

DELAWARE COMPENSATION RATING BUREAU, INC.

ACTUARIAL COMMITTEE

**Summary of Material for Modification of Experience
December 1, 2022 Residual Market Rate and Voluntary Market Loss Cost Revision**

As Filed

DELAWARE 2022 RESIDUAL MARKET RATE AND VOLUNTARY MARKET LOSS COST FILING

PROPOSED EFFECTIVE DATE - DECEMBER 1, 2022

INDEX

PART I - INDICATED RATE AND LOSS COST CHANGE

<u>Exhibit</u>	<u>Description</u>	<u>Page</u>
I	Indicated Change in Rate Level	1
II	Expense Loading	2
III	Internal Rate of Return Assumptions	3
IV	Policy Year Loss Ratios	4-13
V	Policy Year On-Level Factors	14-16
VI	Policy Year Development Factors	17-22
VII	Determination of Trend Factors	23-25

Table

I	Policy Year Data From Supplemental Call - Standard Earned Premium	26
I-A	Policy Year Data From Supplemental Call - Total Incurred*	27
I-B	Policy Year Data From Supplemental Call - Indemnity Incurred Losses*	28
I-C	Policy Year Data From Supplemental Call - Medical Incurred Losses*	29
I-D	Policy Year Data From Supplemental Call - Indemnity Paid Losses*	30
I-E	Policy Year Data From Supplemental Call - Medical Paid Losses*	31

* Losses exclude IBNR and Bulk Reserves and individual claims have been capped at amounts varying by policy year

PART II - CLASSIFICATION RELATIVITY

Exhibit

VIII	Rate and Loss Cost Formulae	32-34
------	-----------------------------	-------

PART III - EXPERIENCE RATING & RETROSPECTIVE RATING PLANS

Exhibit

IX	Collectible Premium Ratios	35
X	Expected Loss Rate Factors	36
XI	Tax Multiplier	37
XII	Retrospective Development Factors	38

EXHIBIT I

INDICATED CHANGE IN RATE LEVEL

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
(1a) Policy Year 2017 Loss and Loss Adjustment Expense Ratio	0.3744	0.3822	0.7566
(1b) Policy Year 2018 Loss and Loss Adjustment Expense Ratio	0.3454	0.3150	0.6604
(1c) Policy Year 2019 Loss and Loss Adjustment Expense Ratio	0.3721	0.3438	0.7159
(1d) Policy Year 2020 Loss and Loss Adjustment Expense Ratio	0.2718	0.2987	0.5705
(1e) Weighted Average (2017 - 30%; 2018 - 30%; 2019 - 30%; 2020 - 10%)	0.3548	0.3422	0.6970
(2a) Policy Year 2017 Loss and LAE Ratio Trended to 12/1/2023	0.2709	0.3055	0.5764
(2b) Policy Year 2018 Loss and LAE Ratio Trended to 12/1/2023	0.2639	0.2620	0.5259
(2c) Policy Year 2019 Loss and LAE Ratio Trended to 12/1/2023	0.3003	0.2969	0.5972
(2d) Policy Year 2020 Loss and LAE Ratio Trended to 12/1/2023	0.2317	0.2678	0.4995
(2e) Weighted Average (2017 - 30%; 2018 - 30%; 2019 - 30%; 2020 - 10%)	0.2737	0.2861	0.5598
(3a) Excess Loss Factor at \$1,791,586 (Post-Legislative Basis)			0.0636
(3b) Provision for Excess Loss (4a) - (2e)			0.0380
(4a) Total Trended Loss and LAE Ratio (2e) / (1.0 - (3a))	0.2785	0.3193	0.5978
(4b) Percentage of Total	46.59%	53.41%	
(5) Permissible Loss and Loss Adjustment Ratio			0.7216
(6) Indicated Change in Rates (4a) / (5)			0.8284
(7) Estimated Effect of the 7/1/23 Benefit Change			1.0123
(8) Indicated Change in Residual Market Rate Level (6) * (7)			0.8386
			-16.14%
(9) Indicated Change in Voluntary Market Loss Costs (8) / Change in Average LCMs [1.3275 / 1.4094] LCM = (1 / Loss, LAE and Administrative Assessment Ratio)			0.8904
			-10.96%

	<u>Mfg.</u>	<u>Cont.</u>	<u>Other</u>	<u>Total</u>
(10) Current Collectible Premium Ratio	1.0621	1.0579	0.9069	
(11) Proposed Collectible Premium Ratio	1.0600	1.0230	0.8886	
(12) Change in Collectible Premium Ratio (11) / (10)	0.9980	0.9670	0.9798	0.9798
(13) Change in Residual Market Manual Rate Level (8) * (12)	0.8369	0.8109	0.8217	0.8217
(14) Change in Voluntary Market Manual Loss Cost Level (9) * (12)	0.8886	0.8610	0.8724	0.8724
(15) Current Offset for Residual Market Surcharge				0.9965
(16) Proposed Offset for Residual Market Surcharge				0.9973
(17) Adjusted Change in Voluntary Market Manual Loss Cost Level (14) * (16) / (15)	0.8893	0.8617	0.8731	0.8731

EXHIBIT II
EXPENSE LOADING

	<u>Current %</u>	<u>Proposed %</u>
LOSS AND LOSS ADJUSTMENT EXPENSE		
Losses	53.26	56.87
Loss Adjustment Expense	14.86	15.29 a
Loss & Loss Adjustment	68.12	72.16
UNDERWRITING EXPENSES		
Commission	5.32	4.83
Other Acquisition	1.77	1.57
General Expenses	2.47	2.48
Premium Discount	8.53	8.38
State Premium Tax	2.00	2.00
Other State Tax	0.31	0.30
Uncollectible Premium	2.86	2.62
Administrative Assessment	2.83	3.17 b
Workers Compensation Fund	2.00	2.00
Deviations	0.00	0.00
Policyholder Dividends	0.00	0.00
Underwriting Profit	3.79	0.49
Underwriting Expense Total	31.88	27.84

a - As ratio to loss, Loss Adjustment Expense = 0.2689

b - As ratio to loss, Administrative Assessment = 0.0558

RESIDUAL MARKET MINIMUM PREMIUM:

It is proposed that the Minimum Premium formula increase from $(290 * \text{Rate}) + \text{Expense Constant}$ to

$$(310 * \text{Rate}) + \text{Expense Constant}$$

It is proposed that the Minimum Premium be subject to a Maximum Minimum Premium of \$2,000.

It is proposed to use a multiplier of 155.00 in the Minimum Premium formula for the Farm Classes, (0006, 0016, 0034, 0036, 0083).

RESIDUAL MARKET EXPENSE CONSTANT:

It is proposed that the expense constant increase from \$330 to \$345.

EXHIBIT III

**INTERNAL RATE OF RETURN ANALYSIS
STATE OF DELAWARE - 2022
TABLE I: INPUTS, ASSUMPTIONS & OUTPUTS**

Section 1: Inputs & Assumptions		
(1) Commissions *		4.83
(2) Other Expenses		4.35
(2A)	Other Acquisitions *	1.57
(2B)	General Expenses *	2.48
(2C)	Other Tax **	0.30
(3) State Premium Taxes & Uncollectible Premium		
(3A)	Tax1 - Premium Tax **	2.00
(3B)	Uncollectible Premium **	2.62
(3C)	Tax3 - Workers Compensation Fund **	2.00
(4) Premium Discount ***		8.38
(5) Deviations		0.00
(6) Dividends to Policyholders		0.00
(7) Premium Written		1,000,000
Investment Income		
(8A)	Pre-Tax Return on Assets	4.63
(8B)	Investment Income Tax Rate	0.79
(8C)	Post-Tax Return on Assets	3.84
(10) Reserve to Surplus Ratio		1.87
(11) Internal Rate of Return (Cost of Capital)		9.60
* Applies to standard premium at DCRB level (before premium discount)		
** Applies to net premium at company level (after deviations and premium discounts)		
*** Applies to standard premium at company level (after deviations)		

Section 2: Outputs		
(1) Loss Ratio - including loss adjustment expense & loss based assessments		75.33
(2) Profit & Contingencies		0.49

EXHIBIT IV - 1

POLICY YEAR LOSS RATIO 2020*

(1) Standard Earned Premium Reported (Table I)			155,194,824
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.9632
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0032
(4) Expense Constant Removal Factor			0.9970
(5) DCCPAP On-Level Factor			1.0134
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			151,515,579
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	8,099,550	14,436,257	22,535,807
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	4.1062	2.4554	
(10) Ultimate Incurred Losses (8) * (9)	33,258,372	35,446,785	68,705,157
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	17,296,911	24,385,742	41,682,653
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.7357	1.4712	
(13) Ultimate Incurred Losses (11) * (12)	30,022,248	35,876,304	65,898,552
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	31,640,310	35,661,545	67,301,855
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0257	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	41,180,203	45,250,934	86,431,137
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.2718	0.2987	0.5705
(19) Normalized Claim Frequency (Exhibit VII-3)	0.5601	0.5601	
(20) Severity Ratio** (18) / (19)	0.4853	0.5333	1.0186

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 2

POLICY YEAR LOSS RATIO 2019*

(1) Standard Earned Premium Reported (Table I)			168,152,803
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.8364
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			0.9984
(4) Expense Constant Removal Factor			0.9975
(5) DCCPAP On-Level Factor			1.0134
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			141,943,828
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	19,097,447	21,938,230	41,035,677
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	2.1219	1.7855	
(10) Ultimate Incurred Losses (8) * (9)	40,522,873	39,170,710	79,693,583
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	30,837,409	29,280,895	60,118,304
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.2815	1.2890	
(13) Ultimate Incurred Losses (11) * (12)	39,518,140	37,743,074	77,261,214
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	40,020,507	38,456,892	78,477,399
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0401	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	52,818,380	48,797,950	101,616,330
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3721	0.3438	0.7159
(19) Normalized Claim Frequency (Exhibit VII-3)	0.5868	0.5868	
(20) Severity Ratio** (18) / (19)	0.6341	0.5859	1.2200

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 3

POLICY YEAR LOSS RATIO 2018*

(1) Standard Earned Premium Reported (Table I)			176,063,836
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.7477
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0002
(4) Expense Constant Removal Factor			0.9975
(5) DCCPAP On-Level Factor			1.0138
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			133,152,579
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	22,600,374	21,854,932	44,455,306
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.5244	1.5868	
(10) Ultimate Incurred Losses (8) * (9)	34,452,010	34,679,406	69,131,416
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	29,764,772	26,000,349	55,765,121
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1446	1.2091	
(13) Ultimate Incurred Losses (11) * (12)	34,068,758	31,437,022	65,505,780
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	34,260,384	33,058,214	67,318,598
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0578	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	45,985,741	41,947,568	87,933,309
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3454	0.3150	0.6604
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6095	0.6095	
(20) Severity Ratio** (18) / (19)	0.5667	0.5168	1.0835

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 4

POLICY YEAR LOSS RATIO 2017*

(1) Standard Earned Premium Reported (Table I)			175,825,763
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.7217
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0001
(4) Expense Constant Removal Factor			0.9975
(5) DCCPAP On-Level Factor			1.0133
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			128,273,416
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	28,676,914	27,722,713	56,399,627
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.3053	1.4880	
(10) Ultimate Incurred Losses (8) * (9)	37,431,976	41,251,397	78,683,373
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	31,629,926	31,024,171	62,654,097
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0913	1.1611	
(13) Ultimate Incurred Losses (11) * (12)	34,517,738	36,022,165	70,539,903
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	35,974,857	38,636,781	74,611,638
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0520	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	48,022,218	49,026,211	97,048,429
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3744	0.3822	0.7566
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6843	0.6843	
(20) Severity Ratio** (18) / (19)	0.5471	0.5585	1.1056

