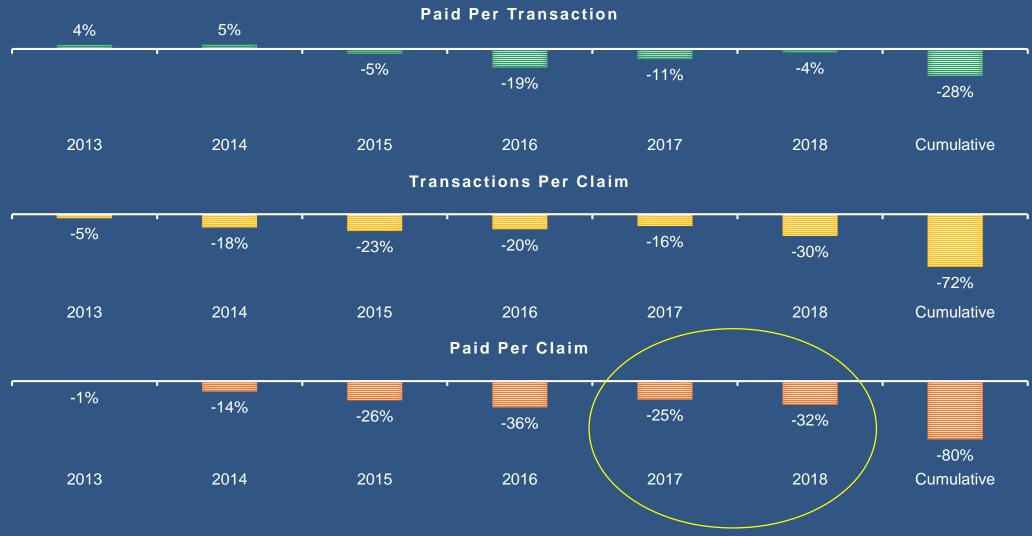
### **Share of Pharmaceutical Payments by the Drug Formulary Category**





### % Change in *Pharmaceutical* Cost per Claim

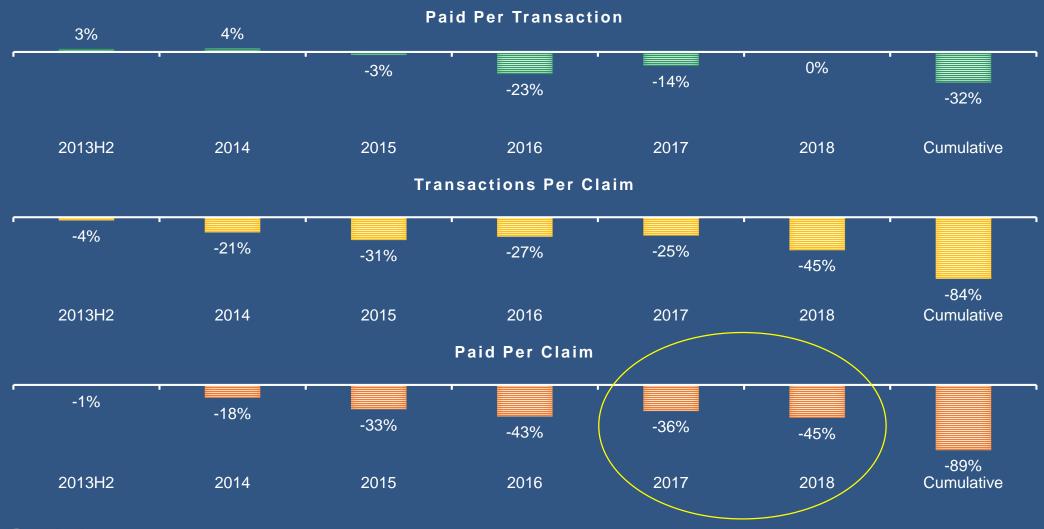
As of April 7, 2019



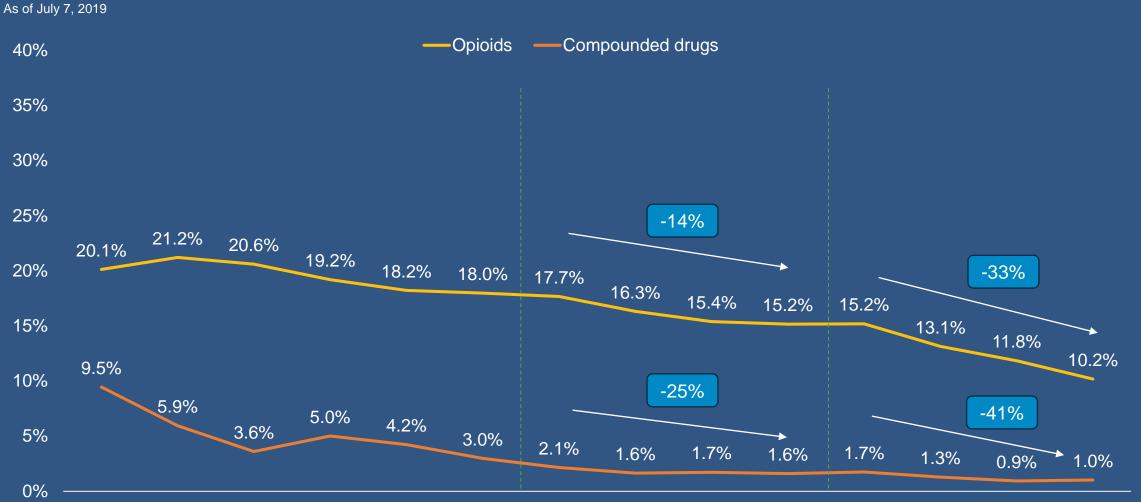


### % Change in *Opioid* Cost per Claim

As of April 7, 2019



### **Share of All Drug Payments to Opioids and Compounds**



2015 Q3 2015 Q4 2016 Q1 2016 Q2 2016 Q3 2016 Q4 2017 Q1 2017 Q2 2017 Q3 2017 Q4 2018 Q1 2018 Q2 2018 Q3 2018 Q4





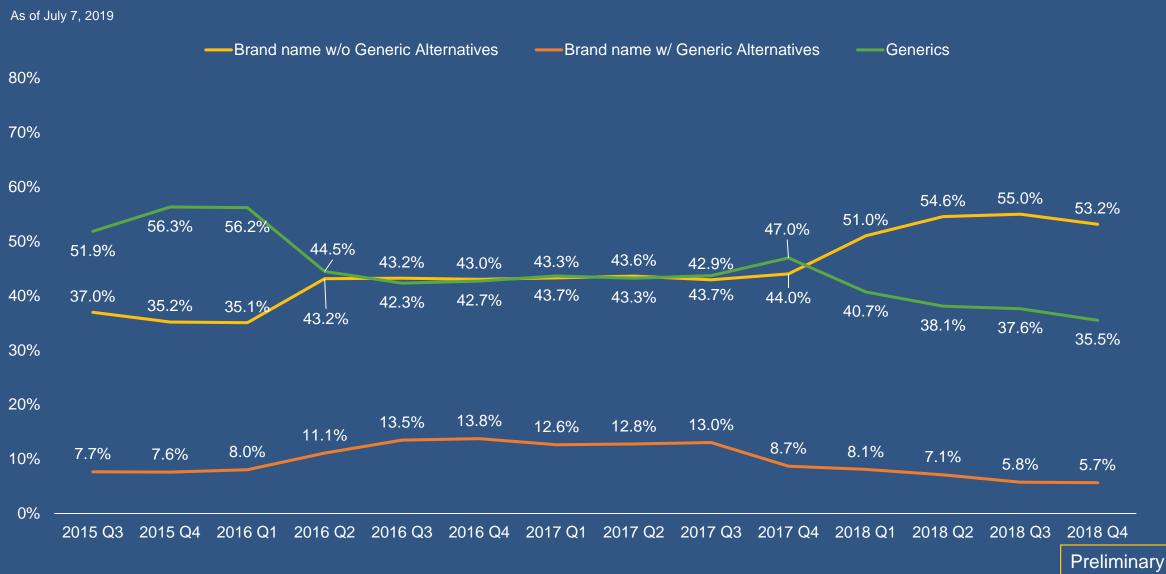
## Share of All Drug Payments to Physician-Dispensed Drugs Subject to UR (excl. opioids and compounded drugs)







#### **Share of All Drug Payments to Brand Name vs. Generics**



### **Share of All Drug Prescriptions: Brand Name vs. Generics**

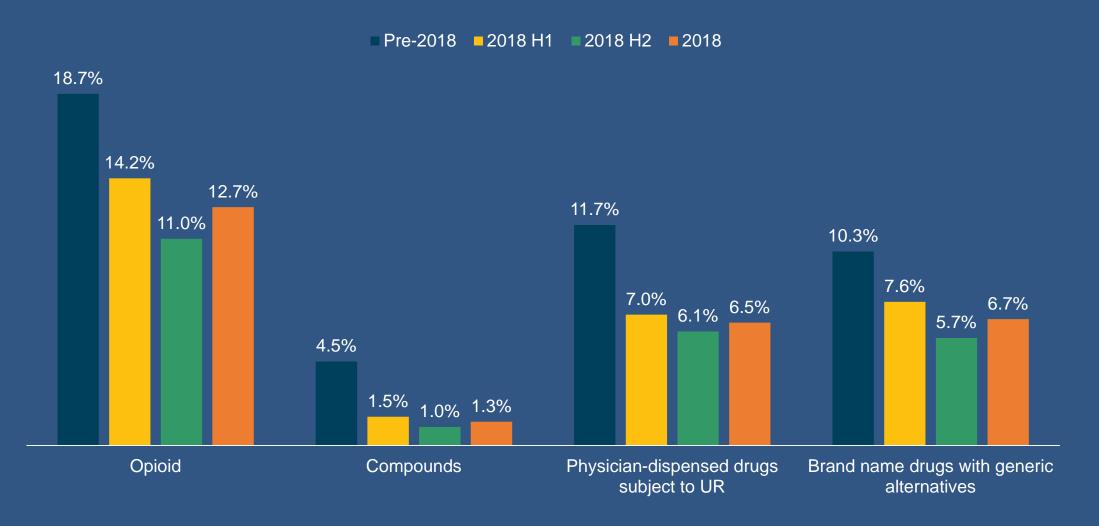
As of July 7, 2019 —Brand name w/o Generic Alternatives —Brand name w/ Generic Alternatives Generics 100% 88.5% 88.2% 88.0% 87.3% 86.0% 85.9% 85.4% 85.0% 85.1% 84.6% 84.0% 83.3% 83.1% 82.6% 80% 60% 40% 20% 11.4% 9.7% 9.2% 9.3% 9.1% 9.1% 9.0% 8.6% 8.9% 9.1% 8.8% 8.5% 8.1% 8.2% 3.9% 3.7% 4.5% 3.8% 2.3% 2.9% 2.5% 2.1% 2.2% 6.7% 6.7% 6.2% 6.0% 6.4% 0% 2015 Q4 2016 Q1 2016 Q2 2016 Q3 2016 Q4 2017 Q1 2017 Q2 2017 Q3 2017 Q4 2018 Q1 2018 Q2 2018 Q3



Preliminary

### **Summary of Share of Total Drug Payments by Prescribing Category**

As July 7, 2019





#### Item AC19-06-01 3/31/2019 Experience – Review of Methodologies

At the June 14, 2019 meeting, the Committee reviewed a preliminary analysis of statewide experience through March 31, 2019. Exhibits 1 through 8 contain an updated analysis of March 31, 2019 experience. In total, approximately 100% of the market is included. Wage and loss levels are 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 January 1, 2019.

The updated information differs from what was presented at the June 14, 2019 meeting in that this analysis reflects: (a) the inclusion of additional insurer data submissions and insurer data call corrections, (b) updates to the wage level and indemnity claim frequency projections based on UCLA's June 2019 forecasts, (c) adjustments to the medical loss development projections and medical on-level adjustments for the impact of the recent pharmaceutical cost reductions adopted by the Committee at the June 14, 2019 meeting, and (d) updates to the indemnity on-level adjustments for the impact of wage inflation to reflect the most current data and statistical relationship between average wage levels and average indemnity benefits (discussed at the March 18, 2019 meeting).

As shown on Exhibit 8, the projected policy year 2020 loss to the industry average filed pure premium ratio based on March 31, 2019 experience and the January 1, 2020 industry average filed pure premium rate level is 0.560. (The projected loss ratio reflected in the analysis presented at the June 14, 2019 meeting was 0.549.)

Additional supplemental information is included in Exhibits 9 through 12.

III-B-1

<sup>&</sup>lt;sup>1</sup> In the January 1, 2020 Pure Premium Rate Filing, ratios will be adjusted to the July 1, 2019 industry average filed pure premium

### California Workers' Compensation Accident Year Experience as of March 31, 2019

	Earned	Paid	Indemnity	Paid	Medical		Total	Loss
<u>Year</u>	<u>Premium</u>	<u>Indemnity</u>	Reserves	Medical**	Reserves	IBNR*	Incurred**	Ratio*
1986	3,506,609,097	1,383,116,214	4,696,354	1,141,069,438	32,902,227	18,852,369	2,580,636,602	0.736
1987	4,374,085,383	1,505,867,310	6,185,596	1,332,314,887	39,173,789	57,912,715	2,941,454,297	0.672
1988	5,173,049,472	1,702,887,219	6,411,903	1,539,553,177	35,082,864	38,394,980	3,322,330,143	0.642
1989	5,676,279,371	1,939,834,674	8,364,069	1,794,847,180	50,360,007	39,588,930	3,832,994,860	0.675
1990	5,705,878,797	2,260,136,023	8,187,178	2,041,092,148	48,404,287	60,232,828	4,418,052,464	0.774
1991	5,872,566,346	2,479,929,463	14,313,664	2,197,221,205	54,477,997	61,907,918	4,807,850,247	0.819
1992	5,692,939,950	1,978,495,103	12,429,314	1,761,651,468	52,721,173	62,035,351	3,867,332,409	0.679
1993	5,942,544,967	1,694,480,879	13,707,161	1,511,590,704	71,795,669	41,193,634	3,332,768,047	0.561
1994	5,034,831,820	1,627,162,824	20,470,114	1,462,799,902	86,145,428	44,558,857	3,241,137,125	0.644
1995	3,790,122,732	1,763,757,976	26,907,658	1,614,050,035	100,551,537	54,054,205	3,559,321,411	0.939
1996	3,748,266,525	1,952,710,231	33,327,458	1,709,419,534	104,902,971	71,295,292	3,871,655,486	1.033
1997	3,928,295,572	2,314,769,584	42,246,558	2,005,310,421	137,495,048	102,063,629	4,601,885,240	1.171
1998	4,333,560,338	2,769,276,578	53,719,836	2,625,405,204	224,719,529	202,348,036	5,875,469,183	1.356
1999	4,551,546,853	3,050,289,815	55,050,181	3,018,397,503	195,608,979	247,279,793	6,566,626,271	1.443
2000	5,923,031,823	3,421,624,057	72,139,293	3,543,359,836	227,664,515	413,299,589	7,678,087,290	1.296
2001	10,120,534,867	4,826,547,365	108,553,634	5,325,276,765	392,601,045	620,105,914	11,273,084,723	1.114
2002	13,434,933,190	4,757,722,120	100,074,490	5,446,737,719	348,299,064	891,962,884	11,544,796,277	0.859
2003	19,476,317,174	4,524,176,610	155,298,113	5,012,853,957	366,359,195	1,266,351,826	11,325,039,701	0.581
2004	23,096,787,993	3,187,898,211	131,037,417	4,013,933,588	314,579,553	1,383,892,211	9,031,340,980	0.391
2005	21,398,213,516	2,510,240,239	115,621,027	3,609,067,188	308,377,144	1,119,040,723	7,662,346,321	0.358
2006	17,232,800,048	2,593,393,462	125,477,916	3,712,607,028	336,396,264	780,014,540	7,547,889,210	0.438
2007	13,275,649,610	2,727,274,188	145,040,143	3,975,419,488	378,326,001	861,011,214	8,087,071,034	0.609
2008	10,764,323,955	2,770,334,825	162,837,358	3,965,808,413	384,893,373	534,172,787	7,818,046,756	0.726
2009	8,896,709,168	2,635,951,007	159,132,232	3,763,038,281	375,169,585	526,737,802	7,460,028,907	0.839
2010	9,398,228,398	2,638,896,065	167,628,893	3,834,022,165	372,090,950	606,343,669	7,618,981,742	0.811
2011	10,129,285,077	2,598,490,238	181,088,413	3,456,673,655	397,352,825	816,031,403	7,449,636,534	0.735
2012	11,692,134,220	2,607,277,617	226,624,384	3,315,563,021	437,395,736	1,009,801,100	7,596,661,858	0.650
2013	14,149,827,161	2,609,019,076	254,410,788	3,126,537,115	491,123,538	1,742,570,108	8,223,660,625	0.581
2014	15,997,914,039	2,654,684,051	359,773,250	2,957,257,972	570,848,001	2,842,633,281	9,385,196,555	0.587
2015	17,059,168,432	2,533,728,675	489,211,212	2,736,789,782	766,863,317	3,471,587,166	9,998,180,152	0.586
2016	17,952,877,787	2,148,412,575	649,240,851	2,348,478,166	976,318,486	3,881,776,066	10,004,226,144	0.557
2017	17,672,417,401	1,513,575,313	910,934,330	1,818,962,435	1,281,400,143	4,617,739,953	10,142,612,174	0.574
2018	17,420,199,712	682,690,511	961,605,325	1,044,242,404	1,568,577,049	5,814,092,079	10,071,207,368	0.578
2019	3,993,572,512	19,602,795	109,885,445	35,674,333	253,515,650	1,819,196,448	2,237,874,671	0.560

<sup>\*</sup> Shown for informational purposes only.

Source: WCIRB quarterly experience calls

<sup>\*\*</sup> 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.

# Incurred Indemnity Loss Development Factors

207/406	0.999	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.002																1.001
105/192	190/100	0.999	1.002	1.002	1.001	1.003	1.002	1.002	1.002	1.002	1.002															1.002
102/171	1/2001		1.001	0.999	1.002	1.000	1.002	1.003	1.001	1.003	1.003	1.002														1.002
174/450	601/1			1.000	1.003	1.004	1.003	1.002	1.003	1.001	1.003	1.001	1.004													1.002
150/117	150/14/				1.002	1.004	1.004	1.003	1.005	1.002	1.002	1.003	1.004	1.002												1.003
117/135	177					1.002	1.002	1.004	1.005	1.005	1.008	1.006	1.006	1.005	1.009											1.007
(in months)	130/123						1.004	1.004	1.007	1.006	1.008	1.007	1.005	1.008	1.003	1.007										1.006
Age-to-Age (in months)	11/07							1.005	1.008	1.009	1.012	1.015	1.010	1.008	1.009	1.008	1.010									1.010
je-to-Age	66/1								1.007	1.011	1.016	1.015	1.016	1.012	1.012	1.011	1.013	1.011								1.011
Aç	10/66									1.010	1.020	1.025	1.022	1.020	1.022	1.018	1.016	1.017	1.016							1.016
97/76	01110										1.018	1.026	1.039	1.031	1.030	1.025	1.021	1.023	1.024	1.022						1.022 1.097
75/63	20/07											1.037	1.049	1.051	1.045	1.043	1.043	1.037	1.032	1.033	1.030					1.030
63/64	000												1.063	1.072	1.066	1.063	1.067	1.062	1.053	1.059	1.047	1.049				1.049
71/20	60/10													1.100	1.104	1.116	1.124	1.112	1.109	1.093	1.093	1.097	1.085			1.085
70/08	39121														1.216	1.245	1.233	1.250	1.225	1.218	1.201	1.224	1.195	1.187		1.187 1.526
27/15	21/12															1.618	1.670	1.665	1.657	1.662	1.604	1.625	1.630	1.606	1.588	1.588
, took	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Selected (a) Cumulative

(a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and six-year average for the subsequent age-to-age factors.

Incurred Indemnity Loss Development Factors (Continued)

	ULT/411Inc (b)																					1.004
	411/399	1.001	1.001	1.000																	1.001	1.004
	399/387	1.001	1.000	1.000	1.000																1.000	1.005
	387/375	1.000	1.000	1.000	1.000	1.000															1.000	1.005
	375/363	1.001	0.999	1.000	1.000	1.001	1.000														1.000	1.005
	363/351	1.001	1.001	1.000	1.000	1.000	1.000	1.001													1.000	1.005
	351/339	1.001	1.001	1.001	1.000	1.001	1.001	1.000	1.000												1.001	1.006
	339/327	1.001	1.000	1.001	1.001	1.000	1.000	1.001	1.001	1.000											1.001	1.006
onths)	327/315	1.000	1.001	1.001	1.002	1.000	1.000	1.001	1.000	1.000	1.000										1.000	1.007
-Age (in m	315/303		1.001	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000 1.000 1.000	1.000									1.000	1.007
Age-to	303/291			1.000	1.000	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.001								1.000	1.007
	291/279										1.000		1.000	0.999							1.000	1.007
	279/267					1.000	1.002	1.001	1.000	1.001	1.000	1.000	1.001	1.001	1.000						1.001	1.007
	267/255						1.000	1.001	1.001	1.000	1.001	1.001	1.001	1.000	1.001	1.001					1.001	1.008
	255/243							1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	0.999	1.000				1.001	1.008
	243/231								1.000	1.000	1.001	1.001	1.001	0.999	1.000	1.000	1.001	1.002			1.001	1.009
	231/219									1.001	1.001	1.001	1.002	0.999	1.001	1.000	1.002	1.000	1.001		1.001	1.009
	219/207										1.000	1.000	1.001	1.002	1.002	1.000	1.002	1.000	1.002	1.001	1.001	1.011
	Accident Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Selected (a)	Cumulative

The ULT/411Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years. (q)

# **Incurred Medical Loss Development Factors**

207/195	1.008	.011	.010	.008	.004	.012	000	0.995	966'	666.																1.001
195/183 20										0.999	.001															1.001 1.035
183/171 19	•									0.999 0		666.														1.002
171/159 18										0.998 0			866.													1.002 1
159/147 17				_						1.007 0				.003												1.005 1 1.044 1
147/135 15					_	·	•	•	•	1.013	•		·	•	.003											1.006 1 1.050 1
(b) 135/123 147						←.	`	•	`	1.020 1.	`	`	`	`	`	002										1.007 1. 1.057 1.
onths) (b) /111 135							<u></u>	•	`	1.027	`	`	`	`	`	`	004									1.011 1.068 1.
Age-to-Age (in months) (b) 99/87 111/99 123/111								7.		1.028 1.0	•		`				`	110								1.010 1.0 1.079 1.0
Age-to-A <u>111</u>									1.0	`	`	`	`	`	`	`	`	`	8							
8/66										1.03	1.04	1.03	1.04	1.03	1.02	1.02	1.01	1.011	1.00							1.008
87/75											1.043	1.062	1.057	1.049	1.041	1.035	1.025	1.023	1.016	1.014						1.014
75/63												1.056	1.074	1.061	1.069	1.058	1.049	1.036	1.026	1.025	1.023					1.023
63/51													1.080	1.076	1.078	1.087	1.080	1.068	1.059	1.051	1.031	1.033				1.033
51/39														1.095	1.114	1.116	1.133	1.117	1.103	1.078	1.077	1.064	1.050			1.050 1.224
39/27															1.171	1.189	1.182	1.212	1.185	1.153	1.119	1.135	1.117	1.093		1.093
27/15																1.378	1.431	1.431	1.452	1.391	1.353	1.325	1.313	1.287	1.260	1.260
Accident Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Selected (a) Cumulative

(a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and six-year average for the subsequent age-to-age factors. (b) Incurred medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.

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Incurred Medical Loss Development Factors (Continued)

	ULT/411Inc (c)																					1.029
	411/399	0.999	1.000	1.001																	1.000	1.029
	399/387	0.997	1.001	1.000	1.004																1.001	1.030
	387/375	1.002	0.999	0.999	1.004	0.999															1.001	1.030
	375/363	1.003	0.999	0.999	0.998	1.001	1.000														1.000	1.030
	363/351	1.003	1.004	1.000	1.001	0.999	0.998	0.999													1.000	1.030
	351/339	1.005	1.000	1.004	1.002	1.001	1.000	1.000	0.998												1.001	1.031
		1.003																			1.001	1.032
nonths)	327/315	1.003	1.004	1.004	1.005	1.005	1.003	0.999	1.001	0.999	0.998										1.001	1.033
o-Age (in r	315/303		1.002	1.004	1.005	1.003	1.002	1.002	1.001	0.999	1.002	1.000									1.001	1.034
Age-t	303/291			1.002	1.006	1.006	1.005	1.000	0.997	1.001	1.000	1.000	0.998								0.999	1.033
	291/279									1.003		0.996	0.997	0.999							1.000	1.033
	279/267					1.010	1.005	1.006	1.002	1.001	1.003	0.999	966.0	0.998	966.0						0.999	1.032
	267/255						1.005	1.005	1.003	1.004	1.003	1.001	1.001	0.997	0.998	1.000					1.000	1.032
	255/243							1.008	1.005	1.002	1.005	1.001	1.004	1.000	1.001	0.998	1.000				1.001	1.032
	243/231								1.008	1.005	1.003	1.013	1.006	1.007	1.000	0.997	966.0	1.002			1.001	1.034
	231/219									1.006	1.001	1.013	1.005	966.0	1.003	0.995	1.000	0.997	0.998		0.998	1.032
	219/207										1.009	1.005	1.011	1.012	1.007	1.000	0.999	0.998	0.997	1.002	1.001	1.032
	Accident Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Selected (a)	Cumulative

The ULT/411nc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years. (c)

Paid Indemnity Loss Development Factors

	207/195 1.002	1.003	1.004	1.004	1.005	1.006	1.005	1.004	1.005	1.005																1.005	)
	195/183	1.003	1.004	1.005	1.005	1.006	1.006	1.004	1.006	1.005	1.007															1.006	:
	183/171		1.006	1.004	1.006	1.007	1.006	1.007	1.007	1.006	1.008	1.008														1.007	)
	171/159			1.007	1.007	1.008	1.008	1.007	1.008	1.007	1.009	1.008	1.011													1.009	)
	159/147				1.007	1.009	1.009	1.009	1.011	1.009	1.010	1.011	1.012	1.011												1.011	)
	147/135					1.009	1.010	1.010	1.011	1.012	1.015	1.014	1.014	1.015	1.016											1.015	1
	135/123						1.014	1.012	1.014	1.014	1.020	1.018	1.019	1.017	1.017	1.018										1.017	
	123/111							1.015	1.016	1.018	1.022	1.026	1.025	1.026	1.025	1.021	1.023									1.023	;
Age-to-Age (in months)	111/99								1.022	1.019	1.025	1.034	1.037	1.032	1.032	1.025	1.029	1.024								1.024	)
-	28/86									1.028	1.029	1.041	1.048	1.045	1.042	1.040	1.039	1.036	1.038							1.038	)
	87/75										1.039	1.045	1.057	1.062	1.061	1.054	1.056	1.053	1.053	1.047						1.047	)
	75/63											1.067	1.073	1.085	1.085	1.083	1.084	1.081	1.076	1.076	1.063					1.063	)
	63/51												1.104	1.121	1.127	1.132	1.135	1.129	1.129	1.123	1.111	1.109				1.109	· ·
	51/39													1.197	1.211	1.234	1.238	1.240	1.227	1.219	1.216	1.215	1.202			1.202	)
	39/27														1.436	1.468	1.499	1.505	1.481	1.477	1.490	1.501	1.476	1.459		1.459	)
	27/15															2.279	2.369	2.399	2.433	2.424	2.385	2.455	2.468	2.403	2.390	2.390	
	<u>Accident Year</u> 1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Selected (a) Cumulative	)

(a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors.

Paid Indemnity Loss Development Factors (Continued)

	ULT/411Inc (c)																					1.004	
	411Inc/411Pd (b)	600.1	1.005	1.005	1.005	1.003	1.003															1.004	
	411/399	1.00.1	1.000	1.000																		1.000	
	399/387	1.00.1	1.001	1.000	1.000																	1.000	
	387/375	1.00.1	1.000	1.001	1.001	1.001																1.001	
	375/363	1.00.1	1.000	1.001	1.001	1.001	1.001															1.001	
	363/351	1.00.1	1.001	1.001	1.001	1.000	1.001	1.001														1.001	
hs)	351/339	.00.1	1.001	1.001	1.001	1.001	1.000	1.001	1.001													1.001	
ye (in mont	327/315 339/327 351	1.00.1	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.001												1.001	
Age-to-Ag	327/315	1.00.1	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001											1.001	
	315/303		1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001										1.001	
	303/291			1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001									1.001	
	291/279				1.002	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.002	1.002								1.002	
	279/267					1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.002	1.002	1.003							1.002	
	267/255						1.001	1.001	1.001	1.002	1.002	1.002	1.002	1.003	1.002	1.003						1.003	
	255/243							1.001	1.001	1.001	1.002	1.002	1.003	1.002	1.003	1.002	1.003					1.003	
	243/231								1.001	1.001	1.002	1.002	1.003	1.003	1.003	1.002	1.003	1.003				1.003	
	231/219									1.002	1.002	1.003	1.002	1.004	1.004	1.003	1.004	1.003	1.004			1.004	
	219/207										1.001	1.002	1.004	1.005	1.005	1.004	1.005	1.004	1.004	1.005		1.004	
	Accident Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		Selected (a) Cumulative	

Three-year averages of the 411Inc/411Pd factors are selected.

The ULT/411Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years. © ©

Paid Medical Loss Development Factors

	207/195	2000 2000 2000 2000 2000 2000 2000 200	207/406	1.011		1.011	1.180	I
	195/183 2	1.012 1.017 1.014 1.018 1.012 1.012 1.011 1.011	105/102			1.012	1.195	I
	183/171	10.11 4 4 10.01 10.01 10.01 10.01 10.01 10.01 10.01 10.01	102/174	1.012		1.013	1.210	ı
	171/159	1.022 1.019 1.016 1.016 1.019 1.015 1.014 1.014	474/450	1.016 1.015 1.015		1.015	1.229	I
	159/147	1,020 1,020 1,020 1,020 1,018 1,017 1,017 1,017	150/117	1.018 1.019 1.016		1.018	1.250	I
	147/135	1.027 1.022 1.022 1.022 1.025 1.020 1.020 1.018	447/495	1.021		1.021	1.276	I
	135/123	1,030 1,026 1,026 1,024 1,033 1,023 1,029 1,029	105/100	1.024 1.022 1.021		1.022	1.305	I
(in months)	123/111	1.030 1.023 1.023 1.029 1.037 1.028 1.028 1.028	(in months)	1.030 1.026 1.025		1.027	1.340	I
Age-to-Age (in months)	111/99	1.037 1.033 1.053 1.054 1.054 1.029 1.023	Age-to-Age (in months)	1.034		1.028	1.377	I
	28/66	1.043 1.045 1.053 1.057 1.057 1.047 1.039 1.039	70/00	1.044		1.038	1.430	I
	87/75	1.055 1.066 1.063 1.063 1.067 1.067 1.060 1.055 1.055	07/75	1.062 1.059 1.056		1.056	1.510	1.499
	75/63	1.096 1.098 1.098 1.098 1.098 1.078 1.078	75/63	1.085 1.085 1.074		1.074	1.622	1.597
	63/51	1,128 1,130 1,150 1,133 1,113 1,128	62/64	1.1 1.133	1.112	1.112	1.803	1.758
	51/39	1.195 1.203 1.228 1.227 1.237 1.213 1.206 1.194	64/20	1.213	1.190	1.190	2.146	2.066
	39/27	1.352 1.352 1.385 1.390 1.390 1.359 1.359	70/06		1.392 1.365 1.344	1.344	2.884	2.745
	27/15	1.826 1.876 1.926 1.983 1.939 1.936 1.876	27/45	2	1.959 1.882 1.844	1.844	5.318	5.063
Unadjusted (a)	Accident Year	1995 1996 1996 1996 1999 2000 2000 2007 2007 2008 2011 2011 2015 2015	Adjusted (b)	2000 2000 2000 2000 2000 2000 2000 2011 2013	2014 2015 2016 2017	Selected (c)	Cumulative Unadjusted for Impact of SB 1160	Cumulative Adjusted for Impact of SB 1160(d)

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

These factors are adjusted for the losses paid prior to July 1, 2017 by -3.6%, -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. (a)

(c) (c)

Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors.

The cumulative factors for 27, 39, 51, 63, and 75 months are adjusted by 4.8%, -3.7%, -2.5%, -1.5%, and -0.7%, respectively, for the impact of the SB 1160 reductions in future lien

Paid Medical Loss Development Factors (Continued)

	) ULT/41lnc (f)		<u>ULT/411Inc (f)</u>	1.029
	411Inc/411Pd(e) 1.033 1.035 1.030 1.027 1.018 1.019		411Inc/411Pd (e) 1.033 1.035 1.036 1.027 1.018 1.019	1.027
	1.004 1.004 1.002 1.002		411 <u>1399</u> 1.004 1.002 1.002	1.002
	399/387 1.003 1.002 1.003		399/387 1.003 1.002 1.004	1.003
	387/375 1.003 1.003 1.004 1.003		387/375 1.003 1.003 1.004 1.004	1.004
	375/363 1.004 1.002 1.002 1.006 1.004		375/363 1.004 1.002 1.002 1.003 1.003	1.004
	363/351 1.004 1.003 1.003 1.003 1.003 1.003		363/351 1.004 1.003 1.003 1.003 1.003 1.004	1.003
_	351/339 1.004 1.003 1.003 1.003 1.003 1.003	_	351/339 1.003 1.003 1.003 1.003 1.003 1.003	1.003
Age-to-Age (in months)	339/327 1.004 1.004 1.005 1.005 1.003 1.003 1.004	Age-to-Age (in months)	1.004 1.004 1.003 1.003 1.003 1.003 1.004	1.003
Age-to-Age	327/315 1,005 1,006 1,006 1,006 1,002 1,002 1,002	Age-to-Age	327/315 1.005 1.005 1.003 1.003 1.003	1.004
	315/303 1.003 1.005 1.005 1.005 1.005 1.003 1.003 1.008		315/303 1.005 1.005 1.005 1.005 1.009	1.006
	303/291 1.004 1.005 1.006 1.006 1.006 1.006 1.006		303/291 1.004 1.006 1.004 1.005 1.007 1.007	1.005
	291/279 1.005 1.005 1.006 1.005 1.005 1.005 1.005 1.007		1.006 1.006 1.005 1.005 1.005 1.007 1.007	1.007
	1,005 1,006 1,006 1,006 1,006 1,008 1,008 1,008		1.004 1.005 1.005 1.008 1.008 1.011	1.009
	267/255 1.005 1.006 1.006 1.007 1.008 1.007		267/255 1.006 1.006 1.008 1.008 1.008	1.010
	1.005 1.005 1.005 1.007 1.013 1.010 1.010 1.007 1.008		1.007 1.010 1.010 1.010 1.008 1.007 1.010	1.008
	1.005 1.006 1.006 1.009 1.013 1.013 1.010 1.006		1,009 1,010 1,010 1,010 1,007 1,000 1,000 1,010	1.008
	231/219 1.006 1.007 1.014 1.010 1.010 1.010 1.010		1.009 1.014 1.013 1.010 1.010 1.009 1.009	1.009
	1.007 1.007 1.011 1.013 1.013 1.013 1.013 1.010 1.010		1.012 1.013 1.013 1.013 1.013 1.013 1.013	1.010
Unadjusted (a)	Accident Year 1983 1984 1985 1986 1986 1990 1990 1991 1995 1996 1996 1996 1996 1996 1997 1998 1998	Adjusted (b)	Accident Year 1983 1984 1985 1986 1986 1980 1990 1991 1992 1993 1994 1995 1996 1996 1996 1996 1996 1996 1997 1996 1997 1998	Selected (c) Cumulative

(e)

Six-year averages of the 411nc/411Pd factors are selected.

The ULT/411Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Age 255, Incurred from Age 255 to Ultimate

(q) p		
255Inq255Pd (b) 1.012 1.027 1.020 1.020 1.020 1.020		1.020
265/243 1.002 1.002 1.003 1.003 1.002 1.003		1.003
243/231 1.002 1.002 1.003 1.003 1.003 1.003 1.003		1.003
231/219 1.002 1.003 1.004 1.004 1.004 1.003 1.004 1.003		1.004
219/207 1.001 1.002 1.004 1.005 1.005 1.004 1.005 1.005		1.004
207/195 1.002 1.004 1.005 1.005 1.005 1.005 1.005 1.005		1.005
195/183 1.003 1.005 1.005 1.006 1.006 1.006 1.006 1.007		1.006
183/171 1.006 1.004 1.007 1.007 1.006 1.007 1.008 1.008		1.007
171/159 171/159 1.007 1.007 1.008 1.009 1.009 1.009 1.001 1.011		1.009
		1.011
147/135 147/135 1009 1010 1011 1015 1014 1015 1016		1.015
Age-to-Age (in mont 135/123 147/135 159/147 1.007 1.009 1.009 1.012 1.010 1.009 1.014 1.011 1.011 1.014 1.012 1.009 1.020 1.014 1.012 1.019 1.019 1.014 1.015 1.017 1.016 1.018 1.014 1.015 1.017 1.016 1.018 1.014 1.015 1.017 1.016 1.018		1.017
1.025 1.025 1.025 1.025 1.025 1.025 1.025 1.025 1.025		1.023
1022 1.022 1.037 1.037 1.032 1.032 1.025 1.025		1.024
1.028 1.029 1.045 1.045 1.045 1.045 1.039 1.036 1.038		1.038
1.039 1.045 1.067 1.067 1.067 1.067 1.064 1.054 1.053		1.047
1.067 1.085 1.085 1.085 1.084 1.084 1.086 1.076 1.076		1.055(c) 1.343
63/51 1.104 1.123 1.135 1.129 1.129 1.1131 1.1131		1.093(c) 1.467
1.197 1.197 1.238 1.238 1.240 1.270 1.219 1.216	1.202	2.384(c) 1.434(c) 1.180(c) 1.093(c) 1.055(c) 5.920 2.483 1.732 1.467 1.343
39/27 1.436 1.499 1.505 1.499 1.477 1.490	1.476	1.434(c) 2.483
2.779 2.369 2.369 2.433 2.424 2.385 2.455	2.468 2.403 2.390	2.384(c) 5.920
Accident Year 1992 1993 1993 1994 1996 1996 1997 1999 2000 2000 2004 2005 2005 2006 2007 2006 2007 2007 2008 2007 2010 2011	2015 2016 2017	Selected (a) Cumulative

(a) Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 255, 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 255Ino/255Pd 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 255, Incurred from Age 255 to Ultimate (Continued)

	ULT/411Inc (d)	•																1.004
	411/399	1.001	1.001	1.000													1.001	1.005
	399/387	1.001	1.000	1.000	1.000												1.000	1.005
	387/375	1.000	1.000	1.000	1.000	1.000											1.000	1.005
	375/363	1.001	0.999	1.000	1.000	1.001	1.000										1.000	1.005
nths)	363/351	1.001	1.001	1.000	1.000	1.000	1.000	1.001									1.000	1.005
Age-to-Age (in months)	351/339	1.001	1.001	1.001	1.000	1.001	1.001	1.000	1.000								1.001	1.006
Age-to-	339/327	1.001	1.000	1.001	1.001	1.000	1.000	1.001	1.001	1.000							1.001	1.006
	327/315	1.000	1.001	1.001	1.002	1.000	1.000	1.001	1.000	1.000	1.000						1.000	1.007
	315/303		1.001	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000					1.000	1.007
	303/291			1.000	1.000	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.001				1.000	1.007
	291/279				1.001	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	0.999			1.000	1.007
	279/267					1.000	1.002	1.001	1.000	1.001	1.000	1.000	1.001	1.001	1.000		1.001	1.007
	267/255						1.000	1.001	1.001	1.000	1.001	1.001	1.001	1.000	1.001	1.001	1.001	1.008
	Accident Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Selected (a)	Cumulative

The ULT/411Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years. **(**р

### A. Total Reported Indemnity Claim Counts

Accident	Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>					
2010						117,260					
2011					117,817	118,059					
2012				123,988	124,553	124,854					
2013			131,398	132,372	132,916	133,098					
2014		135,175	137,778	138,876	139,367						
2015	128,733	141,546	143,811	144,486							
2016	131,171	144,370	147,154								
2017	133,390	145,143									
2018	135,849										

### B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):									
<u>Year</u>	15-27	27-39	<u>39-51</u>	<u>51-63</u>	<u>63-75</u> <u>7</u>	5-Ultimate				
2011					1.002					
2012				1.005	1.002					
2013			1.007	1.004	1.001					
2014		1.019	1.008	1.004						
2015	1.100	1.016	1.005							
2016	1.101	1.019								
2017	1.088									
Latest Year	1.088	1.019	1.005	1.004	1.001					
Cumulative	1.125	1.034	1.014	1.010	1.006	1.005				
Acc. Year	<u>2018</u>	2017	<u>2016</u>	<u>2015</u>	2014	2013				
Ult. Claim Counts	152,826	150,060	149,260	145,870	140,206	133,716				

### C. Closed Indemnity Claim Counts

Accident		Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>						
2010						102,249						
2011					98,064	104,137						
2012				95,688	105,187	111,619						
2013			89,082	104,487	114,606	120,841						
2014		72,458	95,318	111,796	121,882							
2015	43,771	78,191	103,252	119,602								
2016	46,923	83,728	109,606									
2017	50,824	88,430										
2018	52,750											

### D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident	Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>					
2010						86.7%					
2011					82.7%	87.8%					
2012				76.3%	83.9%	89.0%					
2013			66.6%	78.1%	85.7%	90.4%					
2014		51.7%	68.0%	79.7%	86.9%						
2015	30.0%	53.6%	70.8%	82.0%							
2016	31.4%	56.1%	73.4%								
2017	33.9%	58.9%									
2018	34.5%										

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

Accident	Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>					
2010						106,562					
2011					103,125	107,206					
2012				102,846	109,040	113,356					
2013			98,191	109,637	116,240	120,841					
2014		82,623	102,957	114,958	121,882						
2015	50,349	85,961	107,116	119,602							
2016	51,519	87,959	109,606								
2017	51,795	88,430									
2018	52,750										

### F. Average Paid Indemnity per Closed Claim

Accident	Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>					
2010						17,217					
2011					15,546	17,331					
2012				13,293	15,614	17,373					
2013			10,517	13,682	15,897	17,421					
2014		6,728	11,160	14,533	16,786						
2015	3,011	7,371	11,895	15,218							
2016	3,254	7,706	12,017								
2017	3,348	7,808									
2018	3,575										

- (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.

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

Accident	Evaluated as of (in months)										
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>					
2010						18,679					
2011					17,020	18,318					
2012				15,007	16,646	17,876					
2013			12,288	14,768	16,283	17,421					
2014		8,426	12,614	15,205	16,786						
2015	3,573	8,550	12,608	15,218							
2016	3,624	8,287	12,017								
2017	3,422	7,808									
2018	3,575										
2019											

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

Accident		Evaluated as of (in months)												
Year	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>								
2010						1,990,476								
2011					1,755,181	1,963,770								
2012				1,543,430	1,815,039	2,026,307								
2013			1,206,527	1,619,112	1,892,797	2,105,196								
2014		696,192	1,298,676	1,747,932	2,045,904									
2015	179,914	735,006	1,350,541	1,820,060										
2016	186,728	728,918	1,317,134											
2017	177,266	690,492												
2018	188,564													

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

Accident		Evaluated as of (in months)												
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>								
2010						586,444								
2011					637,689	521,246								
2012				748,589	625,289	499,869								
2013			851,808	743,827	591,414	460,088								
2014		815,536	891,810	751,074	588,448									
2015	447,077	852,237	879,871	713,230										
2016	460,082	827,152	831,765											
2017	463,035	823,281												
2018	494,161													

- (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.

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

Accident		Evaluated as of (in months)											
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>							
2010						39,068							
2011					32,283	37,440							
2012				26,452	32,288	37,769							
2013			20,130	26,675	32,300	37,537							
2014		13,003	21,004	27,735	33,654								
2015	5,262	13,452	21,694	28,662									
2016	5,461	13,640	22,152										
2017	5,608	14,517											
2018	5,947												

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

Accident		Evaluated as of (in months)												
Year	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>								
2010						-168,499								
2011					-163,385	-114,905								
2012				-189,343	-124,406	-65,604								
2013			-183,361	-137,375	-52,778									
2014		-132,180	-160,446	-87,699										
2015	-34,614	-104,520	-83,824											
2016	-25,099	-57,711												
2017	-5,445													

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

Accident		Evaluated as of (in months)												
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>								
2010						417,945								
2011					474,304	406,342								
2012				559,246	500,883	434,265								
2013			668,447	606,451	538,636	460,088								
2014		683,356	731,364	663,374	588,448									
2015	412,463	747,717	796,047	713,230										
2016	434,983	769,442	831,765											
2017	457,590	823,281												
2018	494,161													

- (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)].

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

Accident		Evaluated as of (in months)												
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>								
2010						2,408,421								
2011					2,229,485	2,370,111								
2012				2,102,676	2,315,922	2,460,572								
2013			1,874,974	2,225,563	2,431,433	2,565,284								
2014		1,379,548	2,030,040	2,411,307	2,634,351									
2015	592,377	1,482,723	2,146,587	2,533,290										
2016	621,711	1,498,359	2,148,899											
2017	634,856	1,513,773												
2018	682,725													

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

Accident	Evaluated as of (in months)												
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75								
2010													
2011					1.063								
2012				1.101	1.062								
2013			1.187	1.093	1.055								
2014		1.472	1.188	1.092									
2015	2.503	1.448	1.180										
2016	2.410	1.434											
2017	2.384												
Latest Year 3-Year Average	2.384 2.432	1.434 1.451	1.180 1.185	1.092 1.095	1.055 1.060								

### O. Paid Indemnity Loss Development Factors (i)

Accident		nths)			
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75
2011					1.076
2012				1.122	1.076
2013			1.215	1.110	1.063
2014		1.501	1.215	1.109	
2015	2.468	1.476	1.202		
2016	2.403	1.459			
2017	2.391				

- (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.

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

Accident		Evaluated as of (in months)										
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75							
2011					-1.18%							
2012				-1.86%	-1.22%							
2013			-2.31%	-1.61%	-0.74%							
2014		-1.95%	-2.23%	-1.47%								
2015	1.42%	-1.89%	-1.80%									
2016	0.30%	-1.73%										
2017	-0.26%											

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

Accident	Evaluated as of (in months)											
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75							
2011					1.063							
2012				1.102	1.063							
2013			1.188	1.093	1.055							
2014		1.472	1.188	1.093								
2015	2.503	1.448	1.180									
2016	2.410	1.434										
2017	2.384											
Latest Year	2.384	1.434	1.180	1.093	1.055							
3-Year Average	2.432	1.451	1.185	1.096	1.060							

<sup>(</sup>j) Each factor represents the change in age-to-age development factors from Item O to those in Item N.

<sup>(</sup>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].

Selected Medical Development Factors - Paid to Age 255, Incurred from Age 255 to Ultimate

1		ব্ৰ				
/ FG330/04[330	1.080 1.089 1.089 1.086 1.086 1.082	255Inc/255Pd (b) 1 086	1,097	1.082		
055 (0.40	1,007 1,007 1,007 1,007 1,008 1,008	255/243 1 008	1,000	1.008	1.125	1
0.40,004	1,000 1,000 1,000 1,000 1,000 1,000 1,000	243/231	1,007	1.008	1.135	I
024/040	2000 1000 1000 1000 1000 1000 1000 1000	231/219	1.010	1.009	1.145	I
700/070	1001 1001 1001 1001 1001 1001 1001 100	219/207	1,012	1.010	1.157	1
207/405	1001 1001 1001 1001 1001 1001 1001 100	207/195	1.011	1.011	1.169	1
405/402	2	195/183	1.013 1.012 1.012	1.012	1.183	1
400/474	1011 1011 1011 1011 1011 1011 1011 101	183/171	1001 1013 1013 1013	1.013	1.198	1
474/450	1,012 1,019 1,019 1,019 1,019 1,015 1,013 1,013	171/159	1.016 1.015 1.015	1.015	1.217	1
in months)	1,020 1,020 1,020 1,026 1,026 1,017 1,017 1,017	in months) 159/147	. 1.010 1.010 1.010	1.018	1.238	1
Age-to-Age (in months)	1,027 1,025 1,025 1,025 1,026 1,020 1,019	Age-to-Age (in months)	1.021 1.020 1.021	1.021	1.264	1
A 25/472	1,036 1,026 1,026 1,026 1,023 1,023 1,021 1,019	A 135/123	1,024 1,022 1,021	1.022	1.292	1
100/444	1.030 1.023 1.023 1.032 1.032 1.032 1.024 1.024	123/111	1.030 1.026 1.025	1.027	1.327	I
444	1.037 1.033 1.039 1.039 1.038 1.038 1.038	111/99	1.034 1.028 1.028	1.028	1.364	I
20/00	1.043 1.045 1.057 1.057 1.042 1.042 1.034	28/85	1.044 1.041 1.038	1.038	1.416	I
37/76	1.065 1.064 1.064 1.067 1.067 1.067 1.067 1.067	87/75	1.062 1.059 1.056	1.056	1.495	1.485
75 (6.0	1.086 1.091 1.085 1.085 1.087 1.087 1.087	75/63	1.085 1.082	1.066(e)	1.594	1.570
69/64	1428 1428 1428 1433 1433 1478 1478	63/51	11133 11119 11119	1.097(e)	1.749	1.705
100	1.196 1.208 1.221 1.221 1.213 1.194 1.194	51/39	1.213 1.203 1.190	1.173(e)	2.051	1.975
20/00	1 352 1 388 1 401 1 388 1 388 1 388 1 388 1 359	39/27	1.392 1.365 1.344	1.331(e)	2.730	2.599
27/45	1.826 1.957 1.957 1.936 1.936 1.936 1.838	27/15	1.959 1.842 1.842	1.843(e)	5.031	4.790
	2006 1996 1996 1996 1996 1996 1996 2000 2000 2006 2007 2006 2007 2008 2011 2011 2011 2011 2011 2011 2011	Adjusted (b) Accident Year 1996	2997 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2011 2 20	Selected (c)	Cumulative Unadjusted for Impact of SB 1160	Cumulative Adjusted for Impact of SB 1160(f)

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

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. (p)

Selections are latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected not incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.

A three-year average of the 255Ind/255Pd factor is selected.

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. The cumulative factors for 27, 39, 51, 63, and 75 months are adjusted by 4.8%, -3.7%, -1.5%, and -0.7%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Age 255, Incurred from Age 255 to Ultimate (Continued)

	ULT/411Inc (g)																	1.029
	Γ.																	
	411/399	0.999	1.000	1.001													1.000	1.029
	399/387	0.997	1.001	1.000	1.004												1.001	1.030
	387/375	1.002	0.999	0.999	1.004	0.999											1.001	1.030
	375/363	1.003	0.999	0.999	0.998	1.001	1.000										1.000	1.030
ıths)	363/351	1.003	1.004	1.000	1.001	0.999	0.998	0.999									1.000	1.030
Age-to-Age (in months)	351/339		1.000	1.004	1.002	1.001	1.000	1.000	0.998								1.001	1.031
Age-to-A	339/327			1.003	1.004	1.003	1.002	0.999	0.999	0.998							1.001	1.032
	327/315				1.005	1.005	1.003	0.999	1.001	0.999	0.998						1.001	1.033
	315/303					1.003	1.002	1.002	1.001	0.999	1.002	1.000					1.001	1.034
	303/291						1.005	1.000	0.997	1.001	1.000	1.000	0.998				0.999	1.033
	291/279							1.007	1.004	1.003	0.999	966.0	0.997	0.999			1.000	1.033
	279/267								1.002	1.001	1.003	0.999	966.0	0.998	966.0		0.999	1.032
	267/255									1.004	1.003	1.001	1.001	0.997	0.998	1.000	1.000	1.032
	Accident Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Selected (c)	Cumulative

The ULT/411Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 111-to-123 through 339-to-351 factors, excluding most recent three evaluations, and extrapolated to 80 development years. (g)

### A. Total Reported Indemnity Claim Counts

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						117,260
2011					117,817	118,059
2012				123,988	124,553	124,854
2013			131,398	132,372	132,916	133,098
2014		135,175	137,778	138,876	139,367	
2015	128,733	141,546	143,811	144,486		
2016	131,171	144,370	147,154			
2017	133,390	145,143				
2018	135,849					

### B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):						
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u> <u>7</u>	<u>'5-Ultimate</u>	
2011					1.002		
2012				1.005	1.002		
2013			1.007	1.004	1.001		
2014		1.019	1.008	1.004			
2015	1.100	1.016	1.005				
2016	1.101	1.019					
2017	1.088						
Latest Year	1.088	1.019	1.005	1.004	1.001		
Cumulative	1.125	1.034	1.014	1.010	1.006	1.005	
Acc. Year	2018	2017	2016	2015	2014	2013	
Ult. Claim Counts	152,826	150,060	149,260	145,870	140,206	133,716	

### C. Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						102,249
2011					98,064	104,137
2012				95,688	105,187	111,619
2013			89,082	104,487	114,606	120,841
2014		72,458	95,318	111,796	121,882	
2015	43,771	78,191	103,252	119,602		
2016	46,923	83,728	109,606			
2017	50,824	88,430				
2018	52,750					

### D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						86.7%
2011					82.7%	87.8%
2012				76.3%	83.9%	89.0%
2013			66.6%	78.1%	85.7%	90.4%
2014		51.7%	68.0%	79.7%	86.9%	
2015	30.0%	53.6%	70.8%	82.0%		
2016	31.4%	56.1%	73.4%			
2017	33.9%	58.9%				
2018	34.5%					

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

Accident		Evaluated as of (in months)							
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>			
2010						106,562			
2011					103,125	107,206			
2012				102,846	109,040	113,356			
2013			98,191	109,637	116,240	120,841			
2014		82,623	102,957	114,958	121,882				
2015	50,349	85,961	107,116	119,602					
2016	51,519	87,959	109,606						
2017	51,795	88,430							
2018	52,750								

### F. Average Paid Medical per Closed Indemnity Claim

Accident		Evaluated as of (in months)						
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>		
2010						21,570		
2011					18,109	20,808		
2012				14,666	17,617	19,840		
2013			10,963	14,367	17,053	18,913		
2014		6,864	10,991	14,415	16,864			
2015	3,235	7,274	11,350	14,589				
2016	3,466	7,498	11,330					
2017	3,573	7,726						
2018	3,679							

- (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.

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						23,843
2011					20,332	22,275
2012				16,839	18,917	20,492
2013			12,864	15,677	17,523	18,913
2014		8,463	12,464	15,142	16,864	
2015	3,777	8,350	12,044	14,589		
2016	3,817	8,021	11,330			
2017	3,645	7,726				
2018	3,679					

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						2,540,739
2011					2,096,773	2,388,021
2012				1,731,801	2,062,741	2,322,875
2013			1,263,127	1,718,754	2,036,825	2,285,434
2014		699,204	1,283,223	1,740,720	2,055,397	
2015	190,184	717,812	1,290,121	1,744,824		
2016	196,647	705,550	1,241,832			
2017	188,794	683,180				
2018	194,068					

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

Accident		Evaluated as of (in months)						
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>		
2010						886,076		
2011					888,395	736,679		
2012				935,110	801,111	651,898		
2013			957,129	864,165	688,926	549,258		
2014		877,103	934,369	793,707	624,163			
2015	522,945	888,276	885,787	734,081				
2016	554,121	866,797	838,008					
2017	569,815	857,409						
2018	598,128							

- (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.

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

Accident		Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	
2010						59,028	
2011					44,975	52,915	
2012				33,043	41,367	49,256	
2013			22,619	30,990	37,626	44,812	
2014		13,985	22,006	29,310	35,697		
2015	6,155	14,021	21,839	29,500			
2016	6,577	14,294	22,318				
2017	6,901	15,118					
2018	7,198						

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

Accident		Evaluated as of (in months)						
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>		
2010						-254,590		
2011					-227,620	-162,395		
2012				-236,520	-159,387	-85,557		
2013			-206,033	-159,600	-61,480			
2014		-142,158	-168,103	-92,677				
2015	-40,488	-108,940	-84,388					
2016	-30,229	-60,477						
2017	-6,701							

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

Accident		Evaluated as of (in months)						
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>		
2010						631,487		
2011					660,776	574,284		
2012				698,590	641,724	566,341		
2013			751,096	704,565	627,445	549,258		
2014		734,945	766,266	701,030	624,163			
2015	482,457	779,336	801,399	734,081				
2016	523,892	806,321	838,008					
2017	563,114	857,409						
2018	598,128							

- (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)].

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

Accident	Evaluated as of (in months)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						227,488
2011					213,500	216,813
2012				216,762	221,615	225,995
2013			215,707	221,923	228,605	231,095
2014		230,330	240,129	246,897	249,602	
2015	204,649	242,436	251,805	257,238		
2016	217,848	259,031	269,106			
2017	238,198	278,463				
2018	252,103					

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

Accident		Е	valuated as	of (in month	ns)	
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>
2010						3,445,659
2011					3,226,733	3,447,783
2012				2,647,153	2,926,080	3,115,212
2013			2,229,930	2,645,241	2,892,875	3,065,786
2014		1,664,479	2,289,618	2,688,647	2,929,163	
2015	877,290	1,739,583	2,343,325	2,736,143		
2016	938,386	1,770,901	2,348,946			
2017	990,106	1,819,052				
2018	1,044,299					

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

Accident		Evaluated as of (in months)					
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75		
2011					1.069		
2012				1.105	1.065		
2013			1.186	1.094	1.060		
2014		1.376	1.174	1.089			
2015	1.983	1.347	1.168				
2016	1.887	1.326					
2017	1.837						
Latest Year	1.837	1.326	1.168	1.089	1.060		

<sup>(</sup>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.

### P. Paid Medical Loss Development Factors (i)

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>15-27</u>	27-39	39-51	51-63	63-75		
2011					1.082		
2012				1.125	1.075		
2013			1.204	1.110	1.067		
2014		1.385	1.194	1.104			
2015	1.955	1.359	1.185				
2016	1.876	1.340					
2017	1.838						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75		
2011					-1.21%		
2012				-1.78%	-1.00%		
2013			-1.45%	-1.48%	-0.72%		
2014		-0.66%	-1.61%	-1.36%			
2015	1.42%	-0.87%	-1.44%				
2016	0.58%	-0.98%					
2017	-0.05%						

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

Accident		Evaluated	l as of (in m	onths)	
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75
2011					1.072
2012				1.113	1.071
2013			1.195	1.102	1.066
2014		1.383	1.184	1.097	
2015	1.987	1.353	1.173		
2016	1.893	1.331			
2017	1.843				
Latest Year 3-Year Average	1.843 1.908	1.331 1.356	1.173 1.184	1.097 1.104	1.066 1.070

- (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].

# Developed Indemnity Loss Ratios Using Selected Loss Development Factors Adjusted for Changes in Claim Settlement Rates Based on Experience as of March 31, 2019

	_	Developm	_	
	(1)	(2)	(3)	(4)
	Paid or			Projected
	Incurred Loss			Ultimate
Accident <u>Year</u>	Ratio(a)	Annual(b)	<u>Cumulative</u>	Loss Ratio
				$(4) = (1) \times (3)$
1986	0.396	1.001	1.005	0.398
1987	0.346	1.000	1.005	0.347
1988	0.330	1.000	1.005	0.332
1989	0.343	1.000	1.005	0.345
1990	0.398	1.000	1.005	0.400
1991	0.425	1.001	1.006	0.427
1992	0.350	1.001	1.006	0.352
1993	0.287	1.000	1.007	0.289
1994	0.327	1.000	1.007	0.329
1995	0.472	1.000	1.007	0.476
1996	0.530	1.000	1.007	0.533
1997	0.600	1.001	1.007	0.604
1998	0.651	1.001	1.008	0.657
1999	0.670	1.003	1.031	0.691
2000	0.578	1.003	1.034	0.597
2001	0.477	1.004	1.037	0.495
2002	0.354	1.004	1.042	0.369
2003	0.232	1.005	1.047	0.243
2004	0.138	1.006	1.053	0.145
2005	0.117	1.007	1.061	0.124
2006	0.150	1.009	1.071	0.161
2007	0.205	1.011	1.083	0.222
2008	0.257	1.015	1.099	0.283
2009	0.296	1.017	1.118	0.331
2010	0.281	1.023	1.144	0.321
2011	0.257	1.024	1.171	0.300
2012	0.223	1.038	1.216	0.271
2013	0.184	1.047	1.273	0.235
2014	0.166	1.055	1.343	0.223
2015	0.149	1.093	1.467	0.218
2016	0.120	1.180	1.732	0.207
2017	0.086	1.434	2.483	0.213
2018	0.039	2.384	5.920	0.232

- (a) Based on Exhibit 1. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
- (b) See Exhibits 2.5.1 and 2.5.2.

## Developed Medical Loss Ratios Using Selected Loss Development Factors Adjusted for Changes in Claim Settlement Rates Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) Reform Ad	(5) diusted	(6)	(7)
			С	evelopment Facto			
		Adjusted		Cumul	lative	Adjusted	Projected
Accident	Paid or Incurred	Paid or Incurred		Unadjusted for	Adjusted for	Developed	Ultimate
<u>Year</u>	Loss Ratio(a)	Loss Ratio (b)	Annual(c)	Reforms(c)	Reforms(c)	Loss Ratio (d)	Loss Ratio
	<del> </del>					(2) x (5)	(1) + ((6) - (2))
1986	0.335	0.335	1.000	1.029	1.029	0.344	0.344
1987	0.314	0.314	1.001	1.030	1.030	0.323	0.323
1988	0.304	0.304	1.001	1.030	1.030	0.314	0.314
1989	0.325	0.325	1.000	1.030	1.030	0.335	0.335
1990	0.366	0.366	1.000	1.030	1.030	0.377	0.377
1991	0.383	0.383	1.001	1.031	1.031	0.395	0.395
1992	0.319	0.319	1.001	1.032	1.032	0.329	0.329
1993	0.266	0.266	1.001	1.033	1.033	0.275	0.275
1994	0.308	0.308	1.001	1.034	1.034	0.318	0.318
1995	0.452	0.452	0.999	1.033	1.033	0.467	0.467
1996	0.484	0.484	1.000	1.033	1.033	0.500	0.500
1997	0.545	0.545	0.999	1.032	1.032	0.563	0.563
1998	0.658	0.658	1.000	1.032	1.032	0.679	0.679
1999	0.663	0.590	1.008	1.125	1.125	0.664	0.737
2000	0.598	0.533	1.008	1.135	1.135	0.605	0.670
2001	0.526	0.471	1.009	1.145	1.145	0.539	0.594
2002	0.405	0.364	1.010	1.157	1.157	0.421	0.462
2003	0.257	0.232	1.011	1.169	1.169	0.271	0.297
2004	0.174	0.157	1.012	1.183	1.183	0.186	0.203
2005	0.169	0.152	1.013	1.198	1.198	0.183	0.199
2006	0.215	0.195	1.015	1.217	1.217	0.238	0.258
2007	0.299	0.273	1.018	1.238	1.238	0.338	0.364
2008	0.368	0.337	1.021	1.264	1.264	0.426	0.457
2009	0.423	0.390	1.022	1.292	1.292	0.503	0.537
2010	0.408	0.377	1.027	1.327	1.327	0.501	0.531
2011	0.341	0.319	1.028	1.364	1.364	0.435	0.458
2012	0.284	0.268	1.038	1.416	1.416	0.379	0.395
2013	0.221	0.211	1.056	1.495	1.485	0.313	0.323
2014	0.185	0.179	1.066	1.594	1.570	0.281	0.287
2015	0.160	0.157	1.097	1.749	1.705	0.268	0.271
2016	0.131	0.130	1.173	2.051	1.975	0.256	0.257
2017	0.103	0.103	1.331	2.730	2.599	0.266	0.267
2018	0.060	0.060	1.843	5.031	4.790	0.287	0.287

<sup>(</sup>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.

<sup>(</sup>b) Based on experience evaluated as of March 31, 2019. Reflects an adjustment for the pharmaceutical cost reductions to restate the historical medical paid-to-date ratios at a 2018 pharmaceutical cost level.

<sup>(</sup>c) See Exhibits 2.6.1 and 2.6.2.

<sup>(</sup>d) The developed medical loss ratio shown were derived based on an adjustment for the 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 <u>Year</u>	(1) Annual Benefit Change Prior to Frequency Adjustments (a)	Frequency	(3) Annual Impact on Indemnity Ben Due to Wage Inflation (b)	efits Cost	(5a) Composite Indemnity Adjustment <u>Factor (d)</u>
1986	0.0	0.0	1.6	1.6	1.638
1987	0.0	0.0	1.9	1.9	1.608
1988	0.0	0.0	1.5	1.5	1.584
1989	0.0	0.0	1.5	1.5	1.561
1990	2.3	19.9	1.7	24.7	1.251
1991	4.9	14.8	0.8	21.4	1.031
1992	1.8	-8.3	1.6	-5.2	1.087
1993	0.2	-18.1	0.4	-17.6	1.319
1994	-5.1	0.2	0.6	-4.3	1.379
1995	6.3	0.6	1.0	8.0	1.276
1996	5.3	0.4	1.2	7.0	1.193
1997	9.7	0.2	1.6	11.7	1.068
1998	6.5	0.0	1.8	8.4	0.985
1999	5.7	0.0	2.1	7.9	0.913
2000	3.9	0.0	3.1	7.1	0.852
2001	-0.3	0.0	0.2	-0.1	0.853
2002	-0.7	0.0	0.4	-0.3	0.874 (e)
2003	7.3	0.0	1.2	8.6	0.871 (e)
2004	-6.0	-13.7	2.1	-17.2	1.193 (e)
2005	-31.6	-15.3	1.6	-41.2	1.616
2006	5.6	-5.7	2.2	1.8	1.588
2007	1.6	0.0	2.1	3.7	1.531
2008	4.8	0.6	1.0	6.5	1.438
2009	0.4	1.4	0.2	2.0	1.410
2010	0.4	0.0	1.5	1.9	1.383
2011	0.0	0.0	1.4	1.4	1.364
2012	0.3	0.0	2.1	2.4	1.332
2013	2.6	0.2	0.6	3.4	1.288
2014	7.0	1.5	1.7	10.4	1.166
2015	0.3	0.0	2.3	2.6	1.137
2016	0.3	0.0	1.0	1.3	1.122
2017	0.5	0.0	2.2	2.7	1.093
2018	0.4	0.0	1.9	2.3	1.068
2019	0.4	0.0	2.4	2.8	
2020	0.5	0.0	2.2	2.7	
1/1/2021	0.2 (A	nnual 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) { [Column (1) /100 + 1.0] x [Column (2) /100 + 1.0] x [Column (3) /100 + 1.0] 1.0 } x 100.
- (d) These factors represent the combined impact of the annual benefit changes on claim severity shown in Column (1), claim frequencies shown in Column (2) and wage inflation impact on benefits shown in Column (3), adjusted to the 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

	(1) Proportion of Medical	(2) Proportion of Medical Not	(3) Impact of Fee Schedule	C	(4) Change	in	(5) Impact of CPI Change	a	(6) Annual Non-Legislative
Accident	Subject to	Subject to	Change on		Medica		on Total	•	Cost Impact on
<u>Year</u>	Fee Schedule (a)	<u>Fee Schedule (a)</u>	Total Medical (b	<u>o)</u>	CPI (c)	!	Medical (d)	<u>)</u>	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%

<sup>(</sup>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.

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

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

<sup>(</sup>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.

<sup>(</sup>e) Column (6) = Column (3) + Column (5).

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

	(1)	(2)	(3)
	Annual Legislative	Annual Legislative Cost Impact	Annual Total
Accident	Cost Impact on	on Medical Due to	Legislative Cost
<u>Year</u>	Medical Severity(a)	Frequency Changes(b)	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 including SB 863 provisions effective 1/1/2013 and 1/1/2014. Does not include the impact of the SB 1160 lien provisions on future medical costs as well as the estimated reductions to pharmaceutical costs resulting from 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) [Column (1) + 1.0] x [Column (2) + 1.0] 1.0

### **Total Medical Cost Level Factors**

	(1)	(2)	_(3)	(4)
	Annual	Annual	Total	Composite
A = =: =! = := 4	Non-Legislative	Legislative	Annual Cost	Medical
Accident	Cost Impact on	Cost Impact on	Impact on	On-level
<u>Year</u>	Medical (a)	Medical(b)	Medical(c)	<u>Factor(d)</u>
1986	3.0%	0.0%	3.0%	0.837
1987	3.8%	0.0%	3.8%	0.806
1988	3.8%	0.0%	3.8%	0.777
1989	3.0%	0.0%	3.0%	0.754
1990	3.7%	19.1%	23.5%	0.611
1991	3.6%	12.9%	16.9%	0.522
1992	3.0%	-7.9%	-5.2%	0.551
1993	2.7%	-18.7%	-16.5%	0.660
1994	-2.3%	-2.3%	-4.6%	0.691
1995	0.9%	0.5%	1.4%	0.682
1996	1.0%	0.4%	1.4%	0.672
1997	0.7%	0.2%	0.9%	0.666
1998	0.8%	12.6%	13.5%	0.587
1999	2.5%	12.6%	15.4%	0.509
2000	1.7%	7.0%	8.8%	0.467
2001	2.9%	6.6%	9.7%	0.426
2002	2.0%	-5.6%	-3.7%	0.442
2003	1.4%	-6.0%	-4.7%	0.464
2004	0.0%	-33.9%	-33.9%	0.702
2005	0.0%	-13.9%	-13.9%	0.815
2006	0.3%	-5.1%	-4.8%	0.856
2007	1.8%	0.1%	1.9%	0.840
2008	0.2%	0.5%	0.7%	0.834
2009	0.4%	1.0%	1.4%	0.823
2010	0.3%	0.0%	0.3%	0.820
2011	0.3%	-2.0%	-1.7%	0.835
2012	0.1%	-4.4%	-4.3%	0.872
2013	0.1%	-8.0%	-7.9%	0.947
2014	0.3%	-4.7%	-4.4%	0.991
2015	0.2%	-2.0%	-1.8%	1.009
2016	0.4%	-0.5%	-0.1%	1.010
2017	0.2%	-0.4%	-0.2%	1.012
2018	0.2%	0.3%	0.5%	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%	

<sup>(</sup>a) See Exhibit 4.2, Column (6).

<sup>(</sup>b) See Exhibit 4.3, Column (3).

<sup>(</sup>c) Column (3) =  $[1.0 + Column (1)] \times [1.0 + Column (2)] - 1.0$ .

<sup>(</sup>d) These factors adjust the annual impact shown in Column (3) to the 1/1/2021 level.

### **Annual Wage Level Changes**

	Annual Wage	Factor to a
<u>Year</u>	<u>Level Change(a)</u>	1/1/2021 Wage Level
1987	5.6	3.124
1988	4.4	2.992
1989	4.3	2.869
1990	5.0	2.732
1991	2.3	2.671
1992	4.7	2.551
1993	1.2	2.521
1994	1.8	2.476
1995	2.9	2.406
1996	3.4	2.327
1997	4.7	2.223
1998	5.2	2.113
1999	6.2	1.990
2000	9.0	1.825
2001	0.6	1.814
2002	1.1	1.795
2003	3.6	1.732
2004	5.0	1.650
2005	3.2	1.599
2006	4.6	1.528
2007	4.5	1.463
2008	2.1	1.432
2009	0.5	1.425
2010	3.0	1.384
2011	3.0	1.344
2012	4.2	1.289
2013	0.7	1.280
2014	3.3	1.240
2015	4.4	1.187
2016	1.9	1.165
2017	2.9	1.132
2018	3.2	1.097
Projected:		
2019	4.0	
2020	3.7	
1/1/2021	1.7 (Annual = 3.6)	
	` '	

(a) Historical wage changes through 2016 are based on Bureau of Labor Statistics data. Forecasts for 2017 to 2021 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)
				Factor to Adjust					
		Ratio of	Factor to	Insurer Premium			Off-Balance		
		Industry Average	•	to an Industry			Correction in	Factor to Adjust	
		Charged Rates	Average Filed	Average Filed	Adjustment		Advisory	for Impact	Composite
	Factor to a	to Advisory	Pure Premium	Pure Premium	to Remove	Average	January 1, 2019	of Premium	Premium
Calendar	1/1/2021	Pure Premium	Rate Level as of	Rate Level as of	Surcharge	Experience	Pure Premium	Resulting from	Adjustment
<u>Year</u>	Wage Level (a)	Rates (b)	January 1, 2019 (c)	January 1, 2019 (d)	Premium (e)	Modification (f)	<u>Rates</u>	Audits (g)	Factor (h)
1986	3.299			0.751	0.991	0.983	1.017		2.455
1987	3.124			0.660	0.992	0.983	1.017		2.046
1988	2.992			0.590	0.993	0.963	1.017		1.791
1989	2.869			0.581	0.993	0.945	1.017		1.723
1990	2.732			0.567	0.991	0.942	1.017		1.602
1991	2.671			0.525	0.987	0.939	1.017		1.448
1992	2.551			0.504	0.982	0.940	1.017		1.320
1993	2.521			0.497	0.981	0.949	1.017		1.273
1994	2.476			0.569	0.986	0.948	1.017		1.442
1995	2.406			0.770	0.995	0.958	1.017		1.893
1996	2.327	1.023	0.819	0.801	1.000	0.935	1.017		1.959
1997	2.223	0.989	0.817	0.826	1.000	0.949	1.017		1.903
1998	2.113	0.965	0.851	0.882	1.000	0.959	1.017		1.911
1999	1.990	0.972	0.860	0.885	1.000	0.954	1.017		1.814
2000	1.825	1.005	0.780	0.776	1.000	0.970	1.017		1.436
2001	1.814	1.029	0.687	0.668	1.000	0.969	1.017		1.229
2002	1.795	1.157	0.615	0.532	1.000	0.991	1.017		0.947
2003	1.732	1.267	0.503	0.397	1.000	1.005	1.017		0.673
2004	1.650	1.397	0.512	0.366	1.000	0.981	1.017		0.606
2005	1.599	1.470	0.616	0.419	1.000	0.982	1.017		0.671
2006	1.528	1.447	0.793	0.548	1.000	0.956	1.017		0.862
2007	1.463	1.493	1.081	0.724	1.000	0.931	1.017	0.985	1.102
2008	1.432	1.426	1.286	0.902	1.000	0.946	1.017	0.991	1.331
2009	1.425	1.366	1.268	0.928	1.000	0.937	1.017	1.034	1.436
2010	1.384	1.384	1.242	0.897	1.000	0.941	1.017	1.005	1.304
2011	1.344	1.401	1.241	0.886	1.000	0.982	1.017		1.192
2012	1.289	1.223	1.023	0.836	1.000	1.000	1.017		1.060
2013	1.280	1.138	0.824	0.724	1.000	0.983	1.017		0.927
2014	1.240	1.126	0.759	0.674	1.000	0.961	1.017		0.855
2015	1.187	1.109	0.738	0.665	1.000	0.951	1.017		0.817
2016	1.165	1.148	0.794	0.692	1.000	0.949	1.017		0.835
2017	1.132	1.156	0.877	0.759	1.000	0.956	1.017		0.884
2018	1.097	1.195	0.993	0.831	1.000	0.958	1.017		0.936

<sup>(</sup>a) See Exhibit 5.1.

<sup>(</sup>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.

<sup>(</sup>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 (\$1.63) to the industry average filed pure premium rate as of January 1, 2019 (\$2.02).

<sup>(</sup>d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of January 1, 2019.

<sup>(</sup>e) Based on unit statistical data.

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

<sup>(9)</sup> 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.

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

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

	Annual %				Annual Log Differences	i		
	Changes Intra-		Class Indemnity Freque	•	AY+1		Economic	CalOSHA
	Class Ind Freq		Exposure at PY 2017		Indemnity	Cumulative	Variables	Dummy
AY	Total	Total	Cumulative	Non-cum.	Benefit Level	Injury Index	(1st Prin. Comp.)	Variable
1962 1963	2.0%	0.020			0.000		-0.029	0.000
1963	0.3%	0.020			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 1995	-12.8% -4.6%	-0.136 -0.048	-0.462	-0.107 -0.050	0.061 0.053	-0.355 0.034	0.106 0.092	0.173 0.295
1995	-6.8%	-0.046	-0.016 -0.136	-0.065	0.096	-0.071	0.092	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.138	0.000
1998	-3.8%	-0.038	-0.023	-0.034	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	1.1%	0.011	0.031	0.009	0.003	0.022	0.043	0.000
2012	4.7%	0.046	0.127	0.036	0.025	0.091	0.123	0.000
2013	0.4%	0.004	0.138	-0.014	0.071	0.152	0.151	0.000
2014	0.2%	0.002	0.070	-0.008	0.003	0.078	0.178	0.000
2015	-0.8%	-0.008	0.050	-0.018	0.002	0.068	0.194	0.000
2016	-3.3%	-0.033	0.035	-0.045	0.004	0.081	0.082	0.000
2017*	-4.1%	-0.042	0.054	-0.061	0.004	0.115	0.078	0.000
2018	0.0%	0.000	0.000	0.000	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 2021	-2.0% -2.2%	-0.020 -0.022	-0.020 -0.022	-0.020 -0.022	0.004 0.004	0.000 0.000	-0.005 -0.030	0.000 0.000
2021	-2.2%	-0.022	-0.022	-0.022	0.004	0.000	-0.030	0.000
		Y = Hazardousness-A	djusted Noncumulativ	ve Indemnity Claim Fi	requency			
		Std Err of Y Est		0.041				
		R Squared		0.558				
		No. of Observations		39				
		Degrees of Freedom		34				

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.

X Coefficient(s)

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.

0.074

0.091

0.045

### Projection of Indemnity Severity Trends by Accident Year Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)			
A = =: -! = := 4	Estimated	A	Indemnity	Ultimate	A			
Accident	Ultimate	Annual	Adjustment	On-level	Annual			
<u>Year</u>	<u>Severity</u>	<u>% Change</u>	Factor (a)	Severity	<u>% Change</u>			
				(1) x (3)				
1990	9,975		2.001	19,960				
1991	10,915	9.4%	1.892	20,654	3.5%			
1992	11,017	0.9%	1.830	20,157	-2.4%			
1993	11,994	8.9%	1.819	21,814	8.2%			
1994	12,957	8.0%	1.905	24,682	13.2%			
1995	14,528	12.1%	1.774	25,778	4.4%			
1996	16,284	12.1%	1.665	27,114	5.2%			
1997	19,341	18.8%	1.494	28,895	6.6%			
1998	21,205	9.6%	1.378	29,220	1.1%			
1999	23,246	9.6%	1.277	29,681	1.6%			
2000	24,680	6.2%	1.192	29,418	-0.9%			
2001	27,157	10.0%	1.193	32,402	10.1%			
2002	26,267	-3.3%	1.222	32,102	-0.9%			
2003	25,889	-1.4%	1.218	31,541	-1.7%			
2004	21,111	-18.5%	1.439	30,384	-3.7%			
2005	19,084	-9.6%	1.652	31,531	3.8%			
2006	20,801	9.0%	1.531	31,845	1.0%			
2007	22,623	8.8%	1.476	33,387	4.8%			
2008	24,728	9.3%	1.394	34,478	3.3%			
2009	25,920	4.8%	1.386	35,923	4.2%			
2010	25,454	-1.8%	1.360	34,618	-3.6%			
2011	25,174	-1.1%	1.341	33,764	-2.5%			
2012	24,781	-1.6%	1.310	32,457	-3.9%			
2013	24,443	-1.4%	1.269	31,016	-4.4%			
2014	25,227	3.2%	1.166	29,422	-5.1%			
2015	25,485	1.0%	1.137	28,970	-1.5%			
2016	24,941	-2.1%	1.122	27,996	-3.4%			
2017	25,053	0.4%	1.093	27,387	-2.2%			
2018	26,450	5.6%	1.068	28,251	3.2%			
(0) =					4.624			
	timated Annual Ex				1.2%			
	timated Annual Ex				-1.6%			
(8) Es	timated Annual Ex	ponential Trend B	ased on 2014 to 20	)18:	-1.4%			
Selected Indemnity Severity Trend:								

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

Source: WCIRB experience calls.

### Projection of Medical Severity Trends by Accident Year Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)
	Estimated		Medical	Ultimate	
Accident	Ultimate	Annual	Adjustment	On-level	Annual
<u>Year</u>	Severity (a)	% Change	Factor (b)	<u>Severity</u>	% Change
				(1) x (3)	
1990	8,776		0.915	8,029	
1991	9,430	7.5%	0.897	8,464	5.4%
1992	9,521	1.0%	0.867	8,255	-2.5%
1993	10,561	10.9%	0.850	8,979	8.8%
1994	11,636	10.2%	0.893	10,395	15.8%
1995	13,320	14.5%	0.885	11,794	13.5%
1996	14,269	7.1%	0.877	12,509	6.1%
1997	16,996	19.1%	0.871	14,796	18.3%
1998	20,800	22.4%	0.767	15,954	7.8%
1999	23,583	13.4%	0.665	15,672	-1.8%
2000	26,399	11.9%	0.611	16,122	2.9%
2001	31,366	18.8%	0.557	17,463	8.3%
2002	31,663	0.9%	0.578	18,308	4.8%
2003	30,209	-4.6%	0.607	18,326	0.1%
2004	27,897	-7.7%	0.802	22,385	22.1%
2005	28,716	2.9%	0.802	23,043	2.9%
2006	31,352	9.2%	0.799	25,057	8.7%
2007	35,003	11.6%	0.784	27,454	9.6%
2008	37,848	8.1%	0.781	29,567	7.7%
2009	39,901	5.4%	0.778	31,046	5.0%
2010	40,081	0.5%	0.776	31,092	0.1%
2011	36,407 (c)		0.797	29,029 (c)	
2012	34,211	-6.0%	0.842	28,806	-0.8%
2013	31,830	-7.0%	0.926	29,488	2.4%
2014	30,598	-3.9%	0.986	30,162	2.3%
2015	29,846	-2.5%	1.009	30,114	-0.2%
2016	28,957	-3.0%	1.010	29,247	-2.9%
2017	29,319	1.2%	1.012	29,673	1.5%
2018	30,535	4.1%	1.007	30,749	3.6%

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 March 31, 2019

MCCP Removed Based on

	(6)		Annual	% Change	i	7.6%	9.1%	2.3%	2.5%	0.1%	2.0%	-0.8%	2.4%	2.3%	-0.2%	-2.9%	1.5%	3.6%		A/N	2.1%	0.2%	2.5%
gregate Jata Calls (b)	(8)	Ultimate	On-Level	Severity (c)	21,835	23,494	25,632	26,985	28,459	28,473	29,029	28,806	29,488	30,162	30,114	29,247	29,673	30,749					
WCIRB Aggregate Calendar Year Data Calls (b)	(7)		Annual	% Change	1	8.0%	11.2%	2.7%	2.9%	0.4%	%8.0-	%0.9-	%0· <b>Z</b> -	-3.9%	-2.5%	-3.0%	1.2%	4.1%					erity Trend:
	(9)	Estimated	Ultimate	Severity (a)	27,212	29,396	32,680	34,544	36,576	36,704	36,407	34,211	31,830	30,598	29,846	28,957	29,319	30,535					Selected Medical Severity Trend:
	(5)		Annual	% Change	1	8.7%	%9.6	7.7%	2.0%	0.2%	2.3%	%6:0-	2.6%	2.3%	-0.3%	-2.9%	1.8%	4.3%		2.8%	2.3%	0.4%	Sel
cluded	(4)	Ultimate	On-Level	Severity (c)	23,043	25,057	27,454	29,567	31,046	31,092	31,806	31,527	32,355	33,093	32,977	32,007	32,577	33,979					
MCCP Included	(3)		Annual	% Change	!	9.5%	11.6%	8.1%	5.4%	0.5%	-0.5%	-6.1%	%2'9-	-3.9%	-2.6%	-3.0%	1.6%	4.8%	l Trend	•••			
	(2)	Estimated	Ultimate	Severity (a)	28,716	31,352	35,003	37,848	39,901	40,081	39,890	37,442	34,926	33,572	32,683	31,689	32,189	33,743	Estimated Annual Exponential Trend	Frend Based on 1990 to 2018	Trend Based on 2005 to 2018:	Frend Based on 2014 to 2018:	
	Ξ)		Accident	Year	2002	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Estimated A	Trend Base	Trend Base	Trend Base	

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

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

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

Source: WCIRB experience calls.

### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
<u>1041</u>	<u> 2000 Hallo(a)</u>	rajasament astor(s)	<u>rajastment raster(s)</u>	(1)×(2)÷(3)
1986	0.398	1.638	2.455	0.265
1987	0.347	1.608	2.046	0.273
1988	0.332	1.584	1.791	0.294
1989	0.345	1.561	1.723	0.312
1990	0.400	1.251	1.602	0.312
1991	0.427	1.031	1.448	0.304
1992	0.352	1.087	1.320	0.290
1993	0.289	1.319	1.273	0.300
1994	0.329	1.379	1.442	0.315
1995	0.476	1.276	1.893	0.321
1996	0.533	1.193	1.959	0.325
1997	0.604	1.068	1.903	0.339
1998	0.657	0.985	1.911	0.339
1999	0.691	0.913	1.814	0.348
2000	0.597	0.852	1.436	0.354
2001	0.495	0.853	1.229	0.343
2002	0.369	0.874	0.947	0.341
2003	0.243	0.871	0.673	0.315
2004	0.145	1.193	0.606	0.286
2005	0.124	1.616	0.671	0.300
2006	0.161	1.588	0.862	0.297
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265
				Projections (d)
2019				0.257
2020				0.251
1/1/2021				0.247

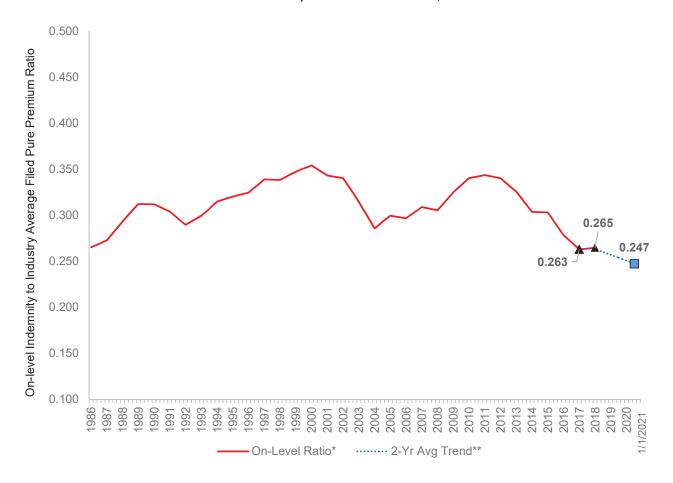
<sup>(</sup>a) See Exhibit 3.1.

<sup>(</sup>b) See Exhibit 4.1.

<sup>(</sup>c) See Exhibit 5.2.

<sup>(</sup>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 March 31, 2019



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

<sup>\*\*</sup> 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 March 31, 2019

	(1)	(2)	(3)	(4)
Accident	Developed Medical	Commonite Madical	Commonito Decembra	On-Level Medical to
	•	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	On-Level Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
4000	0.044	0.007	0.455	(1)×(2)÷(3)
1986	0.344	0.837	2.455	0.117
1987	0.323	0.806	2.046	0.127
1988	0.314	0.777	1.791	0.136
1989	0.335	0.754	1.723	0.147
1990	0.377	0.611	1.602	0.144
1991	0.395	0.522	1.448	0.143
1992	0.329	0.551	1.320	0.137
1993	0.275	0.660	1.273	0.143
1994	0.318	0.691	1.442	0.152
1995	0.467	0.682	1.893	0.168
1996	0.500	0.672	1.959	0.172
1997	0.563	0.666	1.903	0.197
1998	0.679	0.587	1.911	0.208
1999	0.664	0.509	1.814	0.186
2000	0.605	0.467	1.436	0.197
2001	0.539	0.426	1.229	0.187
2002	0.421	0.442	0.947	0.197
2003	0.271	0.464	0.673	0.187
2004	0.186	0.702	0.606	0.215
2005	0.183	0.815	0.671	0.222
2006	0.238	0.856	0.862	0.236
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309
20.0	0.20.		0.000	0.000
				Projections (d)
2019				0.313
2020				0.315
1/1/2021				0.315

<sup>(</sup>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.

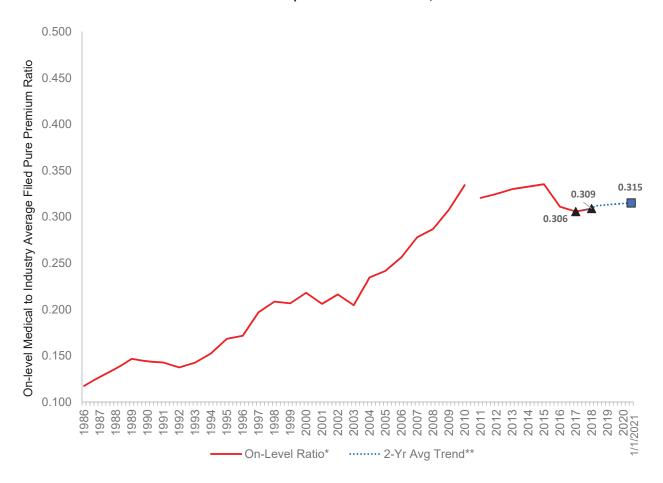
<sup>(</sup>b) See Exhibit 4.4.

<sup>(</sup>c) See Exhibit 5.2.

<sup>(</sup>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.