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 5

POLICY YEAR LOSS RATIO 2016*

(1) Standard Earned Premium Reported (Table I)			164,669,498
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.7045
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0003
(4) Expense Constant Removal Factor			0.9973
(5) DCCPAP On-Level Factor			1.0153
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			117,503,087
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	30,074,869	29,952,964	60,027,833
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.2013	1.4200	
(10) Ultimate Incurred Losses (8) * (9)	36,128,940	42,533,209	78,662,149
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	34,077,109	34,029,604	68,106,713
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0640	1.1283	
(13) Ultimate Incurred Losses (11) * (12)	36,258,044	38,395,602	74,653,646
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	36,193,492	40,464,406	76,657,898
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0655	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	48,934,070	51,345,285	100,279,355
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4164	0.4370	0.8534
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6726	0.6726	
(20) Severity Ratio** (18) / (19)	0.6191	0.6497	1.2688

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 6

POLICY YEAR LOSS RATIO 2015*

(1) Standard Earned Premium Reported (Table I)			145,673,955
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.7438
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0005
(4) Expense Constant Removal Factor			0.9965
(5) DCCPAP On-Level Factor			1.0166
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			109,818,389
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	31,945,560	30,199,136	62,144,696
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1430	1.3659	
(10) Ultimate Incurred Losses (8) * (9)	36,513,775	41,249,000	77,762,775
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	33,811,382	32,026,791	65,838,173
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0477	1.1043	
(13) Ultimate Incurred Losses (11) * (12)	35,424,185	35,367,185	70,791,370
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	35,968,980	38,308,093	74,277,073
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0819	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	49,379,040	48,609,139	97,988,179
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4496	0.4426	0.8922
(19) Normalized Claim Frequency (Exhibit VII-3)	0.7845	0.7845	
(20) Severity Ratio** (18) / (19)	0.5731	0.5642	1.1373

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 7

POLICY YEAR LOSS RATIO 2014*

(1) Standard Earned Premium Reported (Table I)			147,644,972
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.6745
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0004
(4) Expense Constant Removal Factor			0.9966
(5) DCCPAP On-Level Factor			1.0141
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			100,691,143
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	30,847,026	27,089,722	57,936,748
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1066	1.3202	
(10) Ultimate Incurred Losses (8) * (9)	34,135,319	35,763,851	69,899,170
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	31,855,295	29,376,316	61,231,611
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0369	1.0860	
(13) Ultimate Incurred Losses (11) * (12)	33,030,755	31,902,679	64,933,434
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	33,583,037	33,833,265	67,416,302
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0835	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	46,171,744	42,931,030	89,102,774
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4585	0.4264	0.8849
(19) Normalized Claim Frequency (Exhibit VII-3)	0.7522	0.7522	
(20) Severity Ratio** (18) / (19)	0.6095	0.5668	1.1763

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 8

POLICY YEAR LOSS RATIO 2013*

(1) Standard Earned Premium Reported (Table I)			134,822,968
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.7419
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0001
(4) Expense Constant Removal Factor			0.9966
(5) DCCPAP On-Level Factor			1.0139
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			101,080,804
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	36,749,581	33,024,459	69,774,040
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0822	1.2808	
(10) Ultimate Incurred Losses (8) * (9)	39,770,397	42,297,727	82,068,124
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	39,288,072	35,652,135	74,940,207
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0292	1.0716	
(13) Ultimate Incurred Losses (11) * (12)	40,435,284	38,204,828	78,640,112
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	40,102,841	40,251,278	80,354,119
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.0962	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	55,781,776	51,074,847	106,856,623
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.5519	0.5053	1.0572
(19) Normalized Claim Frequency (Exhibit VII-3)	0.8634	0.8634	
(20) Severity Ratio** (18) / (19)	0.6392	0.5852	1.2244

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 9

POLICY YEAR LOSS RATIO 2012*

(1) Standard Earned Premium Reported (Table I)			114,993,495
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.9100
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0000
(4) Expense Constant Removal Factor			0.9966
(5) DCCPAP On-Level Factor			1.0156
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			105,915,188
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	35,220,637	31,044,826	66,265,463
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0648	1.2463	
(10) Ultimate Incurred Losses (8) * (9)	37,502,934	38,691,167	76,194,101
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	37,334,148	33,161,212	70,495,360
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0234	1.0601	
(13) Ultimate Incurred Losses (11) * (12)	38,207,767	35,154,201	73,361,968
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	37,855,351	36,922,684	74,778,035
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.1200	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	53,798,813	46,851,194	100,650,007
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.5079	0.4423	0.9502
(19) Normalized Claim Frequency (Exhibit VII-3)	0.8380	0.8380	
(20) Severity Ratio** (18) / (19)	0.6061	0.5278	1.1339

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT IV - 10

POLICY YEAR LOSS RATIO 2011*

(1) Standard Earned Premium Reported (Table I)	105,562,982
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)	1.0605
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)	1.0000
(4) Expense Constant Removal Factor	0.9968
(5) DCCPAP On-Level Factor	1.0145
(6) Other Adjustments	1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)	113,209,378

Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	37,577,161	34,842,466	72,419,627
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0519	1.2159	
(10) Ultimate Incurred Losses (8) * (9)	39,527,416	42,364,954	81,892,370

Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	38,026,811	38,308,485	76,335,296
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0191	1.0509	
(13) Ultimate Incurred Losses (11) * (12)	38,753,123	40,258,387	79,011,510

Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses ((10) + (13)) / 2	39,140,270	41,311,671	80,451,941
(15) Factor to 7/1/21 Benefit Level (Exhibit V-3)	1.1363	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2689	1.2689	
(17) Adjusted Losses (14) * (15) * (16)	56,434,440	52,420,379	108,854,819
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4985	0.4630	0.9615
(19) Normalized Claim Frequency (Exhibit VII-3)	0.9293	0.9293	
(20) Severity Ratio** (18) / (19)	0.5364	0.4982	1.0346

* Projected losses limited on a per claim basis, with the loss limitation varying by policy year.

** Severity ratio represents loss and loss adjustment expense ratio adjusted to a common level of frequency.

EXHIBIT V - 1
POLICY YEARS 2016 - 2020
PREMIUM ON-LEVEL FACTORS

<u>POLICY YEAR</u>		<u>(1) RATE CHANGE DATE</u>	<u>(2) RATE CHANGE</u>	<u>(3) CUM. INDEX OF COL (2)</u>		<u>(4) PORTION OF YEAR ON-LEVEL</u>	<u>(5) PRODUCT (3) * (4)</u>	<u>FACTOR TO ADJUST TO 12/1/21 RATE LEVEL</u>
2020	VOL	12/01/19	BASE	0.7411	*	0.8628	0.6394	
		12/01/20	0.8844	0.6554		0.0546	0.0358	
		12/01/21	0.7898	0.5176		-----	-----	
						0.9174	0.6752	
	RM	12/01/19	BASE	1.0000		0.0777	0.0777	
		12/01/20	0.9120	0.9120		0.0049	0.0045	
		12/01/21	0.7999	0.7295		-----	-----	
						0.0826	0.0822	
*	Loss, LAE and LBA portion of 12/1/19 rate.						0.7574	0.9632
2019	VOL	12/01/18	BASE	0.7457	*	0.8631	0.6436	
		12/01/19	0.8671	0.6466		0.0535	0.0346	
		12/01/20	0.6985	0.4517		-----	-----	
		TO 12/01/21				0.9166	0.6782	
	RM	12/01/18	BASE	1.0000		0.0787	0.0787	
		12/01/19	0.8725	0.8725		0.0047	0.0041	
		12/01/20	0.7295	0.6365		-----	-----	
		TO 12/01/21				0.0834	0.0828	
*	Loss, LAE and LBA portion of 12/1/18 rate.						0.7610	0.8364
2018	VOL	12/01/17	BASE	0.7308	*	0.4278	0.3126	
		6/01/18	1.0000	0.7308		0.4156	0.3037	
		12/01/18	0.9000	0.6577		0.0552	0.0363	
		12/01/19	0.6057	0.3984		-----	-----	
		TO 12/01/21				0.8986	0.6526	
	RM	12/01/17	BASE	1.0000		0.0448	0.0448	
		6/01/18	0.9514	0.9514		0.0506	0.0481	
		12/01/18	0.9271	0.8820		0.0060	0.0053	
		12/01/19	0.6365	0.5614		-----	-----	
		TO 12/01/21				0.1014	0.0982	
*	Loss, LAE and LBA portion of 12/1/17 rate.						0.7508	0.7477
2017	VOL	12/01/16	BASE	0.6999	*	0.8238	0.5766	
		12/01/17	0.9700	0.6789		0.0589	0.0400	
		6/01/18	0.5451	0.3701		-----	-----	
		TO 12/01/21				0.8827	0.6166	
	RM	12/01/16	BASE	1.0000		0.1075	0.1075	
		12/01/17	0.9427	0.9427		0.0098	0.0092	
		6/01/18	0.5614	0.5292		-----	-----	
		TO 12/01/21				0.1173	0.1167	
*	Loss, LAE and LBA portion of 12/1/16 rate.						0.7333	0.7217
2016	VOL	12/01/15	BASE	0.7102	*	0.8071	0.5732	
		12/01/16	1.0000	0.7102		0.0513	0.0364	
		12/01/17	0.5287	0.3755		-----	-----	
		TO 12/01/21				0.8584	0.6096	
	RM	12/01/15	BASE	1.0000		0.1323	0.1323	
		12/01/16	1.0000	1.0000		0.0093	0.0093	
		12/01/17	0.5292	0.5292		-----	-----	
		TO 12/01/21				0.1416	0.1416	
*	Loss, LAE and LBA portion of 12/1/15 rate.						0.7512	0.7045

EXHIBIT V - 2
POLICY YEARS 2011 - 2015
PREMIUM ON-LEVEL FACTORS

POLICY YEAR		(1) RATE CHANGE DATE	(2) RATE CHANGE	(3) CUM. INDEX OF COL (2)		(4) PORTION OF YEAR ON-LEVEL	(5) PRODUCT (3) * (4)	FACTOR TO ADJUST TO 12/1/21 RATE LEVEL
2015	VOL	12/01/14	BASE	0.7095	*	0.7759	0.5505	
		12/01/15	1.0720	0.7606		0.0563	0.0428	
		12/01/16	0.5287	0.4021		-----	-----	
		TO 12/01/21				0.8322	0.5933	
	RM	12/01/14	BASE	1.0000		0.1565	0.1565	
		12/01/15	1.0709	1.0709		0.0113	0.0121	
		12/01/16	0.5292	0.5667		-----	-----	
		TO 12/01/21				0.1678	0.1686	
	*	Loss, LAE and LBA portion of 12/1/14 rate.					0.7619	0.7438
2014	VOL	12/01/13	BASE	0.7239	*	0.8058	0.5833	
		12/01/14	0.8850	0.6407		0.0495	0.0317	
		12/01/15	0.5668	0.3631		-----	-----	
		TO 12/01/21				0.8553	0.6150	
	RM	12/01/13	BASE	1.0000		0.1356	0.1356	
		12/01/14	0.9030	0.9030		0.0091	0.0082	
		12/01/15	0.5668	0.5118		-----	-----	
		TO 12/01/21				0.1447	0.1438	
	*	Loss, LAE and LBA portion of 12/1/13 rate.					0.7588	0.6745
2013	VOL	12/01/12	BASE	0.7074	*	0.7579	0.5361	
		12/01/13	1.1400	0.8064		0.0577	0.0465	
		12/01/14	0.5016	0.4045		-----	-----	
		TO 12/01/21				0.8156	0.5826	
	RM	12/01/12	BASE	1.0000		0.1724	0.1724	
		12/01/13	1.1140	1.1140		0.0120	0.0134	
		12/01/14	0.5118	0.5701		-----	-----	
		TO 12/01/21				0.1844	0.1858	
	*	Loss, LAE and LBA portion of 12/1/12 rate.					0.7684	0.7419
2012	VOL	12/01/11	BASE	0.7343	*	0.7707	0.5659	
		12/01/12	1.2166	0.8933		0.0792	0.0707	
		12/01/13	0.5719	0.5109		-----	-----	
		TO 12/01/21				0.8499	0.6366	
	RM	12/01/11	BASE	1.0000		0.1382	0.1382	
		12/01/12	1.2606	1.2606		0.0119	0.0150	
		12/01/13	0.5701	0.7187		-----	-----	
		TO 12/01/21				0.1501	0.1532	
	*	Loss, LAE and LBA portion of 12/1/11 rate.					0.7898	0.9100
2011	VOL	12/01/10	BASE	0.7688	*	0.8259	0.6350	
		12/01/11	1.1261	0.8657		0.0662	0.0573	
		12/01/12	0.6957	0.6023		-----	-----	
		TO 12/01/21				0.8921	0.6923	
	RM	12/01/10	BASE	1.0000		0.1012	0.1012	
		12/01/11	1.1826	1.1826		0.0067	0.0079	
		12/01/12	0.7187	0.8499		-----	-----	
		TO 12/01/21				0.1079	0.1091	
	*	Loss, LAE and LBA portion of 12/1/10 rate.					0.8014	1.0605

EXHIBIT V - 3
POLICY YEARS 2011 - 2020
INDEMNITY LOSS ON-LEVEL FACTORS

<u>POLICY YEAR</u>	<u>(1) LAW AMENDMENT DATE</u>	<u>(2) BENEFIT CHANGE</u>	<u>(3) CUM. INDEX OF COL (2)</u>	<u>(4) PORTION OF YEAR ON-LEVEL</u>	<u>(5) PRODUCT (3) * (4)</u>	<u>FACTOR TO ADJUST TO 7/1/21 BENEFIT LEVEL</u>
2020	7/01/19	BASE	1.0000	0.1250	0.1250	
	7/01/20	1.0128	1.0128	0.7500	0.7596	
	7/01/21	1.0124	1.0254	0.1250	0.1282	
	7/01/22	1.0131	1.0388	-----	-----	
				1.0000	1.0128	1.0257
2019	7/01/18	BASE	1.0000	0.1250	0.1250	
	7/01/19	1.0231	1.0231	0.7500	0.7673	
	7/01/20	1.0128	1.0362	0.1250	0.1295	
	7/01/21	1.0257	1.0628	-----	-----	
	TO 7/01/22			1.0000	1.0218	1.0401
2018	7/01/17	BASE	1.0000	0.1250	0.1250	
	7/01/18	0.9861	0.9861	0.7500	0.7396	
	7/01/19	1.0231	1.0089	0.1250	0.1261	
	7/01/20	1.0388	1.0480	-----	-----	
	TO 7/01/22			1.0000	0.9907	1.0578
2017	7/01/16	BASE	1.0000	0.1250	0.1250	
	7/01/17	1.0165	1.0165	0.7500	0.7624	
	7/01/18	0.9861	1.0024	0.1250	0.1253	
	7/01/19	1.0628	1.0654	-----	-----	
	TO 7/01/22			1.0000	1.0127	1.0520
2016	7/01/15	BASE	1.0000	0.1250	0.1250	
	7/01/16	1.0184	1.0184	0.7500	0.7638	
	7/01/17	1.0165	1.0352	0.1250	0.1294	
	7/01/18	1.0480	1.0849	-----	-----	
	TO 7/01/22			1.0000	1.0182	1.0655
2015	7/01/14	BASE	1.0000	0.1250	0.1250	
	7/01/15	0.9967	0.9967	0.7500	0.7475	
	7/01/16	1.0184	1.0150	0.1250	0.1269	
	7/01/17	1.0653	1.0813	-----	-----	
	TO 7/01/22			1.0000	0.9994	1.0819
2014	7/01/13	BASE	1.0000	0.1250	0.1250	
	7/01/14	1.0124	1.0124	0.7500	0.7593	
	7/01/15	0.9967	1.0091	0.1250	0.1261	
	7/01/16	1.0849	1.0948	-----	-----	
	TO 7/01/22			1.0000	1.0104	1.0835
2013	7/02/12	BASE	1.0000	0.1250	0.1250	
	7/01/13	1.0242	1.0242	0.7500	0.7682	
	7/01/14	1.0124	1.0369	0.1250	0.1296	
	7/01/15	1.0813	1.1212	-----	-----	
	TO 7/01/22			1.0000	1.0228	1.0962
2012	6/13/11	BASE	1.0000	0.1264	0.1264	
	7/02/12	1.0161	1.0161	0.7486	0.7607	
	7/01/13	1.0242	1.0407	0.1250	0.1301	
	7/01/14	1.0947	1.1393	-----	-----	
	TO 7/01/22			1.0000	1.0172	1.1200
2011	6/22/10	BASE	1.0000	0.1010	0.1010	
	6/13/11	0.9936	0.9936	0.7746	0.7696	
	7/02/12	1.0161	1.0096	0.1244	0.1256	
	7/01/13	1.1212	1.1320	-----	-----	
	TO 7/01/22			1.0000	0.9962	1.1363

EXHIBIT VI - 1

DEVELOPMENT FACTORS

PREMIUM

<u>Reports in Ratio</u>	<u>Policy Year</u>	<u>Calendar Years 17-18</u>	<u>Policy Year</u>	<u>Calendar Years 18-19</u>	<u>Policy Year</u>	<u>Calendar Years 19-20</u>	<u>Policy Year</u>	<u>Calendar Years 20-21</u>	<u>Unweighted Average</u>	<u>Cumulative Average</u>
2nd to 1st	2016	1.0073	2017	1.0061	2018	1.0156	2019	1.0048	1.0048 *	1.0032
3rd to 2nd	2015	0.9986	2016	0.9950	2017	0.9994	2018	0.9998	0.9982	0.9984
4th to 3rd	2014	0.9998	2015	1.0007	2016	0.9996	2017	1.0003	1.0001	1.0002
5th to 4th	2013	1.0001	2014	1.0001	2015	0.9991	2016	0.9999	0.9998	1.0001
6th to 5th	2012	1.0001	2013	0.9992	2014	0.9998	2015	1.0000	0.9998	1.0003
7th to 6th	2011	1.0001	2012	1.0001	2013	1.0003	2014	0.9999	1.0001	1.0005
8th to 7th	2010	1.0009	2011	1.0002	2012	1.0000	2013	0.9999	1.0003	1.0004
9th to 8th	2009	1.0001	2010	1.0001	2011	1.0000	2012	1.0000	1.0001	1.0001
10th to 9th	2008	1.0004	2009	1.0000	2010	1.0000	2011	1.0000	1.0000 *	1.0000
11th to 10th	2007	1.0000	2008	1.0000	2009	1.0000	2010	1.0000	1.0000 *	1.0000
12th to 11th	2006	1.0000	2007	1.0002	2008	1.0000	2009	1.0000	1.0000 *	1.0000
13th to 12th	2005	1.0000	2006	1.0000	2007	0.9998	2008	1.0000	1.0000 *	1.0000
14th to 13th	2004	1.0000	2005	1.0000	2006	1.0000	2007	1.0000	1.0000 *	1.0000
15th to 14th	2003	1.0000	2004	1.0000	2005	1.0000	2006	1.0000	1.0000 *	1.0000
16th to 15th	2002	1.0000	2003	1.0000	2004	1.0000	2005	1.0000	1.0000 *	1.0000
17th to 16th	2001	1.0000	2002	1.0000	2003	1.0000	2004	1.0000	1.0000 *	1.0000
18th to 17th	2000	1.0000	2001	1.0000	2002	1.0000	2003	1.0000	1.0000 *	1.0000
19th to 18th	1999	1.0000	2000	1.0000	2001	1.0000	2002	1.0000	1.0000 *	1.0000
20th to 19th	1998	1.0000	1999	1.0000	2000	1.0000	2001	1.0000	1.0000 *	1.0000

* Selected

EXHIBIT VI - 2

DEVELOPMENT FACTORS

INDEMNITY LOSSES
PAID METHOD - LIMITED LOSS BASIS

Reports in Ratio	Policy Year	Calendar	Policy Year	Calendar	Policy Year	Calendar	Policy Year	Calendar	Unweighted Average	Fitted Value	Cumulative Average		
		Years 17-18		Years 18-19		Years 19-20		Years 20-21					
2nd to 1st	a	2016	2.0033	2017	1.8234	2018	1.9768	2019	1.9333	1.9342	1.9351	4.1062	
3rd to 2nd	a	2015	1.3183	2016	1.4317	2017	1.4053	2018	1.4218	1.3943	1.3920	2.1219	
4th to 3rd	a	2014	1.1604	2015	1.1546	2016	1.1987	2017	1.1532	1.1667	1.1678	1.5244	
5th to 4th	a	2013	1.0914	2014	1.0603	2015	1.0724	2016	1.0875	1.0779	1.0866	1.3053	
6th to 5th	a	2012	1.0432	2013	1.0416	2014	1.0767	2015	1.0461	1.0519	1.0510	1.2013	
7th to 6th	a	2011	1.0497	2012	1.0396	2013	1.0250	2014	1.0199	1.0336	1.0329	1.1430	
8th to 7th	a	2010	1.0329	2011	1.0202	2012	1.0371	2013	1.0137	1.0260	1.0226	1.1066	
9th to 8th	a	2009	1.0334	2010	1.0211	2011	1.0090	2012	1.0177	1.0203	1.0163	1.0822	
10th to 9th	a	2008	1.0363	2009	1.0088	2010	1.0042	2011	1.0102	1.0149	1.0123	1.0648	
11th to 10th	a	2007	1.0225	2008	1.0139	2009	1.0210	2010	1.0141	1.0179	1.0095	1.0519	
12th to 11th	a	2006	1.0050	2007	1.0115	2008	1.0176	2009	1.0072	1.0103	1.0075	1.0420	
13th to 12th	a	2005	1.0018	2006	1.0118	2007	1.0072	2008	1.0092	1.0075	1.0061	1.0342	
14th to 13th	a	2004	1.0089	2005	1.0016	2006	1.0069	2007	1.0087	1.0065	1.0050	1.0279	
15th to 14th	a	2003	1.0048	2004	1.0042	2005	1.0049	2006	1.0031	1.0043	1.0042	1.0228	
16th to 15th	a	2002	1.0004	2003	1.0024	2004	1.0022	2005	1.0008	1.0015	1.0035	1.0185	
17th to 16th	a	2001	1.0017	2002	0.9980	2003	1.0068	2004	1.0015	1.0020	1.0030	1.0150	
18th to 17th	a	2000	1.0019	2001	0.9980	2002	0.9996	2003	1.0024	1.0005	1.0026	1.0120	
19th to 18th	a	1999	1.0010	2000	1.0048	2001	1.0021	2002	0.9996	1.0019	1.0022	1.0093	
20th to 19th	a	1998	1.0010	1999	1.0000	2000	1.0002	2001	1.0016	1.0007	1.0020	1.0071	
21st to 20th	a	1997	1.0015	1998	1.0016	1999	1.0000	2000	1.0038	1.0017	1.0051	b	1.0051
22nd to 21st	a	1996	1.0010	1997	1.0032	1998	1.0026	1999	1.0000	1.0017			
23rd to 22nd	a	1995	1.0011	1996	1.0012	1997	1.0081	1998	1.0008	1.0028			
24th to 23rd	a	1994	1.0039	1995	1.0011	1996	1.0001	1997	0.9999	1.0013			
25th to 24th	a	1993	1.0022	1994	1.0021	1995	1.0013	1996	1.0036	1.0023			
26th to 25th	a	1992	0.9991	1993	1.0014	1994	1.0029	1995	1.0005	1.0010			
27th to 26th	a	1991	0.9996	1992	0.9982	1993	1.0029	1994	1.0017	1.0006			
28th to 27th	a	1990	1.0015	1991	0.9995	1992	0.9999	1993	1.0011	1.0005			
29th to 28th	a	1989	0.9997	1990	1.0009	1991	0.9988	1992	1.0000	0.9999			
30th to 29th	a	1988	1.0000	1989	1.0011	1990	1.0019	1991	0.9993	1.0006			