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

### On-Level Medical Loss to Industry Average Filed Pure Premium Ratios Based on Experience as of March 31, 2019



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

<sup>\*\*</sup> 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 March 31, 2019

	<u>Indemnity</u>	Medical	<u>Total</u>
Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.247	0.315	0.562
2. Impact of Medical Treatment Utilization Schedule (MTUS) Drug Formulary		-0.6%	
<ol> <li>Projected Loss to Industry Average Filed Pure Premium Ratio After Impact of MTUS Drug Formulary (1) x [1 + (2)]</li> </ol>	0.247	0.313	0.560

## Quarterly Incurred Indemnity Loss Development Factors Through March 31, 2019

Age in										Acc	ident \	/ear									
<u>Months</u>	<u>1998</u>	<u>1999</u>	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	<u>2018</u>
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
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	
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		
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			
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				
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					
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			1.003																		
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																				
87/84			1.002												1.004						
90/87	1.001																				
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 March 31, 2019

Age in										Acc	ident \	/ear									
<u>Months</u>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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
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	
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		
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			
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				
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					
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						
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							
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 acident year experience calls

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

## Quarterly Paid Indemnity Loss Development Factors Through March 31, 2019

Age in										Acc	cident `	⁄ear									
<u>Months</u>	<u>1998</u>	<u>1999</u>	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	<u>2018</u>
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
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	
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		
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			
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				
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					
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	1.016	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						
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							
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 acident year experience calls

## Quarterly Paid Medical Loss Development Factors \* Through March 31, 2019

Age in										Acc	cident '	Year									
<u>Months</u>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>2016</u>	2017	2018
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
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	
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		
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			
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				
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					
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						
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							
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 acident year experience calls

<sup>\*</sup> 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								Develop	ment							
Year	<u>3-15</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	87-99	99-111	111-123	123-135	135-147	147-159	<u>159-171</u>	<u>171-183</u>	183-195
1994																1.000
1995															1.001	1.000
1996														1.000	1.001	1.001
1997													1.000	1.000	1.000	1.000
1998												1.000	1.000	1.000	1.000	1.000
1999											1.000	1.001	1.000	1.000	1.000	1.000
2000										1.000	1.000	1.000	1.001	1.000	1.000	1.000
2001									0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002								0.999	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						0.999	0.999	0.999	1.000	0.999	1.000	1.001	1.000	1.000	1.000	
2005					1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000		
2006				1.004	1.002	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000			
2007			1.011	1.006	1.003	1.002	1.000	1.000	1.001	1.000	1.000	1.000				
2008		1.059	1.017	1.009	1.004	1.003	1.001	1.002	1.001	1.000	1.000					
2009	6.968	1.080	1.022	1.008	1.005	1.003	1.003	1.001	1.000	1.000						
2010	7.382	1.089	1.021	1.010	1.006	1.004	1.002	1.001	1.000							
2011	7.502	1.100	1.026	1.011	1.007	1.002	1.001	1.001								
2012	7.678	1.120	1.026	1.012	1.005	1.002	1.001									
2013	8.155	1.101	1.028	1.007	1.004	1.001										
2014	7.706	1.114	1.019	1.008	1.004											
2015	8.133	1.100	1.016	1.005												
2016	7.682	1.101	1.019													
2017	7.737	1.088														
2018	7.741															
								Latest	Year							
	Age-to-Age															
	7.741	1.088	1.019	1.005	1.004	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Age-to-Ultima		4.004	4.044	4.040	4.000	4.005	4.004	4.000	4 000	4.000	4.000	4 000	4.000	4.000	4.000
	8.708	1.125	1.034	1.014	1.010	1.006	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002

#### Quarterly Reported Indemnity Claim Count Development Factors

Accident							De	velopment							
Year	3-6	<u>6-9</u>	9-12	12-15	<u>15-18</u>	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			
2017	2.821	1.686	1.412	1.125	1.039	1.023	1.012	1.008							
2018	2.802	1.729	1.411	1.133											

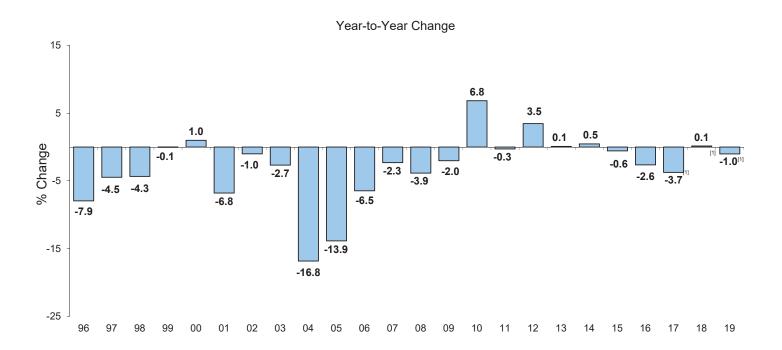
#### Reported Indemnity Claim Settlement Ratios

Accident							Е	Evaluated	as of (in	months):							
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>	<u>171</u>	<u>183</u>	<u>195</u>
1994																	98.8%
1995																98.4%	98.6%
1996															98.1%	98.3%	98.5%
1997														97.5%	97.8%	98.0%	98.2%
1998													96.8%	97.2%	97.5%	97.8%	98.1%
1999												96.2%	96.7%	97.1%	97.4%	97.8%	98.0%
2000											94.9%	95.7%	96.3%	96.8%	97.3%	97.6%	97.8%
2001										92.6%	93.8%	94.7%	95.4%	96.2%	96.7%	97.1%	97.4%
2002									91.2%	92.7%	94.0%	95.0%	96.0%	96.5%	97.0%	97.5%	97.8%
2003								88.9%	91.0%	92.7%	94.1%	95.4%	96.0%	96.6%	97.1%	97.6%	98.0%
2004							86.0%	88.8%	91.1%	92.8%	94.6%	95.6%	96.3%	96.9%	97.4%	97.9%	
2005						82.3%	86.3%	89.1%	91.3%	93.5%	94.8%	95.7%	96.6%	97.2%	97.7%		
2006					76.0%	82.2%	86.0%	89.0%	91.7%	93.4%	94.7%	95.8%	96.6%	97.3%			
2007				66.2%	75.4%	81.3%	85.5%	89.5%	91.9%	93.7%	95.1%	96.2%	96.9%				
2008			51.4%	64.5%	73.9%	80.5%	86.0%	89.6%	92.2%	94.0%	95.4%	96.4%					
2009		33.2%	49.6%	62.7%	72.7%	80.5%	85.7%	89.6%	92.3%	94.2%	95.6%						
2010	5.6%	33.6%	50.2%	63.5%	74.7%	82.0%	87.2%	90.9%	93.3%	95.1%							
2011	7.2%	34.0%	50.7%	65.3%	76.0%	83.2%	88.2%	91.7%	94.2%								
2012	7.2%	34.0%	51.8%	66.7%	77.2%	84.5%	89.4%	92.7%									
2013	8.4%	33.4%	52.8%	67.8%	78.9%	86.2%	90.8%										
2014	6.6%	33.8%	53.6%	69.2%	80.5%	87.5%											
2015	7.5%	34.0%	55.2%	71.8%	82.8%												
2016	7.2%	35.8%	58.0%	74.5%													
2017	7.2%	38.1%	60.9%														
2018	8.3%	38.8%															
2019	8.5%																

#### Estimated Ultimate Indemnity Claim Settlement Ratios

Accident							Е	valuated	as of (in	months):							
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	111	123	<u>135</u>	<u>147</u>	<u>159</u>	<u>171</u>	<u>183</u>	<u>195</u>
1994																	98.5%
1995																98.1%	98.3%
1996															97.8%	98.0%	98.2%
1997														97.2%	97.4%	97.7%	97.9%
1998													96.5%	96.9%	97.3%	97.6%	97.8%
1999												95.8%	96.4%	96.8%	97.1%	97.6%	97.8%
2000											94.5%	95.3%	95.9%	96.5%	97.1%	97.4%	97.6%
2001										92.3%	93.5%	94.4%	95.1%	95.9%	96.4%	96.8%	97.2%
2002									91.1%	92.6%	93.8%	94.8%	95.8%	96.4%	96.8%	97.3%	97.6%
2003								89.0%	90.9%	92.6%	93.9%	95.1%	95.8%	96.4%	97.0%	97.4%	97.8%
2004							86.0%	88.8%	91.0%	92.6%	94.4%	95.3%	96.1%	96.7%	97.2%	97.7%	
2005						82.0%	86.0%	88.9%	91.1%	93.2%	94.6%	95.6%	96.4%	97.0%	97.5%		
2006					75.4%	81.7%	85.6%	88.6%	91.4%	93.1%	94.5%	95.6%	96.4%	97.1%			
2007				65.2%	74.6%	80.7%	85.1%	89.1%	91.5%	93.5%	94.9%	96.0%	96.8%				
2008			49.4%	63.1%	72.8%	79.7%	85.4%	89.1%	91.9%	93.8%	95.1%	96.2%					
2009		29.4%	47.3%	61.3%	71.6%	79.7%	85.1%	89.2%	92.0%	93.9%	95.4%						
2010	0.7%	29.5%	47.9%	62.0%	73.6%	81.2%	86.7%	90.5%	93.1%	94.8%							
2011	0.8%	29.4%	48.2%	63.7%	74.9%	82.7%	87.8%	91.4%	93.9%								
2012	0.8%	28.9%	49.3%	65.1%	76.3%	83.9%	89.0%	92.4%									
2013	0.9%	29.0%	50.5%	66.6%	78.1%	85.7%	90.4%										
2014	0.7%	29.3%	51.7%	68.0%	79.7%	86.9%											
2015	0.8%	30.0%	53.6%	70.8%	82.0%												
2016	0.8%	31.4%	56.1%	73.4%													
2017	0.8%	33.9%	58.9%														
2018	1.0%	34.5%															
2019	1.0%																

### 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 March 31, 2019 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

## Item AC19-08-01 Third Quarter 2019 Review of Diagnostics

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

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

#### Please note the following:

- 1. Permanent disability claims continue to close at a faster rate throughout the state. The percent of permanent disability claims closed increased from 30% for policy year 2010 to 46% for policy year 2015 at second report level, with claim settlement increasing fastest in the Los Angeles region. The rate at which temporary disability claims close has also begun to increase in the last several years with the largest rate of increase in the Bay Area (Exhibit M5).
- 2. While the number of expedited hearings in total has continued to increase (Exhibit M8.1), the share of Southern California expedited hearings related to issues other than medical treatment or temporary disability has declined sharply (Exhibit M8.2).
- 3. Since Senate Bill No. 1160 (SB 1160) became effective January 1, 2017, the number of filed liens has continued to decrease. The number of liens filed in the first half of 2019 is 37% less than the first half of 2018. Lien filings of virtually all types and in virtually all regions have declined (Exhibit M9.1).
- 4. The percentage of permanent disability claims involving a Medicare set-aside shows indicators of decline (Exhibit M10.2).
- 5. After reaching a historical high in 2018, the number of independent medical review (IMR) applications eligible for review declined in the first half of 2019 to the level comparable to the first half of 2017 (Exhibit M14).
- 6. The number of medical-only claims reported each quarter have been increasing steadily over the last several years concurrently with changes in reporting requirements and experience rating treatment of small "first aid" claims (Exhibit C11).
- 7. On a preliminary basis, the frequency of cumulative trauma claims in all areas of the state increased significantly for accident year 2017, with the greatest increases in the Los Angeles Basin and San Diego areas (Exhibits C21.3 and C21.42).
- 8. Although claims caused by motor vehicle accidents continue to represent a relatively small proportion of all indemnity claims, the frequency of indemnity claims caused by motor vehicle accidents has increased approximately 13% from 2014 to 2016, while the overall statewide frequency has decreased over this period (Exhibit C25).
- 9. Paid indemnity and medical severities per indemnity claim shows significant increase with accident year 2018 indemnity severity increasing 5% over accident year 2017 (Exhibit S4.1) and medical severity increasing 3% (Exhibit S4.2.). Incremental paid medical severities also showed growth in the last several quarters (Exhibit S7).

- 10. Temporary disability duration has continued its post-Senate Bill No. 863 decline. The median temporary disability duration on permanent disability claims for accident year 2016 claims at first survey level is down 38% from 2008 and 21% from 2012 (Exhibit S10.2).
- 11. Paid allocated loss adjustment expenses (ALAE) per indemnity claim continues to rise. The average private insurer paid ALAE for accident year 2018 at 15 months is 9% above 2017 and almost 50% above 2012 (Exhibit E5).
- 12. Following a sharper decline in 2017, the number of medical-legal reports per claim and the average cost per report continued to decrease in the 2018 service year by approximately 1% and 3%, respectively (Exhibit E13).
- 13. Despite changes in SB 1160 and the new drug formulary intended to limit prospective utilization review, the average cost of medical cost containment programs (MCCP) per indemnity claim for accident year 2018 at 15 months is 9% above the 2017 level (Exhibit E15).

#### Exhibit Numbering Guide July 2019

	E 1320
Exhibit #	Exhibit Name  Market/Claim Characteristics
M3	Total Incurred Loss Distribution by Insurer
M4	Distribution of Estimated Ultimate Number of Claims by Injury Type
M5	Percentage of Claims Closed by Injury Type and Region - First through Third Report Level
M6	Percentage of Claim Count and Average Severity by Geographic Region
M8	Quarterly Expedited Hearings by Region
M9	Number of Division of Workers' Compensation (DWC) Lien Decisions
M10	Medicare Set-aside Costs by Age Interval & Permanent Disability Rating Interval
M14	IMR Filed Counts
IVIII	Claim Count
C1	Reported Indemnity Claim Count Development - Statewide
C2	Indemnity Claim Settlement Rates by Injury Type
C3	Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims
C4	Reopening Rates Based on Unit Statistical Data & by Injury Type
C5	Closed-Closed Development Based on Unit Statistical Data
C6	California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year
C7	Accident Year Indemnity Claim Frequency Model & Indemnity Claim Frequency History and Projections
C8	California OPRL Injury & Illness Rates
C9	Self-Insured Employers - Claim Frequency
C10	Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness
C11	Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts
C12	Economic Variables
C15	Accident Year Cumulative Injury Indemnity Claim Counts by Policy Year and Report Level
C17	Claim Count Ratios by Region Based on Unit Statistical Data at 1st Report Level
C18	Ratio of Total Indemnity Claim Counts to Total Claim Counts
C19	Distribution of Cumulative Injury Claims by Injury Type
C20	Indemnity Claim Frequency Relativities by NAICS Sector
C21	Indemnity Claim Frequency by Geographic Region
C24	Percentage of Cumulative Trauma Indemnity Claims by Policy Years and Industry Sector
C25	Frequency of Indemnity Claims Caused by Motor Vehicle Accidents
	Loss Development
D4	Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year
D6	Comparison of Projected Loss Ratios
	Claim Severity
S2	Average Incurred Indemnity Loss per Reported Indemnity Claim & Incurred Medical Loss per Reported Claim
S3	Average Indemnity & Medical Case Outstanding Per Open Indemnity Claim
S4	Average Paid Losses per Indemnity Claim & Average Paid Medical Loss Per Claim
S5	Average Paid Losses per Closed Indemnity Claim
S6	Ratio of Incremental Paid Indemnity & Medical to Indemnity Claims Open During Period
S7	Ratio of Quarterly Paid Medical to Indemnity Claims Inventory
S8	Estimated Ultimate Severities by Injury Type
S10	Changes in the Number of Weeks of Temporary Disability Benefits
S11	Average Permanent Disability Ratings by Type of Loss
S14	Self Insured Employers - Claim Severity
S15	Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness
S16	Claim Counts and Losses on Claims in Excess of \$250,000 & \$500,000 & \$1,000,000
S18	Indemnity Claim Frequency by Layer of Incurred Medical at USR 1st
	Loss Adjustment Expense
E5	Average Paid ALAE Per Reported Indemnity Claim - Private Insurers
E6	Ratio of Paid ALAE to Paid Loss - Private Insurers
E7	Percentage of Represented Permanent Disability Claims by Region and Loss Type
E8	Distribution of Total ALAE & MCCP Components - Private Insurers
E9	Applicant Attorney Expense Paid - Private Insurers
E13	Changes in the Number and Cost of Medical-Legal Reports by Service Year
E15	Average Paid MCCP per Reported Indemnity Claim - Statewide

#### **Total Incurred Loss Distribution by Insurer\***

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

<u>Group</u> State Fund	AY 2014 <u>@ 12/31/2014</u> 10.2%	AY 2015 @ 12/31/2015 12.0%	AY 2016 @ 12/31/2016 9.5%	AY 2017 @ 12/31/2017 10.8%	AY 2018 @ 12/31/2018 12.7%
1	7.6%	8.0%	8.0%	8.4%	8.4%
2	6.6%	7.8%	7.4%	6.5%	6.5%
3	8.0%	7.8%	7.6%	6.8%	6.2%
4	7.7%	6.9%	6.8%	5.2%	5.4%
5	3.6%	4.3%	4.7%	4.9%	4.8%
6	4.2%	3.4%	3.2%	3.1%	3.4%
7	3.8%	3.6%	3.6%	3.9%	3.4%
8	3.8%	3.6%	3.6%	3.5%	2.9%
9	3.2%	2.7%	2.7%	2.2%	2.3%
10	1.6%	1.8%	1.8%	2.1%	2.2%
All Other	39.7%	38.3%	41.0%	42.8%	41.8%

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

	AY 2014	AY 2015	AY 2016	AY 2017	AY 2018
<u>Group</u>	@ 12/31/2014	@ 12/31/2015	@ 12/31/2016	@ 12/31/2017	@ 12/31/2018
1	8.5%	9.1%	8.8%	9.4%	9.7%
2	7.4%	8.8%	8.2%	7.2%	7.5%
3	9.0%	8.8%	8.4%	7.6%	7.1%
4	8.6%	7.9%	7.5%	5.8%	6.2%
5	4.0%	4.9%	5.2%	5.5%	5.6%
6	4.6%	3.8%	3.5%	3.4%	3.9%
7	4.3%	4.0%	4.0%	4.4%	3.9%
8	4.2%	4.1%	4.0%	3.9%	3.3%
9	3.5%	3.0%	3.0%	2.4%	2.6%
10	1.8%	2.0%	2.0%	2.4%	2.5%
All Other	44.2%	43.5%	45.3%	47.9%	47.8%

Source: WCIRB quarterly calls for experience

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

<sup>\*\*</sup>Groups are ranked according to accident year 2018 incurred losses. State Fund is State Compensation Insurance Fund.

#### Distribution of Estimated Ultimate Number of Claims by Injury Type

#### I. Distribution of Ultimate Number of Indemnity Claims

Accident	Permanent	Temporary	
<u>Year</u>	<u>Indemnity</u>	<u>Indemnity</u>	<u>Total</u>
2001	52.8%	47.2%	100%
2002	54.5%	45.5%	100%
2003	53.9%	46.1%	100%
2004	49.7%	50.3%	100%
2005	46.3%	53.7%	100%
2006	47.4%	52.6%	100%
2007	48.6%	51.4%	100%
2008	50.8%	49.2%	100%
2009	52.2%	47.8%	100%
2010	51.7%	48.3%	100%
2011	51.5%	48.5%	100%
2012	51.0%	49.0%	100%
2013	51.2%	48.8%	100%
2014	51.7%	48.3%	100%
2015	52.7%	47.3%	100%
2016	51.8%	48.2%	100%
2017*	51.9%	48.1%	100%

#### II. Distribution of Ultimate Number of All Claims

Accident	Permanent	Temporary	Medical	
<u>Year</u>	Indemnity**	Indemnity	<u>Only</u>	<u>Total</u>
2001	16.8%	15.0%	68.2%	100%
2002	18.0%	15.0%	67.0%	100%
2003	18.3%	15.7%	66.0%	100%
2004	15.7%	15.8%	68.5%	100%
2005	13.5%	15.7%	70.8%	100%
2006	13.7%	15.2%	71.1%	100%
2007	14.4%	15.2%	70.4%	100%
2008	15.1%	14.6%	70.3%	100%
2009	16.3%	14.9%	68.8%	100%
2010	16.9%	15.8%	67.3%	100%
2011	17.4%	16.3%	66.3%	100%
2012	17.6%	16.9%	65.5%	100%
2013	18.3%	17.4%	64.3%	100%
2014	18.4%	17.2%	64.4%	100%
2015	18.8%	16.9%	64.3%	100%
2016	18.5%	17.2%	64.3%	100%
2017*	18.0%	16.7%	65.3%	100%

<sup>\*</sup> Accident year 2018 experience is partial in that it only reflects experience from policy year 2017.

Source: WCIRB unit statistical data

<sup>\*\*</sup> Permanent indemnity consists of the death, permanent total, and permanent partial injury types.

#### Percentage of Claims Closed by Injury Type and Region

Permanent Partial & Temporary

		Pe	rmanent Pa	artial & Tem	porary				
									Latest Year
Permanent F	Partial								Reported
	_				Policy Year	-			Claim
Report Leve	<u>Region*</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Distribution</u>
1	Bay Area	10%	12%	14%	15%	16%	18%	19%	14%
1	Los Angeles	11%	12%	15%	16%	17%	21%	24%	54%
1	San Diego	14%	13%	17%	20%	20%	23%	26%	7%
1	Remainder of CA	12%	13%	15%	17%	17%	20%	22%	25%
	ALL REGIONS COMBINED	11%	12%	15%	16%	17%	20%	23%	100%
2	Bay Area	32%	35%	38%	38%	41%	45%		15%
2	Los Angeles	28%	32%	37%	37%	40%	45%		54%
2	San Diego	34%	38%	43%	44%	46%	50%		7%
2	Remainder of CA	32%	36%	38%	39%	42%	47%		24%
	ALL REGIONS COMBINED	30%	34%	38%	38%	41%	46%		100%
3	Bay Area	53%	55%	58%	59%	62%			15%
3	Los Angeles	48%	51%	55%	55%	59%			55%
3	San Diego	57%	59%	62%	65%	67%			7%
3	Remainder of CA	53%	56%	58%	59%	62%			24%
	ALL REGIONS COMBINED	50%	53%	56%	58%	61%			100%
									Latast Vaar
Tomporoni									Latest Year
Temporary					Policy Year				Reported Claim
Report Leve	<u> </u>	2010	2011	2012	2013	2014	2015	2016	<u>Distribution</u>
	<del></del>								
1	Bay Area	56%	56%	54%	56%	59%	60%	61%	18%
1	Los Angeles	50%	51%	49%	47%	50%	51%	52%	46%
1	San Diego	58%	58%	56%	55%	56%	57%	60%	7%
1	Remainder of CA	59%	59%	57%	55%	59%	60%	61%	29%
	ALL REGIONS COMBINED	54%	55%	53%	52%	55%	55%	57%	100%
2	Bay Area	74%	74%	73%	77%	77%	79%		17%
2	Los Angeles	68%	68%	67%	68%	70%	71%		45%
2	San Diego	75%	73%	75%	75%	76%	77%		7%
2	Remainder of CA	76%	75%	73%	74%	76%	77%		31%
	ALL REGIONS COMBINED	72%	71%	71%	72%	73%	75%		100%
3	Bay Area	86%	85%	85%	87%	89%			17%
3	Los Angeles	78%	79%	80%	81%	82%			46%
3	San Diego	84%	85%	86%	87%	88%			7%
3	Remainder of CA	85%	84%	85%	86%	86%			30%
	ALL REGIONS COMBINED	82%	82%	83%	84%	85%			100%

<sup>\*</sup>Los Angeles Includes Los Angeles County and remainder of Los Angeles Basin Source: WCIRB unit statistical data

# Percentage of Claim Count and Average Severity of Compromise & Release and Stipulated and Award Settlements Geographic Region: All Regions Combined

	Policy Year 2011									
Compromise & Release Stipulated Award Total/Average	Claims Distri	% Average bution Indemnity 24,578 18,741 23,646	Average Medical 28,206 16,784 26,382	Average <u>Incurred</u> 52,784 <u>35,526</u> 50,027	% Change in Claims   	% Change in Avq. Indemnity	% Change in Avg. Medical  	% Change in Avg. Incurred		
				Policy Y	′ear 2012					
Compromise & Release Stipulated Award Total/Average	Claims Distri 12,934	Average Indemnity 23,200 16% 17,044 22,219	Average Medical 26,737 15,359 24,923	Average <u>Incurred</u> 49,937 <u>32,403</u> 47,143	% Change in <u>Claims</u> 28.7% <u>28.3%</u> 28.6%	% Change in Avg. Indemnity -5.6% -9.1% -6.0%	% Change in Avg. Medical -5.2% -8.5% -5.5%	% Change in <u>Avg. Incurred</u> -5.4% - <u>8.8%</u> -5.8%		
	Policy Year 2013									
Compromise & Release Stipulated Award Total/Average	Claims Distri	% Average bution 84% 24,087 17,914 23,128	Average <u>Medical</u> 25,999 <u>14,353</u> 24,189	Average Incurred 50,086 32,267 47,317	% Change in <u>Claims</u> 31.6% <u>27.7%</u> 31.0%	% Change in <u>Avg. Indemnity</u> 3.8% <u>5.1%</u> 4.1%	% Change in Avg. Medical -2.8% -6.6% -2.9%	% Change in Avg. Incurred 0.3% -0.4% 0.4%		
				Policy Y	′ear 2014					
Compromise & Release Stipulated Award Total/Average	Claims Distri 20,871	% Average bution 84% 25,960 16% 18,377 24,782	Average Medical 25,939 13,461 24,001	Average <u>Incurred</u> 51,899 <u>31,838</u> 48,783	% Change in <u>Claims</u> 22.6% <u>22.5%</u> 22.6%	% Change in Avg. Indemnity 7.8% 2.6% 7.2%	% Change in Avg. Medical -0.2% -6.2% -0.8%	% Change in Avg. Incurred 3.6% -1.3% 3.1%		

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

# Percentage of Claim Count and Average Severity of Compromise & Release and Stipulated Finding and Award Settlements Geographic Region: Bay Area

					Policy	Year 2011			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 1,380 326 1,706	% <u>Distribution</u> 81% 19%	Average Indemnity 29,056 18,366 27,013	Average <u>Medical</u> 30,345 <u>15,753</u> 27,557	Average <u>Incurred</u> 59,401 <u>34,119</u> 54,570	% Change in Claims   	% Change in Avg. Indemnity	% Change in Avg. Medical  	% Change in Avg. Incurred
					Policy	Year 2012			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 1,726 <u>461</u> 2,187	% <u>Distribution</u> 79% 21%	Average Indemnity 27,688 18.353 25,720	Average <u>Medical</u> 29,431 <u>14,901</u> 26,368	Average <u>Incurred</u> 57,120 <u>33.254</u> 52,089	% Change in <u>Claims</u> 25.1% 41.4% 28.2%	% Change in <u>Avg. Indemnity</u> -4.7% <u>-0.1%</u> -4.8%	% Change in Avg. Medical -3.0% -5.4% -4.3%	% Change in <u>Avg. Incurred</u> -3.8% -2.5% -4.5%
					Policy	Year 2013			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 2,217 546 2,763	% <u>Distribution</u> 80% 20%	Average Indemnity 29,892 20,521 28,040	Average <u>Medical</u> 29,785 <u>14,727</u> 26,809	Average <u>Incurred</u> 59,677 <u>35,248</u> 54,850	% Change in <u>Claims</u> 28.4% 18.4% 26.3%	% Change in Avg. Indemnity 8.0% 11.8% 9.0%	% Change in Avg. Medical 1.2% -1.2% 1.7%	% Change in Avg. Incurred 4.5% 6.0% 5.3%
					Policy	Year 2014			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 2,839 765 3,604	% <u>Distribution</u> 79% 21%	Average Indemnity 32,956 18,829 29,957	Average <u>Medical</u> 31,536 13,238 27,652	Average <u>Incurred</u> 64,492 32,068 57,610	% Change in <u>Claims</u> 28.1% 40.1% 30.4%	% Change in <u>Avg. Indemnity</u> 10.2% <u>-8.2%</u> 6.8%	% Change in Avg. Medical 5.9% -10.1% 3.1%	% Change in Avg. Incurred 8.1% -9.0% 5.0%

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

# Percentage of Claim Count and Average Severity of Compromise & Release and Stipulated Finding and Award Settlements Geographic Region: Los Angeles\*\*

	Policy Year 2011										
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 5,296 <u>893</u> 6,189	% <u>Distribution</u> 86% 14%	Average Indemnity 23,023 18,976 22,439	Average <u>Medical</u> 26,508 17,627 25,226	Average <u>Incurred</u> 49,531 <u>36,603</u> 47,665	% Change in Claims  	% Change in Avg. Indemnity	% Change in Avg. Medical  	% Change in Avg. Incurred		
					Policy Ye	ear 2012					
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 7,031 <u>1,169</u> 8,200	% <u>Distribution</u> 86% 14%	Average Indemnity 21,390 16.832 20,740	Average <u>Medical</u> 24,199 <u>15,488</u> 22,957	Average <u>Incurred</u> 45,589 <u>32,320</u> 43,697	% Change in <u>Claims</u> 32.8% 30.9% 32.5%	% Change in <u>Avg. Indemnity</u> -7.1% <u>-11.3%</u> -7.6%	% Change in Avg. Medical -8.7% -12.1% -9.0%	% Change in Avg. Incurred -8.0% -11.7% -8.3%		
					Policy Ye	ear 2013					
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 9,225 <u>1,446</u> 10,671	% <u>Distribution</u> 86% 14%	Average Indemnity 22,163 17,871 21,582	Average <u>Medical</u> 23,595 14,939 22,422	Average Incurred 45,758 32,810 44,003	% Change in <u>Claims</u> 31.2% <u>23.7%</u> 30.1%	% Change in <u>Avg. Indemnity</u> 3.6% <u>6.2%</u> 4.1%	% Change in Avg. Medical -2.5% -3.5% -2.3%	% Change in Avg. Incurred 0.4% 1.5% 0.7%		
					Policy Ye	ear 2014					
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 11,389 <u>1,740</u> 13,129	% <u>Distribution</u> 87% 13%	Average Indemnity 23,797 18,171 23,051	Average <u>Medical</u> 22,984 <u>13,643</u> 21,746	Average Incurred 46,781 31,813 44,797	% Change in <u>Claims</u> 23.5% <u>20.3%</u> 23.0%	% Change in Avg. Indemnity 7.4% 1.7% 6.8%	% Change in <u>Avg. Medical</u> -2.6% <u>-8.7%</u> -3.0%	% Change in Avg. Incurred 2.2% -3.0% 1.8%		

\*\*Includes Los Angeles County and remainder of Los Angeles Basin Source: closed permanent disability claims from third report level unit statistical data

# Percentage of Claim Count and Average Severity of Compromise & Release and Stipulated Finding and Award Settlements Geographic Region: San Diego

					Policy Ye	ear 2011			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 725 <u>139</u> 864	% <u>Distribution</u> 84% 16%	Average <u>Indemnity</u> 24,555 <u>15,503</u> 23,099	Average <u>Medical</u> 27,688 <u>14,993</u> 25,646	Average Incurred 52,243 30,496 48,744	% Change in Claims  	% Change in Avg. Indemnity	% Change in Avg. Medical	% Change in Avg. Incurred  
					Policy Ye	ear 2012			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 875 <u>205</u> 1,080	% <u>Distribution</u> 81% 19%	Average Indemnity 21,745 14,857 20,437	Average <u>Medical</u> 27,195 <u>14,390</u> 24,764	Average Incurred 48,940 29,247 45,202	% Change in <u>Claims</u> 20.7% 47.5% 25.0%	% Change in Avg. Indemnity -11.4% -4.2% -11.5%	% Change in Avg. Medical -1.8% -4.0% -3.4%	% Change in Avg. Incurred -6.3% -4.1% -7.3%
					Policy Ye	ear 2013			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 1,265 285 1,550	% <u>Distribution</u> 82% 18%	Average Indemnity 22,368 16,311 21,255	Average <u>Medical</u> 26,504 11,793 23,799	Average Incurred 48,872 28,105 45,054	% Change in <u>Claims</u> 44.6% 39.0% 43.5%	% Change in Avg. Indemnity 2.9% 9.8% 4.0%	% Change in Avg. Medical -2.5% -18.0% -3.9%	% Change in Avg. Incurred -0.1% -3.9% -0.3%
					Policy Ye	ear 2014			
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 1,520 <u>307</u> 1,827	% <u>Distribution</u> 83% 17%	Average Indemnity 23,329 17,813 22,402	Average <u>Medical</u> 27,189 12,259 24,680	Average <u>Incurred</u> 50,518 30,072 47,083	% Change in <u>Claims</u> 20.2% 7.7% 17.9%	% Change in Avg. Indemnity 4.3% 9.2% 5.4%	% Change in Avg. Medical 2.6% 3.9% 3.7%	% Change in Avg. Incurred 3.4% 7.0% 4.5%

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

# Percentage of Claim Count and Average Severity of Compromise & Release and Stipulated Finding and Award Settlements Geographic Region: Other

-	Policy Year 2011										
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 2,651 <u>553</u> 3,204	% <u>Distribution</u> 83% 17%	Average Indemnity 25,361 19,398 24,332	Average <u>Medical</u> 30,627 <u>16,482</u> 28,186	Average <u>Incurred</u> 55,988 <u>35,879</u> 52,517	% Change in Claims  	% Change in Avg. Indemnity	% Change in Avg. Medical	% Change in Avg. Incurred		
_					Policy Ye	ear 2012					
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 3,302 <u>617</u> 3,919	% <u>Distribution</u> 84% 16%	Average Indemnity 25,095 17,196 23,851	Average <u>Medical</u> 30,610 <u>15,779</u> 28,275	Average <u>Incurred</u> 55,705 <u>32,975</u> 52,126	% Change in <u>Claims</u> 24.6% <u>11.6%</u> 22.3%	% Change in Avg. Indemnity -1.1% -11.4% -2.0%	% Change in Avg. Medical -0.1% -4.3% 0.3%	% Change in Avg. Incurred -0.5% -8.1% -0.7%		
<u>-</u>					Policy Ye	ear 2013					
Compromise & Release Stipulated Award Total/Average	<u>Claims</u> 4,319 855 5,174	% <u>Distribution</u> 83% 17%	Average Indemnity 25,720 16,855 24,255	Average <u>Medical</u> 29,043 <u>13,977</u> 26,554	Average <u>Incurred</u> 54,763 <u>30,831</u> 50,808	% Change in <u>Claims</u> 30.8% 38.6% 32.0%	% Change in Avg. Indemnity 2.5% -2.0% 1.7%	% Change in Avg. Medical -5.1% -11.4% -6.1%	% Change in Avg. Incurred -1.7% -6.5% -2.5%		
-					Policy Ye	ear 2014					
Compromise & Release Stipulated Award Total/Average	Claims 5,123 1,026 6,149	% <u>Distribution</u> 83% 17%	Average Indemnity 27,672 18,560 26,152	Average <u>Medical</u> 29,034 <u>13,678</u> 26,472	Average Incurred 56,706 32,238 52,623	% Change in <u>Claims</u> 18.6% <u>20.0%</u> 18.8%	% Change in Avg. Indemnity 7.6% 10.1% 7.8%	% Change in Avg. Medical 0.0% -2.1% -0.3%	% Change in Avg. Incurred 3.5% 4.6% 3.6%		

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

#### **Quarterly Expedited Hearings by Region**

Time Period	Northern <u>California</u>	Central <u>California</u>	Southern <u>California</u>	Expedited <u>Hearing</u>	Change from Same Quarter in Prior Year
1st Qtr 2011				2,503	
2nd Qtr 2011				2,098	
3rd Qtr 2011				2,462	
4th Qtr 2011				2,439	
1st Qtr 2012				2,480	-0.9%
2nd Qtr 2012				2,525	20.4%
3rd Qtr 2012				3,786	53.8%
4th Qtr 2012				2,673	9.6%
1st Qtr 2013				3,480	40.3%
2nd Qtr 2013				3,615	43.2%
3rd Qtr 2013				4,109	8.5%
4th Qtr 2013				4,013	50.1%
1st Qtr 2014				3,813	9.6%
2nd Qtr 2014	14.4%	24.6%	60.9%	4,463	23.5%
3rd Qtr 2014	16.6%	23.5%	59.8%	4,404	7.2%
4th Qtr 2014	16.9%	16.8%	66.3%	3,926	-2.2%
1st Qtr 2015	15.9%	18.2%	65.9%	4,062	6.5%
2nd Qtr 2015	18.0%	18.0%	63.9%	3,993	-10.5%
3rd Qtr 2015	17.6%	20.1%	62.3%	4,222	-4.1%
4th Qtr 2015	19.1%	20.3%	60.6%	4,252	8.3%
1st Qtr 2016	18.4%	20.7%	60.8%	4,507	11.0%
2nd Qtr 2016	16.7%	20.5%	62.8%	4,631	16.0%
3rd Qtr 2016	17.5%	20.3%	62.2%	4,764	12.8%
4th Qtr 2016	18.3%	20.1%	61.6%	4,569	7.5%
1st Qtr 2017	19.1%	20.3%	60.6%	4,983	10.6%
2nd Qtr 2017	16.8%	17.8%	65.4%	4,990	7.8%
3rd Qtr 2017	16.8%	15.3%	67.9%	5,041	5.8%
4th Qtr 2017	16.5%	15.3%	68.2%	5,155	12.8%
1st Qtr 2018	20.0%	16.4%	63.6%	5,633	13.0%
2nd Qtr 2018	19.7%	14.8%	65.5%	5,768	15.6%
3rd Qtr 2018	20.7%	13.8%	65.5%	5,594	11.0%
4th Qtr 2018	20.3%	12.5%	67.2%	5,537	7.4%
1st Qtr 2019	20.1%	14.6%	65.3%	5,705	1.3%
2nd Qtr 2019	17.8%	12.0%	70.2%	5,831	1.1%

Source: DWC

#### **Quarterly Expedited Hearings - DOR Reasons by Region**

#### **Northern California**

	Medical		
Time Period	<u>Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	77.4%	18.1%	4.5%
2015	76.4%	19.9%	3.7%
2016	77.6%	19.2%	3.2%
2017	77.5%	20.5%	2.0%
2018	80.8%	17.3%	1.9%
1Q19-2Q19	80.6%	17.0%	2.4%

#### **Central California**

	Medical		
Time Period	<u>Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	86.8%	12.2%	1.0%
2015	84.6%	14.2%	1.2%
2016	87.3%	12.0%	0.7%
2017	84.8%	14.3%	0.9%
2018	84.7%	14.9%	0.4%
1Q19-2Q19	83.6%	15.9%	0.5%

#### **Southern California**

	Medical		
Time Period	<u>Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	70.0%	19.4%	10.7%
2015	65.4%	20.5%	14.1%
2016	69.1%	18.9%	12.0%
2017	71.5%	18.6%	9.9%
2018	74.2%	17.0%	8.8%
1Q19-2Q19	77.3%	16.7%	5.9%

Source: DWC

#### Liens Filed Counts\*

	Counts by Region**									
		Central		D	Remaining		0 D'			
Time Period	Bay Area	Coast/ Valley	Los Angeles County	Remainder of LA Basin	CA Zip Codes	Sacramento	San Diego County	Total		
2011	18,723	24,414	283.774	114,554	2,535	3,934	15,922	463,856		
1st Qtr 2012	5,490	7,245	97,245	38,034	895	1,248	4.936	155,093		
2nd Qtr 2012	5,467	8,970	122,040	44,065	1,102	1,322	4,991	187,957		
3rd Qtr 2012	6,434	15,289	207,639	85,152	698	1,407	6,611	323,230		
4th Qtr 2012	10,397	25,730	342,549	123,129	1,119	1,557	8,523	513,004		
1st Qtr 2013	1,232	2,193	46,830	17,032	230	268	1,312	69,097		
2nd Qtr 2013	1,450	1,562	18,947	6,917	211	339	684	30,110		
3rd Qtr 2013	1,607	1,795	25,999	9,855	247	410	991	40,904		
4th Qtr 2013	1,928	2,025	29,537	10,893	276	358	1,136	46,153		
1st Qtr 2014	1,841	2,029	25,668	10,117	239	384	1,165	41,443		
2nd Qtr 2014	1,697	2,306	29,417	11,942	265	354	1,263	47,244		
3rd Qtr 2014	1,941	1,996	29,665	12,198	355	424	1,378	47,957		
4th Qtr 2014	1,690	2,371	34,772	12,469	374	384	1,488	53,548		
1st Qtr 2015	2,071	3,058	45,827	18,016	431	488	2,133	72,024		
2nd Qtr 2015	2,370	4,218	54,147	22,198	501	500	2,787	86,721		
3rd Qtr 2015	2,428	4,977	61,619	24,827	691	526	3,047	98,115		
4th Qtr 2015	2,338	4,991	68,843	26,571	686	495	3,085	107,009		
1st Qtr 2016	2,884	5,410	67,259	27,326	672	538	3,931	108,020		
2nd Qtr 2016	2,543	5,112	66,511	26,852	536	506	3,912	105,972		
3rd Qtr 2016	2,243	4,167	45,707	20,136	420	462	3,404	76,539		
4th Qtr 2016	1,872	4,433	66,169	25,942	506	397	4,400	103,719		
1st Qtr 2017	1,228	1,872	24,947	9,594	334	312	1,380	39,667		
2nd Qtr 2017	1,537	2,211	33,194	11,969	349	369	1,764	51,393		
3rd Qtr 2017	1,700	2,047	29,215	10,487	298	419	1,149	45,315		
4th Qtr 2017	1,535	1,804	26,566	9,914	313	366	1,176	41,674		
1st Qtr 2018	1,501	1,575	28,754	10,848	312	406	1,314	44,710		
2nd Qtr 2018	1,264	1,538	23,697	9,034	312	338	986	37,169		
3rd Qtr 2018	1,156	1,178	18,596	6,340	241	309	702	28,522		
4th Qtr 2018	1,276	1,217	19,034	6,108	230	308	690	28,522		
1st Qtr 2019	1,206	1,044	17,863	5,664	268	336	577	26,958		
2nd Qtr 2019	1,447	1,049	15,862	5,073	244	334	445	24,454		

		C	Counts by Type			
			Medical-	Сору		
Time Period	<u>Interpreter</u>	<u>Medical</u>	<u>Legal</u>	<u>Service</u>	Other***	Total
2011	28,721	292,982	39,569	539	102,045	463,85
1st Qtr 2012	12,937	85,152	22,931	139	33,934	155,09
2nd Qtr 2012	17,162	106,336	37,440	65	26,954	187,95
3rd Qtr 2012	46,095	182,474	64,912	91	29,658	323,23
4th Qtr 2012	47,427	317,241	80,916	62	67,358	513,00
1st Qtr 2013	2,397	45,631	11,411	11	9,647	69,09
2nd Qtr 2013	831	22,480	587	20	6,192	30,11
3rd Qtr 2013	484	32,356	653	23	7,388	40,90
4th Qtr 2013	378	37,515	537	8	7,715	46,15
1st Qtr 2014	421	33,105	397	16	7,504	41,44
2nd Qtr 2014	275	38,534	320	10	8,105	47,24
3rd Qtr 2014	140	39,810	179	7	7,821	47,95
4th Qtr 2014	156	45,440	160	4	7,788	53,54
1st Qtr 2015	143	60,155	216	18	11,492	72,02
2nd Qtr 2015	152	74,037	268	7	12,257	86,72
3rd Qtr 2015	134	84,290	191	7	13,493	98,11
4th Qtr 2015	101	91,820	236	15	14,837	107,00
1st Qtr 2016	60	93,393	233	5	14,329	108,02
2nd Qtr 2016	90	89,781	467	6	15,628	105,97
3rd Qtr 2016	64	64,924	262	11	11,278	76,53
4th Qtr 2016	94	91,867	68	4	11,686	103,71
1st Qtr 2017	29	33,952	19	3	5,664	39,66
2nd Qtr 2017	33	43,470	34	5	7,851	51,39
3rd Qtr 2017	77	37,815	31	0	7,392	45,31
4th Qtr 2017	65	33,876	18	1	7,714	41,67
1st Qtr 2018	64	36,674	29	2	7,941	44,71
2nd Qtr 2018	103	29,276	22	0	7,768	37,16
3rd Qtr 2018	79	21,334	14	4	7,091	28,52
4th Qtr 2018	60	21,595	22	1	7,185	28,86
1st Qtr 2019	75	19,887	12	1	6,983	26,95
2nd Qtr 2019	54	18,497	17	1	5,885	24,45

<sup>\*</sup> Lien Counts exclude SDI/EDD Liens

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

Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego \*\*\*Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens Source: EAMS Liens Data

#### **Liens Filed Counts\***

Counts by Region\*\*

			Co	ounts by Region*	*			
		Central		-	Remaining			
		Coast/	Los Angeles	Remainder	CA Zip		San Diego	
<u>Month</u>	Bay Area	Valley	County	of LA Basin	<u>Codes</u>	<u>Sacramento</u>	County	<u>Total</u>
Jan-17	210	347	5,362	2,380	69	64	316	8,748
Feb-17	421	598	8,251	3,112	122	118	453	13,075
Mar-17	597	927	11,334	4,102	143	130	611	17,844
Apr-17	474	764	11,573	4,118	110	106	640	17,785
May-17	519	835	11,395	4,175	121	132	573	17,750
Jun-17	544	612	10,226	3,676	118	131	551	15,858
Jul-17	530	548	10,092	3,636	101	130	426	15,463
Aug-17	594	703	10,712	3,690	109	146	412	16,366
Sep-17	576	796	8,411	3,161	88	143	311	13,486
Oct-17	514	773	9,856	3,585	100	128	413	15,369
Nov-17	451	496	8,506	3,214	110	119	371	13,267
Dec-17	570	535	8,204	3,115	103	119	392	13,038
Jan-18	473	565	9,986	3,636	98	123	457	15,338
Feb-18	490	479	8,982	3,451	101	140	481	14,124
Mar-18	538	531	9,786	3,761	113	143	376	15,248
Apr-18	387	546	8,851	3,375	97	90	361	13,707
May-18	477	513	8,380	3,433	112	126	308	13,349
Jun-18	400	479	6,466	2,226	103	122	317	10,113
Jul-18	386	414	6,101	2,109	79	124	229	9,442
Aug-18	406	422	7,039	2,338	76	91	275	10,647
Sep-18	364	342	5,456	1,893	86	94	198	8,433
Oct-18	476	454	6,645	2,270	74	106	271	10,296
Nov-18	454	431	6,436	2,097	81	117	237	9,853
Dec-18	346	332	5,953	1,741	75	85	182	8,714
Jan-19	434	371	6,394	1,918	78	113	191	9,499
Feb-19	407	385	5,581	1,802	120	116	205	8,616
Mar-19	365	288	5,888	1,944	70	107	181	8,843
Apr-19	449	374	5,683	1,903	99	121	188	8,817
May-19	535	366	5,352	1,734	82	113	152	8,334
Jun-19	463	309	4,827	1,436	63	100	105	7,303

		C	Counts by Type			
			Medical-	Сору		
<u>Month</u>	<u>Interpreter</u>	<u>Medical</u>	<u>Legal</u>	Service	Other***	<u>Total</u>
Jan-17	9	7,460	5	2	1,272	8,748
Feb-17	8	11,103	10	1	1,953	13,075
Mar-17	12	15,389	4	0	2,439	17,844
Apr-17	13	15,188	12	3	2,569	17,785
May-17	7	14,838	14	1	2,890	17,750
Jun-17	13	13,444	8	1	2,392	15,858
Jul-17	37	13,022	9	0	2,395	15,463
Aug-17	24	13,599	11	0	2,732	16,366
Sep-17	16	11,194	11	0	2,265	13,486
Oct-17	13	12,692	5	1	2,658	15,369
Nov-17	19	10,666	5	0	2,577	13,267
Dec-17	33	10,518	8	0	2,479	13,038
Jan-18	41	12,695	12	1	2,589	15,338
Feb-18	17	11,551	9	1	2,546	14,124
Mar-18	6	12,428	8	0	2,806	15,248
Apr-18	18	10,714	11	0	2,964	13,707
May-18	25	10,744	8	0	2,572	13,349
Jun-18	60	7,818	3	0	2,232	10,113
Jul-18	44	7,056	0	3	2,339	9,442
Aug-18	23	7,914	8	1	2,701	10,647
Sep-18	12	6,364	6	0	2,051	8,433
Oct-18	23	7,720	9	0	2,544	10,296
Nov-18	24	7,309	7	1	2,512	9,853
Dec-18	13	6,566	6	0	2,129	8,714
Jan-19	26	6,759	7	1	2,706	9,499
Feb-19	38	6,011	3	0	2,564	8,616
Mar-19	11	7,117	2	0	1,713	8,843
Apr-19	27	6,707	4	1	2,078	8,817
May-19	22	6,357	10	0	1,945	8,334
Jun-19	5	5,433	3	0	1,862	7,303

<sup>\*</sup> Lien Counts exclude SDI/EDD Liens

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

<sup>\*\*\*</sup>Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens Source: EAMS Liens Data

# Medicare Set-aside Costs by Age Interval

			e Je	7	2	9	6	3	<b>O</b>					<u>)</u>	0	7	6	4	۲.
	ount		Average	20,247	28,615	25,166	37,439	27,533	24,399			ount		Average	29,410	35,237	32,569	39,474	27 533
:	Median Set-aside Amount	60 or	Older	12,634	28,224	22,656	25,230	27,533	16,540		Median	Set-aside Amount	60 or	Older	21,755	33,038	25,672	28,736	27 533
	Set	59 or	Younger	22,743	44,154	28,729	41,975	38,145	32,117			Set	59 or	Younger	31,500	37,097	40,222	52,572	38 145
	ount		Average	43,194	57,555	53,190	42,880	33,514	33,194			ount		Average	49,020	65,801	58,314	67,392	32 593
•	Average Set-aside Amount	60 or	Older	34,138	35,779	34,890	40,012	32,853	29,231		Average	Set-aside Amount	60 or	Older	33,195	43,793	44,122	40,321	31,900
	Set	59 or	Younger	54,190	93,330	85,397	47,245	38,145	40,326			Set	59 or	Younger	66,781	94,412	76,734	95,430	38,145
-	Percentage of PD Claims Involving Set-aside Claims		Average	1.9%	1.1%	2.0%	1.7%	%6.0	1.5%		Percentage of PD Claims Involving	ims		Average	3.1%	2.7%	3.1%	3.4%	1.0%
(	ige of PD Claims I Set-aside Claims	60 or	Older	10.5%	%9.9	11.5%	9.5%	7.4%	7.9%		of PD Clair	Set-aside Claims	60 or	Older	16.8%	14.3%	16.0%	15.1%	8.0%
<u>svel</u>	ercentage ( Set	59 or	Younger	%6.0	0.5%	%8.0	%8.0	0.1%	%9.0	y Level	ercentage o	Set	59 or	Younger	1.6%	1.3%	1.5%	1.9%	0.1%
First Survey Level	1	Accident	Year	2011	2012	2013	2014	2015	2016	Second Survey Level	<u>.                                    </u>		Accident	Year	2011	2012	2013	2014	2015

Source: WCIRB Permanent Disability Claim Survey.

Medicare Set-aside Costs By Permanent Disability Rating Interval

			Average	20,247	28,615	25,166	37,439	27,533	24,399					Average	29,410	35,237	32,569	39,474	27,533
	lian Amount	70% or	More	576,974	278,838	204,096	61,277	A/N	35,766		lian	. Amount	70% or	More	84,036	151,666	174,060	153,195	A/N
	Median Set-aside Amount	25% to	<u>%69</u>	28,586	31,609	25,166	37,439	44,050	36,023		Median	Set-aside Amount	25% to	<del>%69</del>	32,617	35,237	38,731	37,004	44,050
		Less Than	<u>%97</u>	14,930	16,902	20,994	21,065	19,477	11,170				Less Than	<u>25%</u>	16,187	23,309	20,509	37,487	19,477
		•	Average	43,194	57,555	53,190	42,880	33,514	33,194					Average	49,020	65,801	58,314	67,392	32,593
	Average Set-aside Amount	70% or	More	576,974	278,838	307,815	90,827	0	38,627		Average	Set-aside Amount	70% or	More	88,547	249,859	171,049	217,650	N/A
	Aver Set-aside	25% to	<u>%69</u>	43,933	51,369	39,803	43,308	46,647	44,636		Ave	Set-aside	25% to	<del>%69</del>	51,839	54,702	59,207	53,027	41,887
		Less Than	<del>75%</del>	20,777	19,076	33,622	28,092	23,300	24,479				Less Than	<u>25%</u>	40,316	32,197	26,167	38,337	23,300
	volving		Average	1.9%	1.1%	2.0%	1.7%	%6.0	1.5%		volving			Average	3.1%	2.7%	3.1%	3.4%	1.0%
	Percentage of PD Claims Involving Set-aside Claims	70% or	More	5.3%	7.4%	9.1%	10.0%	%0:0	30.0%		Percentage of PD Claims Involving	Set-aside Claims	70% or	More	9.1%	21.1%	14.8%	29.3%	%0.0
	tage of PD Set-asid	25% to	%69 %69	4.1%	3.2%	3.8%	4.0%	3.3%	4.6%		tage of PD	Set-asid	25% to	<del>%69</del>	%2'9	6.4%	6.2%	8.9	4.1%
eve	Percen	Accident Less Than	<u>75%</u>	1.0%	0.3%	1.0%	0.5%	%9.0	%6.0	ey Level	Percen		Accident Less Than	<u>25%</u>	1.5%	1.0%	1.3%	1.1%	%9.0
First Survey Leve		Accident	<u>Year</u>	2011	2012	2013	2014	2015	2016	Second Survey Level			Accident	<u>Year</u>	2011	2012	2013	2014	2015

Source: WCIRB Permanent Disability Claim Survey.

#### **IMR Filed Counts**

#### Quarterly IMRs Filed

		Change from		Change from
		Same Quarter in		Same Quarter in
Year & Quarter	IMRs Filed	Prior Year	Eligible IMRs	Prior Year
2013 1Q & 2Q	878			
2013 3Q	31,950			
2013 4Q	51,092			
2014 1Q	49,929		17,421	
2014 2Q	60,023		24,417	
2014 3Q	59,678	86.8%	54,959	
2014 4Q	58,577	14.7%	46,512	
2015 1Q	61,142	22.5%	36,314	108.4%
2015 2Q	65,418	9.0%	48,628	99.2%
2015 3Q	65,889	10.4%	40,603	-26.1%
2015 4Q	61,330	4.7%	39,950	-14.1%
2016 1Q	60,772	-0.6%	41,023	13.0%
2016 2Q	64,852	-0.9%	44,287	-8.9%
2016 3Q	62,411	-5.3%	43,892	8.1%
2016 4Q	61,318	0.0%	43,618	9.2%
2017 1Q	61,253	0.8%	43,194	5.3%
2017 2Q	62,773	-3.2%	42,866	-3.2%
2017 3Q	63,380	1.6%	42,836	-2.4%
2017 4Q	60,125	-1.9%	43,298	-0.7%
2018 1Q	64,533	5.4%	47,336	9.6%
2018 2Q	66,647	6.2%	48,175	12.4%
2018 3Q	61,658	-2.7%	45,775	6.9%
2018 4Q	59,539	-1.0%	44,941	3.8%
2019 1Q	56,083	-13.1%	42,334	-10.6%
2019 2Q	57,498	-13.7%	43,658	-9.4%

#### Yearly IMR Counts

	Original IMR <u>Applications</u>	<u>Duplicates</u>	Ineligible	Total Rejected	Eligible IMRs	Eligible IMR Yearly Change
2013 IMR Counts	83,920	15,560	15,516	31,076	52,844	
2014 IMR Counts	228,084	56,503	28,272	84,775	143,309	171.2%
2015 IMR Counts	253,776	58,106	30,175	88,281	165,495	15.5%
2016 IMR Counts	249,353	53,314	23,219	76,533	172,820	4.4%
2017 IMR Counts	247,531	54,993	20,344	75,337	172,194	-0.4%
2018 IMR Counts	252,377	52,294	13,856	66,150	186,227	8.1%

Source: DWC Collected from IMR Vendor

DWC Via Commission on Health and Safety & Workers' Compensation 2018 Annual Report

#### Reported Indemnity Claim Count Development - Statewide

Accident										
<u>Year</u>	<u>3-15</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75	<u>75-87</u>	87-99	99-111	
2001									0.999	
2002								0.999	1.000	
2003							0.999	0.999	0.999	
2004						0.999	0.999	0.999	1.000	
2005					1.001	1.000	1.001	1.000	1.000	
2006			4.044	1.004	1.002	1.001	1.001	1.000	1.001	
2007		4.050	1.011	1.006	1.003	1.002	1.000	1.000	1.001	
2008	0.000	1.059	1.017	1.009	1.004	1.003	1.001	1.001	1.001	
2009 2010	6.968	1.080	1.022	1.008	1.005	1.003	1.002	1.002	1.000	
2010	7.382 7.502	1.089 1.100	1.021 1.026	1.010 1.011	1.006 1.005	1.003 1.003	1.002 1.002	1.001 1.001	1.000	
2011	7.678	1.120	1.026	1.011	1.005	1.003	1.002	1.001		
2012	8.155	1.120	1.020	1.009	1.005	1.003	1.001			
2014	7.706	1.105	1.023	1.010	1.005	1.002				
2015	8.019	1.106	1.020	1.006	1.000					
2016	7.723	1.110	1.023	1.000						
2017	7.812	1.098	25							
2018	7.846									
					Latest Y	'ear				
I.	Age-to-Age									
	7.846	1.098	1.023	1.006	1.005	1.002	1.001	1.001	1.000	
II.	Age-to-Ultimate	!								
	8.978	1.144	1.042	1.019	1.013	1.008	1.006	1.005	1.004	1.004
Ш	Estimated Perce	ent of I litin	nate Indemn	ity Claims R	enorted					
111.	11.1%	87.4%	95.9%	98.1%	98.8%	99.2%	99.4%	99.5%	99.6%	99.6%
		•								
			Panartad Ta	tal Claim C	ount Dovole	nmont — St	atowido			
		F	Reported To	tal Claim C	ount Develo	opment – St	atewide			
Accident Year	3-15							87-99	99-111	
<u>Year</u>	<u>3-15</u>	15-27	27-39	tal Claim Co	51-63	opment – St 63-75	75-87	87-99	<u>99-111</u> 1.001	
<u>Year</u> 2001	<u>3-15</u>								1.001	
<u>Year</u> 2001 2002	<u>3-15</u>						<u>75-87</u>	1.001	1.001 1.001	
<u>Year</u> 2001	<u>3-15</u>								1.001	
<u>Year</u> 2001 2002 2003	<u>3-15</u>					<u>63-75</u>	<u>75-87</u> 1.001	1.001 1.001	1.001 1.001 1.000	
<u>Year</u> 2001 2002 2003 2004	<u>3-15</u>				<u>51-63</u>	63-75	75-87 1.001 1.001	1.001 1.001 1.000	1.001 1.001 1.000 1.000	
Year 2001 2002 2003 2004 2005 2006 2007	<u>3-15</u>			39-51 1.004 1.005	51-63 1.001 1.003 1.003	63-75 1.001 1.002	75-87 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001	
Year 2001 2002 2003 2004 2005 2006 2007 2008	<u>3-15</u>		27-39	<u>39-51</u> 1.004	1.001 1.003 1.003 1.003	63-75  1.001 1.002 1.001 1.002 1.002	75-87 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001	
Year 2001 2002 2003 2004 2005 2006 2007	7.020	1.041 1.044	27-39 1.009 1.010 1.013	39-51 1.004 1.005 1.006 1.005	1.001 1.003 1.003 1.003 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	7.020 7.240	1.041 1.044 1.047	27-39 1.009 1.010 1.013 1.011	39-51 1.004 1.005 1.006 1.005 1.006	1.001 1.003 1.003 1.003 1.004 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.000 1.000 1.000 1.001 1.001 1.001	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	7.020 7.240 7.157	1.041 1.044 1.047 1.050	27-39 1.009 1.010 1.013 1.011 1.014	1.004 1.005 1.006 1.005 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	7.020 7.240 7.157 7.190	1.041 1.044 1.047 1.050 1.061	27-39 1.009 1.010 1.013 1.011 1.014 1.013	1.004 1.005 1.006 1.005 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.003 1.004	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	7.020 7.240 7.157 7.190 7.737	1.041 1.044 1.047 1.050 1.061 1.054	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014	1.004 1.005 1.006 1.005 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	7.020 7.240 7.157 7.190 7.737 7.427	1.041 1.044 1.047 1.050 1.061 1.054 1.059	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.013	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.003 1.004	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	7.020 7.240 7.157 7.190 7.737 7.427 7.466	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012	1.004 1.005 1.006 1.005 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.013	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003	63-75  1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003	63-75  1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058 1.049	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012 1.013	39-51 1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006 1.005	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003	63-75  1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002 1.001 1.001	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001 1.001	1.001 1.000 1.000 1.000 1.001 1.001 1.001 1.000 1.001	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347 Age-to-Age 7.347	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058 1.049	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012	1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003	63-75  1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001	1.001 1.001 1.000 1.000 1.001 1.001 1.001 1.001 1.000	
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347 Age-to-Age 7.347	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058 1.049	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012 1.013	39-51 1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.006 1.005	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.001 1.001	1.001 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 1.001 1.001 1.000 1.001	1.003
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347  Age-to-Age 7.347  Age-to-Ultimate 7.927	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058 1.049	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012 1.013  1.013	39-51 1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.005 1.005	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003 1.003	63-75  1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.002 1.001 1.001	1.001 1.001 1.000 1.001 1.001 1.001 1.001 1.001 1.001	1.001 1.000 1.000 1.000 1.001 1.001 1.001 1.000 1.001	1.003
Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	7.020 7.240 7.157 7.190 7.737 7.427 7.466 7.374 7.619 7.347 Age-to-Age 7.347	1.041 1.044 1.047 1.050 1.061 1.054 1.059 1.056 1.058 1.049	27-39  1.009 1.010 1.013 1.011 1.014 1.013 1.014 1.012 1.012 1.013  1.013	39-51 1.004 1.005 1.006 1.006 1.006 1.006 1.006 1.005 1.005	1.001 1.003 1.003 1.003 1.004 1.003 1.004 1.003 1.003 1.003	1.001 1.002 1.001 1.002 1.002 1.002 1.002 1.002 1.002 1.002	75-87  1.001 1.001 1.001 1.001 1.001 1.002 1.002 1.001 1.001	1.001 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 1.001 1.001 1.000 1.001	1.003

Source: WCIRB quarterly calls for experience

#### Indemnity Claim Settlement Ratios by Injury Type

Permanent Partial 77 1790 1790 180 1879 180 180 180 180 180 180 180 180 180 180												
1997			0	0	4	-	Temporary		0	0	4	-
1998 8 7% 30.3% 52.0% 66.7% 73.9% 1998 69.9% 84.2% 90.2% 94.0% 57.7% 34.5% 1999 65.5% 85.5% 26.7% 40.0% 67.7% 86.0% 1999 65.5% 81.5% 85.5% 26.7% 94.0% 67.7% 86.0% 1999 65.5% 81.5%								1				
1999   3.5%   22.7%   49.9%   61.7%   88.6%   1999   68.5%   83.4%   89.9%   92.7%   92.007   20001   0.8%   21.8%   40.0%   57.0%   68.8%   2001   60.8%   76.1%   84.9%   88.4%   99.3%   92.3%   2002   2002   5.1%   19.0%   41.1%   53.5%   77.0%   77.0%   20.8%   2001   60.8%   76.1%   84.9%   88.4%   99.5%   92.3%   2003   40.5%   79.5%								l l				
2000		l .										
2001   6.8%   21.8%   40.8%   57.0%   68.8%   2001   60.4%   76.1%   84.9%   88.4%   90.0%   2002   63.4%   76.1%   85.5%   22.4%   68.5%   92.2%   2003   4.0%   20.6%   44.9%   69.9%   71.1%   2003   61.5%   79.6%   87.2%   91.7%   94.2%   2003   2004   57.6%   82.2%   91.7%   94.2%   92.5%   2005   5.5%   22.4%   43.9%   59.5%   71.1%   2004   67.0%   82.6%   90.0%   94.2%   92.5%   2005   5.5%   22.5%   43.2%   59.3%   69.5%   20.2%   2006   67.0%   82.6%   90.5%   94.2%   95.2%   94.2%   94.2%   95.2%   94.2%   94.2%   95.2%   94.2%   95.2%   94.2%   94.2%   95.2%   94.2%   94.2%   94.2%   94.2%   95.2%   94.												
2002 5.1% 19.0% 41.1% 596% 71.0% 2002 60.4% 78.1% 86.3% 98.5% 92.3% 2004 62.2% 40.9% 61.0% 72.1% 2004 65.2% 22.4% 43.9% 59.9% 71.1% 2004 67.0% 82.6% 90.0% 92.2% 95.2% 2005 67.5% 82.6% 90.0% 42.2% 98.5% 92.3% 92.3% 2006 85.5% 22.6% 43.3% 95.3% 98.9% 71.1% 2004 67.0% 82.6% 90.0% 92.2% 95.2% 2006 85.5% 22.6% 43.3% 95.9% 71.1% 2004 67.0% 82.6% 90.0% 92.2% 95.2% 2006 85.5% 22.6% 43.3% 95.9% 71.1% 2004 67.5% 20.0% 92.3% 92		l .										
2003								l l				
2004 5.2% 22.4% 43.9% 56.9% 71.1% 2004 67.0% 82.6% 90.0% 94.2% 95.2% 2005 2006 6.5% 23.6% 43.2% 95.3% 92.6% 90.0% 94.2% 95.2% 95.2% 92.1% 95.2% 2006 6.5% 23.6% 43.2% 95.9% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 92.6% 95.3% 95												
2005   5.9%   22.5%   43.2%   59.3%   69.6%   2006   67.3%   82.4%   89.5%   92.1%   95.2%	2003	4.0%	20.6%	44.0%	61.0%	72.1%		64.5%	79.6%	87.2%	91.7%	94.2%
2006 6.5% 23.9% 43.9% 59.4% 68.9% 2006 68.7% 24.6% 59.3% 93.5% 95.3% 2008 6.1% 23.9% 43.8% 58.0% 68.9% 2008 6.5% 83.8% 50.5% 93.5% 94.5% 2008 6.1% 24.6% 43.2% 57.9% 69.8% 2008 66.5% 83.0% 68.9% 93.5% 94.5% 2009 66.5% 83.0% 68.9% 92.5% 94.2% 2000 61.1% 23.5% 42.4% 58.4% 70.6% 2001 64.8% 78.2% 55.5% 50.9% 94.2% 2011 63.5% 77.6% 2011 63.5% 2011 63.5% 77.6% 2011 63.5% 201	2004	5.2%	22.4%	43.9%	59.9%	71.1%	2004	67.0%	82.6%	90.0%	94.2%	95.2%
2007   6.0%   23.9%   43.0%   58.0%   68.1%   2007   69.2%   83.8%   90.5%   93.5%   94.9%   2008   6.1%   24.0%   43.2%   57.9%   69.8%   2008   66.9%   80.7%   69.2%   2010   7.2%   25.5%   44.9%   58.4%   70.6%   2009   66.9%   80.7%   68.8%   92.0%   2011   2.72%   25.5%   45.7%   62.9%   73.6%   2010   64.8%   76.2%   68.9%   90.5%   2011   8.0%   27.4%   48.0%   64.4%   75.6%   2011   63.3%   77.6%   84.9%   89.5%   93.5%   2012   2.2%   30.6%   51.4%   66.5%   77.6%   2012   63.3%   77.6%   84.9%   89.5%   91.8%   2013   10.2%   32.1%   53.0%   70.0%   80.5%   2013   63.6%   78.2%   88.1%   90.7%   93.5%   2014   10.6%   32.29%   54.5%   71.0%   2014   66.5%   71.6%   88.1%   90.7%   93.5%   2016   10.6%   32.29%   54.5%   71.0%   2016   65.9%   68.1%   80.9%   92.5%   2017   10.6%   32.29%   54.5%   71.0%   2016   65.9%   68.1%   80.9%   92.5%   2018   10.7%   29.1%   48.8%   62.5%   71.1%   1997   18.0%   45.0%   63.6%   77.6%   83.6%   2019   10.7%   22.1%   48.8%   62.5%   71.1%   1997   18.0%   45.0%   63.6%   77.6%   83.6%   2000   11.6%   22.2%   23.3%   46.7%   50.2%   77.5%   1999   29.3%   51.1%   66.9%   77.6%   83.6%   2000   11.6%   22.1%   44.8%   62.5%   71.1%   1998   25.8%   48.2%   66.9%   77.6%   83.6%   2001   10.5%   24.4%   41.7%   50.2%   77.6%   2000   30.8%   49.4%   62.9%   63.1%   77.6%   2002   10.5%   24.4%   41.7%   50.2%   65.5%   2000   30.8%   49.4%   62.9%   63.9%   77.6%   2003   11.8%   26.5%   44.0%   69.6%   20.6%   20.0%   34.1%   51.4%   66.9%   77.6%   2004   14.8%   29.6%   44.0%   60.2%   69.6%   20.0%   34.1%   51.4%   66.9%   77.6%   20.0%   20.0%   20.0%   34.1%   53.3%   20.0%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%	2005	5.9%	22.5%	43.2%	59.3%	69.6%	2005	67.3%	82.4%	89.5%	92.1%	95.2%
2007   6.0%   23.9%   43.0%   58.0%   68.1%   2007   69.2%   83.8%   90.5%   93.5%   94.9%   2008   6.1%   24.0%   43.2%   57.9%   69.8%   2008   66.9%   80.7%   69.2%   2010   7.2%   25.5%   44.9%   58.4%   70.6%   2009   66.9%   80.7%   68.8%   92.0%   2011   2.72%   25.5%   45.7%   62.9%   73.6%   2010   64.8%   76.2%   68.9%   90.5%   2011   8.0%   27.4%   48.0%   64.4%   75.6%   2011   63.3%   77.6%   84.9%   89.5%   93.5%   2012   2.2%   30.6%   51.4%   66.5%   77.6%   2012   63.3%   77.6%   84.9%   89.5%   91.8%   2013   10.2%   32.1%   53.0%   70.0%   80.5%   2013   63.6%   78.2%   88.1%   90.7%   93.5%   2014   10.6%   32.29%   54.5%   71.0%   2014   66.5%   71.6%   88.1%   90.7%   93.5%   2016   10.6%   32.29%   54.5%   71.0%   2016   65.9%   68.1%   80.9%   92.5%   2017   10.6%   32.29%   54.5%   71.0%   2016   65.9%   68.1%   80.9%   92.5%   2018   10.7%   29.1%   48.8%   62.5%   71.1%   1997   18.0%   45.0%   63.6%   77.6%   83.6%   2019   10.7%   22.1%   48.8%   62.5%   71.1%   1997   18.0%   45.0%   63.6%   77.6%   83.6%   2000   11.6%   22.2%   23.3%   46.7%   50.2%   77.5%   1999   29.3%   51.1%   66.9%   77.6%   83.6%   2000   11.6%   22.1%   44.8%   62.5%   71.1%   1998   25.8%   48.2%   66.9%   77.6%   83.6%   2001   10.5%   24.4%   41.7%   50.2%   77.6%   2000   30.8%   49.4%   62.9%   63.1%   77.6%   2002   10.5%   24.4%   41.7%   50.2%   65.5%   2000   30.8%   49.4%   62.9%   63.9%   77.6%   2003   11.8%   26.5%   44.0%   69.6%   20.6%   20.0%   34.1%   51.4%   66.9%   77.6%   2004   14.8%   29.6%   44.0%   60.2%   69.6%   20.0%   34.1%   51.4%   66.9%   77.6%   20.0%   20.0%   20.0%   34.1%   53.3%   20.0%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.1%   53.3%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%   20.0%   34.6%   52.9%	2006	6.5%	23.6%	44.3%	59.4%	68.9%	2006	68.7%	84.6%	90.3%	93.6%	95.3%
2008 6.1% 24.0% 43.2% 57.9% 60.8% 2008 66.5% 83.0% 88.9% 92.0% 94.2% 2009 66.9% 80.7% 86.8% 90.9% 93.1% 2010 7.2% 25.2% 45.7% 62.3% 73.6% 2010 64.8% 76.2% 85.5% 83.0% 90.9% 93.1% 2011 72.2% 25.2% 48.0% 64.4% 75.6% 2011 63.3% 77.5% 85.5% 83.0% 90.9% 93.1% 2011 20.2% 30.5% 51.4% 86.0% 67.0% 2011 63.3% 77.5% 80.9% 92.5% 2012 9.2% 30.5% 51.4% 86.0% 63.9% 77.5% 2013 63.6% 80.4% 88.0% 92.0% 94.2% 2013 61.02% 20.2% 53.0% 53.0% 77.0% 20.5% 20.13 63.6% 80.4% 88.0% 92.0% 93.0% 2014 10.6% 32.9% 54.5% 71.0% 2015 65.9% 80.4% 88.0% 92.0% 93.9% 2016 13.7% 39.9% 25.5% 2016 13.7% 39.9% 20.0% 11.6% 20.0%	2007	6.0%	23.9%	43.6%	58.0%		2007	69.2%	83.8%		93.5%	94.9%
2009   6.1%   23.5%   45.7%   62.3%   70.6%   2010   64.8%   76.2%   86.8%   90.9%   93.7%   2011   8.0%   27.4%   48.6%   64.4%   75.6%   2011   63.3%   77.5%   84.9%   89.5%   92.5%   2011   8.0%   27.4%   48.6%   64.4%   75.6%   2011   63.3%   77.5%   84.9%   89.5%   91.8%   2012   92.2%   30.5%   51.4%   66.3%   77.6%   2012   63.6%   78.0%   84.9%   89.5%   91.8%   2013   10.2%   32.1%   53.6%   70.0%   80.5%   2013   63.6%   60.4%   81.7%   88.0%   92.5%   2014   10.6%   32.9%   54.5%   71.0%   2015   65.9%   81.6%   89.5%   92.5%   2015   12.3%   37.2%   59.7%   71.0%   2015   65.9%   81.6%   89.5%   89.5%   2016   13.7%   39.9%   21.6%   20.2%   20.1%   80.5%   2016   13.7%   39.9%   21.6%   20.2%   20.2%   2017   10.6%   22.9%   48.8%   62.5%   71.3%   1998   25.8%   48.2%   66.9%   77.6%   83.6%   2000   11.6%   22.1%   29.3%   46.7%   59.2%   77.5%   1998   25.8%   48.2%   66.9%   77.6%   83.6%   2000   11.6%   22.1%   43.9%   55.7%   65.3%   2000   30.8%   49.4%   62.9%   77.6%   82.6%   2000   10.5%   24.4%   41.7%   55.5%   65.3%   2000   30.8%   49.4%   62.9%   77.6%   82.2%   2000   10.5%   24.6%   40.9%   69.5%   20.00   30.8%   49.4%   62.9%   67.4%   2001   10.5%   24.6%   43.9%   55.5%   60.2%   20.00   30.8%   49.4%   62.9%   67.6%   82.0%   2003   12.6%   22.7%   42.9%   43.9%   55.5%   60.2%   20.00   30.8%   49.4%   62.9%   67.4%   77.0%   2004   14.8%   22.6%   40.0%   60.2%   69.6%   20.00   20.3%   40.6%   40.9%   63.6%   77.6%   82.2%   2005   12.6%   22.7%   42.9%   43.9%   55.5%   60.2%   20.00   30.8%   49.4%   62.9%   67.4%   77.0%   2001   12.5%   22.7%   42.9%   43.9%   55.9%   69.9%   20.00   30.8%   49.4%   62.9%   67.4%   77.0%   2002   20.5%   20.5%   40.0%   40.0%   60.2%   69.6%   20.00   30.8%   49.4%   62.9%   67.4%   77.0%   2004   12.6%   22.7%   42.9%   43.5%   63.9%		l .						l l				
2010   7.2%   25.2%   45.7%   62.3%   73.6%   2010   64.8%   78.2%   85.5%   89.8%   92.5%								l l				
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2012   9.2%   30.5%   51.4%   66.3%   77.6%   2012   63.1%   78.0%   86.1%   90.7%   93.0%     2014   10.2%   32.1%   53.6%   54.5%   71.0%   80.5%     2016   12.3%   37.2%   58.7%   71.0%   2014   66.4%   81.7%   88.8%   92.5%     2016   12.3%   37.2%   58.7%   71.0%   2016   68.2%   85.1%     2017   70.9%   2017   70.9%     2018   13.7%   39.9%   58.7%   71.0%   2016   68.2%   85.1%     2017   70.9%   2017   70.9%     2018   12.3%   37.2%   58.7%   74.3%   1997   18.0%   45.0%   63.6%   77.6%   83.6%     1999   10.7%   20.1%   48.8%   62.5%   71.1%   1998   10.7%   20.1%   48.8%   62.5%   71.1%   1999   23.9%   51.7%   68.3%     2000   11.6%   28.1%   43.9%   55.7%   65.3%   2000   30.8%   49.4%   62.9%   77.4%     2001   10.5%   24.4%   41.7%   55.5%   66.2%   2001   20.1%   43.9%   55.5%   66.2%   2001   20.1%   43.9%   55.5%   66.2%   2001   20.1%   43.9%   52.5%   44.5%   60.9%   77.4%     2002   10.5%   24.5%   44.5%   59.0%   60.2%   2003   20.3%   51.1%   62.2%   72.6%   78.8%     2004   14.8%   20.6%   46.0%   60.2%   60.9%   2003   20.3%   51.4%   60.3%   70.7%   82.2%     2005   12.7%   27.6%   42.2%   54.8%   64.4%   20.06   39.0%   56.2%   67.6%   76.7%   82.2%     2006   12.7%   27.6%   42.2%   54.8%   64.4%   20.05   39.3%   50.6%   67.6%   76.7%   83.2%     2007   13.4%   28.8%   43.4%   55.3%   65.5%   60.9%   70.0%   39.9%   56.2%   67.5%   76.7%   83.2%     2008   12.0%   27.2%   42.0%   54.6%   64.6%   20.05   39.3%   56.6%   67.6%   76.7%   83.2%     2001   12.9%   27.3%   44.7%   61.1%   71.9%   20.01   32.4%   53.8%   68.4%   68.9%   76.5%   83.9%     2001   13.5%   46.6%   60.9%   76.5%   82.9%     2001   30.8%   52.2%   68.8%   70.9%   83.3%     2001   31.5%   46.6%   60.9%   76.5%   83.3%     2001   31.5%   46.6%   60.9%   76.5%   83.3%     2001   31.5%   46.6%   60.9%   76.5%   82.9%     2001   31.5%   46.6%   60.9%   76.5%   82.9%     2001   30.5%   55.5%   66.8%   77.0%   83.3%     2001   30.5%   55.5%   66.8%   77.0%   83.3%     2001   30.5%   55.5%   66.8%   77.0%   83.3%     2												
2013								l l				
2014   10.6%   32.9%   54.5%   71.0%   2014   66.4%   81.7%   88.8%   92.5%		l .						I .				
2015		10.2%		53.6%		80.5%		63.6%		88.0%		93.9%
2016   13.7%   39.9%   2016   68.2%   65.1%    Cumulative Injury*  AVRL   1	2014	10.6%	32.9%	54.5%	71.0%		2014	66.4%	81.7%	88.8%	92.5%	
Cumulative Injury*	2015	12.3%	37.2%	58.7%			2015	65.9%	81.6%	89.5%		
Cumulative Injury*	2016	13.7%	39.9%				2016	68.2%	85.1%			
Cumulative Injury*  AV/RL  1  2  3  4  5  AV/RL  11997  7.7%  30.1%  50.0%  65.1%  74.3%  1998  10.7%  20.3  4  5  1998  10.7%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  11.6%  20.1%  20.00  10.5%  20.1%  20.00  10.5%  20.5%  40.0%  60.2%  20.00  20.8%  20.00  20.8%  20.00  20.8%  20.00  20.8%  20.00  10.5%  20.5%  20.00  10.5%  20.5%  20.00  10.5%  20.5%  20.00  10.5%  20.5%  20.00  10.5%  20.5%  20.00  20.00  10.5%  20.5%  20.00  20.00  10.5%  20.00  10.5%  20.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00  20.00  10.5%  20.00												
AVRIL   1	2011	10.070					2011	70.070				
AV/RL   1	Cumulative In	jury*					Non-Cumulative	e Injury				
1997		, .	2	3	4	5	AY/RL	l 1	2	3	4	5
1998		7.7%						18.0%				
1999 122% 29,3% 46.7% 59,2% 67.5% 1999 29.3% 51.1% 66.1% 74.3% 79.1% 2000 11.6% 28.1% 43.9% 55.7% 66.3% 2000 30.8% 51.1% 66.1% 74.3% 79.1% 2001 10.5% 24.4% 41.7% 55.5% 66.3% 2001 26.1% 42.9% 58.4% 69.6% 77.4% 2002 10.5% 25.1% 42.8% 58.3% 69.4% 2002 26.4% 43.0% 59.5% 72.1% 79.8% 2003 11.8% 26.5% 44.5% 59.0% 69.5% 2003 22.7% 46.5% 63.2% 74.8% 82.2% 2004 14.8% 29.6% 44.0% 60.2% 69.6% 2004 34.1% 51.4% 66.3% 76.7% 83.2% 2005 12.6% 26.7% 42.3% 54.8% 64.5% 2005 37.8% 54.0% 67.6% 63.3% 65.2% 2006 12.7% 27.6% 42.8% 54.8% 64.1% 2006 39.0% 56.0% 69.8% 84.0% 2007 39.3% 56.0% 69.8% 84.0% 2008 12.7% 27.2% 42.0% 56.2% 2007 39.3% 56.0% 69.8% 78.0% 83.3% 2009 11.3% 25.2% 40.5% 54.7% 66.9% 2008 30.9% 56.2% 69.9% 2008 30.9% 56.2% 69.9% 2008 12.0% 27.2% 42.0% 56.4% 66.9% 2008 39.0% 56.0% 69.8% 78.0% 83.3% 2009 11.3% 25.2% 40.5% 54.7% 66.9% 2009 39.4% 55.3% 69.8% 78.0% 83.3% 2009 11.3% 25.2% 40.5% 54.6% 66.9% 2009 39.4% 55.3% 69.8% 78.0% 83.5% 2011 11.8% 29.1% 44.7% 61.1% 71.9% 2010 39.2% 65.0% 68.7% 78.4% 84.9% 2011 11.8% 29.1% 44.5% 69.9% 2008 39.2% 65.0% 68.7% 78.4% 84.9% 2011 11.8% 29.1% 44.5% 69.9% 2011 39.4% 65.0% 68.7% 78.4% 84.9% 2011 31.8% 32.8% 55.3% 69.3% 75.0% 2012 40.3% 68.2% 72.0% 80.9% 30.1% 56.3% 65.6% 70.0% 79.5% 85.7% 2014 42.9% 60.8% 74.6% 85.3% 69.9% 70.0% 2012 40.3% 68.2% 72.0% 80.9% 2014 42.9% 60.8% 74.6% 85.3% 69.9% 70.0% 2014 42.9% 60.8% 74.6% 83.3% 83.1% 88.5% 2016 21.3% 45.5% 60.0% 76.9% 82.9% 2001 31.5% 46.6% 60.9% 71.4% 78.8% 2016 44.8% 60.0% 76.9% 82.9% 2010 33.4% 55.3% 60.1% 75.9% 82.9% 2010 33.4% 55.3% 61.5% 60.0% 76.9% 82.9% 2010 33.4% 55.3% 61.5% 60.9% 76.9% 82.9% 2010 33.4% 55.3% 65.9% 60.4% 70.5% 82.9% 2010 33.4% 55.3% 60.1% 75.9% 82.9% 2010 33.4% 55.3% 60.1% 75.9% 82.9% 2010 33.4% 55.3% 70.5% 82.9% 2010 33.4% 55.3% 70.5% 82.9% 2010 33.4% 55.3% 70.5% 82.9% 2010 33.4% 55.3% 70.5% 82.9% 2010 33.4% 55.9% 66.4% 70.9% 83.3% 83.3% 2011 33.5% 55.2% 68.0% 76.5% 82.9% 2011 35.6% 55.2% 68.0% 76.5% 82.9% 2011 35.6% 55.2% 68.0% 76.5% 82.9% 2010 33.4% 55.3% 66.8% 77.0% 82.9% 2010 33.4% 55.3% 66.8% 77.0% 82.9%												
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2002								l l				
2003		l .						l l				
2004												
2005	2003	11.8%	26.5%	44.5%	59.0%	69.2%	2003	29.7%	46.5%	63.2%	74.8%	82.2%
2006	2004	14.8%	29.6%	46.0%	60.2%	69.6%	2004	34.1%	51.4%	66.3%	76.7%	83.2%
2007	2005	12.6%	26.7%	42.3%	54.8%	64.5%	2005	37.8%	54.0%	67.6%	76.5%	84.3%
2007	2006		27.6%	42.8%	54.8%		2006	39.0%	56.2%		78.8%	84.0%
2008								l l				
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2010		l .						l l				
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2012								I .				
2013								l l				
2014		l .						I .				
2015	2013	16.3%	36.8%	55.3%	69.3%	79.1%	2013	41.5%	60.2%	73.8%	83.1%	88.5%
2016 21.3% 45.5% 2017 26.8% 65.6% 2017 2016 2017 26.8% 65.6% 2017 26.8% 65.6% 2017 26.8% 65.6% 2017 27.3% 65.6% 2017 27.3% 65.6% 2017 27.3% 65.6% 2017 27.3% 65.6% 2017 27.3% 65.6% 2017 27.3% 65.6% 2018 27.2% 2019 27.2% 2	2014	16.6%	36.4%	52.8%	69.7%		2014	42.9%	60.8%	74.6%	83.8%	
All Indemnity AY/RL 1 2 3 4 5 1997 35.1% 55.6% 70.6% 80.1% 85.8% 1998 37.1% 55.3% 70.1% 79.4% 84.0% 1999 36.5% 54.2% 68.3% 76.2% 80.7% 2000 34.6% 52.1% 64.7% 72.7% 78.4% 2001 31.5% 46.6% 60.9% 71.4% 78.8% 2002 29.5% 45.1% 60.6% 72.8% 80.4% 2003 31.4% 47.3% 63.5% 74.9% 82.1% 2004 35.5% 51.9% 66.4% 76.7% 82.9% 2005 38.7% 54.6% 68.0% 76.9% 83.3% 2006 39.4% 55.9% 68.6% 77.5% 82.9% 2007 39.0% 55.2% 68.0% 76.5% 82.1% 2008 37.4% 53.6% 66.1% 75.0% 82.0% 2009 36.0% 51.6% 64.3% 74.4% 81.7% 2011 35.6% 52.4% 66.8% 77.0% 82.9% 2013 37.2% 56.5% 77.9% 82.9% 2011 35.6% 51.5% 66.4% 77.5% 82.9% 2013 37.4% 53.6% 66.1% 75.0% 82.0% 2009 36.0% 51.6% 64.3% 74.4% 81.7% 2011 35.6% 52.4% 66.8% 77.0% 83.7% 2012 36.4% 54.4% 68.9% 78.6% 85.4% 2013 37.2% 56.5% 70.9% 81.1% 87.3% 2014 38.2% 59.1% 73.9% 2015 38.7% 59.1% 73.9% 2016 40.8% 62.4%	2015	18.0%	39.6%	57.5%			2015	42.2%	61.8%	76.8%		
All Indemnity AY/RL 1 2 3 4 5 1997 35.1% 55.6% 70.6% 80.1% 85.8% 1998 37.1% 55.3% 70.1% 79.4% 84.0% 1999 36.5% 54.2% 68.3% 76.2% 80.7% 2000 34.6% 52.1% 64.7% 72.7% 78.4% 2001 31.5% 46.6% 60.9% 71.4% 78.8% 2002 29.5% 45.1% 60.6% 72.8% 80.4% 2003 31.4% 47.3% 63.5% 74.9% 82.1% 2004 35.5% 51.9% 66.4% 76.7% 82.9% 2005 38.7% 54.6% 68.0% 76.9% 83.3% 2006 39.4% 55.9% 68.6% 77.5% 82.9% 2007 39.0% 55.2% 68.0% 76.5% 82.1% 2008 37.4% 53.6% 66.1% 75.0% 82.0% 2009 36.0% 51.6% 64.3% 74.4% 81.7% 2011 35.6% 52.4% 66.8% 77.0% 82.9% 2013 37.2% 56.5% 77.9% 82.9% 2011 35.6% 51.5% 66.4% 77.5% 82.9% 2013 37.4% 53.6% 66.1% 75.0% 82.0% 2009 36.0% 51.6% 64.3% 74.4% 81.7% 2011 35.6% 52.4% 66.8% 77.0% 83.7% 2012 36.4% 54.4% 68.9% 78.6% 85.4% 2013 37.2% 56.5% 70.9% 81.1% 87.3% 2014 38.2% 59.1% 73.9% 2015 38.7% 59.1% 73.9% 2016 40.8% 62.4%	2016	21.3%	45.5%				2016	44.8%	65.6%			
All Indemnity AY/RL 1 2 3 4 5 1997 35.1% 55.6% 70.6% 80.1% 85.8% 1998 37.1% 55.3% 70.1% 79.4% 84.0% 1999 36.5% 54.2% 68.3% 76.2% 80.7% 2000 34.6% 52.1% 64.7% 72.7% 78.4% 2001 31.5% 46.6% 60.9% 71.4% 78.8% 2002 29.5% 45.1% 60.6% 72.8% 80.4% 2003 31.4% 47.3% 63.5% 74.9% 82.1% 2004 35.5% 51.9% 66.4% 76.7% 82.9% 2005 38.7% 54.6% 68.0% 76.9% 83.3% 2006 39.4% 55.9% 68.6% 77.5% 82.9% 2007 39.0% 55.2% 68.0% 76.5% 82.1% 2008 37.4% 53.6% 66.1% 75.0% 82.0% 2009 36.0% 51.6% 64.3% 74.4% 81.7% 2011 35.6% 52.4% 66.8% 77.0% 82.9% 2011 35.6% 52.4% 66.8% 77.0% 82.9% 2013 37.2% 56.5% 70.9% 81.1% 87.3% 2014 38.2% 57.0% 71.5% 81.7% 2015 38.7% 54.4% 68.9% 78.6% 85.4% 2013 37.2% 56.5% 70.9% 81.1% 87.3% 2014 38.2% 57.0% 71.5% 81.7% 2015 38.7% 59.1% 73.9% 2016 40.8% 62.4%								l l				
AY/RL         1         2         3         4         5           1997         35.1%         55.6%         70.6%         80.1%         85.8%           1998         37.1%         55.3%         70.1%         79.4%         84.0%           1999         36.5%         54.2%         68.3%         76.2%         80.7%           2000         34.6%         52.1%         64.7%         72.7%         78.4%           2001         31.5%         46.6%         60.9%         71.4%         78.8%           2002         29.5%         45.1%         60.6%         72.8%         80.4%           2003         31.4%         47.3%         63.5%         74.9%         82.1%           2004         35.5%         51.9%         66.4%         76.7%         82.9%           2005         38.7%         54.6%         68.0%         76.5%         82.9%           2007         39.0%         55.2%         68.0%         76.5%         82.1%           2007         39.0%         55.2%         68.0%         76.5%         82.1%           2008         37.4%         53.6%         64.3%         74.4%         81.7%           2011	2011	20.070					20	11.070				
AY/RL         1         2         3         4         5           1997         35.1%         55.6%         70.6%         80.1%         85.8%           1998         37.1%         55.3%         70.1%         79.4%         84.0%           1999         36.5%         54.2%         68.3%         76.2%         80.7%           2000         34.6%         52.1%         64.7%         72.7%         78.4%           2001         31.5%         46.6%         60.9%         71.4%         78.8%           2002         29.5%         45.1%         60.6%         72.8%         80.4%           2003         31.4%         47.3%         63.5%         74.9%         82.1%           2004         35.5%         51.9%         66.4%         76.7%         82.9%           2005         38.7%         54.6%         68.0%         76.5%         82.9%           2007         39.0%         55.2%         68.0%         76.5%         82.1%           2007         39.0%         55.2%         68.0%         76.5%         82.1%           2008         37.4%         53.6%         64.3%         74.4%         81.7%           2011	All Indemnity											
1998       37.1%       55.3%       70.1%       79.4%       84.0%         1999       36.5%       54.2%       68.3%       76.2%       80.7%         2000       34.6%       52.1%       64.7%       72.7%       78.4%         2001       31.5%       46.6%       60.9%       71.4%       78.8%         2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       77.6%       85.4% <td< td=""><td>AY/RL</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	AY/RL	1	2	3	4	5						
1999       36.5%       54.2%       68.3%       76.2%       80.7%         2000       34.6%       52.1%       64.7%       72.7%       78.4%         2001       31.5%       46.6%       60.9%       71.4%       78.8%         2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       77.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4% <td< td=""><td>1997</td><td>35.1%</td><td>55.6%</td><td>70.6%</td><td>80.1%</td><td>85.8%</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1997	35.1%	55.6%	70.6%	80.1%	85.8%						
2000       34.6%       52.1%       64.7%       72.7%       78.4%         2001       31.5%       46.6%       60.9%       71.4%       78.8%         2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       77.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3% <td< td=""><td>1998</td><td>37.1%</td><td>55.3%</td><td>70.1%</td><td>79.4%</td><td>84.0%</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1998	37.1%	55.3%	70.1%	79.4%	84.0%						
2000       34.6%       52.1%       64.7%       72.7%       78.4%         2001       31.5%       46.6%       60.9%       71.4%       78.8%         2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       77.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3% <td< td=""><td>1999</td><td>36.5%</td><td>54.2%</td><td>68.3%</td><td>76.2%</td><td>80.7%</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1999	36.5%	54.2%	68.3%	76.2%	80.7%						
2001       31.5%       46.6%       60.9%       71.4%       78.8%         2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       74.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       36.4%       54.4%       68.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2015       38.7%       59.1%       73.9%         2016       40.8%												
2002       29.5%       45.1%       60.6%       72.8%       80.4%         2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       74.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2014       38.7%       59.1%       73.9%         2015       38.7%       59.1%       73.9%												
2003       31.4%       47.3%       63.5%       74.9%       82.1%         2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       74.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2014       38.2%       57.0%       71.5%       81.7%         2015       38.7%       59.1%       73.9%         2016       40.8%       62.4%		l .										
2004       35.5%       51.9%       66.4%       76.7%       82.9%         2005       38.7%       54.6%       68.0%       76.9%       83.3%         2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       74.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2014       38.2%       57.0%       71.5%       81.7%         2015       38.7%       59.1%       73.9%         2016       40.8%       62.4%												
2005     38.7%     54.6%     68.0%     76.9%     83.3%       2006     39.4%     55.9%     68.6%     77.5%     82.9%       2007     39.0%     55.2%     68.0%     76.5%     82.1%       2008     37.4%     53.6%     66.1%     75.0%     82.0%       2009     36.0%     51.6%     64.3%     74.4%     81.7%       2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%												
2006       39.4%       55.9%       68.6%       77.5%       82.9%         2007       39.0%       55.2%       68.0%       76.5%       82.1%         2008       37.4%       53.6%       66.1%       75.0%       82.0%         2009       36.0%       51.6%       64.3%       74.4%       81.7%         2010       35.8%       51.5%       65.4%       75.9%       82.9%         2011       35.6%       52.4%       66.8%       77.0%       83.7%         2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2014       38.2%       57.0%       71.5%       81.7%         2015       38.7%       59.1%       73.9%         2016       40.8%       62.4%												
2007     39.0%     55.2%     68.0%     76.5%     82.1%       2008     37.4%     53.6%     66.1%     75.0%     82.0%       2009     36.0%     51.6%     64.3%     74.4%     81.7%       2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%	2005	38.7%	54.6%	68.0%	76.9%	83.3%						
2008     37.4%     53.6%     66.1%     75.0%     82.0%       2009     36.0%     51.6%     64.3%     74.4%     81.7%       2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%	2006	39.4%	55.9%	68.6%	77.5%	82.9%						
2008     37.4%     53.6%     66.1%     75.0%     82.0%       2009     36.0%     51.6%     64.3%     74.4%     81.7%       2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%	2007	39.0%		68.0%								
2009     36.0%     51.6%     64.3%     74.4%     81.7%       2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%		l .										
2010     35.8%     51.5%     65.4%     75.9%     82.9%       2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%												
2011     35.6%     52.4%     66.8%     77.0%     83.7%       2012     36.4%     54.4%     68.9%     78.6%     85.4%       2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%												
2012       36.4%       54.4%       68.9%       78.6%       85.4%         2013       37.2%       56.5%       70.9%       81.1%       87.3%         2014       38.2%       57.0%       71.5%       81.7%         2015       38.7%       59.1%       73.9%         2016       40.8%       62.4%												
2013     37.2%     56.5%     70.9%     81.1%     87.3%       2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%												
2014     38.2%     57.0%     71.5%     81.7%       2015     38.7%     59.1%     73.9%       2016     40.8%     62.4%												
2015 38.7% 59.1% 73.9% 2016 40.8% 62.4%						87.3%						
2016 40.8% 62.4%	2014	38.2%	57.0%	71.5%	81.7%							
2016 40.8% 62.4%	2015											
	==	1										

Notes:

\*Cumulative Injury includes both cumulative injury and occupational disease.