INCURRED METHOD

Reports in Ratio	Policy Year	Calendar Years 17-18	Policy Year	Calendar Years 18-19	Policy Year	Calendar Years 19-20	Policy Year	Calendar Years 20-21	Unweighted Average	Fitted Value	Cumulative Average		
2nd to 1st	c	2016		1.4357	2017	1.3337	2018	1.2958	2019	1.3522	1.3544	1.7357	
3rd to 2nd	c	2015		1.0946	2016	1.1330	2017	1.1108	2018	1.1407	1.1198	1.2815	
4th to 3rd	c	2014		1.0545	2015	1.0495	2016	1.0490	2017	1.0420	1.0488	1.1446	
5th to 4th	c	2013		1.0238	2014	1.0306	2015	1.0397	2016	1.0057	1.0250	1.0913	
6th to 5th	c	2012		1.0111	2013	1.0144	2014	1.0072	2015	1.0077	1.0101	1.0640	
7th to 6th	c	2011		1.0194	2012	1.0229	2013	1.0132	2014	1.0084	1.0160	1.0477	
8th to 7th	c	2010		1.0031	2011	0.9998	2012	1.0205	2013	1.0031	1.0066	1.0369	
9th to 8th	c	2009		1.0212	2010	1.0139	2011	1.0056	2012	1.0041	1.0112	1.0292	
10th to 9th	c	2008		1.0236	2009	1.0124	2010	0.9978	2011	0.9997	1.0084	1.0234	
11th to 10th	c	2007		0.9999	2008	1.0034	2009	1.0052	2010	1.0039	1.0031	1.0191	
12th to 11th	c	2006		0.9966	2007	1.0020	2008	1.0128	2009	1.0007	1.0030	1.0155	
13th to 12th	c	2005		0.9992	2006	1.0049	2007	1.0013	2008	1.0005	1.0015	1.0127	
14th to 13th	c	2004		1.0064	2005	1.0025	2006	1.0020	2007	1.0069	1.0045	1.0102	
15th to 14th	c	2003		0.9999	2004	1.0020	2005	1.0029	2006	0.9996	1.0011	1.0082	
16th to 15th	c	2002		0.9983	2003	0.9949	2004	0.9985	2005	0.9979	0.9974	1.0065	
17th to 16th	c	2001		1.0000	2002	0.9971	2003	1.0047	2004	0.9981	1.0000	1.0050	
18th to 17th	c	2000		1.0004	2001	0.9977	2002	0.9993	2003	1.0002	0.9994	1.0037	
19th to 18th	c	1999		0.9965	2000	1.0015	2001	0.9987	2002	0.9972	0.9985	1.0026	
20th to 19th	c	1998		1.0017	1999	1.0000	2000	1.0007	2001	0.9985	1.0002	1.0016	
21st to 20th	c	1997		1.0006	1998	0.9997	1999	1.0000	2000	1.0019	1.0006	d	1.0007
22nd to 21st	c	1996		0.9915	1997	1.0024	1998	1.0000	1999	1.0000	0.9985		
23rd to 22nd	c	1995		1.0005	1996	0.9979	1997	1.0014	1998	1.0003	1.0000		
24th to 23rd	c	1994		1.0044	1995	0.9986	1996	0.9993	1997	1.0000	1.0006		
25th to 24th	c	1993		0.9964	1994	1.0022	1995	1.0021	1996	1.0009	1.0004		
26th to 25th	c	1992		0.9989	1993	0.9998	1994	1.0008	1995	1.0001	0.9999		
27th to 26th	c	1991		0.9989	1992	0.9982	1993	1.0013	1994	0.9959	0.9986		
28th to 27th	c	1990		1.0010	1991	0.9989	1992	0.9987	1993	0.9999	0.9996		
29th to 28th	c	1989		0.9999	1990	0.9993	1991	0.9988	1992	0.9997	0.9994		
30th to 29th	c	1988		0.9996	1989	1.0000	1990	1.0006	1991	0.9988	0.9998		
Beyond 30th	c	1987 & Prior		0.9820	1988 & Prior	0.9980	1989 & Prior	1.0016	1990 & Prior	0.9966	0.9946		

a From Table I-D

b Selected Paid Tail Factor = Incurred Tail Factor * Selected Paid Bridge Factor (1.0007 * 1.0044 = 1.0051)

c From Table I-B

d Derived Separately. See Exhibit 3 of the December 1, 2022 Filing.

EXHIBIT VI - 3

FITTED DEVELOPMENT FACTORS

INDEMNITY LOSSES

Paid Development

	<u>4 Year Average</u>	<u>4 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
2nd to 1st	1.9342	0.9342	0.9351	1.9351
3rd to 2nd	1.3943	0.3943	0.3920	1.3920
4th to 3rd	1.1667	0.1667	0.1678	1.1678
5th to 4th	1.0779	0.0779	0.0866	1.0866
6th to 5th	1.0519	0.0519	0.0510	1.0510
7th to 6th	1.0336	0.0336	0.0329	1.0329
8th to 7th	1.0260	0.0260	0.0226	1.0226
9th to 8th	1.0203	0.0203	0.0163	1.0163
10th to 9th	1.0149	0.0149	0.0123	1.0123
11th to 10th	1.0179	0.0179	0.0095	1.0095
12th to 11th	1.0103	0.0103	0.0075	1.0075
13th to 12th	1.0075	0.0075	0.0061	1.0061
14th to 13th	1.0065	0.0065	0.0050	1.0050
15th to 14th	1.0043	0.0043	0.0042	1.0042
16th to 15th	1.0015	0.0015	0.0035	1.0035
17th to 16th	1.0020	0.0020	0.0030	1.0030
18th to 17th	1.0005	0.0005	0.0026	1.0026
19th to 18th	1.0019	0.0019	0.0022	1.0022
20th to 19th	1.0007	0.0007	0.0020	1.0020
Beyond 20th*	1.0051	0.0051	0.0051	1.0051

$$Y = 1 - \exp(-a \cdot x^b)$$

$$a = 2.734491 \quad b = -2.458259$$

$$* \text{ Selected Paid Tail Factor} = \text{Incurred Tail Factor} * \text{Selected Paid Bridge Factor} (1.0007 * 1.0044 = 1.0051)$$

Incurred Development

	<u>4 Year Average</u>	<u>4 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
2nd to 1st	1.3544	0.3544	0.3544	1.3544
3rd to 2nd	1.1198	0.1198	0.1196	1.1196
4th to 3rd	1.0488	0.0488	0.0489	1.0489
5th to 4th	1.0250	0.0250	0.0256	1.0256
6th to 5th	1.0101	0.0101	0.0156	1.0156
7th to 6th	1.0160	0.0160	0.0104	1.0104
8th to 7th	1.0066	0.0066	0.0075	1.0075
9th to 8th	1.0112	0.0112	0.0056	1.0056
10th to 9th	1.0084	0.0084	0.0043	1.0043
11th to 10th	1.0031	0.0031	0.0035	1.0035
12th to 11th	1.0030	0.0030	0.0028	1.0028
13th to 12th	1.0015	0.0015	0.0024	1.0024
14th to 13th	1.0045	0.0045	0.0020	1.0020
15th to 14th	1.0011	0.0011	0.0017	1.0017
16th to 15th	0.9974	-0.0026	0.0015	1.0015
17th to 16th	1.0000	0.0000	0.0013	1.0013
18th to 17th	0.9994	-0.0006	0.0011	1.0011
19th to 18th	0.9985	-0.0015	0.0010	1.0010
20th to 19th	1.0002	0.0002	0.0009	1.0009
Beyond 20th**	1.0007	0.0007	0.0007	1.0007

$$Y = 1 / (a + b \cdot x + c \cdot x^2)$$

$$a = 3.812274 \quad b = -4.255945 \quad c = 3.265240$$

** Derived Separately. See Exhibit 3 of the December 1, 2022 Filing.

EXHIBIT VI - 4

DEVELOPMENT FACTORS

MEDICAL LOSSES
PAID METHOD - LIMITED LOSS BASIS

		Calendar		Calendar		Calendar		Calendar	
Reports in Ratio	Policy Year	Years 13-14	Policy Year	Years 14-15	Policy Year	Years 15-16	Policy Year	Years 16-17	
2nd to 1st	a	2012	1.3604	2013	1.4553	2014	1.4064	2015	1.3369
3rd to 2nd	a	2011	1.1127	2012	1.1744	2013	1.1890	2014	1.1406
4th to 3rd	a	2010	1.1042	2011	1.0794	2012	1.0851	2013	1.0735
5th to 4th	a	2009	1.0575	2010	1.0721	2011	1.0176	2012	1.0657
6th to 5th	a	2008	1.0532	2009	1.0852	2010	1.0457	2011	1.0568
7th to 6th	a	2007	1.0357	2008	1.0508	2009	1.0631	2010	1.0408
8th to 7th	a	2006	1.0455	2007	1.0336	2008	1.0420	2009	1.0426
9th to 8th	a	2005	1.0287	2006	1.0442	2007	1.0319	2008	1.0235
10th to 9th	a	2004	1.0274	2005	1.0196	2006	1.0419	2007	1.0396
11th to 10th	a	2003	1.0320	2004	1.0314	2005	1.0433	2006	1.0216
12th to 11th	a	2002	1.0330	2003	1.0216	2004	1.0198	2005	1.0179
13th to 12th	a	2001	1.0212	2002	1.0495	2003	1.0215	2004	1.0175
14th to 13th	a	2000	1.0217	2001	1.0135	2002	1.0146	2003	1.0321
15th to 14th	a	1999	1.0046	2000	1.0190	2001	1.0312	2002	1.0131
16th to 15th	a	1998	1.0047	1999	1.0167	2000	1.0086	2001	1.0148
17th to 16th	a	1997	1.0226	1998	1.0089	1999	1.0064	2000	1.0066
18th to 17th	a	1996	1.0181	1997	1.0099	1998	1.0145	1999	1.0034
19th to 18th	a	1995	1.0141	1996	1.0219	1997	1.0185	1998	1.0209
20th to 19th	a	1994	1.0243	1995	1.0064	1996	1.0144	1997	1.0065
21st to 20th	a	1993	1.0086	1994	1.0054	1995	1.0061	1996	1.0097
22nd to 21st	a	1992	1.0116	1993	1.0127	1994	1.0092	1995	1.0039
23rd to 22nd	a	1991	1.0083	1992	1.0072	1993	1.0104	1994	1.0059
24th to 23rd	a	1990	1.0072	1991	1.0130	1992	1.0040	1993	1.0092
25th to 24th	a	1989	1.0167	1990	1.0097	1991	1.0030	1992	1.0022
26th to 25th	a	1988	1.0050	1989	1.0196	1990	1.0044	1991	1.0042
27th to 26th	a	1987	1.0112	1988	1.0023	1989	1.0031	1990	1.0088
28th to 27th	a	1986	1.0034	1987	1.0083	1988	1.0014	1989	1.0137
29th to 28th	a			1986	1.0044	1987	1.0144	1988	1.0005
30th to 29th	a					1986	1.0017	1987	1.0091

INCURRED METHOD

		Calendar		Calendar		Calendar		Calendar	
Reports in Ratio	Policy Year	Years 13-14	Policy Year	Years 14-15	Policy Year	Years 15-16	Policy Year	Years 16-17	
2nd to 1st	b	2012	1.2377	2013	1.2919	2014	1.1976	2015	1.1077
3rd to 2nd	b	2011	1.0855	2012	1.1434	2013	1.1483	2014	1.0726
4th to 3rd	b	2010	1.0692	2011	1.0454	2012	1.0549	2013	1.0736
5th to 4th	b	2009	1.1216	2010	1.0654	2011	1.0333	2012	1.0128
6th to 5th	b	2008	1.0812	2009	1.0573	2010	1.0620	2011	1.0266
7th to 6th	b	2007	1.0224	2008	1.0442	2009	1.0311	2010	1.0467
8th to 7th	b	2006	1.0615	2007	1.0285	2008	1.0636	2009	1.0369
9th to 8th	b	2005	1.0329	2006	1.0079	2007	1.0397	2008	1.0120
10th to 9th	b	2004	1.0161	2005	1.0266	2006	1.0294	2007	1.0005
11th to 10th	b	2003	1.0119	2004	1.0345	2005	1.0264	2006	0.9908
12th to 11th	b	2002	1.0135	2003	1.0120	2004	1.0377	2005	0.9604
13th to 12th	b	2001	0.9987	2002	1.0212	2003	1.0244	2004	1.0398
14th to 13th	b	2000	0.9887	2001	1.0236	2002	1.0221	2003	1.0118
15th to 14th	b	1999	0.9764	2000	0.9915	2001	1.0348	2002	1.0023
16th to 15th	b	1998	0.9990	1999	1.0185	2000	1.0124	2001	1.0055
17th to 16th	b	1997	1.0017	1998	1.0029	1999	0.9934	2000	1.0202
18th to 17th	b	1996	0.9846	1997	1.0035	1998	1.0206	1999	1.0153
19th to 18th	b	1995	0.9932	1996	1.0199	1997	0.9985	1998	0.9980
20th to 19th	b	1994	0.9761	1995	1.0025	1996	0.9986	1997	1.0174
21st to 20th	b	1993	1.0122	1994	1.0058	1995	1.0042	1996	0.9940
22nd to 21st	b	1992	1.0034	1993	1.0070	1994	0.9865	1995	0.9735
23rd to 22nd	b	1991	0.9838	1992	1.0153	1993	1.0001	1994	1.0041
24th to 23rd	b	1990	1.0027	1991	1.0039	1992	1.0083	1993	0.9994
25th to 24th	b	1989	1.0077	1990	1.0115	1991	0.9996	1992	1.0000
26th to 25th	b	1988	0.9967	1989	1.0121	1990	1.0134	1991	1.0019
27th to 26th	b	1987	1.0041	1988	1.0040	1989	1.0050	1990	0.9929
28th to 27th	b	1986	1.0056	1987	1.0083	1988	1.0017	1989	1.0068
29th to 28th	b			1986	1.0013	1987	1.0077	1988	1.0013
30th to 29th	b					1986	1.0004	1987	0.9915
Beyond 30th	b	1985 & Prior	1.0165	1985 & Prior	0.9826	1985 & Prior	1.0067	1986 & Prior	1.0318

a From Table I-E

b From Table I-C

EXHIBIT VI - 5

DEVELOPMENT FACTORS

MEDICAL LOSSES
PAID METHOD - LIMITED LOSS BASIS

			Calendar		Calendar		Calendar		Calendar			
Reports in Ratio	Policy Year		Years 17-18	Policy Year	Years 18-19	Policy Year	Years 19-20	Policy Year	Years 20-21	Unweighted Average	Fitted Value	Cumulative Average
2nd to 1st	a	2016	1.3721	2017	1.3359	2018	1.3167	2019	1.4178	1.3752	1.3752	2.4554
3rd to 2nd	a	2015	1.0890	2016	1.1023	2017	1.1090	2018	1.0847	1.1252	1.1252	1.7855
4th to 3rd	a	2014	1.0519	2015	1.0388	2016	1.0550	2017	1.0430	1.0664	1.0664	1.5868
5th to 4th	a	2013	1.0598	2014	1.0382	2015	1.0225	2016	1.0410	1.0468	1.0479	1.4880
6th to 5th	a	2012	1.0323	2013	1.0268	2014	1.0260	2015	1.0106	1.0421	1.0396	1.4200
7th to 6th	a	2011	1.0247	2012	1.0295	2013	1.0150	2014	1.0243	1.0355	1.0346	1.3659
8th to 7th	a	2010	1.0334	2011	1.0109	2012	1.0067	2013	1.0123	1.0284	1.0308	1.3202
9th to 8th	a	2009	1.0301	2010	1.0184	2011	1.0062	2012	1.0083	1.0239	1.0277	1.2808
10th to 9th	a	2008	1.0310	2009	1.0201	2010	1.0143	2011	1.0084	1.0253	1.0250	1.2463
11th to 10th	a	2007	1.0120	2008	1.0246	2009	1.0286	2010	1.0215	1.0269	1.0226	1.2159
12th to 11th	a	2006	1.0190	2007	1.0236	2008	1.0096	2009	1.0068	1.0189	1.0205	1.1890
13th to 12th	a	2005	1.0105	2006	1.0067	2007	1.0182	2008	1.0113	1.0196	1.0186	1.1651
14th to 13th	a	2004	1.0236	2005	1.0172	2006	1.0162	2007	1.0089	1.0185	1.0169	1.1438
15th to 14th	a	2003	1.0247	2004	1.0157	2005	1.0169	2006	1.0197	1.0181	1.0153	1.1248
16th to 15th	a	2002	1.0148	2003	1.0184	2004	1.0096	2005	1.0062	1.0117	1.0139	1.1079
17th to 16th	a	2001	1.0097	2002	1.0046	2003	1.0078	2004	1.0079	1.0093	1.0126	1.0927
18th to 17th	a	2000	1.0062	2001	1.0125	2002	1.0100	2003	1.0055	1.0100	1.0114	1.0791
19th to 18th	a	1999	1.0144	2000	1.0110	2001	1.0076	2002	1.0015	1.0137	1.0103	1.0669
20th to 19th	a	1998	1.0045	1999	1.0015	2000	1.0056	2001	1.0032	1.0083	1.0093	1.0560
21st to 20th	a	1997	1.0152	1998	1.0049	1999	1.0128	2000	1.0025	1.0082	1.0463	b 1.0463
22nd to 21st	a	1996	1.0090	1997	1.0161	1998	1.0043	1999	1.0010	1.0085		
23rd to 22nd	a	1995	1.0039	1996	1.0098	1997	1.0022	1998	1.0008	1.0061		
24th to 23rd	a	1994	1.0059	1995	1.0070	1996	1.0026	1997	1.0041	1.0066		
25th to 24th	a	1993	1.0225	1994	1.0015	1995	1.0021	1996	1.0129	1.0088		
26th to 25th	a	1992	1.0016	1993	1.0112	1994	1.0016	1995	1.0023	1.0062		
27th to 26th	a	1991	1.0056	1992	1.0037	1993	1.0071	1994	1.0098	1.0065		
28th to 27th	a	1990	1.0062	1991	1.0019	1992	1.0027	1993	1.0013	1.0049		
29th to 28th	a	1989	1.0023	1990	1.0094	1991	1.0041	1992	1.0003	1.0051		
30th to 29th	a	1988	1.0017	1989	1.0089	1990	1.0243	1991	1.0068	1.0088		

INCURRED METHOD

Reports in Ratio	Policy Year	Calendar	Policy	Calendar	Policy	Calendar	Policy	Calendar	Unweighted Average	Fitted Value	Cumulative Average		
		Years 17-18	Year	Years 18-19	Year	Years 19-20	Year	Years 20-21					
2nd to 1st	c	2016	1.1784	2017	1.0505	2018	1.0042	2019	1.0735	1.1427	1.1414	1.4712	
3rd to 2nd	c	2015	1.0154	2016	1.0449	2017	1.0309	2018	0.9718	1.0641	1.0661	1.2890	
4th to 3rd	c	2014	1.0396	2015	0.9722	2016	1.0023	2017	0.9633	1.0276	1.0413	1.2091	
5th to 4th	c	2013	1.0057	2014	1.0292	2015	1.0245	2016	0.9866	1.0349	1.0291	1.1611	
6th to 5th	c	2012	1.0340	2013	1.0321	2014	0.9822	2015	0.9820	1.0322	1.0217	1.1283	
7th to 6th	c	2011	1.0020	2012	0.9968	2013	0.9971	2014	0.9844	1.0156	1.0169	1.1043	
8th to 7th	c	2010	1.0128	2011	0.9962	2012	0.9838	2013	0.9882	1.0214	1.0134	1.0860	
9th to 8th	c	2009	1.0349	2010	0.9800	2011	1.0043	2012	1.0097	1.0152	1.0108	1.0716	
10th to 9th	c	2008	1.0093	2009	1.0181	2010	0.9977	2011	0.9870	1.0106	1.0088	1.0601	
11th to 10th	c	2007	1.0123	2008	0.9726	2009	1.0080	2010	0.9829	1.0049	1.0072	1.0509	
12th to 11th	c	2006	1.0055	2007	0.9882	2008	0.9947	2009	0.9916	1.0005	1.0058	1.0434	
13th to 12th	c	2005	1.0121	2006	0.9818	2007	0.9923	2008	0.9834	1.0067	1.0047	1.0374	
14th to 13th	c	2004	1.0285	2005	1.0059	2006	0.9970	2007	0.9909	1.0086	1.0038	1.0325	
15th to 14th	c	2003	1.0105	2004	0.9981	2005	0.9927	2006	1.0048	1.0014	1.0030	1.0286	
16th to 15th	c	2002	0.9850	2003	0.9906	2004	1.0261	2005	0.9887	1.0032	1.0023	1.0255	
17th to 16th	c	2001	1.0083	2002	0.9981	2003	0.9904	2004	0.9808	0.9995	1.0017	1.0232	
18th to 17th	c	2000	0.9677	2001	0.9758	2002	0.9996	2003	0.9840	0.9939	1.0012	1.0214	
19th to 18th	c	1999	0.9998	2000	0.9869	2001	0.9906	2002	0.9980	0.9981	1.0007	1.0202	
20th to 19th	c	1998	1.0028	1999	0.9960	2000	1.0020	2001	0.9985	0.9992	1.0003	1.0195	
21st to 20th	c	1997	1.0151	1998	0.9958	1999	0.9967	2000	0.9975	1.0027	1.0192	d	1.0192
22nd to 21st	c	1996	1.0010	1997	0.9870	1998	0.9884	1999	0.9866	0.9917			
23rd to 22nd	c	1995	1.0037	1996	0.9798	1997	0.9976	1998	0.9884	0.9966			
24th to 23rd	c	1994	1.0152	1995	0.9966	1996	0.9965	1997	1.0015	1.0030			
25th to 24th	c	1993	1.0081	1994	1.0129	1995	0.9974	1996	0.9950	1.0040			
26th to 25th	c	1992	0.9955	1993	1.0126	1994	0.9881	1995	0.9954	1.0020			
27th to 26th	c	1991	1.0069	1992	1.0030	1993	0.9776	1994	0.9823	0.9970			
28th to 27th	c	1990	1.0106	1991	1.0004	1992	0.9966	1993	1.0000	1.0038			
29th to 28th	c	1989	0.9971	1990	1.0009	1991	1.0040	1992	0.9992	1.0016			
30th to 29th	c	1988	1.0016	1989	1.0021	1990	0.9857	1991	1.0027	0.9973			
Beyond 30th	c	1987 & Prior	0.9970	1988 & Prior	1.0187	1989 & Prior	1.0548	1990 & Prior	0.9745	1.0103			

a From Table I-E

b Selected Paid Tail Factor = Incurred Tail Factor * Selected Paid Bridge Factor (1.0192 * 1.0266 = 1.0463)

c From Table I-C

d Derived Separately. See Exhibit 3 of the December 1, 2022 Filing.