Settlement rates are based on claim counts developed to 5th report.

Source: WCIRB Unit Statistical data

#### Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

Accident				D	evelopme	nt			
Year	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	99-111
2001									17.7%
2002								20.4%	16.9%
2003							22.2%	18.1%	18.2%
2004						22.1%	20.2%	19.2%	18.6%
2005					24.1%	22.3%	21.1%	19.5%	24.3%
2006				26.9%	25.6%	21.5%	20.8%	24.4%	20.3%
2007			27.9%	27.1%	24.1%	22.9%	26.7%	22.1%	23.3%
2008		26.4%	27.0%	26.5%	25.3%	28.0%	25.2%	25.6%	23.9%
2009	28.9%	25.4%	26.5%	26.7%	28.5%	26.4%	27.6%	26.0%	24.0%
2010	29.0%	26.1%	27.0%	30.6%	28.8%	29.4%	28.6%	26.8%	25.4%
2011	28.8%	26.6%	29.9%	30.9%	30.9%	29.5%	29.2%	28.9%	
2012	28.3%	28.6%	31.1%	32.1%	31.9%	31.7%	30.8%		
2013	28.3%	30.2%	32.6%	34.5%	34.5%	32.5%			
2014	28.7%	31.7%	33.7%	36.6%	35.4%				
2015	29.4%	33.7%	37.0%	38.3%					
2016	30.8%	35.9%	39.4%						
2017	33.3%	37.8%							
2018	33.8%								

Source: WCIRB quarterly calls for experience

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

Accident							De	Development							
Year	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48
2008	4.7%	8.3%	11.2%	11.2%	9.5%	7.0%	%9.9	%2'9	7.3%	7.4%	8.1%	7.3%	7.4%	7.7%	7.5%
2009	4.0%	7.9%	10.3%	10.6%	8.5%	8.9	%9'9	6.5%	%6:9	%9'.	7.8%	7.2%	7.9%	7.1%	7.7%
2010	4.1%	7.5%	10.4%	11.1%	8.5%	8.9	7.1%	%8.9	%9'.	7.3%	7.9%	7.8%	9.1%	8.8%	9.3%
2011	4.3%	7.2%	10.6%	10.7%	8.7%	7.0%	7.3%	7.0%	8.4%	8.3%	9.2%	8.4%	8.5%	9.2%	9.1%
2012	4.3%	7.4%	10.4%	10.5%	9.1%	7.5%	8.2%	%9'.	8.6%	9.2%	9.3%	8.9%	9.3%	9.5%	%9.6
2013	4.2%	7.1%	10.4%	10.6%	9.4%	8.4%	8.6%	8.5%	9.1%	9.3%	9.7%	9.7%	10.2%	%6.6	10.4%
2014	4.1%	7.3%	10.3%	11.1%	%9.6	9.1%	8.8%	%0.6	9.4%	8.6	10.3%	9.6%	11.1%	10.3%	11.2%
2015	4.0%	7.7%	10.2%	11.7%	10.6%	9.1%	9.4%	10.0%	11.1%	10.6%	11.1%	11.0%	11.6%	11.5%	11.6%
2016	4.3%	%9'.	11.0%	12.5%	11.4%	%6.6	10.6%	10.3%	11.8%	11.2%	12.4%	12.0%			
2017	4.8%	8.3%	12.4%	13.1%	11.9%	10.7%	11.3%	10.9%							
2018	4.9%	8.5%	12.4%	13.4%											

Note: All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 84% to 97% of the total California workers' compensation insured market measured using 2018 earned premium levels).

Source: WCIRB quarterly calls for experience

#### Reopening Rates Based on Unit Statistical Data

PY/RL         1st to 2nd         2nd to 3rd         3rd to 4th         4th to 5th         5th to 6th         6th to 7th         7th to 8th           2001         0.84%         0.50%         0.34%         0.30%	PY/RL			Reope	ning Rates			
2002       0.92%       0.45%       0.35%       0.33%       0.24%       0.19%       0.16%         2003       0.68%       0.43%       0.38%       0.31%       0.24%       0.23%       0.18%         2004       0.60%       0.40%       0.32%       0.27%       0.27%       0.18%       0.12%         2005       0.63%       0.34%       0.29%       0.29%       0.25%       0.14%       0.11%         2006       0.62%       0.38%       0.39%       0.37%       0.22%       0.15%       0.13%         2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%		1st to 2nd	2nd to 3rd			5th to 6th	6th to 7th	7th to 8th
2003       0.68%       0.43%       0.38%       0.31%       0.24%       0.23%       0.18%         2004       0.60%       0.40%       0.32%       0.27%       0.27%       0.18%       0.12%         2005       0.63%       0.34%       0.29%       0.29%       0.25%       0.14%       0.11%         2006       0.62%       0.38%       0.39%       0.37%       0.22%       0.15%       0.13%         2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2001	0.84%	0.50%	0.34%	0.30%			
2004       0.60%       0.40%       0.32%       0.27%       0.27%       0.18%       0.12%         2005       0.63%       0.34%       0.29%       0.29%       0.25%       0.14%       0.11%         2006       0.62%       0.38%       0.39%       0.37%       0.22%       0.15%       0.13%         2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2002	0.92%	0.45%	0.35%	0.33%	0.24%	0.19%	0.16%
2005       0.63%       0.34%       0.29%       0.29%       0.25%       0.14%       0.11%         2006       0.62%       0.38%       0.39%       0.37%       0.22%       0.15%       0.13%         2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2003	0.68%	0.43%	0.38%	0.31%	0.24%	0.23%	0.18%
2006       0.62%       0.38%       0.39%       0.37%       0.22%       0.15%       0.13%         2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2004	0.60%	0.40%	0.32%	0.27%	0.27%	0.18%	0.12%
2007       0.64%       0.60%       0.53%       0.29%       0.23%       0.17%       0.14%         2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2005	0.63%	0.34%	0.29%	0.29%	0.25%	0.14%	0.11%
2008       1.24%       0.80%       0.38%       0.32%       0.27%       0.17%       0.14%         2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2006	0.62%	0.38%	0.39%	0.37%	0.22%	0.15%	0.13%
2009       1.22%       0.48%       0.40%       0.38%       0.26%       0.19%       0.16%         2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2007	0.64%	0.60%	0.53%	0.29%	0.23%	0.17%	0.14%
2010       0.74%       0.53%       0.45%       0.35%       0.26%       0.20%         2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2008	1.24%	0.80%	0.38%	0.32%	0.27%	0.17%	0.14%
2011       0.86%       0.60%       0.48%       0.40%       0.31%         2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2009	1.22%	0.48%	0.40%	0.38%	0.26%	0.19%	0.16%
2012       0.92%       0.60%       0.54%       0.39%         2013       0.89%       0.67%       0.47%         2014       0.84%       0.62%	2010	0.74%	0.53%	0.45%	0.35%	0.26%	0.20%	
2013 0.89% 0.67% 0.47% 2014 0.84% 0.62%	2011	0.86%	0.60%	0.48%	0.40%			
2014 0.84% 0.62%	2012	0.92%	0.60%	0.54%	0.39%			
	2013	0.89%	0.67%	0.47%				
2015 0.74%	2014	0.84%	0.62%					
	2015	0.74%						
Average Incurred for Reopened Claims				•	•			
PY/RL 2nd 3rd 4th 5th 6th 7th 8th						6th	7th	8th
2001 27,368 34,714 44,371 52,850			34,714	44,371	52,850			
								76,263
				47,715	50,915			72,056
2004 20,348 27,536 35,748 50,349 50,964 71,644 75,968	2004	20,348	27,536	35,748	50,349	50,964	71,644	75,968
2005 24,800 30,865 41,020 47,858 59,755 66,347 79,249	2005	24,800	30,865	41,020	47,858	59,755	66,347	79,249
2006 25,237 29,803 36,576 45,402 62,900 65,690 76,528		05.007						
2007 24,977 25,653 36,417 57,370 67,285 75,642 83,655		25,237	29,803	36,576	45,402	62,900	65,690	76,528
2008 17,783 22,985 45,903 58,719 65,007 79,550 109,922	2006	,	•	•	,	•	,	76,528 83,655
2009 19,985 32,723 43,640 56,804 67,492 78,072 76,602	2006 2007	24,977	25,653	36,417	57,370	67,285	75,642	
2010 25,513 33,258 47,060 56,399 66,372 82,341	2006 2007 2008	24,977 17,783	25,653 22,985	36,417 45,903	57,370 58,719	67,285 65,007	75,642 79,550	83,655
2011 26,482 34,265 45,437 57,611 61,198	2006 2007 2008 2009	24,977 17,783 19,985	25,653 22,985 32,723	36,417 45,903 43,640	57,370 58,719 56,804	67,285 65,007 67,492	75,642 79,550 78,072	83,655 109,922
2012 26,314 34,862 44,611 55,943	2006 2007 2008 2009 2010	24,977 17,783 19,985 25,513	25,653 22,985 32,723 33,258	36,417 45,903 43,640 47,060	57,370 58,719 56,804 56,399	67,285 65,007 67,492 66,372	75,642 79,550 78,072	83,655 109,922
2013 26,914 36,436 47,811	2006 2007 2008 2009 2010 2011	24,977 17,783 19,985 25,513 26,482	25,653 22,985 32,723 33,258 34,265	36,417 45,903 43,640 47,060 45,437	57,370 58,719 56,804 56,399 57,611	67,285 65,007 67,492 66,372	75,642 79,550 78,072	83,655 109,922
2014 28,634 38,942	2006 2007 2008 2009 2010 2011 2012	24,977 17,783 19,985 25,513 26,482 26,314	25,653 22,985 32,723 33,258 34,265 34,862	36,417 45,903 43,640 47,060 45,437 44,611	57,370 58,719 56,804 56,399 57,611	67,285 65,007 67,492 66,372	75,642 79,550 78,072	83,655 109,922
2015 28,197	2006 2007 2008 2009 2010 2011 2012 2013	24,977 17,783 19,985 25,513 26,482 26,314 26,914	25,653 22,985 32,723 33,258 34,265 34,862 36,436	36,417 45,903 43,640 47,060 45,437 44,611	57,370 58,719 56,804 56,399 57,611	67,285 65,007 67,492 66,372	75,642 79,550 78,072	83,655 109,922

Source: WCIRB unit statistical data

#### Reopening Rates by Injury Type

Permanent Indemnity						Ter	mporary	Indemnit	V						
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	-	6 to 7	7 to 8	PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8
2001	3.10%	2.54%	1.65%	1.49%				2001	1.55%	0.92%	0.66%	0.43%			
2002	6.37%	1.93%	1.74%	1.60%	1.13%	0.92%	0.76%	2002	1.63%	0.92%	0.55%	0.44%	0.25%	0.15%	0.13%
2003	2.51%	2.15%	1.96%	1.66%	1.23%	1.15%	0.86%	2003	1.24%	0.81%	0.62%	0.40%	0.26%	0.16%	0.14%
2004	2.08%	2.33%	1.75%	1.72%	1.57%	1.01%	0.71%	2004	1.11%	0.80%	0.60%	0.34%	0.30%	0.20%	0.10%
2005	2.73%	1.94%	2.00%	1.94%	1.60%	0.87%	0.65%	2005	1.17%	0.67%	0.48%	0.36%	0.28%	0.14%	0.11%
2006	2.34%	2.23%	2.30%	2.27%	1.47%	0.92%	0.77%	2006	1.14%	0.82%	0.57%	0.46%	0.28%	0.18%	0.14%
2007	2.47%	3.03%	2.82%	1.86%	1.32%	0.98%	0.77%	2007	1.20%	0.94%	0.71%	0.40%	0.28%	0.16%	0.13%
2008	4.02%	3.54%	2.17%	1.87%	1.44%	0.86%	0.73%	2008	1.67%	1.12%	0.57%	0.40%	0.29%	0.18%	0.12%
2009	3.81%	2.42%	1.91%	1.80%	1.26%	0.85%	0.70%	2009	1.80%	0.81%	0.60%	0.47%	0.27%	0.24%	0.17%
2010	2.15%	2.23%	2.09%	1.56%	1.15%	0.84%		2010	1.23%	0.91%	0.64%	0.50%	0.33%	0.22%	
2011		2.38%		1.80%	1.21%			2011	1.55%	1.04%	0.71%		0.35%		
2012	2.68%		2.39%	1.74%				2012	1.51%		0.80%	0.48%			
2013	3.35%		2.02%					2013	1.47%	1.17%	0.68%				
2014		2.86%						2014	1.45%	1.01%					
2015	2.89%							2015	1.17%						
			A 11 1 1	••											
DV/DI	1 +0 2	2 +0 2	All Inde	•	E to G	6 to 7	7 to 0	DV/DI	1 to 2	2 to 2	Medical	,	E to G	6 to 7	7 to 9
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	PY/RL	1 to 2	2 to 3	3 to 4		5 to 6	6 to 7	7 to 8
2001	1.70%	1.26%	0.99%	0.86%	0.669/	O F20/	0.440/	2001	0.66%	0.30%	0.13%	0.08% 0.08%	0.05%	0.049/	0.030/
2002	1.97%	1.13% 1.10%	0.97%	0.93%	0.66%	0.52%	0.44%	2002	0.70%		0.13%		0.05%		0.03%
2003 2004	1.32% 1.17%	1.10%	1.08% 0.94%	0.91% 0.83%	0.69% 0.81%	0.63% 0.54%	0.48% 0.36%	2003 2004	0.56% 0.49%		0.14% 0.13%	0.08% 0.08%	0.05%	0.05% 0.04%	0.05% 0.03%
2004	1.17 %	0.90%	0.94%	0.83%	0.78%	0.43%	0.33%	2004	0.49%	0.23%	0.13%	0.08%	0.06%	0.04%	0.03%
2005	1.23%		1.08%	1.10%	0.74%	0.43%	0.33%	2003	0.50%	0.21%	0.11%	0.10%	0.04%	0.03%	0.03%
2007	1.29%	1.37%	1.35%	0.93%	0.74%	0.40 %	0.41%	2007	0.53%	0.42%	0.19%	0.09%	0.04 %	0.03%	0.03%
2007	1.86%	1.66%	1.09%	0.97%	0.79%	0.49%	0.42 %	2008	1.12%	0.58%	0.25%	0.10%	0.00%	0.04%	0.03%
2009	1.98%	1.19%	1.05%	1.01%	0.71%	0.53%	0.41%	2009	1.07%	0.29%	0.18%	0.14%	0.07%	0.04%	0.04%
2010	1.32%	1.24%	1.16%	0.94%	0.70%	0.51%	0.4070	2010	0.62%	0.23%	0.10%	0.10%	0.07%		0.0470
2011	1.68%		1.25%		0.74%	0.0170		2011	0.68%		0.18%	0.12%	0.10%	0.0070	
2012	1.67%		1.39%	1.01%	0.7 + 70			2012	0.75%		0.19%		0.1070		
2013	1.73%	1.70%	1.19%	1.0170				2013	0.68%	0.31%		0.1070			
2013	1.70%	1.57%	1.1370					2013	0.63%	0.28%	0.17 /0				
2015	1.45%	1.57 /0						2015	0.56%	0.2070					
2010	1.4070							2010	0.0070						
			All Cla	aims											
PY/RL	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8								
2001	0.84%	0.50%	0.34%	0.30%											
2002	0.92%	0.45%	0.35%	0.33%	0.24%	0.19%	0.16%								
2003	0.68%	0.43%	0.38%	0.31%	0.24%	0.23%	0.18%								
2004	0.60%	0.40%			0.27%	0.18%	0.12%								
2005	0.63%			0.29%			0.11%								
2006				0.37%			0.13%								
2007	0.64%		0.53%	0.29%	0.23%	0.17%	0.14%								
2008	1.24%		0.38%	0.32%	0.27%	0.17%	0.14%								
2009	1.22%		0.40%	0.38%	0.26%		0.16%								
2010	0.74%	0.53%	0.45%	0.35%	0.26%	0.20%									
2011	0.86%		0.48%	0.40%	0.31%										
2012	0.92%		0.54%	0.39%											
2013	0.89%		0.47%												
2014	0.84%	0.62%													
2015	0.74%														

Source: WCIRB unit statistical data

Injury types are fixed at denominator age.

Note:

#### **Closed-Closed Development Based on Unit Statistical Data**

**Developing Closed Claim Rates** 

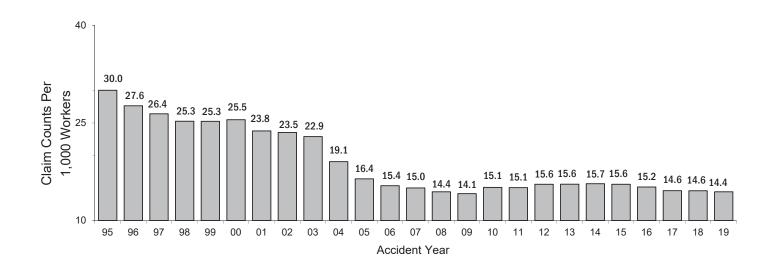
PY/RL	1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
2001	16.66%	12.58%	9.61%	7.86%			
2002	20.85%	13.76%	10.47%	10.22%	14.10%	7.81%	4.53%
2003	24.16%	13.85%	12.12%	18.44%	9.70%	5.04%	5.54%
2004	22.60%	14.45%	21.30%	9.15%	5.26%	5.26%	1.11%
2005	20.78%	20.68%	8.28%	4.98%	4.34%	1.36%	1.11%
2006	27.49%	9.95%	5.46%	4.42%	1.84%	1.49%	1.43%
2007	20.05%	6.62%	5.38%	2.53%	2.36%	1.90%	1.48%
2008	11.84%	6.47%	3.85%	3.43%	2.80%	2.08%	1.58%
2009	11.69%	5.58%	4.72%	3.83%	2.93%	2.23%	1.85%
2010	10.20%	6.10%	4.45%	3.36%	2.57%	2.11%	
2011	10.88%	5.43%	3.76%	2.71%	2.13%		
2012	10.42%	5.27%	3.97%	2.92%			
2013	9.95%	5.69%	3.96%				
2014	9.19%	5.12%					
2015	9.12%						

Closed-Closed Total Incurred Development as a Percent of Total Incurred Development on All Claims

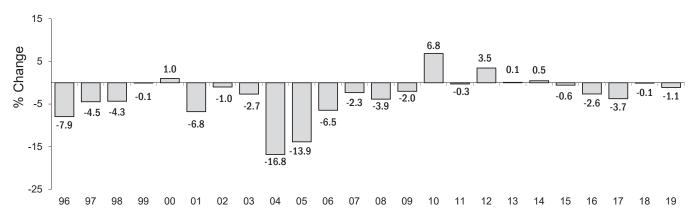
PY/RL	1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
2001	0.83%	2.11%	2.95%	6.25%			
2002	0.78%	2.28%	5.14%	3.80%	8.49%	6.39%	4.49%
2003	1.43%	2.43%	5.04%	8.44%	6.10%	3.57%	4.00%
2004	1.64%	2.18%	6.20%	4.24%	3.13%	3.65%	3.14%
2005	1.49%	3.49%	2.91%	3.23%	3.48%	3.53%	3.54%
2006	1.93%	1.88%	2.61%	3.12%	3.18%	3.23%	5.20%
2007	1.43%	1.57%	2.46%	3.25%	4.55%	2.93%	5.55%
2008	0.99%	1.62%	2.32%	3.81%	4.41%	6.09%	5.39%
2009	1.01%	1.46%	2.96%	4.18%	4.71%	9.16%	10.13%
2010	0.87%	1.94%	3.53%	5.35%	7.31%	9.40%	
2011	1.05%	2.26%	4.31%	5.75%	7.38%		
2012	1.32%	3.07%	5.33%	6.71%			
2013	1.41%	3.52%	6.09%				
2014	1.62%	3.29%					
2015	1.60%						

Source: WCIRB unit statistical data

# California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year As of March 31, 2019



#### Year-to-Year Change



#### Note:

The 2018 and 2019 estimates are based on comparison of claim counts based on WCIRB accident year experience as of March 31, 2019 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

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

	Annual %				Annual Log Differenc	es		
	Changes Intra-		Class Indemnity Fred		AY+1		Economic	CalOSHA
	Class Ind Freq		Exposure at PY 201		Indemnity	Cumulative	Variables	Dummy
AY	Total	Total	Cumulative	Non-cum.	Benefit Level	Injury Index	(1st Prin. Comp.)	Variable
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.081	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	1.1%	0.011	0.031	0.009	0.003	0.022	0.043	0.000
2012	4.7%	0.046	0.127	0.036	0.025	0.091	0.123	0.000
2012	0.4%	0.040	0.138	-0.014	0.023	0.051	0.151	0.000
2013	0.4%	0.004	0.070	-0.008	0.003	0.132	0.178	0.000
2014	-0.8%	-0.002	0.050	-0.008	0.003	0.068	0.178	0.000
2016	-3.3%	-0.008	0.035	-0.016	0.002	0.081	0.082	0.000
2010	-4.1%	-0.033	0.054	-0.045	0.004	0.061	0.082	0.000
2017	0.0%	0.000	0.000	0.000	0.003	0.000	0.216	0.000
2019	-1.9%	-0.019	-0.019	-0.019	0.003	0.000	0.005	0.000
2019		-0.019 -0.020	-0.019 -0.020	-0.019 -0.020	0.004	0.000	-0.005	0.000
	-2.0%							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	0.041
R Squared	0.558
No. of Observations	39
Degrees of Freedom	34
V 0 ff: -: t/- \	

X Coefficient(s)	0.179	0.277	0.091	-0.130
Std Err of Coef.	0.074	0.063	0.045	0.078

#### Notes:

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

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

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

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

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

Economic variables are historical through 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.

### **Indemnity Claim Frequency History and Projections**

		Inter-Class				
	Intra-Class	Indemnity	Overall			
	Indemnity	Claim	Indemnity	Λ	al Darsont Chan	~~~
AY	Claim Frequency(a)	Frequency Index(b)	Claim Frequency	Intra-Class	ial Percent Chan Inter-Class	ges Overall
1979	0.548	0.921	0.660			
1980	0.512	0.914	0.612	-6.54%	-0.75%	-7.24%
1981	0.494	0.900	0.581	-3.54%	-1.56%	-5.04%
1982	0.486	0.882	0.561	-1.59%	-2.00%	-3.56%
1983	0.516	0.873	0.590	6.20%	-0.98%	5.17%
1984	0.565	0.871	0.645	9.53%	-0.18%	9.32%
1985	0.577	0.867	0.654	2.05% -2.39%	-0.51%	1.52% -3.28%
1986 1987	0.563 0.572	0.859 0.854	0.633 0.639	-2.39% 1.53%	-0.92% -0.56%	-3.28% 0.97%
1988	0.576	0.854	0.643	0.69%	-0.06%	0.64%
1989	0.590	0.853	0.659	2.47%	-0.08%	2.39%
1990	0.643	0.845	0.712	9.04%	-0.89%	8.07%
1991	0.645	0.832	0.702	0.28%	-1.58%	-1.30%
1992	0.574	0.820	0.615	-11.09%	-1.45%	-12.37%
1993	0.488	0.810	0.517	-14.91%	-1.25%	-15.98%
1994	0.426	0.809	0.451	-12.76%	-0.06%	-12.81%
1995	0.406	0.811	0.431	-4.64% -6.78%	0.16% -1.25%	-4.49% -7.94%
1996 1997	0.379 0.366	0.800 0.791	0.396 0.379	-0.76% -3.27%	-1.23% -1.23%	-7.94% -4.46%
1998	0.352	0.786	0.362	-3.76%	-0.60%	-4.34%
1999	0.357	0.774	0.362	1.45%	-1.48%	-0.05%
2000	0.372	0.752	0.366	4.02%	-2.91%	0.99%
2001	0.346	0.753	0.341	-6.91%	0.13%	-6.79%
2002	0.338	0.763	0.337	-2.31%	1.34%	-1.00%
2003	0.328	0.764	0.328	-2.86%	0.20%	-2.67%
2004	0.274	0.763	0.273	-16.65%	-0.21%	-16.82%
2005	0.237	0.760	0.235	-13.59%	-0.31%	-13.85% -6.46%
2006 2007	0.223 0.219	0.754 0.749	0.220 0.215	-5.69% -1.64%	-0.81% -0.68%	-0.46% -2.31%
2008	0.214	0.740	0.217	-2.71%	-1.18%	-3.86%
2009	0.213	0.727	0.203	-0.20%	-1.82%	-2.02%
2010	0.232	0.713	0.216	8.87%	-1.87%	6.83%
2011	0.235	0.703	0.216	1.15%	-1.42%	-0.29%
2012	0.246	0.694	0.223	4.70%	-1.20%	3.45%
2013	0.247	0.692	0.223	0.45%	-0.36%	0.09%
2014	0.247	0.694	0.225	0.24%	0.22%	0.46%
2015 2016(c)	0.245 0.237	0.695 0.700	0.223 0.217	-0.83% -3.28%	0.26% 0.68%	-0.57% -2.63%
2016(d)	0.236	0.700	0.217	-5.26 /0	0.0070	-2.03 /0
2017(e)	0.226	0.703	0.208	-4.12%	0.39%	-3.75%
2018	0.226	0.701	0.207	0.01%	-0.27%	-0.26%
2019	0.222	0.701	0.203	-1.87%	0.02%	-1.85%
2020	0.217	0.699	0.199	-1.95%	-0.30%	-2.25%
2021	0.213	0.695	0.193	-2.18%	-0.48%	-2.65%
PY						
2008	0.213	0.734	0.205			
2009	0.222	0.720	0.209	3.93%	-1.84%	1.97%
2010	0.233	0.708	0.216	5.18%	-1.67%	3.47%
2011	0.240	0.699	0.219	2.78%	-1.32%	1.42%
2012	0.246	0.693	0.223	2.71%	-0.82%	1.89%
2013	0.247	0.693	0.224	0.35%	-0.09%	0.26%
2014 2015	0.246 0.242	0.694 0.698	0.224 0.221	-0.25% -1.95%	0.24% 0.45%	-0.01% -1.51%
2016	0.232	0.701	0.213	-3.97%	0.54%	-3.45%
2017	0.226	0.702	0.207	-2.67%	0.08%	-2.59%
2018	0.224	0.701	0.205	-0.84%	-0.14%	-0.98%
2019	0.220	0.700	0.201	-1.91%	-0.13%	-2.03%
2020	0.215	0.697	0.196	-2.05%	-0.38%	-2.43%

Notes: (a) All frequencies are per \$M exposure at PY 2017 Level.
(b) Index is to AY 1961.
(c) 2016 accidents on 2016 and 2015 policies.
(d) 2016 accidents on 2015 policies only.
(e) AY 2017 percent changes are based on a comparison of 2017 accidents on 2016 policies to 2016 accidents on 2015 policies.
(f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

### California OPRL Injury & Illness Rates

Α	В	С	D	Е	F	G	Н	I	J	
	Total		Total		California	Frequen	cy Rates	Annual C	change in	Insured System
	Reportable	Total	Days Away	Ind Proxy/	Avg Ann	per 1,000	Workers	Frequen	icy Rates	Overall Ind
CY	Incidents	Cases(a)	Cases	Incidents	Employment(b)	Incidents	"Indemnity"	Incidents	"Indemnity"	Freq Change(c)
1992	993.9	456.6	359.8	36.2%	12,171.0	81.7	29.6			
1993	918.4	425.0	324.8	35.4%	11,964.1	76.8	27.1	-6.0%	-8.2%	-16.0%
1994	902.6	436.7	313.3	34.7%	12,150.9	74.3	25.8	-3.2%	-5.0%	-12.8%
1995	825.3	401.0	278.0	33.7%	12,458.6	66.2	22.3	-10.8%	-13.5%	-4.5%
1996	784.7	384.3	253.3	32.3%	12,739.1	61.6	19.9	-7.0%	-10.9%	-7.9%
1997	809.3	409.8	251.6	31.1%	13,149.1	61.5	19.1	-0.1%	-3.8%	-4.5%
1998	779.5	388.2	241.0	30.9%	13,583.5	57.4	17.7	-6.8%	-7.3%	-4.3%
1999	758.9	370.8	229.1	30.2%	14,135.5	53.7	16.2	-6.4%	-8.6%	-0.1%
2000	787.4	396.4	246.2	31.3%	14,616.5	53.9	16.8	0.3%	3.9%	1.0%
2001	748.2	413.4	259.0	34.6%	14,747.4	50.7	17.6	-5.8%	4.3%	-6.8%
2002	694.1	404.1	231.8	33.4%	14,593.0	47.6	15.9	-6.2%	-9.6%	-1.0%
2003	684.7	387.0	223.5	32.6%	14,301.3	47.9	15.6	0.7%	-1.6%	-2.7%
2004	645.1	367.3	201.4	31.2%	14,383.1	44.9	14.0	-6.3%	-10.4%	-16.8%
2005	629.9	344.1	179.4	28.5%	14,570.7	43.2	12.3	-3.6%	-12.1%	-13.9%
2006	603.0	340.4	171.0	28.4%	14,892.9	40.5	11.5	-6.3%	-6.7%	-6.5%
2007	594.4	328.6	168.2	28.3%	15,428.6	38.5	10.9	-4.8%	-5.1%	-2.3%
2008	541.8	298.4	158.9	29.3%	15,452.7	35.1	10.3	-9.0%	-5.7%	-3.9%
2009	491.9	269.3	142.3	28.9%	14,877.9	33.1	9.6	-5.7%	-7.0%	-2.0%
2010	464.1	257.1	137.4	29.6%	14,255.0	32.6	9.6	-1.5%	0.8%	6.8%
2011	440.9	243.6	134.2	30.4%	13,875.2	31.8	9.7	-2.4%	0.3%	-0.3%
2012	451.5	257.1	140.1	31.0%	14,959.8	30.2	9.4	(b)	(b)	3.5%
2013	468.4	265.0	146.8	31.3%	15,379.0	30.5	9.5	0.9%	1.9%	0.1%
2014	460.7	265.1	142.8	31.0%	15,809.1	29.1	9.0	-4.3%	-5.4%	0.5%
2015	470.6	273.5	144.0	30.6%	16,295.2	28.9	8.8	-0.9%	-2.2%	-0.6%
2016	466.6	272.7	145.9	31.3%	16,718.6	27.9	8.7	-3.4%	-1.2%	-2.6%
2017	466.6	267.3	146.5	31.4%	17,019.7	27.4	8.6	-1.8%	-1.4%	-3.7%
	000s	000s	000s	Proxy for	000s	Proxy for	Proxy for	Change in	Change in	
	Broad OSHA		Proxy for	Indemnity		Indemnity	Indemnity	Column G	Column H	
	Definition		Indemnity	to Total		& Med-Only	D/F	Proxy for	Proxy for	
	Proxy for		,	Ratio		Combined		Indemnity	Indemnity	
	Med & Ind			D/B		B/F		& Med-Only	,	
	Combined							Combined		

Notes:

- (a) Cases with days away from work, job restrictions or transfers.
- (b) Series Change: OPRL data element was discontinued in 2012. BLS QCEW data element for 2013 and later.
- (c) Insured System AY 2017 change is based on a comparison of 2017 accidents on 2016 policies to 2016 accidents on 2015 policies.

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

### Self-Insured Employers - Claim Frequency

### Private Self-Insured Employers

	Private Self-Insured Employers									
								Total Freq.		Ind. Freq
	Number of Ca	ses Reported	During Year	Indemnity	Annual	Private	Total	Annual	Indemnity	Annual
CY	Medical-Only	Indemnity	Total	/Total	Change	Employees	Frequency	Change	Frequency	Change
2001	73,527	46,596	120,123	0.388		2,049,611	0.059		0.023	
2002	72,130	46,218	118,348	0.391	0.7%	1,968,800	0.060	2.6%	0.023	3.3%
2003	69,761	46,477	116,238	0.400	2.4%	2,474,025	0.047	-21.8%	0.019	-20.0%
2004	70,630	42,455	113,085	0.375	-6.1%	2,595,470	0.044	-7.3%	0.016	-12.9%
2005	66,467	40,102	106,569	0.376	0.2%	2,814,083	0.038	-13.1%	0.014	-12.9%
2006	69,395	35,570	104,965	0.339	-9.9%	2,681,843	0.039	3.4%	0.013	-6.9%
2007	61,432	30,247	91,679	0.330	-2.6%	2,295,155	0.040	2.1%	0.013	-0.6%
2008	59,764	32,631	92,395	0.353	7.0%	2,393,095	0.039	-3.3%	0.014	3.5%
2009	51,916	29,557	81,473	0.363	2.7%	2,173,519	0.037	-2.9%	0.014	-0.3%
2010	50,039	29,036	79,075	0.367	1.2%	2,145,570	0.037	-1.7%	0.014	-0.5%
2011	48,360	29,026	77,386	0.375	2.1%	2,111,065	0.037	-0.5%	0.014	1.6%
2012	49,492	28,065	77,557	0.362	-3.5%	2,122,757	0.037	-0.3%	0.013	-3.8%
2013	46,442	29,573	76,015	0.389	7.5%	2,088,402	0.036	-0.4%	0.014	7.1%
2014	45,775	30,652	76,427	0.401	3.1%	2,190,516	0.035	-4.1%	0.014	-1.2%
2015	43,785	31,899	75,684	0.421	5.1%	2,259,451	0.033	-4.0%	0.014	0.9%
2016	46,039	32,365	78,404	0.413	-2.1%	2,374,484	0.033	-1.4%	0.014	-3.5%
2017	48,008	31,647	79,655	0.397	-3.8%	2,255,013	0.035	7.0%	0.014	3.0%

### Public Self-Insured Employers

Public Self-Insured Employers										
								Total Freq.		Ind. Freq
	Number of Ca	ses Reported	During Year	Indemnity	Annual	Public	Total	Annual	Indemnity	Annual
FY	Medical-Only	Indemnity	Total	/Total	Change	Employees	Frequency	Change	Frequency	Change
2000/2001	65,103	56,168	121,271	0.463		1,379,977	0.088		0.041	
2001/2002	65,372	60,688	126,060	0.481	3.9%	1,504,119	0.084	-4.6%	0.040	-0.9%
2002/2003	69,985	65,043	135,028	0.482	0.1%	1,646,055	0.082	-2.1%	0.040	-2.1%
2003/2004	68,563	64,214	132,777	0.484	0.4%	1,804,405	0.074	-10.3%	0.036	-9.9%
2004/2005	69,739	56,265	126,004	0.447	-7.7%	1,764,198	0.071	-2.9%	0.032	-10.4%
2005/2006	66,405	52,524	118,929	0.442	-1.1%	1,670,607	0.071	-0.3%	0.031	-1.4%
2006/2007	65,564	50,664	116,228	0.436	-1.3%	1,842,017	0.063	-11.4%	0.028	-12.5%
2007/2008	70,784	57,618	128,402	0.449	2.9%	1,939,483	0.066	4.9%	0.030	8.0%
2008/2009	68,184	57,595	125,779	0.458	2.0%	2,095,055	0.060	-9.3%	0.027	-7.5%
2009/2010	64,031	57,322	121,353	0.472	3.2%	2,040,413	0.059	-0.9%	0.028	2.2%
2010/2011	61,806	57,201	119,007	0.481	1.8%	1,920,695	0.062	4.2%	0.030	6.0%
2011/2012	61,151	57,461	118,612	0.484	0.8%	1,898,064	0.062	0.9%	0.030	1.7%
2012/2013	60,303	56,398	116,701	0.483	-0.2%	1,891,873	0.062	-1.3%	0.030	-1.5%
2013/2014	58,263	56,858	115,121	0.494	2.2%	2,396,139	0.048	-22.1%	0.024	-20.4%
2014/2015	57,276	57,519	114,795	0.501	1.4%	1,991,021	0.058	20.0%	0.029	21.7%
2015/2016	59,033	56,797	115,830	0.490	-2.1%	2,068,691	0.056	-2.9%	0.027	-5.0%
2016/2017	60,528	55,723	116,251	0.479	-2.2%	2,127,675	0.055	-2.4%	0.026	-4.6%
2017/2018	58,395	57,475	115,870	0.496	3.5%	2,080,967	0.056	1.9%	0.028	5.5%

	All Self-Insured Employers											
								Total Freq.		Ind. Freq		Ind. Freq
	Number of Ca	ses Reported	During Year	Indemnity	Annual	All Self-Ins.	Total	Annual	Indemnity	Annual		Annual
CY	Medical-Only	Indemnity	Total	/Total	Change	Employees	Frequency	Change	Frequency	Change	AY	Change
2001	138,765	105,024	243,789	0.431		3,491,659	0.070		0.030		2001	-6.8%
2002	139,809	109,084	248,892	0.438	1.7%	3,543,887	0.070	0.6%	0.031	2.3%	2002	-1.0%
2003	139,035	111,106	250,141	0.444	1.3%	4,199,255	0.060	-15.2%	0.026	-14.0%	2003	-2.7%
2004	139,781	102,695	242,476	0.424	-4.6%	4,379,772	0.055	-7.1%	0.023	-11.4%	2004	-16.8%
2005	134,539	94,497	229,036	0.413	-2.6%	4,531,486	0.051	-8.7%	0.021	-11.1%	2005	-13.9%
2006	135,380	87,164	222,544	0.392	-5.1%	4,438,155	0.050	-0.8%	0.020	-5.8%	2006	-6.5%
2007	129,606	84,388	213,994	0.394	0.7%	4,185,905	0.051	2.0%	0.020	2.6%	2007	-2.3%
2008	129,248	90,238	219,486	0.411	4.3%	4,410,364	0.050	-2.7%	0.020	1.5%	2008	-3.9%
2009	118,024	87,016	205,039	0.424	3.2%	4,241,253	0.048	-2.9%	0.021	0.3%	2009	-2.0%
2010	112,958	86,298	199,255	0.433	2.1%	4,126,124	0.048	-0.1%	0.021	1.9%	2010	6.8%
2011	109,839	86,357	196,196	0.440	1.6%	4,020,445	0.049	1.1%	0.021	2.7%	2011	-0.3%
2012	110,219	84,995	195,214	0.435	-1.1%	4,017,726	0.049	-0.4%	0.021	-1.5%	2012	3.5%
2013	105,725	86,201	191,926	0.449	3.2%	4,232,408	0.045	-6.7%	0.020	-3.7%	2013	0.1%
2014	103,545	87,841	191,385	0.459	2.2%	4,384,096	0.044	-3.7%	0.020	-1.6%	2014	0.5%
2015	101,940	89,057	190,997	0.466	1.6%	4,289,307	0.045	2.0%	0.021	3.6%	2015	-0.6%
2016	105,820	88,625	194,445	0.456	-2.2%	4,472,667	0.043	-2.4%	0.020	-4.6%	2016	-2.6%
2017	107,470	88,246	195,716	0.451	-1.1%	4,359,334	0.045	3.3%	0.020	2.2%	2017	-3.7%

Notes: Fiscal Year Public data prorated to CYs 50%/50%.

Insured System AY 2017 change is based on a comparison of 2017 accidents on 2016 policies to 2016 accidents on 2015 policies.

Sources: California Department of Industrial Relations

WCIRB Indemnity Claim Frequency Model for insured system

Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness

		Change in	Indemnity	Annual % Change in Ind Frequency
Policy	Poport	Change in Frequency	Frequency Hazardousness	Attributable to Change in Mix
Year	Report Level	Hazardousness	Index	of Exposures
1961	3	1.000000	1.000000	oi Exposures
1962	3	0.990262	0.990262	-0.9738
1963	3	0.998718	0.988993	-0.1282
1964	3	0.994304	0.983359	-0.5696
1965	3	0.993875	0.977336	-0.6125
1966	3	0.983584	0.961291	-1.6416
1967	3	0.987626	0.949396	-1.2374
1968	3	0.997512	0.947033	-0.2488
1969	3	0.986390	0.934144	-1.3610
1970	3	0.989966	0.924770	-1.0034
1971	3	1.000824	0.925532	0.0824
1972	3	1.000505	0.926000	0.0505
1973	3	0.998631	0.924732	-0.1369
1974	3	0.986017	0.911802	-1.3983
1975	3	0.984110	0.897313	-1.5890
1976	3	1.004996	0.901796	0.4996
1977	3	1.009490	0.910354	0.9490
1978	3	1.012494	0.921728	1.2494
1979	3	0.997841	0.919739	-0.2159
1980	3	0.988843	0.909477	-1.1157
1981	3	0.981336	0.892503	-1.8664
1982	3	0.979033	0.873790	-2.0967
1983	3	0.997989	0.872032	-0.2011
1984	3	0.998272	0.870525	-0.1728
1985	3	0.992516	0.864010	-0.7484
1986	3	0.989667	0.855082	-1.0333
1987	3	0.997751	0.853159	-0.2249
1988	3	1.000574	0.853649	0.0574
1989	5	0.998212	0.852122	-0.1788
1990	5	0.986184	0.840349	-1.3816
1991	5	0.982822	0.825913	-1.7178
1992	5	0.987393	0.815501	-1.2607
1993	5	0.987562	0.805358	-1.2438
1994	5	1.007382	0.811303	0.7382
1995	5	0.997625	0.809376	-0.2375
1996	5	0.980288	0.793422	-1.9712
1997	5	0.993034	0.787895	-0.6966
1998	5	0.994743	0.783752	-0.5257
1999	5	0.978134	0.766615	-2.1866
2000	5	0.965472	0.740145	-3.4528
2001	5	1.027926	0.760814	2.7926
2002	5	1.002823	0.762962	0.2823
2003	5	1.001398	0.764029	0.1398
2004	5	0.995209	0.760369	-0.4791
2005	5	0.998285	0.759065	-0.1715
2006	5 5	0.986896	0.749118	-1.3104
2007		0.998047	0.747655	-0.1953 1.0316
2008 2009	5 5	0.980684 0.982600	0.733213 0.720455	-1.9316 -1.7400
2009	5 5	0.982600	0.720455	-1.7400 -1.9740
2010	5	0.990176	0.699296	-0.9824
2011	5	0.986305	0.689719	-1.3695
2012	Proj to 5th	1.004761	0.693002	0.4761
2013	Proj to 5th	1.000126	0.693090	0.0126
2015	Proj to 5th	1.004679	0.696333	0.4679
2016	Proj to 5th	1.008486	0.702242	0.8486
	,			

Source: WCIRB unit statistical data

Change in Statewide Incremental Number of Indemnity Claims

Change in Statewide Incremental Number of Medical-Only Claims

	Change in	Change in	Change in	Change in
	Quarterly Increment		Quarterly Increment	
Calendar	from Same Quarter	from Same Quarter	from Same Quarter	from Same Quarter
Quarter	at Prior	at Prior	at Prior	at Prior
<u>Evaluation</u>	<u>Calendar Year</u>	Calendar Year	Calendar Year	<u>Calendar Year</u>
3/31/2007	-2.4%			
6/30/2007	-10.2%		-13.5%	
9/30/2007	0.3%		1.2%	
12/31/2007	-13.4%	-6.3%	-19.4%	
3/31/2008	-5.8%	-7.2%	-14.8%	-11.6%
6/30/2008	-3.9%	-5.7%	-2.8%	-9.0%
9/30/2008	-19.2%	-10.7%	-17.6%	-13.9%
12/31/2008	-16.7%	-11.4%	-3.8%	-10.3%
3/31/2009	-27.1%	-16.8%	-27.5%	-13.2%
6/30/2009	-14.2%	-19.4%	-27.0%	-19.4%
9/30/2009	-8.2%	-16.8%	-16.7%	-19.2%
12/31/2009	2.5%	-12.8%	-15.8%	-22.0%
3/31/2010	7.4%	-4.1%	-5.2%	-17.1%
6/30/2010	3.9%	1.0%	-1.9%	-10.6%
9/30/2010	6.7%	5.1%	-6.3%	-7.6%
12/31/2010	7.2%	6.3%	3.3%	-2.6%
3/31/2011 6/30/2011	2.7% -1.2%	5.1% 3.8%	-4.1% -8.9%	-2.3% -4.1%
9/30/2011	3.4%	2.9%	-0.9% -1.3%	-4.1% -2.7%
12/31/2011	4.5%	2.3%	-7.8%	-5.5%
3/31/2012	-0.4%	1.5%	-1.8%	-4.6%
6/30/2012	8.1%	3.9%	0.1%	-2.6%
9/30/2012	5.5%	4.5%	3.2%	-1.5%
12/31/2012	6.7%	5.1%	5.5%	1.8%
3/31/2013	5.2%	6.4%	-4.2%	1.3%
6/30/2013	10.9%	7.1%	9.0%	3.4%
9/30/2013	6.2%	7.3%	-1.9%	2.0%
12/31/2013	5.4%	7.0%	0.5%	0.8%
3/31/2014	8.6%	7.7%	0.6%	1.9%
6/30/2014	-0.2%	4.8%	-5.8%	-1.8%
9/30/2014	1.1%	3.5%	1.3%	-0.9%
12/31/2014	-0.4%	2.0%	1.7%	-0.6%
3/31/2015	-2.3%	-0.4%	4.2%	0.2%
6/30/2015	2.4%	0.2%	2.7%	2.4%
9/30/2015	3.1%	0.8%	7.8%	4.2%
12/31/2015	2.7%	1.5%	0.7%	3.9%
3/31/2016	5.3%	3.3%	6.3%	4.4%
6/30/2016	2.7%	3.4%	4.6%	4.8%
9/30/2016	-1.2%	2.3%	-3.3%	1.8%
12/31/2016	0.4%	1.7%	-1.3%	1.3%
3/31/2017	2.7%	1.1%	1.3%	0.2%
6/30/2017	4.0%	1.4%	6.3%	0.7%
9/30/2017	0.9%	2.0%	5.2%	3.0%
12/31/2017	1.7%	2.3%	13.3%	6.5%
3/31/2018	-2.1%	1.2%	3.2%	7.0%
6/30/2018	-2.1%	-0.4%	-1.4%	5.0%
9/30/2018	7.7%	1.3%	10.2%	6.3%
12/31/2018	4.3%	2.0%	4.9%	4.3%
3/31/2019	4.0%	3.4%	3.6%	4.4%

**Economic Variables** 

		Economic			
	Aggregate	Unemployment	Aggregate	Unemployment	Variables
CY	Employment	Rate	Employment	Rate	1st Prin. Comp.
1961	3,963,242	6.90			
1962	4,146,749	5.80	0.045	-0.174	0.178
1963	4,293,966	6.00	0.035	0.034	-0.029
1964	4,426,369	6.00	0.030	0.000	0.004
1965	4,546,719	5.90	0.027	-0.017	0.020
1966	4,793,964	4.90	0.053	-0.186	0.191
1967	4,929,157	5.70	0.028	0.151	-0.146
1968	5,134,603	5.40	0.041	-0.054	0.059
1969	5,369,271	5.20	0.045	-0.038	0.043
1970	5,336,545	7.30	-0.006	0.339	-0.337
1971	5,285,062	8.79	-0.010	0.186	-0.186
1972	6,022,635	7.61	0.131	-0.145	0.161
1973	6,500,706	7.02	0.076	-0.081	0.090
1974	6,709,500	7.30	0.032	0.040	-0.035
1975	6,685,230	9.88	-0.004	0.302	-0.300
1976	7,261,209	9.17	0.083	-0.075	0.085
1977	7,681,971	8.25	0.056	-0.105	0.112
1978	9,203,099	7.11	0.181	-0.149	0.172
1979	9,621,815	6.24	0.044	-0.130	0.134
1980	10,269,331	6.83	0.065	0.090	-0.081
1981	10,408,249	7.41	0.013	0.081	-0.079
1982	10,235,071	9.95	-0.017	0.294	-0.294
1983	10,334,786	9.68	0.010	-0.028	0.029
1984	10,826,006	7.79	0.046	-0.218	0.222
1985	11,178,336	7.21	0.032	-0.077	0.081
1986	11,489,283	6.69	0.027	-0.075	0.078
1987	11,893,711	5.77	0.035	-0.148	0.151
1988	12,361,079	5.31	0.039	-0.084	0.088
1989	12,692,805	5.09	0.026	-0.042	0.045
1990	12,946,887	5.77	0.020	0.125	-0.121
1991	12,782,341	7.74	-0.013	0.294	-0.293
1992	12,582,274	9.32	-0.016	0.186	-0.186
1993	12,483,226	9.52	-0.008	0.021	-0.022
1994	12,615,828	8.56	0.011	-0.106	0.106
1995	12,873,417	7.82	0.020	-0.090	0.092
1996	13,231,630	7.28	0.027	-0.072	0.075
1997	13,626,047	6.37	0.029	-0.135	0.138
1998	14,089,578	5.91	0.033	-0.075	0.078
1999	14,486,568	5.21	0.028	-0.125	0.128
2000	14,999,309	4.90	0.035	-0.062	0.066
2001	15,105,147	5.43	0.007	0.103	-0.101
2002	14,979,580	6.65	-0.008	0.203	-0.202
2003	14,957,730	6.81	-0.001	0.023	-0.023
2004	15,137,580	6.20	0.012	-0.093	0.093
2005	15,429,468	5.40	0.019	-0.139	0.141
2006	15,705,339	4.92	0.018	-0.093	0.095
2007	15,851,478	5.36	0.009	0.087	-0.084
2008	15,696,799	7.31	-0.010	0.310	-0.308
2009	14,814,913	11.15	-0.058	0.423	-0.427
2010	14,671,408	12.22	-0.010	0.091	-0.092
2011	14,857,771	11.72	0.013	-0.042	0.043
2012	15,211,651	10.38	0.024	-0.121	0.123
2013	15,603,785	8.94	0.025	-0.149	0.151
2014	16,048,787	7.50	0.028	-0.176	0.178
2015	16,513,701	6.19	0.029	-0.192	0.194
2016	16,939,919	5.72	0.029	-0.079	0.082
2017	17,310,051	5.30	0.023	-0.076	0.078
2017	17,603,161	4.28	0.022	-0.215	0.216
2019	17,857,112	4.27	0.017	-0.003	0.005
2019	17,996,536	4.29	0.008	0.006	-0.005
2020	18,109,838	4.43	0.006	0.031	-0.030
2021	10,108,030	4.43	0.000	0.031	-0.030

Notes: The first principal component is of the annual log difference data from 1962-2018.

The first principal component of the annual log difference of the economic variables is:

1st PC of Econ Variables = -0.1362132 x Aggregate Employment + 0.9906795 x Unemployment Rate

Sources: Government historical labor statistics through 2018

UCLA Anderson forecasts through 2021 are as of June 2019

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

### Cumulative Injury Indemnity Claim Counts by Policy Year and Report Level

AY/RL	1	2	3	4	5	6	7	8	9	10
2004	12,018	12,876	13,224	13,474	13,751	14,240	14,394	14,391	14,444	14,527
2005	7,921	8,802	9,390	9,817	10,320	10,563	10,652	10,767	10,854	10,874
2006	7,368	8,491	9,048	9,520	9,771	9,889	9,980	10,149	10,236	10,252
2007	7,560	8,657	9,341	9,754	9,965	10,130	10,333	10,372	10,426	10,446
2008	7,278	8,577	9,429	9,855	10,157	10,416	10,586	10,675	10,696	10,708
2009	7,749	9,332	10,201	10,699	11,145	11,306	11,435	11,498	11,559	
2010	8,622	9,950	10,690	11,486	11,640	11,839	11,974	12,081		
2011	8,393	10,363	11,630	11,930	12,187	12,345	12,514			
2012	9,470	12,099	12,814	13,284	13,578	13,832				
2013	12,040	14,207	15,143	15,566	16,079					
2014	12,834	15,180	15,811	16,611						
2015	12,858	15,335	16,807							
2016	13,064	17,050								
2017	13,978									

### Cumulative Injury Share of Total Indemnity Count

AY/RL	1	2	3	4	5	6	7	8	9	10
2004	8.8%	9.2%	9.4%	9.6%	9.8%	10.1%	10.3%	10.3%	10.3%	10.4%
2005	6.7%	7.3%	7.8%	8.1%	8.5%	8.7%	8.8%	8.8%	8.9%	8.9%
2006	6.6%	7.5%	7.9%	8.3%	8.5%	8.6%	8.6%	8.8%	8.9%	8.9%
2007	7.1%	7.9%	8.5%	8.8%	8.9%	9.1%	9.2%	9.3%	9.3%	9.3%
2008	7.4%	8.4%	9.1%	9.4%	9.7%	9.9%	10.0%	10.1%	10.1%	10.1%
2009	8.6%	9.9%	10.6%	11.1%	11.5%	11.6%	11.7%	11.8%	11.8%	
2010	9.4%	10.3%	10.9%	11.6%	11.7%	11.9%	12.0%	12.1%		
2011	9.0%	10.6%	11.6%	11.8%	12.0%	12.2%	12.3%			
2012	9.7%	11.7%	12.1%	12.5%	12.7%	12.9%				
2013	11.5%	12.9%	13.5%	13.8%	14.2%					
2014	11.9%	13.3%	13.7%	14.3%						
2015	11.9%	13.4%	14.4%							
2016	12.0%	14.5%								
2017	13.2%									

Source: WCIRB unit statistical data

Note: Figures in italics are based on a partial accident year.

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

				Ratio o	of Perma	nent Dis	ability Cl	aims to I	ndemnit	v Claims	for Accid	dent Yea	r		
Region	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bay Area	0.379	0.359	0.309	0.303	0.283	0.296	0.305	0.313	0.323	0.309	0.293	0.302	0.310	0.299	0.286
Los Angeles/LA Basin	0.482	0.456	0.398	0.382	0.388	0.405	0.405	0.397	0.403	0.398	0.369	0.374	0.392	0.381	0.385
San Diego	0.456	0.411	0.341	0.330	0.329	0.336	0.362	0.356	0.357	0.361	0.327	0.348	0.360	0.345	0.344
All Other	0.410	0.370	0.324	0.315	0.299	0.320	0.315	0.325	0.320	0.314	0.290	0.302	0.315	0.301	0.313
All Regions	0.441	0.410	0.356	0.344	0.339	0.357	0.360	0.360	0.363	0.358	0.332	0.341	0.355	0.343	0.346
7 1 tog.o		00	0.000	0.0	0.000	0.00.	0.000	0.000	0.000	0.000	0.002	0.0	0.000	0.0.0	0.0.0
	1						Ar	nual Ch	ange						
Region	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bay Area		-5.2%	-14.0%	-1.8%	-6.6%	4.4%	3.1%	2.5%	3.3%	-4.4%	-5.2%	3.0%	2.7%	-3.5%	-4.3%
Los Angeles/LA Basin		-5.4%	-12.8%	-4.0%	1.7%	4.3%	-0.1%	-2.1%	1.6%	-1.3%	-7.2%	1.4%	4.8%	-2.8%	1.1%
San Diego		-9.9%	-16.9%	-3.4%	-0.1%	2.2%	7.6%	-1.5%	0.2%	1.1%	-9.3%	6.2%	3.4%	-4.1%	-0.3%
All Other		-9.7%	-12.5%	-2.7%	-5.2%	7.1%	-1.6%	3.3%	-1.7%	-1.8%	-7.8%	4.2%	4.4%	-4.4%	4.1%
All Regions		-6.9%	-13.3%	-3.2%	-1.5%	5.3%	0.9%	0.0%	0.8%	-1.5%	-7.3%	2.7%	4.2%	-3.5%	1.1%
7 1 tog.oc	l	0.070	10.070	0.270		0.070	0.070	0.070	0.070	1.070	11070		,	0.070	,0
	I				Ratio o	f Indemr	nity Claim	s to Tota	al Claims	s for Acc	ident Yea	ar			
Region	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bay Area	0.346	0.307	0.284	0.285	0.289	0.295	0.307	0.315	0.323	0.322	0.331	0.328	0.333	0.334	0.325
Los Angeles/LA Basin	0.364	0.333	0.304	0.297	0.305	0.316	0.341	0.352	0.359	0.372	0.389	0.393	0.391	0.391	0.373
San Diego	0.311	0.281	0.263	0.259	0.260	0.272	0.285	0.303	0.313	0.327	0.329	0.329	0.327	0.327	0.321
All Other	0.352	0.321	0.299	0.289	0.294	0.300	0.313	0.321	0.329	0.330	0.343	0.339	0.331	0.332	0.318
All Regions	0.353	0.321	0.295	0.200	0.295	0.304	0.313	0.333	0.340	0.348	0.361	0.361	0.358	0.358	0.344
All Regions	0.000	0.520	0.233	0.230	0.233	0.504	0.020	0.000	0.540	0.540	0.501	0.501	0.550	0.550	0.577
	I						Δr	nual Ch	ange						
						0000			•	2012	2013	2014		0040	
Region	2003	2004	2005	2006	2007	2008	2009	2010	2011		2013	2014	2015	2016	2017
Region Bav Area	2003	2004	2005 -7.4%	2006 0.6%	2007 1.1%	2008	2009 3.9%	2010	2011	-0.2%	2.8%	-0.8%	2015 1.4%	2016 0.3%	-2.7%
Bay Area		-11.4%	-7.4%	0.6%	1.1%	2.3%	3.9%	2.7%	2.4%	-0.2%	2.8%	-0.8%	1.4%	0.3%	-2.7%
Bay Area Los Angeles/LA Basin		-11.4% -8.4%	-7.4% -8.7%	0.6% -2.4%	1.1% 2.5%	2.3% 3.8%	3.9% 7.9%	2.7% 3.3%	2.4% 1.7%	-0.2% 3.7%	2.8% 4.7%	-0.8% 0.9%	1.4% -0.4%	0.3% -0.2%	-2.7% -4.5%
Bay Area Los Angeles/LA Basin San Diego		-11.4% -8.4% -9.5%	-7.4% -8.7% -6.4%	0.6% -2.4% -1.4%	1.1% 2.5% 0.2%	2.3% 3.8% 4.7%	3.9% 7.9% 4.6%	2.7% 3.3% 6.4%	2.4% 1.7% 3.5%	-0.2% 3.7% 4.3%	2.8% 4.7% 0.5%	-0.8% 0.9% 0.0%	1.4% -0.4% -0.6%	0.3% -0.2% 0.1%	-2.7% -4.5% -1.8%
Bay Area Los Angeles/LA Basin San Diego All Other		-11.4% -8.4% -9.5% -8.8%	-7.4% -8.7% -6.4% -6.9%	0.6% -2.4% -1.4% -3.2%	1.1% 2.5% 0.2% 1.6%	2.3% 3.8% 4.7% 2.2%	3.9% 7.9% 4.6% 4.2%	2.7% 3.3% 6.4% 2.7%	2.4% 1.7% 3.5% 2.3%	-0.2% 3.7% 4.3% 0.4%	2.8% 4.7% 0.5% 3.9%	-0.8% 0.9% 0.0% -1.3%	1.4% -0.4% -0.6% -2.3%	0.3% -0.2% 0.1% 0.3%	-2.7% -4.5% -1.8% -4.2%
Bay Area Los Angeles/LA Basin San Diego		-11.4% -8.4% -9.5%	-7.4% -8.7% -6.4%	0.6% -2.4% -1.4%	1.1% 2.5% 0.2%	2.3% 3.8% 4.7%	3.9% 7.9% 4.6%	2.7% 3.3% 6.4%	2.4% 1.7% 3.5%	-0.2% 3.7% 4.3%	2.8% 4.7% 0.5%	-0.8% 0.9% 0.0%	1.4% -0.4% -0.6%	0.3% -0.2% 0.1%	-2.7% -4.5% -1.8%
Bay Area Los Angeles/LA Basin San Diego All Other		-11.4% -8.4% -9.5% -8.8%	-7.4% -8.7% -6.4% -6.9%	0.6% -2.4% -1.4% -3.2%	1.1% 2.5% 0.2% 1.6%	2.3% 3.8% 4.7% 2.2%	3.9% 7.9% 4.6% 4.2%	2.7% 3.3% 6.4% 2.7%	2.4% 1.7% 3.5% 2.3%	-0.2% 3.7% 4.3% 0.4%	2.8% 4.7% 0.5% 3.9%	-0.8% 0.9% 0.0% -1.3%	1.4% -0.4% -0.6% -2.3%	0.3% -0.2% 0.1% 0.3%	-2.7% -4.5% -1.8% -4.2%
Bay Area Los Angeles/LA Basin San Diego All Other		-11.4% -8.4% -9.5% -8.8%	-7.4% -8.7% -6.4% -6.9%	0.6% -2.4% -1.4% -3.2% -2.0%	1.1% 2.5% 0.2% 1.6% 1.8%	2.3% 3.8% 4.7% 2.2% 3.2%	3.9% 7.9% 4.6% 4.2% 6.0%	2.7% 3.3% 6.4% 2.7% 3.3%	2.4% 1.7% 3.5% 2.3% 2.1%	-0.2% 3.7% 4.3% 0.4% 2.2%	2.8% 4.7% 0.5% 3.9% 3.8%	-0.8% 0.9% 0.0% -1.3% 0.0%	1.4% -0.4% -0.6% -2.3%	0.3% -0.2% 0.1% 0.3%	-2.7% -4.5% -1.8% -4.2%
Bay Area Los Angeles/LA Basin San Diego All Other All Regions	   	-11.4% -8.4% -9.5% -8.8% -9.2%	-7.4% -8.7% -6.4% -6.9% -7.8%	0.6% -2.4% -1.4% -3.2% -2.0%	1.1% 2.5% 0.2% 1.6% 1.8%	2.3% 3.8% 4.7% 2.2% 3.2%	3.9% 7.9% 4.6% 4.2% 6.0%	2.7% 3.3% 6.4% 2.7% 3.3%	2.4% 1.7% 3.5% 2.3% 2.1%	-0.2% 3.7% 4.3% 0.4% 2.2%	2.8% 4.7% 0.5% 3.9% 3.8%	-0.8% 0.9% 0.0% -1.3% 0.0%	1.4% -0.4% -0.6% -2.3% -0.8%	0.3% -0.2% 0.1% 0.3% 0.0%	-2.7% -4.5% -1.8% -4.2% -3.9%
Bay Area Los Angeles/LA Basin San Diego All Other All Regions	    2003	-11.4% -8.4% -9.5% -8.8% -9.2%	-7.4% -8.7% -6.4% -6.9% -7.8%	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009	2.7% 3.3% 6.4% 2.7% 3.3% 100 Inde 2010	2.4% 1.7% 3.5% 2.3% 2.1% emnity C	-0.2% 3.7% 4.3% 0.4% 2.2%	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014	1.4% -0.4% -0.6% -2.3% -0.8%	0.3% -0.2% 0.1% 0.3% 0.0%	-2.7% -4.5% -1.8% -4.2% -3.9%
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area	    2003 8.94	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20	2.7% 3.3% 6.4% 2.7% 3.3% 100 Inde 2010 8.18	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21	-0.2% 3.7% 4.3% 0.4% 2.2% claims for 2012 7.73	2.8% 4.7% 0.5% 3.9% 3.8% - Accider 2013 9.12	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05	-2.7% -4.5% -1.8% -4.2% -3.9% -2017
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin	    2003 8.94 10.36	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60	2.7% 3.3% 6.4% 2.7% 3.3% 100 Inde 2010 8.18 11.63	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26	-0.2% 3.7% 4.3% 0.4% 2.2% claims for 2012 7.73 12.52	2.8% 4.7% 0.5% 3.9% 3.8% - Accider 2013 9.12 14.89	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 18.44
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego	2003 8.94 10.36 9.04	-11.4% -8.4% -9.5% -8.8% -9.2% -2004 8.82 10.47 8.86	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55 8.90 6.96	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 7.30	2.7% 3.3% 6.4% 2.7% 3.3% 100 Inde 2010 8.18 11.63 9.20	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51	-0.2% 3.7% 4.3% 0.4% 2.2% claims for 2012 7.73 12.52 8.77	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 12.81
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other	2003 8.94 10.36 9.04 6.29	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16	-7.4% -8.7% -6.4% -6.9% -7.8% -2005 7.39 7.98 6.58 4.47	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43 4.86	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55 8.90 6.96 4.86	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 7.30 5.77	2.7% 3.3% 6.4% 2.7% 3.3% 100 Indo 2010 8.18 11.63 9.20 6.30	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94	-0.2% 3.7% 4.3% 0.4% 2.2% daims for 2012 7.73 12.52 8.77 6.15	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 12.81 6.84
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego	2003 8.94 10.36 9.04	-11.4% -8.4% -9.5% -8.8% -9.2% -2004 8.82 10.47 8.86	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55 8.90 6.96	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 7.30	2.7% 3.3% 6.4% 2.7% 3.3% 100 Inde 2010 8.18 11.63 9.20	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51	-0.2% 3.7% 4.3% 0.4% 2.2% claims for 2012 7.73 12.52 8.77	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 12.81
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other	2003 8.94 10.36 9.04 6.29	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16	-7.4% -8.7% -6.4% -6.9% -7.8% -2005 7.39 7.98 6.58 4.47	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43 4.86	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55 8.90 6.96 4.86	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 5.77 8.61	2.7% 3.3% 6.4% 2.7% 3.3% 100 Indo 2010 8.18 11.63 9.20 6.30 9.39	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04	-0.2% 3.7% 4.3% 0.4% 2.2% daims for 2012 7.73 12.52 8.77 6.15	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 12.81 6.84
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions	2003 8.94 10.36 9.04 6.29 8.79	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76	-7.4% -8.7% -6.4% -6.9% -7.8% -7.89 -7.89 -7.98 6.58 4.47 6.71	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92 6.60	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43 4.86 7.09	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90 6.96 4.86 7.37	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 7.30 5.77 8.61	2.7% 3.3% 6.4% 2.7% 3.3% 100 Indo 2010 8.18 11.63 9.20 6.30 9.39	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange	-0.2% 3.7% 4.3% 0.4% 2.2% llaims for 2012 7.73 12.52 8.77 6.15 9.69	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02 11.51	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90	1.4% -0.4% -0.6% -2.3% -0.8% -0.8% -0.8% -0.8%	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 18.44 12.81 6.84 13.19
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region	2003 8.94 10.36 9.04 6.29	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58 4.47 6.71	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92 6.60	1.1% 2.5% 0.2% 1.6% 1.8% nulative 2007 7.51 8.50 6.43 4.86 7.09	2.3% 3.8% 4.7% 2.2% 3.2% Injury Cl 2008 7.55 8.90 6.96 4.86 7.37	3.9% 7.9% 4.6% 4.2% 6.0% aims per 2009 8.20 10.60 7.30 5.77 8.61 Ar 2009	2.7% 3.3% 6.4% 2.7% 3.3% 100 Indo 2010 8.18 11.63 9.20 6.30 9.39	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange 2011	-0.2% 3.7% 4.3% 0.4% 2.2% laims for 2012 7.73 12.52 8.77 6.15 9.69	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02 11.51	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79 11.89	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Region Region Bay Area Region Bay Area	2003 8.94 10.36 9.04 6.29 8.79	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76 2004 -1.3%	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58 4.47 6.71 2005 -16.2%	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92 6.60 2006 -11.9%	1.1% 2.5% 0.2% 1.6% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90 6.96 4.86 7.37	3.9% 7.9% 4.6% 4.2% 6.0% eaims per 2009 8.20 10.60 7.30 5.77 8.61 Ar 2009 8.7%	2.7% 3.3% 6.4% 2.7% 3.3% 100 Indd 2010 8.18 11.63 9.20 6.30 9.39 nnual Ch 2010 -0.3%	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange 2011 0.4%	-0.2% 3.7% 4.3% 0.4% 2.2% llaims for 2012 7.73 12.52 8.77 6.15 9.69	2.8% 4.7% 0.5% 3.9% 3.8% - Accider 2013 9.12 14.89 11.76 7.02 11.51	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79 11.89 2015 -8.0%	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02 2016 0.1%	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions	2003 8.94 10.36 9.04 6.29 8.79	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76 2004 -1.3% 1.1%	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58 4.47 6.71 2005 -16.2% -23.8%	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92 6.60 2006 -11.9% -1.5%	1.1% 2.5% 0.2% 1.6% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8%	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90 6.96 4.86 7.37	3.9% 7.9% 4.6% 4.2% 6.0% eaims per 2009 8.20 10.60 7.30 5.77 8.61 Ar 2009 8.7% 19.1%	2.7% 3.3% 6.4% 2.7% 3.3%  100 Indd 2010 8.18 11.63 9.20 6.30 9.39  nnual Ch 2010 -0.3% 9.6%	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange 2011 0.4% -3.1%	-0.2% 3.7% 4.3% 0.4% 2.2% llaims foi 2012 7.73 12.52 8.77 6.15 9.69	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02 11.51 2013 18.0% 18.9%	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90 2014 -4.1% 4.9%	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79 11.89 2015 -8.0% 3.6%	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02 2016 0.1% 2.5%	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 -12.81 -6.84 -13.19 -2017 -11.0% -11.2%
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions	2003 8.94 10.36 9.04 6.29 8.79	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76 2004 -1.3% 1.1% -2.0%	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58 4.47 6.71 2005 -16.2% -23.8% -25.8%	0.6% -2.4% -1.4% -3.2% -2.0%  Cur 2006 6.51 7.86 6.00 4.92 6.60  2006 -11.9% -1.5% -8.8%	1.1% 2.5% 0.2% 1.6% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90 6.96 4.86 7.37 2008 0.5% 4.8% 8.4%	3.9% 7.9% 4.6% 4.2% 6.0% eaims per 2009 8.20 10.60 7.30 5.77 8.61 Ar 2009 8.7% 19.1% 4.8%	2.7% 3.3% 6.4% 2.7% 3.3%  100 Indd 2010 8.18 11.63 9.20 6.30 9.39  nual Ch 2010 -0.3% 9.6% 26.1%	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange 2011 0.4% -3.1% -7.6%	-0.2% 3.7% 4.3% 0.4% 2.2% llaims for 2012 7.73 12.52 8.77 6.15 9.69 2012 -5.8% 11.2% 3.0%	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02 11.51 2013 18.0% 18.9% 34.2%	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90 2014 -4.1% 4.9% 5.8%	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79 11.89 2015 -8.0% 3.6% -1.8%	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02 2016 0.1% 2.5% -0.4%	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 -12.81 -6.84 -13.19 -2017 -11.0% -11.2% -5.3%
Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions  Region Bay Area Los Angeles/LA Basin San Diego All Other All Regions	2003 8.94 10.36 9.04 6.29 8.79	-11.4% -8.4% -9.5% -8.8% -9.2% 2004 8.82 10.47 8.86 6.16 8.76 2004 -1.3% 1.1%	-7.4% -8.7% -6.4% -6.9% -7.8% 2005 7.39 7.98 6.58 4.47 6.71 2005 -16.2% -23.8% -25.8% -27.6%	0.6% -2.4% -1.4% -3.2% -2.0% Cur 2006 6.51 7.86 6.00 4.92 6.60 2006 -11.9% -1.5%	1.1% 2.5% 0.2% 1.6% 1.8% 1.8% 1.8% 1.8% 1.8% 1.8%	2.3% 3.8% 4.7% 2.2% 3.2% Injury CI 2008 7.55 8.90 6.96 4.86 7.37 2008 0.5% 4.8%	3.9% 7.9% 4.6% 4.2% 6.0% eaims per 2009 8.20 10.60 7.30 5.77 8.61 Ar 2009 8.7% 19.1%	2.7% 3.3% 6.4% 2.7% 3.3%  100 Indd 2010 8.18 11.63 9.20 6.30 9.39  nnual Ch 2010 -0.3% 9.6%	2.4% 1.7% 3.5% 2.3% 2.1% emnity C 2011 8.21 11.26 8.51 5.94 9.04 ange 2011 0.4% -3.1%	-0.2% 3.7% 4.3% 0.4% 2.2% llaims foi 2012 7.73 12.52 8.77 6.15 9.69	2.8% 4.7% 0.5% 3.9% 3.8% Accider 2013 9.12 14.89 11.76 7.02 11.51 2013 18.0% 18.9%	-0.8% 0.9% 0.0% -1.3% 0.0% at Year 2014 8.74 15.62 12.44 7.12 11.90 2014 -4.1% 4.9%	1.4% -0.4% -0.6% -2.3% -0.8% 2015 8.04 16.18 12.22 6.79 11.89 2015 -8.0% 3.6%	0.3% -0.2% 0.1% 0.3% 0.0% 2016 8.05 16.58 12.17 6.66 12.02 2016 0.1% 2.5%	-2.7% -4.5% -1.8% -4.2% -3.9% -2017 -8.94 -18.44 -12.81 -6.84 -13.19 -2017 -11.0% -11.2%

Note: Figures in italics are based on a partial accident year. Cumulative inury claims include occupational disease.

### Ratio of Total Indemnity Claim Counts to Total Claim Counts

Accident				Evalu	uated as of	(in months)	):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
2000										0.337
2001									0.340	0.340
2002								0.356	0.356	0.355
2003							0.354	0.354	0.353	0.352
2004						0.318	0.317	0.317	0.316	0.316
2005					0.293	0.293	0.292	0.292	0.292	0.292
2006				0.290	0.290	0.289	0.289	0.289	0.289	0.289
2007			0.296	0.296	0.297	0.297	0.297	0.297	0.297	0.297
2008		0.300	0.305	0.307	0.308	0.308	0.308	0.309	0.309	0.309
2009	0.318	0.315	0.326	0.329	0.330	0.331	0.331	0.331	0.331	0.331
2010	0.322	0.328	0.341	0.345	0.346	0.346	0.347	0.347	0.347	0.347
2011	0.318	0.335	0.352	0.356	0.357	0.358	0.358	0.358	0.358	
2012	0.317	0.339	0.358	0.362	0.363	0.364	0.364	0.364		
2013	0.334	0.352	0.368	0.372	0.373	0.374	0.374			
2014	0.337	0.349	0.365	0.369	0.370	0.371				
2015	0.325	0.349	0.366	0.369	0.369					
2016	0.333	0.349	0.366	0.370						
2017	0.327	0.336	0.351							
2018	0.316	0.337								
2019	0.321									

### Distribution of Cumulative Injury Claims by Injury Type

Permanent	Indemnity
	Danasata

	Perce	entage of A	II Cumulati	ve Injury C	laims				Ar	nual Cha	nge	
AY/RL	1	2	3	4	5	_	AY/RL	1	2	3	4	5
1999	33.8%	35.1%	35.3%	35.6%	36.1%	_	1999					
2000	31.6%	34.0%	34.7%	35.4%	34.5%		2000	-6.5%	-3.0%	-1.8%	-0.4%	-4.5%
2001	30.8%	34.4%	36.7%	37.6%	37.9%		2001	-2.5%	1.2%	5.9%	6.0%	10.0%
2002	33.3%	37.4%	38.9%	39.3%	39.1%		2002	8.1%	8.8%	5.8%	4.7%	3.0%
2003	33.5%	37.4%	38.6%	38.8%	39.2%		2003	0.6%	-0.1%	-0.6%	-1.4%	0.2%
2004	28.6%	31.6%	32.8%	33.6%	34.9%		2004	-14.4%	-15.6%	-15.1%	-13.4%	-10.8%
2005	22.0%	25.3%	27.7%	30.0%	31.6%		2005	-23.1%	-19.8%	-15.6%	-10.7%	-9.5%
2006	20.2%	25.1%	28.4%	30.1%	31.0%		2006	-8.4%	-0.9%	2.8%	0.6%	-1.9%
2007	20.7%	26.6%	29.4%	29.9%	31.1%		2007	2.6%	6.1%	3.4%	-0.8%	0.4%
2008	21.6%	27.8%	31.0%	31.2%	33.1%		2008	4.2%	4.4%	5.6%	4.3%	6.2%
2009	24.3%	30.9%	34.2%	36.0%	37.0%		2009	12.8%	11.0%	10.2%	15.6%	11.9%
2010	25.4%	33.2%	36.0%	37.8%	38.5%		2010	4.5%	7.4%	5.2%	5.0%	4.1%
2011	27.7%	34.2%	37.6%	39.3%	40.3%		2011	9.1%	3.1%	4.6%	3.9%	4.7%
2012	29.2%	35.5%	38.8%	40.5%	41.3%		2012	5.4%	3.9%	3.1%	3.0%	2.6%
2013	30.7%	37.6%	40.7%	42.3%	41.8%		2013	5.1%	6.1%	4.7%	4.5%	1.2%
2014	32.9%	39.6%	42.1%	44.5%			2014	7.0%	5.3%	3.5%	5.2%	
2015	33.8%	39.5%	42.6%				2015	2.7%	-0.2%	1.2%		
2016	32.1%	37.4%					2016	-4.8%	-5.5%			
2017	30.8%						2017	-4.3%				

### Temporary Indemnity

	Perc	entage of A	II Cumulati	ve Injury C	laims			Ar	nual Cha	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
1999	19.0%	15.9%	15.0%	14.5%	14.2%	1999					
2000	19.2%	16.3%	16.1%	15.6%	15.1%	2000	0.9%	2.0%	7.5%	8.0%	6.6%
2001	19.9%	18.3%	17.7%	16.7%	16.1%	2001	3.9%	12.6%	10.2%	7.0%	6.3%
2002	20.2%	18.9%	16.8%	15.9%	15.9%	2002	1.6%	3.5%	-5.3%	-4.6%	-1.2%
2003	22.1%	18.6%	17.1%	16.8%	16.4%	2003	9.2%	-2.1%	2.0%	5.2%	3.0%
2004	22.0%	19.2%	18.1%	17.1%	16.1%	2004	-0.3%	3.6%	5.5%	2.3%	-1.9%
2005	21.6%	19.4%	17.9%	16.2%	15.1%	2005	-1.9%	0.8%	-1.0%	-5.3%	-5.9%
2006	21.6%	19.0%	16.5%	15.5%	14.7%	2006	0.2%	-1.9%	-7.7%	-4.9%	-2.4%
2007	22.5%	18.7%	17.2%	16.1%	15.8%	2007	4.0%	-1.5%	4.0%	4.5%	7.0%
2008	22.8%	19.4%	17.5%	16.4%	16.6%	2008	1.6%	3.4%	2.0%	1.4%	5.1%
2009	25.2%	21.7%	19.5%	18.4%	17.9%	2009	10.4%	12.3%	11.3%	12.5%	7.9%
2010	26.4%	21.8%	19.7%	18.9%	18.1%	2010	4.7%	0.3%	0.8%	2.4%	1.3%
2011	26.3%	23.5%	21.8%	20.2%	19.2%	2011	-0.4%	8.0%	10.7%	6.9%	5.9%
2012	27.5%	25.3%	22.5%	21.0%	20.1%	2012	4.6%	7.3%	3.5%	4.2%	4.9%
2013	30.5%	25.6%	22.9%	21.2%	19.5%	2013	10.9%	1.3%	1.8%	0.8%	-2.9%
2014	29.7%	24.7%	21.9%	21.2%		2014	-2.4%	-3.5%	-4.4%	-0.1%	
2015	26.9%	23.0%	21.5%			2015	-9.7%	-6.7%	-1.9%		
2016	27.3%	23.8%				2016	1.8%	3.2%			
2017	26.6%					2017	-2.7%				

### Medical-Only

wearca	i-Only										
	Perce	entage of A	II Cumulati	ve Injury C	laims			Ar	nual Cha	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
1999	47.2%	49.0%	49.7%	49.9%	49.7%	1999					
2000	49.3%	49.7%	49.2%	49.0%	50.4%	2000	4.3%	1.5%	-1.0%	-2.0%	1.4%
2001	49.3%	47.3%	45.5%	45.7%	46.0%	2001	0.1%	-4.9%	-7.5%	-6.6%	-8.7%
2002	46.5%	43.6%	44.3%	44.7%	45.0%	2002	-5.7%	-7.8%	-2.6%	-2.2%	-2.1%
2003	44.5%	44.0%	44.2%	44.5%	44.5%	2003	-4.4%	1.0%	-0.3%	-0.6%	-1.3%
2004	49.4%	49.2%	49.1%	49.3%	49.0%	2004	11.0%	11.7%	11.1%	10.8%	10.2%
2005	56.4%	55.3%	54.4%	53.8%	53.3%	2005	14.3%	12.4%	10.8%	9.1%	8.7%
2006	58.2%	55.9%	55.1%	54.4%	54.2%	2006	3.2%	1.1%	1.1%	1.2%	1.8%
2007	56.8%	54.6%	53.4%	53.9%	53.1%	2007	-2.4%	-2.2%	-3.0%	-0.8%	-2.1%
2008	55.6%	52.8%	51.4%	52.5%	50.4%	2008	-2.1%	-3.3%	-3.7%	-2.8%	-5.1%
2009	50.5%	47.4%	46.3%	45.5%	45.1%	2009	-9.2%	-10.3%	-10.0%	-13.2%	-10.4%
2010	48.2%	45.0%	44.3%	43.3%	43.4%	2010	-4.5%	-5.0%	-4.2%	-4.9%	-3.9%
2011	46.0%	42.3%	40.6%	40.5%	40.5%	2011	-4.6%	-6.1%	-8.5%	-6.4%	-6.6%
2012	43.3%	39.3%	38.7%	38.5%	38.5%	2012	-5.8%	-7.2%	-4.7%	-5.0%	-4.9%
2013	38.8%	36.8%	36.4%	36.5%	38.7%	2013	-10.4%	-6.4%	-5.8%	-5.2%	0.3%
2014	37.4%	35.7%	36.0%	34.3%		2014	-3.7%	-2.9%	-1.2%	-5.9%	
2015	39.4%	37.4%	35.9%			2015	5.3%	4.9%	-0.4%		
2016	40.5%	39.1%				2016	2.9%	4.5%			
2017	42.6%					2017	5.0%				

<sup>\*</sup> Includes Permanent Partial, Permanent Total, and Death

Note: Figures in italics are based on a partial accident year. Cumulative injury claims include occupational disease. Source: WCIRB unit statistical data

# Indemnity Claim Frequency Relativities by NAICS Sector

.017	3.411	1.909	2.122	7.025	467	000	0.232	833	980	745	747	. 128	.216	.988	.677	. 169	. 129	7.204		2017	-5.0%	-8.1%	2.9%	3.3%	3.0%	-2.4%	%6.	.5%	0.5%	1.7%	-3.5%	%6"	-3.3%	0.5%	-4.9%	%9 <sup>.</sup> t	-0.4%	3.2%	-1.9%
2016 2			3.650 3		3.554													0.208 0																			-1.4% -0		•
																	_	•																					
2015			3.559		3.545											0.172	0.150	0.214			5.3%																		-1.3%
2014	3.429	4.210	3.558	1 964	3.517	0.00	0.263	0.961	0.098	3.916	0.667	1.185	2.201	3.234	1.773	0.176	0.156	0.217		2014	3.4%	-0.2%	4.7%	2.0%	-1.2%	0.7%	4.8%	-10.4%	-1.8%	-6.8%	4.2%	-3.4%	4.1%	-6.0%	1.2%	1.1%	-1.2%	-6.1%	0.8%
2013	3.316	4 0 15	3 488	080	3 491	0.43	0.294	626.0	0.105	3.759	0.691	1.236	2.343	3.196	1.755	0.178	0.166	0.215		2013	1.3%	0.5%	3.6%	2.3%	-1.2%	1.3%	-1.4%	-12.8%	-7.1%	-9.1%	1.7%	-5.1%	-1.1%	-2.8%	5.4%	0.7%	-3.2%	-3.9%	0.2%
	3.275	1 702	3.411	20.4	3 445	0.0	0.337	1.053	0.115	3.697	0.728	1.249	2.410	3.032	1.743	0.184	0.173	0.215		2012	%6.0	-2.8%	2.5%	1.4%	-1.0%	-3.3%	2.0%	-10.6%	-7.0%	-14.1%	0.1%	-1.5%	-3.2%	-1.1%	4.9%	0.7%	-4.8%	-2.5%	3.7%
Frequency Relativity for Accident Year at 1st 2007 2008 2009 2010	3.247	4 720	3.364	0.00	3.561	0.33	0.377	1.132	0.134	3.694	0.739	1.291	2.437	2.890	1.731	0.193	0.177	0.207		2011	8.1%	3.6%	6.2%	8.5%	0.7%	0.8%	2.4%	-4.7%	1.2%	-7.1%	3.5%	1.5%	1.3%	6.4%	8.3%	%8.9	-3.3%	-3.2%	-1.2%
sident Ye 2010	3.003	7.190	3.099	2.033	3.532	0.02	0.395	1119	0.144	3.568	0.728	1.274	2.291	2.668	1.620	0.200	0.183	0.210		2010	0.3%	-2.7%	-3.0%	2.1%	-3.7%	-4.9%	-8.8%	-4.3%	-1.8%	-13.0%	-1.1%	-4.7%	0.5%	-1.1%	5.4%	1.7%	%9.9-	-7.5%	6.4%
ty for Acc 2009	2.994	7.238	3.036	2.005	3.714	0000	0.413	1.140	0.166	3.607	0.764	1.268	2.317	2.532	1.594	0.214	0.198	0.197	Change	2009																	2.8%	4.7%	-3.2%
Relativil 2008	2.888		2007 2003		3 839											0.208	0.189	0.204	=	2008							_	_									-0.5%		.6.3%
equency 2007			2 999		3 890											.209 (	).181 (	.218											_								-1.2% -		-4.1%
			7 036 7 036 7		3816						0.705					0.211 0	_	0.227 0										-5.6%			2.5%			4.2%		_		10.4% -	-6.3%
ndemnity Claim 2005 2006		763 7.						0 747 0			0.729 0.					_	0.213 0.	.242 0.		2005 2						9.7% 3										·	-8.5% -4	1	.14.7% -6
_																Ŭ	_	0																					•
	2.875																																				-3.0%		-15.2%
2003	2.625	4 725	7 692	1 574	3.040	780	0.317	0 725	0.186	2.839	0.768	1.190	1.890	2.103	1.369	0.250	0.243	0.335		2003	-1.9%	-6.6%	-4.4%	-5.0%	-5.1%	-4.5%	-3.3%	-19.5%	-15.6%	-5.1%	-8.6%	-3.8%	-8.7%	-9.1%	-6.5%	%6:9-	3.1%	-7.2%	0.8%
2002	2.677	4.309	2 833	4.033 4.033 7.033	3 181	08.0	0.394	0.859	0.196	3.107	0.799	1.304	2.081	2.249	1.471	0.242	0.262	0.332		2002	%8.0	4.4%	4.0%	%2.0	-0.3%	-1.0%	-0.7%	-8.0%	2.3%	7.7%	2.1%	%9.9	3.1%	-1.5%	0.8%	0.2%	%8.0	5.1%	-3.2%
2001	2.654	7.47.7	0.1.33	1.663	3.213	0.4.0	0.429	0.839	0.182	3.044	0.749	1.265	2.113	2.230	1.468	0.241	0.250	0.343		2001	1	!	I	1	1	1	I		I	1	I	l	I	I	1	!	I	1	I
NAICS Name	Agriculture & Mining	Mosufooturing	Wholesale	Refail			Finance	Real Estate	Prof. Services	Administrative	Education	Health	Hospitality	Entertainment	Other Services	Outside Sales	0 Clerical & Public Admin.	Accident Year Total Frequency	NAICS	Name	Agriculture & Mining	Construction	Manufacturing	Wholesale	_	_	Information	Finance	Real Estate	Prof. Services	Administrative	Education	Health	Hospitality	Entertainment	Other Services		0 Clerical & Public Admin.	Accident Year Total Frequency
NAICS Sector	11821	2, 2,	42	44	22848	157	52	53	55	56	61	62	71	72	81	8742	92&8810	Accid	NAICS	Sector	11821	23	31	42	44	22&48	51	52	53	54	26	61	62	71	72	81	8742	92&8810	Accid

Figures in italics are based on partial data.