EXHIBIT VI - 6

FITTED DEVELOPMENT FACTORS

MEDICAL LOSSES

Paid Development

	<u>8 Year Average</u>	<u>8 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
2nd to 1st	1.3752	0.3752	0.3752	1.3752
3rd to 2nd	1.1252	0.1252	0.1252	1.1252
4th to 3rd	1.0664	0.0664	0.0664	1.0664
5th to 4th	1.0468	0.0468	0.0479	1.0479
6th to 5th	1.0421	0.0421	0.0396	1.0396
7th to 6th	1.0355	0.0355	0.0346	1.0346
8th to 7th	1.0284	0.0284	0.0308	1.0308
9th to 8th	1.0239	0.0239	0.0277	1.0277
10th to 9th	1.0253	0.0253	0.0250	1.0250
11th to 10th	1.0269	0.0269	0.0226	1.0226
12th to 11th	1.0189	0.0189	0.0205	1.0205
13th to 12th	1.0196	0.0196	0.0186	1.0186
14th to 13th	1.0185	0.0185	0.0169	1.0169
15th to 14th	1.0181	0.0181	0.0153	1.0153
16th to 15th	1.0117	0.0117	0.0139	1.0139
17th to 16th	1.0093	0.0093	0.0126	1.0126
18th to 17th	1.0100	0.0100	0.0114	1.0114
19th to 18th	1.0137	0.0137	0.0103	1.0103
20th to 19th	1.0083	0.0083	0.0093	1.0093
Beyond 20th*	1.0463	0.0463	0.0463	1.0463

$$Y = a + b/x + c/x^2 + d/x^3 + e/x^4 + f/x^5$$

$$a = -0.015304 \quad b = 0.602000 \quad c = -2.981799 \quad d = 8.463496 \quad e = -9.442617 \quad f = 3.749424$$

$$* \text{ Selected Paid Tail Factor} = \text{Incurred Tail Factor} * \text{Selected Paid Bridge Factor} (1.0192 * 1.0266 = 1.0463)$$

Incurred Development

	<u>8 Year Average</u>	<u>8 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
2nd to 1st	1.1427	0.1427	0.1414	1.1414
3rd to 2nd	1.0641	0.0641	0.0661	1.0661
4th to 3rd	1.0276	0.0276	0.0413	1.0413
5th to 4th	1.0349	0.0349	0.0291	1.0291
6th to 5th	1.0322	0.0322	0.0217	1.0217
7th to 6th	1.0156	0.0156	0.0169	1.0169
8th to 7th	1.0214	0.0214	0.0134	1.0134
9th to 8th	1.0152	0.0152	0.0108	1.0108
10th to 9th	1.0106	0.0106	0.0088	1.0088
11th to 10th	1.0049	0.0049	0.0072	1.0072
12th to 11th	1.0005	0.0005	0.0058	1.0058
13th to 12th	1.0067	0.0067	0.0047	1.0047
14th to 13th	1.0086	0.0086	0.0038	1.0038
15th to 14th	1.0014	0.0014	0.0030	1.0030
16th to 15th	1.0032	0.0032	0.0023	1.0023
17th to 16th	0.9995	-0.0005	0.0017	1.0017
18th to 17th	0.9939	-0.0061	0.0012	1.0012
19th to 18th	0.9981	-0.0019	0.0007	1.0007
20th to 19th	0.9992	-0.0008	0.0003	1.0003
Beyond 20th**	1.0192	0.0192	0.0192	1.0192

$$Y = a + b/x + c/x^{1.5}$$

$$a = -0.007232 \quad b = 0.141780 \quad c = 0.006815$$

** Derived Separately. See Exhibit 3 of the December 1, 2022 Filing.

EXHIBIT VII - 1

DETERMINATION OF TREND

	INDEMNITY									
Policy Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual Loss Ratio	0.4985	0.5079	0.5519	0.4585	0.4496	0.4164	0.3744	0.3454	0.3721	0.2718
Normalized Frequency	0.9293	0.8380	0.8634	0.7522	0.7845	0.6726	0.6843	0.6095	0.5868	0.5601
Severity Loss Ratio	0.5364	0.6061	0.6392	0.6095	0.5731	0.6191	0.5471	0.5667	0.6341	0.4853
x	1	2	3	4	5	6	7	8	9	10
y	0.5364	0.6061	0.6392	0.6095	0.5731	0.6191	0.5471	0.5667	0.6341	0.4853

	Severity Loss Ratio Trend (excluding 2020)	Severity Loss Ratio Trend (including 2020)
Trend Selection		
3 pt	7.7%	-7.5%
5 pt	1.1%	-3.3%
6 pt	0.1%	-2.0%
7 pt	-0.8%	-2.0%
All Available	0.3%	-0.9%

Selected Annual Trend: 6 Point Exponential Regression (2012 - 2019) = 0.1% (y = 0.586349 * 1.001158 ^ x)

Policy Year	Annual Trend Factor (1)	Trend Period # Years to 12/1/23 (2)	Severity Trend Factor (3) = (1)^(2)	Frequency Trend Factor (4) *
2017	1.0012	5.9167	1.0069	0.7185
2018	1.0012	4.9167	1.0057	0.7598
2019	1.0012	3.9167	1.0045	0.8035
2020	1.0012	2.9167	1.0034	0.8496

Trended Loss Ratio

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3)*(4)	Trended Loss Ratio (7) = (5)*(6)
2017	0.3744	0.7235	0.2709
2018	0.3454	0.7641	0.2639
2019	0.3721	0.8071	0.3003
2020	0.2718	0.8525	0.2317
Average			0.2667

* See Page 25 for column (4).

EXHIBIT VII - 2

DETERMINATION OF TREND

MEDICAL

Policy Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual Loss Ratio	0.4630	0.4423	0.5053	0.4264	0.4426	0.4370	0.3822	0.3150	0.3438	0.2987
Normalized Frequency	0.9293	0.8380	0.8634	0.7522	0.7845	0.6726	0.6843	0.6095	0.5868	0.5601
Severity Loss Ratio	0.4982	0.5278	0.5852	0.5668	0.5642	0.6497	0.5585	0.5168	0.5859	0.5333
x	1	2	3	4	5	6	7	8	9	10
y	0.4982	0.5278	0.5852	0.5668	0.5642	0.6497	0.5585	0.5168	0.5859	0.5333

Trend Selection	Severity Loss Ratio Trend	CPI-U Trend
3 pt	1.6%	6.2%
6 pt	-1.9%	3.2%
7 pt	-1.2%	3.0%
10 pt	0.5%	2.2%

Selected Annual Trend Factor to 1/31/2018: 7 Point Exponential Regression = **-1.2%** ($y = 0.616228 * 0.988067^x$)

10 Point Exponential Regression = 0.5% ($y = 0.542165 * 1.004977^x$)
 CPI-U 6 Point Exponential Regression = 3.2% *
 Selected Annual Trend Factor from 1/31/2018 and later = **1.9%**

Policy Year	Annual Trend Factor (1)	Trend Period # Years to 1/31/18 (2)	Severity Trend Factor to 1/31/18 (3) = (1) ^ (2)	Annual Severity Trend Factor from 1/31/18 to 12/1/23 (4)	Trend Period # of Years from 1/31/18 to 12/1/23 (5)	Severity Trend Factor (6) = (4)^(5)	Frequency Trend Factor (7) **
2017	0.9881	0.0833	0.9990	1.0186	5.8334	1.1135	0.7185
2018	0.9881	0.0000	1.0000	1.0186	4.9167	1.0948	0.7598
2019	0.9881	0.0000	1.0000	1.0186	3.9167	1.0748	0.8035
2020	0.9881	0.0000	1.0000	1.0186	2.9167	1.0552	0.8496

Trended Loss Ratio

Policy Year	Actual Loss Ratio (8)	Combined Trend Factor (9) = (3)*(6)*(7)	Trended Loss Ratio (10) = (8)*(9)
2017	0.3822	0.7992	0.3055
2018	0.3150	0.8318	0.2620
2019	0.3438	0.8636	0.2969
2020	0.2987	0.8965	0.2678
Average			0.2831

* Exhibit 12

** See Page 25 for column (7).

EXHIBIT VII - 3

DETERMINATION OF TREND

CLAIM FREQUENCY

Policy Year Frequency per \$1 million of Expected Losses

Policy Year	Claim Frequency	Normalized Frequency
2010	14.57	1.0000
2011	13.54	0.9293
2012	12.21	0.8380
2013	12.58	0.8634
2014	10.96	0.7522
2015	11.43	0.7845
2016	9.80	0.6726
2017	9.97	0.6843
2018	8.88	0.6095
2019	8.55	0.5868
2020	8.16	0.5601

Policy Year	2014	2015	2016	2017	2018	2019	2020
x	1	2	3	4	5	6	7
y	0.7522	0.7845	0.6726	0.6843	0.6095	0.5868	0.5601

Trend Selection	Frequency Trend
3 pt	-4.1%
6 pt	-6.1%
7 pt	-5.4%
10 pt	-5.4%

Selected Annual Trend:

7 Point Exponential Regression = **-5.4%** ($y = 0.824942 * 0.945667^x$)

Policy Year	Annual Trend Factor (1)	# of Years to 12/1/23 (2)	Frequency Trend Factor (3) = (1)^(2)
2017	0.9457	5.9167	0.7185
2018	0.9457	4.9167	0.7598
2019	0.9457	3.9167	0.8035
2020	0.9457	2.9167	0.8496

TABLE I

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

ACCUMULATED STANDARD EARNED PREMIUM

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	650,116,801	650,116,791	1.0000	to 1989	752,956,395	752,956,400	1.0000
1988	102,949,395	102,949,395	1.0000	1989	110,749,576	110,749,576	1.0000
1989	110,768,371	110,768,371	1.0000	1990	99,918,040	99,918,040	1.0000
1990	99,934,859	99,934,859	1.0000	1991	95,943,791	95,964,951	1.0002
1991	95,947,530	95,966,485	1.0002	1992	87,056,863	87,056,863	1.0000
1992	87,086,969	87,086,969	1.0000	1993	87,770,982	87,770,982	1.0000
1993	87,801,353	87,801,353	1.0000	1994	82,285,706	82,285,706	1.0000
1994	82,320,327	82,320,327	1.0000	1995	78,654,617	78,654,617	1.0000
1995	78,691,441	78,691,441	1.0000	1996	82,540,859	82,540,859	1.0000
1996	82,678,809	82,575,994	0.9988	1997	81,921,802	81,921,802	1.0000
1997	81,863,105	81,965,920	1.0013	1998	86,403,533	86,403,942	1.0000
1998	86,448,932	86,448,932	1.0000	1999	80,847,508	80,847,926	1.0000
1999	80,897,648	80,897,648	1.0000	2000	89,482,335	89,482,794	1.0000
2000	89,553,605	89,553,605	1.0000	2001	88,003,203	88,003,203	1.0000
2001	88,074,135	88,074,135	1.0000	2002	114,130,309	114,130,309	1.0000
2002	114,189,999	114,189,999	1.0000	2003	129,497,030	129,497,030	1.0000
2003	129,540,805	129,540,806	1.0000	2004	152,848,419	152,848,419	1.0000
2004	152,893,519	152,894,012	1.0000	2005	186,118,336	186,118,337	1.0000
2005	186,170,909	186,171,636	1.0000	2006	205,712,731	205,717,577	1.0000
2006	205,768,543	205,769,722	1.0000	2007	199,830,762	199,865,396	1.0002
2007	199,891,429	199,893,328	1.0000	2008	151,065,057	151,069,567	1.0000
2008	151,013,810	151,074,601	1.0004	2009	118,585,410	118,590,101	1.0000
2009	118,569,653	118,585,410	1.0001	2010	106,106,904	106,116,744	1.0001
2010	106,009,876	106,106,904	1.0009	2011	105,754,587	105,773,822	1.0002
2011	105,743,602	105,754,587	1.0001	2012	115,258,614	115,267,794	1.0001
2012	115,247,366	115,258,614	1.0001	2013	135,232,793	135,130,720	0.9992
2013	135,225,120	135,232,793	1.0001	2014	148,028,975	148,049,227	1.0001
2014	148,064,859	148,028,975	0.9998	2015	146,248,253	146,348,416	1.0007
2015	146,452,216	146,248,253	0.9986	2016	166,693,833	165,860,349	0.9950
2016	165,480,644	166,693,833	1.0073	2017	176,718,905	177,798,628	1.0061
2017	93,396,340	176,718,905	1.8921	2018	95,926,886	174,887,365	1.8231
2018		95,938,159		2019		92,893,802	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	863,423,977	863,423,831	1.0000	to 1991	948,254,819	948,254,834	1.0000
1990	99,915,475	99,915,475	1.0000	1991	94,486,015	94,492,435	1.0001
1991	95,961,795	95,978,940	1.0002	1992	85,925,037	85,925,037	1.0000
1992	87,055,817	87,055,817	1.0000	1993	86,886,122	86,886,122	1.0000
1993	87,753,360	87,753,360	1.0000	1994	80,835,041	80,835,041	1.0000
1994	82,284,648	82,284,648	1.0000	1995	77,135,308	77,135,308	1.0000
1995	78,651,340	78,651,340	1.0000	1996	80,213,005	80,213,005	1.0000
1996	82,533,546	82,533,546	1.0000	1997	78,795,302	78,795,302	1.0000
1997	81,908,125	81,908,125	1.0000	1998	83,092,704	83,092,704	1.0000
1998	86,384,318	86,384,318	1.0000	1999	77,288,180	77,288,180	1.0000
1999	80,832,002	80,832,002	1.0000	2000	84,923,492	84,923,492	1.0000
2000	89,472,562	89,472,562	1.0000	2001	85,860,388	85,860,388	1.0000
2001	87,995,899	87,995,899	1.0000	2002	112,766,966	112,766,966	1.0000
2002	114,125,292	114,125,292	1.0000	2003	129,427,957	129,427,956	1.0000
2003	129,449,663	129,449,663	1.0000	2004	152,727,063	152,727,063	1.0000
2004	152,795,198	152,795,197	1.0000	2005	185,903,328	185,903,327	1.0000
2005	186,050,914	186,050,914	1.0000	2006	205,364,256	205,364,256	1.0000
2006	205,640,535	205,640,534	1.0000	2007	199,366,040	199,366,039	1.0000
2007	199,785,157	199,752,892	0.9998	2008	150,710,847	150,710,877	1.0000
2008	151,005,306	151,005,305	1.0000	2009	118,225,615	118,225,616	1.0000
2009	118,466,735	118,465,646	1.0000	2010	105,598,036	105,598,035	1.0000
2010	105,791,129	105,791,129	1.0000	2011	105,562,978	105,562,982	1.0000
2011	105,712,444	105,712,444	1.0000	2012	114,994,946	114,993,495	1.0000
2012	115,174,650	115,175,309	1.0000	2013	134,842,014	134,822,968	0.9999
2013	135,032,735	135,069,242	1.0003	2014	147,661,811	147,644,972	0.9999
2014	147,952,085	147,920,627	0.9998	2015	145,681,068	145,673,955	1.0000
2015	146,278,365	146,140,787	0.9991	2016	164,693,139	164,669,498	0.9999
2016	165,772,885	165,707,468	0.9996	2017	175,766,766	175,825,763	1.0003
2017	177,696,292	177,594,492	0.9994	2018	176,090,725	176,063,836	0.9998
2018	174,782,972	177,510,638	1.0156	2019	167,346,605	168,152,803	1.0048
2019	92,891,479	168,709,768	1.8162	2020	85,059,666	155,194,824	1.8245
2020		85,667,611		2021		79,470,385	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

TABLE I - A - Individual Losses Limited *

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	311,167,743	310,564,834	0.9981	to 1989	349,730,979	349,917,937	1.0005
1988	39,105,479	39,112,059	1.0002	1989	44,677,372	44,704,661	1.0006
1989	44,719,035	44,677,372	0.9991	1990	47,626,573	47,615,001	0.9998
1990	47,447,792	47,629,697	1.0038	1991	44,023,412	43,995,365	0.9994
1991	43,965,429	44,023,412	1.0013	1992	40,263,391	40,259,478	0.9999
1992	40,355,767	40,264,433	0.9977	1993	45,441,732	45,629,846	1.0041
1993	45,425,458	45,442,044	1.0004	1994	37,336,983	37,565,674	1.0061
1994	37,037,766	37,347,046	1.0084	1995	39,078,244	38,994,618	0.9979
1995	39,023,281	39,089,849	1.0017	1996	50,559,395	50,082,724	0.9906
1996	50,799,151	50,560,255	0.9953	1997	46,532,927	46,377,551	0.9967
1997	46,259,064	46,534,996	1.0060	1998	40,590,295	40,519,145	0.9982
1998	40,504,430	40,590,577	1.0021	1999	48,855,914	48,780,154	0.9984
1999	49,016,658	48,908,187	0.9978	2000	64,531,781	64,248,869	0.9956
2000	65,522,179	64,669,370	0.9870	2001	56,937,977	56,302,430	0.9888
2001	56,789,035	56,978,823	1.0033	2002	58,836,703	58,692,832	0.9976
2002	59,535,321	59,091,488	0.9925	2003	68,936,102	68,452,297	0.9930
2003	68,634,633	68,946,213	1.0045	2004	74,630,585	74,643,025	1.0002
2004	73,453,768	74,675,521	1.0166	2005	73,348,296	73,644,666	1.0040
2005	72,990,284	73,356,035	1.0050	2006	79,031,666	78,610,856	0.9947
2006	78,993,909	79,033,580	1.0005	2007	79,781,405	79,427,499	0.9956
2007	79,335,137	79,782,183	1.0056	2008	77,810,611	76,899,382	0.9883
2008	76,552,089	77,819,321	1.0166	2009	86,068,910	87,372,457	1.0151
2009	83,747,157	86,068,910	1.0277	2010	85,265,546	84,901,442	0.9957
2010	84,563,531	85,265,546	1.0083	2011	76,747,452	76,592,721	0.9980
2011	75,950,112	76,747,452	1.0105	2012	69,360,394	70,072,240	1.0103
2012	67,862,926	69,360,394	1.0221	2013	73,630,114	75,310,930	1.0228
2013	72,538,164	73,630,114	1.0151	2014	59,957,110	61,750,357	1.0299
2014	57,259,345	59,957,110	1.0471	2015	63,501,061	64,114,865	1.0097
2015	60,347,048	63,501,061	1.0523	2016	61,607,351	66,888,374	1.0857
2016	47,940,281	61,607,351	1.2851	2017	50,533,620	58,917,318	1.1659
2017	19,206,744	50,533,620	2.6310	2018	21,240,040	47,512,543	2.2369
2018		21,240,040		2019		19,470,964	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	395,166,111	395,991,320	1.0021	to 1991	437,449,031	437,006,968	0.9990
1990	47,615,421	47,435,417	0.9962	1991	43,451,601	43,451,851	1.0000
1991	44,005,264	44,022,020	1.0004	1992	39,972,091	39,953,747	0.9995
1992	40,275,409	40,194,811	0.9980	1993	45,263,248	45,259,570	0.9999
1993	45,652,040	45,336,078	0.9931	1994	36,907,347	36,572,189	0.9909
1994	37,565,674	37,421,151	0.9962	1995	38,561,899	38,496,850	0.9983
1995	38,996,816	39,010,666	1.0004	1996	48,693,358	48,622,785	0.9986
1996	50,060,549	49,968,669	0.9982	1997	44,658,869	44,684,134	1.0006
1997	46,345,464	46,345,397	1.0000	1998	38,392,304	38,231,146	0.9958
1998	40,519,145	40,340,986	0.9956	1999	46,743,054	46,495,522	0.9947
1999	48,784,600	48,721,367	0.9987	2000	59,199,309	59,207,259	1.0001
2000	64,262,840	64,342,463	1.0012	2001	54,953,590	54,869,918	0.9985
2001	56,321,300	56,067,747	0.9955	2002	57,533,393	57,392,453	0.9976
2002	58,694,509	58,661,795	0.9994	2003	68,262,517	67,793,862	0.9931
2003	68,338,378	68,229,243	0.9984	2004	75,432,059	74,672,744	0.9899
2004	74,646,827	75,492,646	1.0113	2005	73,368,216	72,909,270	0.9937
2005	73,639,259	73,509,705	0.9982	2006	78,518,602	78,665,323	1.0019
2006	78,608,167	78,591,762	0.9998	2007	79,126,636	79,088,693	0.9995
2007	79,684,474	79,460,439	0.9972	2008	77,201,439	76,608,859	0.9923
2008	76,900,533	77,215,034	1.0041	2009	87,896,289	87,574,305	0.9963
2009	87,372,456	87,946,898	1.0066	2010	84,453,516	83,849,219	0.9928
2010	84,720,128	84,528,960	0.9977	2011	76,851,560	76,335,296	0.9933
2011	76,593,589	76,974,132	1.0050	2012	70,025,694	70,495,360	1.0067
2012	69,864,109	70,069,462	1.0029	2013	75,244,826	74,940,207	0.9960
2013	75,045,897	75,452,443	1.0054	2014	61,431,495	61,231,611	0.9967
2014	61,752,416	61,437,693	0.9949	2015	66,169,193	65,838,173	0.9950
2015	64,115,295	66,175,344	1.0321	2016	68,375,396	68,106,713	0.9961
2016	66,889,627	68,555,330	1.0249	2017	62,559,810	62,654,097	1.0015
2017	58,892,423	62,903,158	1.0681	2018	52,847,495	55,765,121	1.0552
2018	47,482,041	53,617,757	1.1292	2019	50,080,125	60,118,304	1.2004
2019	19,472,370	50,390,976	2.5878	2020	14,761,490	41,682,653	2.8237
2020		14,830,608		2021		16,171,155	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

* Losses limited on a per-claim basis, with the actual limitation varying by policy year as described in Exhibit 1a.

Losses are expressed on a post-HB373 basis.

TABLE I - B - Individual Losses Limited *

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	245,835,066	245,273,230	0.9977	to 1989	273,825,310	273,761,392	0.9998
1988	28,747,466	28,737,390	0.9996	1989	31,237,378	31,236,843	1.0000
1989	31,240,118	31,237,378	0.9999	1990	33,542,210	33,518,084	0.9993
1990	33,508,360	33,542,819	1.0010	1991	30,536,467	30,502,920	0.9989
1991	30,570,248	30,536,467	0.9989	1992	26,302,821	26,256,659	0.9982
1992	26,331,966	26,303,076	0.9989	1993	29,879,574	29,872,227	0.9998
1993	29,987,417	29,879,574	0.9964	1994	23,711,891	23,765,144	1.0022
1994	23,611,833	23,716,447	1.0044	1995	24,398,439	24,364,026	0.9986
1995	24,391,759	24,404,132	1.0005	1996	30,178,024	30,113,777	0.9979
1996	30,438,130	30,178,184	0.9915	1997	29,151,513	29,221,499	1.0024
1997	29,135,093	29,151,623	1.0006	1998	25,220,813	25,214,409	0.9997
1998	25,178,054	25,220,813	1.0017	1999	29,701,391	29,701,389	1.0000
1999	29,841,438	29,736,681	0.9965	2000	38,499,149	38,558,016	1.0015
2000	38,569,662	38,586,763	1.0004	2001	33,863,406	33,786,152	0.9977
2001	33,881,295	33,881,411	1.0000	2002	33,679,920	33,582,794	0.9971
2002	33,772,348	33,713,784	0.9983	2003	38,697,021	38,498,711	0.9949
2003	38,705,010	38,701,738	0.9999	2004	39,823,887	39,903,283	1.0020
2004	39,589,165	39,844,227	1.0064	2005	40,156,549	40,257,042	1.0025
2005	40,190,132	40,158,182	0.9992	2006	44,022,927	44,240,473	1.0049
2006	44,174,300	44,023,245	0.9966	2007	42,562,779	42,647,614	1.0020
2007	42,569,078	42,562,779	0.9999	2008	39,716,586	39,850,045	1.0034
2008	38,800,964	39,717,093	1.0236	2009	44,904,376	45,463,266	1.0124
2009	43,970,447	44,904,376	1.0212	2010	39,572,001	40,122,514	1.0139
2010	39,448,005	39,572,001	1.0031	2011	37,917,354	37,909,305	0.9998
2011	37,196,879	37,917,354	1.0194	2012	35,830,783	36,649,819	1.0229
2012	35,435,903	35,830,783	1.0111	2013	38,414,622	38,966,037	1.0144
2013	37,523,397	38,414,622	1.0238	2014	30,429,050	31,360,366	1.0306
2014	28,856,273	30,429,050	1.0545	2015	30,751,096	32,274,000	1.0495
2015	28,092,747	30,751,096	1.0946	2016	28,541,815	32,336,804	1.1330
2016	19,879,481	28,541,815	1.4357	2017	20,597,412	27,470,176	1.3337
2017	7,175,048	20,597,412	2.8707	2018	8,623,272	20,361,670	2.3612
2018		8,623,272		2019		7,583,636	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	305,562,001	305,615,079	1.0002	to 1991	334,249,135	334,147,242	0.9997
1990	33,518,084	33,539,594	1.0006	1991	30,094,870	30,059,034	0.9988
1991	30,506,098	30,468,207	0.9988	1992	26,099,288	26,092,441	0.9997
1992	26,257,503	26,224,249	0.9987	1993	29,889,573	29,886,102	0.9999
1993	29,882,301	29,920,354	1.0013	1994	23,390,772	23,294,744	0.9959
1994	23,765,144	23,784,531	1.0008	1995	24,184,412	24,185,813	1.0001
1995	24,364,026	24,415,530	1.0021	1996	29,191,479	29,217,838	1.0009
1996	30,091,992	30,070,089	0.9993	1997	27,929,986	27,930,636	1.0000
1997	29,195,836	29,237,594	1.0014	1998	23,842,620	23,850,450	1.0003
1998	25,214,409	25,214,150	1.0000	1999	28,291,469	28,291,469	1.0000
1999	29,701,389	29,701,378	1.0000	2000	35,091,901	35,159,473	1.0019
2000	38,559,753	38,586,815	1.0007	2001	32,914,594	32,864,105	0.9985
2001	33,795,439	33,752,959	0.9987	2002	32,705,169	32,614,925	0.9972
2002	33,582,794	33,560,783	0.9993	2003	38,619,882	38,626,573	1.0002
2003	38,433,551	38,612,821	1.0047	2004	39,776,578	39,700,687	0.9981
2004	39,903,283	39,843,315	0.9985	2005	40,269,852	40,184,191	0.9979
2005	40,256,100	40,371,375	1.0029	2006	44,278,873	44,261,141	0.9996
2006	44,241,066	44,329,434	1.0020	2007	42,634,844	42,929,561	1.0069
2007	42,905,741	42,963,096	1.0013	2008	40,348,085	40,368,677	1.0005
2008	39,850,045	40,360,418	1.0128	2009	45,664,589	45,696,949	1.0007
2009	45,463,265	45,700,674	1.0052	2010	39,871,374	40,028,763	1.0039
2010	40,018,917	39,929,798	0.9978	2011	38,039,105	38,026,811	0.9997
2011	37,909,899	38,122,853	1.0056	2012	37,181,808	37,334,148	1.0041
2012	36,441,272	37,189,219	1.0205	2013	39,168,027	39,288,072	1.0031
2013	38,761,086	39,272,531	1.0132	2014	31,588,641	31,855,295	1.0084
2014	31,361,593	31,588,864	1.0072	2015	33,554,027	33,811,382	1.0077
2015	32,274,077	33,554,027	1.0397	2016	33,884,427	34,077,109	1.0057
2016	32,337,659	33,923,180	1.0490	2017	30,354,566	31,629,926	1.0420
2017	27,449,392	30,489,460	1.1108	2018	26,092,811	29,764,772	1.1407
2018	20,353,584	26,374,076	1.2958	2019	22,804,840	30,837,409	1.3522
2019	7,583,956	22,916,157	3.0217	2020	5,230,985	17,296,911	3.3066
2020		5,255,962		2021		5,541,607	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