### Indemnity Claim Frequency by Geographic Region

Day Alea	Bay	/ Ar	ea
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Bay Are	a										
		Indemnity	/ Claim Fr	equency							
	per \$1	00M of Ex	posure at	AY 2017	Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	24.40	25.09	25.63	25.32	25.35	2001					
2002	23.88	24.29	24.52	24.51	24.55	2002	-2.1%	-3.2%	-4.3%	-3.2%	-3.2%
2003	22.27	22.65	22.79	22.90	23.20	2003	-6.8%	-6.7%	-7.1%	-6.6%	-5.5%
2004	19.55	19.79	19.88	20.14	20.19	2004	-12.2%	-12.6%	-12.8%	-12.1%	-13.0%
2005	17.25	17.29	17.57	17.65	17.62	2005	-11.8%	-12.6%	-11.6%	-12.4%	-12.8%
2006	15.77	16.08	16.22	16.24	16.24	2006	-8.6%	-7.0%	-7.7%	-8.0%	-7.8%
2007	14.80	15.07	15.16	15.22	15.25	2007	-6.2%	-6.3%	-6.6%	-6.3%	-6.1%
2008	13.61	13.88	14.04	14.13	14.18	2008	-8.0%	-7.9%	-7.4%	-7.2%	-7.0%
2009	12.93	13.34	13.49	13.59	13.63	2009	-5.0%	-3.9%	-3.9%	-3.8%	-3.9%
2010	12.92	13.49	13.65	13.74	13.78	2010	-0.1%	1.2%	1.2%	1.1%	1.1%
2011	12.57	13.16	13.39	13.49	13.54	2011	-2.7%	-2.5%	-1.9%	-1.8%	-1.7%
2012	12.43	12.97	13.18	13.27	13.32	2012	-1.1%	-1.5%	-1.5%	-1.7%	-1.7%
2013	12.08	12.58	12.73	12.81	12.85	2013	-2.8%	-2.9%	-3.4%	-3.5%	-3.5%
2014	11.96	12.44	12.55	12.63		2014	-1.0%	-1.2%	-1.4%	-1.4%	
2015	11.78	12.47	12.57			2015	-1.5%	0.3%	0.2%		
2016	11.41	12.22				2016	-3.1%	-2.0%			
2017	11.11					2017	-2.7%				

### Los Angeles/L.A. Basin

Indemnity Claim Frequency

			Ciaiiii i i								
	per \$1	00M of Ex	posure at	AY 2017	Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	33.39	35.04	35.45	35.41	35.25	2001					
2002	33.67	35.27	35.21	35.11	35.00	2002	0.8%	0.7%	-0.7%	-0.8%	-0.7%
2003	32.34	33.40	33.16	33.14	32.98	2003	-4.0%	-5.3%	-5.8%	-5.6%	-5.8%
2004	28.22	28.40	28.43	28.38	28.43	2004	-12.7%	-15.0%	-14.3%	-14.4%	-13.8%
2005	24.22	24.20	24.29	24.44	24.52	2005	-14.2%	-14.8%	-14.6%	-13.9%	-13.7%
2006	22.42	22.61	22.84	23.02	23.08	2006	-7.5%	-6.5%	-5.9%	-5.8%	-5.9%
2007	21.57	22.19	22.51	22.68	22.78	2007	-3.8%	-1.9%	-1.5%	-1.5%	-1.3%
2008	20.85	21.88	22.27	22.52	22.64	2008	-3.3%	-1.4%	-1.0%	-0.7%	-0.6%
2009	20.99	22.19	22.69	22.91	23.01	2009	0.7%	1.4%	1.9%	1.7%	1.7%
2010	22.04	23.40	23.96	24.17	24.25	2010	5.0%	5.4%	5.6%	5.5%	5.4%
2011	22.64	24.25	24.79	25.03	25.13	2011	2.7%	3.6%	3.5%	3.6%	3.6%
2012	23.67	25.42	25.92	26.13	26.28	2012	4.5%	4.8%	4.6%	4.4%	4.6%
2013	24.28	25.94	26.39	26.60	26.77	2013	2.6%	2.0%	1.8%	1.8%	1.9%
2014	24.87	26.53	26.97	27.21		2014	2.5%	2.3%	2.2%	2.3%	
2015	24.83	26.44	26.87			2015	-0.2%	-0.4%	-0.4%		
2016	24.16	25.65				2016	-2.7%	-3.0%			
2017	23.58					2017	-2.4%				

### San Diego

	lr	nd	en	nr	nity	Claim	Fre	eq	u	ency	

	per \$1	00M of Ex	posure at		Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	34.05	34.91	35.13	35.09	34.87	2001					
2002	32.64	32.97	32.95	32.65	32.75	2002	-4.2%	-5.6%	-6.2%	-7.0%	-6.1%
2003	29.89	30.09	29.84	29.76	29.88	2003	-8.4%	-8.7%	-9.4%	-8.8%	-8.8%
2004	26.14	26.04	26.08	25.96	25.50	2004	-12.5%	-13.5%	-12.6%	-12.8%	-14.6%
2005	22.75	22.82	22.82	22.09	21.84	2005	-13.0%	-12.4%	-12.5%	-14.9%	-14.4%
2006	21.26	21.13	20.53	20.16	20.19	2006	-6.5%	-7.4%	-10.1%	-8.7%	-7.5%
2007	20.51	19.98	19.67	19.35	19.41	2007	-3.5%	-5.5%	-4.2%	-4.0%	-3.9%
2008	18.84	18.90	19.07	18.83	18.93	2008	-8.2%	-5.4%	-3.0%	-2.7%	-2.5%
2009	17.77	18.48	18.66	18.80	18.90	2009	-5.7%	-2.2%	-2.1%	-0.1%	-0.1%
2010	18.45	19.23	19.49	19.69	19.77	2010	3.9%	4.1%	4.4%	4.8%	4.6%
2011	18.76	19.47	19.76	19.96	20.02	2011	1.7%	1.2%	1.4%	1.3%	1.3%
2012	18.93	19.63	19.88	20.01	20.08	2012	0.9%	0.8%	0.6%	0.2%	0.3%
2013	18.66	19.37	19.54	19.64	19.70	2013	-1.4%	-1.3%	-1.7%	-1.8%	-1.9%
2014	19.01	19.81	19.95	20.06		2014	1.8%	2.2%	2.1%	2.2%	
2015	19.24	20.10	20.29			2015	1.3%	1.5%	1.7%		
2016	18.91	19.72				2016	-1.7%	-1.9%			
2017	18.72					2017	-1.0%				

### Indemnity Claim Frequency by Geographic Region

### All Other

All Othe	r										
		Indemnity	/ Claim Fr	equency							
	per \$1	00M of Ex	posure at	AY 2017	Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	41.60	43.38	43.51	44.06	44.63	2001					
2002	40.67	41.83	42.58	43.11	43.46	2002	-2.2%	-3.6%	-2.2%	-2.2%	-2.6%
2003	38.45	39.82	40.33	40.53	40.69	2003	-5.5%	-4.8%	-5.3%	-6.0%	-6.4%
2004	35.08	35.90	36.03	36.23	36.37	2004	-8.8%	-9.8%	-10.7%	-10.6%	-10.6%
2005	30.69	31.15	31.38	31.64	31.82	2005	-12.5%	-13.2%	-12.9%	-12.7%	-12.5%
2006	28.08	28.45	28.80	29.05	29.14	2006	-8.5%	-8.7%	-8.2%	-8.2%	-8.4%
2007	26.62	27.22	27.72	27.99	28.05	2007	-5.2%	-4.3%	-3.8%	-3.7%	-3.8%
2008	25.09	25.89	26.24	26.45	26.53	2008	-5.7%	-4.9%	-5.3%	-5.5%	-5.4%
2009	24.51	25.33	25.53	25.70	25.80	2009	-2.3%	-2.2%	-2.7%	-2.8%	-2.7%
2010	24.95	25.93	26.28	26.40	26.56	2010	1.8%	2.4%	2.9%	2.7%	3.0%
2011	25.18	26.41	26.82	26.99	27.10	2011	0.9%	1.8%	2.1%	2.2%	2.0%
2012	25.78	26.98	27.38	27.57	27.62	2012	2.4%	2.2%	2.1%	2.2%	1.9%
2013	25.63	26.76	27.13	27.28	27.32	2013	-0.6%	-0.8%	-0.9%	-1.0%	-1.1%
2014	25.37	26.50	26.90	27.05		2014	-1.0%	-1.0%	-0.8%	-0.8%	
2015	25.29	26.36	26.80			2015	-0.3%	-0.5%	-0.4%		
2016	24.13	25.12				2016	-4.6%	-4.7%			
2017	22.45					2017	-6.9%				

### All Regions

All Regi	UIIS										
		Indemnity	Claim Fr	equency							
	per \$1	00M of Ex	posure at	AY 2017	Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	33.06	34.34	34.75	34.70	34.73	2001					
2002	32.75	33.86	33.99	34.01	34.05	2002	-0.9%	-1.4%	-2.2%	-2.0%	-2.0%
2003	31.11	31.91	31.92	31.97	32.01	2003	-5.0%	-5.8%	-6.1%	-6.0%	-6.0%
2004	27.45	27.74	27.80	27.85	27.86	2004	-11.8%	-13.0%	-12.9%	-12.9%	-12.9%
2005	23.82	23.92	24.05	24.13	24.17	2005	-13.2%	-13.8%	-13.5%	-13.4%	-13.3%
2006	21.92	22.15	22.32	22.41	22.46	2006	-8.0%	-7.4%	-7.2%	-7.1%	-7.1%
2007	20.90	21.34	21.57	21.70	21.77	2007	-4.7%	-3.7%	-3.3%	-3.2%	-3.1%
2008	19.76	20.45	20.76	20.93	21.03	2008	-5.4%	-4.2%	-3.8%	-3.5%	-3.4%
2009	19.44	20.33	20.66	20.84	20.93	2009	-1.6%	-0.6%	-0.4%	-0.4%	-0.5%
2010	20.01	21.05	21.44	21.60	21.69	2010	2.9%	3.5%	3.7%	3.6%	3.6%
2011	20.22	21.41	21.83	22.02	22.10	2011	1.1%	1.7%	1.8%	1.9%	1.9%
2012	20.70	21.91	22.30	22.46	22.56	2012	2.4%	2.3%	2.1%	2.0%	2.1%
2013	20.79	21.94	22.27	22.42	22.51	2013	0.4%	0.1%	-0.1%	-0.2%	-0.2%
2014	20.92	22.05	22.37	22.54		2014	0.6%	0.5%	0.5%	0.5%	
2015	20.73	21.96	22.30			2015	-0.9%	-0.4%	-0.3%		
2016	20.10	21.37				2016	-3.0%	-2.7%			
2017	19.50					2017	-3.0%				

### Indemnity Claim Frequency by Geographic Region - CT Only

D	A

Bay Are	а											
		Indemnity	Claim Fr	equency								
	per \$1	00M of Ex	posure at	AY 2017	Level				An	nual Char	nge	
AY/RL	1	2	3	4	5	_	AY/RL	1	2	3	4	5
2001	3.86	4.21	4.26	4.29	4.16		2001					
2002	4.02	4.28	4.45	4.42	4.47		2002	4.0%	1.6%	4.3%	2.9%	7.6%
2003	3.73	4.02	4.11	4.17	4.23		2003	-7.1%	-6.1%	-7.6%	-5.6%	-5.3%
2004	3.50	3.61	3.70	3.81	3.89		2004	-6.3%	-10.3%	-9.9%	-8.7%	-8.1%
2005	2.96	3.13	3.25	3.35	3.44		2005	-15.3%	-13.3%	-12.3%	-11.9%	-11.5%
2006	2.50	2.67	2.78	2.84	2.88		2006	-15.6%	-14.7%	-14.5%	-15.3%	-16.3%
2007	2.53	2.70	2.82	2.90	2.90		2007	1.2%	1.3%	1.6%	2.2%	0.8%
2008	2.29	2.45	2.58	2.59	2.61		2008	-9.4%	-9.2%	-8.7%	-10.8%	-10.2%
2009	2.21	2.37	2.48	2.52	2.58		2009	-3.6%	-3.2%	-3.8%	-2.5%	-0.9%
2010	2.04	2.22	2.27	2.37	2.41		2010	-7.6%	-6.6%	-8.5%	-5.9%	-6.9%
2011	1.92	2.10	2.27	2.32	2.37		2011	-5.9%	-5.5%	-0.1%	-2.3%	-1.6%
2012	1.79	2.05	2.11	2.16	2.21		2012	-6.8%	-2.2%	-7.1%	-6.8%	-6.7%
2013	1.86	2.04	2.14	2.18	2.25		2013	3.9%	-0.6%	1.3%	1.0%	1.7%
2014	1.84	2.03	2.10	2.18			2014	-1.0%	-0.2%	-1.6%	0.0%	
2015	1.68	1.90	1.99				2015	-8.7%	-6.7%	-5.4%		
2016	1.60	1.89					2016	-4.7%	-0.3%			
2017	1.71						2017	6.6%				

### Los Angeles/L.A. Basin

Indemnity Claim Frequency

indentific Claim Frequency												
	per \$1	00M of Ex	posure at	AY 2017	Level				An	nual Char	nge	
AY/RL	1	2	3	4	5		AY/RL	1	2	3	4	5
2001	4.95	5.72	6.00	6.07	6.21		2001					
2002	4.92	5.55	5.84	5.87	5.96		2002	-0.5%	-3.0%	-2.5%	-3.2%	-3.9%
2003	4.84	5.29	5.49	5.62	5.68		2003	-1.6%	-4.8%	-6.1%	-4.4%	-4.8%
2004	4.50	4.85	4.98	5.08	5.22		2004	-7.2%	-8.3%	-9.3%	-9.6%	-8.2%
2005	3.36	3.60	3.80	3.97	4.13		2005	-25.2%	-25.7%	-23.7%	-21.7%	-20.7%
2006	3.14	3.46	3.66	3.83	3.95		2006	-6.6%	-4.0%	-3.5%	-3.6%	-4.3%
2007	3.15	3.47	3.68	4.25	3.95		2007	0.1%	0.4%	0.6%	11.1%	-0.1%
2008	3.11	3.51	3.83	3.92	4.06		2008	-1.1%	1.2%	3.9%	-7.8%	2.8%
2009	3.26	3.79	4.06	4.27	4.44		2009	4.8%	8.0%	6.0%	8.9%	9.3%
2010	3.47	3.87	4.18	4.43	4.49		2010	6.6%	2.0%	2.9%	3.7%	1.2%
2011	3.36	4.00	4.39	4.50	4.61		2011	-3.2%	3.3%	5.0%	1.7%	2.6%
2012	3.74	4.54	4.79	4.98	5.11		2012	11.3%	13.7%	9.3%	10.6%	10.8%
2013	4.28	4.99	5.35	5.53	5.68		2013	14.4%	10.0%	11.5%	10.9%	11.2%
2014	4.43	5.23	5.49	5.72			2014	3.3%	4.7%	2.7%	3.6%	
2015	4.65	5.48	5.89				2015	5.0%	4.8%	7.3%		
2016	4.71	5.47					2016	1.4%	-0.1%			
2017	5.36						2017	13.9%				

### San Diego

`	Indemnity Claim Frequency											
	per \$1	00M of Ex	posure at	AY 2017	Level				An	nual Char	nge	
AY/RL	1	2	3	4	5		AY/RL	1	2	3	4	5
2001	5.45	5.91	6.08	6.11	6.10		2001					
2002	5.72	5.90	6.00	6.77	6.83		2002	4.9%	-0.1%	-1.3%	10.7%	11.8%
2003	5.47	6.09	6.09	6.16	6.19		2003	-4.5%	3.3%	1.5%	-9.0%	-9.4%
2004	5.33	5.64	5.63	5.70	5.51		2004	-2.6%	-7.4%	-7.6%	-7.5%	-10.9%
2005	3.79	4.00	4.10	3.96	3.99		2005	-28.9%	-29.1%	-27.2%	-30.5%	-27.7%
2006	3.50	3.65	3.63	3.57	3.63		2006	-7.5%	-8.7%	-11.3%	-9.9%	-9.0%
2007	3.38	3.37	3.39	3.55	3.46		2007	-3.6%	-7.6%	-6.8%	-0.5%	-4.6%
2008	2.99	3.11	3.20	3.21	3.30		2008	-11.5%	-7.8%	-5.6%	-9.7%	-4.7%
2009	2.64	2.89	3.03	3.17	3.33		2009	-11.8%	-7.0%	-5.4%	-1.0%	0.9%
2010	3.05	3.13	3.31	3.48	3.52		2010	15.8%	8.1%	9.5%	9.7%	5.8%
2011	2.65	2.96	3.32	3.38	3.43		2011	-13.3%	-5.3%	0.3%	-3.0%	-2.7%
2012	2.64	3.11	3.20	3.30	3.35		2012	-0.1%	5.1%	-3.5%	-2.3%	-2.2%
2013	3.38	3.70	3.86	3.92	4.04		2013	28.0%	18.7%	20.5%	19.0%	20.6%
2014	3.38	3.75	3.84	4.02			2014	0.0%	1.3%	-0.7%	2.4%	
2015	3.52	3.85	4.16				2015	4.0%	2.9%	8.6%		
2016	3.35	4.00					2016	-5.0%	3.8%			
2017	4.41						2017	31.8%				

### Indemnity Claim Frequency by Geographic Region - CT Only

### All Other

All Othe	r.										
		Indemnity	Claim Fr	equency							
	per \$1	00M of Ex	posure at	AY 2017	Level			An	nual Char	nge	
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	4.58	4.86	4.97	5.17	5.25	2001					
2002	4.35	4.89	5.10	5.20	5.25	2002	-5.0%	0.7%	2.6%	0.6%	0.0%
2003	4.14	4.53	4.69	4.84	4.90	2003	-4.7%	-7.3%	-8.0%	-6.9%	-6.7%
2004	4.20	4.37	4.53	4.63	4.81	2004	1.5%	-3.5%	-3.5%	-4.4%	-1.8%
2005	3.26	3.50	3.66	3.81	3.95	2005	-22.5%	-20.1%	-19.2%	-17.7%	-18.0%
2006	3.30	3.56	3.77	3.93	4.04	2006	1.3%	1.9%	3.1%	3.3%	2.5%
2007	3.04	3.36	3.53	3.69	3.71	2007	-7.8%	-5.7%	-6.4%	-6.0%	-8.2%
2008	2.89	3.16	3.39	3.49	3.55	2008	-5.0%	-6.1%	-4.1%	-5.5%	-4.3%
2009	2.96	3.24	3.46	3.56	3.64	2009	2.4%	2.5%	2.0%	2.0%	2.5%
2010	3.15	3.31	3.49	3.66	3.72	2010	6.3%	2.3%	1.0%	2.7%	2.1%
2011	2.82	3.21	3.41	3.50	3.56	2011	-10.4%	-3.2%	-2.2%	-4.3%	-4.3%
2012	2.83	3.31	3.46	3.54	3.62	2012	0.3%	3.3%	1.5%	1.3%	1.7%
2013	2.94	3.30	3.45	3.54	3.67	2013	3.9%	-0.3%	-0.2%	-0.2%	1.3%
2014	2.93	3.31	3.48	3.58		2014	-0.4%	0.1%	0.9%	1.3%	
2015	2.92	3.29	3.51			2015	-0.1%	-0.5%	0.6%		
2016	2.80	3.25				2016	-4.3%	-1.3%			
2017	2.95					2017	5.5%				

### All Regions

 ndemr	sity C	laim I	Eroau	onou

		maemmily	Claim Fr	equency								
	per \$1	00M of Ex	posure at	AY 2017	Level				An	nual Char	nge	
AY/RL	1	2	3	4	5	_	AY/RL	1	2	3	4	5
2001	4.61	5.12	5.30	5.39	5.44		2001					
2002	4.61	5.10	5.33	5.42	5.49		2002	0.1%	-0.6%	0.5%	0.5%	0.9%
2003	4.45	4.86	5.01	5.12	5.19		2003	-3.5%	-4.7%	-5.9%	-5.5%	-5.5%
2004	4.24	4.50	4.61	4.71	4.83		2004	-4.6%	-7.4%	-7.9%	-8.0%	-6.9%
2005	3.27	3.49	3.66	3.78	3.91		2005	-22.8%	-22.4%	-20.8%	-19.7%	-19.0%
2006	3.04	3.30	3.46	3.58	3.68		2006	-7.0%	-5.6%	-5.2%	-5.3%	-5.9%
2007	2.98	3.25	3.41	3.73	3.59		2007	-2.0%	-1.6%	-1.6%	4.1%	-2.3%
2008	2.84	3.13	3.36	3.43	3.52		2008	-4.7%	-3.5%	-1.4%	-8.2%	-2.2%
2009	2.88	3.24	3.44	3.59	3.71		2009	1.2%	3.6%	2.5%	4.6%	5.4%
2010	3.00	3.26	3.46	3.65	3.70		2010	4.1%	0.5%	0.5%	1.8%	-0.1%
2011	2.80	3.23	3.52	3.61	3.69		2011	-6.5%	-0.8%	1.8%	-1.0%	-0.4%
2012	2.92	3.48	3.64	3.77	3.85		2012	4.4%	7.6%	3.4%	4.2%	4.5%
2013	3.24	3.70	3.92	4.03	4.15		2013	10.9%	6.3%	7.6%	7.1%	7.8%
2014	3.28	3.78	3.96	4.11			2014	1.2%	2.3%	1.0%	2.0%	
2015	3.31	3.84	4.11				2015	0.9%	1.5%	3.9%		
2016	3.27	3.84					2016	-1.4%	0.0%			
2017	3.68						2017	12.5%				

Los Angeles				1st Report Level			
NAICS Sector	2010	<u>2011</u>	2012	2013	2014	2015	2016
Professional Services	13.8%	15.7%	13.5%	16.5%	15.2%	21.1%	27.9%
Manufacturing	14.3%	15.8%	17.8%	21.8%	22.5%	22.1%	26.6%
Outside Sales & Clerical	17.7%	20.5%	22.7%	23.8%	21.6%	22.8%	24.7%
Finance & Insurance	14.6%	14.2%	30.4%	21.7%	23.7%	28.6%	24.5%
Other Services	13.8%	14.6%	15.1%	16.0%	19.1%	18.0%	22.8%
Hospitality	12.8%	11.6%	16.0%	19.0%	19.3%	19.0%	17.7%
Los Angeles	11.6%	11.6%	13.8%	15.3%	15.9%	16.2%	17.4%
Administrative	11.4%	11.2%	13.4%	14.7%	18.6%	18.5%	15.9%
Health	12.5%	9.4%	12.1%	12.9%	12.5%	14.2%	15.0%
Wholesale & Retail	8.3%	9.2%	9.7%	11.6%	12.1%	12.9%	14.4%
Real Estate	12.4%	11.8%	15.2%	16.0%	13.6%	17.8%	15.0%
Arts & Entertainment	8.5%	9.0%	13.4%	15.1%	14.0%	13.3%	13.6%
Agriculture & Mining	7.1%	6.6%	6.4%	10.4%	11.7%	12.3%	11.9%
Education	8.7%	11.2%	11.6%	8.8%	10.4%	11.1%	12.4%
Construction	9.5%	7.2%	8.1%	8.5%	10.5%	11.1%	10.9%
Utilities, Transportation & Warehousing & Public Admin	6.7%	5.6%	8.0%	7.6%	7.7%	7.5%	7.7%
Information	9.8%	9.8%	11.8%	8.7%	8.7%	7.1%	5.2%
Los Angeles				3rd Report Level			
NAICS Sector	2008	2009	2010	2011	2012	2013	2014
Outside Sales & Clerical	19.3%	20.3%	19.3%	23.6%	26.3%	26.1%	24.9%
Manufacturing	17.0%	18.2%	18.6%	20.6%	21.5%	24.4%	24.6%
Finance & Insurance	14.0%	15.8%	38.3%	35.8%	31.7%	24.2%	23.9%
Hospitality	11.0%	12.8%	15.3%	14.4%	18.5%	21.6%	22.0%
Other Services	12.9%	17.0%	16.4%	16.9%	18.1%	18.0%	21.7%
Administrative	10.1%	11.3%	13.6%	13.0%	15.5%	17.3%	20.2%
Los Angeles	12.1%	13.5%	14.2%	14.8%	16.4%	17.8%	18.2%
Arts & Entertainment	10.7%	9.9%	11.1%	11.3%	14.3%	18.4%	16.6%
Professional Services	14.3%	14.4%	13.5%	17.5%	15.2%	18.5%	16.2%
Real Estate	10.9%	14.7%	13.1%	15.2%	17.2%	18.3%	15.9%
Health	10.8%	13.5%	13.9%	12.6%	14.9%	15.7%	15.6%
Wholesale & Retail	9.6%	9.6%	9.8%	11.2%	12.1%	13.9%	14.4%
Agriculture & Mining	7.9%	6.9%	7.8%	8.2%	7.6%	11.6%	12.8%
Construction	8.5%	11.1%	11.5%	9.5%	10.8%	10.8%	12.7%
Education	8.7%	10.9%	11.6%	12.1%	13.1%	10.5%	11.0%
Information	11.9%	12.3%	11.2%	12.6%	12.7%	11.4%	10.5%
Utilities, Transportation & Warehousing & Public Admin	6.4%	7.9%	8.3%	6.9%	9.2%	9.8%	10.1%
Los Angeles				5th Report Level			
NAICS Sector	2006	2007	2008	2009	2010	2011	2012
Finance & Insurance	22.8%	22.7%	26.2%	33.3%	39.1%	36.4%	32.3%
Outside Sales & Clerical	18.8%	18.4%	20.1%	21.0%	20.2%	24.7%	26.7%
Manufacturing	14.5%	15.4%	18.0%	19.5%	18.7%	20.6%	22.1%
Hospitality	8.9%	9.9%	11.8%	13.6%	15.2%	15.0%	19.2%
Other Services	11.7%	12.3%	14.1%	17.8%	16.5%	17.2%	19.0%
Los Angeles	10.7%	11.2%	13.0%	14.4%	14.6%	15.3%	17.0%
Real Estate	8.8%	9.6%	11.0%	15.4%	14.3%	15.8%	17.5%
Professional Services	15.2%	18.1%	16.9%	15.2%	15.3%	17.8%	16.1%
Administrative	7.1%	7.5%	10.8%	11.5%	13.5%	13.3%	15.7%
Health	12.7%	11.1%	11.6%	13.6%	14.7%	13.4%	15.4%
Arts & Entertainment	8.5%	7.9%	11.2%	10.5%	11.8%	12.2%	15.2%
Education	9.3%	8.7%	9.0%	11.3%	13.5%	12.2%	13.3%
Information	16.0%	16.1%	12.7%	12.7%	11.7%	12.7%	13.0%
Wholesale & Retail	8.3%	8.8%	9.9%	10.4%	10.4%	11.8%	12.6%
Construction	5.2%	6.8%	9.5%	11.3%	12.0%	10.8%	11.3%
Utilities, Transportation & Warehousing & Public Admin	5.5%	6.1%	6.8%	8.4%	8.9%	7.2%	9.7%
Agriculture & Mining	6.2%	5.3%	7.6%	7.2%	8.0%	8.8%	8.8%

\*NAICS Sector order based on most recent Policy Year available Source: Unit Statistical Reported data

Remainder of CA				1st Report Level			
NAICS Sector	2010	2011	2012	2013	<u>2014</u>	2015	2016
Finance & Insurance	27.7%	26.6%	26.1%	26.8%	22.9%	23.4%	26.5%
Outside Sales & Clerical	17.6%	15.6%	16.9%	18.1%	14.6%	16.1%	17.9%
Professional Services	10.8%	11.1%	11.4%	11.1%	12.1%	9.9%	13.5%
Information	8.0%	6.5%	10.8%	7.6%	10.4%	8.6%	10.5%
Hospitality	6.5%	7.3%	9.0%	9.9%	10.4%	10.5%	11.2%
Manufacturing	7.8%	8.5%	9.1%	10.6%	9.5%	8.4%	9.6%
Health	7.5%	6.3%	7.6%	8.8%	8.2%	8.8%	9.0%
Other Services	6.5%	6.0%	5.9%	7.2%	9.2%	8.4%	8.6%
Administrative	4.7%	4.8%	5.3%	8.0%	8.3%	9.5%	8.7%
Remainder of CA	7.4%	6.9%	7.5%	8.6%	8.0%	7.8%	8.0%
Arts & Entertainment	7.4%	6.8%	9.0%	7.9%	8.8%	7.9%	7.2%
Real Estate	7.0%	6.4%	6.7%	7.8%	9.4%	8.3%	7.0%
Utilities, Transportation & Warehousing & Public Admin	6.2%	6.6%	6.5%	7.2%	6.3%	6.7%	6.2%
Wholesale & Retail	5.8%	5.6%	6.1%	8.1%	6.9%	6.6%	6.3%
Education	6.2%	5.6%	5.3%	4.5%	5.1%	4.7%	5.2%
Agriculture & Mining	4.6%	4.0%	4.2%	5.1%	5.2%	4.4%	4.4%
Construction	5.6%	3.9%	3.8%	4.0%	3.7%	3.3%	3.9%
Remainder of CA				3rd Report Level			
NAICS Sector	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Finance & Insurance	26.6%	28.4%	27.8%	28.9%	30.1%	26.5%	23.7%
Outside Sales & Clerical	19.8%	20.6%	19.0%	17.7%	18.9%	19.7%	16.9%
Arts & Entertainment	6.3%	7.5%	14.9%	13.1%	11.4%	10.9%	13.7%
Professional Services	15.5%	14.4%	12.5%	13.5%	11.3%	13.5%	13.5%
Hospitality	6.9%	7.3%	8.5%	9.1%	10.6%	11.2%	11.7%
Information	18.5%	7.7%	13.1%	10.3%	11.7%	10.6%	11.0%
Manufacturing	8.0%	8.9%	10.1%	11.8%	11.3%	11.9%	11.0%
Real Estate Other Services	4.8% 7.1%	6.7%	8.3%	8.0% 8.3%	9.0%	9.7% 9.6%	10.7%
Health	7.1%	8.6% 9.0%	7.3% 9.3%	7.8%	8.5% 8.9%	9.8%	10.1% 9.8%
Administrative	7.9% 3.6%	5.2%	9.3% 5.2%	7.8%	8.9% 8.4%	9.8%	9.8%
Remainder of CA	7.6%	8.4%	8.6%	8.9%	9.2%	9.9%	9.4%
Wholesale & Retail	5.9%	6.7%	7.1%	7.7%	7.3%	9.1%	8.1%
Utilities, Transportation & Warehousing & Public Admin	7.4%	6.6%	5.9%	7.5%	8.0%	8.3%	7.6%
Agriculture & Mining	3.2%	3.9%	4.4%	5.2%	4.9%	6.1%	6.2%
Education	6.2%	7.0%	6.5%	6.6%	7.3%	5.9%	5.9%
Construction	4.9%	7.0%	6.4%	5.2%	5.2%	5.2%	5.2%
Remainder of CA				5th Report Level			
NAICS Sector	2006	2007	2008	2009	2010	<u>2011</u>	2012
Finance & Insurance	27.4%	24.0%	28.4%	30.3%	29.1%	28.8%	30.3%
Outside Sales & Clerical	17.1%	18.8%	20.2%	21.4%	19.6%	18.7%	19.7%
Arts & Entertainment	7.6%	7.2%	9.1%	10.7%	17.9%	14.9%	12.1%
Professional Services	14.7%	15.2%	15.4%	14.1%	13.3%	13.5%	12.6%
Information	11.0%	11.2%	20.7%	9.2%	12.8%	10.6%	11.8%
Manufacturing	9.2%	9.3%	9.2%	10.4%	10.7%	12.3%	11.7%
Health	8.8%	8.1%	8.4%	9.9%	9.3%	8.5%	9.6%
Remainder of CA	7.1%	7.4%	8.1%	9.2%	9.2%	9.5%	9.6%
Hospitality	6.1%	6.3%	7.0%	8.4%	9.1%	9.6%	10.9%
Real Estate	6.7%	5.0%	4.6%	7.8%	8.3%	8.6%	9.6%
Other Services	7.7%	7.8%	7.5%	9.0%	8.0%	8.9%	8.8%
Wholesale & Retail	6.5%	5.8%	6.4%	7.1%	7.6%	8.1%	7.7%
Construction	4.1%	4.7%	5.9%	7.7%	6.9%	5.8%	5.6%
Administrative	3.0%	3.9%	4.2%	6.0%	6.7%	8.4%	8.2%
Utilities, Transportation & Warehousing & Public Admin Education	5.0% 5.3%	6.4% 6.6%	6.8% 6.3%	6.6% 7.7%	6.5% 6.3%	7.9% 6.8%	8.4% 7.2%
Agriculture & Mining	3.5%	3.4%	3.6%	4.2%	4.9%	5.6%	7.2% 5.5%
Agriculture & Milling	3.370	J.4 /0	3.070	4.2 /0	4.570	J.U /0	3.370

\*NAICS Sector order based on most recent Policy Year available Source: Unit Statistical Reported data

### Frequency of Indemnity Claims Caused by Motor Vehicle Accidents

Indemnity Claim Frequency per \$100M
of Exposure of AV 2017 Lovel

	macrimity O	iaiiii i requerio					
	of Expo	sure at AY 201	17 Level		<u>Ann</u>	<u>ual Change</u>	
AY/RL	<u>1</u>	<u>2</u>	<u>3</u>	AY/RL	<u>1</u>	<u>2</u>	<u>3</u>
2001	1.00	0.93	0.97	2001			
2002	0.85	0.93	0.94	2002	-15.3%	0.5%	-3.2%
2003	0.95	0.97	0.97	2003	12.0%	3.7%	3.3%
2004	0.82	0.80	0.79	2004	-13.5%	-17.2%	-18.2%
2005	0.69	0.66	0.66	2005	-16.4%	-17.1%	-16.5%
2006	0.68	0.65	0.65	2006	-0.9%	-1.5%	-1.4%
2007	0.67	0.65	0.65	2007	-2.0%	-0.4%	-0.6%
2008	0.61	0.60	0.61	2008	-8.5%	-7.4%	-6.4%
2009	0.56	0.56	0.57	2009	-7.4%	-7.2%	-6.8%
2010	0.61	0.60	0.60	2010	7.9%	7.8%	6.4%
2011	0.57	0.57	0.57	2011	-6.9%	-5.6%	-5.1%
2012	0.55	0.56	0.56	2012	-2.3%	-1.7%	-2.1%
2013	0.57	0.57	0.57	2013	3.0%	1.0%	1.8%
2014	0.54	0.54	0.54	2014	-6.2%	-4.8%	-5.3%
2015	0.59	0.59		2015	10.3%	10.0%	
2016	0.61			2016	2.5%		

	Percenta	ige of Indemni	ty Claims
AY/RL	<u>1</u>	<u>2</u>	<u>3</u>
2001	2.9%	2.8%	2.8%
2002	3.0%	2.9%	2.9%
2003	2.9%	2.9%	2.9%
2004	3.1%	3.0%	2.9%
2005	3.1%	3.0%	2.9%
2006	3.2%	3.0%	3.0%
2007	3.2%	3.1%	3.1%
2008	3.2%	3.0%	3.0%
2009	3.1%	3.0%	2.9%
2010	3.0%	2.9%	2.8%
2011	2.9%	2.8%	2.7%
2012	2.7%	2.6%	2.5%
2013	2.7%	2.6%	2.5%
2014	2.6%	2.4%	2.4%
2015	2.9%	2.7%	
2016	3.0%		

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

					Indemnity				
Accident _	2.45	45.07	07.00		velopment	00.75	75.07	07.00	00 111
<u>Year</u>	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	99-111 0.228
1994 1995								0.279	0.226
1996							0.307	0.275	0.231
1997						0.360	0.320	0.273	0.217
1998					0.396	0.345	0.283	0.227	0.217
1999				0.481	0.433	0.347	0.277	0.264	0.232
2000			0.582	0.517	0.402	0.352	0.289	0.297	0.244
2001		0.797	0.675	0.539	0.400	0.388	0.334	0.282	0.245
2002	3.214	0.813	0.620	0.488	0.460	0.406	0.355	0.291	0.245
2003	3.147	0.759	0.586	0.548	0.462	0.381	0.296	0.268	0.256
2004	2.953	0.594	0.602	0.472	0.398	0.357	0.290	0.305	0.292
2005	2.579	0.807	0.621	0.532	0.419	0.363	0.325	0.313	0.302
2006	3.896	0.852	0.635	0.500	0.433	0.382	0.339	0.303	0.269
2007	4.279	0.897	0.656	0.516	0.445	0.394	0.351	0.307	0.282
2008	4.586	0.954	0.705	0.567	0.478	0.416	0.349	0.326	0.251
2009	5.179	0.959	0.697	0.578	0.481	0.423	0.366	0.339	0.317
2010	5.650	0.975	0.738	0.602	0.511	0.456	0.410	0.368	0.316
2011	6.004	0.957	0.690	0.574	0.490	0.437	0.416	0.401	
2012	6.175	0.986	0.716	0.586	0.532	0.471	0.409		
2013	6.149	0.941	0.742	0.638	0.546	0.470			
2014	6.155	0.996	0.792	0.650	0.542				
2015	6.014	0.998	0.752	0.629					
2016	6.098	1.005	0.765						
2017	6.098	0.986							
2018	6.221								
					-I B#I! I				
					d Medical				
Accident _				De	velopment				
Year	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>			<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	99-111
<u>Year</u> 1994	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	De	velopment	<u>63-75</u>	<u>75-87</u>		0.189
<u>Year</u> 1994 1995	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	De	velopment	<u>63-75</u>		0.216	0.189 0.203
<u>Year</u> 1994 1995 1996	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	De	velopment		0.264	0.216 0.259	0.189 0.203 0.173
Year 1994 1995 1996 1997	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	De	velopment <u>51-63</u>	0.320	0.264 0.287	0.216 0.259 0.215	0.189 0.203 0.173 0.150
Year 1994 1995 1996 1997 1998	<u>3-15</u>	<u>15-27</u>	<u>27-39</u>	<u>De</u> <u>39-51</u>	velopment <u>51-63</u> 0.361	0.320 0.324	0.264 0.287 0.221	0.216 0.259 0.215 0.177	0.189 0.203 0.173 0.150 0.171
Year 1994 1995 1996 1997 1998 1999	<u>3-15</u>	<u>15-27</u>		De <sup>1</sup> 39-51 0.451	0.361 0.419	0.320 0.324 0.292	0.264 0.287 0.221 0.223	0.216 0.259 0.215 0.177 0.196	0.189 0.203 0.173 0.150 0.171 0.222
Year 1994 1995 1996 1997 1998 1999 2000	<u>3-15</u>		0.568	0.451 0.477	0.361 0.419 0.333	0.320 0.324 0.292 0.260	0.264 0.287 0.221 0.223 0.223	0.216 0.259 0.215 0.177 0.196 0.262	0.189 0.203 0.173 0.150 0.171 0.222 0.196
Year 1994 1995 1996 1997 1998 1999 2000 2001		0.921	0.568 0.636	0.451 0.477 0.473	0.361 0.419 0.333 0.313	0.320 0.324 0.292 0.260 0.295	0.264 0.287 0.221 0.223 0.223 0.289	0.216 0.259 0.215 0.177 0.196 0.262 0.240	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002	4.430	0.921 0.870	0.568 0.636 0.545	0.451 0.477 0.473 0.378	0.361 0.419 0.333 0.313 0.351	0.320 0.324 0.292 0.260 0.295 0.353	0.264 0.287 0.221 0.223 0.223 0.289 0.278	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003	4.430 4.058	0.921 0.870 0.772	0.568 0.636 0.545 0.428	0.451 0.477 0.473 0.378 0.385	0.361 0.419 0.333 0.313 0.351 0.374	0.320 0.324 0.292 0.260 0.295 0.353 0.302	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	4.430 4.058 3.376	0.921 0.870 0.772 0.574	0.568 0.636 0.545 0.428 0.453	0.451 0.477 0.473 0.378 0.385 0.424	0.361 0.419 0.333 0.313 0.351 0.374 0.369	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005	4.430 4.058 3.376 2.981	0.921 0.870 0.772 0.574 0.574	0.568 0.636 0.545 0.428 0.453 0.457	0.451 0.477 0.473 0.378 0.385 0.424 0.414	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006	4.430 4.058 3.376 2.981 3.903	0.921 0.870 0.772 0.574 0.574 0.621	0.568 0.636 0.545 0.428 0.453 0.457 0.489	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	4.430 4.058 3.376 2.981 3.903 3.798	0.921 0.870 0.772 0.574 0.574 0.621 0.651	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.323	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	4.430 4.058 3.376 2.981 3.903 3.798 4.032	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.323 0.339 0.351	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.526	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.526 0.577 0.540	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.526 0.577 0.540 0.534	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414 4.380	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690 0.649	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.526 0.577 0.540 0.534	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465 0.470	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410 0.384	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414 4.380 4.507	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690 0.649 0.667	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.577 0.540 0.534 0.521 0.549	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465 0.470 0.473	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414 4.380 4.507 4.424	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690 0.649 0.667 0.650	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.577 0.540 0.534 0.521 0.549 0.507	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465 0.470	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410 0.384	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414 4.380 4.507	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690 0.649 0.667	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.577 0.540 0.534 0.521 0.549	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465 0.470 0.473	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410 0.384	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200
Year 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	4.430 4.058 3.376 2.981 3.903 3.798 4.032 4.401 4.623 4.282 4.414 4.380 4.507 4.424 4.525	0.921 0.870 0.772 0.574 0.574 0.621 0.651 0.672 0.685 0.700 0.707 0.690 0.649 0.667 0.650 0.625	0.568 0.636 0.545 0.428 0.453 0.457 0.489 0.504 0.526 0.577 0.540 0.534 0.521 0.549 0.507	0.451 0.477 0.473 0.378 0.385 0.424 0.414 0.407 0.439 0.465 0.479 0.510 0.461 0.465 0.470 0.473	0.361 0.419 0.333 0.313 0.351 0.374 0.369 0.375 0.359 0.365 0.409 0.416 0.414 0.396 0.410 0.384	0.320 0.324 0.292 0.260 0.295 0.353 0.302 0.308 0.333 0.323 0.339 0.351 0.347 0.353 0.333	0.264 0.287 0.221 0.223 0.223 0.289 0.278 0.262 0.274 0.261 0.285 0.306 0.288 0.282 0.322 0.302	0.216 0.259 0.215 0.177 0.196 0.262 0.240 0.252 0.239 0.235 0.269 0.255 0.242 0.243 0.236 0.270	0.189 0.203 0.173 0.150 0.171 0.222 0.196 0.210 0.209 0.207 0.226 0.242 0.202 0.205 0.201 0.200

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

### Comparison of Projected Loss Ratios as of March 31, 2019 Accident Year 2013 Projected to 75 Months[1]

### Indemnity

<u>Methodology</u>		Based on Exp	perience Evaluate	d as of (in months	s):	
•	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	Current
3-Year Avg. Incurred	0.230	0.222	0.214	0.209	0.205	0.202
Latest Year Incurred	0.227	0.218	0.213	0.209	0.205	0.202
Latest Yr. Inc. Adj. for Case Reserves	0.276	0.236	0.222	0.211	0.204	0.202
3-Year Avg. Paid	0.219	0.216	0.214	0.211	0.206	0.202
Latest Year Paid	0.219	0.215	0.215	0.211	0.206	0.202
Reform-Adj. Paid <sup>[2]</sup>	0.219	0.215	0.215	0.211	0.206	0.202
Latest Yr. Pd. Adj. for Settlement [3]	0.215	0.212	0.212	0.209	0.206	0.202
		Difference	e from Actual 75-N	Month Loss Ratio		
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	Current
3-Year Avg. Incurred	13.7%	9.5%	5.9%	3.5%	1.5%	0.0%
Latest Year Incurred	12.0%	7.9%	5.2%	3.3%	1.2%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	36.6%	16.6%	9.8%	4.3%	1.0%	0.0%
3-Year Avg. Paid	8.4%	6.8%	6.0%	4.1%	2.0%	0.0%
Latest Year Paid	8.1%	6.3%	6.4%	4.3%	1.8%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	8.1%	6.3%	6.4%	4.3%	1.8%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	6.3%	4.5%	4.9%	3.4%	1.8%	0.0%
			Medical			
		Based on Ex	perience Evaluate	d as of (in months	5):	
	<u>15</u>	Based on Exp	perience Evaluate 39	d as of (in months	s): <u>63</u>	Current
3-Year Avg. Incurred	<u>15</u> 0.329					<u>Current</u> 0.256
3-Year Avg. Incurred Latest Year Incurred	_	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	
· ·	0.329	2 <u>7</u> 0.311	<u>39</u> 0.291	<u>51</u> 0.279	<u>63</u> 0.266	0.256
Latest Year Incurred	0.329 0.316	27 0.311 0.306	3 <u>9</u> 0.291 0.288	<u>51</u> 0.279 0.277	6 <u>3</u> 0.266 0.265	0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	0.329 0.316 0.342	2 <u>7</u> 0.311 0.306 0.319	3 <u>9</u> 0.291 0.288 0.290	5 <u>1</u> 0.279 0.277 0.277	63 0.266 0.265 0.267	0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	0.329 0.316 0.342 0.276	27 0.311 0.306 0.319 0.274	3 <u>9</u> 0.291 0.288 0.290 0.271	51 0.279 0.277 0.277 0.267	63 0.266 0.265 0.267 0.262	0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	0.329 0.316 0.342 0.276 0.289	27 0.311 0.306 0.319 0.274 0.284	39 0.291 0.288 0.290 0.271 0.279	51 0.279 0.277 0.277 0.267 0.272	63 0.266 0.265 0.267 0.262 0.263	0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2]	0.329 0.316 0.342 0.276 0.289	27 0.311 0.306 0.319 0.274 0.284 0.284	39 0.291 0.288 0.290 0.271 0.279	51 0.279 0.277 0.277 0.267 0.272 0.272	63 0.266 0.265 0.267 0.262 0.263	0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2]	0.329 0.316 0.342 0.276 0.289	27 0.311 0.306 0.319 0.274 0.284 0.284	39 0.291 0.288 0.290 0.271 0.279 0.279	51 0.279 0.277 0.277 0.267 0.272 0.272	63 0.266 0.265 0.267 0.262 0.263	0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2]	0.329 0.316 0.342 0.276 0.289 0.289	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271	63 0.266 0.265 0.267 0.262 0.263 0.263	0.256 0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]	0.329 0.316 0.342 0.276 0.289 0.289 0.286	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271 Month Loss Ratio	63 0.266 0.265 0.267 0.262 0.263 0.263	0.256 0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]  3-Year Avg. Incurred	0.329 0.316 0.342 0.276 0.289 0.289 0.286 15 28.4% 23.3% 33.7%	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281 Difference 27 21.7% 19.6% 24.8%	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277 e from Actual 75-N 39 13.6% 12.4%	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271 Wonth Loss Ratio 51 9.0% 8.3% 8.4%	63 0.266 0.265 0.267 0.262 0.263 0.263 0.263 3.9% 3.4% 4.4%	0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup> 3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	0.329 0.316 0.342 0.276 0.289 0.289 0.286 15 28.4% 23.3% 33.7% 7.6%	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281 Difference 27 21.7% 19.6% 24.8% 7.0%	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277 e from Actual 75-N 39 13.6% 12.4% 13.4% 5.8%	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271 Wonth Loss Ratio 51 9.0% 8.3% 8.4% 4.4%	63 0.266 0.265 0.267 0.262 0.263 0.263 0.263 3.9% 3.4% 4.4% 2.2%	0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.0256 0.00% 0.0% 0.0% 0.0%
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]  3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	0.329 0.316 0.342 0.276 0.289 0.289 0.286 15 28.4% 23.3% 33.7%	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281 Difference 27 21.7% 19.6% 24.8%	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277 e from Actual 75-N 39 13.6% 12.4%	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271 Wonth Loss Ratio 51 9.0% 8.3% 8.4%	63 0.266 0.265 0.267 0.262 0.263 0.263 0.263 3.9% 3.4% 4.4%	0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.256
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup> 3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	0.329 0.316 0.342 0.276 0.289 0.289 0.286 15 28.4% 23.3% 33.7% 7.6%	27 0.311 0.306 0.319 0.274 0.284 0.284 0.281 Difference 27 21.7% 19.6% 24.8% 7.0%	39 0.291 0.288 0.290 0.271 0.279 0.279 0.277 e from Actual 75-N 39 13.6% 12.4% 13.4% 5.8%	51 0.279 0.277 0.277 0.267 0.272 0.272 0.271 Wonth Loss Ratio 51 9.0% 8.3% 8.4% 4.4%	63 0.266 0.265 0.267 0.262 0.263 0.263 0.263 3.9% 3.4% 4.4% 2.2%	0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.256 0.0256 0.00% 0.0% 0.0% 0.0%

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

<sup>[2]</sup> The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160.

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

### Comparison of Projected Loss Ratios as of March 31, 2019 Accident Year 2014 Projected to 63 Months[1]

### Indemnity

Methodology	E	Based on Experience	Evaluated as of (in m	nonths):	
_	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	Current
3-Year Avg. Incurred	0.198	0.196	0.194	0.191	0.188
Latest Year Incurred	0.190	0.192	0.193	0.191	0.188
Latest Yr. Inc. Adj. for Case Reserves	0.210	0.199	0.198	0.192	0.188
3-Year Avg. Paid	0.190	0.194	0.196	0.192	0.188
Latest Year Paid	0.185	0.191	0.194	0.192	0.188
Reform-Adj. Paid <sup>[2]</sup>	0.185	0.191	0.194	0.192	0.188
Latest Yr. Pd. Adj. for Settlement [3]	0.182	0.188	0.191	0.191	0.188
_			tual 63-Month Loss		
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	Current
3-Year Avg. Incurred	5.2%	3.8%	3.1%	1.4%	0.0%
Latest Year Incurred	1.0%	1.9%	2.4%	1.2%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	11.5%	5.5%	4.8%	1.7%	0.0%
3-Year Avg. Paid	1.1%	2.9%	3.8%	2.0%	0.0%
Latest Year Paid	-1.8%	1.2%	2.9%	1.8%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	-1.8%	1.2%	2.9%	1.8%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	-3.4%	-0.4%	1.6%	1.1%	0.0%
		P	Medical		
		•	vicuicai		
_		Based on Experience		nonths):	
-	1 <u>5</u>			nonths): <u>51</u>	Current
– 3-Year Avg. Incurred		Based on Experience	Evaluated as of (in m		Current 0.221
3-Year Avg. Incurred Latest Year Incurred	<u>15</u>	Based on Experience	Evaluated as of (in m	<u>51</u>	
	<u>15</u> 0.268 0.247 0.255	27 0.253 0.241 0.244	Evaluated as of (in m 39 0.242 0.237 0.233	5 <u>1</u> 0.231 0.228 0.224	0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	15 0.268 0.247 0.255 0.239	27 0.253 0.241 0.244 0.236	Evaluated as of (in m 39 0.242 0.237 0.233 0.234	51 0.231 0.228 0.224 0.228	0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	<u>15</u> 0.268 0.247 0.255	27 0.253 0.241 0.244	Evaluated as of (in m 39 0.242 0.237 0.233	5 <u>1</u> 0.231 0.228 0.224	0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	15 0.268 0.247 0.255 0.239	27 0.253 0.241 0.244 0.236	Evaluated as of (in m 39 0.242 0.237 0.233 0.234	51 0.231 0.228 0.224 0.228	0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	15 0.268 0.247 0.255 0.239 0.233	27 0.253 0.241 0.244 0.236 0.233	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231	51 0.231 0.228 0.224 0.228 0.226	0.221 0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup>	15 0.268 0.247 0.255 0.239 0.233 0.233	27 0.253 0.241 0.244 0.236 0.233 0.233 0.231	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.231	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225	0.221 0.221 0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231	27 0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.231 0.229 Etual 63-Month Loss	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225	0.221 0.221 0.221 0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup> 3-Year Avg. Incurred	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231	0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac 27 14.5%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Etual 63-Month Loss 39 9.8%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup> 3-Year Avg. Incurred Latest Year Incurred	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231	0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac 27 14.5% 9.0%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Etual 63-Month Loss 39 9.8% 7.3%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid <sup>[2]</sup> Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup> 3-Year Avg. Incurred Latest Yr. Inc. Adj. for Case Reserves	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231 15 21.4% 11.8% 15.3%	0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac 27 14.5% 9.0% 10.4%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Etual 63-Month Loss 39 9.8% 7.3% 5.4%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio 51 4.4% 3.4% 1.5%	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.201 0.006
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]  3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231 15 21.4% 11.8% 15.3% 8.3%	27 0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac 27 14.5% 9.0% 10.4% 6.9%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Etual 63-Month Loss 39 9.8% 7.3% 5.4% 5.8%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio 51 4.4% 3.4% 1.5% 3.1%	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.006
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]  3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid	15 0.268 0.247 0.255 0.239 0.233 0.231 0.231 15 21.4% 11.8% 15.3% 8.3% 5.7%	Difference from Ac  27 0.253 0.241 0.244 0.236 0.233 0.233 0.231  Difference from Ac  27 14.5% 9.0% 10.4% 6.9% 5.4%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Stual 63-Month Loss 39 9.8% 7.3% 5.4% 5.8% 4.5%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio 51 4.4% 3.4% 1.5% 3.1% 2.5%	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.020 0.0% 0.0% 0.0% 0.0% 0.0%
Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid Latest Year Paid Reform-Adj. Paid [2] Latest Yr. Pd. Adj. for Settlement [3]  3-Year Avg. Incurred Latest Year Incurred Latest Yr. Inc. Adj. for Case Reserves 3-Year Avg. Paid	15 0.268 0.247 0.255 0.239 0.233 0.233 0.231 15 21.4% 11.8% 15.3% 8.3%	27 0.253 0.241 0.244 0.236 0.233 0.233 0.231 Difference from Ac 27 14.5% 9.0% 10.4% 6.9%	Evaluated as of (in m 39 0.242 0.237 0.233 0.234 0.231 0.229 Etual 63-Month Loss 39 9.8% 7.3% 5.4% 5.8%	51 0.231 0.228 0.224 0.228 0.226 0.226 0.225 Ratio 51 4.4% 3.4% 1.5% 3.1%	0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.221 0.006

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

<sup>[2]</sup> The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160.

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

### Comparison of Projected Loss Ratios as of March 31, 2019 Accident Year 2015 Projected to 51 Months[1]

### Indemnity

Methodology		Based on Experience Evalu	uated as of (in months):	
_	<u>15</u>	<u>27</u>	<u>39</u>	Current
3-Year Avg. Incurred	0.184	0.184	0.180	0.177
Latest Year Incurred	0.179	0.180	0.179	0.177
Latest Yr. Inc. Adj. for Case Reserves	0.197	0.184	0.181	0.177
3-Year Avg. Paid	0.179	0.182	0.181	0.177
Latest Year Paid	0.181	0.182	0.180	0.177
Reform-Adj. Paid <sup>[2]</sup>	0.181	0.182	0.180	0.177
Latest Yr. Pd. Adj. for Settlement [3]	0.178	0.179	0.179	0.177
_		Difference from Actual	51-Month Loss Ratio	
_	<u>15</u>	<u>27</u>	<u>39</u>	Current
3-Year Avg. Incurred	3.7%	3.6%	1.8%	0.0%
Latest Year Incurred	1.1%	1.3%	0.8%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	11.2%	4.0%	2.2%	0.0%
3-Year Avg. Paid	1.0%	2.8%	2.3%	0.0%
Latest Year Paid	2.1%	2.5%	1.5%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	2.1%	2.5%	1.5%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	0.7%	1.2%	0.8%	0.0%
		Medi	cal	
		Based on Experience Evalu	uated as of (in months):	
_	<u>15</u>	<u>27</u>	<u>39</u>	Current
3-Year Avg. Incurred	0.229	0.222	0.215	0.206
Latest Year Incurred	0.213	0.211	0.211	0.206
Latest Yr. Inc. Adj. for Case Reserves	0.232	0.221	0.212	0.206
3-Year Avg. Paid	0.218	0.218	0.212	0.206
Latest Year Paid	0.213	0.215	0.211	0.206
Reform-Adj. Paid <sup>[2]</sup>	0.213	0.215	0.211	0.206
Latest Yr. Pd. Adj. for Settlement [3]	0.212	0.214	0.209	0.206
_		Difference from Actual	51-Month Loss Ratio	
	<u>15</u>	<u>27</u>	<u>39</u>	<u>Current</u>
3-Year Avg. Incurred	11.5%	7.9%	4.6%	0.0%
Latest Year Incurred	3.7%	2.7%	2.6%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	13.0%	7.6%	3.0%	0.0%
3-Year Avg. Paid	6.0%	6.0%	3.2%	0.0%
Latest Year Paid	3.8%	4.7%	2.4%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	3.8%	4.7%	2.4%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	3.0%	3.9%	1.9%	0.0%

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

<sup>[2]</sup> The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160.

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

### Comparison of Projected Loss Ratios as of March 31, 2019 Accident Year 2016 Projected to 39 Months[1]

### Indemnity

Methodology	Based o	on Experience Evaluated as of (in months):	
	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	0.161	0.159	0.156
Latest Year Incurred	0.163	0.161	0.156
Latest Yr. Inc. Adj. for Case Reserves	0.169	0.160	0.156
3-Year Avg. Paid	0.161	0.159	0.156
Latest Year Paid	0.165	0.160	0.156
Reform-Adj. Paid <sup>[2]</sup>	0.165	0.160	0.156
Latest Yr. Pd. Adj. for Settlement [3]	0.162	0.159	0.156
	Diffe	erence from Actual 39-Month Loss Ratio	
	<u>15</u>	<u>27</u>	<u>Current</u>
3-Year Avg. Incurred	3.2%	2.3%	0.0%
Latest Year Incurred	4.7%	3.1%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	8.3%	2.4%	0.0%
3-Year Avg. Paid	3.6%	2.1%	0.0%
Latest Year Paid	5.8%	2.9%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	5.8%	2.9%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	4.2%	1.8%	0.0%
		Medical	
	Based o	on Experience Evaluated as of (in months):	
	<u>15</u>	<u>27</u>	Current
3-Year Avg. Incurred	0.199	0.193	0.185
Latest Year Incurred	0.197	0.193	0.185
Latest Yr. Inc. Adj. for Case Reserves	0.203	0.196	0.185
3-Year Avg. Paid	0.200	0.193	0.185
Latest Year Paid	0.201	0.192	0.185
Reform-Adj. Paid <sup>[2]</sup>	0.201	0.192	0.185
Latest Yr. Pd. Adj. for Settlement [3]	0.199	0.191	0.185
	Diffe	erence from Actual 39-Month Loss Ratio	
	<u>15</u>	<u>27</u>	Current
3-Year Avg. Incurred	7.6%	4.1%	0.0%
Latest Year Incurred	6.2%	4.0%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	9.5%	5.5%	0.0%
3-Year Avg. Paid	7.9%	4.1%	0.0%
Latest Year Paid	8.2%	3.7%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	8.2%	3.7%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	7.4%	3.1%	0.0%

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

<sup>[2]</sup> The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160.

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

### Comparison of Projected Loss Ratios as of March 31, 2019 Accident Year 2017 Projected to 27 Months[1]

### Indemnity

Methodology	Based on Experience Evaluated as of (in mo	nths):
		Current
3-Year Avg. Incurred	0.141	0.137
Latest Year Incurred	0.139	0.137
Latest Yr. Inc. Adj. for Case Reserves	0.141	0.137
3-Year Avg. Paid	0.141	0.137
Latest Year Paid	0.138	0.137
Reform-Adj. Paid <sup>[2]</sup>	0.138	0.137
Latest Yr. Pd. Adj. for Settlement [3]	0.137	0.137
	Difference from Actual 27-Month Loss Ra	atio
	<u>15</u>	Current
3-Year Avg. Incurred	2.4%	0.0%
Latest Year Incurred	1.5%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	2.6%	0.0%
3-Year Avg. Paid	2.6%	0.0%
Latest Year Paid	0.9%	0.0%
Reform-Adj. Paid [2]	0.9%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	-0.1%	0.0%
	Medical	
	Based on Experience Evaluated as of (in mo	nths):
	<u>15</u>	Current
3-Year Avg. Incurred	0.183	0.176
Latest Year Incurred	0.180	0.176
Latest Yr. Inc. Adj. for Case Reserves	0.177	0.176
3-Year Avg. Paid	0.185	0.176
Latest Year Paid	0.180	0.176
Reform-Adj. Paid <sup>[2]</sup>	0.180	0.176
Latest Yr. Pd. Adj. for Settlement [3]	0.180	0.176
	Difference from Actual 27-Month Loss Ra	atio
		Current
3-Year Avg. Incurred	4.3%	0.0%
Latest Year Incurred	2.5%	0.0%
Latest Yr. Inc. Adj. for Case Reserves	1.0%	0.0%
3-Year Avg. Paid	5.1%	0.0%
Latest Year Paid	2.5%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	2.5%	0.0%
Latest Yr. Pd. Adj. for Settlement [3]	2.3%	0.0%

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

<sup>[2]</sup> The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160.

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

# Average Incurred Indemnity Loss per Reported Indemnity Claim As of March 31, 2019

Accident				Evalu	ıated as o	it (in mont	hs):			
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
1994										12,560
1995									14,289	14,493
1996								16,238	16,570	16,680
1997							18,293	18,729	18,876	18,910
1998						19,845	20,552	20,868	20,882	20,982
1999					20,612	21,705	22,189	22,328	22,514	22,640
2000				20,162	22,030	22,807	23,064	23,300	23,555	23,709
2001			17,806	21,927	23,875	24,414	24,904	25,383	25,744	25,942
2002		11,447	18,072	21,244	22,220	22,821	23,471	23,924	24,175	24,433
2003	9,101	12,127	18,205	20,325	21,642	22,689	23,403	23,855	24,354	24,780
2004	8,689	11,664	14,389	16,424	17,477	18,212	18,915	19,429	19,932	20,238
2005	9,449	8,766	12,089	14,078	15,270	16,216	17,007	17,662	18,051	18,338
2006	6,908	8,786	12,998	15,319	16,770	17,949	18,839	19,369	19,736	19,968
2007 2008	6,687 6,446	9,234 9,839	13,913 15,031	16,721 18,420	18,362 20,364	19,523 21,565	20,359 22,412	20,931 22,932	21,385 23,316	21,622 23,543
2009	6,411	10,192	15,763	19,004	21,190	22,418	23,289	23,749	24,099	24,402
2010	6,205	10,132	15,705	18,871	20,728	21,878	22,629	23,102	23,463	23,717
2010	6,105	10,130	15,911	18,842	20,720	21,571	22,186	22,661	22,995	20,111
2012	6,201	10,643	15,675	18,550	20,085	21,149	21,784	22,238	22,000	
2013	6,556	10,718	15,584	18,266	19,768	20,597	21,176	,		
2014	6,240	10,750	15,831	18,934	20,563	21,482	, -			
2015	6,875	11,246	16,564	19,397	20,919	, -				
2016	6,815	11,321	16,381	19,015						
2017	6,964	11,548	16,706							
2018	7,247	12,105								
2019	7,348									
Accident					Ann	ual Chan	ge			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
1995										15.4%
1996									16.0%	15.1%
1997								15.3%	13.9%	13.4%
1998							12.3%	11.4%	10.6%	11.0%
1999						9.4%	8.0%	7.0%	7.8%	7.9%
2000					6.9%	5.1%	3.9%	4.4%	4.6%	4.7%
2001				8.8%	8.4%					
2002			4 = 07			7.0%	8.0%	8.9%	9.3%	9.4%
2003		5.00/	1.5%	-3.1%	-6.9%	-6.5%	-5.8%	-5.7%	9.3% -6.1%	9.4% -5.8%
	4.50/	5.9%	0.7%	-3.1% -4.3%	-6.9% -2.6%	-6.5% -0.6%	-5.8% -0.3%	-5.7% -0.3%	9.3% -6.1% 0.7%	9.4% -5.8% 1.4%
2004	-4.5%	-3.8%	0.7% -21.0%	-3.1% -4.3% -19.2%	-6.9% -2.6% -19.2%	-6.5% -0.6% -19.7%	-5.8% -0.3% -19.2%	-5.7% -0.3% -18.6%	9.3% -6.1% 0.7% -18.2%	9.4% -5.8% 1.4% -18.3%
2005	8.7%	-3.8% -24.8%	0.7% -21.0% -16.0%	-3.1% -4.3% -19.2% -14.3%	-6.9% -2.6% -19.2% -12.6%	-6.5% -0.6% -19.7% -11.0%	-5.8% -0.3% -19.2% -10.1%	-5.7% -0.3% -18.6% -9.1%	9.3% -6.1% 0.7% -18.2% -9.4%	9.4% -5.8% 1.4% -18.3% -9.4%
2005 2006	8.7% -26.9%	-3.8% -24.8% 0.2%	0.7% -21.0% -16.0% 7.5%	-3.1% -4.3% -19.2% -14.3% 8.8%	-6.9% -2.6% -19.2% -12.6% 9.8%	-6.5% -0.6% -19.7% -11.0% 10.7%	-5.8% -0.3% -19.2% -10.1% 10.8%	-5.7% -0.3% -18.6% -9.1% 9.7%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9%
2005 2006 2007	8.7% -26.9% -3.2%	-3.8% -24.8% 0.2% 5.1%	0.7% -21.0% -16.0% 7.5% 7.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3%
2005 2006 2007 2008	8.7% -26.9% -3.2% -3.6%	-3.8% -24.8% 0.2% 5.1% 6.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9%
2005 2006 2007 2008 2009	8.7% -26.9% -3.2% -3.6% -0.5%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008	8.7% -26.9% -3.2% -3.6%	-3.8% -24.8% 0.2% 5.1% 6.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2% -0.7%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9%
2005 2006 2007 2008 2009 2010	8.7% -26.9% -3.2% -3.6% -0.5% -3.2%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2% -0.7% -0.2%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 1.6%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2% -0.7% -0.2% -1.5%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 1.6% 5.7%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% 3.2% -0.7% -0.2% -1.5%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6% 1.6%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 3.7%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6% 1.6% 4.6%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 3.7% 2.4%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9% 2.2% 4.1%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% -1.5% -0.6% 1.6% 4.6% -1.1%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 3.7% 2.4%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9% 2.2%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7% 2.0%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% -1.5% -0.6% 1.6% 4.6% -1.1%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 3.7% 2.4%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9% 2.2% 4.1% 1.4%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7% 2.0% 4.8%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6% 4.6% -1.1% 2.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 2.4% -2.0%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 4.0% -2.4% -1.4% -2.0% -2.6% 4.3%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8% -2.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6% -2.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.9% 3.6% -2.8%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9% 2.2% 4.1%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7% 2.0%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% -1.5% -0.6% 1.6% 4.6% -1.1%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 3.7% 2.4% -2.0%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -1.6% 4.0% 1.7%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6% 4.3%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 8.9% 3.6%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% 10.2% -0.9% 2.2% 4.1% 1.4%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7% 2.0% 4.8%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6% 4.6% -1.1% 2.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% 10.2% -0.7% -0.2% -1.5% -1.5% 2.4% -2.0%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -1.6% 4.0% 1.7%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 4.0% -2.4% -1.4% -2.0% -2.6% 4.3%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8% -2.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6% -2.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 8.3% 3.6% -2.8%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 1.6% -4.8% -0.9% -2.2% 4.1% 1.4%	-3.8% -24.8% 0.2% 5.1% 6.6% 3.6% -0.6% 4.7% 0.3% 4.6% 0.7% 2.0% 4.8%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% -1.5% -0.6% 4.6% -1.1% 2.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% -0.7% -0.2% -1.5% -1.5% -2.4% -2.0%	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 10.9% 4.1% -2.2% -0.5% -1.6% 4.0% 1.7%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 4.0% -2.4% -1.4% -2.0% -2.6% 4.3%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8% -2.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6% -2.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 3.6% -2.8%
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	8.7% -26.9% -3.2% -3.6% -0.5% -3.2% -1.6% 5.7% -4.8% -0.2% -0.9% 2.2% 4.1% 1.4% -1.2% 0.195	-3.8% -24.8% 0.2% 5.1% 6.6% -0.6% 4.7% 0.3% 0.7% 0.3% 4.6% 0.7% 2.0% 4.8% 0.6%	0.7% -21.0% -16.0% 7.5% 7.0% 8.0% 4.9% -2.1% 3.1% -1.5% -0.6% 4.6% -1.1% 2.0%	-3.1% -4.3% -19.2% -14.3% 8.8% 9.2% -0.7% -0.2% -1.5% -1.5% -2.4% -2.0%  Ani -0.2% 0.005	-6.9% -2.6% -19.2% -12.6% 9.8% 9.5% 4.1% -2.2% -0.5% -2.6% -1.6% 4.0% 1.7%	-6.5% -0.6% -19.7% -11.0% 10.7% 8.8% 10.5% 4.0% -2.4% -1.4% -2.0% -2.6% 4.3%	-5.8% -0.3% -19.2% -10.1% 10.8% 8.1% 10.1% 3.9% -2.8% -2.0% -1.8% -2.8% -2.8%	-5.7% -0.3% -18.6% -9.1% 9.7% 8.1% 9.6% 3.6% -2.7% -1.9% -1.9%	9.3% -6.1% 0.7% -18.2% -9.4% 9.3% 8.4% 9.0% 3.4% -2.6% -2.0%	9.4% -5.8% 1.4% -18.3% -9.4% 8.9% 3.6% -2.8% -2.8%

<sup>\*</sup>Trend is based on an exponential distribution.

# Average Incurred Medical Loss per Reported Claim As of March 31, 2019

Accident					Evaluated	as of (in	months):			
Year	<u>3</u>	<u>15</u>	27	39	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>
1998										6,166
1999									6,982	7,280
2000								7,639	8,013	8,184
2001							8,585	8,993	9,352	9,690
2002						8,566	9,074	9,425	9,756	10,043
2003					7,916	8,393	8,814	9,193	9,572	9,915
2004				5,914	6,477	6,962	7,354	7,806	8,106	8,362
2005			5,016	5,708	6,123	6,601	7,083	7,498	7,796	7,987
2006		4,248	5,494	6,328	6,899	7,408	7,864	8,241	8,523	8,667
2007	4,071	4,712	6,157	7,112	7,892	8,501	9,077	9,411	9,671	9,810
2008	4,171	5,171	6,841	8,053	8,965	9,725	10,244	10,589	10,794	10,888
2009	4,387	5,703	7,822	9,128	10,292	11,037	11,542	11,821	11,967	12,039
2010	4,459	5,932	8,105	9,712	10,747	11,440	11,825	12,067	12,192	12,323
2011	4,818	6,409	8,855	10,282	11,241	11,870	12,138	12,309	12,426	
2012	4,840	6,564	8,715	9,955	10,715	11,223	11,486	11,646		
2013	5,229	6,614	8,611	9,599	10,285	10,589	10,826			
2014	4,837	6,403	8,171	9,208	9,764	10,074				
2015	4,961	6,532	8,263	9,180	9,636					
2016	4,985	6,655	8,223	8,936						
2017	5,049	6,529	7,971							
2018	5,319	6,829								
2019	5,421									
Accident					Ann	ual Chan	ge			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
1999										18.1%
2000									14.8%	12.4%
2001								17.7%	16.7%	18.4%
2002							5.7%	4.8%	4.3%	3.6%
2003						-2.0%	-2.9%	-2.5%	-1.9%	-1.3%
2004					-18.2%	-17.0%	-16.6%	-15.1%	-15.3%	-15.7%
2005				-3.5%	-5.5%	-5.2%	-3.7%	-3.9%	-3.8%	-4.5%
2006			9.5%	10.9%	12.7%	12.2%	11.0%	9.9%	9.3%	8.5%
2007		10.9%	12.1%	12.4%	14.4%	14.8%	15.4%	14.2%	13.5%	13.2%
2008	2.4%	9.7%	11.1%	13.2%	13.6%	14.4%	12.9%	12.5%	11.6%	11.0%
2009	5.2%	10.3%	14.3%	13.3%	14.8%	13.5%	12.7%	11.6%	10.9%	10.6%
2010	1.6%	4.0%	3.6%	6.4%	4.4%	3.6%	2.4%	2.1%	1.9%	2.4%
2011	8.1%	8.0%	9.3%	5.9%	4.6%	3.8%	2.6%	2.0%	1.9%	
2012	0.5%	2.4%	-1.6%	-3.2%	-4.7%	-5.4%	-5.4%	-5.4%		
2013	8.0%	0.8%	-1.2%	-3.6%	-4.0%	-5.6%	-5.7%			
2014	-7.5%	-3.2%	-5.1%	-4.1%	-5.1%	-4.9%				
2015	2.6%	2.0%	1.1%	-0.3%	-1.3%					
2016	0.5%	1.9%	-0.5%	-2.7%						
2017	1.3%	-1.9%	-3.1%							
2018	5.4%	4.6%								
2019	1.9%									
					nual Tren					
All-Year	2.2%	3.4%	3.8%	4.4%	4.2%	3.9%	3.6%	3.7%	3.9%	4.1%
$R^2$	0.846	0.752	0.612	0.651	0.603	0.562	0.566	0.628	0.649	0.633
5-Year	2.5%	1.3%	-1.5%	-2.6%	-3.9%	-3.6%	-1.6%	2.3%	6.4%	9.5%
$R^2$	0.900	0.700	0.702	0.940	0.975	0.803	0.341	0.392	0.877	0.960

<sup>\*</sup>Trend is based on an exponential distribution.

# Average Indemnity Case Outstanding per Open Indemnity Claim As of March 31, 2019

Accident				Eval	uated as o	of (in mon	ths):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	<u>111</u>
1994										27,174
1995									29,276	32,423
1996								30,970	34,365	33,827
1997							29,077	31,920	32,178	32,879
1998						27,833	31,043	31,948	31,860	33,180
1999					24,846	27,324	27,920	28,206	29,107	30,533
2000			18,014	22,062	23,922	24,219	23,686	24,517	25,203	26,064
2001 2002		12,427	18,014	20,424 17,997	20,490 16,678	19,833 16,350	19,905 17,479	21,265 18,634	22,997 19,418	23,854 21,215
2002	8,872	12,773	16,715	15,161	15,429	16,959	18,898	21,007	24,181	27,794
2004	8,466	12,089	12,490	13,234	14,276	15,958	18,112	20,648	23,323	24,550
2005	9,116	8,128	10,158	11,558	12,888	15,266	18,297	21,696	23,004	25,650
2006	6,516	7,843	11,195	13,087	15,202	18,328	20,918	22,383	25,241	26,808
2007	6,142	8,258	11,800	14,332	16,499	18,501	20,552	23,838	27,004	29,403
2008	5,868	8,572	12,307	15,131	16,855	18,302	21,262	23,834	26,943	30,735
2009	5,819	8,958	12,988	14,833	17,054	19,167	21,527	23,680	26,121	29,008
2010	5,620	8,959	12,553	14,738	16,417	18,202	20,409	22,576	25,348	28,808
2011	5,539	9,646	13,199	15,248	17,478	19,188	21,071	23,597	26,036	
2012	5,651	9,547	12,939	14,952	16,560	18,907	21,214	24,828		
2013 2014	6,099 5,679	9,578 9,649	13,102 13,310	14,408 15,352	15,871 17,709	17,707 20,560	20,656			
2014	6,382	10,209	14,435	16,795	19,662	20,500				
2016	6,280	10,338	14,716	17,292	10,002					
2017	6,443	10,983	16,064	11,202						
2018	6,734	11,573	,							
2019	6,815									
Accident <u>Year</u>	3	<u>15</u>	<u>27</u>	39	Anr 51	nual Chan <u>63</u>	ige <u>75</u>	87	99	<u>111</u>
	<u> </u>	10	<u> </u>	<u>00</u>	<u>01</u>	<u>00</u>	10	<u>01</u>	<u>00</u>	
1995 1996									17.4%	19.3% 4.3%
1997								3.1%	-6.4%	-2.8%
1998							6.8%	0.1%	-1.0%	0.9%
1999						-1.8%	-10.1%	-11.7%	-8.6%	-8.0%
2000					-3.7%	-11.4%	-15.2%	-13.1%	-13.4%	-14.6%
2001				-7.4%	-14.3%	-18.1%	-16.0%	-13.3%	-8.8%	-8.5%
2002			0.0%	-11.9%	-18.6%	-17.6%	-12.2%	-12.4%	-15.6%	-11.1%
2003		2.8%	-7.2%	-15.8%	-7.5%	3.7%	8.1%	12.7%	24.5%	31.0%
2004	-4.6%	-5.4%	-25.3%	-12.7%	-7.5%	-5.9%	-4.2%	-1.7%	-3.5%	-11.7%
2005	7.7%	-32.8%	-18.7%	-12.7%	-9.7%	-4.3%	1.0%	5.1%	-1.4%	4.5%
2006 2007	-28.5% -5.7%	-3.5% 5.3%	10.2% 5.4%	13.2% 9.5%	18.0% 8.5%	20.1% 0.9%	14.3% -1.7%	3.2% 6.5%	9.7% 7.0%	4.5% 9.7%
2008	-4.5%	3.8%	4.3%	5.6%	2.2%	-1.1%	3.5%	0.0%	-0.2%	4.5%
2009	-0.8%	4.5%	5.5%	-2.0%	1.2%	4.7%	1.2%	-0.6%	-3.0%	-5.6%
2010	-3.4%	0.0%	-3.4%	-0.6%	-3.7%	-5.0%	-5.2%	-4.7%	-3.0%	-0.7%
2011	-1.5%	7.7%	5.1%	3.5%	6.5%	5.4%	3.2%	4.5%	2.7%	
2012	2.0%	-1.0%	-2.0%	-1.9%	-5.3%	-1.5%	0.7%	5.2%		
2013	7.9%	0.3%	1.3%	-3.6%	-4.2%	-6.3%	-2.6%			
2014	-6.9%	0.7%	1.6%	6.6%	11.6%	16.1%				
2015	12.4%	5.8%	8.4%	9.4%	11.0%					
2016	-1.6%	1.3%	1.9%	3.0%						
2017 2018	2.6% 4.5%	6.2% 5.4%	9.2%							
2018	4.5% 1.2%	5.470								
2010	1.2/0									
All 27	4 407	0.00/	0.00/		nual Tren		4.00/	4 = 2 /	4.00/	0 =0:
All-Year	-1.4%	0.0%	-0.3%	-0.7%	-1.0%	-1.4%	-1.6%	-1.5%	-1.3%	-0.7%
$R^2$	0.208	0.000	0.009	0.053	0.085	0.180	0.249	0.240	0.208	0.071
5-Year	2.0%	4.5%	5.2%	4.5%	3.1%	1.6%	-0.4%	0.8%	-1.3%	1.3%
R <sup>2</sup>	0.809	0.972	0.948	0.817	0.350	0.205	0.107	0.134	0.644	0.174
	0.000	0.01 E	0.010	0.017	0.000	0.200	0.107	0.107	0.017	J.11 T

<sup>\*</sup>Trend is based on an exponential distribution.

# Average Medical Case Outstanding per Open Indemnity Claim As of March 31, 2019

Accident		15	07		Evaluated			^-		444
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>
1994										43,400
1995									43,790	54,588
1996								34,652	45,576	50,490
1997							30,278	41,337	48,428	54,631
1998						27,998	38,607	44,283	50,524	59,901
1999					21,013	27,994	33,522	39,602	48,569	64,696
2000			44.000	17,726	22,876	27,777	31,585	38,625	50,916	59,001
2001		40.070	14,282	17,399	20,248	23,408	28,384	36,867	46,855	59,193
2002	40.007	12,673	14,969	16,571	17,970	21,232	28,231	35,500	44,448	53,911
2003	12,327	12,401	14,326	15,326	18,436 20,118	23,244	30,526	38,881 42,532	48,518	61,114
2004	12,042 13,993	12,398 12,452	12,993 14,713	15,525 18,597	20,116	26,420 27,500	32,357 35,880	46,283	51,044 53,907	60,069 64,489
2005 2006	11,400	12,452	16,785	21,471	25,879	32,480	39,232	47,447	58,970	66,730
2007	12,419	13,866	18,207	22,472	28,322	34,745	43,367	52,356	62,159	72,534
2008	12,436	14,517	18,739	23,734	28,605	35,576	44,468	53,455	63,594	71,814
2009	12,992	15,169	20,204	24,062	30,365	36,808	43,634	51,932	59,684	67,335
2010	13,026	15,416	19,839	24,693	29,768	35,928	42,220	48,390	54,208	64,225
2011	14,582	16,823	21,792	26,332	32,088	39,114	43,933	49,486	57,166	0.,220
2012	14,644	17,118	21,070	24,982	29,430	34,974	41,038	47,896	,	
2013	15,264	16,529	20,796	23,624	28,382	33,115	39,894	,		
2014	13,515	16,097	19,526	22,941	27,348	32,596				
2015	14,460	16,813	20,541	25,438	30,818					
2016	14,217	17,278	21,427	26,004						
2017	14,299	18,055	22,596							
2018	15,909	18,878								
2019	15,722									
						1.01				
Accident Year	3	<u>15</u>	<u>27</u>	39	51	nual Chan <u>63</u>	ge <u>75</u>	87	99	<u>111</u>
	<u> </u>	10	<u> 21</u>	<u>55</u>	<u>51</u>	00	<u>10</u>	<u>07</u>	33	
1995									4.40/	25.8%
1996								40.00/	4.1%	-7.5%
1997							07.50/	19.3%	6.3%	8.2%
1998						0.00/	27.5%	7.1%	4.3%	9.6%
1999 2000					8.9%	0.0% -0.8%	-13.2% -5.8%	-10.6% -2.5%	-3.9% 4.8%	8.0% -8.8%
2000				-1.8%	-11.5%	-15.7%	-10.1%	-4.6%	-8.0%	0.3%
2002			4.8%	-4.8%	-11.2%	-9.3%	-0.5%	-3.7%	-5.1%	-8.9%
2002		-2.1%	-4.3%	-7.5%	2.6%	9.5%	8.1%	9.5%	9.2%	13.4%
2004	-2.3%	0.0%	-9.3%	1.3%	9.1%	13.7%	6.0%	9.4%	5.2%	-1.7%
2005	16.2%	0.4%	13.2%	19.8%	9.6%	4.1%	10.9%	8.8%	5.6%	7.4%
2006	-18.5%	0.0%	14.1%	15.5%	17.3%	18.1%	9.3%	2.5%	9.4%	3.5%
2007	8.9%	11.3%	8.5%	4.7%	9.4%	7.0%	10.5%	10.3%	5.4%	8.7%
2008	0.1%	4.7%	2.9%	5.6%	1.0%	2.4%	2.5%	2.1%	2.3%	-1.0%
2009	4.5%	4.5%	7.8%	1.4%	6.2%	3.5%	-1.9%	-2.9%	-6.1%	-6.2%
2010	0.3%	1.6%	-1.8%	2.6%	-2.0%	-2.4%	-3.2%	-6.8%	-9.2%	-4.6%
2011	11.9%	9.1%	9.8%	6.6%	7.8%	8.9%	4.1%	2.3%	5.5%	
2012	0.4%	1.8%	-3.3%	-5.1%	-8.3%	-10.6%	-6.6%	-3.2%		
2013	4.2%	-3.4%	-1.3%	-5.4%	-3.6%	-5.3%	-2.8%			
2014	-11.5%	-2.6%	-6.1%	-2.9%	-3.6%	-1.6%				
2015	7.0%	4.4%	5.2%	10.9%	12.7%					
2016	-1.7%	2.8%	4.3%	2.2%						
2017	0.6%	4.5%	5.5%							
2018	11.3%	4.6%								
2019	-1.2%									
				An	nual Tren	d*				
All-Year	1.6%	2.8%	3.2%	3.3%	3.2%	2.6%	2.4%	2.2%	1.9%	2.1%
$R^2$	0.658	0.912	0.806	0.737	0.676	0.528	0.541	0.607	0.650	0.668
E V	2.00/	4.00/	0.60/	1.00/	1 50/	2 = 0/	2 40/	0.60/	2 20/	4 50/
5-Year R <sup>2</sup>	2.8%	4.0%	2.6%	1.6%	-1.5% 0.147	-3.5% 0.617	-2.1%	-2.6%	-3.2% 0.647	-1.5%
ĸ	0.654	0.994	0.577	0.217	0.147	0.617	0.648	0.810	0.647	0.214

<sup>\*</sup>Trend is based on an exponential distribution.

# Average Paid Indemnity Loss per Reported Indemnity Claim As of March 31, 2019

Accident				Evalu	uated as c	of (in mon	ths):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>
1994										11,716
1995									13,087	13,344
1996							4= 004	14,437	14,909	15,247
1997						10.015	15,821	16,577	17,043	17,400
1998					15 700	16,245 17,741	17,423	18,270	18,781	19,220
1999 2000				13,417	15,788 16,689	18,724	19,055 20,077	19,878 20,923	20,491 21,623	20,963 22,097
2000			9,124	14,499	18,361	20,461	21,940	22,943	23,643	24,171
2002		3,596	9,109	14,437	17,621	19,645	20,935	21,842	22,462	22,884
2003	784	3,725	9,503	14,405	17,493	19,411	20,693	21,521	22,170	22,753
2004	760	3,754	8,034	11,671	13,911	15,330	16,367	17,117	17,842	18,457
2005	835	3,442	7,290	10,215	12,254	13,504	14,484	15,293	16,033	16,646
2006	769	3,632	7,798	11,015	13,113	14,674	15,910	16,892	17,635	18,189
2007	883	3,873	8,383	11,877	14,294	16,058	17,382	18,422	19,183	19,790
2008	910	4,224	9,050	13,045	15,953	17,989	19,426	20,439	21,227	21,721
2009	926	4,210	9,209	13,472	16,532	18,678	20,195	21,292	22,090	22,721
2010	901	4,182	9,164	13,493	16,574	18,593	20,033	21,051	21,782	22,305
2011	967	4,241	9,397	13,544	16,410	18,381	19,722	20,707	21,473	
2012 2013	958 965	4,342 4,334	9,428 9,397	13,556 13,659	16,332 16,441	18,226 18,166	19,540 19,274	20,429		
2013	933	4,360	9,700	14,232	17,124	18,902	13,214			
2015	969	4,550	10,148	14,681	17,533	10,002				
2016	992	4,725	10,229	14,603	11,000					
2017	993	4,787	10,430	,						
2018	1,078	5,026								
2019	1,112									
A = = : =   = = = +					Λ	ouel Ohen				
Accident_ <u>Year</u>	<u>3</u>	<u>15</u>	27	39	51	nual Chan <u>63</u>	ge <u>75</u>	87	99	111
	<u> </u>	10	21	<u>00</u>	<u>01</u>	<u>00</u>	10	<u>01</u>	<u>55</u>	
1995									12 00/	13.9%
1996 1997								14.8%	13.9% 14.3%	14.3% 14.1%
1998							10.1%	10.2%	10.2%	10.5%
1999						9.2%	9.4%	8.8%	9.1%	9.1%
2000					5.7%	5.5%	5.4%	5.3%	5.5%	5.4%
2001				8.1%	10.0%	9.3%	9.3%	9.7%	9.3%	9.4%
2002			-0.2%	-0.4%	-4.0%	-4.0%	-4.6%	-4.8%	-5.0%	-5.3%
2003		3.6%	4.3%	-0.2%	-0.7%	-1.2%	-1.2%	-1.5%	-1.3%	-0.6%
2004	-3.0%	0.8%	-15.5%	-19.0%	-20.5%	-21.0%	-20.9%	-20.5%	-19.5%	-18.9%
2005	9.9%	-8.3%	-9.3%	-12.5%	-11.9%	-11.9%	-11.5%	-10.7%	-10.1%	-9.8%
2006	-7.9%	5.5%	7.0%	7.8%	7.0%	8.7%	9.8%	10.5%	10.0%	9.3%
2007	14.9%	6.6%	7.5%	7.8%	9.0%	9.4%	9.3%	9.1%	8.8%	8.8%
2008 2009	3.0% 1.8%	9.1% -0.3%	8.0% 1.8%	9.8% 3.3%	11.6% 3.6%	12.0% 3.8%	11.8% 4.0%	11.0% 4.2%	10.7% 4.1%	9.8% 4.6%
2010	-2.7%	-0.3%	-0.5%	0.2%	0.3%	-0.5%	-0.8%	-1.1%	-1.4%	-1.8%
2011	7.2%	1.4%	2.5%	0.4%	-1.0%		-1.6%	-1.6%	-1.4%	1.070
2012	-0.9%	2.4%	0.3%	0.1%	-0.5%	-0.8%	-0.9%	-1.3%		
2013	0.8%	-0.2%	-0.3%	0.8%	0.7%	-0.3%	-1.4%			
2014	-3.3%	0.6%	3.2%	4.2%	4.2%	4.1%				
2015	3.9%	4.4%	4.6%	3.2%	2.4%					
2016	2.4%	3.9%	0.8%	-0.5%						
2017	0.1%	1.3%	2.0%							
2018	8.6%	5.0%								
2019	3.2%									
					nual Tren					
All-Year	2.0%	2.1%	1.2%	0.6%	0.3%	0.2%	0.4%	1.0%	1.7%	2.6%
$R^2$	0.866	0.899	0.419	0.078	0.013	0.009	0.030	0.130	0.268	0.389
5-Year	3.7%	3.4%	2.7%	2.2%	1.8%	0.2%	-1.2%	-0.3%	2.5%	5.6%
R <sup>2</sup>	0.892	0.976	0.943	0.893	0.812	0.043	0.992	0.062	0.504	0.853
- •	0.502	0.010	0.010	0.000	0.012	0.010	0.002	0.002	0.007	0.000

<sup>\*</sup>Trend is based on an exponential distribution.

# Average Paid Medical Loss per Indemnity Claim As of March 31, 2019

Accident				1	Evaluated	l as of (in	months):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
2001										22,881
2002									22,288	23,112
2003								20,365	21,420	22,342
2003							17,180	18,434	19,563	20,594
2004						16,000	17,180	18,871	20,224	21,366
2005					15,782	17,970	19,816	21,360	22,681	23,654
2006				14 500	17,704			24,212	25,525	26,534
2007			44 400	14,502	17,704	20,172	22,309	,		
		0.470	11,436	15,896	,	22,550	24,909	26,653	27,966	28,905
2009	040	6,176	11,874	16,799	20,881	24,181	26,559	28,260	29,471	30,367
2010	919	6,107	11,808	17,003	21,304	24,227	26,390	28,010	29,116	29,916
2011	917	5,526	11,270	16,209	19,917	22,651	24,619	26,019	27,032	
2012	775	5,544	10,979	15,522	18,903	21,333	22,965	24,162		
2013	835	5,395	10,486	14,768	17,894	19,897	21,298			
2014	946	5,219	10,235	14,425	17,337	19,227				
2015	1,006	5,221	10,353	14,334	17,157					
2016	924	5,526	10,390	14,134						
2017	1,198	5,680	10,614							
2018	1,129	5,831								
2019	1,227									
Accident					Anr	nual Chan	ige			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	111
2002	_									1.0%
2002									-3.9%	-3.3%
								0.50/		
2004							0.50/	-9.5%	-8.7%	-7.8%
2005						40.00/	2.5%	2.4%	3.4%	3.7%
2006					40.00/	12.3%	12.5%	13.2%	12.1%	10.7%
2007				0.00/	12.2%	12.3%	12.6%	13.3%	12.5%	12.2%
2008			0.00/	9.6%	10.7%	11.8%	11.7%	10.1%	9.6%	8.9%
2009			3.8%	5.7%	6.6%	7.2%	6.6%	6.0%	5.4%	5.1%
2010**	0.00/	-1.1%	-0.6%	1.2%	2.0%	0.2%	-0.6%	-0.9%	-1.2%	-1.5%
2011**	-0.2%	-9.5%	-4.6%	-4.7%	-6.5%	-6.5%	-6.7%	-7.1%	-7.2%	
2012**	-15.5%	0.3%	-2.6%	-4.2%	-5.1%	-5.8%	-6.7%	-7.1%		
2013	7.7%	-2.7%	-4.5%	-4.9%	-5.3%	-6.7%	-7.3%			
2014	13.3%	-3.3%	-2.4%	-2.3%	-3.1%	-3.4%				
2015	6.3%	0.0%	1.2%	-0.6%	-1.0%					
2016	-8.1%	5.8%	0.4%	-1.4%						
2017	29.6%	2.8%	2.2%							
2018	-5.8%	2.7%								
2019	8.7%									
				An	nual Tren	d*				
All-Year	4.1%	-0.7%	-1.6%	-1.3%	-0.1%	1.6%	3.4%	4.2%	4.3%	4.0%
$R^2$	0.643	0.152	0.724	0.336	0.002	0.135	0.407	0.623	0.704	0.685
5-Year	6.1%	3.1%	0.4%	-2.1%	-3.8%	-5.7%	-5.6%	-2.7%	1.6%	6.2%
R <sup>2</sup>	0.617	0.944	0.476	0.874	0.944	0.990	0.950	0.484	0.176	0.270
1.	0.017	0.544	0.200	0.074	0.544	0.550	0.550	0.404	0.170	0.031

<sup>\*</sup>Trend is based on an exponential distribution.

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

# Average Paid Medical Loss per Claim\*\* As of March 31, 2019

Accident				Evalu	uated as c	f (in mon	ths):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	75	87	99	<u>111</u>
1998	_	_	_	_	_	_	_	_	_	5,143
									E 0E0	
1999									5,852	6,091
2000								6,387	6,706	6,963
2001							7,148	7,553	7,895	8,197
2002						7,099	7,613	8,011	8,361	8,644
2003					6,157	6,796	7,264	7,667	8,027	8,344
2004				4,145	4,881	5,453	5,917	6,306	6,659	6,984
2005			2,988	3,889	4,620	5,181	5,647	6,021	6,414	6,746
2006		1,865	3,230	4,287	5,099	5,732	6,275	6,722	7,104	7,387
2007	366	2,043	3,637	4,865	5,825	6,570	7,212	7,776	8,167	8,469
2008	413	2,336	4,083	5,487	6,659	7,582	8,318	8,864	9,273	9,573
2009	498	2,506	4,492	6,171	7,551	8,660	9,465	10,036	10,445	10,745
2010	519	2,578	4,729	6,606	8,142	9,192	9,963	10,542	10,944	11,231
2011	521	2,681	5,073	7,026	8,479	9,541	10,297	10,840	11,227	,
2012	527	2,733	5,076	6,933	8,292	9,255	9,904	10,373	,	
2013	551	2,732	4,994	6,791	8,065	8,889	9,453	10,010		
2013	579	2,674	4,886	6,614	7,797	8,557	3,433			
2014	605	2,674		6,542	7,672	0,557				
			4,918		1,012					
2016	581	2,797	4,934	6,476						
2017	690	2,781	4,856							
2018	670	2,894								
2019	723									
Accident					Anr	ual Chan	ae			
Year	<u>3</u>	<u>15</u>	27	39	<u>51</u>	63	<u>75</u>	87	99	<u>111</u>
1999	_				_			_	' <u></u> '	18.4%
									14 60/	14.3%
2000								18.3%	14.6%	
2001							0.50/		17.7%	17.7%
2002						4.00/	6.5%	6.1%	5.9%	5.5%
2003					00.70/	-4.3%	-4.6%	-4.3%	-4.0%	-3.5%
2004				0.00/	-20.7%	-19.8%	-18.6%	-17.8%	-17.0%	-16.3%
2005				-6.2%	-5.3%	-5.0%	-4.6%	-4.5%	-3.7%	-3.4%
2006			8.1%	10.2%	10.4%	10.6%	11.1%	11.6%	10.8%	9.5%
2007		9.5%	12.6%	13.5%	14.2%	14.6%	14.9%	15.7%	15.0%	14.6%
2008	12.7%	14.3%	12.3%	12.8%	14.3%	15.4%	15.3%	14.0%	13.5%	13.0%
2009	20.6%	7.3%	10.0%	12.5%	13.4%	14.2%	13.8%	13.2%	12.6%	12.2%
2010	4.3%	2.9%	5.3%	7.0%	7.8%	6.1%	5.3%	5.0%	4.8%	4.5%
2011	0.3%	4.0%	7.3%	6.4%	4.1%	3.8%	3.4%	2.8%	2.6%	
2012	1.1%	1.9%	0.1%	-1.3%	-2.2%	-3.0%	-3.8%	-4.3%		
2013	4.6%	0.0%	-1.6%	-2.1%	-2.7%	-3.9%	-4.6%			
2014	5.0%	-2.1%	-2.2%	-2.6%	-3.3%	-3.7%				
2015	4.6%	0.1%	0.6%	-1.1%	-1.6%					
2016	-4.0%	4.5%	0.3%	-1.0%						
2017	18.8%	-0.6%	-1.6%							
2018	-3.0%	4.1%								
2019	8.0%									
				۸	nual Train	d*				
All-Year	4.8%	2.9%	4.0%	4.8%	nual Tren 4.7%	4.3%	4.1%	4.2%	4.4%	4.7%
R <sup>2</sup>	0.899	0.726	0.692	0.736	0.666	0.582	0.559	0.603	0.641	0.658
11	0.055	0.720	0.032	0.730	0.000	0.002	0.008	0.003	0.041	0.000
5-Year	5.1%	2.0%	-0.5%	-1.7%	-2.6%	-2.1%	-0.1%	4.0%	8.4%	11.4%
$R^2$	0.740	0.872	0.481	0.962	0.990	0.659	0.001	0.623	0.920	0.974
	-	- "	-							

<sup>\*</sup>Trend is based on an exponential distribution.

<sup>\*\*</sup>All entries reflect the paid cost of medical cost containment programs.

# Average Paid Indemnity Loss per Closed Indemnity Claim\*\* As of March 31, 2019

Accident				Evalı	uated as o	of (in mon	ths)·			
Year	<u>3</u>	<u>15</u>	<u>27</u>	39	<u>51</u>	63	<u>75</u>	<u>87</u>	99	<u>111</u>
1994										10,647
1995									11,553	11,955
1996								12,488	13,041	13,467
1997							13,336	14,278	14,839	15,307
1998						13,179	14,633	15,581	16,352	16,938
1999					12,340	14,431	16,040	17,134	17,904	18,661
2000				8,865	12,497	14,939	16,862	17,940	18,799	19,530
2001		4.045	4,067	9,028	13,565	16,445	17,764	19,096	20,104	20,868
2002	0.50	1,245	3,789	9,221	13,611	15,595	17,165	18,478	19,411	19,926
2003 2004	856 609	1,446 1,733	4,616	10,559 7,692	13,282 10,460	15,594 12,274	17,181 13,530	18,243 14,262	18,879 15,016	19,578 15,796
2004	526	1,733	4,693 3,472	6,426	9,005	10,579	11,664	12,522	13,408	14,447
2006	646	1,683	3,940	7,047	9,598	11,365	12,681	13,924	15,117	15,978
2007	885	1,628	4,328	7,583	10,199	12,152	13,849	15,371	16,484	17,447
2008	531	1,935	4,700	8,305	11,286	13,708	15,907	17,319	18,552	19,445
2009	576	1,967	4,898	8,674	11,958	14,815	16,811	18,490	19,674	20,613
2010	581	1,944	5,010	8,925	12,553	15,192	17,217	18,741	19,843	20,636
2011	564	2,179	5,397	9,504	12,911	15,544	17,329	18,708	19,817	
2012	623	2,264	5,948	10,061	13,293	15,614	17,373	18,632		
2013	591	2,609	6,321	10,517	13,682	15,897	17,421			
2014	666	2,694	6,728	11,160	14,533	16,786				
2015 2016	721 704	3,011 3,252	7,370 7,701	11,892 12,017	15,218					
2017	704	3,344	7,701	12,017						
2018	790	3,575	7,000							
2019	850	0,0.0								
Accident	2	<u>15</u>	27	39		nual Chan		87	99	111
<u>Year</u>	<u>3</u>	15	<u> 21</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	07	99	
1995									40.00/	12.3%
1996 1997								14.3%	12.9% 13.8%	12.6% 13.7%
1998							9.7%	9.1%	10.2%	10.7%
1999						9.5%	9.6%	10.0%	9.5%	10.7 %
2000					1.3%	3.5%	5.1%	4.7%	5.0%	4.7%
2001				1.8%	8.5%	10.1%	5.3%	6.4%	6.9%	6.8%
2002			-6.9%	2.1%	0.3%	-5.2%	-3.4%	-3.2%	-3.4%	-4.5%
2003		16.2%	21.8%	14.5%	-2.4%	0.0%	0.1%	-1.3%	-2.7%	-1.7%
2004	-28.8%	19.9%	1.7%	-27.1%	-21.2%	-21.3%	-21.3%	-21.8%	-20.5%	-19.3%
2005	-13.7%	-5.6%	-26.0%	-16.5%	-13.9%	-13.8%	-13.8%	-12.2%	-10.7%	-8.5%
2006	22.8%	2.8%	13.5%	9.7%	6.6%	7.4%	8.7%	11.2%	12.7%	10.6%
2007	37.1%	-3.2%	9.9%	7.6%	6.3%	6.9%	9.2%	10.4%	9.0%	9.2%
2008 2009	-40.0% 8.4%	18.8% 1.6%	8.6% 4.2%	9.5% 4.4%	10.7% 5.9%	12.8% 8.1%	14.9% 5.7%	12.7% 6.8%	12.5% 6.0%	11.5% 6.0%
2009	0.8%	-1.2%	2.3%	2.9%	5.0%	2.5%	2.4%	1.4%	0.0%	0.0%
2011	-2.8%	12.1%	7.7%	6.5%	2.8%	2.3%	0.6%	-0.2%	-0.1%	0.170
2012	10.4%	3.9%	10.2%	5.9%	3.0%	0.5%	0.3%	-0.4%	0	
2013	-5.2%	15.2%	6.3%	4.5%	2.9%	1.8%	0.3%			
2014	12.7%	3.3%	6.4%	6.1%	6.2%	5.6%				
2015	8.3%	11.8%	9.5%	6.6%	4.7%					
2016	-2.4%	8.0%	4.5%	1.1%						
2017	2.9%	2.8%	1.4%							
2018 2019	9.1% 7.6%	6.9%								
2013	7.070									
All M	4.00/	0.007	4 70/		nual Tren		0.70/	4.007	4.00/	0.001
All-Year R <sup>2</sup>	1.0%	6.3%	4.7%	2.1%	0.9%	0.7%	0.7%	1.2%	1.9%	2.6%
ĸ	0.091	0.962	0.845	0.338	0.104	0.061	0.076	0.166	0.296	0.413
5-Year	4.5%	6.9%	5.7%	4.9%	4.3%	2.2%	0.8%	1.6%	4.5%	7.0%
$R^2$	0.795	0.956	0.941	0.967	0.977	0.873	0.778	0.561	0.753	0.916

<sup>\*</sup>Trend is based on an exponential distribution.

<sup>\*\*</sup>Paid indemnity losses used in the severity calculations above represent paid indemnity losses on closed claims only.

### Average Paid Medical Loss per Closed Indemnity Claim\*\*\* As of March 31, 2019

Accident					Evaluated	as of (in	months):			
Year	<u>3</u>	<u>15</u>	27	39	<u>51</u>	63	<u>75</u>	<u>87</u>	99	<u>111</u>
2001										18,651
2002									18,316	19,082
2002								16,325	17,219	18,147
2004							12,907	13,998	15,017	16,166
2005						11,374	12,904	13,966	15,343	17,045
2006					10,452	12,635	14,436	16,092	17,856	19,169
2007				8,723	11,656	13,991	16,204	18,639	20,378	22,054
2008			6,036	9,728	12,978	15,962	19,087	21,212	23,178	24,643
2009		3,286	6,286	10,256	14,150	18,026	20,846	23,292	25,107	26,573
2010	1,983	3,215	6,550	10,735	15,174	18,729	21,591	23,952	25,595	26,850
2011	1,033	2,644	6,123	10,677	14,689	18,117	20,812	22,863	24,420	
2012	746	2,838	6,605	11,019	14,673	17,620	19,842	21,478		
2013	707	2,978	6,714	10,972	14,372	17,055	18,913			
2014	702	2,982	6,878	10,999	14,418	16,864				
2015	855	3,246	7,282	11,354	14,589					
2016	700	3,479	7,507	11,330						
2017	971	3,583	7,726							
2018	977	3,679								
2019	834									
Accident					Anr	ual Chan	ae			
Year	<u>3</u>	<u>15</u>	27	39	51	63	<u>75</u>	87	99	111
2002	_									2.3%
2002									-6.0%	-4.9%
2003								-14.2%	-12.8%	-10.9%
2005							0.0%	-0.2%	2.2%	5.4%
2006						11.1%	11.9%	15.2%	16.4%	12.5%
2007					11.5%	10.7%	12.2%	15.8%	14.1%	15.1%
2008				11.5%	11.3%	14.1%	17.8%	13.8%	13.7%	11.7%
2009			4.1%	5.4%	9.0%	12.9%	9.2%	9.8%	8.3%	7.8%
2010**		-2.2%	4.2%	4.7%	7.2%	3.9%	3.6%	2.8%	1.9%	1.0%
2011**	-47.9%	-17.7%	-6.5%	-0.5%	-3.2%	-3.3%	-3.6%	-4.5%	-4.6%	
2012**	-27.8%	7.3%	7.9%	3.2%	-0.1%	-2.7%	-4.7%	-6.1%		
2013	-5.2%	4.9%	1.7%	-0.4%	-2.1%	-3.2%	-4.7%			
2014	-0.8%	0.1%	2.4%	0.2%	0.3%	-1.1%				
2015	21.9%	8.8%	5.9%	3.2%	1.2%					
2016	-18.1%	7.2%	3.1%	-0.2%						
2017	38.7%	3.0%	2.9%							
2018	0.6%	2.7%								
2019	-14.6%									
				An	nual Tren	d*				
All-Year	-4.0%	2.2%	2.7%	2.4%	3.1%	4.5%	5.8%	6.1%	5.8%	5.1%
$R^2$	0.154	0.380	0.898	0.766	0.592	0.607	0.712	0.743	0.710	0.668
5 Voor	2.00/	E 20/	2 70/	0.00/	0.30/	2 70/	2 00/	0.40/	4 70/	0.00/
5-Year R <sup>2</sup>	2.9%	5.3%	3.7%	0.9%	-0.3%	-2.7%	-2.8%	0.1%	4.7%	9.0%
K	0.107	0.937	0.982	0.696	0.242	0.979	0.736	0.000	0.636	0.921

<sup>\*</sup>Trend is based on an exponential distribution.

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

<sup>\*\*\*</sup>Paid medical losses used in the severity calculations above represent paid medical losses on closed indemnity claims only.

Accident				Evalı	lated as d	of (in mon	ths)·			
Year	0-3	3-15	15-27	27-39	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	99-111
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	784 760 835 769 883 910 926 901 967 958 965 933 969 992 993	3,514 3,649 3,672 3,344 3,550 3,772 4,116 4,111 4,091 4,153 4,257 4,275 4,275 4,471 4,641 4,704 5,026	8,852 8,777 8,846 6,650 5,997 6,401 7,022 7,506 7,671 7,699 7,833 8,288 8,761 8,862 9,340	11,089 11,370 10,824 9,546 7,288 6,235 6,992 7,559 8,385 8,663 8,878 8,659 8,801 9,247 10,046 10,391 10,677	10,315 10,948 10,779 8,606 8,122 6,244 6,127 6,459 7,269 8,374 8,383 8,650 8,494 8,530 8,923 9,678 10,322	9,092 10,352 9,362 8,042 7,540 7,133 5,683 5,380 6,543 7,261 7,932 8,051 8,209 8,396 8,594 8,459 9,377	9,257 9,343 9,273 8,323 7,600 6,638 6,513 5,710 5,533 6,960 7,197 7,517 7,972 8,164 8,248 8,217	8,226 9,083 8,602 7,577 6,798 6,668 6,221 7,061 7,203 7,352 7,794 8,220 8,624 8,559	7,247 8,294 7,109 6,579 7,314 7,261 6,021 5,449 5,692 6,362 6,785 6,755 7,281 7,680 7,906 8,211 9,371	5,455 6,520 7,236 6,567 6,830 6,768 6,166 5,671 4,764 6,266 6,822 6,971 6,743 7,546 6,651 8,259 7,965
2019	1,112	0,020								
Accident					Anr	nual Chan	ae			
<u>Year</u> 1995	<u>0-3</u>	<u>3-15</u>	<u>15-27</u>	27-39	39-51	<u>51-63</u>	63-7 <u>5</u>	<u>75-87</u>	87-99	99-111 19.5%
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	-3.0% 9.9% -7.9% 14.9% 3.0% 1.8% -2.7% 7.2% -0.9% -3.3% 3.9% 2.4% 0.1% 8.6% 3.2%	3.8% 0.7% -8.9% 6.1% 6.3% 9.1% -0.1% -0.5% 1.5% 2.5% 0.4% 4.6% 3.8% 1.4% 6.8%	-0.8% 0.8% -24.8% 6.7% 9.7% 6.9% 2.2% 0.4% 4.1% -0.6% -1.7% 5.8% 5.7% 1.2%	2.5% -4.8% -11.8% -23.7% -14.4% 12.1% 8.1% 10.9% 3.3% 2.5% -2.5% 1.6% 5.1% 8.6% 3.4% 2.8%	6.1% -1.5% -20.2% -5.6% -23.1% -1.9% 5.4% 12.5% 15.2% 0.1% 3.2% -1.8% 0.4% 4.6% 8.5% 6.7%	13.9% -9.6% -14.1% -6.2% -5.4% -20.3% -1.6% 21.6% 2.0% 2.3% 2.4% -1.6% 10.9%	0.9% -0.8% -10.2% -8.7% -1.2.7% -1.9% -3.1% 25.8% 4.5% 6.1% 2.4% 1.0% 5.8% -5.8%	10.4% -5.3% -11.9% -10.3% -6.7% -9.3% -6.5% 12.2% 19.3% 2.0% 2.1% 6.0% 5.5% 4.9% -0.8%	14.4% -14.3% -7.5% 11.2% -0.7% -17.1% -9.5% 4.5% 11.8% 6.6% -0.4% 7.8% 5.5% 2.9% 3.9% 14.1%	11.0% -9.2% 4.0% -0.9% -8.0% -16.0% 31.5% 8.9% 2.2% -3.3% 11.9% -11.9% 24.2% -3.6%
All-Year	2.0%	2.2%	0.9%	0.2%	nual Tren 0.0%	d* 0.1%	-0.3%	0.2%	0.9%	1.3%
R <sup>2</sup>	0.866	0.898	0.120	0.003	0.000	0.000	0.010	0.003	0.100	0.228
5-Year R <sup>2</sup>	3.7% 0.892	3.8% 0.965	4.3% 0.967	5.2% 0.962	5.3% 0.926	2.8% 0.713	1.3% 0.364	4.1% 0.910	5.9% 0.905	4.3% 0.473

<sup>\*</sup>Trend is based on an exponential distribution.

# Ratio of Incremental Paid Medical to Indemnity Claims Open During the Period\*\* As of March 31, 2019

Accident				Evalu	uated as c	of (in mon	ths):			
Year	0-3	<u>3-15</u>	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
2002										23,112
2003									21,420	22,342
2004								18,434	19,563	20,594
2005							17,608	18,871	20,224	21,366
2006						17,970	19,816	21,360	22,681	23,654
2007					17,704	20,172	22,309	24,212	25,525	26,534
2008				15,896	19,597	22,550	24,909	26,653	27,966	28,905
2009			11,874	16,799	20,881	24,181	26,559	28,260	29,471	30,367
2010		6,107	11,808	17,003	21,304	24,227	26,390	28,010	29,116	29,916
2011	917	5,526	11,270	16,209	19,917	22,651	24,619	26,019	27,032	
2012	775	5,495	8,656	9,716	10,359	10,980	10,807	11,488		
2013	835	5,348	8,012	9,342	10,007	9,798	10,346			
2014	946	5,140	7,938	9,351	9,743	9,949				
2015	1,006	5,143	8,177	9,189	10,212					
2016	924	5,458	8,030	9,223						
2017	1,198	5,579	8,372							
2018	1,129	5,749								
2019	1,227									
Accident					Δnr	nual Chan	ne			
Year	0-3	3-15	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111
								<u></u>		
2003									0.70/	-3.3% -7.8%
2004 2005								2.4%	-8.7% 3.4%	3.7%
2005							12.5%	13.2%	12.1%	10.7%
2007						12.3%	12.5%	13.3%	12.1%	12.2%
2007					10.7%	11.8%	11.7%	10.1%	9.6%	8.9%
2009				5.7%	6.6%	7.2%	6.6%	6.0%	5.4%	5.1%
2010			-0.6%	1.2%	2.0%	0.2%	-0.6%	-0.9%	-1.2%	-1.5%
2011**		-9.5%	-4.6%	-4.7%	-6.5%	-6.5%	-6.7%	-7.1%	-7.2%	-1.570
2012**	-15.5%	-0.6%	-23.2%	-40.1%	-48.0%	-51.5%	-56.1%	-55.8%	-1.270	
2013	7.7%	-2.7%	-7.4%	-3.8%	-3.4%	-10.8%	-4.3%	00.070		
2014	13.3%	-3.9%	-0.9%	0.1%	-2.6%	1.5%	4.070			
2015	6.3%	0.1%	3.0%	-1.7%	4.8%	1.070				
2016	-8.1%	6.1%	-1.8%	0.4%	1.070					
2017	29.6%	2.2%	4.3%	0.170						
2018	-5.8%	3.1%	1.070							
2019	8.7%	0								
					nual Tren					
All-Year	5.1%	-0.4%	-5.3%	-9.1%	-10.3%	-9.6%	-6.0%	-0.4%	5.3%	4.9%
$R^2$	0.742	0.051	0.706	0.768	0.673	0.495	0.210	0.001	0.777	0.756
5-Year	6.1%	3.1%	1.0%	-1.2%	-13.0%	-23.0%	-24.3%	-16.2%	1.6%	6.2%
R <sup>2</sup>	0.176	0.942	0.554	0.745	0.523	0.822	0.802	0.520	0.176	0.2%
11	0.017	0.942	0.554	0.743	0.023	0.022	0.002	0.520	0.170	0.001

<sup>\*</sup>Trend is based on an exponential distribution.

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

### Ratio of Quarterly Paid Medical to Indemnity Claims Inventory\* Through March 31, 2019

Developme							luation Yea								
Period	2005	<u>2006</u>	2007	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
3/0	1,104	1,201	1,147	1,289	1,553	1,615	1,714	1,601	1,587	1,672	1,847	1,737	2,105	2,124	2,273
6/3	2,100	2,477	2,330	2,870	3,029	3,071	3,139	3,000	3,013	2,873	3,178	3,161	3,357	3,497	
9/6	2,048	2,440	2,517	2,952	3,160	3,137	3,108	3,148	3,269	3,080	3,089	3,221	3,310	3,604	
12/9	2,174	2,431	2,697	3,012	3,075	3,134	3,065	3,243	3,033	2,983	2,951	3,157	3,361	3,513	
12/0	4,282	4,839	5,103	6,035	6,228	6,172	6,076	6,139	6,065	5,902	5,997	6,232	6,547	6,844	
15/12	2,257	2,284	2,571	2,927	3,040	3,131	3,159	3,354	3,316	3,074	3,130	3,135	3,406	3,446	3,558
18/15	2,096	2,430	2,186	2,680	2,784	2,924	2,982	3,221	3,187	2,839	2,871	3,006	3,039	3,150	
21/18	1,751	1,881	2,168	2,474	2,616	2,711	2,802	2,975	2,914	2,827	2,824	2,817	2,791	2,933	
24/21	1,669	1,834	2,190	2,407	2,537	2,603	2,738	3,035	2,929	2,747	2,706	2,790	2,870	2,921	
24/12	6,361	6,360	7,576	8,762	9,141	9,420	9,576	10,215	9,966	9,299	9,274	9,359	9,483	9,685	
27/24	1,720	1,495	1,728	2,214	2,353	2,531	2,563	2,740	3,022	2,862	2,784	2,810	2,889	2,811	3,111
30/27	1,653	1,865	1,801	2,337	2,607	2,708	2,857	2,988	3,162	3,036	3,027	3,055	3,016	3,080	
33/30	1,544	1,632	1,807	2,342	2,560	2,770	2,912	3,100	3,196	3,177	3,003	2,984	2,926	3,094	
36/33	1,591	1,704	1,965	2,389	2,596	2,731	2,889	3,406	3,308	3,120	3,096	3,072	3,041	3,092	
36/24	5,781	5,540	6,452	8,158	8,942	9,452	9,861	10,661	11,007	10,483	10,161	10,091	9,885	9,910	
39/36	1,670	1,471	1,710	2,032	2,278	2,500	2,680	3,019	3,258	3,177	3,265	3,026	3,041	3,111	3,102
42/39	1,602	1,981	1,791	2,146	2,524	2,786	2,944	3,124	3,539	3,463	3,344	3,114	3,267	3,481	
45/42	1,595	1,646	1,836	2,166	2,517	2,735	3,083	3,246	3,427	3,691	3,372	3,215	3,017	3,237	
48/45	1,634	1,812	1,953	2,251	2,551	2,913	3,072	3,411	3,629	3,433	3,281	3,414	3,141	3,410	
48/36	5,676	5,551	6,360	7,478	8,645	9,621	10,316	11,224	12,024	11,867	11,391	10,771	10,478	10,940	
5 .															
Developme Period	04-to-05	05-to-06	06-to-07	07-to-08	08-to-09	Year-ti 09-to-10	o-Year Cha 10-to-11	ange 11-to-12	12-to-13	13-to-14	14-to-15	15-to-16	16-to-17	17-to-18	18-to-19
	<u> </u>							· · · · · · · · · · · · · · · · · · ·							
3/0 6/3	50.7% 11.6%	8.8% 17.9%	-4.6% -6.0%	12.4% 23.2%	20.5% 5.5%	4.0% 1.4%	6.1%	-6.6%	-0.8%	5.4%	10.5%	-6.0%	21.2%	0.9%	7.0%
9/6	-1.6%		-0.070					-1 1%	0.4%	-4 6%	10.6%	-0 6%	6 7%	1 2%	
	5.3%	10 10/	2 10/				2.2%	-4.4%	0.4%	-4.6% 5.8%	10.6%	-0.6%	6.2%	4.2%	
12/9 12/0		19.1%	3.1%	17.3%	7.0%	-0.7%	-0.9%	1.3%	3.9%	-5.8%	0.3%	4.3%	2.8%	8.9%	
		11.8%	11.0%	17.3% 11.7%	7.0% 2.1%	-0.7% 1.9%	-0.9% -2.2%	1.3% 5.8%	3.9% -6.5%	-5.8% -1.6%	0.3% -1.1%	4.3% 7.0%	2.8% 6.5%	8.9% 4.5%	
	8.4%	11.8% 13.0%	11.0% 5.5%	17.3% 11.7% 18.2%	7.0% 2.1% 3.2%	-0.7% 1.9% - <b>0.9%</b>	-0.9% -2.2% -1.5%	1.3% 5.8% <b>1.0%</b>	3.9% -6.5% -1.2%	-5.8% -1.6% -2.7%	0.3% -1.1% <b>1.6%</b>	4.3% 7.0% <b>3.9%</b>	2.8% 6.5% <b>5.1%</b>	8.9% 4.5% <b>4.5</b> %	2.20
15/12	<b>8.4%</b> -17.4%	11.8% 13.0% 1.2%	11.0% 5.5% 12.6%	17.3% 11.7% 18.2% 13.8%	7.0% 2.1% 3.2% 3.9%	-0.7% 1.9% - <b>0.9%</b> 3.0%	-0.9% -2.2% -1.5% 0.9%	1.3% 5.8% 1.0% 6.2%	3.9% -6.5% -1.2% -1.1%	-5.8% -1.6% -2.7% -7.3%	0.3% -1.1% 1.6% 1.8%	4.3% 7.0% 3.9% 0.1%	2.8% 6.5% <b>5.1%</b> 8.7%	8.9% 4.5% <b>4.5%</b> 1.2%	3.3%
15/12 18/15	8.4% -17.4% -20.6%	11.8% 13.0% 1.2% 15.9%	11.0% 5.5% 12.6% -10.1%	17.3% 11.7% 18.2% 13.8% 22.6%	7.0% 2.1% 3.2% 3.9% 3.9%	-0.7% 1.9% -0.9% 3.0% 5.0%	-0.9% -2.2% -1.5% 0.9% 2.0%	1.3% 5.8% 1.0% 6.2% 8.0%	3.9% -6.5% -1.2% -1.1%	-5.8% -1.6% -2.7% -7.3% -10.9%	0.3% -1.1% <b>1.6%</b> 1.8% 1.1%	4.3% 7.0% 3.9% 0.1% 4.7%	2.8% 6.5% <b>5.1%</b> 8.7% 1.1%	8.9% 4.5% 4.5% 1.2% 3.7%	3.3%
15/12 18/15 21/18	8.4% -17.4% -20.6% -21.4%	11.8% 13.0% 1.2% 15.9% 7.4%	11.0% <b>5.5%</b> 12.6% -10.1% 15.3%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0%	0.3% -1.1% <b>1.6%</b> 1.8% 1.1% -0.1%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1%	3.3%
15/12 18/15 21/18 24/21	8.4% -17.4% -20.6% -21.4% -11.9%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8%	3.3%
15/12 18/15 21/18 24/21 24/12	8.4% -17.4% -20.6% -21.4% -11.9%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1%	
15/12 18/15 21/18 24/21 24/12 27/24	8.4% -17.4% -20.6% -21.4% -11.9% -17.8%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% 2.8%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1%	3.3%
15/12 18/15 21/18 24/21 24/12 27/24 30/27	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.8%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% 2.8% -1.3%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1%	
15/12 18/15 21/18 24/21 24/12 27/24 30/27 33/30	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.8% 29.6%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9% 8.2%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0%	8.9% 4.5% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8%	
15/12 18/15 21/18 24/21 24/21 27/24 30/27 33/30 36/33	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2% -12.7%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7% 7.1%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7% 15.3%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.6% 29.6% 21.6%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3% 8.7%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9% 8.2% 5.2%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1% 5.8%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5% 17.9%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1% -2.9%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6% -5.7%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5% -0.7%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6% -0.8%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0% -1.0%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8% 1.7%	
15/12 18/15 21/18 24/21 24/12 27/24 30/27 33/30	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.8% 29.6%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9% 8.2%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0%	8.9% 4.5% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8%	
15/12 18/15 21/18 24/21 24/12 27/24 30/27 33/30 36/33 36/24	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2% -12.7% -22.3%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7% 7.1%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7% 15.3% 16.5%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.6% 29.6% 21.6%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3% 8.7% 9.6%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9% 8.2% 5.2%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1% 5.8%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5% 17.9%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1% -2.9% 3.2% 7.9%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6% -5.7%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5% -0.7% -3.1%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6% -0.8%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0% -1.0% -2.0% 0.5%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8% 1.7% 0.3% 2.3%	
15/12 18/15 21/18 24/21 24/21 27/24 30/27 33/30 36/33 36/24	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -12.7% -22.3%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7% 7.1%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7% 15.3%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.8% 21.6% 26.4%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3% 8.7% 9.6%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.0% 7.6% 3.9% 8.2% 5.2%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1% 5.8% 4.3%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.5% 4.6% 6.5% 17.9% 8.1%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1% -2.9% 3.2%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6% -5.7%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5% -0.7% -3.1%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6% -0.8%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0% -1.0%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8% 1.7% 0.3%	10.7%
15/12 18/15 21/18 24/21 24/12 27/24 30/27 33/30 36/33 36/24	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2% -12.7% -22.3%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7% 7.19 -4.2%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7% 15.3% 16.5%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.6% 21.6% 26.4% 18.8%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3% 8.7% 9.6%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.9% 5.2% 5.7% 9.8%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1% 5.8% 4.3% 7.2%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5% 17.9% 8.1%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1% -2.9% 3.2% 7.9%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6% -5.7% -4.8%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5% -0.7% -3.1%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6% -0.8% -0.7%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -1.3% -2.0% -1.0% -2.0% 0.5%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8% 1.7% 0.3% 2.3%	10.7%
15/12 18/15 21/18 24/21 24/12 27/24 30/27 33/30 36/33 36/24 39/36 42/39	8.4% -17.4% -20.6% -21.4% -11.9% -17.8% -24.8% -27.0% -23.2% -12.7% -22.3% -18.8% -23.0%	11.8% 13.0% 1.2% 15.9% 7.4% 9.8% 0.0% -13.1% 12.8% 5.7% 7.1% -4.2% -11.9% 23.7%	11.0% 5.5% 12.6% -10.1% 15.3% 19.4% 19.1% 15.6% -3.5% 10.7% 15.3% 16.5% 16.2% -9.6%	17.3% 11.7% 18.2% 13.8% 22.6% 14.1% 9.9% 15.7% 28.1% 29.8% 29.6% 21.6% 26.4% 18.8% 19.8%	7.0% 2.1% 3.2% 3.9% 3.9% 5.8% 5.4% 4.3% 6.3% 11.5% 9.3% 8.7% 9.6% 12.1% 17.6%	-0.7% 1.9% -0.9% 3.0% 5.0% 3.6% 2.6% 3.9% 8.2% 5.2% 5.7% 9.8% 10.4%	-0.9% -2.2% -1.5% 0.9% 2.0% 3.4% 5.2% 1.7% 1.2% 5.5% 5.1% 5.8% 4.3% 7.2% 5.7%	1.3% 5.8% 1.0% 6.2% 8.0% 6.2% 10.8% 6.7% 6.9% 4.6% 6.5% 17.9% 8.1% 12.6% 6.1%	3.9% -6.5% -1.2% -1.1% -1.1% -2.1% -3.5% -2.4% 10.3% 5.8% 3.1% -2.9% 3.2% 7.9% 13.3%	-5.8% -1.6% -2.7% -7.3% -10.9% -3.0% -6.2% -6.7% -5.3% -4.0% -0.6% -5.7% -4.8% -2.5% -2.1%	0.3% -1.1% 1.6% 1.8% 1.1% -0.1% -1.5% -0.3% -2.7% -0.3% -5.5% -0.7% -3.1% 2.7% -3.4%	4.3% 7.0% 3.9% 0.1% 4.7% -0.3% 3.1% 0.9% 0.9% -0.6% -0.6% -0.7% -7.3% -6.9%	2.8% 6.5% 5.1% 8.7% 1.1% -0.9% 2.9% 1.3% -2.0% -1.0% -2.0% 0.5% 4.9%	8.9% 4.5% 4.5% 1.2% 3.7% 5.1% 1.8% 2.1% -2.7% 2.1% 5.8% 1.7% 0.3% 6.6%	10.7%

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

Source: WCIRB accident year experience calls.

#### Estimated Ultimate Severities by Injury Type

	I litimate Inde	mnity Severity		erity Adjusted to Benefit Level		Llltima	ate Medical Sev	erity**		l Severity Adju	
Accident	Permanent	illility Severity	Permanent	Delielit Level	Accident	Permanent	ite ivieulcai Sev	Medical	Permanent	.020 Deneni Le	Medical
Year	Partial	Temporary	Partial	Temporary	Year	Partial	Temporary	Only	Partial	Temporary	Only
2001	43,646	3,827	47,685	6,020	2001	46,815	4.768	693	26,234	2,672	388
2002	41,758	3,872	47,099	6,109	2002	48,164	5,349	779	28,031	3,113	454
2002	41,730	4,099	48,994	5,971	2002	47,765	5,619	864	29,165	3,431	527
2003	35,450	4,003	52,359	5,686	2004	48,665	5,267	834	39,304	4,254	673
2004	33,937	3,779	59,870	5,274	2004	53,580	5,293	845	43,274	4,275	683
2006	36,677	3,776	59,582	5,134	2006	57,850	5,482	872	46,537	4,410	702
2007	39,137	4,039	61,028	5,373	2007	62,647	6,298	959	49,454	4,972	757
2007	41,301	4,498	58,197	5,866	2007	64,646	6,838	990	50,829	5,377	778
2009	41,242	5,163	57,812	6,687	2009	64,290	7,833	1,052	50,348	6,134	824
2010	40,019	6,036	55,345	7,701	2010	62,056	8,973	1,079	48,453	7,006	843
2010	38,448	6,441	52,335	8,089	2010	56,530	8,773	1,075	45,367	7,040	832
2011	37,384	6,891	49,659	8,439	2011	52,003	8,827	1,030	43,841	7,442	874
2012	36,143	7,085	46,312	8,614	2012	47,765	8,342	1,037	44,255	7,729	993
2013	38,031	7,085 7,145	43,753	8,399	2013	45,836	8,047	1,137	45,139	7,729	1,120
2014	38,738	7,145	43,458	8,269	2014	45,324	8,079	1,157	45,139	8,135	1,120
2015		7,235 7,471		8,415	2015	45,32 <del>4</del> 45,426	8,140	1,175	45,642	8,189	
2016	38,988		43,208	8,415 8,418	2016	45,426 44,454	8,140 8,414		45,699 44,721		1,182
2017"	38,706	7,901	40,912	8,418	2017	44,454	8,414	1,223	44,721	8,464	1,230
Accident					Accident						
Year	Annual	Change	Annua	l Change	<u>Year</u>		Annual Change	:		Annual Change	
2001					2001						
2002	-4.3%	1.2%	-1.2%	1.5%	2002	2.9%	12.2%	12.5%	6.8%	16.5%	16.8%
2003	-1.3%	5.9%	4.0%	-2.3%	2003	-0.8%	5.1%	10.8%	4.0%	10.2%	16.3%
2004	-14.0%	-2.4%	6.9%	-4.8%	2004	1.9%	-6.3%	-3.5%	34.8%	24.0%	27.7%
2005	-4.3%	-5.6%	14.3%	-7.3%	2005	10.1%	0.5%	1.3%	10.1%	0.5%	1.3%
2006	8.1%	-0.1%	-0.5%	-2.6%	2006	8.0%	3.6%	3.2%	7.5%	3.2%	2.8%
2007	6.7%	7.0%	2.4%	4.7%	2007	8.3%	14.9%	9.9%	6.3%	12.7%	7.9%
2008	5.5%	11.4%	-4.6%	9.2%	2008	3.2%	8.6%	3.2%	2.8%	8.1%	2.8%
2009	-0.1%	14.8%	-0.7%	14.0%	2009	-0.6%	14.6%	6.2%	-0.9%	14.1%	5.8%
2010	-3.0%	16.9%	-4.3%	15.2%	2010	-3.5%	14.6%	2.6%	-3.8%	14.2%	2.3%
2011	-3.9%	6.7%	-5.4%	5.0%	2011	-8.9%	-2.2%	-4.0%	-6.4%	0.5%	-1.3%
2012	-2.8%	7.0%	-5.1%	4.3%	2012	-8.0%	0.6%	0.0%	-3.4%	5.7%	5.1%
2013	-3.3%	2.8%	-6.7%	2.1%	2013	-8.2%	-5.5%	3.4%	0.9%	3.9%	13.6%
2014	5.2%	0.9%	-5.5%	-2.5%	2014	-4.0%	-3.5%	6.1%	2.0%	2.5%	12.7%
2015	1.9%	1.2%	-0.7%	-1.5%	2015	-1.1%	0.4%	1.2%	1.1%	2.6%	3.5%
2016	0.6%	3.3%	-0.6%	1.8%	2016	0.2%	0.8%	2.2%	0.1%	0.7%	2.1%
2017*	-0.7%	5.8%	-5.3%	0.0%	2017*	-2.1%	3.4%	4.0%	-2.1%	3.4%	4.0%

Source: WCIRB unit statistical data

<sup>\*</sup> Accident year 2018 experience is partial in that it only reflects experience from policy year 2017.

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

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

### First Survey Level

Accident	Average		Median	
<u>Year</u>	TD Duration	<u>Change</u>	TD Duration	<u>Change</u>
2004	51.4		39.2	
2005	56.7	10.3%	46.5	18.5%
2006	59.0	4.2%	49.6	6.8%
2007	63.1	6.9%	56.2	13.3%
2008	67.4	6.8%	63.4	12.8%
2009	64.8	-3.8%	58.5	-7.7%
2010	61.7	-4.7%	55.0	-6.1%
2011	59.6	-3.6%	48.8	-11.2%
2012	58.7	-1.4%	49.6	1.6%
2013	56.0	-4.6%	49.5	0.0%
2014	55.9	-0.2%	50.3	1.6%
2015	50.1	-10.4%	43.2	-14.2%
2016	48.7	-2.8%	39.4	-8.7%

### Second Survey Level

Accident <u>Year</u>	Average TD Duration	<u>Change</u>	Median TD Duration	<u>Change</u>
2003	54.5		43.3	
2004	51.9	-4.7%	41.8	-3.5%
2005	57.1	9.9%	50.4	20.8%
2006	58.6	2.6%	51.2	1.4%
2007	64.0	9.2%	58.4	14.1%
2008	69.2	8.2%	66.7	14.4%
2009	66.2	-4.3%	61.9	-7.3%
2010	60.8	-8.2%	56.0	-9.5%
2011	62.4	2.5%	52.8	-5.7%
2012	58.1	-6.8%	52.0	-1.5%
2013	59.4	2.3%	52.8	1.5%
2014	57.1	-3.9%	52.4	-0.8%
2015	51.5	-9.8%	45.2	-13.6%

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

Average Permanent Disability Ratings by Type of Loss

ß	27.1 25.6	23.0	16.9	17.2	18.2	17.4	16.6	16.5	15.5				Ľ	04 600	91,067	78,082	55 101	54,380	54,411	50,743	51,623	52,781	53,798				2	23.5	19.5	14.5	13.0	12.5	14.0 0.41	14.0	13.0	13.0			
ating 4	26.9 25.8	23.3	16.2	16.7	17.5	17.4	16.2	15.9	15.1	14.7			aims	94 300	90,642	76,979	54 761	53,431	53,819	49,377	51,188	51,622	52,403			ating	4	24.0	20.0	15.0	12.0	13.0	14.0 14.0	14.0	12.5	12.5	11.0		
Disability Ra	26.4 25.2	23.6	15.9	15.6	16.7	16.9	15.9	15.2	14.3	14.1	į		Disability Cl	01 037	90,093	76,055	51.587	52,215	51,707	48,525	49,543	50,304	50,430	54,416		Disability Ra	3	23.0	20.0	14.5	12.0	12.0	13.0	13.0	12.0	11.5	11.0	9.5	
Average Permanent Disability Rating 1 2 3	23.6 23.9	22.3	14.8	14.4	14.7	15.3	15.0	14.5	13.2	13.1	12.2		Count of Permanent Disability Claims	2 27 37 3	85,916	73,987	48.528	46,641	48,508	45,094	45,948	46,767	45,950	49,039	49,736	Median Permanent Disability Rating	2	19.5	19.0	14.5	10.5	10.0	12.0	10.5	10.5	9.5	9.5	10.0 9.5	,
Average 1	18.8 18.9	20.0	12.6	12.0	12.1	12.6	12.7	12.7	11.8	11.3	10.3	5	Count of	70 083	74,927	64,929	41 604	39,060	36,903	34,945	35,848	37,485	36,014	37,859	38,328 37,595	Median	1	15.0	17.0	12.5	9.5	80.0	10.0	10.0	9.5	9.5	8.5	9.0	: :
PY/RL	2001 2002	2003	2005	2006	2007	2009	2010	2011	2012	2013	2015	2	PY/RI	2001	2002	2003	2004	2006	2007	2009	2010	2011	2012	2014	2015 2016		PY/RL	2001	2002	2004	2005	2006	2008	2009	2010	2011	2013	2014 2015	1
5	24.4 22.1	19.9	16.4	16.7	17.6	16.6	16.4	15.6	14.3				LC.	11 569	12,161	10,348	6.621	6,585	6,596	7,823	8,197	9,176	10,686				2	20.0	14.5	12.5	12.0	12.0	11.5	12.0	12.0	11.5 9.5			
ating 4	24.2 22.0	20.1	15.3	16.0	16.7	16.2	15.7	14.8	13.9	13.0			aims 4	11 524	11,975	10,101	6 197	6,216	6,326	7,273	7,643	8,495	10,091				4	19.5	15.0	12.0	11.0	10.5	12.0	12.0	12.0	11.0	9.5		
Disability R	23.6 21.4	20.2	4.4	14.6	15.5	15.8	15.4	14.2	13.1	12.4	i i		Disability Cl	11.058	11,784	9,756	5.383	5,677	5,797	6,624	6,780	7,635	9,052	11,918		Disability Ra	3	19.5	14.5	12.5	10.0	10.0	11.0	10.5	10.5	9.5	10.0		
Average Permanent Disability Rating 1 2 3	21.2 20.4	19.1	12.7	12.7	13.5	14.0	14.9	13.4	12.1	11.5	11.0		Sount of Permanent Disability Claims	10 546	11,078	9,320	0,000	4,721	4,816	5,585	2,767	6,243	9.358	10,608	11,031	Median Permanent Disability Rating	2	17.5	19.5	11.5	9.5	0.0	9.5	10.0	11.0	10.0 9.5	9.5	7.5 8.0	
Average F	16.9 16.9	17.4	11.0	10.3	10.9	11.5	12.4	11.8	10.9	10.3	4.0	2	Count of F	7 740	9,284	7,824	3.463	3,324	3,256	3,782	3,985	4,230	6.327	7,173	7,905	Median F	1	15.0	t. 4.	10.5	8.0	6.5	7.5 8.5	9.5	10.0	9.5 9.0	8.0	8.0	
PY/RL	2001 2002	2003	2005	2006	2007	2009	2010	2011	2012	2013	2015	2	PY/R	2001	2002	2003	2004	2006	2007	2003	2010	2011	2012	2014	2015 2016		PY/RL	2001	2002	2004	2005	2006	2008	2009	2010	2011	2013	2014 2015	1.11
5	26.9 25.2	22.6	16.9	17.2	18.1	17.3	16.6	16.3	15.3				LC.	106 169	103,228	88,430	61 722	96,09	61,007	58,566	59,820	61,957	64,484				2	24.0	19.5	14.5	12.5	13.0	14.U	12.5	12.5	13.0			
ating 4	26.7 25.4	23.0	16.1	16.6	17.5	17.3	16.1	15.8	14.9	14.4			Claims 4	105 833	102,617	87,080	60.958	59,647	60,145	56,650	58,831	60,117	62,494				4	24.0	19.5	14.5	11.5	13.0	13.5	12.5	13.0	13.0	11.0		
Average Permanent Disability Rating 1 2 3	26.1 24.7	23.2	15.8	15.5	16.6	16.8	15.8	15.1	14.1	13.8			Disability C	102 995	101,877	85,811	56.970	57,892	57,504	55,149	56,323	57,939	59,482	66,334		Median Permanent Disability Rating	3	23.0	20.0	14.5	11.5	11.5	12.5	13.0	12.0	12.0	9.5	9.5	
Permanent 2	23.4	22.0	14.6	14.2	14.6 7	15.2	15.0	14.4	13.0	12.8	12.0		of Permanent Disability	97 918	96,994	83,307	53 120	51,362	53,324	50,679	51,715	53,010	53,428	59,647	60,767	Permanent	2	19.5	19.0	14.5	9.5	9.5	10.5	11.0	11.0	10.5 9.5	9.5	10.0	
Average 1	18.6 18.7	19.8	12.5	11.8	12.0 12.8	12.5	12.7	12.6	11.7	11.2	10.1	-	Count of I	87 732	84,211	72,753	45.067	42,384	39,867	38,727	39,833	41,715	41,005	45,032	46,233 45,982	Median F	-	14.5	15.0	12.5	10.0	8.5	9.0 0.0	10.0	10.0	10.0	9.0	7.5	
PY/RL	2001 2002	2003	2005	2006	7007	2009	2010	2011	2012	2013	2015	2	PY/RI	2004	2002	2003	2004	2006	2007	2009	2010	2011	2012	2014	2015 2016		PY/RL	2001	2002	2004	2005	2006	2008	2009	2010	2011	2013	2014 2015	1

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

Source: WCIRB unit statistical data

#### Self-Insured Employers - Claim Severity

#### Private Self-Insured Employers

		Indemnity	Paid Medical	
	Medical	Cases Open	on Open	Annual
CY	Paid	During Year	Ind Claims	Change
2001	655,349,356	128,723	5,091	
2002	789,748,542	129,147	6,115	20.1%
2003	930,788,004	130,323	7,142	16.8%
2004	802,856,921	132,488	6,060	-15.2%
2005	688,918,290	124,757	5,522	-8.9%
2006	800,826,010	115,054	6,960	26.0%
2007	676,050,168	105,671	6,398	-8.1%
2008	733,149,220	102,990	7,119	11.3%
2009	761,740,423	98,642	7,722	8.5%
2010	760,504,505	97,135	7,829	1.4%
2011	758,672,255	95,946	7,907	1.0%
2012	752,732,652	94,591	7,958	0.6%
2013	814,214,051	95,263	8,547	7.4%
2014	918,409,257	93,850	9,786	14.5%
2015	786,278,830	90,382	8,700	-11.1%
2016	787,771,330	85,563	9,207	5.8%
2017	765,002,435	81,842	9,347	1.5%

	Public Se	If-Insured Emp	loyers	
		Indemnity	Paid Medical	
	Medical	Cases Open	on Open	Annual
FY	Paid	During Year	Ind Claims	Change
2000/2001	603,567,334	148,040	4,077	
2001/2002	736,531,748	153,231	4,807	17.9%
2002/2003	872,925,555	166,835	5,232	8.9%
2003/2004	932,492,476	176,127	5,294	1.2%
2004/2005	777,579,644	171,938	4,522	-14.6%
2005/2006	768,887,952	163,511	4,702	4.0%
2006/2007	779,028,256	159,524	4,883	3.9%
2007/2008	887,316,859	173,348	5,119	4.8%
2008/2009	949,449,769	170,751	5,560	8.6%
2009/2010	978,954,150	171,444	5,710	2.7%
2010/2011	1,043,538,851	173,585	6,012	5.3%
2011/2012	1,073,241,078	177,309	6,053	0.7%
2012/2013	1,045,517,623	179,375	5,829	-3.7%
2013/2014	1,086,439,359	178,788	6,077	4.3%
2014/2015	1,102,863,683	181,993	6,060	-0.3%
2015/2016	1,097,857,099	180,467	6,083	0.4%
2016/2017	1,046,637,539	178,746	5,855	-3.7%
2017/2018	1,119,293,067	180,404	6,204	6.0%

	All Self-	Insured Emplo	yers		Insure	d System at 1s	t Report
		Indemnity	Paid Medical			Paid Medical	
	Medical	Cases Open	on Open	Annual		Severity on	Annual
CY	Paid	During Year	Ind Claims	Change	AY	Ind Claims	Change
2001	1,325,398,897	279,359	4,744		2001	6,203	
2002	1,594,477,194	289,180	5,514	16.2%	2002	7,255	17.0%
2003	1,833,497,020	301,804	6,075	10.2%	2003	7,203	-0.7%
2004	1,657,892,981	306,521	5,409	-11.0%	2004	5,970	-17.1%
2005	1,462,152,088	292,482	4,999	-7.6%	2005	5,906	-1.1%
2006	1,574,784,114	276,572	5,694	13.9%	2006	6,270	6.2%
2007	1,509,222,726	272,107	5,546	-2.6%	2007	6,922	10.4%
2008	1,651,532,534	275,040	6,005	8.3%	2008	7,605	9.9%
2009	1,725,942,383	269,740	6,399	6.6%	2009	7,925	4.2%
2010	1,771,751,006	269,650	6,571	2.7%	2010	7,946	0.3%
2011	1,817,062,220	271,393	6,695	1.9%	2011	7,462	-6.1%
2012	1,812,112,003	272,933	6,639	-0.8%	2012	7,238	-3.0%
2013	1,880,192,542	274,345	6,853	3.2%	2013	7,085	-2.1%
2014	2,013,060,778	274,241	7,340	7.1%	2014	6,995	-1.3%
2015	1,886,639,221	271,612	6,946	-5.4%	2015	7,036	0.6%
2016	1,860,018,649	265,170	7,014	1.0%	2016	7,293	3.6%
2017	1,847,967,738	261,417	7,069	0.8%	2017	6,481	3.7%

Notes: Fiscal Year Public data prorated to CYs 50%/50%.

Insured System AY 2017 change is based on a comparison of 2017 accidents on 2016 policies to 2016 accidents on 2015 policies.

Sources: California Department of Industrial Relations for self-insured

WCIRB Unit Statistical Data for insured system

### Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness

		In	demnity Claim Seve	erity		Total Claim Severity	,
				Annual % Change			Annual % Change
		Change in	Severity	Attributable to	Change in	Severity	Attributable to
Policy	Report	Severity	Hazardousness	Change in	Severity	Hazardousness	Change in
Year	Level	Hazardousness	Index	Industrial Mix	Hazardousness	Index	Industrial Mix
1993	5	1.0000	1.0000		1.0000	1.0000	
1994	5	1.0010	1.0010	0.10%	0.9986	0.9986	-0.14%
1995	5	1.0007	1.0017	0.07%	1.0013	0.9998	0.13%
1996	5	0.9988	1.0005	-0.12%	0.9993	0.9991	-0.07%
1997	5	1.0032	1.0036	0.32%	1.0045	1.0036	0.45%
1998	5	1.0037	1.0074	0.37%	1.0050	1.0086	0.50%
1999	5	1.0023	1.0096	0.23%	1.0011	1.0097	0.11%
2000	5	1.0016	1.0112	0.16%	1.0009	1.0107	0.09%
2001	5	1.0031	1.0144	0.31%	1.0001	1.0108	0.01%
2002	5	0.9984	1.0128	-0.16%	0.9996	1.0104	-0.04%
2003	5	1.0042	1.0170	0.42%	1.0071	1.0176	0.71%
2004	5	1.0020	1.0190	0.20%	1.0048	1.0224	0.48%
2005	5	1.0010	1.0201	0.10%	1.0027	1.0252	0.27%
2006	5	0.9965	1.0165	-0.35%	0.9917	1.0167	-0.83%
2007	5	0.9935	1.0098	-0.65%	0.9861	1.0025	-1.39%
2008	5	0.9908	1.0005	-0.92%	0.9845	0.9870	-1.55%
2009	5	0.9884	0.9889	-1.16%	0.9832	0.9704	-1.68%
2010	5	0.9961	0.9851	-0.39%	0.9938	0.9644	-0.62%
2011	5	0.9996	0.9847	-0.04%	1.0014	0.9657	0.14%
2012	5	0.9972	0.9819	-0.28%	0.9978	0.9636	-0.22%
2013	Proj 5	1.0011	0.9830	0.11%	1.0030	0.9665	0.30%
2014	Proj 5	1.0016	0.9845	0.16%	1.0066	0.9728	0.66%
2015	Proj 5	1.0002	0.9847	0.02%	1.0027	0.9755	0.27%
2016	Proj 5	0.9986	0.9834	-0.14%	0.9968	0.9724	-0.32%

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

Source: WCIRB unit statistical data

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

8 0.925% 0.718% 0.718% 0.0805% 0.1335% 1.326%	8 30.77% 32.17% 33.79% 36.03% 37.30% 35.35% 35.35% 35.1%	8 377,161 374,592 376,147 365,845 366,422 366,887 366,432 361,394
7 0.857% 0.775% 0.0747% 0.885% 1.261% 1.251% 1.122%	7 28.53% 30.08% 31.31% 32.71% 35.80% 34.36% 29.62%	7 362,640 365,700 366,212 360,970 360,970 362,062 362,062 363,062 364,963 349,962 341,023
6 0.790% 0.681% 0.581% 0.076% 1.011% 1.173% 1.224% 1.065%	6.16% 26.16% 26.34% 28.00% 31.09% 33.64% 32.32% 32.32% 28.24% 28.24%	6 352,430 350,688 356,039 348,929 354,965 354,965 354,865 354,865 37,317 337,317
0.61\$250,000 5 0.672% 0.588% 0.657% 0.687% 0.881% 1.038% 0.986% 0.756%	rf \$250,000 5 5 22,33% 23,77% 28,60% 30,13% 28,07% 28,64% 28,64% 28,43% 24,59%	ity (\$526,000
% of Claims in Excess of \$250,000 3	% of Medical Incurred on Claims in Excess of \$250,000    4	Median Severity on Claims in Excess of \$250,000  4 5 9,559 330,745 34,182 7,404 332,985 341,792 6,677 331,078 341,792 6,677 334,06 342,492 7,700 332,716 343,500 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,631 328,483 337,178 0,694 318,441 321,292 6,946 318,441 321,292
% of Clai 3 0.372% 0.295% 0.276% 0.276% 0.566% 0.566% 0.568% 0.549% 0.549% 0.548% 0.466%	90 On Clain 3 1 15.41% 15.75% 16.17% 17.09% 19.82% 20.71% 19.88% 19.88% 19.15% 17.82% 15.13% 17.41%	on Clain 3 31,549 331,549 327,404 326,677 327,700 323,835 327,700 320,631 320,
227% 0.177% 0.146% 0.168% 0.282% 0.342% 0.342% 0.342% 0.342% 0.342% 0.358% 0.340% 0.320% 0.320%	2 12,42% 12,96% 15,104% 15,104% 15,33% 15,37% 15,37% 15,29% 12,29% 12,38% 12,38% 15,09% 15,09%	2 323,506 344,674 351,844 341,967 340,323 327,300 325,000 325,000 325,000 325,000 325,000 325,000 325,000 325,000 325,000 321,976 335,014 336,299 323,341
0.112% 0.099% 0.099% 0.165% 0.163% 0.183% 0.183% 0.194% 0.196% 0.196% 0.194% 0.196%	10.03% 11.23% 11.23% 12.87% 13.38% 12.95% 12.52% 13.20% 13.48% 13.48% 13.36% 13.36%	1 353,167 379,130 383,528 380,882 380,882 380,846 352,898 359,510 357,534 347,534 346,734 346,734 346,734 346,734
PY/RI. 2002 2003 2004 2005 2005 2006 2009 2010 2011 2012 2012 2012 2013 2014 2015	PY/RL 2002 2003 2004 2004 2005 2006 2008 2010 2011 2011 2012 2013 2013 2013 2015	PY/RL 2002 2003 2003 2004 2005 2005 2008 2010 2011 2012 2012 2012 2013 2014 2015
8 5.232 5.232 3.547 3.783 3.783 4.212 4.801 4.552	8 21.84% 22.92% 24.01% 29.732% 30.55% 29.79% 28.50%	8 529,239 548,977 569,398 543,589 519,917 488,041 484,932
7 4,866 4,071 3,273 3,505 3,985 4,643 4,686 3,875 3,875	7 20.07% 21.16% 22.24% 28.552% 29.43% 29.73% 27.36% 24.23%	7 5511,322 536,729 553,349 526,756 527,579 512,169 477,545 479,239 483,099
6 4, 501 3, 589 2, 874 3, 170 3, 604 4, 323 4, 389 4, 227 3, 732 3, 432	6 18.57% 19.69% 23.05% 25.76% 27.54% 27.11% 26.27% 22.88% 21.53%	6 498,066 511,184 538,976 513,087 515,909 501,201 469,921 477,964 477,964
2550,000 5 3,839 3,104 2,297 2,657 3,109 3,759 3,878 3,784 3,379 3,16 3,16 3,16 3,16 3,16 3,16 3,16 3,16	of \$250,000 5 16.07% 16.47% 15.73% 22.72% 24.93% 24.93% 21.20% 19.56% 17.99%	(250,000 5 5 5 5 5 513,663 520,475 498,380 620,426 494,637 457,438 457,438 457,438 457,438 472,300 472,3
υ Εχα 0 0 3 3 4 4 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		of &
Claims in 1 2,990 2,990 2,323 1,742 1,921 1,921 3,077 3,077 3,077 2,654 2,654 2,180 2,180	ns in Excess 4 14 13.12% 13.19% 13.12% 13.19% 15.00% 18.95% 20.21% 20.21% 19.96% 17.23% 17.23% 17.23% 14.27%	Average Severity ms in Excess of \$;  4  481,072  531,520  550,822  501,441  516,917  494,341  456,502  478,213  511,034  459,951
Number of Claims in Excess of \$250,000 3 4 4 5 2,110 2,990 3,839 1,550 2,323 3,104 1,65 1,921 2,207 1,92 2,100 3,077 3,759 1,920 2,810 3,779 3,784 1,956 2,110 3,779 3,784 1,956 2,180 1,754 2,180	% of Indemnity Incurred on Claims in Excess of \$250,000 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Average Severity on Claims in Excess of \$250,000 3 4 508,756 648,107 579,912 579,913 571,914 579,912 579,913 571,914 579,913 571,914 579,913 571,914 579,914 579,915 579,913 5
Number of Claims is 1283 2,110 2,99 1,289 1,550 2,32 722 1,165 1,74 783 1,292 1,905 1,901 1,216 1,100 1,734 2,24 1,125 1,752 1	8 on Claims in Excess 0 n Claims in Excess 6.36% 9.13% 12.64% 7.11% 9.89% 13.12% 8.27% 11.00% 15.00% 11.51% 16.25% 20.91% 11.21% 16.25% 20.91% 10.24% 13.94% 17.23% 9.89% 12.37% 9.83% 12.37%	Average Severity on Claims in Excess of \$ 3
	0 0 0 5 4 5 5 5 5 5 5 5 5	50 57 58 58 59 50 60 60 60 60 60 60 60 60 60 60 60 60 60

Source: WCIRB unit statistical data

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

		ı	 
∞	0.256% 0.244% 0.214% 0.214% 0.255% 0.312% 0.312%	8	17.49% 19.82% 20.10% 20.32% 17.56% 17.56% 17.672 771,672 695,778 695,778 663,209
7	0.214% 0.203% 0.177% 0.188% 0.231% 0.286% 0.273%	7	15.57% 17.14% 17.14% 17.78% 18.98% 16.59% 15.49% 14.39% 17.00.767 700.767 700.767 700.767 700.767 700.767 868.337 681.932 683.218 684.754 684.754 684.754 684.754
9	0.169% 0.152% 0.150% 0.150% 0.255% 0.251% 0.261% 0.201% 0.185%	9	13.49% 15.26% 16.83% 17.07% 14.95% 14.85% 12.51% 685.258 707,027 701,420 677,511 670,404 662,532 687,631 677,511
if \$500,000 5	0.122% 0.011% 0.0113% 0.151% 0.154% 0.194% 0.164% 0.164%	s500,000 5	11.41% 12.38% 13.10% 14.71% 14.72% 12.65% 12.87% 11.69% 11
% of Claims in Excess of \$500,000 3 4 5	0.085% 0.0082% 0.0082% 0.0082% 0.0074% 0.00714% 0.0074% 0.0074% 0.0074% 0.0072% 0.0097%	% of Medical Incurred on Claims in Excess of \$500,000 3 4 5	9.34% 10.14% 11.41% 23.8% 10.06% 11.10% 11.518% 10.55% 13.10% 11.55% 12.88% 14.71% 12.85% 10.291% 10.291% 10.291% 10.291% 10.291% 10.293% 12.87% 10.39% 10.39% 12.87% 10.96% 11.87% 10.96% 11.87% 10.96% 11.87% 10.96% 11.87% 10.96% 11.87% 10.96% 11.87% 10.96% 11.87% 10.96% 10.30% 10.30% 10.30% 10.30% 10.30% 10.30% 10.32% 10.30% 10.32% 10.3
% of Clain 3	0.057% 0.057% 0.057% 0.051% 0.078% 0.092% 0.092% 0.091% 0.098% 0.088%	% c on Claim 3	8.24% 9.31% 10.06% 9.92% 10.756% 8.94% 9.58% 9.58% 9.58% 9.72% 10.16% 172, 132 772, 336 772, 344 772, 346 773, 378 772, 348 772, 348 772, 348 773, 368 773, 368 773, 368 773, 378 773, 378 774 775 775 775 775 775 775 775 775 775
2	0.043% 0.042% 0.042% 0.040% 0.058% 0.062% 0.065% 0.067% 0.067% 0.067%	2	7.93% 9.91% 9.99% 11.38% 9.85% 8.38% 9.71% 9.20% 9.58% 9.58% 10.33% 10.33% 776,001 875,244 814,506 770,012 774,439 774,439 774,4439 776,001 875,244 814,506 770,012 776,001 817,504 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,506 776,001 817,601 81
~	0.032% 0.034% 0.033% 0.045% 0.045% 0.052% 0.052% 0.055% 0.058% 0.058% 0.058%	1	7.40% 8.53% 8.47% 9.77% 8.84% 8.84% 9.66% 10.30% 10.30% 11.40% 9.80% 13.10% 13.
PY/RL	2002 2003 2004 2005 2006 2007 2009 2010 2011 2013 2013 2014 2015	PY/RL	2002 2003 2004 2005 2006 2007 2010 2011 2011 2012 2005 2008 2009 2009 2009 2010 2011 2011 2012 2009 2009
ω	1,449 1,275 1,010 1,003 1,149 1,189 1,189 1,025	80	10.46% 11.78% 13.53% 145.24% 14.46% 12.21% 11.020,705 11.142,140 11.1142,140 1
_	1,215 1,066 887 880 1,038 1,1,39 1,1,39 1,084 943 786	7	10.05% 11.048% 13.56% 13.34% 11.224% 11.082,296 11.092,964 11.092,964 11.045,187 10.045,187 10.045,187 10.052,046 11.068,071 11.068,
9	961 800 680 680 851 964 940 942 705	9	7.37% 7.54% 9.41% 9.92% 11.168% 11.12% 10.35% 8.53% 7.97% 6.1091.473 1.122.403 1.122.403 1.122.403 1.103.038 1.072.957 1.03.038 1.072.957 1.097.815 1.097.815
Number of Claims in Excess of \$500,000 3 5 5	697 584 453 679 679 741 726 705 573 660	surred \$500,000 5	5.73% 6.76% 7.94% 10.09% 9.55% 10.09% 9.06% 8.49% 7.60% 6.87% 6.87% 6.87% 1.77.611 1.222.676 1.122.676 1.122.634 1.125.012 1.165.334 1.125.012 1.165.334 1.125.012 1.165.334 1.125.012 1.165.334 1.125.012 1.165.334 1.125.012
Jaims in Exces	481 6 431 4 342 5 505 6 528 7 528 7 528 7 524 7 422 5 335 4 335 4	% of Indefinity Incurred on Claims in Excess of \$500,000 3 4	68% 5.55% 6.57% 6.58% 6.57% 1.0% 5.79% 7.94% 1.10% 7.74% 10.09% 1.38% 6.47% 8.49% 1.38% 6.47% 8.49% 1.38% 6.43% 7.24% 10.09% 1.29% 6.43% 7.24% 1.20% 6.87% 1.20% 6.87% 1.20% 1.426,187 1.137,614 1.20% 1.20% 1.165,362 1.21% 6.57% 1.157,859 1.20% 1.165,362 1.21% 6.57% 1.157,859 1.20% 1.165,362 1.21% 6.57% 1.157,859 1.20% 1.165,362 1.21% 6.57% 1.156,363 1.256,576 1.126,014 1.226,576 1.126
Number of C	324 300 300 238 347 368 347 335 335 322 332	% c on Clain 3	3.05% 4.28% 4.52% 6.38% 6.17% 5.23% 4.72% 4.72% 4.72% 3.83% 4.67% 1.532.015 1.638,500 1.422.051 1.356.962 1.356.962 1.356.962 1.356.963
2	245 219 219 219 258 234 237 227 227 227 227 227 227 227 227 237 23	2	2.53% 3.39% 4.47% 5.10% 4.26% 4.26% 4.56% 4.18% 4.18% 3.10% 4.06% 4.05% 1.7741,153 1.897,416 1.767,615 1.776,408 1.778,498 1.708,498 1.708,498 1.708,498 1.708,498 1.708,498 1.708,498 1.708,498 1.708,498 1.708,498
-	171 174 160 160 187 173 173 161 180 180 237	-	2.13% 2.53% 3.05% 3.05% 3.89% 4.47% 4.52% 4.10% 6.17% 4.10% 6.17% 4.10% 6.17% 4.10% 6.17% 4.10% 6.13% 2.89% 4.20% 6.13% 4.20% 6.13% 4.20% 4.20% 6.13% 4.20% 4.20% 6.13% 4.10% 6.10%
PY/RL	2002 2003 2004 2006 2006 2007 2011 2011 2013 2014 2015 2016	PY/RL	2002 2003 2004 2005 2006 2007 2010 2011 2014 2014 2015 2002 2002 2004 2006 2007 2007 2011 2011 2011 2011 2011 2011

WCIRB unit statistical data

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

8 0.060% 0.060% 0.051% 0.052% 0.064% 0.063% 0.071%	8 9.36% 10.22% 11.25% 11.127% 10.38% 8.29% 8.04%	8 1,409,212 1,605,699 1,605,699 1,445,338 1,561,314 1,433,919 1,493,429
7 0.047% 0.044% 0.044% 0.057% 0.055% 0.058% 0.058%	7 8.48% 9.50% 10.13% 9.75% 10.53% 9.67% 7.88% 7.88% 8.08%	7 1,436,815 1,533,770 1,721,976 1,445,929 1,445,929 1,614,738 1,396,833 1,396,833 1,671,465
6 0.033% 0.033% 0.037% 0.047% 0.050% 0.050% 0.046%	6 7.88% 8.06% 9.04% 9.71% 9.71% 7.26% 7.26% 7.89% 7.61%	6 1.604.620 1.683.325 1.882.020 1.561,145 1.586.274 1.495,782 1.495,782 1.495,378 1.550,865
\$1,000,000 5030% 0.030% 0.022% 0.028% 0.037% 0.045% 0.043% 0.042% 0.036%	1,000,000 5,1,000,000 5,7,31% 8,13% 7,78% 8,65% 8,65% 6,57% 6,57% 6,57% 7,87% 7,87% 7,87%	1,000,000 51,000,000 1,760,458 1,756,000 1,742,043 1,905,520 1,618,687 1,512,298 1,779,631 1,633,108 1,945,194
% of Claims in Excess of \$1,000,000 3	% of Medical Incurred on Claims in Excess of \$1,000,000 3	Median Severity  On Claims in Excess of \$1,000,000  7,245 1,760,458 1,760,458 2,077 2,173,42 1,756,000 2,244 2,120,000 2,095,911 0,971 1,742,043 1,737,10 0,971 1,742,043 1,742,043 7,733 1,855,183 1,905,520 0,410 1,762,740 1,618,687 3,872 1682,373 1,512,288 6,786 1,814,410 1,779,631 6,509 1,912,820 1,945,194 1,725 1,725
% of Clair 0.021% 0.022% 0.019% 0.016% 0.025% 0.025% 0.029% 0.029% 0.029% 0.029% 0.029% 0.029% 0.029% 0.034%	9% 3 3 4 4 5 5 5 5 6 6 5 6 5 6 6 6 6 6 6 6 6 6	on Claim 3 2,077,245 2,282,077 2,142,484 2,089,271 1,727,733 1,727,733 1,830,410 1,833,872 1,946,786 1,945,509 1,767,043 1,561,725
0.025%	2 6.41% 7.22% 8.49% 8.55% 7.11% 5.95% 6.59% 6.59% 7.59% 7.59% 7.31% 8.18%	2,570,630 2,313,505 2,105,638 2,106,065 2,210,827 2,210,826 1,711,957 2,215,829 1,945,519 1,945,519 1,845,303 1,946,862 1,847,303
0.013% 0.012% 0.012% 0.015% 0.016% 0.019% 0.021% 0.022% 0.024% 0.025% 0.025%	1 6.84% 6.37% 7.742% 7.04% 6.42% 6.42% 7.41% 7.41% 8.13% 7.043%	1,982,089 2,346,394 2,128,170 1,990,755 1,841,931 1,953,016 1,970,712 2,153,329 1,748,331 1,748,331 1,748,331 1,854,543 1,874,824 1,873,825 2,120,950
PY/RI 2002 2003 2004 2005 2005 2006 2009 2010 2011 2012 2013 2015 2015	PY/RL 2002 2003 2003 2004 2005 2006 2009 2011 2011 2013 2013 2013 2014 2015 2015 2015 2015 2015 2017 2017 2017	2002 2003 2003 2004 2006 2006 2007 2007 2010 2011 2012 2013 2014 2015 2015 2016
8 337 315 315 225 225 226 287 202	8 4.35% 5.748% 7.06% 7.89% 6.60% 5.25%	977 443 1443 1697 000
8 331 255 285 286 267 205 205	8 4.3 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8 2.167,597 2.242,340 2.561,543 2.316,982 2.411,318 1.967,597
7 8 265 3 3 3 2 248 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7 3.63% 4.3 4.82% 5.7 6.15% 7.0 6.15% 7.0 6.16% 6.6 5.14% 6.9 5.54% 6.1 5.53% 5.2 4.39%	7 8 2,367,659 2,167,5 2,487,580 2,242,3 2,564,725 2,564,5 2,306,095 2,306,095 2,316,9 2,516,846 2,411,3 2,516,846 2,411,
6 7 221 285 194 248 165 216 173 208 201 258 201 235 213 242 117 202 162 172		
221 286 194 248 194 248 165 216 173 208 201 235 201 235 174 202 162 172	6 7 3.25% 3.63% 5.94% 4.82% 5.04% 6.15% 5.16% 6.15% 5.86% 6.16% 5.38% 6.14% 5.28% 5.34% 4.86% 5.33% 3.53%	6 7 7 6 6 2.367,659 2.543,782 2.487,580 2.812,364,252 2.561,168 2.468,390 2.402,523 2.306,095 2.650,264 2.516,846 2.070,407 1.989,235 2.568,245 2.605,578 2.568,464 2.05,578
221 286 194 248 194 248 165 216 173 208 201 235 201 235 174 202 162 172	6 7 3.25% 3.63% 5.94% 4.82% 5.04% 6.15% 5.16% 6.15% 5.86% 6.16% 5.38% 6.14% 5.28% 5.34% 4.86% 5.33% 3.53%	age Severity 4 5 6 7 7 4 5 6 7 7 4 5 6 7 7 7 81,297 2,799,369 2,544,865 2,367,659 81,799 2,922,506 2,543,782 2,487,580 80,113 3,201,987 2,812,364 2,576,725 82,927 2,682,004 2,812,364 2,576,725 88,358 2,941,223 2,602,64 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,948,767 2,633,315 2,191,136 88,299 2,809,145 2,568,245 2,605,578 88,739 3,070,864 2,624,964
ixcess of \$1,000,000 6 7 7 6 6 7 7 8 6 7 7 8 6 7 7 8 7 8 7 8	% of Indemnity Incurred  a	age Severity 4 5 6 7 7 4 5 6 7 7 4 5 6 7 7 7 81,297 2,799,369 2,544,865 2,367,659 81,799 2,922,506 2,543,782 2,487,580 80,113 3,201,987 2,812,364 2,576,725 82,927 2,682,004 2,812,364 2,576,725 88,358 2,941,223 2,602,64 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,948,767 2,633,315 2,191,136 88,299 2,809,145 2,568,245 2,605,578 88,739 3,070,864 2,624,964
221 286 194 248 194 248 165 216 173 208 201 235 201 235 174 202 162 172	9, of Indemnity Incurred  2 3 4 5  1.62% 1.83% 2.19% 2.68% 3.25% 3.63% 2.93% 3.27% 3.40% 3.65% 3.91% 4.82% 3.21% 3.09% 3.74% 3.73% 5.04% 6.15% 3.00% 2.31% 4.05% 4.11% 5.16% 6.15% 3.00% 2.31% 3.06% 4.11% 5.16% 6.15% 3.01% 3.46% 4.04% 5.00% 5.38% 6.14% 2.10% 2.28% 3.12% 3.74% 4.86% 5.03% 3.15% 2.88% 3.12% 3.74% 4.86% 5.03% 3.15% 2.88% 3.12% 3.74% 4.86% 5.03% 2.58% 2.17% 3.52% 3.81% 3.94% 2.58% 2.77% 3.52% 3.75% 2.58% 2.17% 3.52% 3.75% 2.58% 2.17% 3.52% 3.75% 2.54% 2.63%	age Severity 4 5 6 7 7 4 5 6 7 7 4 5 6 7 7 7 81,297 2,799,369 2,544,865 2,367,659 81,799 2,922,506 2,543,782 2,487,580 80,113 3,201,987 2,812,364 2,576,725 82,927 2,682,004 2,812,364 2,576,725 88,358 2,941,223 2,602,64 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,941,223 2,650,264 2,516,846 88,358 2,948,767 2,633,315 2,191,136 88,299 2,809,145 2,568,245 2,605,578 88,739 3,070,864 2,624,964
Number of Claims in Excess of \$1,000,000    3	% of Indemnity Incurred  a	Average Severity  a Claims in Excess of \$1,000,000  b C Claims in Excess of \$1,000,000  c C Claims in Excess of \$1,000,000  c C C C C C C C C C C C C C C C C C C

IV-A-71 WCIRB California®

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

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

Layer of Incurred Medical								L	ayer of Incu	rred Medical		
Accident	0	2,500	10,000	25,000	All	Acc	cident	0	2,500	10,000	25,000	All
Year	2,499	9,999	24,999	& Over	Claims	Y	ear/	2,499	9,999	24,999	& Over	Claims
2002	0.0672	0.0826	0.0878	0.0582	0.2958	2	002	22.7%	27.9%	29.7%	19.7%	100.0%
2003	0.0682	0.0825	0.0878	0.0550	0.2935	2	003	23.2%	28.1%	29.9%	18.7%	100.0%
2004	0.0671	0.0751	0.0803	0.0374	0.2599	2	004	25.8%	28.9%	30.9%	14.4%	100.0%
2005	0.0664	0.0646	0.0673	0.0310	0.2294	2	005	29.0%	28.2%	29.3%	13.5%	100.0%
2006	0.0635	0.0585	0.0604	0.0324	0.2147	2	006	29.6%	27.2%	28.1%	15.1%	100.0%
2007	0.0608	0.0530	0.0577	0.0368	0.2083	2	007	29.2%	25.4%	27.7%	17.7%	100.0%
2008	0.0553	0.0477	0.0564	0.0397	0.1991	2	800	27.8%	24.0%	28.3%	20.0%	100.0%
2009	0.0544	0.0466	0.0565	0.0417	0.1992	2	009	27.3%	23.4%	28.4%	20.9%	100.0%
2010	0.0567	0.0479	0.0587	0.0430	0.2063	2	010	27.5%	23.2%	28.5%	20.8%	100.0%
2011	0.0602	0.0487	0.0585	0.0432	0.2107	2	011	28.6%	23.1%	27.8%	20.5%	100.0%
2012	0.0606	0.0492	0.0596	0.0439	0.2133	2	012	28.4%	23.1%	27.9%	20.6%	100.0%
2013	0.0607	0.0499	0.0616	0.0435	0.2157	2	013	28.2%	23.1%	28.6%	20.1%	100.0%
2014	0.0609	0.0514	0.0625	0.0425	0.2173	2	014	28.0%	23.7%	28.8%	19.5%	100.0%
2015	0.0595	0.0515	0.0622	0.0412	0.2144	2	015	27.8%	24.0%	29.0%	19.2%	100.0%
2016	0.0593	0.0508	0.0589	0.0390	0.2080	2	016	28.5%	24.4%	28.3%	18.7%	100.0%
2017	0.0579	0.0502	0.0610	0.0349	0.2040	2	017	28.4%	24.6%	29.9%	17.1%	100.0%

**Annual Change** 

#### Percent of Annual Change Attributable to Each Layer

	,g-											,
	La	yer of Incur	red Medical				Layer of Incurred Medical					
Accident	0	2,500	10,000	25,000	All	A	ccident	0	2,500	10,000	25,000	All
Year	2,499	9,999	24,999	& Over	Claims		Year	2,499	9,999	24,999	& Over	Claims
2003	1.5%	-0.1%	0.0%	-5.5%	-0.8%		2003	0.3%	0.0%	0.0%	-1.1%	-0.8%
2004	-1.6%	-9.0%	-8.5%	-32.1%	-11.5%		2004	-0.4%	-2.5%	-2.5%	-6.0%	-11.5%
2005	-1.0%	-13.9%	-16.2%	-17.1%	-11.7%		2005	-0.2%	-4.0%	-5.0%	-2.5%	-11.7%
2006	-4.5%	-9.6%	-10.3%	4.4%	-6.4%		2006	-1.3%	-2.7%	-3.0%	0.6%	-6.4%
2007	-4.3%	-9.4%	-4.4%	13.8%	-3.0%		2007	-1.3%	-2.6%	-1.2%	2.1%	-3.0%
2008	-9.1%	-9.9%	-2.3%	7.9%	-4.4%		2008	-2.6%	-2.5%	-0.6%	1.4%	-4.4%
2009	-1.5%	-2.5%	0.3%	5.0%	0.1%		2009	-0.4%	-0.6%	0.1%	1.0%	0.1%
2010	4.2%	3.0%	3.8%	3.0%	3.6%		2010	1.2%	0.7%	1.1%	0.6%	3.6%
2011	6.1%	1.6%	-0.3%	0.6%	2.1%		2011	1.7%	0.4%	-0.1%	0.1%	2.1%
2012	0.7%	1.0%	1.8%	1.5%	1.2%		2012	0.2%	0.2%	0.5%	0.3%	1.2%
2013	0.2%	1.3%	3.4%	-1.0%	1.1%		2013	0.1%	0.3%	0.9%	-0.2%	1.1%
2014	0.3%	3.1%	1.5%	-2.3%	0.8%		2014	0.1%	0.7%	0.4%	-0.5%	0.8%
2015	-2.3%	0.2%	-0.5%	-3.0%	-1.3%		2015	-0.7%	0.1%	-0.2%	-0.6%	-1.3%
2016	-0.3%	-1.3%	-5.2%	-5.4%	-3.0%		2016	-0.1%	-0.3%	-1.5%	-1.0%	-3.0%
2017	-2.3%	-1.3%	3.5%	-10.3%	-1.9%		2017	-0.7%	-0.3%	1.0%	-1.9%	-1.9%

Note: Figures in italics are based on a partial accident year.

Source: WCIRB unit statistical data

Average Paid ALAE<sup>[1]</sup> Per Reported Indemnity Claim - Private Insurers
As of March 31, 2019

Accident				Evalu	uated as of	(in month	s):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	<u>111</u>
2000								4,340	4,548	4,786
2001							5,159	5,480	5,819	6,017
2002						5,264	5,668	6,064	6,308	6,493
2003					4,907	5,528	6,043	6,383	6,647	6,869
2004				3,570	4,548	5,212	5,673	6,022	6,283	6,495
2005			2,083	3,279	4,191	4,833	5,307	5,673	5,965	6,175
2006		797	2,176	3,410	4,328	5,022	5,550	5,920	6,211	6,471
2007	71	849	2,340	3,613	4,619	5,393	5,993	6,429	6,768	7,039
2008	85	944	2,494	3,933	5,103	5,975	6,595	7,096	7,468	7,729
2009	150	1,037	2,812	4,448	5,718	6,637	7,358	7,900	8,278	8,553
2010	87	1,111	2,981	4,586	5,816	6,746	7,440	7,931	8,271	8,574
2011	86	1,127	2,942	4,520	5,796	6,733	7,375	7,838	8,274	0,074
2012	85	1,120	3,012	4,721	5,998	6,883	7,496	7,993	0,214	
2012	98	1,120	3,276	4,941	6,141	6,944	7,548	1,555		
2013	140	1,340	3,465	5,124	6,258	7,020	7,540			
2014	102					7,020				
		1,424	3,576	5,183	6,249					
2016	108	1,443	3,640	5,237						
2017 2018	121 142	1,524 1,656	3,766							
		1,030								
2019	153									
Accident					Annual C	hande				
Year	3	<u>15</u>	<u>27</u>	39	51	63	<u>75</u>	<u>87</u>	99	<u>111</u>
2001	<u>~</u>	10	<u> </u>	<u>00</u>	<u>0 1</u>	<u>00</u>	10		27.9%	25.7%
							0.00/	26.3%		
2002						E 00/	9.9%	10.7%	8.4%	7.9%
2003					7 20/	5.0%	6.6%	5.2%	5.4%	5.8%
2004				0.40/	-7.3%	-5.7%	-6.1%	-5.6%	-5.5%	-5.5%
2005			4.40/	-8.1%	-7.8%	-7.3%	-6.5%	-5.8%	-5.0%	-4.9%
2006		G E0/	4.4%	4.0%	3.3%	3.9%	4.6%	4.4%	4.1%	4.8%
2007	20.20/	6.5%	7.5%	5.9%	6.7%	7.4%	8.0%	8.6%	9.0%	8.8%
2008	20.3%	11.3%	6.6%	8.9%	10.5%	10.8%	10.0%	10.4%	10.3%	9.8%
2009	76.5%	9.8%	12.8%	13.1%	12.0%	11.1%	11.6%	11.3%	10.8%	10.7%
2010	-41.7%	7.1%	6.0%	3.1%	1.7%	1.6%	1.1%	0.4%	-0.1%	0.2%
2011	-1.4%	1.4%	-1.3%	-1.4%	-0.3%	-0.2%	-0.9%	-1.2%	0.0%	
2012	-1.2%	-0.5%	2.4%	4.4%	3.5%	2.2%	1.6%	2.0%		
2013	15.4%	7.3%	8.8%	4.7%	2.4%	0.9%	0.7%			
2014	42.0%	11.5%	5.8%	3.7%	1.9%	1.1%				
2015	-26.9%	6.3%	3.2%	1.2%	-0.1%					
2016	6.2%	1.3%	1.8%	1.1%						
2017	11.8%	5.6%	3.5%							
2018	17.2%	8.7%								
2019	8.1%									
A	[2]									
Annual Tre		F 00/	F 40/	4.00/	0.40/	0.00/	0.40/	4.007	4.50/	4.50/
All-Year	4.4%	5.9%	5.1%	4.2%	3.4%	3.2%	3.4%	4.3%	4.5%	4.5%
$R^3$	0.429	0.976	0.965	0.917	0.796	0.779	0.813	0.812	0.799	0.782
<b>5</b>	44 = 27	F 00/	0.00/	0.007	4.007	4 407	0.00/	0.007	F 00/	7 00/
5-Year	11.5%	5.0%	3.3%	2.6%	1.9%	1.1%	0.6%	2.3%	5.2%	7.9%
$R^3$	0.980	0.950	0.963	0.906	0.897	0.926	0.737	0.543	0.782	0.949

<sup>&</sup>lt;sup>[1]</sup> All paid ALAE exclude the paid cost of medical cost containment programs. <sup>[2]</sup> Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

#### Ratio of Paid ALAE to Paid Loss - Private Insurers

As of March 31, 2019

Accident				Evalu	uated as of	f (in month	s):			
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	111
2000								0.107	0.107	0.109
2001							0.118	0.119	0.121	0.122
2002						0.132	0.134	0.137	0.137	0.138
2003					0.136	0.141	0.144	0.146	0.147	0.148
2004				0.139	0.150	0.155	0.158	0.159	0.160	0.160
2005			0.113	0.133	0.144	0.149	0.152	0.154	0.155	0.154
2006		0.076	0.112	0.129	0.138	0.143	0.146	0.148	0.148	0.150
2007	0.032	0.077	0.112	0.127	0.135	0.142	0.145	0.146	0.148	0.148
2008	0.037	0.078	0.110	0.126	0.136	0.141	0.143	0.146	0.147	0.148
2009	0.059	0.084	0.122	0.138	0.146	0.150	0.153	0.155	0.157	0.158
2010	0.033	0.092	0.130	0.143	0.148	0.152	0.156	0.157	0.158	0.160
2011	0.033	0.099	0.133	0.146	0.154	0.160	0.163	0.165	0.168	
2012	0.034	0.098	0.138	0.155	0.164	0.168	0.171	0.174		
2013	0.041	0.109	0.154	0.166	0.172	0.177	0.181			
2014	0.058	0.121	0.163	0.171	0.176	0.180				
2015	0.039	0.128	0.163	0.171	0.175					
2016	0.046	0.124	0.165	0.174						
2017	0.046	0.128	0.166							
2018	0.050	0.130								
2019	0.050									
	0.000									
	0.000				Annual C	'hange				
Accident _		15	27	39	Annual C		75	87	99	111
Accident _ <u>Year</u>	3	<u>15</u>	<u>27</u>	<u>39</u>	Annual C	hange <u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>
Accident _ <u>Year</u> 2001		<u>15</u>	<u>27</u>	<u>39</u>				11.6%	13.2%	12.4%
Accident Year 2001 2002		<u>15</u>	<u>27</u>	<u>39</u>		<u>63</u>	13.7%	11.6% 14.7%	13.2% 13.2%	12.4% 13.4%
Accident Year 2001 2002 2003		<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	6 <u>3</u> 7.2%	13.7% 7.7%	11.6% 14.7% 6.9%	13.2% 13.2% 7.3%	12.4% 13.4% 7.1%
Accident Year 2001 2002 2003 2004		<u>15</u>	<u>27</u>		<u>51</u> 10.1%	63 7.2% 10.1%	13.7% 7.7% 9.3%	11.6% 14.7% 6.9% 9.2%	13.2% 13.2% 7.3% 8.5%	12.4% 13.4% 7.1% 7.9%
Accident Year 2001 2002 2003 2004 2005		<u>15</u>		-4.0%	51 10.1% -4.1%	7.2% 10.1% -3.8%	13.7% 7.7% 9.3% -3.3%	11.6% 14.7% 6.9% 9.2% -3.2%	13.2% 13.2% 7.3% 8.5% -3.0%	12.4% 13.4% 7.1% 7.9% -3.5%
Accident Year 2001 2002 2003 2004 2005 2006			-1.2%	-4.0% -3.5%	51 10.1% -4.1% -4.2%	7.2% 10.1% -3.8% -4.3%	13.7% 7.7% 9.3% -3.3% -4.2%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8%
Accident Year 2001 2002 2003 2004 2005 2006 2007	3	1.8%	-1.2% 0.1%	-4.0% -3.5% -1.7%	10.1% -4.1% -4.2% -1.8%	7.2% 10.1% -3.8% -4.3% -0.8%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008	3 16.2%	1.8% 0.5%	-1.2% 0.1% -1.5%	-4.0% -3.5% -1.7% -0.4%	10.1% -4.1% -4.2% -1.8% 0.5%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009	3 16.2% 58.8%	1.8% 0.5% 8.7%	-1.2% 0.1% -1.5% 10.4%	-4.0% -3.5% -1.7% -0.4% 9.6%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	16.2% 58.8% -43.4%	1.8% 0.5%	-1.2% 0.1% -1.5% 10.4% 7.2%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2%	10.1% -4.1% -4.2% -1.8% 0.5%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009	3 16.2% 58.8%	1.8% 0.5% 8.7% 9.0%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1%	-4.0% -3.5% -1.7% -0.4% 9.6%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	16.2% 58.8% -43.4% -0.8%	1.8% 0.5% 8.7% 9.0% 7.1%	-1.2% 0.1% -1.5% 10.4% 7.2%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	16.2% 58.8% -43.4% -0.8% 4.0%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4% 6.1%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	16.2% 58.8% -43.4% -0.8% 4.0% 20.1%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4% 6.1% 7.5%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2% -32.6%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4% 5.8%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9% 0.2%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2% -32.6% 17.6%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4% 5.8% -2.7%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9% 0.2% 1.1%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%

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

Source: WCIRB accident year experience calls.

#### Percentage of Represented Permanent Disability Claims by Region and Loss Type

First and Second Survey Level, Open Claims Only

### First Survey Level

	Northern	Southern		
	<u>California</u>	<u>California</u>	CT Claims	Non-CT Claims
% of Represented				
AY 2011	66.5%	80.9%	88.3%	73.5%
AY 2012	67.7%	82.4%	89.9%	74.8%
AY 2013	69.2%	84.2%	91.8%	76.5%
AY 2014	68.3%	83.1%	90.6%	75.5%
AY 2015	67.1%	81.6%	89.0%	74.1%
AY 2016	67.0%	81.4%	88.8%	74.0%

#### **Second Survey Level**

	Northern	Southern		
	<u>California</u>	<u>California</u>	CT Claims	Non-CT Claims
% of Represented				
AY 2011	69.6%	84.7%	92.4%	77.0%
AY 2012	71.9%	87.4%	95.4%	79.5%
AY 2013	72.2%	87.8%	95.8%	79.8%
AY 2014	69.8%	84.9%	92.7%	77.2%
AY 2015	68.7%	83.5%	91.1%	75.9%

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

Source: WCIRB Permanent Disability Claim Survey for each accident year (AY)

Data is recast from survey proportions to true proportions.

### **Distribution of Total ALAE & MCCP Components - Private Insurers**

Calendar <u>Year</u>	<u>MCCP</u>	Defense Expense	Other <u>Paid ALAE</u>	Paid <u>ALAE</u>
2005	20.2%	54.9%	24.9%	100.0%
2006	22.6%	44.3%	33.1%	100.0%
2007	24.2%	49.0%	26.8%	100.0%
2008	31.8%	43.0%	25.2%	100.0%
2009	27.8%	45.4%	26.8%	100.0%
2010	27.7%	45.4%	26.9%	100.0%
2011	27.3%	46.1%	26.6%	100.0%
2012	27.7%	46.3%	26.0%	100.0%
2013	28.0%	47.1%	24.9%	100.0%
2014	31.1%	45.8%	23.0%	100.0%
2015	29.2%	42.1%	28.8%	100.0%
2016	27.4%	43.2%	29.4%	100.0%
2017	25.8%	45.9%	28.3%	100.0%
2018	23.4%	42.6%	34.0%	100.0%

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

### **Applicant Attorney Expense Paid - Private Insurers**

Calendar <u>Year</u>	Applicant Attorney Amounts paid (in \$milllions)	Incurred Losses (in \$milllions)	Applicant Attorney Expenses Paid as a Percent of Incurred Losses
2003	192	10,423	1.8%
2004	249	9,073	2.7%
2005	228	7,559	3.0%
2006	209	5,540	3.8%
2007	196	5,444	3.6%
2008	177	5,711	3.1%
2009	221	5,700	3.9%
2010	253	6,260	4.0%
2011	280	7,500	3.7%
2012	340	8,533	4.0%
2013	353	9,501	3.7%
2014	330	9,632	3.4%
2015	326	9,384	3.5%
2016	354	9,620	3.7%
2017	350	8,974	3.9%
2018	313	6,736	4.6%

Source: WCIRB expense calls and quarterly calls for experience

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

Service			Number o	of Med-Lega	Reports by Serv	ice Year		
<u>Year</u>	Southern	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	All
2013	56,933	15,782	27,450	100,165				
2014	63,209	17,103	27,757	108,069	11.0%	8.4%	1.1%	7.9%
2015	64,827	16,969	27,657	109,453	2.6%	-0.8%	-0.4%	1.3%
2016	70,313	20,881	28,290	119,484	8.5%	23.1%	2.3%	9.2%
2017	67,054	20,345	27,657	115,056	-4.6%	-2.6%	-2.2%	-3.7%
2018	64,827	21,006	27,575	113,408	-3.3%	3.2%	-0.3%	-1.4%
Service					rts per Claim <sup>[1]</sup> b			
<u>Year</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2012	0.24	0.31	0.32	0.27				
2013	0.21	0.21	0.25	0.22				
2014	0.22	0.23	0.25	0.23	6.5%	7.5%	0.3%	4.9%
2015	0.22	0.24	0.25	0.23	-2.7%	7.6%	0.4%	-0.5%
2016	0.23	0.28	0.25	0.24	8.3%	13.7%	-0.2%	7.2%
2017	0.23	0.26	0.24	0.24	-2.7%	-6.3%	-5.6%	-3.9%
2018	0.22	0.27	0.24	0.23	-2.2%	3.7%	0.1%	-0.6%
Service		Med-	l egal Payme	nt ner reno	rt by Service Yea	r on All Cla	ims <sup>[2]</sup>	
<u>Year</u>	Southern	Central	Northern	All	Southern	<u>Central</u>	Northern	All
2013	\$1,689	\$1,064	\$1,305	\$1,485				
2014	\$1,859	\$1,222	\$1,382	\$1,636	10.1%	14.8%	6.0%	10.1%
2015	\$1,821	\$1,285	\$1,368	\$1,624	-2.0%	5.1%	-1.1%	-0.8%
2016	\$1,878	\$1,244	\$1,354	\$1,643	3.1%	-3.2%	-1.0%	1.2%
2017	\$1,692	\$1,029	\$1,242	\$1,467	-9.9%	-17.3%	-8.3%	-10.7%
2018	\$1,631	\$1,028	\$1,236	\$1,423	-3.6%	-0.2%	-0.5%	-3.0%

 $<sup>^{[1]}</sup>$  Includes claims with any medical transaction for the service year.

Source: WCIRB medical data call (MDC).

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

### Average Paid MCCP Per Reported Indemnity Claim - Statewide

As of March 31, 2019

Accident			Eva	luated as of (	in months):			
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>
2012	197	891	1,456	1,755	1,976	2,125	2,226	2,232
2013	187	813	1,311	1,635	1,843	1,973	1,998	
2014	164	753	1,273	1,594	1,780	1,869		
2015	173	748	1,249	1,519	1,695			
2016	151	722	1,161	1,414				
2017	162	703	1,155					
2018	167	765						
2019	187							
Accident				Annual Ch				
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>
2013	-4.9%	-8.8%	-9.9%	-6.9%	-6.7%	-7.1%	-10.2%	
2014	-12.5%	-7.4%	-3.0%	-2.5%	-3.4%	-5.2%		
2015	5.4%	-0.7%	-1.8%	-4.7%	-4.8%			
2016	-12.3%	-3.4%	-7.0%	-6.9%				
2017	7.3%	-2.6%	-0.5%					
2018	3.0%	8.8%						
2019	11.7%							
Annual Trend <sup>[</sup>	1]							
All-Year	-1.3%	0.5%	0.1%	0.1%	0.1%	0.1%		
$R^2$	0.128	0.846	0.945	0.945	0.996	0.988		

<sup>&</sup>lt;sup>[1]</sup> Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

## Item AC19-08-02 1/1/2020 Filing - Loss Adjustment Expense Experience Review

Staff has developed the indicated policy year 2020 ratio of loss adjustment expense (LAE) to loss based on calendar year unallocated loss adjustment expense (ULAE) experience through calendar year 2018, accident year allocated loss adjustment expense (ALAE) experience as of March 31, 2019, and projection methodologies consistent with those reflected in the WCIRB's January 1, 2019 Pure Premium Rate Filing. The indicated policy year 2020 ULAE and ALAE projections, including projections for the cost of medical cost containment programs (MCCP), are summarized separately below.

#### **ULAE** Projection

Beginning with the WCIRB's 2015 Expense Call, the WCIRB has collected information related to (a) negative "service fee" type adjustments that are sometimes reflected in reported countrywide ULAE, (b) losses on claims on large deductible policies and/or handled by third-party administrators (TPA) for which the associated claims handling costs are not reported in countrywide ULAE amounts, and (c) various countrywide loss and ULAE amounts consistent with what is reported by insurers on the Insurance Expense Exhibit.<sup>1</sup> This information is used to more accurately reflect the cost of handling claims in California primarily for insurers that make use of TPA or make other adjustments to countrywide reported ULAE costs that ultimately are apportioned to California. Beginning with the WCIRB's 2017 Expense Call, the WCIRB has also collected information related to countrywide open indemnity claim counts in order to more accurately estimate California's share of countrywide paid ULAE.<sup>2</sup>

The approach to derive the adjusted calendar year California paid ULAE for ratemaking purposes, as reflected in the January 1, 2019 Pure Premium Rate Filing, involves several steps. First, reported negative "service fee" type adjustments to ULAE were added back into the reported countrywide paid ULAE amount. Second, countrywide paid losses on large deductible policies and/or claims handled by TPA for which the associated claims handling costs were not reported in countrywide ULAE were subtracted from the countrywide paid losses. This adjustment was applied to losses gross or net of deductible amounts depending on whether the insurer reported ULAE costs on a gross or net basis. Third, the adjusted countrywide paid ULAE ratio was derived based on the ratio of adjusted countrywide paid ULAE computed in the first step described above to adjusted countrywide paid losses computed in the second step. Fourth, the adjusted countrywide paid ULAE was derived by multiplying the adjusted countrywide paid ULAE ratio by the reported countrywide paid losses. Finally, the adjusted countrywide paid ULAE was apportioned to California based on California's share of the insurer's countrywide indemnity claim counts open at the end of the previous calendar year.

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

Exhibit 1 shows calendar year paid ALAE and ULAE as ratios to paid losses by type of insurer. Calendar years 2016 through 2018 ULAE has been computed as described above and incudes an apportionment of countrywide ULAE to California based on open indemnity claim counts. Calendar year 2015 ULAE is

<sup>&</sup>lt;sup>1</sup> See Item AC15-03-07 of the June 12, 2015 and August 6, 2015 Actuarial Committee Agendas for more information.

<sup>&</sup>lt;sup>2</sup> See Item AC17-09-02 of the September 5, 2017 Actuarial Committee Agenda for more information.

adjusted as described above but reflects an apportionment of countrywide ULAE to California based on the prior approach using paid losses. In addition, as discussed at prior meetings and reflected in prior pure premium rate filings, the ULAE for calendar years 2013 and 2014 also reflect partial adjustments for the issues addressed by the changes to the Expense Call for several large national insurers. As a result of these adjustments and enhancements, the ULAE ratios shown on Exhibit 1 for "national" insurers have become increasingly comparable to those for other private insurers since 2013. Also, as discussed at prior meetings, ULAE ratios for State Compensation Insurance Fund (State Fund) are much higher than those of other insurers.

Exhibit 2 shows the average calendar year paid ULAE per open indemnity claim for private insurers. The ULAE severities for calendar years 2016 through 2018 shown on Exhibit 2 were computed based on the approach described above and, as a result, are not comparable to the ULAE severities for prior years, which for 2013 through 2015 only partially reflect the adjustments discussed above and, for prior to 2013, are based solely on the California ULAE reported by insurers.

Exhibits 3.1 through 3.5 show the policy year 2020 projection of ULAE to loss based on the relationship of calendar year paid ULAE to the number of indemnity claims open at the beginning of the calendar year. As in the last several pure premium rate filings, the ULAE projection shown in Exhibit 3.5 is based on statewide claim count and loss projections but using the estimated paid ULAE per open indemnity claim based on the experience of private insurers only. The ULAE projection shown in Exhibit 3.5 is based on the average of ULAE severities from the latest two calendar years. As in the January 1, 2019 Pure Premium Rate Filing, the projected ULAE severity trend was based on the average of the UCLA Anderson Forecast and California Department of Finance projected annual growth rates in California wage levels. The projected ratio of ULAE to loss based on this method for policy year 2020 is 15.6%.

Exhibit 4 shows the projection of policy year 2020 ULAE based on the relationship of calendar year ULAE paid to calendar year paid losses. The ULAE projection shown in Exhibit 4 is based on statewide loss to premium information and paid ULAE to paid loss ratios based on the experience of private insurers only. As with the ULAE projection shown in Exhibit 3.5, the projected ratio of ULAE to losses shown in Exhibit 4 is based on the average of calendar years 2017 and 2018. The projected ratio of ULAE to loss based on this method for policy year 2020 is 13.9%.

As in the last several pure premium rate filings, the projected ratio of ULAE to losses has been based on the average of the projections resulting from the two methodologies described above based on statewide data and average ULAE costs from private insurers (see Exhibits 3.5 and 4). (The ULAE experience of State Fund has been excluded for reasons that have been discussed at prior Committee meetings and in prior pure premium rate filings and California Department of Insurance decisions.) The preliminary policy year 2020 ULAE projection based on this approach is 14.8%. For comparison purposes, the projected ULAE to loss ratio reflected in the January 1, 2019 Pure Premium Rate Filing was 13.6%.

Table 1 shows the projected ratio of ULAE to losses based on the WCIRB's current methodology using statewide data and private insurer average ULAE. Table 1 also shows alternative ULAE projections based on (a) the WCIRB's current methodology but projected based on calendar year 2018 only as shown in Exhibits 5 and 6, (b) the projection of ULAE paid to a weighted number of indemnity claims as shown in Exhibit 7, and (c) projections based on recent calendar year ratios of paid ULAE to paid losses.

Table 1: Projections of Policy Year 2020 ULAE to Loss

ULAE Projection Method	Statewide with Private Insurer Average ULAE
Current WCIRB Methodology	
Paid ULAE per Open Indemnity Claim Applied to the Latest Two Years	15.6%
Paid ULAE to Paid Losses Applied to the Latest Two Years	13.9%
Average of Open Indemnity Claim-Based and Paid Loss- Based Projections	14.8%
Alternative Methodologies	
Paid ULAE per Open Indemnity Claim Applied to the Latest Year Only	15.7%
Paid ULAE to Paid Losses Applied to the Latest Year Only	13.9%
Paid ULAE per Weighted Open Indemnity Claim Applied to the Latest Two Years	15.1%
Latest Two Calendar Year Paid ULAE to Loss Ratios	14.6%
Latest Calendar Year Paid ULAE to Loss Ratio	14.8%

#### ALAE Projection – Excluding MCCP Costs

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

Exhibit 8.1 shows private insurer average paid ALAE per reported indemnity claim by accident year. Exhibit 8.2 shows private insurer ratios of paid ALAE to paid losses. Exhibit 9 show private insurer annual ALAE severity growth percentages based on the estimated ultimate ALAE per indemnity claim, while Exhibit 10 shows private insurer annual ALAE growth percentages based on ratios of incremental calendar year paid ALAE per indemnity claims inventory.

Exhibits 11.1 through 11.4 show the ALAE projection excluding MCCP costs, which is based on statewide claim and loss projections and private insurer average ALAE per indemnity claim. The projection shown in Exhibit 11.4 was computed using a 2.5% ALAE severity trend selected based on the approximate average of the private insurer longer-term (post-2005) and shorter-term (five-year) growth rates of (a) estimated ultimate accident year ALAE per indemnity claim (Exhibit 9) and (b) incremental paid calendar year ALAE per open indemnity claim (Exhibit 10), which is consistent with the methodology used to select the ALAE severity trend in the last several pure premium rate filings. (The projected ALAE severity trend reflected in the January 1, 2019 Premium Rate Filing was 3.5%.) The projected ratio of ALAE to loss based on this method for policy year 2020 prior to adjustment for any lien reforms is 18.8%.

Effective in 2017, Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) included several provisions related to lien filings. As discussed at prior meetings and in prior pure premium rate filings, liens incur significant LAE costs in addition to the settlement costs paid to the lien claimant. In the January 1, 2019 Pure Premium Rate Filing, the WCIRB estimated that SB 1160 and AB 1244 would reduce lien filings by 40%, resulting in a 6.4% decrease in ALAE. At the March 18, 2019 meeting, based on emerging lien filing information through the fourth quarter of 2018, the Committee recommended an adjustment factor based on a 60% reduction in lien filings resulting from SB 1160 and AB 1244, resulting in a 9.6% decrease in ALAE.

The ALAE projection is primarily predicated on accident years 2017 and 2018, which are currently valued at 15 and 27 months, respectively. Liens are typically not filed and paid on claims until much later. As a result, while some of the impact of the reforms is already reflected in the emerging paid ALAE for accident years 2017 and 2018 and the ALAE development factors, most is not yet reflected. To reflect the full impact of these reforms, consistent with the January 1, 2019 Pure Premium Rate Filing, the ALAE projection shown in Exhibit 11.4 includes a separate adjustment to the projected ALAE ratio. This adjustment, which is shown in line (g) of Exhibit 11.4, is based on the full impact of a 9.6% reduction in ALAE costs judgmentally tempered by 25% to reflect the savings that have already emerged in paid ALAE. Staff is in the process of reviewing this adjustment to determine if the impact of SB 1160 and AB 1244 is more appropriately reflected in an adjustment to the ALAE paid development factors, similar to how the impact of these reforms is reflected in medical losses (see Item AC19-08-04 for more information).

As shown in Exhibit 11.4, the preliminary projected ratio of ALAE (excluding MCCP) to loss based on statewide data and private insurer average ALAE costs and after reflecting the impact of SB 1160 and AB 1244 is 17.4%. For comparison purposes, the projected ALAE excluding MCCP costs to loss ratio reflected in the January 1, 2019 Pure Premium Rate Filing was 18.9%.

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

- Projected Ultimate ALAE per Indemnity Claim and Future Number of Indemnity Claims Projection Based on the Latest Year – Exhibit 12
- 2. Latest Year Paid ALAE Ratio Development Compared to Losses Projection Based on the Average of the Latest Two Years Exhibit 13
- 3. Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses Projection Based on the Average of the Latest Two Years Exhibits 14.1 and 14.2

The policy year 2020 ALAE projections derived based on the approach used in the January 1, 2019 Pure Premium Rate Filing and each of the alternative ALAE projection methodologies are shown in Table 2.<sup>3</sup>

Table 2: Projections of Policy Year 2020 ALAE (Excluding MCCP) to Loss

ALAE Projection Method	Statewide with Private Insurer Average ALAE
Current WCIRB Methodology	
Projected Ultimate ALAE per Indemnity Claim – Trend Applied to the Latest Two Years	17.4%
Alternative Methodologies	
Projected Ultimate ALAE per Indemnity Claim – Trend Applied to the Latest Year	18.0%
Latest Year Paid ALAE Ratio Development Compared to Losses – Projection Based on Latest Two Years	17.8%
Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses – Projection Based on Latest Two Years	15.8%

<sup>&</sup>lt;sup>3</sup> All projections shown in Table 3 also reflect the impact of SB 1160 and AB 1244 on ALAE costs.

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#### ALAE Projection - MCCP Costs

As in the last several pure premium rate filings, the projection of MCCP costs is based on a methodology analogous to that used for ALAE excluding MCCP costs and using statewide claim and MCCP cost data.

Exhibit 15 shows statewide average paid MCCP per reported indemnity claim by accident year. Exhibit 16 shows statewide annual MCCP severity growth percentages based on estimated accident year ultimate MCCP costs per indemnity claim. Exhibit 17 shows statewide annual MCCP severity growth percentages based on ratios of calendar year paid MCCP costs per indemnity claims inventory.

Exhibits 18.1 and 18.2 show the projection of MCCP costs based on statewide data. Projected MCCP development through 87 months is based on the latest year paid MCCP age-to-age factor, while projected MCCP development after 87 months is based on the selected paid medical 87-to-ultimate development factor. Exhibit 18.2 shows the projected policy year 2020 ratio of MCCP to loss based on applying separate frequency and severity trends to the latest two years' projected ultimate indemnity claim counts and ultimate MCCP per indemnity claim, which is consistent with the methodology reflected in the last several pure premium rate filings. A 0% MCCP severity trend was selected based on the approximate average rates of growth in (a) estimated ultimate accident year MCCP costs per indemnity claim from 2012 through 2018 (Exhibit 16) and (b) statewide calendar year MCCP per indemnity claims inventory from 2009 through 2018 (Exhibit 17). (The projected MCCP severity trend reflected in the January 1, 2019 Premium Rate Filing based on this approach was -1.0%.)

The new Medical Treatment Utilization Schedule Drug Formulary (Formulary) became effective in 2018. In the July 1, 2018 Pure Premium Rate Filing, the WCIRB estimated that the Formulary would reduce total costs by 0.5%, including a 0.1% reduction for utilization review costs. This translates to an approximate 2.6% reduction in total MCCP costs. Given that the Formulary has only been effective for a little over one year which includes a transition period for outstanding claims through July 1, 2018, staff believes the impact of the Formulary is substantially not yet reflected in the emerging MCCP costs. As a result, staff recommends including a separate adjustment to the projected MCCP ratio for the impact of the Formulary. This adjustment is shown in line (g) of Exhibit 18.2, and is based on the full impact of the Formulary of 2.6% judgmentally tempered by 25% to reflect the savings that have already emerged in paid MCCP costs.<sup>5</sup>

The preliminary projected ratio of MCCP to loss based on this methodology is 4.4%. For comparison purposes, the projected MCCP to loss ratio reflected in the January 1, 2019 Pure Premium Rate Filing was 4.0%.

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

- Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims Projection Based on the Latest Year – Exhibit 19
- Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims Trend Based on Accident Year Ultimate MCCP per Indemnity Claim Applied to the Latest Two Years – Exhibit 20
- Projected Ultimate MCCP per Indemnity Claim and Future Number of Indemnity Claims Trend Based on Calendar Year Paid MCCP per Open Indemnity Claim Applied to the Latest Two Years – Exhibit 21

<sup>&</sup>lt;sup>4</sup> See Exhibit 2.6.1 of Item AC19-06-01 of this Agenda.

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<sup>&</sup>lt;sup>5</sup> Accident year 2018 paid MCCP costs are approximately 25% developed as of March 31, 2019 (see Exhibit 18.1).

The policy year 2020 MCCP cost projections derived based on the approach used in the January 1, 2019 Pure Premium Rate Filing and each of the alternative MCCP projection methodologies are shown in Table 3.6

Table 3: Projections of Policy Year 2020 MCCP to Loss

MCCP Projection Method	Statewide MCCP Ratio
Current WCIRB Methodology  Projected Ultimate MCCP per Indemnity Claim – Trend Applied to the Latest Two Years	4.4%
Alternative Methodologies Projected Ultimate MCCP per Indemnity Claim – Trend Applied to the Latest Year	4.6%
Projected Ultimate MCCP per Indemnity Claim – Trend Based on AY Ultimate MCCP per Indemnity Claim and Applied to the Latest Two Years	4.1%
Projected Ultimate MCCP per Indemnity Claim – Trend Based on CY Paid MCCP per Open Indemnity Claim and Applied to the Latest Two Years	4.6%

The total preliminary ratio of LAE to losses for policy year 2020 based on data evaluated as of March 31, 2019 and the projection methodologies described above is 36.6%. For comparison purposes, the projected total LAE to loss ratio reflected in the January 1, 2019 Pure Premium Rate Filing was 36.5%.

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<sup>&</sup>lt;sup>6</sup> All projections shown in Table 3 also reflect the impact the Formulary on MCCP costs.

#### Summary of Paid LAE Ratios by Insurer Type

Paid AL	Paid ALAE to Paid Loss Ratios <sup>[1]</sup>							
<u>CY</u>	State Fund	CA Private Insurers	<u>National</u>	<u>Statewide</u>	Private Insurers			
2007	5.4%	13.3%	15.4%	12.3%	15.2%			
2008	5.6%	11.5%	13.3%	11.1%	13.1%			
2009	6.2%	15.7%	14.8%	12.8%	14.9%			
2010	5.9%	14.1%	15.5%	13.3%	15.3%			
2011	5.9%	15.9%	17.3%	14.9%	17.2%			
2012	6.3%	15.2%	19.1%	16.2%	18.6%			
2013	5.9%	15.4%	20.0%	17.0%	19.5%			
2014	8.4%	17.8%	21.3%	19.0%	20.8%			
2015	10.1%	18.0%	22.6%	20.5%	22.0%			
2016	11.0%	17.9%	22.4%	20.4%	21.6%			
2017	10.8%	19.8%	22.7%	20.9%	22.3%			
2018	11.4%	19.5%	22.9%	21.0%	22.4%			
Paid UL	AE to Paid Loss Ra	atios						
CY	State Fund	CA Private Insurers	National	Statewide	Private Insurers			
2010	27.9%	17.3%	6.4%	12.3%	7.9%			
2011	28.9%	15.9%	6.5%	11.9%	7.7%			
2012	45.0% <sup>[2]</sup>	15.0%	6.4%	14.8% [2]	7.5%			
2013 <sup>[3</sup>	<sup>3]</sup> 21.8%	16.3%	8.5%	11.7%	9.4%			
2014 [3	28.8%	14.7%	7.7%	11.6%	8.6%			
2015 <sup>[4</sup>	<sup>4]</sup> 35.1%	14.8%	10.2%	13.9%	10.9%			
2016 <sup>[4</sup>	<sup>4]</sup> 37.6%	14.2%	12.8%	15.9%	13.0%			
2017 [4	<sup>4]</sup> 25.6%	16.1%	14.1%	15.8%	14.4%			
2018 [4	24.8%	14.9%	14.8%	16.1%	14.8%			
Paid LAI	E to Paid Loss Rat	i <u>os</u>						
<u>CY</u>	State Fund	CA Private Insurers	<u>National</u>	<u>Statewide</u>	Private Insurers			
2010	33.8%	31.4%	22.0%	25.6%	23.3%			
2011	34.8%	31.8%	23.8%	26.8%	24.8%			
2012	51.3% <sup>[2]</sup>	30.3%	25.5%	31.0% [2]	26.1%			
2013 <sup>[3</sup>	<sup>3]</sup> 27.7%	31.7%	28.5%	28.6%	28.9%			
2014 <sup>[3</sup>	<sup>3]</sup> 37.2%	32.5%	29.0%	30.6%	29.4%			
2015 <sup>[4</sup>	<sup>4]</sup> 45.2%	32.8%	32.8%	34.4%	32.8%			
2016	₹0.070	32.1%	35.2%	36.3%	34.7%			
2017	JU. <del> 7</del> 70	36.0%	36.9%	36.7%	36.7%			
2018 [4	36.2%	34.4%	37.8%	37.1%	37.2%			

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

Source: WCIRB expense calls and quarterly calls for experience

<sup>&</sup>lt;sup>[2]</sup> 2012 figure includes a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

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

<sup>[4]</sup> Reflects adjustments based on the Expense Call for ULAE costs related to deductible policies and third party administrators. 2015 adjusted ratio is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 to 2018 adjusted ratios are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

#### Calendar Year ULAE Paid Per Open Indemnity Claim - Private Insurers

	ULAE	Number of Open Indemnity Claims at	Number of Indemnity Claims	ULAE Paid	
Calendar	Paid	Beginning	Reported	Per Open	Annual
<u>Year</u>	(in Millions)	of the Year	<b>During Year</b>	Indemnity Claim	<u>Change</u>
	(a)	(b)	(c)	(d)	(e)
2010	432	257,439	107,734	1,676	
2011	450	267,152	116,356	1,684	0.5%
2012	474	279,015	122,080	1,698	0.8%
2013 (f)	644	294,011	131,749	2,192	
2014 (f)	598	307,227	133,061	1,947	-11.2%
2015 (g)	774	311,158	140,302	2,486	
2016 (g)	948	314,808	139,941	3,010	
2017 (g)	1,045	311,196	145,909	3,359	11.6%
2018 (g)	1,072	304,634	143,220	3,518	4.7%

#### Notes:

- (a) Calendar year ULAE paid is based on WCIRB expense calls. All figures in each calendar year contain information from the same combination of private insurers that submitted both the ULAE and claim count data for that calendar year. Therefore, each calendar year may contain a different mix of private insurers.
- (b), (c) Based on WCIRB accident year experience calls. Column (c) is for information only.
- (d)  $(a)/(b) \times 1,000,000$ .
- (f) 2013 and 2014 paid ULAE included information submitted by several large national insurers to more appropriately reflect ULAE costs related to deductible policies and third party administrators.
- (g) Reflects adjustments for ULAE costs related to deductible policies and third party administrators based on the Expense Call. 2015 paid ULAE is based on apportioning adjusted countrywide paid ULAE to California using paid losses. 2016 to 2018 paid ULAE are based on apportioning adjusted countrywide paid ULAE to California using open indemnity claim counts.

Source: WCIRB expense calls and quarterly calls for experience

#### Reported Indemnity Claim Count Development - Statewide

Acciden								nt (in mor							
<u>Year</u>	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	120-132	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>	<u>168-180</u>	180-192
1992															1.001
1993														1.001	1.000
1994													1.001	1.000	1.000
1995												1.001	1.000	1.004	1.001
1996											1.001	1.001	1.001	1.000	1.000
1997										1.001	1.000	1.000	1.000	1.000	1.000
1998									1.001	1.000	1.000	1.000	1.001	1.000	1.000
1999							4 000	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.001
2000						0.000	1.000	0.998	1.000	1.000	1.000	1.001	1.000	1.000	1.000
2001					0.000	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002				0.000	0.999	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003			4.004	0.999	1.008	0.998	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000
2004		4.007	1.001	1.000	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	
2005	4 445	1.007	1.004	1.000	1.001	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000		
2006	1.115	1.013	1.005	1.002	1.001	1.000	1.005	1.001	1.000	1.000	1.000	1.000			
2007	1.125	1.015	1.006	1.004	1.002	1.000	1.001	1.001	1.000	1.000	1.000				
2008	1.153	1.023	1.011	1.005	1.003	1.001	1.001	1.001	1.000	1.000					
2009	1.194	1.029	1.011	1.006	1.003	1.002	1.001	1.000	1.000						
2010	1.220	1.030	1.011	1.006	1.004	1.002	1.001	1.000							
2011	1.230	1.033	1.014	1.007	1.002	1.001	1.001								
2012	1.241	1.035	1.013	1.005	1.003	1.001									
2013	1.240	1.031	1.010	1.004	1.002										
2014	1.239	1.027	1.010	1.004											
2015	1.236	1.027	1.006												
2016	1.244	1.029													
2017	1.220														
I.	Age-to-A	ge (Lates	t Year)												
	1.220	1.029	1.006	1.004	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
II.	Age-to-U		4 0 4 =		4 00=				4 000	4 000	4 000	4 000	4 000	4 000	
111	1.275	1.046	1.017	1.011 ite Indemr	1.007	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002
111.	78.4%	95.6%	98.4%	98.9%	99.3%	99.5%	99.6%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%
	70.470	95.076	90.4 /0	90.970	99.570	99.576	99.070	99.7 70	99.1 70	99.7 70	99.070	99.070	99.070	99.070	99.070
Acciden	ıt				Age	to-Age D	evelopme	nt (in mor	nths):						
Year	192-204	204-216	216-228	228-240				276-288		300-312	312-324	324-336	336-348	348-360	
1989			1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990		1.001	0.999	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000		
1991	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1992	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000	1.000	1.000									
1998	1.000	1.000	1.000	1.000	1.000										
1999	1.000	1.000	1.000	1.000											
2000	1.000	1.000	1.000												
2001	1.000	1.000	1.500												
2002	1.000	1.500													
1	Age-to A	ge (Lates	t Vearl												
1.	1.000	<u>1.000</u>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
II.	Age-to-U														
	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	
III.	\			te Indemr	-			00/	00	00/	00	00		100	
	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	

Source: WCIRB quarterly calls for experience

#### Ultimate Indemnity Claim Settlement Ratios - Statewide

Accident	Accident Evaluated as of (in months):														
Year	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	84	96	108	120	132	<u>144</u>	<u>156</u>	<u>168</u>	180
1993															96.7%
1994														96.8%	96.7%
1995													95.7%	95.1%	97.7%
1996												94.8%	93.9%	97.3%	97.5%
1997											95.1%	95.1%	96.9%	97.2%	97.5%
1998										94.7%	94.2%	96.5%	96.9%	97.4%	97.4%
1999									93.5%	92.8%	96.1%	96.7%	97.2%	97.4%	97.8%
2000								91.0%	92.0%	95.4%	96.2%	97.0%	97.4%	98.0%	97.5%
2001							86.4%	90.8%	93.7%	95.0%	96.0%	96.7%	97.5%	96.9%	96.7%
2002						81.9%	88.6%	91.6%	93.2%	94.5%	95.4%	96.5%	96.6%	96.7%	97.1%
2003					75.9%	85.1%	89.1%	91.2%	93.0%	94.1%	95.5%	96.0%	96.2%	96.8%	97.3%
2004				68.9%	80.3%	85.7%	88.6%	90.8%	92.6%	94.4%	95.3%	95.9%	96.6%	97.1%	97.6%
2005			58.7%	73.7%	81.3%	85.6%	88.6%	90.9%	93.2%	94.5%	95.4%	96.2%	96.8%	97.4%	
2006		45.5%	62.9%	74.1%	80.9%	85.2%	88.4%	91.3%	93.1%	94.3%	95.4%	96.3%	96.9%		
2007	21.8%	47.7%	62.8%	73.2%	80.2%	84.7%	89.0%	91.5%	93.1%	94.7%	95.8%	96.6%			
2008	22.8%	46.5%	61.2%	72.2%	79.5%	85.6%	89.5%	91.8%	93.4%	94.9%	96.0%				
2009	21.7%	44.9%	60.0%	71.2%	80.1%	85.8%	89.7%	91.6%	93.7%	95.1%					
2010	21.6%	46.0%	60.7%	73.3%	81.8%	87.0%	90.0%	92.8%	94.5%						
2011	21.9%	45.7%	62.0%	74.3%	82.3%	86.8%	90.8%	93.3%							
2012	21.7%	46.7%	63.5%	75.4%	82.5%	88.3%	91.7%								
2013	21.1%	47.0%	63.8%	76.0%	84.5%	89.4%									
2014	20.9%	47.1%	64.6%	77.5%	85.7%										
2015	20.8%	48.4%	67.2%	79.7%											
2016	21.7%	51.1%	69.8%												
2017	23.8%	53.8%													
2018	24.4%														
Accident		100	004	040			as of (in		070	000	200	040	004	000	0.10
<u>Year</u>	<u>180</u>	<u>192</u>	<u>204</u>	<u>216</u>	<u>228</u>	<u>240</u>	<u>252</u>	<u>264</u>	<u>276</u>	<u>288</u>	300	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>
1989				98.1%	98.4%	99.3%	99.3%	99.4%	99.4%	99.5%	99.5%	99.4%	99.5%	99.6%	99.6%
1990			97.6%	97.9%	98.9%	98.9%	99.0%	99.0%	99.1%	99.2%	99.2%	99.3%	99.4%	99.4%	
1991		96.8%	97.0%	98.6%	98.6%	98.7%	98.8%	98.8%	98.9%	99.0%	99.1%	99.2%	99.2%		
1992	96.8%	96.9%	98.6%	98.6%	98.7%	98.7%	98.8%	98.8%	98.9%	99.0%	99.1%	99.1%			
1993	97.0%	98.4%	98.5%	98.6%	98.6%	98.7%	98.8%	98.8%	98.9%	99.0%	99.0%				
1994	98.2%	98.4%	98.5%	98.3%	98.4%	98.5%	98.5%	98.6%	98.7%	98.8%					
1995	98.0%	98.1%	97.7%	97.9%	98.0%	98.0%	98.1%	98.2%	98.3%						
1996	97.7%	97.2%	97.3%	97.5%	97.5%	97.6%	97.7%	97.8%							
1997	97.0%	97.3%	97.5%	97.5%	97.7%	97.8%	98.0%								
1998	97.7%	97.8%	97.7%	97.8%	98.0%	98.2%									
1999	97.8%	97.7%	97.9%	98.2%	98.4%										
2000	97.4%	97.6%	97.9%	98.1%											
2001	97.1%	97.5%	97.8%												
2002	97.5%	97.8%													

Source: WCIRB quarterly calls for experience

2003 97.7%

# Selected Ultimate Indemnity Claim Reporting and Closure Patterns - Statewide As of December 31, 2018

	Selected Ind	lemnity Claim	Reporting						
a		atterns - As of						Claim Counts	
	Percent	Percent	Percent		Open	Reported	Open	Estimated	Annual
<u>Year</u>	Reported	Closed	<u>Open</u>	<u>AY</u>	<u>Year</u>	@12/31/18	<u>@12/31/18</u>	<u>Ultimate(d)</u>	<u>Change</u>
	(a)	(b)	(c)	(1)	(2)	(3)	(4)	(5)	(6)
1	78.4%	24.4%	54.0%	1989	30	222,831	820	222,831	
2	95.6%	53.8%	41.9%	1990	29	249,123	1,379	249,183	
3	98.4%	69.8%	28.5%	1991	28	250,031	1,819	250,192	
4	98.9%	79.7%	19.2%	1992	27	198,536	1,572	198,693	
5	99.3%	85.7%	13.7%	1993	26	156,173	1,357	156,336	
6	99.5%	89.4%	10.1%	1994	25	143,769	1,600	143,937	
7	99.6%	91.7%	7.9%	1995	24	135,207	2,101	135,398	
8	99.7%	93.3%	6.4%	1996	23	133,140	2,703	133,365	
9	99.7%	94.5%	5.2%	1997	22	137,384	2,568	137,617	
10	99.7%	95.1%	4.7%	1998	21	147,475	2,457	147,749	
11	99.8%	96.0%	3.8%	1999	20	148,688	2,166	148,972	
12	99.8%	96.6%	3.2%	2000	19	161,991	2,676	162,329	
13	99.8%	96.9%	2.9%	2001	18	185,692	3,729	186,102	
14	99.8%	97.4%	2.4%	2002	17	194,696	3,773	195,151	
15	99.8%	97.6%	2.2%	2003	16	184,260	3,880	184,687	
16	99.8%	97.7%	2.1%	2004	15	158,999	3,518	159,358	
17	99.8%	97.8%	1.9%	2005	14	139,586	3,370	139,902	
18	99.8%	97.8%	2.0%	2006	13	133,269	3,848	133,547	
19	99.8%	98.1%	1.6%	2007	12	130,302	4,212	130,554	
20	99.8%	98.4%	1.5%	2008	11	123,028	4,668	123,307	
21	99.8%	98.2%	1.7%	2009	10	113,735	5,327	114,025	
22	99.8%	98.0%	1.9%	2010	9	118,405	6,229	118,752	
23	99.8%	97.8%	2.0%	2011	8	120,528	7,698	120,932	
24	99.9%	98.3%	1.6%	2012	7	127,465	10,127	127,963	
25	99.9%	98.8%	1.1%	2013	6	135,270	13,689	135,939	
26	99.9%	99.0%	0.9%	2014	5	140,414	19,339	141,356	
27	99.9%	99.1%	0.8%	2015	4	144,408	28,023	145,952	
28	99.9%	99.2%	0.7%	2016	3	146,833	42,604	149,257	
29	100.0%	99.4%	0.6%	2017	2	143,999	63,055	150,559	
30	100.0%	99.6%	0.4%	2018	1	119,874	82,522	152,885	
								Projected(e)	
				2019				150,056	-1.9%
				2020				146,680	-2.3%
				2021				142,793	-2.7%

#### Notes:

- (a) See Exhibit 3.1.
- (b) See Exhibit 3.2.
- (c) (a) (b).
- (d) Estimated based on number of reported indemnity claims as of December 31, 2018 (column (3)) and selected reporting pattern (column (a)).

Total

4,645,111

332,829

(e) Estimated based on projected frequency trends for accident years 2019 to 2021. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.

#### **Estimated Number of Open Indemnity Claims - Statewide**

Based on Selected Reporting and Closure Patterns - As of December 31, 2018

		I Number of I	•		ed Number o			Number of Ir Opened Duri	,
<u>AY</u>		@12/31/20			@12/31/20		2019	2020	2021
1989	222,831	222,831	222,831	820	820	820	0	0	0
1990	249,183	249,183	249,183	917	917	917	60	0	0
1991	250,131	250,192	250,192	1,384	921	921	100	61	0
1992	198,565	198,645	198,693	1,445	1,099	731	29	80	48
1993	156,212	156,235	156,298	1,237	1,137	865	39	23	63
1994	143,786	143,823	143,844	1,249	1,139	1,046	17	36	21
1995	135,240	135,256	135,290	1,505	1,175	1,071	33	16	34
1996	133,177	133,210	133,226	2,070	1,483	1,158	37	32	16
1997	137,385	137,424	137,457	2,789	2,136	1,530	1	39	33
1998	147,499	147,500	147,541	2,757	2,994	2,293	24	1	41
1999	148,695	148,719	148,720	2,477	2,779	3,019	7	24	1
2000	162,020	162,028	162,054	2,361	2,699	3,029	29	8	26
2001	185,714	185,748	185,756	3,067	2,706	3,095	22	34	9
2002	194,721	194,744	194,779	3,911	3,217	2,838	25	23	35
2003	184,256	184,280	184,302	3,571	3,701	3,044	-4	24	22
2004	158,990	158,986	159,007	3,348	3,081	3,193	-9	-3	21
2005	139,587	139,579	139,576	3,089	2,939	2,705	1	-8	-3
2006	133,245	133,246	133,238	3,217	2,948	2,806	-24	1	-8
2007	130,282	130,259	130,260	3,762	3,145	2,882	-20	-23	1
2008	123,070	123,051	123,029	3,978	3,553	2,971	42	-18	-22
2009	113,766	113,805	113,788	4,316	3,679	3,286	31	38	-17
2010	118,450	118,483	118,523	5,548	4,495	3,831	45	33	40
2011	120,579	120,625	120,658	6,344	5,650	4,578	51	46	33
2012	127,536	127,590	127,638	8,146	6,713	5,978	71	54	48
2013	135,410	135,486	135,543	10,758	8,654	7,131	140	75	57
2014	140,659	140,805	140,884	14,234	11,187	8,998	245	146	78
2015	144,980	145,233	145,384	19,969	14,697	11,550	572	253	151
2016	147,678	148,263	148,522	28,657	20,421	15,030	845	585	259
2017	148,114	148,966	149,556	42,977	28,907	20,599	4,115	852	590
2018	146,224	150,402	151,267	64,027	43,641	29,354	26,350	4,178	865
<u>Projec</u>									
2019	117,656	143,519	147,620	80,995	62,843	42,834	117,656	25,862	4,101
2020		115,009	140,289		79,173	61,429		115,009	25,280
2021			111,961			77,075			111,961
Total	4,795,643	4,943,123	5,086,910	334,926	334,649	332,607	150,532	147,480	143,787
		(d) Open Cla	aims at Begin	ning of the Yea	ar:		332,829	334,926	334,649
		(e) "Weighte	ed" Open Clai	ms:			633,894	629,885	622,222

- (a), (b) Estimated based on the projected number of indemnity claims and selected reporting and closure patterns (see Exhibit 3.3).
  - (c) Based on the difference in the estimated numbers of reported indemnity claims between two consecutive December 31 evaluations.
  - (d) Based on the number of indemnity claims still open as of the previous year-end. For example, the number of open indemnity claims at the beginning of calendar year 2019 is the total number of indemnity claims from all accident years that were open as of December 31, 2018 (see column (4) total on Exhibit 3.3).
  - (e) The "weighted" number of open claims is the sum of the number of open claims at the beginning of the year and twice the number of claims opened during the year.

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers For Policies with Effective Dates between January 1, 2020 and December 31, 2020

	Number of Open Indemnity	ULAE Paid				
Calendar	Claims at Beginning	Per Open	ULAE			
<u>Year</u>	<u>of the Year</u>	<u>Indemnity Claim</u>	Paid (\$000)			
	(a)	(b)	(c)			
2010	360,624	1,676	604,510			
2011	360,339	1,684	606,894			
2012	360,391	1,698	612,112			
2013	365,706	2,192	801,569			
2014	366,420	1,947	713,493			
2015	367,925	2,486	914,731			
2016	370,782	3,010	1,116,097			
2017	362,328	3,359	1,217,236			
2018	350,417	3,518	1,232,647			
Projected						
2019	332,829	3,634	1,209,664			
2020	334,926	3,769	1,262,470			
2021	334,649	3,900	1,305,234			
(d) Projected ULA	AE Paid (\$000):		1,425,910			
(e) Calendar Yea	r 2018 Earned Premium (\$000):		17,420,200			
(f) Projected Loss	s to Industry Average Filed Pure Premit	um Ratio:	0.560			
(a) Premium Adiu	stment Factor for Calendar Year 2018:		0.936			
(g) i reilliaili Aaja	Stillett i actor for Caleridar Tear 2010.		0.930			
(h) Projected Loss	(h) Projected Losses (\$000): (e) x (f) x (g)					
(i) Projected Rati	io of ULAE to Losses: (d)/(h)		15.6%			

- (a) Calendar years 2010 to 2018 are based on WCIRB accident year experience calls. 2019 to 2021 are from line (d), Exhibit 3.4.
- (b) Calendar years 2010 to 2018 are from column (d) of Exhibit 2. Calendar years 2019 to 2021 are projected based on applying the California average annual wage level changes of 3.2%, 4.0%, 3.7% and 3.5% for 2018 to 2021 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the ULAE paid per open indemnity claim from averaging 2017 and 2018.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2020 and 2021, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2020 policies, based on applying the an average annual change of 3.6% for 2021 and 2022 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2018.
- (f) See Exhibit 8 of Agenda Item AC19-06-01.
- (g) See Exhibit 5.2 of Agenda Item AC19-06-01.

Based on Private Insurers ULAE Paid to Paid Losses Ratio For Policies with Effective Dates between January 1, 2020 and December 31, 2020

Calendar <u>Year</u>	Paid ULAE as % of Paid Losses <sup>1</sup>	Paid Loss as % of Premium	Paid ULAE as % of Premium
2010	(a) 0.079	(b) 72.7%	(c)=(a) x (b) 5.8%
2010	0.079	70.1%	5.4%
2012	0.075	65.3%	4.9%
2013	0.094	58.5%	5.5%
2014	0.086	50.3%	4.3%
2015	0.109	47.8%	5.2%
2016	0.130	46.0%	6.0%
2017	0.144	46.8%	6.8%
2018	0.148	47.4%	7.0%
Projected			
2019	0.146 <sup>2</sup>	48.7% <sup>3</sup>	7.1% <sup>4</sup>
2020	0.146 <sup>2</sup>	49.5% <sup>3</sup>	7.2% 4
2021	0.146 <sup>2</sup>	49.7% <sup>3</sup>	7.3% <sup>4</sup>
` '	d ULAE Paid to CY2018 Earne e of calendar years 2020 and 2		7.3%
(e) Projecte	d Loss to Industry Average File	ed Pure Premium Ratio⁵:	0.560
(f) Premiun	0.936		
(g) Projecte (d) / [(e)	d Ratio of ULAE to Losses: x (f)]		13.9%

- <sup>1</sup> Based on private insurers ULAE to paid loss ratio. See Exhibit 1.
- <sup>2</sup> Based on averaging of the 2017 and 2018 paid ULAE to paid loss ratios.

<sup>&</sup>lt;sup>3</sup> Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2018 experience.

<sup>4 (</sup>a) x (b)

<sup>&</sup>lt;sup>5</sup> See Exhibit 8 of Agenda Item AC19-06-01.

<sup>&</sup>lt;sup>6</sup> See Exhibit 5.2 of Agenda Item AC19-06-01.

Based on Estimated Calendar Year ULAE Paid per Open Indemnity Claim for Private Insurers
Trend from Latest Year

For Policies with Effective Dates between January 1, 2020 and December 31, 2020

	North and Consultations its	LII AE D-i-l				
Calendar	Number of Open Indemnity Claims at Beginning	ULAE Paid Per Open	ULAE			
Year	of the Year	Indemnity Claim	Paid (\$000)			
<u>i Gai</u>	(a)		(c)			
2010	(a) 360,624	(b) 1,676	604,510			
2010	360,339	1,684	606,894			
2012	360,391	1,698	612,112			
2012						
	365,706	2,192	801,569			
2014	366,420	1,947	713,493			
2015	367,925	2,486	914,731			
2016	370,782	3,010	1,116,097			
2017	362,328	3,359	1,217,236			
2018	350,417	3,518	1,232,647			
Projected						
2019	332,829	3,660	1,218,148			
2020	334,926	3,796	1,271,324			
2021	334,649	3,928	1,314,388			
		5,5_5	1,211,022			
(d) Projected ULA	E Paid (\$000):		1,435,911			
, ,			, ,			
(e) Calendar Year	2018 Earned Premium (\$000):		17,420,200			
(f) Drainated Lag	a to Industry Average Filed Dura Promis	um Datio	0.560			
(i) Projected Loss	s to Industry Average Filed Pure Premi	um Ralio.	0.560			
(g) Premium Adju	(g) Premium Adjustment Factor for Calendar Year 2018:					
(h) Projected Loss	(h) Projected Laccas (\$000); (a) y (f) y (a)					
(11) 1 10,000.00 2030	(h) Projected Losses (\$000): (e) x (f) x (g)					
(i) Projected Rati	15.7%					

- (a) Calendar years 2010 to 2018 are based in WCIRB accident year experience calls. 2019 to 2021 are from line (d). Exhibit 3.4.
- (b) Calendar years 2010 to 2018 are from column (d) of Exhibit 2. Calendar years 2019 to 2021 are projected based on applying the California average annual wage level changes of 4.0%, 3.7% and 3.5% for 2019 to 2021 derived based on the information published by the UCLA Anderson School of Business and the California Department of Finance, to the 2018 ULAE paid per open indemnity claim.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2020 and 2021, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2020 policies, based on applying the an average annual change of 3.6% for 2021 and 2022 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2018.
- (f) See Exhibit 8 of Agenda Item AC19-06-01.
- (g) See Exhibit 5.2 of Agenda Item AC19-06-01.

Based on Private Insurers ULAE Paid to Paid Losses Ratio - Trend from Latest Year For Policies with Effective Dates between January 1, 2020 and December 31, 2020

Calendar	Paid ULAE as %	Paid Loss as %	Paid ULAE as %
<u>Year</u>	of Paid Losses <sup>1</sup>	of Premium	of Premium
	(a)	(b)	(c)=(a) x (b)
2010	0.079	72.7%	5.8%
2011	0.077	70.1%	5.4%
2012	0.075	65.3%	4.9%
2013	0.094	58.5%	5.5%
2014	0.086	50.3%	4.3%
2015	0.109	47.8%	5.2%
2016	0.130	46.0%	6.0%
2017	0.144	46.8%	6.8%
2018	0.148	47.4%	7.0%
Projected			
2019	0.148 <sup>2</sup>	48.7% <sup>3</sup>	7.2% 4
2020	0.148 <sup>2</sup>	49.5% <sup>3</sup>	7.3% 4
2021	0.148 <sup>2</sup>	49.7% <sup>3</sup>	7.4% 4
• ,	Paid to CY2018 Earned Premiun dar years 2020 and 2021 in col		7.3%
(e) Projected Loss to	Industry Average Filed Pure Pr	emium Ratio <sup>5</sup> :	0.560
(f) Premium Adjustm	0.936		
(g) Projected Ratio of (d) / [(e) x (f)]	ULAE to Losses:		13.9%

<sup>&</sup>lt;sup>1</sup> Based on private insurers ULAE to paid loss ratio. See Exhibit 1.

<sup>&</sup>lt;sup>2</sup> Based on 2018 paid ULAE to paid loss ratio.

<sup>&</sup>lt;sup>3</sup> Estimated based on age-to-age paid indemnity and medical development factors from insurers' December 31, 2018 experience.

<sup>&</sup>lt;sup>4</sup> (a) x (b).

<sup>&</sup>lt;sup>5</sup> See Exhibit 8 of Agenda Item AC19-06-01.

<sup>&</sup>lt;sup>6</sup> See Exhibit 5.2 of Agenda Item AC19-06-01.

Based on Estimated Calendar Year ULAE Paid per Weighted Open Indemnity Claim for Private Insurers For Policies with Effective Dates between January 1, 2020 and December 31, 2020

	Weighted	ULAE Paid	
Calendar	Number of	Per Weighted Open	ULAE
<u>Year</u>	Open Indemnity Claims	Indemnity Claim	Paid (\$000)
	(a)	(b)	(c)
2010	594,894	913	542,859
2011	605,973	900	545,458
2012	615,637	906	557,651
2013	642,294	1,156	742,428
2014	652,860	1,043	681,195
2015	669,113	1,307	874,717
2016	666,822	1,593	1,062,547
2017	667,648	1,734	1,157,516
2018	649,183	1,813	1,176,947
Projected			
2019	633,894	1,874	1,188,174
2020	629,885	1,944	1,224,485
2021	622,222	2,011	1,251,596
(d) Projected UL	AE Paid (\$000):		1,375,029
(e) Calendar Ye	ar 2018 Earned Premium (\$000):		17,420,200
(f) Projected Lo	ss to Industry Average Filed Pure Pre	emium Ratio:	0.560
(g) Premium Adj	justment Factor for Calendar Year 20°	18:	0.936
(h) Projected Lo	sses (\$000): (e) x (f) x (g)		9,130,972
(i) Projected Ra	atio of ULAE to Losses : (d)/(h)		15.1%

- (a) Calendar years 2010 to 2018 are based on the number of open indemnity claims and twice the number of reported indemnity claims from WCIRB accident year experience calls. 2019 to 2021 are from line (e), Exhibit 3.4.
- (b) Calendar years 2010 to 2018 are from column (a) of Exhibit 2 divided by columns (b)+[2.0 x (c)] of Exhibit 2, multiplied by 1,000,000. Calendar years 2019 to 2021 are projected based on applying the California average annual wage level changes of 3.2%, 4.0%, 3.7% and 3.5% for 2018 to 2021 derived from information published by the UCLA Anderson School of Business, to the ULAE paid per weighted open indemnity claim from averaging 2017 to 2018.
- (c) Column (a) x column (b).
- (d) Average of calendar years 2020 and 2021, projected 3 years to the approximate average midpoint of ultimate ULAE payments on 2020 policies, based on applying the an average annual change of 3.6% for 2021 and 2022 derived from the information published by the UCLA Anderson School of Business and the California Department of Finance.
- (e) Based on the reported earned premium from the same group of insurers that reported the number of open indemnity claims in calendar year 2018.
- (f) See Exhibit 8 of Agenda Item AC19-06-01.
- (g) See Exhibit 5.2 of Agenda Item AC19-06-01.

Average Paid ALAE<sup>1]</sup> Per Reported Indemnity Claim - Private Insurers
As of March 31, 2019

Accident		Evaluated as of (in months):								
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>
2000								4,340	4,548	4,786
2001							5,159	5,480	5,819	6,017
2002						5,264	5,668	6,064	6,308	6,493
2003					4,907	5,528	6,043	6,383	6,647	6,869
2004				3,570	4,548	5,212	5,673	6,022	6,283	6,495
2005			2,083	3,279	4,191	4,833	5,307	5,673	5,965	6,175
2006		797	2,176	3,410	4,328	5,022	5,550	5,920	6,211	6,471
2007	71	849	2,340	3,613	4,619	5,393	5,993	6,429	6,768	7,039
2008	85	944	2,494	3,933	5,103	5,975	6,595	7,096	7,468	7,729
2009	150	1,037	2,812	4,448	5,718	6,637	7,358	7,900	8,278	8,553
2010	87	1,111	2,981	4,586	5,816	6,746	7,440	7,931	8,271	8,568
2011	86	1,127	2,942	4,520	5,796	6,733	7,375	7,838	8,268	0,000
2012	85	1,120	3,012	4,721	5,998	6,883	7,496	7,986	0,200	
2012	98	1,202	3,276	4,941	6,141	6,944	7,540	7,500		
2013	140	1,340	3,465	5,124	6,258	7,010	7,540			
2015	102	1,424	3,576	5,183	6,234	7,010				
2016	102	1,424	3,640	5,105	0,234					
2017	121	1,524	3,738	3,213						
2017	142	1,629	3,730							
2019	142	1,029								
2019	149									
Accident					Annual C	hange				
Year	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	<u>111</u>
2001								26.3%	27.9%	25.7%
2002							9.9%	10.7%	8.4%	7.9%
2003						5.0%	6.6%	5.2%	5.4%	5.8%
2004					-7.3%	-5.7%	-6.1%	-5.6%	-5.5%	-5.5%
2005				-8.1%	-7.8%	-7.3%	-6.5%	-5.8%	-5.0%	-4.9%
2006			4.4%	4.0%	3.3%	3.9%	4.6%	4.4%	4.1%	4.8%
2007		6.5%	7.5%	5.9%	6.7%	7.4%	8.0%	8.6%	9.0%	8.8%
2008	20.3%	11.3%	6.6%	8.9%	10.5%	10.8%	10.0%	10.4%	10.3%	9.8%
2009	76.5%	9.8%	12.8%	13.1%	12.0%	11.1%	11.6%	11.3%	10.8%	10.7%
2010	-41.7%	7.1%	6.0%	3.1%	1.7%	1.6%	1.1%	0.4%	-0.1%	0.2%
2011	-1.4%	1.4%	-1.3%	-1.4%	-0.3%	-0.2%	-0.9%	-1.2%	0.0%	0.270
2012	-1.2%	-0.5%	2.4%	4.4%	3.5%	2.2%	1.6%	1.9%	0.070	
2013	15.4%	7.3%	8.8%	4.7%	2.4%	0.9%	0.6%	1.070		
2014	42.0%	11.5%	5.8%	3.7%	1.9%	0.9%	0.070			
2015	-26.9%	6.3%	3.2%	1.2%	-0.4%	0.070				
2016	6.2%	1.3%	1.8%	0.6%	-0.470					
2017	11.8%	5.6%	2.7%	0.070						
2018	17.2%	6.9%	2.1 /0							
2019	5.0%	0.570								
2019	J.U /0									
Annual Tre	end <sup>[2]</sup>									
All-Year	4.3%	5.8%	5.1%	4.2%	3.4%	3.2%	3.4%	4.3%	4.5%	4.5%
R <sup>3</sup>	0.421	0.975	0.963	0.915	0.795	0.778	0.813	0.812	0.799	0.782
	Ų. <b>⊤</b> ∠ I	0.070	0.000	0.010	0.700	0.770	0.010	0.012	0.700	0.702
5-Year	10.8%	4.7%	3.2%	2.5%	1.9%	1.1%	0.6%	2.3%	5.2%	7.9%
$R^3$	0.973	0.965	0.952	0.886	0.879	0.922	0.730	0.538	0.780	0.948

 $<sup>\</sup>ensuremath{^{[1]}}$  All paid ALAE exclude the paid cost of medical cost containment programs.

Source: WCIRB accident year experience calls.

<sup>[2]</sup> Trend is based on exponential distribution.

### Ratio of Paid ALAE to Paid Loss - Private Insurers

As of March 31, 2019

Accident				Evalu	uated as of	f (in month	s):			
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	63	<u>75</u>	<u>87</u>	99	111
2000								0.107	0.107	0.109
2001							0.118	0.119	0.121	0.122
2002						0.132	0.134	0.137	0.137	0.138
2003					0.136	0.141	0.144	0.146	0.147	0.148
2004				0.139	0.150	0.155	0.158	0.159	0.160	0.160
2005			0.113	0.133	0.144	0.149	0.152	0.154	0.155	0.154
2006		0.076	0.112	0.129	0.138	0.143	0.146	0.148	0.148	0.150
2007	0.032	0.077	0.112	0.127	0.135	0.142	0.145	0.146	0.148	0.148
2008	0.037	0.078	0.110	0.126	0.136	0.141	0.143	0.146	0.147	0.148
2009	0.059	0.084	0.122	0.138	0.146	0.150	0.153	0.155	0.157	0.158
2010	0.033	0.092	0.130	0.143	0.148	0.152	0.156	0.157	0.158	0.160
2011	0.033	0.099	0.133	0.146	0.154	0.160	0.163	0.165	0.168	
2012	0.034	0.098	0.138	0.155	0.164	0.168	0.171	0.174		
2013	0.041	0.109	0.154	0.166	0.172	0.177	0.181			
2014	0.058	0.121	0.163	0.171	0.176	0.180				
2015	0.039	0.128	0.163	0.171	0.175					
2016	0.046	0.124	0.165	0.174						
2017	0.046	0.128	0.166							
2018	0.050	0.130								
2019	0.050									
	0.000									
	0.000				Annual C	'hange				
Accident _		15	27	39	Annual C		75	87	99	111
Accident _ <u>Year</u>	3	<u>15</u>	<u>27</u>	<u>39</u>	Annual C <u>51</u>	hange <u>63</u>	<u>75</u>	<u>87</u>	99 13 2%	<u>111</u>
Accident _ Year 2001		<u>15</u>	<u>27</u>	<u>39</u>				11.6%	13.2%	12.4%
Accident Year 2001 2002		<u>15</u>	<u>27</u>	<u>39</u>		<u>63</u>	13.7%	11.6% 14.7%	13.2% 13.2%	12.4% 13.4%
Accident Year 2001 2002 2003		<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	6 <u>3</u> 7.2%	13.7% 7.7%	11.6% 14.7% 6.9%	13.2% 13.2% 7.3%	12.4% 13.4% 7.1%
Accident Year 2001 2002 2003 2004		<u>15</u>	<u>27</u>		<u>51</u> 10.1%	63 7.2% 10.1%	13.7% 7.7% 9.3%	11.6% 14.7% 6.9% 9.2%	13.2% 13.2% 7.3% 8.5%	12.4% 13.4% 7.1% 7.9%
Accident Year 2001 2002 2003 2004 2005		<u>15</u>		-4.0%	51 10.1% -4.1%	7.2% 10.1% -3.8%	13.7% 7.7% 9.3% -3.3%	11.6% 14.7% 6.9% 9.2% -3.2%	13.2% 13.2% 7.3% 8.5% -3.0%	12.4% 13.4% 7.1% 7.9% -3.5%
Accident Year 2001 2002 2003 2004 2005 2006			-1.2%	-4.0% -3.5%	51 10.1% -4.1% -4.2%	7.2% 10.1% -3.8% -4.3%	13.7% 7.7% 9.3% -3.3% -4.2%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8%
Accident Year 2001 2002 2003 2004 2005 2006 2007	3	1.8%	-1.2% 0.1%	-4.0% -3.5% -1.7%	10.1% -4.1% -4.2% -1.8%	7.2% 10.1% -3.8% -4.3% -0.8%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008	3 16.2%	1.8% 0.5%	-1.2% 0.1% -1.5%	-4.0% -3.5% -1.7% -0.4%	10.1% -4.1% -4.2% -1.8% 0.5%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009	3 16.2% 58.8%	1.8% 0.5% 8.7%	-1.2% 0.1% -1.5% 10.4%	-4.0% -3.5% -1.7% -0.4% 9.6%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008	3 16.2%	1.8% 0.5%	-1.2% 0.1% -1.5%	-4.0% -3.5% -1.7% -0.4%	10.1% -4.1% -4.2% -1.8% 0.5%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	16.2% 58.8% -43.4%	1.8% 0.5% 8.7% 9.0%	-1.2% 0.1% -1.5% 10.4% 7.2%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	16.2% 58.8% -43.4% -0.8%	1.8% 0.5% 8.7% 9.0% 7.1%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	16.2% 58.8% -43.4% -0.8% 4.0%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4% 6.1%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	16.2% 58.8% -43.4% -0.8% 4.0% 20.1%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 2.4% 6.1% 7.5%	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2% -32.6%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4% 5.8%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9% 0.2%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%
Accident Year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	16.2% 58.8% -43.4% -0.8% 4.0% 20.1% 40.2% -32.6% 17.6%	1.8% 0.5% 8.7% 9.0% 7.1% -0.5% 10.8% 11.4% 5.8% -2.7%	-1.2% 0.1% -1.5% 10.4% 7.2% 2.1% 3.6% 11.5% 5.9% 0.2% 1.1%	-4.0% -3.5% -1.7% -0.4% 9.6% 3.2% 	10.1% -4.1% -4.2% -1.8% 0.5% 7.8% 1.0% 4.4% 6.4% 5.0% 1.9%	7.2% 10.1% -3.8% -4.3% -0.8% -0.2% 6.0% 1.7% 4.9% 5.4% 5.1%	13.7% 7.7% 9.3% -3.3% -4.2% -0.7% -1.1% 6.6% 1.7% 4.5% 5.4%	11.6% 14.7% 6.9% 9.2% -3.2% -4.0% -1.2% -0.4% 6.5% 1.2%	13.2% 13.2% 7.3% 8.5% -3.0% -4.2% -0.6% -0.3% 6.4% 1.1%	12.4% 13.4% 7.1% 7.9% -3.5% -2.8% -1.1% -0.1% 6.2%

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

Source: WCIRB accident year experience calls.

#### Estimated Ultimate ALAE Per Indemnity Claim - Private Insurers

			Estimated		Cumulative	umulative Estimated			
	Paid ALAE <sup>[1]</sup>	Cumulative	Ultimate	Indemnity	Count	Estimated	Ultimate ALAE		
Acc.	@3/31/19	Development	ALAE	Claim Counts	Development	Ultimate	Per Indemnity	Annual	
<u>Year</u>	(in \$000)	Factors <sup>[2]</sup>	(in \$000)	@3/31/19	Factors <sup>[3]</sup>	Ind. Counts	<u>Claim</u>	<u>Change</u>	
	(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	$(7)=(3)/(6)\times 1000$		
1991	414,452	1.047	434,106	175,575	1.000	175,617	2,472		
1992	319,142	1.051	335,306	142,033	1.000	142,097	2,360	-4.5%	
1993	237,091	1.053	249,725	113,576	1.001	113,665	2,197	-6.9%	
1994	219,899	1.057	232,514	105,468	1.001	105,579	2,202	0.2%	
1995	242,147	1.061	257,020	101,372	1.001	101,515	2,532	15.0%	
1996	288,554	1.068	308,082	103,188	1.002	103,374	2,980	17.7%	
1997	365,094	1.074	392,062	104,829	1.002	105,033	3,733	25.2%	
1998	503,647	1.080	543,856	112,454	1.002	112,703	4,826	29.3%	
1999	553,777	1.087	601,746	116,408	1.002	116,684	5,157	6.9%	
2000	657,381	1.094	719,030	118,445	1.003	118,759	6,055	17.4%	
2001	779,987	1.101	858,700	113,985	1.003	114,320	7,511	24.1%	
2002	818,264	1.109	907,547	112,984	1.003	113,352	8,006	6.6%	
2003	827,258	1.117	923,959	108,402	1.003	108,771	8,495	6.1%	
2004	710,080	1.125	799,003	99,492	1.004	99,861	8,001	-5.8%	
2005	666,086	1.136	756,466	97,345	1.004	97,721	7,741	-3.3%	
2006	732,746	1.150	842,394	104,283	1.004	104,710	8,045	3.9%	
2007	806,285	1.165	939,273	107,405	1.004	107,883	8,706	8.2%	
2008	854,221	1.185	1,011,847	105,634	1.005	106,161	9,531	9.5%	
2009	884,079	1.208	1,068,374	100,914	1.006	101,475	10,528	10.5%	
2010	931,282	1.239	1,153,700	108,697	1.006	109,391	10,547	0.2%	
2011	933,146	1.277	1,191,502	112,864	1.007	113,648	10,484	-0.6%	
2012	966,906	1.331	1,287,358	121,081	1.008	122,033	10,549	0.6%	
2013	960,995	1.405	1,350,101	127,453	1.010	128,675	10,492	-0.5%	
2014	912,627	1.515	1,382,333	130,196	1.012	131,759	10,491	0.0%	
2015	837,567	1.697	1,421,473	134,349	1.017	136,672	10,401	-0.9%	
2016	723,441	2.056	1,487,246	138,711	1.025	142,157	10,462	0.6%	
2017	513,535	3.013	1,547,390	137,398	1.048	144,032	10,743	2.7%	
2018	209,143	8.088	1,691,636	128,383	1.147	147,279	11,486	6.9%	

Estimated Annual Exponential Trend Based on: R<sup>2</sup>

2005 to 2018 2.3% 0.690 2014 to 2018 2.2% 0.677

Average: 2.3%

<sup>[1]</sup> All paid ALAE exclude the paid cost of medical cost containment programs.

<sup>[2]</sup> Based on the latest year paid ALAE age-to-age development from Exhibit 11.1

<sup>[3]</sup> Based on analogous Exhibit 11.3, applicable to private insurers only.

# Ratio of Accident Year Incremental Paid ALAE<sup>[1]</sup> to Indemnity Claims Inventory<sup>[2]</sup> By Payment Year - Private Insurers

Acc.														
<u>Year</u>	2006	2007	2008	2009	2010	2011	2012	2013	2014	<u>2015</u>	2016	2017	2018	2019
1989	635	1,143	1,062	1,029	1,125	1,143	1,344	1,524	1,471	1,493	1,610	1,948	1,412	1,569
1990	987	2,157	1,139	1,274	1,193	1,355	1,542	1,432	1,812	1,590	1,600	1,828	1,643	1,790
1991	834	1,697	1,577	1,256	1,495	1,388	1,574	1,438	1,789	1,645	1,558	2,144	2,117	1,932
1992	1,416	1,837	1,653	1,405	1,827	1,389	1,669	1,502	1,636	1,576	1,811	1,682	1,856	1,905
1993	1,502	2,157	1,833	1,541	1,927	1,664	1,886	1,800	1,951	1,979	2,169	2,268	2,292	2,148
1994	1,686	1,932	1,717	1,617	1,646	1,576	1,632	1,833	1,663	2,106	1,790	1,802	1,628	1,696
1995	1,671	1,766	1,849	1,766	1,916	1,772	1,672	2,033	2,051	2,107	2,075	2,374	1,999	2,152
1996	2,027	1,997	1,979	1,947	1,946	1,686	2,011	2,085	2,144	2,076	2,297	2,097	1,888	2,236
1997	2,378	2,409	2,347	2,287	2,314	2,225	2,414	2,353	2,147	2,224	2,127	2,259	2,315	2,382
1998	2,556	2,484	2,502	2,336	2,432	2,381	2,277	2,340	2,344	2,292	2,459	2,325	2,527	2,387
1999	2,529	2,629	2,403	2,646	2,804	2,545	2,698	2,641	2,332	2,118	2,342	2,502	2,104	2,225
2000	2,525	2,805	2,720	2,864	2,854	2,740	2,803	2,842	2,539	2,536	2,749	2,592	2,529	2,217
2001	2,284	2,764	2,811	2,873	2,654	2,736	2,755	2,778	2,801	3,292	3,155	2,647	2,618	2,510
2002	2,537	2,873	2,910	3,083	2,899	2,967	3,021	2,915	3,015	3,432	3,203	3,165	3,126	2,837
2003	2,577	2,881	2,947	3,058	3,032	3,216	3,224	3,546	3,397	3,589	3,547	3,127	2,941	2,812
2004	2,100	2,676	3,009	3,077	3,145	3,263	3,130	3,060	3,306	3,584	3,248	3,032	2,945	2,923
2005	768	1,986	2,649	2,916	3,070	3,251	3,284	3,317	3,438	3,609	3,729	3,449	3,516	3,277
2006	106	782	2,162	2,758	2,992	3,243	3,474	3,296	3,404	3,583	3,365	3,161	3,254	2,943
2007		71	846	2,333	2,807	3,192	3,452	3,603	3,686	3,677	3,719	3,540	3,460	3,536
2008			85	939	2,399	3,110	3,500	3,591	3,702	3,835	3,887	3,713	3,718	3,655
2009				150	1,034	2,742	3,391	3,644	3,820	3,943	3,998	3,903	3,810	3,839
2010					87	1,129	2,898	3,450	3,743	3,893	4,073	4,072	3,989	4,021
2011						88	1,147	2,879	3,459	3,863	4,060	3,986	4,128	4,197
2012							90	1,147	3,007	3,677	3,952	4,009	4,130	4,035
2013								101	1,237	3,223	3,649	3,864	4,016	4,098
2014									144	1,378	3,284	3,719	3,895	3,987
2015										105	1,426	3,352	3,751	3,935
2016											108	1,443	3,487	3,904
2017												121	1,523	3,622
2018													142	1,628
2019														149
ALAE per														
Claim	1,846	1,951	1,977	2,104	2,184	2,354	2,506	2,565	2,670	2,857	2,895	2,884	2,937	2,990
Annual														
Change	-8.3%	5.7%	1.4%	6.4%	3.8%	7.8%	6.5%	2.4%	4.1%	7.0%	1.3%	-0.4%	1.8%	1.8%

# Estimated Annual Exponential Trend Based on Payment Year: R<sup>2</sup>

2006-2019 4.0% 0.990 2014-2019 1.4% 0.868 Average: 2.7%

Source: WCIRB quarterly calls for experience

<sup>[1]</sup> All paid ALAE exclude the paid cost of medical cost containment programs.

<sup>&</sup>lt;sup>[2]</sup> Indemnity claims inventory is the sum of indemnity claims open as of April 1 of Year N-1 and newly-reported indemnity claims between April 1 of year N-1 and March 31 of year N.

# Paid Allocated Loss Adjustment Expense Development - Private Insurers As of March 31, 2019

Accident						Age-to-A	Age Develo	pment (in	months):						
<u>Year</u>	15-27	27-39	39-51	<u>51-63</u>	63-75	75-87	87-99	99-111	<u>111-123</u>	123-135	135-147	147-159	159-171	<u>171-183</u>	183-195
1986							1.036	1.023	1.017	1.010	1.011	1.009	1.009	1.010	1.005
1987					4 005	1.051	1.031	1.022	1.015	1.012	1.009	1.013	1.010	1.006	1.004
1988				1 1 1 0	1.085	1.048	1.033	1.021	1.014	1.011	1.011	1.014	1.004	1.004	1.004
1989 1990			1.276	1.148 1.149	1.102 1.097	1.079 1.046	1.040 1.032	1.026 1.020	1.017 1.014	1.011 1.009	1.007 1.007	1.004 1.006	1.005 1.005	1.005 1.005	1.004 1.006
1991		1.552	1.252	1.128	1.062	1.047	1.025	1.017	1.012	1.007	1.007	1.005	1.005	1.005	1.006
1992	2.511	1.512	1.229	1.102	1.074	1.045	1.027	1.018	1.011	1.009	1.007	1.007	1.008	1.005	1.006
1993	2.417	1.527	1.218	1.127	1.076	1.047	1.032	1.028	1.017	1.014	1.010	1.012	1.011	1.009	1.008
1994	2.485	1.498	1.231	1.117	1.082	1.045	1.036	1.023	1.020	1.014	1.019	1.017	1.013	1.011	1.008
1995	2.550	1.569	1.237	1.132	1.072	1.046	1.038	1.030	1.022	1.022	1.019	1.017	1.015	1.013	1.010
1996	2.454	1.490	1.239	1.114	1.072	1.056	1.046	1.036	1.031	1.026	1.021	1.017	1.014	1.008	1.011
1997	2.424	1.511	1.194	1.112	1.081	1.064	1.051	1.040	1.033	1.025	1.020	1.016	1.013	1.013	1.011
1998 1999	2.618 2.514	1.463 1.559	1.229 1.256	1.139 1.152	1.102 1.111	1.083 1.076	1.055 1.058	1.041 1.039	1.028 1.033	1.023 1.027	1.020 1.020	1.018 1.018	1.014 1.015	1.013 1.013	1.011 1.011
2000	2.801	1.593	1.262	1.166	1.110	1.070	1.056	1.039	1.033	1.027	1.020	1.018	1.015	1.013	1.013
2001	3.053	1.597	1.202	1.156	1.108	1.075	1.051	1.034	1.028	1.024	1.019	1.016	1.013	1.013	1.010
2002	2.790	1.592	1.261	1.153	1.102	1.064	1.040	1.031	1.025	1.020	1.017	1.016	1.013	1.011	1.009
2003	2.931	1.550	1.267	1.155	1.089	1.057	1.042	1.032	1.028	1.022	1.019	1.017	1.012	1.009	1.007
2004	2.785	1.573	1.283	1.149	1.090	1.064	1.045	1.033	1.029	1.024	1.019	1.014	1.011	1.009	
2005	2.746	1.599	1.285	1.157	1.104	1.072	1.052	1.042	1.032	1.027	1.019	1.016	1.012		
2006	2.878	1.591	1.278	1.165	1.108	1.075	1.056	1.043	1.032	1.023	1.018	1.013			
2007	2.902	1.570	1.291	1.173	1.116	1.081	1.054	1.042	1.029	1.021	1.017				
2008	2.832	1.621	1.311	1.177	1.115	1.077	1.055	1.037	1.027	1.020					
2009 2010	3.005 2.944	1.623 1.591	1.302 1.295	1.178 1.166	1.112 1.108	1.076 1.068	1.049 1.044	1.034 1.031	1.025						
2010	2.945	1.597	1.298	1.169	1.096	1.065	1.044	1.001							
2012	3.060	1.610	1.288	1.154	1.093	1.055	1.040								
2013	3.024	1.554	1.254	1.136	1.078										
2014	2.902	1.511	1.234	1.120											
2015	2.785	1.478	1.211												
2016	2.796	1.466													
2017	2.684														
	Latest Yea														
Age-to-Age	2.684	1.466	1.211	1.120	1.078	1.055	1.043	1.031	1.025	1.020	1.017	1.013	1.012	1.009	1.007
Cumulative	8.088	3.013	2.056	1.697	1.515	1.405	1.331	1.277	1.239	1.208	1.185	1.165	1.150	1.136	1.125
	3-Year Ari														
Age-to-Age	2.755	1.485	1.233	1.137	1.089	1.063	1.045	1.034	1.027	1.022	1.018	1.014	1.012	1.010	1.009
Cumulative	8.976	3.258	2.194	1.779	1.565	1.437	1.352	1.293	1.251	1.218	1.193	1.171	1.155	1.141	1.130
A 4 - A			High & Low	-	4.004	4.000	4.040	4.004	4.000	4.040	4.045	4.040	4.044	4 000	4.000
Age-to-Age Cumulative	2.789 9.652	1.560 3.461	1.264 2.219	1.147 1.756	1.094 1.531	1.063 1.399	1.043 1.316	1.031 1.262	1.023 1.224	1.019 1.196	1.015 1.174	1.013 1.156	1.011 1.141	1.009 1.128	1.008 1.118
Cumulative	3.002	3.401	2.219	1.750	1.551	1.555	1.510	1.202	1.224	1.130	1.174	1.150	1.141	1.120	1.110
Accident						Age-to-A	Age Develo	pment (in	months):						
<u>Year</u>	207-219	219-231	231-243	243-255	255-267	267-279	279-291	291-303	303-31 <u>5</u>	315-327	327-339	339-351	351-363	363-375	375-387
1986	1.004	1.005	1.007	1.003	1.006	1.005	1.004	1.005	1.005	1.006	1.007	1.006	1.006	1.005	1.004
1987	1.004	1.006	1.006	1.008	1.004	1.004	1.006	1.005	1.004	1.005	1.006	1.004	1.004	1.003	1.004
1988	1.004	1.005	1.005	1.005	1.003	1.005	1.004	1.004	1.005	1.004	1.004	1.003	1.003	1.003	
1989	1.004	1.004	1.004	1.003	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.005		
1990	1.004	1.004	1.002	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.002	1.002			
1991 1992	1.003 1.003	1.002 1.004	1.003 1.004	1.003 1.003	1.003 1.003	1.003 1.003	1.003 1.003	1.002 1.003	1.003 1.003	1.003 1.003	1.002				
1993	1.003	1.004	1.004	1.003	1.005	1.005	1.005	1.003	1.003	1.003					
1993	1.007	1.007	1.006	1.007	1.005	1.005	1.003	1.004	1.004						
1995	1.009	1.009	1.008	1.007	1.008	1.006	1.004								
1996	1.009	1.008	1.008	1.006	1.005	1.006									
1997	1.008	1.008	1.007	1.006	1.006										
1998	1.011	1.009	1.008	1.006											
1999	1.009	1.007	1.007												
2000	1.008	1.007													
2001	1.007														
	Latest Yea		4	4	4	4	4 ~~ -		4 :	4	4		4	4	
Age-to-Age	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.004	1.004	1.003	1.002	1.002	1.005	1.005	1.004
Cumulative	1.109	1.101	1.094	1.087	1.080	1.074	1.068	1.061	1.057	1.053	1.051	1.047	1.044	1.042	1.039
A 4 . A	3-Year Ari			4.000	4.000	4.000	4.005	4.004	4.000	4.000	4.000	4.000	4.004	4.004	4.004
Age-to-Age	1.008	1.007	1.007	1.006	1.006	1.006	1.005	1.004	1.003	1.003	1.003	1.003	1.004	1.004	1.004
Cumulative	1.110	1.101	1.093	1.085	1.078	1.072	1.066	1.060	1.057	1.053	1.051	1.047	1.044	1.042	1.039
Age-to-Age	Average E 1.006	xcluding h	High & Low 1.006	<u>/</u> 1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.003	1.005	1.004	1.004
Cumulative	1.101	1.006	1.088	1.005	1.005	1.003	1.004	1.062	1.004	1.004	1.004	1.003	1.005	1.004	1.004

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

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

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

	Age in Months	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
3	- 6		7.976	7.570	5.434	9.136	8.769	8.693	8.584	6.234	9.866	8.946	8.934	8.191
6	- 9	2.427	3.016	2.765	2.630	3.023	3.176	3.213	3.058	3.163	3.173	3.144	3.064	3.161
9	12	2.022	2.078	2.021	2.034	2.077	2.165	2.115	2.133	2.158	2.107	2.101	2.137	2.091
12	- 15	1.653	1.627	1.687	1.724	1.737	1.701	1.713	1.784	1.744	1.734	1.776	1.701	1.672
15	- 18	1.415	1.486	1.494	1.509	1.482	1.486	1.510	1.494	1.488	1.482	1.491	1.451	
18	- 21	1.357	1.328	1.289	1.326	1.334	1.343	1.338	1.349	1.332	1.309	1.309	1.311	
21	24	1.255	1.234	1.237	1.255	1.253	1.248	1.249	1.237	1.239	1.225	1.227	1.227	
24	- 27	1.187	1.191	1.190	1.197	1.189	1.186	1.205	1.187	1.177	1.184	1.167	1.150	
27	- 30	1.165	1.167	1.172	1.170	1.158	1.163	1.160	1.156	1.151	1.142	1.132		
30	- 33	1.128	1.119	1.135	1.138	1.133	1.131	1.130	1.123	1.116	1.110	1.109		
33	36	1.107	1.103	1.111	1.114	1.113	1.108	1.104	1.101	1.095	1.088	1.092		
36	- 39	1.093	1.090	1.097	1.094	1.091	1.095	1.093	1.085	1.085	1.073	1.068		
39	- 42	1.083	1.086	1.096	1.082	1.083	1.081	1.081	1.077	1.072	1.062			
42	- 45	1.063	1.069	1.069	1.074	1.069	1.068	1.070	1.061	1.057	1.054			
45	48	1.057	1.059	1.063	1.064	1.062	1.059	1.057	1.055	1.051	1.046			
48	- 51	1.050	1.050	1.052	1.053	1.053	1.051	1.050	1.047	1.041	1.036			
51	- 54	1.049	1.050	1.049	1.050	1.048	1.048	1.046	1.042	1.036				
54	- 57	1.038	1.043	1.045	1.043	1.040	1.043	1.038	1.035	1.031				
57	60	1.037	1.038	1.039	1.039	1.037	1.036	1.035	1.031	1.028				
60	- 63	1.032	1.032	1.034	1.034	1.032	1.031	1.031	1.025	1.023				
63	- 66	1.030	1.031	1.033	1.032	1.032	1.029	1.028	1.022					
66	- 69	1.027	1.029	1.028	1.029	1.028	1.024	1.024	1.021					
69	72	1.025	1.028	1.026	1.026	1.024	1.023	1.021	1.018					
72	- 75	1.022	1.023	1.023	1.022	1.021	1.021	1.019	1.016					
75	- 78	1.020	1.023	1.022	1.022	1.020	1.019	1.016						
78	- 81	1.019	1.020	1.020	1.020	1.017	1.017	1.015						
81	84	1.018	1.019	1.018	1.017	1.016	1.014	1.014						
84	- 87	1.016	1.016	1.016	1.015	1.014	1.014	1.011						
87	- 90	1.015	1.015	1.016	1.015	1.012	1.012							
90	- 93	1.014	1.014	1.014	1.012	1.012	1.011							
93	96	1.013	1.013	1.013	1.012	1.010	1.011							
96	- 99	1.012	1.011	1.011	1.010	1.010	1.008							
99	- 102	1.012	1.012	1.011	1.009	1.009								
102	- 105	1.012	1.011	1.009	1.009	1.008								
105	108	1.010	1.010	1.008	1.008	1.007								
108	- 111	1.009	1.009	1.008	1.008	1.006								
111	- 114	1.009	1.008	1.007	1.007									
114	- 117	1.008	1.007	1.007	1.007									
117	120	1.008	1.007	1.006	1.006									
120	- 123	1.007	1.006	1.006	1.006									

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

Source: WCIRB quarterly calls for experience.

## Reported Indemnity Claim Count Development - Statewide

Accide	1					Age-to	o-Age De	velopmer	nt (in mor	nths)·					
Year	15-27	27-39	39-51	<u>51-63</u>	63-75	75-87	87-99				135-147	147-159	159-171	171-183	183-195
1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2016 2017	1.029 1.036 1.059 1.083 1.091 1.102 1.101 1.105 1.100 1.101 1.088	1.005 1.008 1.012 1.017 1.023 1.022 1.027 1.026 1.024 1.019 1.016 1.019	1.000 1.001 1.004 1.006 1.009 1.010 1.011 1.010 1.007 1.008 1.005	1.000 1.000 1.001 1.002 1.003 1.004 1.005 1.005 1.005 1.004 1.003	1.000 0.998 0.999 1.000 1.001 1.002 1.003 1.003 1.003 1.002 1.002	1.000 1.000 0.999 0.999 1.001 1.000 1.002 1.002 1.002 1.001	1.000 1.000 0.999 0.999 1.000 1.000 1.001 1.001 1.001	1.000 1.000 0.999 1.000 0.999 1.000 1.000 1.001 1.001 1.000 1.000	1.000 1.000 1.000 1.000 0.999 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.001 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 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 1.000 1.000 1.000 1.000 1.000 1.000 1.000
1.	<u>Age-to-A</u>	ge (Lates 1.019	t <u>Year)</u> 1.005	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
II.	Age-to-U 1.125		1.014	1.010	1.006	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002
Accide		207-219	210_231	231-243				nt (in mor		303_315	315_327	327-339	339-351	351-363	
Year 1989	1.001	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	
1999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000	1.000	
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1996	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
1997	1.000	1.000	1.000	1.000	1.000	1.000									
1998 1999	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000										
2000	1.000	1.000	1.000	1.000											
2001	1.000	1.000													
2002	1.000														
	Ago to A	go (Lates	et Voor\												
1.	Age-to-A 1.000	ge (Lates 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
II.	Age-to-U														
	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000

Source: WCIRB quarterly calls for experience

### Projected Ratio of ALAE<sup>[1]</sup> to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity For Policies with Effective Dates between January 1, 2020 and December 31, 2020

		Cumulative		Estimated	
	Indemnity	Count	Estimated	Ult. ALAE	Estimated
Acc.	Claim Counts	Development	Ultimate	Per Indemnity	Ult. ALAE
<u>Year</u>	@3/31/19	Factors <sup>[2]</sup>	Ind. Counts	<u>Claim<sup>[3]</sup></u>	<u>(in \$000)</u>
	(1)	(2)	(3)=(1)x(2)	(4)	(5)=(3)x(4)
1991	250,037	1.000	250,072	2,472	618,153
1992	198,545	1.000	198,604	2,360	468,644
1993	156,181	1.001	156,260	2,197	343,306
1994	143,781	1.001	143,878	2,202	316,861
1995	135,217	1.001	135,342	2,532	342,666
1996	133,155	1.001	133,318	2,980	397,321
1997	137,393	1.001	137,584	3,733	513,564
1998	147,474	1.002	147,713	4,826	712,797
1999	148,695	1.002	148,948	5,157	768,136
2000	161,997	1.002	162,296	6,055	982,622
2001	185,697	1.002	186,060	7,511	1,397,564
2002	194,698	1.002	195,095	8,006	1,562,013
2003	184,266	1.002	184,634	8,495	1,568,382
2004	159,001	1.002	159,324	8,001	1,274,775
2005	139,589	1.002	139,867	7,741	1,082,725
2006	133,274	1.002	133,529	8,045	1,074,241
2007	130,302	1.002	130,557	8,706	1,136,681
2008	123,037	1.002	123,302	9,531	1,175,231
2009	113,738	1.003	114,024	10,528	1,200,501
2010	118,407	1.003	118,751	10,547	1,252,415
2011	120,547	1.003	120,911	10,484	1,267,648
2012	127,488	1.004	127,937	10,549	1,349,644
2013	135,284	1.005	135,902	10,492	1,425,934
2014	140,515	1.006	141,344	10,491	1,482,891
2015	144,538	1.009	145,896	10,401	1,517,415
2016	147,154	1.014	149,231	10,462	1,561,256
2017	145,143	1.034	150,030	10,743	1,611,826
2018	135,849	1.125	152,792	11,486	1,754,964

### Projected Based on 2-Year Average of 2017 and 2018:

	Ult. Ind. Counts <sup>[4]</sup>	Ind. Counts <sup>[5]</sup>	Ultimate ALAE <sup>[6]</sup>
2019	148,684	11,530	1,714,348
2020	145,338	11,818	1,717,669
1/1/2021	143,400	11,965	1,715,811
(a) Projected	ALAE Incurred (\$000):		1,715,811
(b) Calendar	Year 2018 Earned Premium <sup>[7]</sup> (\$000):		17,420,200
(c) Projected	Loss to Industry Average Filed Pure Premium Ratio <sup>[8]</sup> :		0.560
(d) Premium	Adjustment Factor for Calendar Year 2018 <sup>[9]</sup> :		0.936
(e) Projected	Losses (\$000): (b) x (c) x (d)		9,130,972
(f) Ratio of A	LAE to Losses Prior to Impact of SB 1160 and AB 1244: (a) / (e)		18.8%
(g) Impact of	SB 1160 and AB 1244 <sup>[10]</sup>		-7.2%
(h) Projected	Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244:		
(f) x [1.0 +	(g)]		17.4%

Ult. ALAE per

- [1] All paid ALAE exclude the paid cost of medical cost containment programs.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Based on estimated ultimate ALAE per indemnity for private insurers from Exhibit 9.
- [4] Estimated based on projected frequency trends for accident years 2018 to 2021. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2017 and 2018.
- [5] Severity is projected by applying an annual growth rate of 2.5%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 9 and (ii) paid ALAE per open indemnity claim from Exhibit 10, to the ultimate ALAE severity estimated from averaging 2017 and 2018.
- [6] Column(6) x Column(7) / 1,000.
- [7] Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [8] See Exhibit 8 of Agenda Item AC19-06-01
- [9] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [10] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 60% reduction in lien fillings, offset by 25% to reflect the impact of the reforms in the emerging ALAE data.

### Projected Ratio of ALAE<sup>[1]</sup> to Losses - Statewide

Based on Estimated Accident Year Indemnity Claim Frequency and Private Insurers ALAE Severity - Trend from Latest Year For Policies with Effective Dates between January 1, 2020 and December 31, 2020

		Cumulative		Estimated	
	Indemnity	Count	Estimated	Ult. ALAE	Estimated
Acc.	Claim Counts	Development	Ultimate	Per Indemnity	Ult. ALAE
<u>Year</u>	@3/31/19	Factors[2]	Ind. Counts	Claim[3]	(in \$000)
	(1)	(2)	(3)=(1)x(2)	(4)	(5)=(3)x(4)
1991	250,037	1.000	250,072	2,472	618,153
1992	198,545	1.000	198,604	2,360	468,644
1993	156,181	1.001	156,260	2,197	343,306
1994	143,781	1.001	143,878	2,202	316,861
1995	135,217	1.001	135,342	2,532	342,666
1996	133,155	1.001	133,318	2,980	397,321
1997	137,393	1.001	137,584	3,733	513,564
1998	147,474	1.002	147,713	4,826	712,797
1999	148,695	1.002	148,948	5,157	768,136
2000	161,997	1.002	162,296	6,055	982,622
2001	185,697	1.002	186,060	7,511	1,397,564
2002	194,698	1.002	195,095	8,006	1,562,013
2003	184,266	1.002	184,634	8,495	1,568,382
2004	159,001	1.002	159,324	8,001	1,274,775
2005	139,589	1.002	139,867	7,741	1,082,725
2006	133,274	1.002	133,529	8,045	1,074,241
2007	130,302	1.002	130,557	8,706	1,136,681
2008	123,037	1.002	123,302	9,531	1,175,231
2009	113,738	1.003	114,024	10,528	1,200,501
2010	118,407	1.003	118,751	10,547	1,252,415
2011	120,547	1.003	120,911	10,484	1,267,648
2012	127,488	1.004	127,937	10,549	1,349,644
2013	135,284	1.005	135,902	10,492	1,425,934
2014	140,515	1.006	141,344	10,491	1,482,891
2015	144,538	1.009	145,896	10,401	1,517,415
2016	147,154	1.014	149,231	10,462	1,561,256
2017	145,143	1.034	150,030	10,743	1,611,826
2018	135,849	1.125	152,792	11,486	1,754,964

#### Projected Based on Latest Year

		OIL / LE POI	
	Ult. Ind. Counts[4]	Ind. Counts <sup>[5]</sup>	Ultimate ALAE <sup>[6]</sup>
2019	149,966	11,773	1,765,560
2020	146,592	12,067	1,768,981
1/1/2021	144,636	12,217	1,767,067
(a) Projected ALAE Incurred (\$000):			1,767,067
(b) Calendar Year 2018 Earned Premium <sup>[7]</sup> (\$000	)):		17,420,200
(c) Projected Loss to Industry Average Filed Pure	e Premium Ratio <sup>[8]</sup> :		0.560
(d) Premium Adjustment Factor for Calendar Yea	ır 2018 <sup>[9]</sup> :		0.936
(e) Projected Losses (\$000): (b) x (c) x (d)			9,130,972
(f) Ratio of ALAE to Losses Prior to Impact of SE	3 1160 and AB 1244		19.4%
(g) Impact of SB 1160 and AB 1244 <sup>[10]</sup>			-7.2%

Ult. ALAE per

18.0%

### Notes:

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

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

- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Based on estimated ultimate ALAE per indemnity for private insures from Exhibit 9.
- [4] Estimated based on projected frequency trends for accident years 2019 and 2021. The estimated frequency changes are based on the projected growth in overall indemnity claim frequency. These frequency trends were then applied to the 2018 ultimate indemnity claim counts.
- [5] Severity is projected by applying an annual growth rate of 2.5%, which is based on the approximate average of the private insurers selected rate of growth in (i) estimated ultimate accident year ALAE severities from Exhibit 9 and (ii) paid ALAE per open indemnity claim from Exhibit 10, to the 2018 ultimate ALAE severity.
- [6] Column(6) x Column(7) / 1,000.

(a) x [1.0 + (f)] / (e)

- <sup>[7]</sup> Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid ALAE in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [8] See Exhibit 8 of Agenda Item AC19-06-01
- [9] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [10] Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 60% reduction in lien filings, offset by 25% to reflect the impact of the reforms in the emerging ALAE data.

## Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide

Based on Private Insurers Paid ALAE as Percentage of Premium For Policies with Effective Dates between January 1, 2020 and December 31, 2020 Latest Year Development Factors

				Ultimate	Ultimate	Ultimate
	Paid ALAE as		Ultimate ALAE	On-level	On-level	ALAE as
Accident	% of Premium	Development	as % of	Indemnity as	Medical as	% of Ultimate
<u>Year</u>	at 3/31/19	<u>Factors</u>	<u>Premium</u>	% of Premium	% of Premium	On-level Loss
	(1)	(2)	(3)	(4)	(5)	(6)
1990	5.7%	1.044	5.9%	50.0%	23.0%	8.1%
1991	7.2%	1.047	7.6%	44.0%	20.7%	11.7%
1992	5.8%	1.051	6.1%	38.2%	18.1%	10.8%
1993	4.1%	1.053	4.3%	38.2%	18.2%	7.7%
1994	4.5%	1.057	4.7%	45.4%	22.0%	7.0%
1995	6.7%	1.061	7.1%	60.7%	31.9%	7.7%
1996	7.8%	1.068	8.3%	63.6%	33.6%	8.6%
1997	9.5%	1.074	10.2%	64.6%	37.5%	10.0%
1998	11.4%	1.080	12.3%	64.7%	39.8%	11.7%
1999	12.3%	1.087	13.4%	63.1%	37.5%	13.3%
2000	11.5%	1.094	12.6%	50.9%	31.3%	15.3%
2001	9.6%	1.101	10.5%	42.2%	25.3%	15.6%
2002	7.6%	1.109	8.5%	32.2%	20.5%	16.1%
2003	5.3%	1.117	5.9%	21.2%	13.8%	16.9%
2004	4.7%	1.125	5.3%	17.3%	14.2%	16.9%
2005	4.3%	1.136	4.9%	20.1%	16.2%	13.6%
2006	5.4%	1.150	6.2%	25.6%	22.1%	12.9%
2007	7.4%	1.165	8.6%	34.1%	30.6%	13.3%
2008	9.4%	1.185	11.2%	40.7%	38.2%	14.2%
2009	11.6%	1.208	14.0%	46.7%	44.2%	15.4%
2010	11.3%	1.239	14.0%	44.4%	43.6%	15.9%
2011	10.2%	1.277	13.1%	41.0%	38.2%	16.5%
2012	9.0%	1.331	12.0%	36.1%	34.4%	16.9%
2013	7.4%	1.405	10.3%	30.2%	30.6%	17.0%
2014	6.4%	1.515	9.7%	26.0%	28.4%	17.7%
2015	5.4%	1.697	9.2%	24.8%	27.4%	17.6%
2016	4.4%	2.056	9.1%	23.3%	26.0%	18.4%
2017	3.1%	3.013	9.5%	23.3%	27.0%	18.8%
2018	1.3%	8.088	10.5%	24.8%	28.9%	19.6%
( <del>-</del> )	Drainated ALAE a					

(7) Projected ALAE as a Percent of Ultimate On-level Losses
Prior to Impact of SB 1160 and AB 1244:

19.2% -7.2%

17.8%

- (1) Based on accident year paid ALAE and calendar year earned premium information from private insurers. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
- (2) Based on the private insurers latest year paid ALAE age-to-age development from Exhibit 11.1.
- $(3) = (1) \times (2).$
- (4), (5) Based on Exhibits 7.1 and 7.3 of AC19-06-01. MCCP costs are not included in the medical ratios shown for accident years 2011 to 2018.
  - (6) = (3) / [(4) + (5)].
  - (7) Based on averaging 2017 and 2018.

<sup>(8)</sup> Impact of SB 1160 and AB 1244:

<sup>(9)</sup> Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244:  $(7) \times [1.0 + (8)]$ 

Development of Paid Allocated Loss Adjustment Expenses as a Percent of Paid Indemnit ${f y}^{I1}$ 

5 - 3					J		,																							
Paid Indemnity <sup>[3]</sup>	183-UIt																									1.053	)		2	1.053
Paid ALAE <sup>[2]</sup>	183-UIt																									1,125	) I		4	1.130
	171-183	1.007	1.004	1.007	1.006	1.007	1.006	1.007	1.005	1.001	1.001															1.001	)		1.002	1.076
	159-171		1.007	1.006	1.006	1.007	1.008	1.009	1.006	1.003	1.003	1.001														1.001			1.002	1.078
	147-159			1.009	1.008	1.009	1.009	1.005	1.007	1.006	1.003	1.004	1.002													1.002			1.003	1.082
	135-147				1.011	1.010	1.010	1.008	1.005	1.004	1.005	1.005	1.003	1.001												1.001	)		1.003	1.085
	<u>123-135</u> <u>135-147</u> <u>147-159</u> <u>159-171</u>					1.013	1.012	1.009	1.006	1.002	1.006	1.008	1.006	1.004	1.002											1.002			1.004	1.090
months):	111-123						1.015	1.011	1.007	1.006	1.003	1.007	1.006	1.004	1.006	1.002										1.002	)		1.004	1.094
oment (in	99-111							1.012	1.012	1.007	0.999	1.004	1.011	1.010	1.011	1.005	1.007									1.007			1.008	1.102
e Develor	87-99								1.012	1.013	1.004	1.004	1.011	1.012	1.014	1.010	1.008	1.005								1.005			1.007	1.110
Age-to-Age Development (in months):	75-87									1.017	1.018	1.014	1.012	1.019	1.022	1.019	1.014	1.011	1.008							1.008			1.011	1.123
	63-75										1.022	1.029	1.021	1.028	1.029	1.026	1.025	1.019	1.015	1.014						1.014		ent I	1.016	1.141
	51-63											1.048	1.040	1.041	1.040	1.038	1.033	1.035	1.027	1.023	1.010					1.010	i .	)evelopm	1.020	1.164
	39-51												1.068	1.066	1.063	1.052	1.044	1.058	1.056	1.031	1.016	1.008			oment	1.008		Average [	1.018	1.185
	27-39													1.093	1.104	1.083	1.057	1.078	1.090	1.043	1.007	1.001	1.005		Latest Year Development	1.005		thmetics	1.004	1.190
	15-27														1.243	1.269	1.227	1.211	1.263	1.268	1.182	1.128	1.164	1.123	Latest Yea	1.123		3-Year Arithmetics Average Development	1.138	1.355
Accident	Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		Age to Age			Age to Age	Age-to-Ult.

[1] Due to relatively sparse data and differing mixes of insurers represented in each factor, each factor shown is the ratio of the paid ALAE development factor to the paid indemnity development factor. The paid ALAE development is based on the private insurers' paid ALAE development from paid Exhibit 11.1, the paid indemnity development factors are from Exhibits 2.5.1 and 2.5.2 of Agenda Item AC19-06-01.

 $<sup>^{[2]}</sup>$  Based on the private insurers year paid ALAE age-to-age development from Exhibit 11.1.  $^{[3]}$  Based on Exhibit 3.1 of Agenda Item AC19-06-01.

## Projected Ultimate ALAE as a Percent of Ultimate Losses - Statewide

For Policies with Effective Dates between January 1, 2020 and December 31, 2020
Using Paid ALAE as a Percent of Paid Indemnity for Private Insurers
Latest Year Development Factors

Accident <u>Year</u>	Paid ALAE as a Percent of Paid Indemnity at 3/31/19 (1)	Development <u>Factors</u> (2)	Ultimate ALAE as a Percent of Ultimate Indemnity (3)	Indemnity On-level <u>Factors</u> (4)	Ultimate ALAE as a Percent of Ultimate On-level Indemnity (5)
2004	36.7%	1.125	41.2%	1.193	34.6%
2005	38.8%	1.070	41.5%	1.616	25.7%
2006	37.4%	1.071	40.0%	1.588	25.2%
2007	37.2%	1.074	40.0%	1.531	26.1%
2008	36.7%	1.075	39.4%	1.438	27.4%
2009	38.6%	1.077	41.5%	1.410	29.5%
2010	39.0%	1.079	42.1%	1.383	30.4%
2011	39.1%	1.086	42.4%	1.364	31.1%
2012	39.5%	1.091	43.1%	1.332	32.4%
2013	39.6%	1.100	43.6%	1.288	33.8%
2014	37.8%	1.115	42.2%	1.166	36.2%
2015	36.3%	1.127	40.9%	1.137	36.0%
2016	36.2%	1.136	41.1%	1.122	36.6%
2017	36.3%	1.141	41.4%	1.093	37.8%
2018	32.8%	1.281	42.0%	1.068	39.3%

(6) ALAE as Percent of On-level Indemnity:	Projected: 38.6%
(7) Indicated Indemnity to Industry Average Filed Pure Premium Ratio:	0.247
(8) Indicated Medical to Industry Average Filed Pure Premium Ratio:	0.313
(9) ALAE as Percent of Total Losses Prior to Impact of SB 1160 and AB 1244:	17.0%
(10) Impact of SB 1160 and AB 1244:	-7.2%
(11) Projected Ratio of ALAE to Losses after Impact of SB 1160 and AB 1244: (9) x [1.0 + (10)]	15.8%

- (1) Based on accident year paid ALAE information from private insurers. Amounts shown do not reflect the paid cost of medical cost containment programs (MCCP).
- (2) See Exhibit 14.1.
- $(3) = (1) \times (2)$ .
- (4) From Exhibit 4.1 of Agenda Item AC19-06-01
- (5) = (3) / (4).
- (6) Projected by averaging 2017 and 2018.
- (7), (8) From Exhibit 8 of Agenda Item AC19-06-01.
  - $(9) = (6) \times (7) / [(7) + (8)].$
  - (10) Based on the WCIRB's most recent evaluation of SB 1160 and AB 1244 reflecting a 60% reduction in lien fillings, offset by 25% to reflect the impact of the reforms in the emerging ALAE data.

# Average Paid MCCP Per Reported Indemnity Claim - Statewide As of March 31, 2019

Accident			Eva	luated as of (	in months):			
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>
2012	197	891	1,506	1,819	2,049	2,205	2,312	2,323
2013	187	841	1,363	1,701	1,918	2,055	2,090	
2014	169	784	1,325	1,661	1,856	1,954		
2015	178	777	1,309	1,598	1,784			
2016	156	766	1,237	1,507				
2017	169	748	1,227					
2018	174	808						
2019	191							
Accident				Annual Ch	ange			
<u>Year</u>	<u>3</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>
2013	-4.9%	-5.7%	-9.5%	-6.5%	-6.4%	-6.8%	-9.6%	
2014	-9.5%	-6.8%	-2.8%	-2.3%	-3.2%	-4.9%		
2015	4.9%	-0.8%	-1.2%	-3.8%	-3.9%			
2016	-12.0%	-1.5%	-5.5%	-5.7%				
2017	8.3%	-2.3%	-0.8%					
2018	3.0%	8.0%						
2019	9.3%							
Annual Trend <sup>[1</sup>	1]							
All-Year	-0.8%	0.4%	0.1%	0.1%	0.1%	0.1%		
$R^2$	0.076	0.770	0.926	0.938	0.996	0.988		

<sup>&</sup>lt;sup>[1]</sup> Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

## Estimated Ultimate MCCP Per Indemnity Claim - Statewide

Accident <u>Year</u>	Paid MCCP @03/31/19 (in \$000) (1)	Cumulative Development <u>Factors<sup>[1]</sup></u> (2)	Estimated Ultimate MCCP (3)=(1)x(2)	Indemnity Claim Counts @03/31/19 (4)	Cumulative Count Development Factors <sup>[2]</sup> (5)	Estimated Ultimate Ind. Counts (6)=(4)x(5)	Estimated Ultimate MCCP Per Indemnity Claim (7)=(3)/(6) x 1000	Annual <u>change</u>
2011	315,502	1.364	430,382	120,547	1.003	120,911	3,559	
2012	293,610	1.416	415,739	127,488	1.004	127,937	3,250	-8.7%
2013	282,696	1.464	413,928	135,284	1.005	135,902	3,046	-6.3%
2014	274,600	1.539	422,513	140,515	1.006	141,344	2,989	-1.9%
2015	257,792	1.650	425,387	144,538	1.009	145,896	2,916	-2.5%
2016	221,724	1.852	410,672	147,154	1.014	149,231	2,752	-5.6%
2017	178,086	2.299	409,410	145,143	1.034	150,030	2,729	-0.8%
2018	109,711	4.106	450,421	135,849	1.125	152,792	2,948	8.0%

## **Estimated Annual Exponential Trend Based on:**

2012 to 2018 -2.1% 2014 to 2018 -0.9%

<sup>[1]</sup> Based on MCCP development through 87 months from Exhibit 18.1. 99-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC19-06-01.

<sup>[2]</sup> Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.

# Paid MCCP per Indemnity Claims Inventory<sup>[1]</sup> by Calendar Year - Statewide

Paid MCCP per Indemnity Claim Adjusted to

Calendar Year	Remove IMR/IBR Fees	Year-to-Year Change
2005		
2006		
2007	\$562	
2008	\$848	50.8%
2009	\$808	-4.7%
2010	\$872	7.9%
2011	\$914	4.8%
2012	\$942	3.0%
2013	\$984	4.5%
2014	\$952	-3.3%
2015	\$1,059	11.2%
2016	\$1,000	-5.6%
2017	\$947	-5.2%
2018	\$978	3.3%

Estimated Annual Exponential Trend Based on:

2009-2018	1.9%
$R^2$	0.559

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

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

## Paid MCCP Development Factors - Statewide

				Q	uarterly Deve	elopment			
Aq	e in	ı			P	Accident Year	-		
<u>Mo</u>			<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
3	-	6	5.599	5.796	6.047	5.652	6.118	5.561	5.890
6	-	9	2.356	2.432	2.402	2.457	2.407	2.395	2.329
9	-	12	1.763	1.773	1.771	1.742	1.725	1.776	1.824
12	-	15	1.476	1.412	1.456	1.468	1.477	1.444	1.432
15	-	18	1.277	1.253	1.299	1.282	1.244	1.258	
18	-	21	1.171	1.157	1.194	1.177	1.170	1.154	
21	-	24	1.128	1.121	1.128	1.120	1.125	1.122	
24	-	27	1.083	1.099	1.096	1.096	1.086	1.096	
27	-	30	1.077	1.081	1.073	1.073	1.077		
30	-	33	1.051	1.068	1.045	1.062	1.054		
33		36	1.045	1.054	1.036	1.047	1.053		
36	-	39	1.047	1.053	1.034	1.040	1.039		
39	-	42	1.036	1.043	1.026	1.040			
42	-	45	1.036	1.035	1.025	1.029			
45		48	1.031	1.027	1.019	1.028			
48	-	51	1.031	1.023	1.026	1.021			
51	-	54	1.025	1.023	1.025				
54	-	57	1.022	1.019	1.019				
57		60	1.017	1.016	1.016				
60	-	63	1.015	1.015	1.013				
63	-	66	1.016	1.017					
66	-	69	1.014	1.012					
69		72	1.011	1.011					
72	-	75	1.010	1.010					
75	-	78	1.010						
78	-	81	1.008						
81	-	84	1.008						
84	-	87	1.008						

Annual	Developmen	t

		Annua	i Developmei	nt			_
Age in			Accide	nt Year			
Months	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	-
15 - 27	1.829	1.791	1.887	1.851	1.779	1.786	
27 - 39	1.242	1.284	1.276	1.240	1.241		
39 - 51	1.141	1.135	1.126	1.122			
51 - 63	1.081	1.075	1.072				
63 - 75	1.051	1.051					
75 - 87	1.034						
	45.07	07.00	00.54	E4.00	00.75	75.07	07.111
Δαρ-to-Δαρ <sup>[1]</sup>	<u>15-27</u> 1.786	<u>27-39</u> 1.241	<u>39-51</u> 1.122	<u>51-63</u> 1.072	<u>63-75</u> 1.051	<u>75-87</u> 1.034	<u>87-Ult.</u>
Age-to-Age <sup>[1]</sup> Age -to-Ult. <sup>[2]</sup>	4.106	2.299	1.852	1.650	1.539	1.464	1.416
0							

### Notes:

Source: WCIRB quarterly calls for experience.

<sup>[1]</sup> Based on Latest Year.

<sup>[2] 87-</sup>to-Ult. is based on selected paid medical 87-to-ultimate development factor on Exhibit 3.2 of Agenda Item AC19-06-01.

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity For Policies with Effective Dates between January 1, 2020 and December 31, 2020

							Estimated	
	Paid			Indemnity	Cumulative		Ultimate	
	MCCP	Cumulative	Estimated	Claim	Count	Estimated	MCCP Per	
Accident	@12/31/18	Development	Ultimate	Counts	Development	Ultimate	Indemnity	Annual
<u>Year</u>	(in \$000)	Factors <sup>[1]</sup>	MCCP	@12/31/18	Factors <sup>[2]</sup>	Ind. Counts	<u>Claim</u>	change
	(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	$(7)=(3)/(6) \times 1000$	_
2011	315,502	1.364	430,382	120,547	1.003	120,911	3,559	
2012	293,610	1.416	415,739	127,488	1.004	127,937	3,250	-8.7%
2013	282,696	1.464	413,928	135,284	1.005	135,902	3,046	-6.3%
2014	274,600	1.539	422,513	140,515	1.006	141,344	2,989	-1.9%
2015	257,792	1.650	425,387	144,538	1.009	145,896	2,916	-2.5%
2016	221,724	1.852	410,672	147,154	1.014	149,231	2,752	-5.6%
2017	178,086	2.299	409,410	145,143	1.034	150,030	2,729	-0.8%
2018	109,711	4.106	450,421	135,849	1.125	152,792	2,948	8.0%

Projected Based on 2-Year Average of 2017 and 2018:

	Ultimate MCCP <sup>[5]</sup>	Ult. Ind. Counts <sup>[3]</sup>	Ult.MCCP per Ind. Counts <sup>[4]</sup>
2019	422,022	148,684	2,838
2020	412,527	145,338	2,838
1/1/2021	407,024	143,400	2,838
(a) Projected MCCP	(\$000):		407,024
(b) Calendar Year 20		17,420,200	
(c) Projected Loss to	Industry Average Filed Pure Premium Ratio <sup>[7]</sup> :		0.560
(d) Premium Adjustm	ent Factor for Calendar Year 2018 <sup>[8]</sup> :		0.936
(e) Projected Losses	(\$000): (b) x (c) x (d)		9,130,972
(f) Ratio of MCCP to	Losses Prior to Impact of Drug Formulary: (a) / (e)		4.5%
(g) Impact of Drug Fo	ormulary on MCCP <sup>[9]</sup>		-2.0%
(h) Projected Ratio o (f) x [1.0 + (g)]	f ALAE to Losses after Impact of Drug Formulary:		4.4%

- [1] Based on MCCP development through 87 months from Exhibit 18.1. 99-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC19-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Estimated based on projected frequency trends for accident years 2018 to 2021. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency. These frequency trends were then applied to the ultimate indemnity claim counts estimated from averaging 2017 and 2018.
- [4] Severity is projected by applying an annual growth rate of 0% to the ultimate MCCP severity estimated from averaging 2017 and 2018.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [7] See Exhibit 8 of Agenda Item AC19-06-01.
- [8] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [9] Based on the WCIRB's evaluation of the Drug Formulary impacting MCCP (UR) costs, offset by 25% to reflect the impact

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity - Trend from Latest Year For Policies with Effective Dates between July 1, 2020 and December 31, 2020

							Estimated	
	Paid			Indemnity	Cumulative		Ultimate	
	MCCP	Cumulative	Estimated	Claim	Count	Estimated	MCCP Per	
Accident	@12/31/18	Development	Ultimate	Counts	Development	Ultimate	Indemnity	Annual
<u>Year</u>	(in \$000)	Factors <sup>[1]</sup>	<u>MCCP</u>	@12/31/18	Factors <sup>[2]</sup>	Ind. Counts	<u>Claim</u>	<u>change</u>
	(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	(7)=(3)/(6) x 1000	
2011	315,502	1.364	430,382	120,547	1.003	120,911	3,559	
2012	293,610	1.416	415,739	127,488	1.004	127,937	3,250	-8.7%
2013	282,696	1.464	413,928	135,284	1.005	135,902	3,046	-6.3%
2014	274,600	1.539	422,513	140,515	1.006	141,344	2,989	-1.9%
2015	257,792	1.650	425,387	144,538	1.009	145,896	2,916	-2.5%
2016	221,724	1.852	410,672	147,154	1.014	149,231	2,752	-5.6%
2017	178,086	2.299	409,410	145,143	1.034	150,030	2,729	-0.8%
2018	109,711	4.106	450,421	135,849	1.125	152,792	2,948	8.0%

### Projected Based on Latest Year:

			Ult.MCCP per
	Ultimate MCCP <sup>[5]</sup>	Ult. Ind. Counts[3]	Ind. Counts <sup>[4]</sup>
2019	442,088	149,966	2,948
2020	432,141	146,592	2,948
1/1/2021	426,377	144,636	2,948
(a) Proje	cted MCCP (\$000):		426,377
(b) Caler	ndar Year 2018 Earned Premium <sup>[6]</sup> (\$000):		17,420,200
(c) Proje	cted Loss to Industry Average Filed Pure Premium Ratio <sup>[7]</sup> :		0.560
(d) Prem	ium Adjustment Factor for Calendar Year 2018 <sup>[8]</sup> :		0.936
(e) Proje	cted Losses (\$000): (b) x (c) x (d)		9,130,972
(f) Ratio	of MCCP to Losses Prior to Impact of Drug Formulary: (a) / (e)		4.7%
(g) Impa	ct of Drug Formulary on MCCP <sup>[9]</sup>		-2.0%
. , .	cted Ratio of ALAE to Losses after Impact of Drug Formulary: 1.0 + (g)]		4.6%

- [1] Based on MCCP development through 87 months from Exhibit 18.1. 99-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC19-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Estimated based on projected frequency trends for accident years 2019 to 2021. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency. These frequency trends were then applied to the 2018 ultimate indemnity claim counts.
- [4] Severity is projected by applying an annual growth rate of 0% to the 2018 ultimate MCCP severity.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [7] See Exhibit 8 of Agenda Item AC19-06-01.
- [8] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [9] Based on the WCIRB's evaluation of the Drug Formulary impacting MCCP (UR) costs, offset by 25% to reflect the impact of the Drug Formulary in emerging MCCP data.

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity with Trend Based on AY Ultimate MCCP per Indemnity Claim and Applied to the Latest Two Years For Policies with Effective Dates between January 1, 2020 and December 31, 2020

								Estimated	
		Paid			Indemnity	Cumulative		Ultimate	
		MCCP	Cumulative	Estimated	Claim	Count	Estimated	MCCP Per	
		@3/31/19	Development	Ultimate	Counts	Development	Ultimate	Indemnity	Annual
Υ	'ear	(in \$000)	Factors <sup>[1]</sup>	MCCP	@3/31/19	Factors <sup>[2]</sup>	Ind. Counts	<u>Claim</u>	<u>change</u>
		(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	(7)=(3)/(6) x 1000	
2	011	315,502	1.364	430,382	120,547	1.003	120,911	3,559	
2	012	293,610	1.416	415,739	127,488	1.004	127,937	3,250	-8.7%
2	013	282,696	1.464	413,928	135,284	1.005	135,902	3,046	-6.3%
2	014	274,600	1.539	422,513	140,515	1.006	141,344	2,989	-1.9%
2	015	257,792	1.650	425,387	144,538	1.009	145,896	2,916	-2.5%
2	016	221,724	1.852	410,672	147,154	1.014	149,231	2,752	-5.6%
2	017	178,086	2.299	409,410	145,143	1.034	150,030	2,729	-0.8%
2	018	109,711	4.106	450,421	135,849	1.125	152,792	2,948	8.0%

Projected Based on 2-Year Average of 2017 and 2018:

	Ultimate MCCP <sup>[5]</sup>	Ult. Ind. Counts <sup>[3]</sup>	Ult.MCCP per Ind. Counts <sup>[4]</sup>
2019	408,979	148,684	2,751
2020	391,375	145,338	2,693
1/1/2021	382,075	143,400	2,664
(a) Projected MCCP	(\$000):		382,075
(b) Calendar Year 20	18 Earned Premium <sup>[6]</sup> (\$000):		17,420,200
(c) Projected Loss to	Industry Average Filed Pure Premium Ratio <sup>[7]</sup> :		0.560
(d) Premium Adjustm	ent Factor for Calendar Year 2018 <sup>[8]</sup> :		0.936
(e) Projected Losses	(\$000): (b) x (c) x (d)		9,130,972
(f) Projected Ratio of	MCCP to Losses: (a)/(e)		4.2%
(g) Impact of Drug Fo	ormulary on MCCP <sup>[9]</sup>		-2.0%
(h) Projected Ratio of (f) x [1.0 + (g)]	ALAE to Losses after Impact of Drug Formulary:		4.1%

- [1] Based on MCCP development through 87 months from Exhibit 18.1. 99-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC19-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Estimated based on projected frequency trends for accident years 2018 and 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.
- [4] Severity is projected by applying an annual growth rate of -2.1% to the ultimate MCCP severity estimated from averaging 2017 and 2018.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [7] See Exhibit 8 of Agenda Item AC19-06-01.
- [8] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [9] Based on the WCIRB's evaluation of the Drug Formulary impacting MCCP (UR) costs, offset by 25% to reflect the impact of the Drug Formulary in emerging MCCP data.

Based on Estimated Accident Year Indemnity Claim Frequency and MCCP Severity with Trend Based on CY Paid MCCP per Open Indemnity Claim and Applied to the Latest Two Years For Policies with Effective Dates between January 1, 2020 and December 31, 2020

							Estimated	
	Paid			Indemnity	Cumulative		Ultimate	
	MCCP	Cumulative	Estimated	Claim	Count	Estimated	MCCP Per	
Accident	@3/31/19	Development	Ultimate	Counts	Development	Ultimate	Indemnity	Annual
<u>Year</u>	(in \$000)	Factors <sup>[1]</sup>	MCCP	@3/31/19	Factors <sup>[2]</sup>	Ind. Counts	<u>Claim</u>	change
	(1)	(2)	(3)=(1)x(2)	(4)	(5)	(6)=(4)x(5)	$(7)=(3)/(6) \times 1000$	_
2011	315,502	1.364	430,382	120,547	1.003	120,911	3,559	
2012	293,610	1.416	415,739	127,488	1.004	127,937	3,250	-8.7%
2013	282,696	1.464	413,928	135,284	1.005	135,902	3,046	-6.3%
2014	274,600	1.539	422,513	140,515	1.006	141,344	2,989	-1.9%
2015	257,792	1.650	425,387	144,538	1.009	145,896	2,916	-2.5%
2016	221,724	1.852	410,672	147,154	1.014	149,231	2,752	-5.6%
2017	178,086	2.299	409,410	145,143	1.034	150,030	2,729	-0.8%
2018	109,711	4.106	450,421	135,849	1.125	152,792	2,948	8.0%

Projected Based on 2-Year Average of 2017 and 2018:

	Ultimate MCCP <sup>[5]</sup>	Ult. Ind. Counts <sup>[3]</sup>	Ult.MCCP per Ind. Counts <sup>[4]</sup>
2019	433,797	148,684	2,918
2020	431,979	145,338	2,972
1/1/2021	430,189	143,400	3,000
(a) Projected MCCP	(\$000):		430,189
(b) Calendar Year 20	18 Earned Premium <sup>[6]</sup> (\$000):		17,420,200
(c) Projected Loss to	Industry Average Filed Pure Premium Ratio <sup>[7]</sup> :		0.560
(d) Premium Adjustm	ent Factor for Calendar Year 2018 <sup>[8]</sup> :		0.936
(e) Projected Losses	(\$000): (b) x (c) x (d)		9,130,972
(f) Projected Ratio of	f MCCP to Losses: (a)/(e)		4.7%
(g) Impact of Drug Fo	ormulary on MCCP <sup>[9]</sup>		-2.0%
(h) Projected Ratio of (f) x [1.0 + (g)]	f ALAE to Losses after Impact of Drug Formulary:		4.6%

- [1] Based on MCCP development through 87 months from Exhibit 18.1. 99-to-ultimate and 87-to-ultimate development factors are based on selected paid medical development factors from Exhibit 3.2 of Agenda Item AC19-06-01.
- [2] Based on the latest year indemnity claim count age-to-age development from Exhibit 11.3.
- [3] Estimated based on projected frequency trends for accident years 2018 and 2020. The estimated frequency changes are based on the projected growth in total or overall indemnity claim frequency.
- [4] Severity is projected by applying an annual growth rate of 1.9% to the ultimate MCCP severity estimated from averaging 2017 and 2018.
- [5] Column(6) x Column(7) / 1,000.
- [6] Based on the reported earned premium for calendar year 2018 from the same group of insurers that reported the paid MCCP in column (1) and the indemnity claim counts in column (4) by accident year as of March 31, 2019.
- [7] See Exhibit 8 of Agenda Item AC19-06-01.
- [8] See Exhibit 5.2 of Agenda Item AC19-06-01.
- [9] Based on the WCIRB's evaluation of the Drug Formulary impacting MCCP (UR) costs, offset by 25% to reflect the impact of the Drug Formulary in emerging MCCP data.

# Item AC19-08-03 1/1/2020 Filing - Review of Alternative Loss Projection Methodologies

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

### Loss Development Methodologies

The loss development projections based on the methodology reflected in the summary analysis of March 31, 2019 experience, included in Item AC19-06-01 of this Agenda, included a combination of (a) latest year reform-adjusted¹ paid loss development factors through 111 months with adjustments for changes in claim settlement rates applied through 75 months, (b) three-year average reform-adjusted paid loss development factors from 111 months through 255 months, and (c) six-year average (unadjusted) incurred loss development factors after 255 months. Attached for the Committee's review are a number of alternative loss development projections based on methodologies that have been included, for informational purposes, in prior pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on March 31, 2019 experience, derived using the following loss development methodologies and the trending methodology reflected in the analysis included in Item AC19-06-01 of this Agenda are included:<sup>2</sup>

- 1. Three-Year Average Unadjusted Incurred Loss Development Exhibits 1.1 through 1.3
- 2. Latest Year Unadjusted Incurred Loss Development Exhibits 2.1 through 2.3
- 3. Three-Year Average Incurred Loss Development Adjusted for Changes in Case Reserve Levels Exhibits 3.1 through 3.11
- Latest Year Incurred Loss Development Adjusted for Changes in Insurer Mix Exhibits 4.1 through 4.3
- 5. Three-Year Average Unadjusted Paid Loss Development Exhibits 5.1 through 5.3
- 6. Latest Year Unadjusted Paid Loss Development Exhibits 6.1 through 6.3
- 7. Latest Year Paid Loss Development Adjusted for Reforms Exhibits 7.1 and 7.2
- 8. Three-Year Average Paid Loss Development Adjusted for Changes in Claim Settlement Rates and Reforms Exhibits 8.1 through 8.3
- 9. Latest Year Paid Loss Development Adjusted for Changes in Claim Settlement Rates and SB 1160 Exhibits 9.1 and 9.2<sup>3</sup>
- Latest Year Paid Loss Development Adjusted for Changes in Insurer Mix Exhibits 10.1 through 10.3
- Expected Loss Ratio with a Bornheutter-Ferguson (BF) Adjustment Based on Paid Loss Development to 27 Months with Latest Year Paid Loss Development Adjusted for Reforms after 27 Months – Exhibits 11.1 through 11.5

<sup>&</sup>lt;sup>1</sup> These includes adjustments for the provisions of Senate Bill No. 1160 (SB 1160) related to lien filings and adjustments for the recent decrease in pharmaceutical costs adopted by the Committee at the June 14, 2019 meeting.

<sup>&</sup>lt;sup>2</sup> All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect six-year average incurred loss development factors applied after 255 months.

<sup>&</sup>lt;sup>3</sup> Does not include adjustments for the recent decrease in pharmaceutical costs. This methodology was reflected in the January 1, 2019 Pure Premium Rate Filing.

A summary of the preliminary policy year 2020 loss ratio projections based on the alternative loss development methodologies described above is shown in Table 1.

Table 1: Projected Policy Year 2020 Loss Ratios Based on Alternative Loss Development Methodologies<sup>4</sup>

Loss Development Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Current WCIRB Methodology			
Latest Year Paid Adjusted for Reforms and Changes in Claim Settlement Rates	0.247	0.315	0.562
Alternative Methodologies			
Incurred Methodologies			
Three-Year Average (Unadjusted)	0.252	0.289	0.541
Latest Year (Unadjusted)	0.244	0.274	0.518
Three-Year Average Adjusted for Changes in Case Reserve Levels	0.247	0.289	0.536
Latest Year Adjusted for Changes in Insurer Mix	0.243	0.270	0.513
Paid Methodologies			
Three-Year Average (Unadjusted)	0.275	0.350	0.625
Latest Year (Unadjusted)	0.263	0.328	0.591
Latest Year Adjusted for Reforms	_	0.329	_
Three-Year Average Adjusted for Changes in Claim Settlement Rates and Reforms	0.256	0.332	0.588
Latest Year Adjusted for Changes in Claim Settlement Rates and SB 1160	_	0.304	_
Latest Year Adjusted for Changes in Insurer Mix	0.258	0.321	0.579
BF Paid to 27 Months; Latest Year Reform-Adjusted after 27 Months	0.244	0.313	0.557
Hybrid Methodologies			
75% Applied to Latest Year Paid Adjusted for SB 1160 and Claim Settlement Rates and 25% Applied to 3-Year Average Unadjusted Incurred <sup>5</sup>	_	0.309	_

<sup>&</sup>lt;sup>4</sup> All methodologies reflect three-year average loss development factors applied after 111 months. All paid loss development methodologies reflect three-year average incurred loss development factors applied after 255 months. Unless otherwise specified, "reform-adjusted" refers to adjustments for the provisions of SB 1160 related to liens and the recent decrease in pharmaceutical costs.

costs.

<sup>5</sup> This loss development methodology was reflected in the California Department of Insurance (CDI) Decision on the January 1, 2019 Pure Premium Rate Filing for the medical projection.

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### Trending Methodologies

The trending projections reflected in the summary analysis of March 31, 2019 experience, included in Item AC19-06-01 of this Agenda, were based on the average of the latest two years' on-level loss ratios with separate projections of claim frequency and claim severity growth applied. The claim frequency growth estimates were based on the preliminary 15-month frequency change for accident year 2018 and the WCIRB's indemnity claim frequency model projections for accident years 2019 through 2021. The severity growth estimates of -0.5% for indemnity and 2.5% for medical were consistent with those reflected in the January 1, 2019 Pure Premium Rate Filing and were selected based on a review of short-term and long-term growth in claim severities.

Attached for the Committee's review are a number of alternative trending projections based on methodologies that have been included, for informational purposes, in prior pure premium rate filing materials or have been discussed at prior meetings. Specifically, alternative loss ratio projections, based on March 31, 2019 experience, derived using the loss development methodologies reflected in the analysis included in Item AC19-06-01 of this Agenda and the following trending methodologies are included:

- 1. Separate Projections of Frequency and Severity (-0.5% for Indemnity; 2.5% for Medical) Growth Applied to the Latest Year Only Exhibits 12.1 and 12.2
- Separate Projections of Frequency and the Long-Term (1990 to 2018) Average Severity Growth Applied to the Latest Two Years – Exhibits 13.1 and 13.2
- 3. Separate Projections of Frequency and the Short-Term (2014 to 2018) Average Severity Growth Applied to the Latest Two Years Exhibits 14.1 and 14.2
- 4. Separate Projections of Frequency and Severity (-1.0% Indemnity, 1.5% Medical) Growth Applied to the Latest Two Years Exhibits 15.1 and 15.26
- 5. Long-Term (1990 to 2018) On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios Exhibits 16.1 and 16.2
- 6. Short-Term (2014 to 2018) On-Level Loss Ratio Exponential Trend Applied to the Latest Two Years' Loss Ratios Exhibits 17.1 and 17.2

A summary of the preliminary policy year 2020 loss ratio projections based on the alternative trending methodologies described above is shown in Table 2.

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<sup>&</sup>lt;sup>6</sup> This trending methodology was reflected in the CDI Decision on the January 1, 2019 Pure Premium Rate Filing.

Table 2: Projected Policy Year 2020 Loss Ratios Based on Alternative Trending Methodologies

Trending Methodologies	Indemnity Loss Ratio	Medical Loss Ratio	Total Loss Ratio
Current WCIRB Methodology			
Separate Projections of Frequency and Severity (-0.5% Indemnity, 2.5% Medical) Applied to the Latest Two Years	0.247	0.315	0.562
Alternative Methodologies			
Separate Projections of Frequency and Severity (-0.5% Indemnity, 2.5% Medical) Applied to the Latest Year	0.249	0.312	0.561
Separate Projections of Frequency and Long-Term (1990 to 2018) Severity Applied to the Latest Two Years	0.260	0.346	0.606
Separate Projections of Frequency and Short-Term (2014 to 2018) Severity Applied to the Latest Two Years	0.241	0.294	0.535
Separate Projections of Frequency and Severity (-1.0% Indemnity, 1.5% Medical) Applied to the Latest Two Years	0.244	0.306	0.550
Long-Term (1990 to 2018) On-level Loss Ratio Exponential Trend Applied to the Latest Two Years	0.262	0.343	0.605
Short-Term (2014 to 2018) On-level Loss Ratio Exponential Trend Applied to the Latest Two Years	0.233	0.290	0.523

# Developed Loss Ratio Unadjusted 3-Year Average Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Inden	nnity			Med	lical		
-	Reported				Reported				•
	Incurred	Annual	Cumulative		Incurred	Annual	Cumulative		Total
Accident	Loss Ratio	Development	Development	Developed	Loss Ratio	Development	Development	Developed	Developed
<u>Year</u>	Ex IBNR(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Ex IBNR(a)	Factor(c)	<u>Factor</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2007	0.216	1.003	1.021	0.221	0.328	1.005	1.044	0.342	0.563
2008	0.272	1.007	1.028	0.280	0.404	1.006	1.050	0.424	0.705
2009	0.314	1.006	1.035	0.325	0.465	1.007	1.057	0.492	0.817
2010	0.299	1.010	1.045	0.312	0.448	1.011	1.068	0.478	0.790
2011	0.274	1.012	1.057	0.290	0.380	1.008	1.077	0.410	0.700
2012	0.242	1.016	1.074	0.260	0.321	1.011	1.089	0.350	0.610
2013	0.202	1.023	1.099	0.222	0.256	1.018	1.108	0.283	0.506
2014	0.188	1.032	1.134	0.214	0.221	1.025	1.136	0.250	0.464
2015	0.177	1.052	1.193	0.211	0.205	1.038	1.179	0.242	0.454
2016	0.156	1.092	1.302	0.203	0.185	1.064	1.254	0.232	0.435
2017	0.137	1.202	1.565	0.215	0.175	1.115	1.399	0.245	0.460
2018	0.094	1.608	2.516	0.238	0.150	1.287	1.800	0.270	0.507

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

<sup>(</sup>b) Based on AC19-06-01, Exhibit 2.1.

<sup>(</sup>c) Based on AC19-06-01, Exhibit 2.2.

### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted 3-Year Average Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.221	1.531	1.102	0.307
2008	0.280	1.438	1.331	0.303
2009	0.325	1.410	1.436	0.319
2010	0.312	1.383	1.304	0.331
2011	0.290	1.364	1.192	0.332
2012	0.260	1.332	1.060	0.327
2013	0.222	1.288	0.927	0.309
2014	0.214	1.166	0.855	0.291
2015	0.211	1.137	0.817	0.294
2016	0.203	1.122	0.835	0.273
2017	0.215	1.093	0.884	0.266
2018	0.238	1.068	0.936	0.271
	·	·	·	·

	Projected (d)
2019	0.261
2020	0.255
1/1/2021	0.252

- (a) See Exhibit 1.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

Projected (d)

### Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted 3-Year Average Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.342	0.807	1.102	0.251
2008	0.424	0.801	1.331	0.256
2009	0.492	0.790	1.436	0.271
2010	0.478	0.788	1.304	0.289
2011	0.410	0.810	1.192	0.279
2012	0.350	0.845	1.060	0.279
2013	0.283	0.927	0.927	0.283
2014	0.250	0.973	0.855	0.285
2015	0.242	0.994	0.817	0.295
2016	0.232	0.992	0.835	0.276
2017	0.245	0.989	0.884	0.275
2018	0.270	1.007	0.936	0.290

2019	0.288
2020	0.289
1/1/2021	0.289

- (a) See Exhibit 1.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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. No adjustment has been made to MCCP costs in medical reserves.

# Developed Loss Ratio Unadjusted Latest Year Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
_		Inden	nnity			Med	lical		
_	Reported				Reported				
	Incurred	Annual	Cumulative		Incurred	Annual	Cumulative		Total
Accident	Loss Ratio	Development	Development	Developed	Loss Ratio	Development	Development	Developed	Developed
<u>Year</u>	Ex IBNR(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Ex IBNR(a)	Factor(c)	<u>Factor</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2007	0.216	1.003	1.021	0.221	0.328	1.005	1.044	0.342	0.563
2008	0.272	1.007	1.028	0.280	0.404	1.006	1.050	0.424	0.705
2009	0.314	1.006	1.035	0.325	0.465	1.007	1.057	0.492	0.817
2010	0.299	1.010	1.045	0.312	0.448	1.011	1.068	0.478	0.790
2011	0.274	1.011	1.056	0.290	0.380	1.010	1.079	0.411	0.701
2012	0.242	1.016	1.073	0.260	0.321	1.008	1.088	0.349	0.609
2013	0.202	1.022	1.097	0.222	0.256	1.014	1.103	0.282	0.504
2014	0.188	1.030	1.130	0.213	0.221	1.023	1.128	0.249	0.462
2015	0.177	1.049	1.185	0.210	0.205	1.033	1.166	0.239	0.449
2016	0.156	1.085	1.286	0.200	0.185	1.050	1.224	0.227	0.427
2017	0.137	1.187	1.526	0.209	0.175	1.093	1.338	0.235	0.444
2018	0.094	1.588	2.424	0.229	0.150	1.260	1.686	0.253	0.482

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

<sup>(</sup>b) Based on AC19-06-01, Exhibit 2.1.

<sup>(</sup>c) Based on AC19-06-01, Exhibit 2.2.

Projected (d)

# Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Latest Year Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
Accident <u>Year</u>	Developed Indemnity Loss Ratio(a)	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Indemnity to Industry Average Filed <u>Pure Premium Ratio</u> (1) x (2) ÷ (3)
2007	0.221	1.531	1.102	0.307
2008	0.280	1.438	1.331	0.303
2009	0.325	1.410	1.436	0.319
2010	0.312	1.383	1.304	0.331
2011	0.290	1.364	1.192	0.332
2012	0.260	1.332	1.060	0.327
2013	0.222	1.288	0.927	0.308
2014	0.213	1.166	0.855	0.290
2015	0.210	1.137	0.817	0.292
2016	0.200	1.122	0.835	0.269
2017	0.209	1.093	0.884	0.259
2018	0.229	1.068	0.936	0.261
	<u> </u>	<u> </u>	·	

2019	0.253
2020	0.247
1/1/2021	0.244

- (a) See Exhibit 2.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

Projected (d)

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Latest Year Incurred Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
Accident <u>Year</u>	Developed Medical <u>Loss Ratio(a)</u>	Composite Medical Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Medical to Industry Average Filed <u>Pure Premium Ratio(e)</u> (1) x (2) ÷ (3)
2027	0.040	0.007	4.400	
2007	0.342	0.807	1.102	0.251
2008	0.424	0.801	1.331	0.256
2009	0.492	0.790	1.436	0.271
2010	0.478	0.788	1.304	0.289
2011	0.411	0.810	1.192	0.279
2012	0.349	0.845	1.060	0.278
2013	0.282	0.927	0.927	0.282
2014	0.249	0.973	0.855	0.283
2015	0.239	0.994	0.817	0.291
2016	0.227	0.992	0.835	0.269
2017	0.235	0.989	0.884	0.263
2018	0.253	1.007	0.936	0.272

2019	0.272
2020	0.274
1/1/2021	0.274

- (a) See Exhibit 2.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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. No adjustment has been made to MCCP costs in medical reserves.

Α	Indemnity	Case	Reserves	Per	Onen	Claim
М.	IIIueIIIIII	Case	Legel ves	L GI	Open	Ciaiiii

Accident	Evaluated as of (in months)												
Year	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>
2001													30,114
2002												25,756	25,652
2003											33,932	35,664	35,716
2004										29,240	31,336	33,213	35,056
2005									25,872	27,803	28,446	31,548	33,729
2006								25,378	26,991	27,471	30,938	32,719	34,366
2007							23,902	27,099	29,187	31,334	32,485	36,433	
2008						21,325	23,929	26,758	30,610	33,635	36,977		
2009					19,212	21,596	23,512	25,988	28,890	32,068			
2010				16,461	18,270	20,260	22,464	25,254	28,808				
2011			15,277	17,524	18,996	20,877	23,489	26,036					
2012		12,962	14,991	16,407	18,783	21,170	24,828						
2013	9,594	13,131	14,259	15,768	17,645	20,656							
2014	9,670	13,132	15,219	17,619	20,560								
2015	10,026	14,254	16,694	19,662									
2016	10,151	14,598	17,292										
2017	10,828	16,064											
2018	11,573												

### B. Average Paid Indemnity per Closed Claim

Accident						Evaluated	l as of (in mo	nths)					
Year	<u>15</u>	27	39	<u>51</u>	63	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													22,752
2002												21,554	21,919
2003											20,974	21,476	21,967
2004										16,643	17,167	17,665	18,085
2005									14,446	15,101	15,652	16,106	16,467
2006								15,117	15,978	16,747	17,357	17,834	18,241
2007							15,371	16,484	17,447	18,246	18,878	19,377	
2008						15,907	17,319	18,551	19,444	20,119	20,749		
2009					14,815	16,811	18,491	19,674	20,614	21,430			
2010				12,553	15,192	17,217	18,741	19,843	20,636				
2011			9,505	12,912	15,546	17,331	18,709	19,817					
2012		5,948	10,061	13,293	15,614	17,373	18,632						
2013	2,609	6,321	10,517	13,682	15,897	17,421							
2014	2,694	6,728	11,160	14,533	16,786								
2015	3,011	7,371	11,895	15,218									
2016	3,254	7,706	12,017										
2017	3,348	7,808											
2018	3,575												

# C. Annual Change of Average Paid Indemnity per Closed Claim

Accident						Evaluated	l as of (in mor	nths)					
Year	<u>15</u>	<u>27</u>	39	<u>51</u>	63	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2002													-3.7%
2003												-0.4%	0.2%
2004											-18.2%	-17.7%	-17.7%
2005										-9.3%	-8.8%	-8.8%	-8.9%
2006									10.6%	10.9%	10.9%	10.7%	10.8%
2007								9.0%	9.2%	8.9%	8.8%	8.6%	
2008							12.7%	12.5%	11.4%	10.3%	9.9%		
2009						5.7%	6.8%	6.1%	6.0%	6.5%			
2010					2.5%	2.4%	1.4%	0.9%	0.1%				
2011				2.9%	2.3%	0.7%	-0.2%	-0.1%					
2012			5.9%	3.0%	0.4%	0.2%	-0.4%						
2013		6.3%	4.5%	2.9%	1.8%	0.3%							
2014	3.3%	6.4%	6.1%	6.2%	5.6%								
2015	11.8%	9.6%	6.6%	4.7%									
2016	8.1%	4.5%	1.0%										
2017	2.9%	1.3%											
2018	6.8%												

### D. Indemnity Case Reserves per Open Claim Adjusted by Paid Indemnity Severity Trend (a)

Accident						Evaluated	l as of (in mo	nths)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													42,864
2002												40,527	41,295
2003											37,379	40,379	41,387
2004										24,905	30,593	33,215	34,073
2005									20,167	22,596	27,894	30,283	31,024
2006								19,862	22,306	25,060	30,933	33,533	34,366
2007							20,482	21,657	24,356	27,303	33,644	36,433	
2008						18,860	23,079	24,374	27,144	30,107	36,977		
2009					18,146	19,933	24,640	25,849	28,777	32,068			
2010				16,219	18,608	20,414	24,973	26,071	28,808				
2011			13,677	16,683	19,041	20,549	24,931	26,036					
2012		12,237	14,478	17,175	19,124	20,599	24,828						
2013	8,445	13,005	15,134	17,677	19,471	20,656							
2014	8,720	13,842	16,059	18,777	20,560								
2015	9,749	15,166	17,116	19,662									
2016	10,536	15,854	17,292										
2017	10,840	16,064											
2018	11,573												

### E. Indemnity Open Claim Counts

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Accident							l as of (in mo						
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>
2001													7,068
2002												7,872	6,742
2003											8,555	7,339	6,285
2004										8,608	7,042	5,956	4,935
2005									9,128	7,276	5,972	4,814	3,945
2006								11,015	8,778	7,102	5,618	4,543	3,655
2007							13,645	10,567	8,171	6,322	4,966	3,981	
2008						17,143	12,775	9,582	7,319	5,705	4,406		
2009					21,980	16,224	11,853	8,787	6,616	4,974			
2010				29,318	21,007	15,011	10,717	7,824	5,764				
2011			40,159	28,099	19,753	13,922	9,832	6,918					
2012		57,605	40,839	28,300	19,366	13,235	9,108						
2013	77,318	60,267	42,316	27,885	18,310	12,257							
2014	80,310	62,717	42,460	27,080	17,485								
2015	84,962	63,355	40,559	24,884									
2016	84,248	60,642	37,548										
2017	82,566	56,713											
2018	83,099												

### F. Total Indemnity Case Reserves Adjusted by Paid Indemnity Severity Trend (in \$000) (b)

Accident						Evaluate	d as of (in mo	onths)					
Year	<u>15</u>	27	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	159
2001													302,973
2002												319,023	278,413
2003											319,781	296,350	260,120
2004										214,371	215,442	197,831	168,153
2005									184,091	164,417	166,589	145,783	122,389
2006								218,774	195,807	177,980	173,782	152,339	125,606
2007							279,491	228,860	199,022	172,610	167,074	145,040	
2008						323,329	294,834	233,551	198,666	171,759	162,923		
2009					398,839	323,395	292,058	227,140	190,387	159,508			
2010				475,499	390,890	306,431	267,639	203,981	166,050				
2011			549,245	468,770	376,108	286,077	245,118	180,120					
2012		704,906	591,249	486,052	370,363	272,623	226,137						
2013	652,968	783,751	640,406	492,932	356,516	253,177							
2014	700,302	868,107	681,862	508,486	359,486								
2015	828,291	960,816	694,215	489,262									
2016	887,632	961,441	649,269										
2017	895,007	911,057											
2018	961,665												

<sup>(</sup>a) Latest evaluation of each accident year is unadjusted. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average indemnity case reserves by a different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (Item C)

<sup>(</sup>b) Each amount is derived as the product of the indemnity open claim counts (Item E) and the adjusted average indemnity case reserves per open claim (Item D).

### G. Paid Indemnity Loss on All Claims

Accident						Evaluate	ed as of (in m	onths)					
Year	<u>15</u>	27	39	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													4,719,807
2002												4,656,525	4,696,499
2003											4,375,661	4,439,473	4,484,835
2004										3,013,372	3,067,705	3,110,762	3,145,180
2005									2,324,045	2,383,601	2,429,034	2,463,283	2,493,192
2006								2,347,437	2,422,686	2,485,728	2,528,444	2,567,588	2,595,593
2007							2,395,037	2,495,073	2,575,740	2,640,738	2,686,140	2,728,353	
2008						2,378,763	2,506,482	2,606,076	2,670,531	2,725,327	2,774,665		
2009					2,108,947	2,287,409	2,415,766	2,510,234	2,582,717	2,642,387			
2010				1,925,419	2,172,048	2,346,880	2,471,439	2,560,081	2,622,512				
2011			1,568,289	1,920,645	2,162,154	2,326,027	2,446,957	2,539,644					
2012		1,126,733	1,661,533	2,020,569	2,267,686	2,439,036	2,553,493						
2013	503,593	1,201,836	1,788,719	2,173,395	2,413,326	2,565,284							
2014	529,821	1,303,031	1,955,583	2,375,810	2,634,351								
2015	578,889	1,428,621	2,108,054	2,533,290									
2016	612,792	1,472,384	2,148,899										
2017	633,213	1,513,773											
2018	682,725												

### H. Adjusted Total Indemnity Incurred (in \$000) (c)

Accident						Evaluate	ed as of (in m	nonths)					
<u>Year</u>	<u>15</u>	27	39	<u>51</u>	63	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	159
2001													5,022,780
2002												4,975,548	4,974,912
2003											4,695,443	4,735,823	4,744,955
2004										3,227,743	3,283,148	3,308,593	3,313,333
2005									2,508,136	2,548,017	2,595,623	2,609,066	2,615,581
2006								2,566,211	2,618,493	2,663,708	2,702,226	2,719,927	2,721,199
2007							2,674,528	2,723,933	2,774,762	2,813,348	2,853,214	2,873,393	
2008						2,702,091	2,801,316	2,839,627	2,869,198	2,897,085	2,937,587		
2009					2,507,786	2,610,804	2,707,824	2,737,374	2,773,104	2,801,896			
2010				2,400,918	2,562,938	2,653,311	2,739,078	2,764,062	2,788,562				
2011			2,117,534	2,389,415	2,538,262	2,612,104	2,692,075	2,719,765					
2012		1,831,639	2,252,783	2,506,621	2,638,049	2,711,659	2,779,630						
2013	1,156,561	1,985,587	2,429,125	2,666,327	2,769,843	2,818,461							
2014	1,230,124	2,171,138	2,637,444	2,884,297	2,993,837								
2015	1,407,180	2,389,437	2,802,269	3,022,551									
2016	1,500,423	2,433,825	2,798,169										
2017	1,528,220	2,424,830											
2018	1,644,390												

## I. Indemnity Incurred Loss Development Factors Based on Adjusted Total Indemnity Incurred

Accident					Age-to-A	ge Developm	ent (in mont	hs):				
Year	<u>15-27</u>	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												1.000
2003											1.009	1.002
2004										1.017	1.008	1.001
2005									1.016	1.019	1.005	1.002
2006								1.020	1.017	1.014	1.007	1.000
2007							1.018	1.019	1.014	1.014	1.007	
2008						1.037	1.014	1.010	1.010	1.014		
2009					1.041	1.037	1.011	1.013	1.010			
2010				1.067	1.035	1.032	1.009	1.009				
2011			1.128	1.062	1.029	1.031	1.010					
2012		1.230	1.113	1.052	1.028	1.025						
2013	1.717	1.223	1.098	1.039	1.018							
2014	1.765	1.215	1.094	1.038								
2015	1.698	1.173	1.079									
2016	1.622	1.150										
2017	1.587											
Latest Year	1.587	1.150	1.079	1.038	1.018	1.025	1.010	1.009	1.010	1.014	1.007	1.000
3-Yr Average	1.636	1.179	1.090	1.043	1.025	1.029	1.010	1.011	1.011	1.014	1.006	1.001

<sup>(</sup>c) Each amount is the sum of the adjusted total indemnity case reserves (Item F) and the total indemnity paid losses (Item G).

### J. Indemnity Incurred Loss Development Factors (d)

Accident					Age-to-A	ge Developm	ent (in mont	hs):				
Year	<u>15-27</u>	27-39	39-51	<u>51-63</u>	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												1.002
2003											1.008	1.002
2004										1.007	1.006	1.003
2005									1.010	1.005	1.006	1.004
2006								1.012	1.008	1.008	1.005	1.002
2007							1.022	1.012	1.009	1.003	1.009	
2008						1.025	1.018	1.011	1.008	1.007		
2009					1.042	1.021	1.016	1.013	1.010			
2010				1.061	1.037	1.023	1.017	1.011				
2011			1.106	1.052	1.031	1.023	1.016					
2012		1.214	1.093	1.059	1.033	1.022						
2013	1.601	1.200	1.092	1.047	1.030							
2014	1.628	1.223	1.097	1.049								
2015	1.630	1.194	1.085									
2016	1.606	1.187										
2017	1.588											

### K. Impact of Adjustments to Common Case Reserve Level (e)

Accident					Age-to-A	ae Develonn	nent (in mont	hs)·				
Year Year	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												-0.22%
2003											0.10%	0.02%
2004										1.00%	0.16%	-0.15%
2005									0.58%	1.36%	-0.11%	-0.17%
2006								0.78%	0.92%	0.64%	0.14%	-0.14%
2007							-0.36%	0.68%	0.51%	1.11%	-0.20%	
2008						1.17%	-0.41%	-0.08%	0.19%	0.69%		
2009					-0.10%	1.53%	-0.54%	0.02%	0.03%			
2010				0.57%	-0.19%	0.90%	-0.75%	-0.23%				
2011			2.02%	1.02%	-0.21%	0.71%	-0.53%					
2012		1.34%	1.81%	-0.62%	-0.53%	0.28%						
2013	7.27%	1.94%	0.48%	-0.80%	-1.21%							
2014	8.43%	-0.71%	-0.27%	-1.09%								
2015	4.19%	-1.82%	-0.61%									
2016	1.00%	-3.13%										
2017	-0.07%											

### L. Indemnity Incurred Loss Development Factors Adjusted for Changes in Case Reserve Adequacy (f)

Accident					Age-to-A	ge Developm	ent (in montl	ns):				
Year	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												1.000
2003											1.009	1.002
2004										1.017	1.008	1.002
2005									1.016	1.019	1.005	1.002
2006								1.020	1.017	1.014	1.006	1.001
2007							1.018	1.019	1.014	1.014	1.007	
2008						1.037	1.014	1.010	1.010	1.014		
2009					1.042	1.037	1.011	1.013	1.010			
2010				1.068	1.035	1.032	1.009	1.009				
2011			1.131	1.064	1.030	1.031	1.011					
2012		1.234	1.113	1.052	1.028	1.025						
2013	1.721	1.224	1.098	1.039	1.018							
2014	1.762	1.215	1.094	1.038								
2015	1.698	1.173	1.078									
2016	1.622	1.150										
2017	1.587											
Latest Year	1.587	1.150	1.078	1.038	1.018	1.025	1.011	1.009	1.010	1.014	1.007	1.001
Year Average	1.636	1.179	1.090	1.043	1.025	1.029	1.010	1.011	1.011	1.014	1.006	1.001

<sup>(</sup>d) Development factors are from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item I.

<sup>(</sup>e) Each factor represents the change in age-to-age development factors from Item J to those in Item I.

<sup>(</sup>f) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item K)] and [the incurred indemnity age-to-age development factors from AC19-06-01, Exhibit 2.1.1].

### A. Medical Case Reserves Per Open Indemnity Claim

Accident						Evaluated	as of (in mo	nths)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>
2001													105,033
2002												85,636	92,632
2003											84,001	88,004	90,181
2004										75,031	80,407	84,225	87,503
2005									65,015	74,782	78,322	85,319	92,172
2006								59,260	67,147	71,596	78,263	83,564	92,065
2007							52,465	62,334	71,961	79,713	89,190	95,033	
2008						44,571	53,629	63,118	71,490	78,917	87,729		
2009					36,865	43,731	51,523	59,346	67,040	75,523			
2010				29,825	36,031	41,883	48,127	53,995	64,225				
2011			26,395	32,195	38,746	43,546	49,272	57,166					
2012		21,120	25,069	29,179	34,753	40,948	47,896						
2013	16,565	20,863	23,398	28,213	33,008	39,894							
2014	16,149	19,280	22,758	27,219	32,596								
2015	16,528	20,298	25,296	30,818									
2016	16,977	21,265	26,004										
2017	17,809	22,596	•										
2018	18,878	•											

### B. Average Paid Medical Loss Per Closed Indemnity Claim (a)

Accident						Evaluated	l as of (in mo	nths)					
Year	<u>15</u>	27	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													21,845
2002												21,701	22,304
2003											20,224	21,033	21,877
2004										17,505	18,513	19,429	20,163
2005									17,044	18,335	19,440	20,266	20,928
2006								17,848	19,161	20,534	21,638	22,503	23,226
2007							18,622	20,360	22,048	23,408	24,504	25,379	
2008						19,050	21,170	23,169	24,634	25,757	26,778		
2009					17,990	20,804	23,282	25,100	26,569	27,919			
2010				15,195	18,755	21,570	23,940	25,587	26,850				
2011			10,685	14,700	18,109	20,808	22,861	24,420					
2012		6,608	11,025	14,666	17,617	19,840	21,478						
2013	2,980	6,719	10,963	14,367	17,053	18,913							
2014	2,984	6,864	10,991	14,415	16,864								
2015	3,235	7,274	11,350	14,589									
2016	3,466	7,498	11,330										
2017	3,573	7,726											
2018	3,679												

## C. Annual Change of Average Paid Medical per Closed Claim (b)

3.0%

2018

	Accident						Evaluated	l as of (in mo	nths)					
	Year	<u>15</u>	27	<u>39</u>	<u>51</u>	63	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
	2002													2.1%
	2003												-3.1%	-1.9%
	2004											-8.5%	-7.6%	-7.8%
	2005										4.7%	5.0%	4.3%	3.8%
	2006									12.4%	12.0%	11.3%	11.0%	11.0%
	2007								14.1%	15.1%	14.0%	13.2%	12.8%	
	2008							13.7%	13.8%	11.7%	10.0%	9.3%		
	2009						9.2%	10.0%	8.3%	7.9%	8.4%			
- "	2010					4.3%	3.7%	2.8%	1.9%	1.1%				
1	2011				4.1%	3.7%	3.3%	2.8%	2.6%					
	2012			-1.3%	-2.3%	-3.0%	-3.8%	-4.3%						
	2013		-1.6%	-2.2%	-2.7%	-3.9%	-4.5%							
	2014	0.1%	2.2%	0.3%	0.3%	-1.1%								
	2015	8.4%	6.0%	3.3%	1.2%									
	2016	7.1%	3.1%	-0.2%										
	2017	3.1%	3.0%											

<sup>(</sup>a) Paid medical per closed claim severities for accident year 2010 and 2011 only reflect the paid cost of medical cost containment programs (MCCP) attributable to policies with effective dates prior to July 1, 2010.

<sup>(</sup>b) The annual changes for accident year 2010, 2011 and 2012 are based on paid medical per total claim for consistency and do not compare to the severities in item B.

### D. Medical Case Reserves per Open Claim Adjusted by Paid Medical Severity Trend (c)

Accident						Evaluated	as of (in mo	nths)					
Year	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>
2001													86,594
2002												81,259	88,411
2003											66,257	78,758	86,720
2004										47,351	60,652	72,750	79,926
2005									40,769	49,598	63,690	75,888	82,955
2006								38,867	45,833	55,544	70,890	84,263	92,065
2007							37,857	44,336	52,741	63,320	80,280	95,033	
2008						37,120	43,036	50,453	58,926	69,672	87,729		
2009					32,720	40,539	47,329	54,660	63,555	75,523			
2010				30,678	34,112	42,030	48,666	55,720	64,225				
2011			26,084	31,938	35,374	43,434	50,039	57,166					
2012		19,975	25,737	31,199	34,316	41,786	47,896						
2013	15,291	19,650	25,162	30,349	32,962	39,894							
2014	15,309	20,075	25,226	30,452	32,596								
2015	16,602	21,276	26,051	30,818									
2016	17,786	21,929	26,004										
2017	18,334	22,596											
2018	18,878												

### E. Total Medical Case Reserves Adjusted by Paid Medical Severity Trend (in \$000) (d)

Accident						Evaluate	d as of (in mo	onths)					
<u>Year</u>	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	99	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>	<u>159</u>
2001													612,058
2002												639,657	596,073
2003											566,838	578,012	545,043
2004										407,577	427,120	433,308	394,439
2005									372,150	360,885	380,365	365,328	327,258
2006								428,122	402,335	394,484	398,264	382,805	336,498
2007							516,576	468,518	430,960	400,314	398,669	378,326	
2008						636,351	549,793	483,445	431,279	397,478	386,532		
2009					719,179	657,714	560,992	480,299	420,480	375,650			
2010				899,423	716,587	630,913	521,559	435,957	370,194				
2011			1,047,509	897,436	698,737	604,694	491,987	395,476					
2012		1,150,669	1,051,058	882,938	664,554	553,039	436,238						
2013	1,182,252	1,184,256	1,064,753	846,287	603,532	488,978							
2014	1,229,452	1,259,072	1,071,110	824,627	569,936								
2015	1,410,497	1,347,946	1,056,609	766,869									
2016	1,498,448	1,329,808	976,410										
2017	1,513,772	1,281,465											
2018	1,568,704												

### F. Paid Medical Loss on All Claims

Accident						Evaluate	ed as of (in m	onths)					
Year	<u>15</u>	27	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													5,017,744
2002												5,161,276	5,253,690
2003											4,694,306	4,814,044	4,899,552
2004										3,661,054	3,775,634	3,859,533	3,925,979
2005									3,226,025	3,344,743	3,440,843	3,509,824	3,570,023
2006								3,270,390	3,402,619	3,511,587	3,593,203	3,659,364	3,713,739
2007							3,406,899	3,580,381	3,715,943	3,821,064	3,900,291	3,976,137	
2008						3,300,982	3,521,593	3,688,314	3,809,963	3,901,095	3,974,181		
2009					2,954,504	3,235,701	3,436,053	3,580,544	3,685,115	3,769,770			
2010				2,695,820	3,054,811	3,319,035	3,518,429	3,654,596	3,751,396				
2011			2,081,519	2,540,562	2,877,744	3,120,380	3,294,546	3,419,316					
2012		1,515,211	2,113,615	2,555,224	2,875,755	3,092,428	3,247,894						
2013	800,907	1,547,675	2,149,437	2,587,228	2,871,941	3,065,786							
2014	828,959	1,604,784	2,222,138	2,652,168	2,929,163								
2015	869,212	1,699,512	2,309,540	2,736,143									
2016	934,619	1,753,593	2,348,946										
2017	989,613	1,819,052											
2018	1,044,299												

<sup>(</sup>c) Latest evaluation of each accident year is unadjusted. Evaluations prior to the latest evaluation are determined by adjusting the latest accident year average medical case reserves by a different annual change applied at each individual accident year and maturity based on the change in paid losses per closed claim for that age and maturity (Item C)

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

### G. Adjusted Total Medical Incurred (in \$000) (e)

Accident						Evaluate	ed as of (in m	onths)					
Year	<u>15</u>	27	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	99	<u>111</u>	123	<u>135</u>	<u>147</u>	<u>159</u>
2001													5,629,802
2002												5,800,933	5,849,763
2003											5,261,144	5,392,056	5,444,595
2004										4,068,632	4,202,754	4,292,841	4,320,418
2005									3,598,175	3,705,627	3,821,209	3,875,153	3,897,281
2006								3,698,511	3,804,955	3,906,071	3,991,468	4,042,168	4,050,237
2007							3,923,474	4,048,899	4,146,903	4,221,378	4,298,961	4,354,463	
2008						3,937,333	4,071,386	4,171,759	4,241,241	4,298,574	4,360,713		
2009					3,673,683	3,893,415	3,997,045	4,060,843	4,105,595	4,145,420			
2010				3,595,243	3,771,397	3,949,948	4,039,988	4,090,553	4,121,590				
2011			3,129,028	3,437,998	3,576,480	3,725,074	3,786,533	3,814,792					
2012		2,665,880	3,164,673	3,438,162	3,540,309	3,645,467	3,684,131						
2013	1,983,159	2,731,930	3,214,189	3,433,516	3,475,473	3,554,764							
2014	2,058,412	2,863,857	3,293,248	3,476,795	3,499,098								
2015	2,279,709	3,047,458	3,366,149	3,503,012									
2016	2,433,067	3,083,402	3,325,356										
2017	2,503,385	3,100,517											
2018	2,613,003												

### H. Medical Incurred Loss Development Factors Based on Adjusted Total Medical Incurred

Accident	Age-to-Age Development (in months):											
Year	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												1.008
2003											1.025	1.010
2004										1.033	1.021	1.006
2005									1.030	1.031	1.014	1.006
2006								1.029	1.027	1.022	1.013	1.002
2007							1.032	1.024	1.018	1.018	1.013	
2008						1.034	1.025	1.017	1.014	1.014		
2009					1.060	1.027	1.016	1.011	1.010			
2010				1.049	1.047	1.023	1.013	1.008				
2011			1.099	1.040	1.042	1.016	1.007					
2012		1.187	1.086	1.030	1.030	1.011						
2013	1.378	1.177	1.068	1.012	1.023							
2014	1.391	1.150	1.056	1.006								
2015	1.337	1.105	1.041									
2016	1.267	1.078										
2017	1.239											
Latest Year	1.239	1.078	1.041	1.006	1.023	1.011	1.007	1.008	1.010	1.014	1.013	1.002
3-Yr Average	1.281	1.111	1.055	1.016	1.031	1.017	1.012	1.012	1.014	1.018	1.013	1.005

### I. Medical Incurred Loss Development Factors (f)

Accident _					Age-to-A	ge Developm	ent (in mont	hs):				
<u>Year</u>	<u>15-27</u>	27-39	<u>39-51</u>	<u>51-63</u>	63-75	<u>75-87</u>	87-99	99-111	111-123	123-135	135-147	147-159
2002												1.007
2003											1.009	1.001
2004										1.008	1.004	0.999
2005									1.018	1.005	1.003	1.003
2006								1.018	1.007	1.003	1.002	1.003
2007							1.028	1.015	1.005	1.004	1.003	
2008						1.035	1.021	1.009	1.004	1.002		
2009					1.048	1.026	1.014	1.006	1.004			
2010				1.068	1.036	1.022	1.011	1.011				
2011			1.097	1.057	1.023	1.014	1.009					
2012		1.148	1.078	1.050	1.024	1.014						
2013	1.347	1.119	1.075	1.030	1.023							
2014	1.324	1.133	1.063	1.032								
2015	1.313	1.117	1.050									
2016	1.287	1.093										
2017	1.260											

<sup>(</sup>e) Each amount is the sum of the adjusted total medical case reserves (Item E) and the total medical paid losses (Item F).

<sup>(</sup>f) Development factors are from the same insurer mix as those which have been adjusted for case reserve level adequacy and applied in the calculation of the development factors in Item H.

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

Accident					Age-to-A	Age Developr	nent (in mont	hs):				
Year	<u>15-27</u>	27-39	39-51	<u>51-63</u>	63-75	75-87	87-99	99-111	111-123	123-135	135-147	147-159
2002												0.11%
2003											1.61%	0.86%
2004										2.46%	1.69%	0.72%
2005									1.15%	2.60%	1.10%	0.24%
2006								1.10%	1.94%	1.86%	1.12%	-0.08%
2007							0.37%	0.88%	1.30%	1.41%	1.03%	
2008						-0.08%	0.40%	0.73%	0.93%	1.23%		
2009					1.13%	0.09%	0.23%	0.45%	0.56%			
2010				-1.75%	1.13%	0.09%	0.19%	-0.33%				
2011			0.19%	-1.62%	1.82%	0.24%	-0.20%					
2012		3.36%	0.82%	-1.90%	0.55%	-0.30%						
2013	2.23%	5.12%	-0.60%	-1.76%	0.02%							
2014	5.11%	1.49%	-0.68%	-2.52%								
2015	1.80%	-1.13%	-0.91%									
2016	-1.52%	-1.31%										
2017	-1.73%											

### K. Medical Incurred Loss Development Factors Adjusted for Changes in Case Reserve Adequacy (h)

Accident					Age-to-A	ge Developm	ent (in montl	ns):				
<u>Year</u>	<u>15-27</u>	27-39	39-51	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	99-111	111-123	123-135	135-147	147-159
2002												1.008
2003											1.025	1.010
2004										1.033	1.021	1.006
2005									1.030	1.031	1.014	1.005
2006								1.029	1.027	1.022	1.013	1.002
2007							1.032	1.024	1.018	1.018	1.013	
2008						1.034	1.024	1.016	1.013	1.014		
2009					1.061	1.026	1.016	1.011	1.010			
2010				1.049	1.048	1.024	1.013	1.007				
2011			1.105	1.042	1.045	1.018	1.006					
2012		1.192	1.087	1.031	1.031	1.011						
2013	1.383	1.176	1.071	1.013	1.023							
2014	1.393	1.152	1.057	1.007								
2015	1.337	1.104	1.040									
2016	1.267	1.079										
2017	1.238											
Latest Year	1.238	1.079	1.040	1.007	1.023	1.011	1.006	1.007	1.010	1.014	1.013	1.002
3-Year Average	1.281	1.112	1.056	1.017	1.033	1.018	1.012	1.011	1.014	1.018	1.014	1.005

<sup>(</sup>g) Each factor represents the change in age-to-age development factors from Item I to those in Item H.

<sup>(</sup>h) Each factor is the product of [1.0 + the impact of adjustments to common case reserve level (Item J)] and [the incurred Medical age-to-age development factors from AC19-06-01, Exhibit 2.2.1].

(0)

# Developed Loss Ratios Using 3-Year Average Incurred Development Factors Adjusted for Changes in Average Case Reserve Levels Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Inden	nnity						
-	Reported				Reported				•
	Incurred	Annual	Cumulative		Incurred	Annual	Cumulative		Total
Accident	Loss Ratio	Development	Development	Developed	Loss Ratio	Development	Development	Developed	Developed
<u>Year</u>	Ex IBNR(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Ex IBNR(a)	Factor(c)	<u>Factor</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2006	0.158	1.002	1.018	0.161	0.235	1.002	1.039	0.244	0.405
2007	0.216	1.001	1.020	0.221	0.328	1.005	1.044	0.342	0.563
2008	0.272	1.006	1.026	0.280	0.404	1.014	1.058	0.427	0.707
2009	0.314	1.014	1.041	0.327	0.465	1.018	1.077	0.501	0.828
2010	0.299	1.011	1.053	0.314	0.448	1.014	1.091	0.488	0.803
2011	0.274	1.011	1.064	0.292	0.380	1.011	1.104	0.420	0.712
2012	0.242	1.010	1.075	0.260	0.321	1.012	1.117	0.358	0.619
2013	0.202	1.029	1.106	0.224	0.256	1.018	1.136	0.291	0.514
2014	0.188	1.025	1.134	0.214	0.221	1.033	1.174	0.259	0.473
2015	0.177	1.043	1.183	0.210	0.205	1.017	1.194	0.245	0.455
2016	0.156	1.090	1.289	0.201	0.185	1.056	1.260	0.233	0.434
2017	0.137	1.179	1.521	0.209	0.175	1.112	1.401	0.246	0.454
2018	0.094	1.636	2.488	0.235	0.150	1.281	1.794	0.269	0.504

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

<sup>(</sup>b) Age-to-age factors for developing accident years 2007 to 2018 were adjusted for changes in indemnity case reserve levels based on 3-year average selections (see Exhibit 3.4, Item L).

<sup>(</sup>c) Age-to-age factors for developing accident years 2007 to 2018 were adjusted for changes in medical case reserve levels based on 3-year average selections (see Exhibit 3.8, Item K).

# Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using 3-Year Average Incurred Development Factors Adjusted for Changes in Indemnity Average Case Reserve Levels Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2006	0.161	1.588	0.862	0.296
2007	0.221	1.531	1.102	0.307
2008	0.280	1.438	1.331	0.302
2009	0.327	1.410	1.436	0.321
2010	0.314	1.383	1.304	0.333
2011	0.292	1.364	1.192	0.334
2012	0.260	1.332	1.060	0.327
2013	0.224	1.288	0.927	0.311
2014	0.214	1.166	0.855	0.291
2015	0.210	1.137	0.817	0.292
2016	0.201	1.122	0.835	0.270
2017	0.209	1.093	0.884	0.258
2018	0.235	1.068	0.936	0.268

2019	0.256
2020	0.250
1/1/2021	0.247

- (a) See Exhibit 3.9.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using 3-Year Average Incurred Development Factors Adjusted for Changes in Medical Average Case Reserve Levels Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2006	0.244	0.822	0.862	0.233
2007	0.342	0.807	1.102	0.251
2008	0.427	0.801	1.331	0.257
2009	0.501	0.790	1.436	0.276
2010	0.488	0.788	1.304	0.295
2011	0.420	0.810	1.192	0.285
2012	0.358	0.845	1.060	0.286
2013	0.291	0.927	0.927	0.290
2014	0.259	0.973	0.855	0.295
2015	0.245	0.994	0.817	0.298
2016	0.233	0.992	0.835	0.277
2017	0.246	0.989	0.884	0.275
2018	0.269	1.007	0.936	0.290

2019	0.288
2020	0.289
1/1/2021	0.289

- (a) See Exhibit 3.9.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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. No adjustment has been made to MCCP costs in medical reserves.

#### Developed Loss Ratio Using Latest Year Incurred Loss Development Factors Adjusted for Insurer Mix

Based on Experience as of March 31, 2019

			Dasci	a on Expending	c as or march	01, 2010			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Inde	mnity			Med	dical		
-	Reported		•	<u> </u>	Reported				
	Incurred	Annual	Cumulative		Incurred	Annual	Cumulative		Total
Accident	Loss Ratio	Development	Development	Developed	Loss Ratio	Development	Development	Developed	Developed
<u>Year</u>	Ex IBNR(a)	Factor	Factor(b)	Loss Ratio(c)	Ex IBNR(a)	Factor	Factor(d)	Loss Ratio(c)	Loss Ratio
									(4) + (8)
2007	0.216		0.991	0.214	0.328		1.018	0.334	0.548
2008	0.272		1.023	0.279	0.404		1.051	0.425	0.703
2009	0.314		1.041	0.327	0.465		1.065	0.495	0.822
2010	0.299		1.061	0.317	0.448		1.083	0.485	0.802
2011	0.274		1.068	0.293	0.380		1.082	0.412	0.705
2012	0.242		1.082	0.262	0.321		1.089	0.350	0.612
2013	0.202		1.100	0.223	0.256		1.100	0.281	0.504
2014	0.188		1.136	0.214	0.221		1.126	0.248	0.462
2015	0.177		1.184	0.210	0.205		1.157	0.238	0.448
2016	0.156		1.290	0.201	0.185		1.217	0.225	0.427
2017	0.137		1.525	0.209	0.175		1.324	0.232	0.441
2018	0.094		2.407	0.227	0.150		1.655	0.248	0.476

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

<sup>(</sup>b) Column (4) divided by Column (1).

<sup>(</sup>c) Developed loss ratios were derived by averaing the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2018 earned premium at the advisory pure premium rate level.

<sup>(</sup>d) Column (8) divided by Column (5).

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Incurred Development Factors Adjusted for Insurer Mix

Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.214	1.531	1.102	0.298
2008	0.279	1.438	1.331	0.301
2009	0.327	1.410	1.436	0.321
2010	0.317	1.383	1.304	0.336
2011	0.293	1.364	1.192	0.335
2012	0.262	1.332	1.060	0.329
2013	0.223	1.288	0.927	0.309
2014	0.214	1.166	0.855	0.292
2015	0.210	1.137	0.817	0.292
2016	0.201	1.122	0.835	0.270
2017	0.209	1.093	0.884	0.259
2018	0.227	1.068	0.936	0.259

2019	0.252
2020	0.246
1/1/2021	0.243

- (a) See Exhibit 4.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Incurred Development Factors Adjusted for Insurer Mix Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.334	0.807	1.102	0.245
2008	0.425	0.801	1.331	0.256
2009	0.495	0.790	1.436	0.273
2010	0.485	0.788	1.304	0.293
2011	0.412	0.810	1.192	0.280
2012	0.350	0.845	1.060	0.279
2013	0.281	0.927	0.927	0.281
2014	0.248	0.973	0.855	0.283
2015	0.238	0.994	0.817	0.289
2016	0.225	0.992	0.835	0.268
2017	0.232	0.989	0.884	0.260
2018	0.248	1.007	0.936	0.267

	Projected (d)
2019	0.268
2020	0.270
1/1/2021	0.270

- (a) See Exhibit 4.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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. No adjustment has been made to MCCP costs in medical reserves.

(4)

### Developed Loss Ratio Unadjusted 3-Year Average Paid Development Factors Based on Experience as of March 31, 2019

(E)

(4)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Indem	nity			Medio	cal		
	Reported	Annual	Cumulative		Reported	Annual	Cumulative		Total
Accident	Paid	Development	Development	Developed	Paid	Development	Development	Developed	Developed
<u>Year</u>	Loss Ratio(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Loss Ratio(a)	Factor(c)	<u>Factor</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2007	0.205	1.011	1.083	0.222	0.299	1.016	1.228	0.368	0.590
2008	0.257	1.015	1.099	0.283	0.368	1.019	1.251	0.461	0.744
2009	0.296	1.017	1.118	0.331	0.423	1.021	1.278	0.540	0.872
2010	0.281	1.023	1.144	0.321	0.408	1.025	1.310	0.534	0.855
2011	0.257	1.026	1.174	0.301	0.341	1.029	1.348	0.460	0.761
2012	0.223	1.038	1.218	0.272	0.284	1.038	1.400	0.397	0.668
2013	0.184	1.051	1.280	0.236	0.221	1.055	1.477	0.326	0.562
2014	0.166	1.072	1.372	0.228	0.185	1.075	1.588	0.294	0.521
2015	0.149	1.114	1.528	0.227	0.160	1.115	1.771	0.284	0.511
2016	0.120	1.211	1.851	0.221	0.131	1.195	2.116	0.277	0.498
2017	0.086	1.479	2.737	0.234	0.103	1.362	2.882	0.297	0.531
2018	0.039	2.420	6.624	0.260	0.060	1.890	5.446	0.326	0.586

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1.

<sup>(</sup>b) Age-to-age factors are selected as three-year averages based on AC19-06-01, Exhibit 2.5.

<sup>(</sup>c) Age-to-age factors are selected as three-year averages based on AC19-06-01, Exhibit 2.6. These factors have not been adjusted for any reforms.

#### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted 3-Year Average Paid Development Factors Based on Experience as of March 31, 2019

Accident De				O 1 1
Year Year	eveloped Indemnity Loss Ratio(a)	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Indemnity to Industry Average Filed <u>Pure Premium Ratio</u> (1) x (2) ÷ (3)
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.301	1.364	1.192	0.345
2012	0.272	1.332	1.060	0.341
2013	0.236	1.288	0.927	0.328
2014	0.228	1.166	0.855	0.310
2015	0.227	1.137	0.817	0.316
2016	0.221	1.122	0.835	0.298
2017	0.234	1.093	0.884	0.290
2018	0.260	1.068	0.936	0.296

2019	0.286
2020	0.279
1/1/2021	0.275

- (a) See Exhibit 5.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted 3-Year Average Paid Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.368	0.807	1.102	0.269
2008	0.461	0.801	1.331	0.278
2009	0.540	0.790	1.436	0.297
2010	0.534	0.788	1.304	0.323
2011	0.460	0.810	1.192	0.313
2012	0.397	0.845	1.060	0.316
2013	0.326	0.927	0.927	0.326
2014	0.294	0.973	0.855	0.334
2015	0.284	0.994	0.817	0.346
2016	0.277	0.992	0.835	0.329
2017	0.297	0.989	0.884	0.332
2018	0.326	1.007	0.936	0.351

2019	0.348
2020	0.350
1/1/2021	0.350

- (a) See Exhibit 5.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

#### Developed Loss Ratio Unadjusted Latest Year Paid Development Factors Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Inder	nnity		-	Med	lical		-
	Reported	Annual	Cumulative		Reported	Annual	Cumulative		Total
Accident	Paid	Development	Development	Developed	Paid	Development	Development	Developed	Developed
<u>Year</u>	Loss Ratio(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Loss Ratio(a)	Factor(c)	<u>Factor</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2007	0.205	1.011	1.083	0.222	0.299	1.016	1.228	0.368	0.590
2008	0.257	1.015	1.099	0.283	0.368	1.019	1.251	0.461	0.744
2009	0.296	1.017	1.118	0.331	0.423	1.021	1.278	0.540	0.872
2010	0.281	1.023	1.144	0.321	0.408	1.025	1.310	0.534	0.855
2011	0.257	1.024	1.171	0.300	0.341	1.026	1.344	0.459	0.759
2012	0.223	1.038	1.216	0.271	0.284	1.034	1.389	0.394	0.665
2013	0.184	1.047	1.273	0.235	0.221	1.051	1.460	0.323	0.557
2014	0.166	1.063	1.353	0.225	0.185	1.068	1.560	0.288	0.513
2015	0.149	1.109	1.501	0.223	0.160	1.105	1.723	0.276	0.499
2016	0.120	1.202	1.804	0.216	0.131	1.185	2.042	0.267	0.483
2017	0.086	1.459	2.632	0.225	0.103	1.340	2.736	0.282	0.507
2018	0.039	2.390	6.289	0.246	0.060	1.838	5.030	0.301	0.548

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1.

<sup>(</sup>b) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC19-06-01, Exhibit 2.5.

<sup>(</sup>c) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC19-06-01, Exhibit 2.6. These factors have not been adjusted for any reforms.

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Based on Unadjusted Latest Year Paid Selections Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.225	1.166	0.855	0.306
2015	0.223	1.137	0.817	0.310
2016	0.216	1.122	0.835	0.290
2017	0.225	1.093	0.884	0.279
2018	0.246	1.068	0.936	0.281
	•	•	•	

	Projected (d)
2019	0.273
2020	0.266
1/1/2021	0.263

<sup>(</sup>a) See Exhibit 6.1.

<sup>(</sup>b) Based on AC19-06-01, Exhibit 4.1.

<sup>(</sup>c) See AC19-06-01, Exhibit 5.2.

<sup>(</sup>d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Based on Unadjusted Latest Year Paid Selections Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.368	0.807	1.102	0.269
2008	0.461	0.801	1.331	0.278
2009	0.540	0.790	1.436	0.297
2010	0.534	0.788	1.304	0.323
2011	0.459	0.810	1.192	0.312
2012	0.394	0.845	1.060	0.314
2013	0.323	0.927	0.927	0.323
2014	0.288	0.973	0.855	0.328
2015	0.276	0.994	0.817	0.336
2016	0.267	0.992	0.835	0.317
2017	0.282	0.989	0.884	0.315
2018	0.301	1.007	0.936	0.324

2019	0.326
2020	0.327
1/1/2021	0.328

- (a) See Exhibit 6.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

### Developed Loss Ratios Adjusted for the Impact of Reforms Based on Paid Latest Year Selections Based on Experience as of March 31, 2019

(1) (2) (3) (4) (5) Medical

			Adj	usted		
Accident	Paid	Paid	Developm	Development Factors		
<u>Year</u>	Loss Ratio(a)	Loss Ratio(b)	Loss Ratio(b) Annual(b)		Loss Ratio (2) x (4)	
2007	0.299	0.273	1.018	1.238	0.338	
2008	0.368	0.337	1.021	1.264	0.426	
2009	0.423	0.390	1.022	1.292	0.503	
2010	0.408	0.377	1.027	1.327	0.501	
2011	0.341	0.319	1.028	1.364	0.435	
2012	0.284	0.268	1.038	1.416	0.379	
2013	0.221	0.211	1.056	1.485	0.313	
2014	0.185	0.179	1.074	1.582	0.283	
2015	0.160	0.157	1.112	1.741	0.274	
2016	0.131	0.130	1.190	2.046	0.265	
2017	0.103	0.103	1.344	2.719	0.279	
2018	0.060	0.060	1.844	5.014	0.301	

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent.

<sup>(</sup>b) See AC19-06-01, Exhibit 3.2, Column (2).

<sup>(</sup>c) Based on AC19-06-01, Exhibit 2.6.1 and includes adjustments for SB 1160 and impact of pharmacetutical cost reductions. Does not reflect any adjustment for changes in claim settlement rates.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Latest Year Paid Development Adjusted for Reforms Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
Accident <u>Year</u>	Developed Medical Loss Ratio(a)	Composite Medical Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.283	0.991	0.855	0.328
2015	0.274	1.009	0.817	0.339
2016	0.265	1.010	0.835	0.321
2017	0.279	1.012	0.884	0.319
2018	0.301	1.007	0.936	0.323

2019	0.327
2020	0.329
1/1/2021	0.329

- (a) See Exhibit 7.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

#### Developed Loss Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates Based on 3-Year Average Selections

Based on Experience as of March 31, 2019

Based on Experience as of march of, 2010										
	(1)	(2)	(3) emnity	(4)	(5)	(6)	(7) Medical	(8)	(9)	(10)
		ilide	пппу					. 4. 1		-
							Adjı	usted		•
										Total
Accident	Paid	Developm	nent Factors	Developed	Paid	Paid	Developm	nent Factors	Developed	Developed
Year	Loss Ratio(a)	Annual(b)	Cumulative(b)	Loss Ratio	Loss Ratio(a)	Loss Ratio(c)	Annual(d)	Cumulative(d)	Loss Ratio	Loss Ratio
				(1) x (3)					(6) x (8)	(4) + (9)
2007	0.205	1.011	1.083	0.222	0.299	0.273	1.018	1.238	0.338	0.560
2008	0.257	1.015	1.099	0.283	0.368	0.337	1.021	1.264	0.426	0.709
2009	0.296	1.017	1.118	0.331	0.423	0.390	1.022	1.292	0.503	0.835
2010	0.281	1.023	1.144	0.321	0.408	0.377	1.027	1.327	0.501	0.822
2011	0.257	1.024	1.171	0.300	0.341	0.319	1.028	1.364	0.435	0.736
2012	0.223	1.038	1.216	0.271	0.284	0.268	1.038	1.416	0.379	0.650
2013	0.184	1.047	1.273	0.235	0.221	0.211	1.056	1.485	0.313	0.547
2014	0.166	1.060	1.350	0.224	0.185	0.179	1.070	1.576	0.282	0.506
2015	0.149	1.096	1.479	0.220	0.160	0.157	1.104	1.722	0.271	0.491
2016	0.120	1.185	1.754	0.210	0.131	0.130	1.184	2.014	0.261	0.471
2017	0.086	1.451	2.545	0.218	0.103	0.103	1.356	2.698	0.277	0.495
2018	0.039	2.432	6.190	0.243	0.060	0.060	1.908	5.147	0.309	0.551

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1.

<sup>(</sup>b) Age-to-age factors for developing accident years 2014 to 2018 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC19-06-01, Exhibit 2.5.8, Item Q).

<sup>(</sup>c) See AC19-06-01, Exhibit 3.2, Column (2).

<sup>(</sup>d) Based on AC19-06-01, Exhibits 2.6.1 and includes adjustments for SB 1160 and impact of pharmaceutical cost reductions. Age-to-age factors for developing accident years 2014 to 2018 were adjusted for changes in claim settlement rates based on 3-year average selections (see AC19-06-01, Exhibit 2.6.8, Item R).

# Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates Based on 3-Year Average Selections Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.224	1.166	0.855	0.306
2015	0.220	1.137	0.817	0.306
2016	0.210	1.122	0.835	0.282
2017	0.218	1.093	0.884	0.270
2018	0.243	1.068	0.936	0.277

	Projected (d)
2019	0.266
2020	0.260
1/1/2021	0.256

- (a) See Exhibit 8.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Adjusted for the Impact of Reforms and Changes in Claim Settlement Rates Based on 3-Year Average Selections Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.282	0.991	0.855	0.327
2015	0.271	1.009	0.817	0.335
2016	0.261	1.010	0.835	0.315
2017	0.277	1.012	0.884	0.317
2018	0.309	1.007	0.936	0.332

	Projected (d)
2019	0.331
2020	0.332
1/1/2021	0.332

- (a) See Exhibit 8.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

(1)

(4)

#### Developed Loss Ratios Adjusted for the Impact of SB 1160 and Changes in Claim Settlement Rates **Based on Paid Latest Year Selections**

Based on Experience as of March 31, 2019

IV.	/ledical	
	Adjusted	
Developm <u>Annual(b)</u>	ent Factors Cumulative(b)	Developed Loss Ratio (1) x (3)
	Developm	Adjusted  Development Factors

Accident <u>Year</u>	Paid Loss Ratio(a)	Developmo Annual(b)	Developed Loss Ratio	
				(1) x (3)
2007	0.299	1.016	1.228	0.368
2008	0.368	1.019	1.251	0.461
2009	0.423	1.021	1.278	0.540
2010	0.408	1.025	1.310	0.534
2011	0.341	1.026	1.344	0.459
2012	0.284	1.035	1.391	0.395
2013	0.221	1.053	1.455	0.321
2014	0.185	1.062	1.533	0.283
2015	0.160	1.092	1.657	0.266
2016	0.131	1.169	1.914	0.250
2017	0.103	1.327	2.511	0.258
2018	0.060	1.837	4.613	0.277

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent.

<sup>(</sup>b) Based on AC19-06-01, Exhibit 2.6.1 and includes adjustments for SB 1160 and changes in claim settlement rates.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Latest Year Paid Development Adjusted for SB 1160 and Changes in Settlement Rates Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.368	0.806	1.102	0.269
2008	0.461	0.801	1.331	0.277
2009	0.540	0.790	1.436	0.297
2010	0.534	0.787	1.304	0.323
2011	0.459	0.809	1.192	0.311
2012	0.395	0.855	1.060	0.318
2013	0.321	0.938	0.927	0.325
2014	0.283	0.986	0.855	0.327
2015	0.266	1.009	0.817	0.328
2016	0.250	1.010	0.835	0.303
2017	0.258	1.012	0.884	0.296
2018	0.277	1.007	0.936	0.298

2019	0.302
2020	0.304
1/1/2021	0.304

- (a) See Exhibit 9.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

(1)

0.184

0.166

0.149

0.120

0.086

0.039

2013

2014

2015

2016

2017

2018

(2)

Indemnity

(3)

1.258

1.343

1.481

1.780

2.590

6.192

(9)

0.549

0.507

0.492

0.475

0.498

0.538

(8)

0.317

0.285

0.272

0.262

0.276

0.296

(7)

1.241

1.291

1.324

1.416

1.573

1.972

Medical

#### Developed Loss Ratio Using Latest Year Paid Loss Development Factors Adjusted for Insurer Mix

Based on Experience as of March 31, 2019

(5)

0.256

0.221

0.205

0.185

0.175

0.150

(4)

0.232

0.223

0.220

0.213

0.222

0.243

Accident <u>Year</u>	Paid Loss Ratio(a)	Annual Development <u>Factor</u>	Cumulative Development <u>Factor(b)</u>	Developed Loss Ratio(c)	Paid Loss Ratio(a)	Annual Development <u>Factor</u>	Cumulative Development <u>Factor(d)</u>	Developed Loss Ratio(c)	Total Developed Loss Ratio (4) + (8)
2007	0.205		1.048	0.215	0.328		1.098	0.360	0.575
2008	0.257		1.087	0.280	0.404		1.134	0.458	0.738
2009	0.296		1.114	0.330	0.465		1.161	0.540	0.870
2010	0.281		1.148	0.322	0.448		1.197	0.536	0.858
2011	0.257		1.167	0.299	0.380		1.190	0.453	0.752
2012	0.223		1.206	0.269	0.321		1.213	0.389	0.658

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs. No adjustment has been made to MCCP costs in medical reserves.

<sup>(</sup>b) Column (4) divided by Column (1).

<sup>(</sup>c) Developed loss ratios were derived by averaing the loss ratios developed using the latest year paid methodology for State Compensation Insurance Fund and the remaining insurers collectively, weighted by calendar year 2018 earned premium at the advisory pure premium rate level.

<sup>(</sup>d) Column (8) divided by Column (5).

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Paid Development Factors Adjusted for Insurer Mix

Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.215	1.531	1.102	0.299
2008	0.280	1.438	1.331	0.302
2009	0.330	1.410	1.436	0.324
2010	0.322	1.383	1.304	0.342
2011	0.299	1.364	1.192	0.343
2012	0.269	1.332	1.060	0.338
2013	0.232	1.288	0.927	0.322
2014	0.223	1.166	0.855	0.304
2015	0.220	1.137	0.817	0.306
2016	0.213	1.122	0.835	0.286
2017	0.222	1.093	0.884	0.274
2018	0.243	1.068	0.936	0.277

	Projected (d)
2019	0.269
2020	0.262
1/1/2021	0.258

- (a) See Exhibit 10.1.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Using Unadjusted Paid Development Factors Adjusted for Insurer Mix Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.360	0.807	1.102	0.264
2008	0.458	0.801	1.331	0.276
2009	0.540	0.790	1.436	0.297
2010	0.536	0.788	1.304	0.324
2011	0.453	0.810	1.192	0.308
2012	0.389	0.845	1.060	0.310
2013	0.317	0.927	0.927	0.317
2014	0.285	0.973	0.855	0.324
2015	0.272	0.994	0.817	0.331
2016	0.262	0.992	0.835	0.312
2017	0.276	0.989	0.884	0.309
2018	0.296	1.007	0.936	0.318

2019	0.319
2020	0.321
1/1/2021	0.321

- (a) See Exhibit 10.1.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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. No adjustment has been made to MCCP costs in medical reserves.

#### Projected Indemnity Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method Accident Year 2018 Indemnity Projected from 15 Months to 27 Months

AY 2018 Reported Paid Indemnity Loss Ratio at 15 Months     (Based on Exhibit 1 of AC19-06-01)	0.039
<ol> <li>Reported Paid Indemnity Loss Ratios at 27 Months for ELR</li> <li>AY 2016 (Based on March 31, 2018 Experience)</li> <li>AY 2017 (Based on Exhibit 1 of AC19-06-01)</li> </ol>	0.082 0.086
3. Frequency Adjustments to AY 2018 (Based on Exhibit 12 of AC19-06-01) a) AY 2016-2017 Frequency Change b) AY 2017-2018 Frequency Change	-3.7% 0.1%
4. Average Indemnity Severity Change, AY 2012-2017 (Based on Exhibit 6.2 of AC19-06-01)	-3.3%
5. Composite Indemnity On-Level Adjustment Factors (Based on Exhibit 4.1 of AC19-06-01) a) AY 2016 to Current b) AY 2017 to Current c) AY 2018 to Current	1.122 1.093 1.068
6. Composite Premium On-Level Adjustment Factors (Based on Exhibit 5.2 of AC19-06-01) a) AY 2016 to Current b) AY 2017 to Current c) AY 2018 to Current	0.835 0.884 0.936
7. AY 2018 Expected Paid Indemnity Loss Ratio at 27 Months a) Projected from 2016 = (2a) * [1 + (3a)] * [1 + (3b)] * [1 + (4)]^2 * [(5a) / (5c)] / [(6a) / (6c)] b) Projected from 2017 = (2b) * [1 + (3b)] * [1 + (4)] * [(5b) / (5c)] / [(6b) / (6c)] c) Average of 2016 and 2017 Projections = [(7a) + (7b)] / 2	0.087 0.090 0.088
8. Projected Indemnity 15-to-27 Paid Development Factor (Based on Exhibit 2.5.1 of AC19-06-01)	2.384
9. Projected AY 2018 Paid Indemnity Loss Ratio at 27 Months = (1) + (7c) * [1 - 1 / (8)]	0.091

#### Projected Medical Loss Ratio Using the Bornhuetter-Ferguson (BF) Paid Development Method Accident Year 2018 Medical Projected from 15 Months to 27 Months

	Adjusted for Reforms <sup>1</sup>
1. AY 2018 Reported Paid Medical Loss Ratio at 15 Months (Based on Exhibit 1 of AC19-06-01)	0.060
<ol> <li>Reported Paid Medical Loss Ratios at 27 Months for ELR</li> <li>AY 2016 (Based on March 31, 2018 Experience)</li> <li>AY 2017 (Based on Exhibit 1 of AC19-06-01)</li> </ol>	0.096 0.103
3. Frequency Adjustments to AY 2018 (Based on Exhibit 12 of AC19-06-01) a) AY 2016-2017 Frequency Change b) AY 2017-2018 Frequency Change	-3.7% 0.1%
4. Average Medical Severity Change, AY 2012-2017 (Based on Exhibit 6.4 of AC19-06-01)	0.3%
5. Composite Medical On-Level Adjustment Factors (Based on Exhibit 4.4 of AC19-06-01) a) AY 2016 to Current b) AY 2017 to Current c) AY 2018 to Current	1.010 1.012 1.007
6. Composite Premium On-Level Adjustment Factors (Based on Exhibit 5.2 of AC19-06-01) a) AY 2016 to Current b) AY 2017 to Current c) AY 2018 to Current	0.835 0.884 0.936
7. AY 2018 Expected Paid Medical Loss Ratio at 27 Months a) Projected from 2016 = (2a) * [1 + (3a)] * [1 + (3b)] * [1 + (4)]^2 * [(5a) / (5c)] / [(6a) / (6c)] b) Projected from 2017 = (2b) * [1 + (3b)] * [1 + (4)] * [(5b) / (5c)] / [(6b) / (6c)] c) Average of 2016 and 2017 Projections = [(7a) + (7b)] / 2	0.105 0.110 0.107
8. Projected Medical 15-to-27 Paid Development Factor (Based on Exhibit 2.6.1 of AC19-06-01)	1.843
9. Projected AY 2018 Paid Medical Loss Ratio at 27 Months = (1) + (7c) * [1 - 1 / (8)]	0.109

<sup>&</sup>lt;sup>1</sup> Based on experience evaluated as of March 31, 2019. Reflects adjustments for SB 1160 and impact of pharmaceutical cost reductions.

#### Developed Loss Ratios Using Latest Year Reform Adjusted Development Factors - BF Adjusted Age 15 Loss Ratio Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Inden	nnity			Med	lical		
						Adju	sted		
	Reported	Annual	Cumulative						Total
Accident	Paid	Development	Development	Developed	Paid	Developm	ent Factors	Developed	Developed
<u>Year</u>	Loss Ratio(a)	Factor(b)	<u>Factor</u>	Loss Ratio	Loss Ratio(c)	Annual(d)	<u>Cumulative</u>	Loss Ratio	Loss Ratio
				(1) x (3)				(5) x (7)	(4) + (8)
2007	0.205	1.011	1.083	0.222	0.273	1.018	1.238	0.338	0.560
2008	0.257	1.015	1.099	0.283	0.337	1.021	1.264	0.426	0.709
2009	0.296	1.017	1.118	0.331	0.390	1.022	1.292	0.503	0.835
2010	0.281	1.023	1.144	0.321	0.377	1.027	1.327	0.501	0.822
2011	0.257	1.024	1.171	0.300	0.319	1.028	1.364	0.435	0.736
2012	0.223	1.038	1.216	0.271	0.268	1.038	1.416	0.379	0.650
2013	0.184	1.047	1.273	0.235	0.211	1.056	1.485	0.313	0.547
2014	0.166	1.055	1.343	0.223	0.179	1.066	1.570	0.281	0.504
2015	0.149	1.093	1.467	0.218	0.157	1.097	1.705	0.268	0.486
2016	0.120	1.180	1.732	0.207	0.130	1.173	1.975	0.256	0.463
2017	0.086	1.434	2.483	0.213	0.103	1.331	2.599	0.266	0.479
2018	0.091		2.483	0.225	0.109		2.599	0.283	0.508

<sup>(</sup>a) Based on AC19-06-01, Exhibit 1. The 2018 indemnity loss ratio is based on Exhibit 11.1.

<sup>(</sup>b) Age-to-age factors are selected as latest year for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC19-06-01, Exhibit 2.5.

<sup>(</sup>c) Based on experience evaluated as of March 31, 2019. Reflects adjustments of SB 1160 and impact of pharmaceutical cost reductions. The 2018 medical loss ratio is based on Exhibit 11.2.

<sup>(</sup>d) Age-to-age factors are selected as latest year for for the 15-to-27 month through 99-to-111 month factors and three-year average for the subsequent age-to-age factors based on AC19-06-01, Exhibit 2.6. Reflects an adjustment for SB 1160 and impact of pharmaceutical cost reductions.

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident <u>Year</u>	Developed Indemnity <u>Loss Ratio(a)</u>	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.225	1.068	0.936	0.257

	Projected (d)
2019	0.253
2020	0.247
1/1/2021	0.244

- (a) See Exhibit 11.3.
- (b) Based on AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Paid Selections Adjusted for Reform Impacts with BF Paid Applied through 27 Months Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
Accident <u>Year</u>	Developed Medical Loss Ratio(a)	Composite Medical Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	On-Level Medical to Industry Average Filed <u>Pure Premium Ratio(e)</u> (1) x (2) ÷ (3)
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.283	1.007	0.936	0.305

2019	0.311
2020	0.312
1/1/2021	0.313

- (a) See Exhibit 11.3.
- (b) Based on AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, the actual frequency trend for accident year 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

# Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Severity Trends Applied to Accident Year 2018 Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

	Projected(d)
2019	0.258
2020	0.252
1/1/2021	0.249

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.

(d)

These on-level ratios were projected based on an estimated annual indemnity severity trend from AC19-06-01, Exhibit 6.2, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 on-level ratio.

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Severity Trends Applied to Accident Year 2018 Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Medical	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309

	Projected(d)
2019	0.311
2020	0.312
1/1/2021	0.312

- (a) See AC19-06-01, Exhibit 3.2.
- (b) See AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from AC19-06-01, Exhibit 6.4, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2018 on-level ratio.
- (e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).

  Accident years 2010 and prior do reflect paid MCCP costs.

#### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Long-Term Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident <u>Year</u>	Developed Indemnity <u>Loss Ratio(a)</u>	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

2019	0.264
2020	0.262
1/1/2021	0.260

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on the 1990-2018 annual indemnity severity trend of 1.2%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

#### Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Long-Term Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Medical	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309

2019 2020	0.328 0.340
1/1/2021	0.346

- (a) See AC19-06-01, Exhibit 3.2.
- (b) See AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on the 1990-2018 annual medical severity trend of 5.8%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

#### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Short-Term Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

2019 2020 1/1/2021 0.245 0.241		Projected(d)
	2020	0.245

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on the 2014-2018 annual indemnity severity trend of -1.4%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Short-Term Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Medical	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309

2019	0.303
2020	0.297
1/1/2021	0.294

- (a) See AC19-06-01, Exhibit 3.2.
- (b) See AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on the 2014-2018 annual medical severity trend of 0.2%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

## Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
				$(1) \times (2) \div (3)$
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

	Projected(d)
2019	0.255
2020	0.248
1/1/2021	0.244

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated indemnity severity trend of -1.0%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, Exhibit 6.1; these trends were then separately applied to the 2017 and 2018 on-level ratios.

## Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Separate Applications of Frequency and Severity Trends Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Medical	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309

2019	0.308
2020	0.307
1/1/2021	0.306

- (a) See AC19-06-01, Exhibit 3.2.
- (b) See AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated medical severity trend of 1.5%, the actual frequency change for 2018 from AC19-06-01, Exhibit 12, and projected frequency trends for accident years 2019 to 2021 from AC19-06-01, 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.

#### Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Long-Term Exponential Loss Ratio Trend Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident	Developed Indemnity	Composite Indemnity	Composite Premium	Industry Average Filed
Year	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio
<del></del>				(1) x (2) ÷ (3)
1987	0.347	1.608	2.046	0.273
1988	0.332	1.584	1.791	0.294
1989	0.345	1.561	1.723	0.312
1990	0.400	1.251	1.602	0.312
1991	0.427	1.031	1.448	0.304
1992	0.352	1.087	1.320	0.290
1993	0.289	1.319	1.273	0.300
1994	0.329	1.379	1.442	0.315
1995	0.476	1.276	1.893	0.321
1996	0.533	1.193	1.959	0.325
1997	0.604	1.068	1.903	0.339
1998	0.657	0.985	1.911	0.339
1999	0.691	0.913	1.814	0.348
2000	0.597	0.852	1.436	0.354
2001	0.495	0.853	1.229	0.343
2002	0.369	0.874	0.947	0.341
2003	0.243	0.871	0.673	0.315
2004	0.145	1.193	0.606	0.286
2005	0.124	1.616	0.671	0.300
2006	0.161	1.588	0.862	0.297
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

	Projected(d)
2019	0.263
2020	0.262
1/1/2021	0.262

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately -0.3% based on the 1990 to 2018 on-level indemnity to industry average filed pure premium ratios to each of the 2017 and 2018 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

### Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Long-Term Exponential Loss Ratio Trend Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)	(5)
Accident <u>Year</u>	Developed Medical Loss Ratio(a)	Composite Medical Adjustment Factor(b)	Composite Medical Adjustment Factor(c)	On-Level Medical to Industry Average Filed Pure Premium Ratio(e) (1) x (2) ÷ (3)	On-Level Medical to Industry Average Filed Pure Premium Ratio(f)
4007	0.000	0.000	0.040	., ., .,	0.407
1987	0.323	0.806	2.046	0.127 0.136	0.127
1988	0.314	0.777	1.791		0.136
1989	0.335	0.754	1.723	0.147	0.147
1990	0.377	0.611	1.602	0.144	0.144
1991	0.395	0.522	1.448	0.143	0.143
1992	0.329	0.551	1.320	0.137	0.137
1993	0.275	0.660	1.273	0.143	0.143
1994	0.318	0.691	1.442	0.152	0.152
1995	0.467	0.682	1.893	0.168	0.168
1996	0.500	0.672	1.959	0.172	0.172
1997	0.563	0.666	1.903	0.197	0.197
1998	0.679	0.587	1.911	0.208	0.208
1999	0.664	0.509	1.814	0.186	0.186
2000	0.605	0.467	1.436	0.197	0.197
2001	0.539	0.426	1.229	0.187	0.187
2002	0.421	0.442	0.947	0.197	0.197
2003	0.271	0.464	0.673	0.187	0.187
2004	0.186	0.702	0.606	0.215	0.215
2005	0.183	0.815	0.671	0.222	0.222
2006	0.238	0.856	0.862	0.236	0.236
2007	0.338	0.840	1.102	0.257	0.257
2008	0.426	0.834	1.331	0.267	0.267
2009	0.503	0.823	1.436	0.289	0.289
2010	0.501	0.820	1.304	0.315	0.315
2011	0.435	0.835	1.192	0.305	0.305
2012	0.379	0.872	1.060	0.312	0.343
2013	0.313	0.947	0.927	0.319	0.352
2014	0.281	0.991	0.855	0.326	0.359
2015	0.268	1.009	0.817	0.332	0.364
2016	0.256	1.010	0.835	0.309	0.339
2017	0.266	1.012	0.884	0.305	0.335
2018	0.287	1.007	0.936	0.309	0.341

	Projected(d)
2019	0.325
2020	0.337
1/1/2021	0.343
(a)	See AC19-06-01, Exhibit 3.2.
(b)	See AC19-06-01, Exhibit 4.4.
(c)	See AC19-06-01, Exhibit 5.2.
(d)	These on-level ratios were projected by separately applying an exponential trend of approximately 3.8% based on
	the 1990 to 2018 on-level medical to industry average filed pure premium ratios (including MCCP costs) to each of
	the 2017 and 2018 on-level medical to industry average filed pure premium ratios. Each stated projection is equal
	to the average of the corresponding trended on-level ratios.
(e)	Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP).
	Accident years 2010 and prior do reflect paid MCCP costs.
(f)	Medical costs include the paid cost of medical cost containment programs (MCCP) for all accident years for selecting the loss ratio trend.

# Projected On-Level Accident Year Indemnity Loss to Industry Average Filed Pure Premium Ratios Short-Term Exponential Loss Ratio Trend Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4) On-Level Indemnity to
Accident <u>Year</u>	Developed Indemnity <u>Loss Ratio(a)</u>	Composite Indemnity Adjustment Factor(b)	Composite Premium Adjustment Factor(c)	Industry Average Filed Pure Premium Ratio (1) x (2) ÷ (3)
2007	0.222	1.531	1.102	0.309
2008	0.283	1.438	1.331	0.306
2009	0.331	1.410	1.436	0.325
2010	0.321	1.383	1.304	0.341
2011	0.300	1.364	1.192	0.344
2012	0.271	1.332	1.060	0.341
2013	0.235	1.288	0.927	0.326
2014	0.223	1.166	0.855	0.304
2015	0.218	1.137	0.817	0.303
2016	0.207	1.122	0.835	0.279
2017	0.213	1.093	0.884	0.263
2018	0.232	1.068	0.936	0.265

	Projected(d)
2019	0.248
2020	0.238
1/1/2021	0.233

- (a) See AC19-06-01, Exhibit 3.1.
- (b) See AC19-06-01, Exhibit 4.1.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately -4.1% based on the 2014 to 2018 on-level indemnity to industry average filed pure premium ratios to each of the 2017 and 2018 on-level indemnity to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.

Projected(d)

# Projected On-Level Accident Year Medical Loss to Industry Average Filed Pure Premium Ratios Short-Term Exponential Loss Ratio Trend Based on Experience as of March 31, 2019

	(1)	(2)	(3)	(4)
				On-Level Medical to
Accident	Developed Medical	Composite Medical	Composite Medical	Industry Average Filed
<u>Year</u>	Loss Ratio(a)	Adjustment Factor(b)	Adjustment Factor(c)	Pure Premium Ratio(e)
				$(1) \times (2) \div (3)$
2007	0.338	0.840	1.102	0.257
2008	0.426	0.834	1.331	0.267
2009	0.503	0.823	1.436	0.289
2010	0.501	0.820	1.304	0.315
2011	0.435	0.835	1.192	0.305
2012	0.379	0.872	1.060	0.312
2013	0.313	0.947	0.927	0.319
2014	0.281	0.991	0.855	0.326
2015	0.268	1.009	0.817	0.332
2016	0.256	1.010	0.835	0.309
2017	0.266	1.012	0.884	0.305
2018	0.287	1.007	0.936	0.309

2019	0.298
2020	0.293
1/1/2021	0.290

- (a) See AC19-06-01, Exhibit 3.2.
- (b) See AC19-06-01, Exhibit 4.4.
- (c) See AC19-06-01, Exhibit 5.2.
- (d) These on-level ratios were projected by separately applying an exponential trend of approximately -1.9% based on the 2014 to 2018 on-level medical to industry average filed pure premium ratios to each of the 2017 and 2018 on-level medical to industry average filed pure premium ratios. Each stated projection is equal to the average of the corresponding trended on-level ratios.
- (e) Accident years 2011 and subsequent do not reflect the paid cost of medical cost containment programs (MCCP). Accident years 2010 and prior do reflect paid MCCP costs.

# Item AC19-08-04 Impact of Claim Settlement Rate Changes on ALAE Development

In the California Department of Insurance (CDI) Decision on the January 1, 2019 Pure Premium Rate Filling, the CDI noted that the recent acceleration in claim settlement rates may also impact paid ALAE development and recommended the WCIRB review the ALAE projection methodology for the potential impact of changes in claim settlement rates. In addition, staff has reviewed the potential impact of recent reforms related to lien filings on paid ALAE development.

Impact of Claim Settlement Changes on Reported Age-to-Age ALAE Development

During periods of significant claim settlement rate change, the WCIRB has for a number of years reflected the impact of these changes in adjustments to paid indemnity and medical loss development. The basis for the adjustments to loss development has been the traditional Berquist-Sherman approach to adjust for changes in claim settlement rates. This approach assumes that an acceleration in claim settlement rates results in significantly more lump sum settlement payments, leading to higher than expected age-to-age paid development factors. The mechanics of the approach includes adjusting prior loss payments to a common settlement level and recomputing age-to-age development factors on an adjusted basis.

Fundamental to the Berquist-Sherman approach is an assumption that changes in average paid per closed claim are correlated with changes in claim settlement rates. For example, when claim settlement is increasing, relatively larger claims are being settled during that period which increases the average paid on closed. Staff tested that assumption on ALAE payments. Although paid ALAE on open or closed indemnity claims is not available in aggregate financial data calls, it can be obtained through WCIRB unit statistical data. Exhibit 1.1 shows reported indemnity claim settlement rates compared to paid ALAE per closed indemnity claim for private insurers. Exhibit 1.2 shows this information on a graphical basis for first, second and third report level. Although average paid ALAE per closed indemnity claim tends to increase over time while indemnity claim settlement rates tend to be cyclical, there does not appear to be any evidence that an acceleration in claim settlement rates results in a greater increase in paid ALAE per closed claim severities or a decrease in claim settlement rates dampens the change in paid ALAE per closed claim severities. For example, claim settlement rates accelerated sharply between 2003 and 2006 but paid ALAE per closed claim severities were flat over this period. This may be due to closed claims being less likely to have a large ALAE payment at the time of closure than a large loss payment.

Exhibits 2.1 and 2.2 show the change in indemnity claim settlement rates compared to the change in the paid ALAE development factor for the immediate prior period. In the Berquist-Sherman approach, a change in claim settlement should have some impact on the immediate prior paid development factor in the same direction. However, as shown in Exhibits 2.1 and 2.2, this does not appear to be the case for paid ALAE development, as there are many periods for which the change in paid ALAE development is in the opposite direction as the claim settlement rate change.

Given these results, staff does not believe a Berquist-Sherman type approach for adjusting paid ALAE development for changes in claim settlement rates is appropriate.

Impact of Claim Settlement Changes on Later ALAE Development

Although staff did not find significant evidence of changing claim settlement rates impacting reported age-to-age paid ALAE development, claim settlement rate changes likely impact later ALAE development on those accident years. If more (or less) claims are settling, lower (or higher) ALAE development would be expected since there are less (or more) open claims to develop ALAE costs. In 2015, staff studied this potential issue on paid medical development. Although staff found some evidence that changes in claim settlement rates are negatively correlated with emerging paid medical development in the periods immediately following the change, given that paid medical development is significantly impacted by fee

<sup>&</sup>lt;sup>1</sup> Berquist, J. and Sherman, R., Loss Reserve Adequacy Testing: A Comprehensive, Systematic Approach, PCAS LXIV, 123.

schedule changes, utilization changes, and several other factors, a strong relationship between claim settlement rate changes at earlier maturities and paid medical development that emerged much later was not found.<sup>2</sup> However, ALAE development is not as heavily influenced by many of these factors as is medical development.

Staff analyzed this issue on ALAE development by comparing accident year changes in claim settlement rates in a period to differences between the projected and actual paid ALAE development for the accident year after that period (projected ALAE paid development is based on the prior age-to-age paid development). Exhibit 3 shows accident year arithmetic changes in reported indemnity claim settlement ratios from 1992 through 2012 for private insurers. Exhibit 4 shows reported paid ALAE age-to-age factors. To assess the impact of significant claim settlement rate changes, the calendar year paid ALAE development factor projected for the accident year at the time of the claim settlement rate change was compared to the actual development for the accident year (an example for accident year 2012 evaluated as of March 31, 2013 is shown in Exhibit 4). Exhibit 5 shows the differences between the projected latest calendar year development factor for an accident year and the actual development that emerged for that period. Differences greater than 0.5% in absolute value are highlighted on Exhibit 4 for emphasis. The lower sections of Exhibit 5 shows the correlation coefficient between the changes in indemnity claim settlement rates (Exhibit 3) and the differences between projected and actual paid ALAE development that occurred after the claim settlement rate change. There is generally strong negative correlation between the claim settlement rate changes and the change in paid ALAE development, suggesting that early claim settlement rate changes may influence future paid ALAE development. As a result, some adjustment to paid ALAE tail development for changes in claim settlement rates may be appropriate.

In order to estimate and project the impact of a significant change in claim settlement rates on future paid ALAE development, staff compared periods with significant (greater than 1.5%) claim settlement rate change at 15 and 27 months with the difference in the actual development from that projected based on the latest calendar year. Table 1 shows the result of the linear regression analysis by bi-annual development period through 111 months (sufficient claim settlement and paid ALAE data for this analysis is only available through 111 months). For example, a 1 point increase in indemnity claim settlement rates at 15 months is estimated to result in a 2.8% decrease in the 15-to-39 paid ALAE development from what is projected based on the latest calendar year. As the estimated impact decreases by approximately half for each bi-annual development period, the total impact after 111 months is assumed to be approximately equal to the impact for the 87-to-111 month period.

Table 1 – Estimated Change in Future ALAE Development after Settlement Rate Change

Settlement Rate	15-to-39	39-to-63	63-to-87	87-to-111	111-to-Ult.	X-to-Ult.
Change Period	Modeled	Modeled	Modeled	Modeled	Extrapolated	Total
15 Months	-2.8%	-1.6%	-0.7%	-0.6%	-0.6%	-6.3%
Adj. R-Squared @15 Months	0.45	0.39	0.09	0.38	N/A	N/A
27 Months	N/A	-1.1%	-0.7%	-0.4%	-0.4%	-2.6%
Adj. R-Squared @27 Months	N/A	0.43	0.31	0.33	N/A	N/A

As shown in Table 1, the adjusted R-squared for the linear regressions is modest (but generally not insignificant) at around 38%. In addition, paid ALAE development is impacted by several other factors and these results are approximate and based on a limited number of observations. However, the information shown on Exhibit 5 suggests there is some negative relationship between claim settlement rate changes and future paid ALAE development. One way to potentially address these issues is to judgmentally temper the results of the regression analysis, such as by using the average adjusted R-squared. This would result in a 1 point increase in indemnity claim settlement rates at 15 months suggesting a 2.4% (38% of 6.3%) decrease in the projected 15-to-ultimate ALAE development factor and a 1 point increase

<sup>&</sup>lt;sup>2</sup> See Item AC17-03-03 of the June 16, 2017 Actuarial Committee Agenda.

in indemnity claim settlement rates at 27 months suggesting in a 1% (38% of 2.6%) decrease in the projected 27-to-ultimate ALAE development factor. Feedback on these approaches will be solicited from the Committee at the meeting.

#### Impact of Recent Reforms Related to Liens on ALAE Development

The provisions of Senate Bill No. 1160 (SB 1160) and Assembly Bill No. 1244 (AB 1244) related to liens have resulted in an approximate 60% reduction in the number of lien filings. The WCIRB estimates that the reduction in lien filings results in savings to medical losses as well as to ALAE and reflected adjustments to both the projected costs of medical and ALAE in the January 1, 2019 Pure Premium Rate Filing. For medical losses, the impact of SB 1160 and AB 1244 is primarily reflected in adjustments to paid medical loss development since medical liens are paid much later than other types of medical services. The computation of the adjustment to medical loss development was based on a review of medical development with and without liens using WCIRB medical transaction data.<sup>3</sup>

Detailed transactional information on ALAE payments that will allow the replication of the adjustment approach used for medical is not available. Also, unlike for medical for which a single lien payment is typically made after the lien is settled, the ALAE cost for liens is much more likely to be paid incrementally as a lien can result in multiple WCAB court appearances after it is filed. Nevertheless, staff believes that some adjustment to paid ALAE development for the 60% reduction in lien filings is appropriate since the significant reduction in lien filings likely has some impact on future paid ALAE development on more recent accident years. In total, the WCIRB estimates the lien provisions of SB 1160 and AB 1244 have resulted in a 9.6% savings to ALAE costs and a 3.6% savings to medical costs. Table 2 shows the adjustment to each cumulative paid medical development factor as of March 31, 2019 experience. Since detailed information on the impact of liens on ALAE development is not available, staff judgmentally assumed the impact to paid ALAE development is proportional to the estimated impact on paid medical development as one potential approach to address this issue. Table 2 shows the estimated impact on paid ALAE development on this basis, by applying the ratio of estimated savings on ALAE costs compared to the savings on medical costs (9.6% / 3.6%) to the adjustments applied to paid medical development.

Table 2 – Estimated Adjustment to ALAE Development from SB 1160 and AB 1244

Component	27-Ult.	39-Ult.	51-Ult.	63-Ult.	75-Ult.
Medical	-4.8%	-3.7%	-2.5%	-1.5%	-0.7%
ALAE	-12.8%	-9.9%	-6.7%	-4.0%	-1.9%

The impact of SB 1160 and AB 1244 is currently applied to ALAE as a separate adjustment to the projected ALAE to loss ratio. However, the net effect of these adjustments on the ALAE projection is greater than the 9.6% reflected in the January 1, 2019 Pure Premium Rate Filing despite the impact of the SB 1160 and AB 1244 lien provisions being reflected in the last several years of ALAE development. Committee input as to these lien adjustments will be solicited at the meeting.

The adjustments to medical loss development for SB 1160 also includes adjusting paid medical age-to-age factors for liens dismissed by the Division of Workers' Compensation in July 2017. Although these liens would not involve a medical payment, they likely involved some ALAE costs already incurred while the lien was open. In addition, there may have been some additional defense expenses to ultimately close out the lien after it was dismissed. As a result, staff does not recommend applying the adjustment to age-to-age development for paid ALAE.

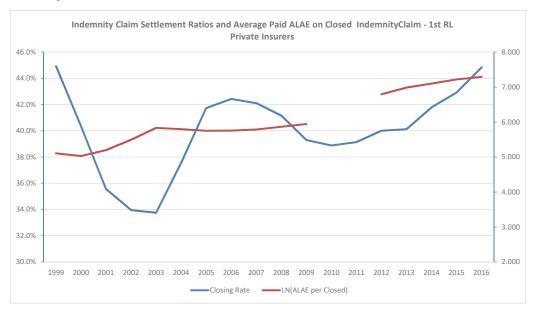
<sup>&</sup>lt;sup>3</sup> See Item AC18-03-03 of the March 19, 2018 Actuarial Committee Agenda for more information on the adjustment to medical loss development.

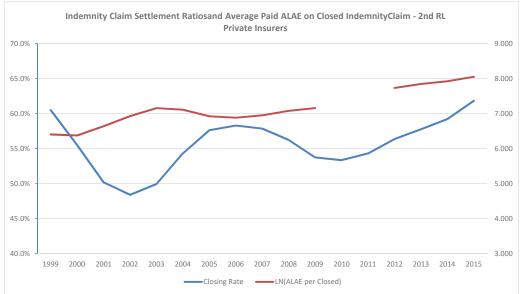
<sup>&</sup>lt;sup>4</sup> See Item AC19-08-02 of this Agenda.

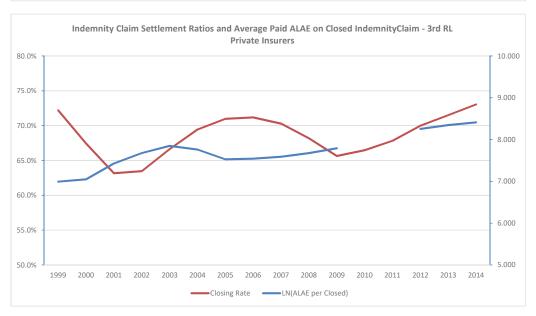
## Indemnity Claim Settlement Ratios and Average Paid ALAE per Closed Indemnity Claim Private Insurers

Indemnity	Claim Settle	ment Ratio	S			Paid ALAE per Closed Indemnity Claim							
AY\RL	1	2	3	4	5	AY\RL	1	2	3	4	5		
1999	44.9%	60.5%	72.2%	78.5%	82.0%	1999	165	605	1,089	1,410	1,655		
2000	40.3%	55.5%	67.4%	74.3%	79.2%	2000	153	587	1,151	1,629	2,019		
2001	35.6%	50.2%	63.2%	72.7%	79.7%	2001	181	764	1,680	2,421	3,047		
2002	34.0%	48.4%	63.5%	75.4%	82.6%	2002	244	1,020	2,158	3,148	3,839		
2003	33.8%	49.9%	66.6%	77.8%	84.7%	2003	342	1,280	2,558	3,554	4,133		
2004	37.6%	54.3%	69.4%	79.6%	85.8%	2004	330	1,223	2,347	3,133	3,690		
2005	41.7%	57.6%	71.0%	80.0%	85.5%	2005	315	1,016	1,860	2,607	3,215		
2006	42.4%	58.3%	71.2%	79.5%	84.5%	2006	317	974	1,884	2,647	3,261		
2007	42.1%	57.9%	70.3%	78.3%	83.3%	2007	327	1,043	1,977	2,799	3,479		
2008	41.2%	56.2%	68.2%	76.3%	82.7%	2008	353	1,183	2,154	3,072	3,927		
2009	39.3%	53.7%	65.6%	75.1%	82.0%	2009	381	1,281	2,419	3,493	4,524		
2010	38.9%	53.3%	66.5%	76.5%	83.2%	2010	522	1,520	2,969	4,166	5,168		
2011	39.1%	54.3%	67.8%	77.6%	84.0%	2011	829	2,039	3,594	5,029	6,257		
2012	40.0%	56.4%	70.0%	79.2%	85.7%	2012	894	2,283	3,847	5,339	6,655		
2013	40.1%	57.8%	71.5%	81.1%	85.9%	2013	1,084	2,552	4,217	5,740	6,610		
2014	41.8%	59.2%	73.0%	80.7%		2014	1,213	2,766	4,499	5,695			
2015	42.9%	61.8%	72.4%			2015	1,366	3,141	4,482				
2016	44.8%	59.9%				2016	1,468	2,818					
2017	42.5%					2017	1,243						
Year-to-Yea	ar Change					Year-to-Yea	ar Change						
Year-to-Yea	ar Change 1	2	3	4	5	Year-to-Yea AY\RL	ar Change 1	2	3	4	5		
		2 -8.3%	3 -6.6%	<u>4</u> -5.3%	5 -3.3%	1	_	2 -2.9%	3 5.7%	4 15.6%	5 22.0%		
AY\RL	1					AY\RL	1						
AY\RL 2000	-10.2%	-8.3%	-6.6%	-5.3%	-3.3%	AY\RL 2000	-7.5%	-2.9%	5.7%	15.6%	22.0%		
AY\RL 2000 2001	1 -10.2% -11.9%	-8.3% -9.5%	-6.6% -6.3%	-5.3% -2.2%	-3.3% 0.6%	AY\RL 2000 2001	-7.5% 18.6%	-2.9% 30.1%	5.7% 45.9%	15.6% 48.6%	22.0% 50.9%		
AY\RL 2000 2001 2002	1 -10.2% -11.9% -4.5%	-8.3% -9.5% -3.6%	-6.6% -6.3% 0.5%	-5.3% -2.2% 3.6%	-3.3% 0.6% 3.7%	AY\RL 2000 2001 2002	-7.5% 18.6% 34.3%	-2.9% 30.1% 33.6%	5.7% 45.9% 28.4%	15.6% 48.6% 30.0%	22.0% 50.9% 26.0%		
AY\RL 2000 2001 2002 2003	1 -10.2% -11.9% -4.5% -0.6%	-8.3% -9.5% -3.6% 3.2%	-6.6% -6.3% 0.5% 5.0%	-5.3% -2.2% 3.6% 3.2%	-3.3% 0.6% 3.7% 2.6%	AY\RL 2000 2001 2002 2003	1 -7.5% 18.6% 34.3% 40.4%	-2.9% 30.1% 33.6% 25.5%	5.7% 45.9% 28.4% 18.5%	15.6% 48.6% 30.0% 12.9%	22.0% 50.9% 26.0% 7.7%		
AY\RL 2000 2001 2002 2003 2004	1 -10.2% -11.9% -4.5% -0.6% 11.3%	-8.3% -9.5% -3.6% 3.2% 8.8%	-6.6% -6.3% 0.5% 5.0% 4.2%	-5.3% -2.2% 3.6% 3.2% 2.3%	-3.3% 0.6% 3.7% 2.6% 1.2%	2000 2001 2002 2003 2004	1 -7.5% 18.6% 34.3% 40.4% -3.5%	-2.9% 30.1% 33.6% 25.5% -4.5%	5.7% 45.9% 28.4% 18.5% -8.3%	15.6% 48.6% 30.0% 12.9% -11.9%	22.0% 50.9% 26.0% 7.7% -10.7%		
AY\RL 2000 2001 2002 2003 2004 2005	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4%	AY\RL 2000 2001 2002 2003 2004 2005	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9%		
AY\RL 2000 2001 2002 2003 2004 2005 2006	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1%	AY\RL 2000 2001 2002 2003 2004 2005 2006	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8% -2.2%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8% -2.2% -4.5%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8% -2.2% -4.5% -1.0%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0% -3.7% 1.3%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5% 1.9%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9% 1.6%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1% 37.0%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3% 18.6%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3% 22.7%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7% 19.3%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2% 14.2%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% -0.8% -2.2% -4.5% -1.0% 0.6%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4% -0.7% 1.8%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0% -3.7% 1.3% 2.1%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5% 1.9%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9% 1.6% 1.0%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1% 37.0% 58.7%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3% 18.6% 34.2%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3% 22.7% 21.1%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7% 19.3% 20.7%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2% 14.2% 21.1%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% -0.8% -2.2% -4.5% -1.0% 0.6% 2.2%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4% -0.7% 1.8% 3.8%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0% -3.7% 1.3% 2.1% 3.2%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5% 1.9% 1.5% 2.1%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9% 1.6% 1.0%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1% 37.0% 58.7% 7.9%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3% 18.6% 34.2% 12.0%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3% 22.7% 21.1% 7.1%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7% 19.3% 20.7% 6.2%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2% 14.2% 21.1%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8% -2.2% -4.5% -1.0% 0.6% 2.2% 0.3%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4% -0.7% 1.8% 3.8% 2.5%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0% -3.7% 1.3% 2.1% 3.2% 2.2%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5% 1.9% 1.5% 2.1%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9% 1.6% 1.0%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1% 37.0% 58.7% 7.9% 21.2%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3% 18.6% 34.2% 12.0% 11.8%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3% 22.7% 21.1% 7.1% 9.6%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7% 19.3% 20.7% 6.2%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2% 14.2% 21.1%		
AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	1 -10.2% -11.9% -4.5% -0.6% 11.3% 11.1% 1.7% -0.8% -2.2% -4.5% -1.0% 0.6% 2.2% 0.3% 4.1%	-8.3% -9.5% -3.6% 3.2% 8.8% 6.1% 1.2% -0.7% -2.8% -4.4% -0.7% 1.8% 3.8% 2.5%	-6.6% -6.3% 0.5% 5.0% 4.2% 2.2% 0.3% -1.3% -3.0% -3.7% 1.3% 2.1% 3.2% 2.2%	-5.3% -2.2% 3.6% 3.2% 2.3% 0.5% -0.7% -1.4% -2.6% -1.5% 1.9% 1.5% 2.1%	-3.3% 0.6% 3.7% 2.6% 1.2% -0.4% -1.1% -1.4% -0.7% -0.9% 1.6% 1.0%	AY\RL 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	1 -7.5% 18.6% 34.3% 40.4% -3.5% -4.6% 0.7% 3.2% 7.8% 8.1% 37.0% 58.7% 7.9% 21.2% 11.9%	-2.9% 30.1% 33.6% 25.5% -4.5% -16.9% -4.1% 7.1% 13.5% 8.3% 18.6% 34.2% 12.0% 11.8% 8.4%	5.7% 45.9% 28.4% 18.5% -8.3% -20.7% 1.3% 4.9% 9.0% 12.3% 22.7% 21.1% 7.1% 9.6%	15.6% 48.6% 30.0% 12.9% -11.9% -16.8% 1.5% 5.7% 9.7% 13.7% 19.3% 20.7% 6.2%	22.0% 50.9% 26.0% 7.7% -10.7% -12.9% 1.4% 6.7% 12.9% 15.2% 14.2% 21.1%		

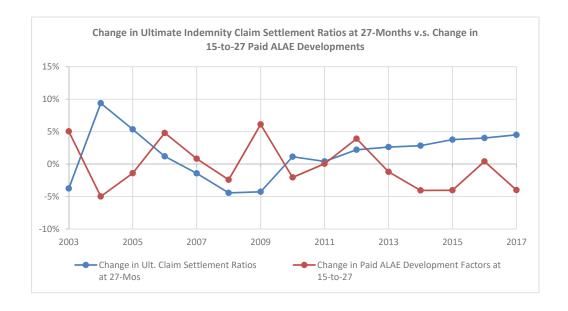
Source: WCIRB unit statistical data

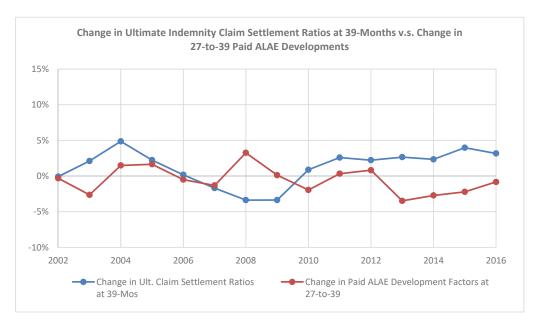


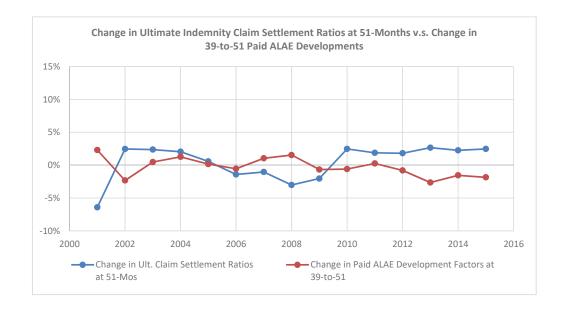


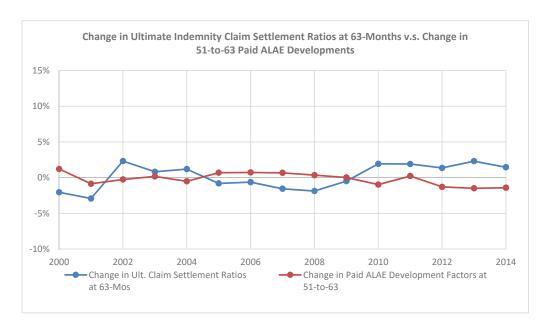


IV-D-5 WCIRB California®









AY	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>
1992	3.6%	3.7%	5.5%	3.5%	1.4%	0.7%	0.6%
1993	3.8%	6.8%	4.1%	1.4%	0.0%	0.1%	-0.7%
1994	0.2%	-1.1%	-0.6%	-0.7%	0.5%	-0.6%	-0.9%
1995	-3.1%	-1.3%	-1.2%	-0.4%	-1.7%	-2.0%	-0.9%
1996	-1.2%	0.4%	-0.2%	-2.0%	-3.0%	-2.6%	-3.4%
1997	-0.1%	-1.2%	-1.4%	-1.7%	0.4%	0.6%	1.2%
1998	-0.2%	-1.8%	-3.6%	-1.4%	-1.6%	-1.0%	-0.7%
1999	-2.1%	-4.2%	-1.4%	-1.2%	-1.0%	-0.8%	-0.2%
2000	-2.4%	-1.4%	-1.8%	-2.3%	-1.9%	-0.7%	-0.4%
2001	-3.5%	-5.3%	-5.7%	-4.4%	-2.0%	-0.9%	-0.9%
2002	0.3%	-0.9%	-0.7%	1.8%	2.2%	1.3%	1.1%
2003	-2.8%	-2.1%	2.0%	2.0%	0.4%	0.3%	0.3%
2004	1.8%	5.1%	3.2%	1.5%	1.2%	0.3%	-0.1%
2005	2.6%	2.8%	1.5%	0.7%	-0.4%	-0.2%	-0.3%
2006	0.5%	0.8%	0.5%	-0.8%	-0.2%	-0.5%	-0.8%
2007	0.4%	-0.7%	-1.2%	-0.9%	-1.6%	-1.2%	0.1%
2008	-0.9%	-1.7%	-1.8%	-2.1%	-1.3%	-0.3%	-0.2%
2009	-1.5%	-1.9%	-2.2%	-1.4%	-0.5%	-0.4%	-0.1%
2010	0.2%	0.4%	0.6%	1.5%	1.4%	1.5%	1.2%
2011	0.4%	0.3%	1.3%	1.1%	1.1%	0.9%	0.6%
2012	0.3%	0.9%	1.4%	1.2%	1.2%	1.2%	1.1%
Number of o	bservations	of claim set	tlement rate	e change:			<u>All</u>
Downward	10	12	12	12	11	12	69
Upward	11	9	9	9	10	9	57

<sup>&</sup>lt;sup>1</sup> For example, the value for 2012 at 15 months is equal to the arithemetic difference between the <u>reported</u> indemnity claim settlement rate for 2012 at 15 months and the <u>reported</u> indemnity claim settlement rate for 2011 at 15 months.

Red - Arithmetic change in claim settlement rates by less than -1.0% (lighter color) or less than 1.5% (darker color).

Blue - Arithmetic change in claim settlement rates by more than 1.0% (lighter color) or more than 1.5% (darker color).

Paid ALAE Loss Development Factors - Private Insurers

Me	etin	ıg A	λgε	enc	da	for	·A	ugı	ust	1,	20	019	9																											E	xhibit
	219-231	1.052	1.045	1.009	1.022	1.010	1.012	1.014	1.007	1.004	1.005	1.005	1.006	1.005	1.004	1.004	1.002	1.004	1.007	1.007	1.009	1.008	1.008	1.009	1.007	1.007															
	207-219	1.016	1.016	1.011	1.019	1.012	1.020	1.009	1.012	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.006	1.007	1.009	1.009	1.008	1.011	1.009	1.008	1.007														
	195-207	1.038	1.014	1.006	1.015	1.012	1.012	1.013	1.012	1.010	1.003	1.005	1.004	1.004	1.005	1.006	1.005	1.005	1.006	1.007	1.008	1.009	1.009	1.011	1.011	1.010	1.009	1.007													
	183-195	1.017	1.033	1.010	1.009	1.019	1.011	1.014	1.009	1.007	1.011	1.005	1.004	1.004	1.004	1.006	1.006	1.006	1.008	1.008	1.010	1.011	1.011	1.011	1.011	1.013	1.010	1.009	1.007												
	171-183		1.022	1.021	1.012	1.012	1.013	1.010	1.013	1.010	1.006	1.010	1.006	1.004	1.005	1.005	1.005	1.005	1.009	1.011	1.013	1.008	1.013	1.013	1.013	1.013	1.014	1.011	1.009	1.009											
	159-171			1.014	1.018	1.015	1.014	1.010	1.011	1.014	1.010	1.009	1.010	1.004	1.005	1.005	1.005	1.008	1.011	1.013	1.015	1.014	1.013	1.014	1.015	1.015	1.017	1.013	1.012	1.011	1.012					15-87	8.731	8.329	-4.6%		
ers	147-159				1.018	1.022	1.017	1.016	1.014	1.016	1.008	1.009	1.013	1.014	1.004	1.006	1.005	1.007	1.012	1.017	1.017	1.017	1.016	1.018	1.018	1.018	1.016	1.016	1.017	1.014	1.016	1.013					@3/31/2012	AY2011	Change:		
Paid ALAE Loss Development Factors - Private Insurers	135-147					1.023	1.019	1.017	1.011	1.044	1.009	1.011	1.009	1.011	1.007	1.007	1.007	1.007	1.010	1.019	1.019	1.021	1.020	1.020	1.020	1.020	1.019	1.017	1.019	1.019	1.019	1.018	1.01/				@				
actors - Pri	123-135						1.027	1.021	1.017	1.013	1.036	1.010	1.012	1.011	1.011	1.009	1.007	1.009	1.014	1.014	1.022	1.026	1.025	1.023	1.027	1.024	1.023	1.020	1.022	1.024	1.027	1.023	1.021	201		15-87	8.621	8.436	-2.1%		
opment F	111-123							1.032	1.029	1.019	1.013	1.017	1.015	1.014	1.017	1.014	1.012	1.011	1.017	1.020	1.022	1.031	1.033	1.028	1.033	1.030	1.028	1.025	1.028	1.029	1.032	1.032	1.023	1.025			@3/31/2013	AY2012	Change:		
Loss Devel	99-111								1.022	1.048	1.023	1.023	1.022	1.021	1.026	1.020	1.017	1.018	1.028	1.023	1.030	1.036	1.040	1.041	1.039	1.042	1.034	1.031	1.032	1.033	1.042	1.043	1.042	1.034	1.031		<u>@</u>				
Paid ALAE	87-99									1.045	1.035	1.036	1.031	1.033	1.040	1.032	1.025	1.027	1.032	1.036	1.038	1.046	1.051	1.055	1.058	1.051	1.052	1.040	1.042	1.045	1.052	1.05b	1.034	1.049	1.044	1.043					
	75-87										1.059	1.055	1.051	1.048	1.079	1.046	1.047	1.045	1.047	1.045	1.046	1.056	1.064	1.083	1.076	1.079	1.075	1.064	1.057	1.064	1.072	1.001	1.001	1.076	1.068	1.065	1.055				
	63-75											1.101	1.086	1.085	1.102	1.097	1.062	1.074	1.076	1.082	1.072	1.072	1.081	1.102	1.111	1.110	1.108	1.102	1.089	1.090	1.104	1.108	1 115	1.112	1.108	1.096	1.093	1.078			
	51-63												1.154	1.145	1.148	1.149	1.128	1.102	1.127	1.117	1.132	1.114	1.112	1.139	1.152	1.166	1.156	1.153	1.155	1.149	1.157	1.105	1177	1.178	1.166	1.169	1.154	1.136	1.120		
	39-51													1.292	1.299	1.276	1.252	1.229	1.218	1.231	1.237	1.239	1.194	1.229	1.256	1.262	1.291	1.261	1.267	1.283	1.285	1.278	1.231	1.302	1.295	1.298	1.288	1.254	1.234	1.211	
	27-39														1.705	1.627	1.552	1.512	1.527	1.498	1.569	1.490	1.511	1.463	1.559	1.593	1.597	1.592	1.550	1.573	1.599	1.591	1.570	1.673	1.591	1.597	1.610	1.554	1.511	1.478	1.466
	15-27															2.957	2.921	2.511	2.417	2.485	2.550	2.454	2.424	2.618	2.514	2.801	3.053	2.790	2.931	2.785	2.746	2.878	2027	3.005	2.944	2.945	3.060	3.024	2.902	2.785	2.796
	Α̈́	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2002	2007	2002	2010	2011	2012	2013	2014	2015	2016 2017

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

## Difference in Projected Calendar Year ALAE Paid Development Compared to Actual<sup>1</sup>

<u>AY</u>	<u>15-87</u>	<u>27-87</u>	<u>39-87</u>	<u>51-87</u>	<u>63-87</u>	<u>75-87</u>	<u>87-111</u>	<u>87-195</u>
1992	-28.7%	-17.1%	-10.8%	-5.7%	-2.0%	-0.9%	-3.6%	-13.5%
1993	-12.3%	-8.9%	-7.4%	-3.0%	-1.2%	-0.4%	0.1%	-2.4%
1994	-4.7%	-7.3%	-6.4%	-4.8%	-2.1%	-0.3%	0.5%	1.9%
1995	0.9%	-1.7%	-4.3%	-4.9%	-5.3%	-3.1%	1.3%	-2.1%
1996	0.3%	4.2%	4.8%	3.0%	1.9%	1.0%	2.1%	6.8%
1997	-6.9%	-5.7%	-2.1%	0.9%	2.3%	1.6%	3.2%	7.9%
1998	14.0%	5.6%	7.5%	8.2%	6.1%	3.6%	5.0%	10.5%
1999	7.9%	12.3%	8.9%	7.4%	5.5%	2.8%	5.2%	
2000	43.5%	28.8%	18.3%	11.9%	6.9%	3.3%	4.2%	
2001	29.5%	18.8%	16.0%	10.4%	6.2%	2.8%	2.1%	
2002	-4.7%	4.3%	4.4%	4.0%	2.7%	0.8%	1.0%	
2003	0.8%	-4.1%	-1.2%	-1.6%	-1.8%	-0.7%	-0.1%	
2004	-11.4%	-6.7%	-5.6%	-5.0%	-3.6%	-1.7%	-0.9%	
2005	2.8%	4.3%	1.1%	-0.8%	-0.9%	-0.4%	-0.1%	
2006	7.7%	2.7%	1.6%	0.7%	-0.4%	-0.4%	0.0%	
2007	3.0%	2.2%	4.1%	3.4%	1.8%	0.5%	0.6%	
2008	7.8%	10.4%	8.4%	6.2%	3.7%	1.3%	-0.2%	
2009	18.2%	11.4%	7.7%	5.7%	3.9%	1.8%		
2010	-2.8%	-0.8%	1.1%	0.8%	0.8%	0.4%		
2011	-4.6%	-4.6%	-3.1%	-2.1%	-1.7%	-0.7%		
2012	-2.1%	-5.8%	-6.9%	-5.8%	-3.9%	-1.8%		

Number of observations of difference in development factor:												
Downward	9	10	9	9	10	10	57					
Upward	12	11	12	12	11	11	69					

Correlation between claim settlement ratio change at age X to development difference at X-to-87:									
	-0.6850	-0.6190	-0.7871	-0.7271	-0.4852	-0.2137			
Correlation between claim settlement ratio change at age X to development difference at 87-to-111:									
	-0.5684	-0.6079	-0.7142	-0.6507	-0.5182	-0.3812			
Correlation between claim settlement ratio change at age X to development difference at 87-to-195:									
	-0 5373	-0.6234	-0.8558	-0 9389	-0 5667	-0 3839			

<sup>&</sup>lt;sup>1</sup> For example, the value of -2.1% for 2012 at 15-to-87 months is equal to the difference in the projected loss development factor at 15-to-87 months as of 3/31/2013 to the actual loss development factor at 15-to-87 months that emerged for accident year 2012.

Yellow Difference in development factors by less than -0.5%.

Green Difference in development factors by more than 0.5%.

## Item AC19-08-05 Review of Loss Development Tail Methodology

For a number of years, the WCIRB's approach to projecting the loss development tail has been based on using incurred age-to-age development from approximately 255 months to 411 months and fitting an inverse power curve to age-to-age incurred loss development factors to compute the tail factor after 411 months. At the March 18, 2019 meeting, the Committee noted that incurred medical development after 120 months has shown an anomalous pattern for the last several calendar years, likely influenced by changes in pharmaceutical costs and other transitional effects of recent reforms. As a result, the Committee recommended staff review the tail development methodology for consideration before the next annual pure premium rate filing.

In 2016,¹ the Committee reviewed a study of alternative tail development approaches. At that meeting, the Committee noted that an approach that extrapolates the tail using an inverse power curve fit from a six year average of incurred age-to-age factors from the 10th development year to 30th development year (29th year for March 31 experience) produced relatively more stable tail development factors among the alternatives reviewed. The Committee recommended a stopping point of 80 years for the extrapolation of the tail development factor due to the positive incurred development observed on claims over 70 years old.

Staff has updated the 2016 analysis of the inverse power curve fit to compare the appropriateness of paid and incurred tail development factors given the recent sharp decline in incurred loss development. Nine evaluations were included to examine the volatility of the tail development factors. Tail development factors are fitted based on the 10<sup>th</sup> through 29<sup>th</sup> year development factors, excluding any periods with development factors less than 1.000 (which result in an error in the inverse power curve fit), and are projected to a stopping point of 80 years, which is consistent with the current approach. The development factors which form the basis of the inverse power curve fit are an average of the latest several age-to-age factors, ranging from a three-year average to a six-year average.

Exhibits 1.1 and 1.2 summarize for indemnity and medical, respectively, the tail development factors based on the inverse power curve fit to both paid and incurred development. The unadjusted factors as well as the factors adjusted for the recent decrease in pharmaceutical costs were reviewed.<sup>2</sup> (For incurred development, only the paid portion of the incurred age-to-age factor was adjusted.) Not surprisingly, Incurred development had significantly more instances of age-to-age factors less than 1.000, particularly for more recent evaluations, which were excluded from the inverse power curve fitting.<sup>3</sup> The goodness-of-fit as measured by the R-squared is consistently significantly better for the paid development factors than the incurred development factors. As shown in Exhibit 1.2, the tail development factors based on paid medical development are also significantly more stable as measured by the standard deviation across the last five evaluations as well as all reviewed evaluations than the respective development factors based on incurred medical development. For paid medical development, an approach based on a four-year average appears to improve the stability over an approach based on a three-year average. Adding additional years does not appear to improve stability.

<sup>&</sup>lt;sup>1</sup> See Item AC16-03-03 of the March 22, 2016 Actuarial Committee Agenda.

<sup>&</sup>lt;sup>2</sup> See Item AC19-06-03 of the June 14, 2019 Actuarial Committee Agenda.

<sup>&</sup>lt;sup>3</sup> For indemnity, as many as 7 age-to-age factors were excluded from a fit for a single period (for three-year average incurred indemnity development as of 3/31/2010). For medical, as many as 15 factors were excluded from a fit for a single period (for three-year average incurred medical development as of 3/31/2019).

For a number of years, the WCIRB has relied primarily on incurred loss development to project later periods. This approach was recommended by the Committee based on a 2014 study which identified a significant shift in the incurred-to-paid ratio observed in the mid-1990s.<sup>4</sup> This shift was largely driven by the Minniear decision as well as other factors significantly slowing down the rate of medical payments during these years. Due to this dramatic shift in paid development patterns, the Committee recommended to no longer use the paid development factors to project ultimate loss ratios arising from accident years prior to 1998.

Exhibits 2.1 and 2.2 show the incurred-to-paid loss ratios for indemnity and medical, respectively, updated through December 31, 2018 experience. Although the more recent ratios for medical (shaded in blue on Exhibit 2.2) have declined significantly, they have not returned to the levels observed in the pre-Minniear period prior to 1998 (shaded in black on Exhibit 2.2). However, these recent incurred-to-paid loss ratios are no longer as stable as the post-Minniear ratios observed in the 2014 analysis (shaded in red on Exhibit 2.2). This suggests that the distortion which led to basing the longer-term loss development projections on incurred development factors still exists but to a less significant degree than shown in the 2014 study.

In order to assess the viability of using paid development factors for projecting ultimate losses at older ages, staff compared the cumulative paid and incurred development factors in these older periods. Exhibits 3.1 and 3.2 compare the change in paid and incurred 255-to-351 cumulative development factors for indemnity and medical, respectively. Consistent with the WCIRB's approach to select age-to-age factors in the last several pure premium rate filings, the cumulative development factors are an average of the latest three years for paid development and the latest six years for incurred development. The cumulative development factors encompass ages 255 through 351 months, which is the period associated with accident years prior to 1998. Multiple evaluations are shown on Exhibits 3.1 and 3.2 to compare the stability of paid versus incurred cumulative development factors for those ages. To facilitate consistency of comparison between paid and incurred development, the development factors for each evaluation are indexed to the March 31, 2011 level. As shown in Exhibit 3.2, the paid medical cumulative development factors have been consistent over the last several evaluations, whereas the incurred medical factors have been more volatile, declining to historically low levels in recent evaluations.

The Committee's feedback on the tail development approach will be solicited at the meeting.

<sup>5</sup> Minniear v. Mount San Antonio Community College District (1996) 61 Cal. Comp. Cases 1055 (Appeals Board en banc opinion).

<sup>&</sup>lt;sup>4</sup> See Item AC14-03-03 of the March 19, 2014 Actuarial Committee Agenda.

Indemnity Year 29 - 80 Cumulative Development										
	Factors	Fit to Inve	rse Power (	-		R-Squared				
Evaluation:		# Years Average In Fit: 6 5 4 3				# Years Average In Fit: 6 5 4 3				
3/31/2019		3	4	<u> </u>	- 0	3	4	3		
Incurred Indemnity	1.002	1.002	1.003	1.004	0.798	0.837	0.794	0.870		
Paid Indemnity	1.009	1.009	1.009	1.009	0.985	0.987	0.988	0.986		
•										
3/31/2018	1 002	1 000	1.002	1 004	0.712	0.027	0.704	0.070		
Incurred Indemnity Paid Indemnity	1.003 1.009	1.002 1.008	1.003 1.008	1.004 1.008	0.713 0.973	0.837 0.982	0.794 0.987	0.870 0.989		
r aid ilidefillity	1.009	1.000	1.000	1.000	0.973	0.902	0.907	0.909		
3/31/2017										
Incurred Indemnity	1.005	1.002	1.003	1.004	0.711	0.837	0.794	0.870		
Paid Indemnity	1.009	1.009	1.008	1.008	0.965	0.958	0.971	0.974		
3/31/2016										
Incurred Indemnity	1.006	1.002	1.003	1.004	0.640	0.837	0.794	0.870		
Paid Indemnity	1.010	1.010	1.010	1.009	0.949	0.950	0.936	0.948		
3/31/2015										
Incurred Indemnity	1.006	1.002	1.003	1.004	0.671	0.837	0.794	0.870		
Paid Indemnity	1.010	1.010	1.011	1.010	0.950	0.948	0.950	0.933		
·										
3/31/2014	4 007	4.000	4.000	4.004	0.500	0.007	0.704	0.070		
Incurred Indemnity Paid Indemnity	1.007 1.010	1.002 1.010	1.003 1.010	1.004 1.011	0.529 0.902	0.837 0.935	0.794 0.933	0.870 0.938		
r aid indefinity	1.010	1.010	1.010	1.011	0.302	0.933	0.933	0.330		
3/31/2013										
Incurred Indemnity	1.005	1.002	1.003	1.004	0.398	0.837	0.794	0.870		
Paid Indemnity	1.010	1.010	1.010	1.011	0.872	0.870	0.911	0.909		
3/31/2012										
Incurred Indemnity	1.005	1.002	1.003	1.004	0.516	0.837	0.794	0.870		
Paid Indemnity	1.011	1.010	1.010	1.009	0.812	0.854	0.847	0.897		
3/31/2011										
Incurred Indemnity	1.003	1.002	1.003	1.004	0.565	0.837	0.794	0.870		
Paid Indemnity	1.012	1.011	1.009	1.009	0.771	0.772	0.823	0.801		
·										
Standard Daviation, 2045 through 204	0									
Standard Deviation: 2015 through 201 Incurred Indemnity	0.001	_	_	_						
Paid Indemnity	0.000	0.001	0.001	0.001						
	0.000		50.							
Standard Deviation: 2011 through 201			0.000	0.000						
Incurred Indemnity Paid Indemnity	0.001 0.001	- 0.001	0.000 0.001	0.000 0.001						
. a.awommy	0.001	3.301	3.301	0.001						

	Medical Year	29 - 80 Cur	nulative De	velopment				
			rse Power (	R-Squared				
	# Years Average In Fit:				# Years Average In Fit:			
Evaluation:	6	5	4	3	6	5	4	3
3/31/2019								
Paid Medical - Unadjusted	1.079	1.079	1.075	1.081	0.985	0.975	0.964	0.946
Paid Medical - Adjusted	1.083	1.085	1.084	1.092	0.983	0.972	0.962	0.945
Incurred Medical - Unadjusted	1.009	1.003	1.006	1.004	0.588	0.792	0.889	0.967
Incurred Medical - Adjusted	1.007	1.003	1.002	1.001	0.713	0.424	0.851	0.994
3/31/2018	4.070	4.070	4.070	4.000				0.045
Paid Medical - Unadjusted	1.072	1.073	1.070	1.063	0.988	0.979	0.962	0.945
Paid Medical - Adjusted	1.074	1.075	1.075	1.070	0.988	0.979	0.963	0.954
Incurred Medical - Unadjusted	1.014	1.014	1.010	1.005	0.674	0.346	0.316	0.834
Incurred Medical - Adjusted	1.008	1.014	1.008	1.003	0.579	0.623	0.294	0.409
3/31/2017	1.072	4.072	1.072	1.071	0.006	0.004	0.060	0.051
Paid Medical - Unadjusted	1.073	1.073	1.073	1.071	0.986	0.981	0.969	0.951
Paid Medical - Adjusted	1.072	1.072	1.073	1.072	0.987	0.982	0.970	0.949
Incurred Medical - Unadjusted	1.024	1.015	1.015	1.017	0.738	0.561	0.522	0.458
Incurred Medical - Adjusted 3/31/2016	1.024	1.016	1.018	1.013	0.765	0.715	0.677	0.348
	1.073	1.075	1.074	1.076	0.983	0.985	0.976	0.965
Paid Medical - Unadjusted Paid Medical - Adjusted	1.073	1.073	1.074	1.076	0.983	0.986	0.978	0.965
Incurred Medical - Unadjusted	1.071	1.072	1.072	1.073	0.963	0.960	0.976	0.967
Incurred Medical - Orladjusted	1.039	1.033	1.027	1.026	0.700	0.772	0.745	0.637
3/31/2015	1.041	1.037	1.029	1.034	0.011	0.791	0.743	0.037
Paid Medical - Unadjusted	1.073	1.075	1.078	1.078	0.966	0.974	0.978	0.963
Paid Medical - Adjusted	1.071	1.073	1.075	1.075	0.966	0.975	0.980	0.968
Incurred Medical - Unadjusted	1.048	1.047	1.044	1.031	0.900	0.825	0.822	0.609
Incurred Medical - Adjusted	1.045	1.043	1.040	1.030	0.894	0.789	0.750	0.709
3/31/2014								
Paid Medical - Unadjusted	1.071	1.069	1.072	1.073	0.921	0.957	0.970	0.975
Paid Medical - Adjusted	1.070	1.067	1.069	1.070	0.917	0.953	0.966	0.973
Incurred Medical - Unadjusted	1.057	1.052	1.051	1.050	0.851	0.907	0.813	0.820
Incurred Medical - Adjusted	1.057	1.049	1.048	1.045	0.871	0.914	0.804	0.787
3/31/2013								
Paid Medical - Unadjusted	1.072	1.069	1.066	1.068	0.862	0.877	0.918	0.931
Paid Medical - Adjusted	1.072	1.068	1.065	1.068	0.861	0.875	0.917	0.929
Incurred Medical - Unadjusted	1.059	1.063	1.056	1.057	0.859	0.877	0.946	0.842
Incurred Medical - Adjusted	1.054	1.056	1.049	1.032	0.754	0.767	0.830	0.392
3/31/2012								
Paid Medical - Unadjusted	1.076	1.072	1.067	1.064	0.794	0.819	0.825	0.858
Paid Medical - Adjusted	1.076	1.072	1.067	1.064	0.794	0.819	0.825	0.858
Incurred Medical - Unadjusted	1.061	1.057	1.061	1.054	0.781	0.761	0.774	0.870
Incurred Medical - Adjusted	1.061	1.057	1.061	1.054	0.781	0.761	0.774	0.870
3/31/2011								
Paid Medical - Unadjusted	1.082	1.076	1.071	1.065	0.741	0.761	0.790	0.803
Paid Medical - Adjusted	1.082	1.076	1.071	1.065	0.741	0.761	0.790	0.803
Incurred Medical - Unadjusted	1.055	1.060	1.056	1.061	0.741	0.762	0.756	0.758
Incurred Medical - Adjusted	1.055	1.060	1.056	1.061	0.741	0.762	0.756	0.758
Oten dend Devietien 2045 through 2040								
Standard Deviation: 2015 through 2019	0 003	0.002	0.003	0.007				
Paid Medical - Adjusted	0.003							
Paid Medical - Adjusted Incurred Medical - Unadjusted	0.005 0.016	0.005 0.018	0.005 0.015	0.009 0.013				
Incurred Medical - Adjusted	0.018	0.016	0.015	0.013				
mounteu Medicai - Adjusted	0.010	0.017	0.013	0.010				
Standard Deviation: 2011 through 2019								
Paid Medical - Unadjusted	0.004	0.003	0.004	0.006				
Paid Medical - Adjusted	0.005	0.005	0.005	0.008				
Incurred Medical - Unadjusted	0.020	0.023	0.022	0.022				
Incurred Medical - Adjusted	0.021	0.021	0.022	0.021				
· · · · · · · · · · · · · · · · · · ·								

<sup>&</sup>quot;Adjusted" refers to adjustments for SB1160 and recent pharmaceutical cost declines in paid development.

### **Indemnity Incurred Loss to Paid Loss Ratio**

Accident					Age	(in month	s)				
<u>Year</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>	<u>180</u>	192	204	<u>216</u>	<u>228</u>	<u>240</u>	<u>252</u>
1985	1.026	1.023	1.019	1.015	1.013	1.012	1.011	1.010	1.009	1.009	1.008
1986	1.026	1.022	1.019	1.015	1.013	1.012	1.011	1.010	1.010	1.010	1.009
1987	1.027	1.021	1.017	1.016	1.014	1.013	1.013	1.012	1.012	1.011	1.010
1988	1.023	1.019	1.018	1.016	1.014	1.013	1.011	1.010	1.010	1.009	1.009
1989	1.023	1.022	1.019	1.019	1.018	1.018	1.012	1.014	1.012	1.011	1.010
1990	1.022	1.020	1.020	1.016	1.015	1.013	1.012	1.011	1.010	1.009	1.008
1991	1.030	1.028	1.026	1.023	1.021	1.020	1.018	1.016	1.015	1.014	1.013
1992	1.034	1.031	1.029	1.026	1.023	1.025	1.021	1.016	1.015	1.014	1.013
1993	1.041	1.037	1.034	1.031	1.031	1.025	1.021	1.018	1.017	1.014	1.014
1994	1.059	1.050	1.043	1.041	1.031	1.028	1.026	1.023	1.021	1.020	1.018
1995	1.066	1.057	1.054	1.046	1.042	1.039	1.035	1.034	1.029	1.024	1.023
1996	1.070	1.063	1.053	1.046	1.040	1.037	1.034	1.032	1.028	1.024	1.021
1997	1.068	1.057	1.051	1.047	1.042	1.037	1.033	1.029	1.026	1.023	1.020
1998	1.068	1.057	1.051	1.046	1.041	1.036	1.030	1.027	1.024	1.022	1.020
1999	1.058	1.049	1.043	1.039	1.034	1.030	1.026	1.022	1.019	1.018	
2000	1.054	1.049	1.043	1.036	1.033	1.030	1.026	1.024	1.020		
2001	1.059	1.053	1.047	1.041	1.036	1.031	1.027	1.024			
2002	1.053	1.044	1.038	1.033	1.029	1.026	1.022				
2003	1.068	1.060	1.052	1.046	1.040	1.035					
2004	1.074	1.065	1.057	1.049	1.043						
2005	1.074	1.063	1.056	1.048							
2006	1.072	1.059	1.052								
2007	1.064	1.054									
2008	1.060										

### **Medical Incurred Loss to Paid Loss Ratio**

Accident	Age (in months)										
<u>Year</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>	<u>180</u>	<u>192</u>	<u>204</u>	<u>216</u>	<u>228</u>	<u>240</u>	<u>252</u>
1985	1.059	1.052	1.044	1.039	1.038	1.039	1.037	1.039	1.037	1.040	1.044
1986	1.061	1.054	1.046	1.043	1.042	1.043	1.043	1.050	1.050	1.049	1.045
1987	1.073	1.059	1.053	1.053	1.053	1.053	1.067	1.064	1.055	1.055	1.046
1988	1.053	1.047	1.051	1.048	1.048	1.048	1.052	1.051	1.049	1.043	1.044
1989	1.057	1.057	1.058	1.058	1.072	1.066	1.062	1.055	1.056	1.055	1.056
1990	1.051	1.050	1.054	1.057	1.056	1.051	1.050	1.047	1.048	1.051	1.051
1991	1.054	1.055	1.056	1.057	1.056	1.059	1.055	1.055	1.055	1.055	1.051
1992	1.072	1.082	1.083	1.081	1.073	1.077	1.071	1.066	1.063	1.063	1.061
1993	1.109	1.111	1.109	1.106	1.105	1.108	1.105	1.102	1.101	1.106	1.097
1994	1.140	1.133	1.133	1.122	1.112	1.120	1.119	1.118	1.110	1.105	1.100
1995	1.176	1.161	1.162	1.168	1.166	1.150	1.143	1.144	1.121	1.114	1.100
1996	1.163	1.156	1.152	1.145	1.139	1.137	1.126	1.117	1.108	1.097	1.086
1997	1.176	1.176	1.165	1.159	1.155	1.141	1.131	1.117	1.098	1.088	1.078
1998	1.189	1.178	1.173	1.156	1.149	1.138	1.132	1.118	1.108	1.093	1.085
1999	1.166	1.158	1.145	1.138	1.132	1.118	1.100	1.086	1.071	1.063	
2000	1.154	1.148	1.146	1.132	1.119	1.104	1.088	1.075	1.065		
2001	1.173	1.165	1.151	1.137	1.119	1.103	1.085	1.076			
2002	1.154	1.137	1.125	1.105	1.089	1.077	1.066				
2003	1.158	1.139	1.121	1.101	1.086	1.075					
2004	1.156	1.136	1.117	1.097	1.082						
2005	1.143	1.126	1.104	1.088							
2006	1.127	1.105	1.095								
2007	1.120	1.100									
2008	1.102										