* Losses limited on a per-claim basis, with the actual limitation varying by policy year as described in Exhibit 1a.

Losses are expressed on a post-HB373 basis.

TABLE I - C - Individual Losses Limited *

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

MEDICAL INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	65,332,677	65,291,604	0.9994	to 1989	75,905,669	76,156,545	1.0033
1988	10,358,013	10,374,669	1.0016	1989	13,439,994	13,467,818	1.0021
1989	13,478,917	13,439,994	0.9971	1990	14,084,363	14,096,917	1.0009
1990	13,939,432	14,086,878	1.0106	1991	13,486,945	13,492,445	1.0004
1991	13,395,181	13,486,945	1.0069	1992	13,960,570	14,002,819	1.0030
1992	14,023,801	13,961,357	0.9955	1993	15,562,158	15,757,619	1.0126
1993	15,438,041	15,562,470	1.0081	1994	13,625,092	13,800,530	1.0129
1994	13,425,933	13,630,599	1.0152	1995	14,679,805	14,630,592	0.9966
1995	14,631,522	14,685,717	1.0037	1996	20,381,371	19,968,947	0.9798
1996	20,361,021	20,382,071	1.0010	1997	17,381,414	17,156,052	0.9870
1997	17,123,971	17,383,373	1.0151	1998	15,369,482	15,304,736	0.9958
1998	15,326,376	15,369,764	1.0028	1999	19,154,523	19,078,765	0.9960
1999	19,175,220	19,171,506	0.9998	2000	26,032,632	25,690,853	0.9869
2000	26,952,517	26,082,607	0.9677	2001	23,074,571	22,516,278	0.9758
2001	22,907,740	23,097,412	1.0083	2002	25,156,783	25,110,038	0.9981
2002	25,762,973	25,377,704	0.9850	2003	30,239,081	29,953,586	0.9906
2003	29,929,623	30,244,475	1.0105	2004	34,806,698	34,739,742	0.9981
2004	33,864,603	34,831,294	1.0285	2005	33,191,747	33,387,624	1.0059
2005	32,800,152	33,197,853	1.0121	2006	35,008,739	34,370,383	0.9818
2006	34,819,609	35,010,335	1.0055	2007	37,218,626	36,779,885	0.9882
2007	36,766,059	37,219,404	1.0123	2008	38,094,025	37,049,337	0.9726
2008	37,751,125	38,102,228	1.0093	2009	41,164,534	41,909,191	1.0181
2009	39,776,710	41,164,534	1.0349	2010	45,693,545	44,778,928	0.9800
2010	45,115,526	45,693,545	1.0128	2011	38,830,098	38,683,416	0.9962
2011	38,753,233	38,830,098	1.0020	2012	33,529,611	33,422,421	0.9968
2012	32,427,023	33,529,611	1.0340	2013	35,215,492	36,344,893	1.0321
2013	35,014,767	35,215,492	1.0057	2014	29,528,060	30,389,991	1.0292
2014	28,403,072	29,528,060	1.0396	2015	32,749,965	31,840,865	0.9722
2015	32,254,301	32,749,965	1.0154	2016	33,065,536	34,551,570	1.0449
2016	28,060,800	33,065,536	1.1784	2017	29,936,208	31,447,142	1.0505
2017	12,031,696	29,936,208	2.4881	2018	12,616,768	27,150,873	2.1520
2018		12,616,768		2019		11,887,328	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	89,604,110	90,376,241	1.0086	to 1991	103,199,896	102,859,726	0.9967
1990	14,097,337	13,895,823	0.9857	1991	13,356,731	13,392,817	1.0027
1991	13,499,166	13,553,813	1.0040	1992	13,872,803	13,861,306	0.9992
1992	14,017,906	13,970,562	0.9966	1993	15,373,675	15,373,468	1.0000
1993	15,769,739	15,415,724	0.9776	1994	13,516,575	13,277,445	0.9823
1994	13,800,530	13,636,620	0.9881	1995	14,377,487	14,311,037	0.9954
1995	14,632,790	14,595,136	0.9974	1996	19,501,879	19,404,947	0.9950
1996	19,968,557	19,898,580	0.9965	1997	16,728,883	16,753,498	1.0015
1997	17,149,628	17,107,803	0.9976	1998	14,549,684	14,380,696	0.9884
1998	15,304,736	15,126,836	0.9884	1999	18,451,585	18,204,053	0.9866
1999	19,083,211	19,019,989	0.9967	2000	24,107,408	24,047,786	0.9975
2000	25,703,087	25,755,648	1.0020	2001	22,038,996	22,005,813	0.9985
2001	22,525,861	22,314,788	0.9906	2002	24,828,224	24,777,528	0.9980
2002	25,111,715	25,101,012	0.9996	2003	29,642,635	29,167,289	0.9840
2003	29,904,827	29,616,422	0.9904	2004	35,655,481	34,972,057	0.9808
2004	34,743,544	35,649,331	1.0261	2005	33,098,364	32,725,079	0.9887
2005	33,383,159	33,138,330	0.9927	2006	34,239,729	34,404,182	1.0048
2006	34,367,101	34,262,328	0.9970	2007	36,491,792	36,159,132	0.9909
2007	36,778,733	36,497,343	0.9923	2008	36,853,354	36,240,182	0.9834
2008	37,050,488	36,854,616	0.9947	2009	42,231,700	41,877,356	0.9916
2009	41,909,191	42,246,224	1.0080	2010	44,582,142	43,820,456	0.9829
2010	44,701,211	44,599,162	0.9977	2011	38,812,455	38,308,485	0.9870
2011	38,683,690	38,851,279	1.0043	2012	32,843,886	33,161,212	1.0097
2012	33,422,837	32,880,243	0.9838	2013	36,076,799	35,652,135	0.9882
2013	36,284,811	36,179,912	0.9971	2014	29,842,854	29,376,316	0.9844
2014	30,390,823	29,848,829	0.9822	2015	32,615,166	32,026,791	0.9820
2015	31,841,218	32,621,317	1.0245	2016	34,490,969	34,029,604	0.9866
2016	34,551,968	34,632,150	1.0023	2017	32,205,244	31,024,171	0.9633
2017	31,443,031	32,413,698	1.0309	2018	26,754,684	26,000,349	0.9718
2018	27,128,457	27,243,681	1.0042	2019	27,275,285	29,280,895	1.0735
2019	11,888,414	27,474,819	2.3111	2020	9,530,505	24,385,742	2.5587
2020		9,574,646		2021		10,629,548	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

* Losses limited on a per-claim basis, with the actual limitation varying by policy year as described in Exhibit 1a.

Losses are expressed on a post-HB373 basis.

TABLE I - D - Individual Losses Limited *

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY PAID LOSSES

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	244,155,620	244,243,229	1.0004	to 1989	272,724,848	272,760,356	1.0001
1988	28,681,231	28,680,639	1.0000	1989	30,998,771	31,032,967	1.0011
1989	31,007,703	30,998,771	0.9997	1990	32,695,529	32,726,331	1.0009
1990	32,647,488	32,696,138	1.0015	1991	30,502,380	30,488,384	0.9995
1991	30,515,808	30,502,380	0.9996	1992	26,267,918	26,219,626	0.9982
1992	26,290,729	26,268,173	0.9991	1993	29,714,718	29,756,925	1.0014
1993	29,650,153	29,714,718	1.0022	1994	23,285,968	23,333,987	1.0021
1994	23,198,975	23,290,524	1.0039	1995	24,248,017	24,275,476	1.0011
1995	24,227,378	24,253,710	1.0011	1996	29,867,559	29,902,720	1.0012
1996	29,839,256	29,867,719	1.0010	1997	28,826,417	28,917,882	1.0032
1997	28,782,452	28,826,527	1.0015	1998	25,071,884	25,112,649	1.0016
1998	25,046,205	25,071,884	1.0010	1999	29,687,328	29,687,469	1.0000
1999	29,692,585	29,722,618	1.0010	2000	37,859,045	38,042,474	1.0048
2000	37,873,322	37,946,659	1.0019	2001	33,077,697	33,012,720	0.9980
2001	33,040,483	33,095,702	1.0017	2002	33,524,854	33,456,740	0.9980
2002	33,546,970	33,558,718	1.0004	2003	37,586,782	37,675,366	1.0024
2003	37,413,020	37,591,499	1.0048	2004	39,133,098	39,298,549	1.0042
2004	38,806,919	39,153,438	1.0089	2005	39,487,055	39,551,747	1.0016
2005	39,416,968	39,488,688	1.0018	2006	42,536,063	43,037,341	1.0118
2006	42,325,534	42,536,381	1.0050	2007	40,921,507	41,390,588	1.0115
2007	40,021,993	40,921,507	1.0225	2008	38,065,269	38,595,421	1.0139
2008	36,730,741	38,065,776	1.0363	2009	41,627,935	41,996,098	1.0088
2009	40,284,114	41,627,935	1.0334	2010	37,702,204	38,498,196	1.0211
2010	36,501,418	37,702,204	1.0329	2011	36,218,736	36,951,629	1.0202
2011	34,503,868	36,218,736	1.0497	2012	32,305,483	33,585,475	1.0396
2012	30,966,578	32,305,483	1.0432	2013	34,247,696	35,672,970	1.0416
2013	31,380,316	34,247,696	1.0914	2014	26,493,593	28,091,047	1.0603
2014	22,831,789	26,493,593	1.1604	2015	24,663,137	28,475,986	1.1546
2015	18,707,734	24,663,137	1.3183	2016	16,137,692	23,105,034	1.4317
2016	8,055,649	16,137,692	2.0033	2017	9,767,857	17,810,864	1.8234
2017	1,774,309	9,767,857	5.5052	2018	1,669,404	8,135,242	4.8731
2018		1,669,404		2019		1,869,651	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	304,347,303	304,315,619	0.9999	to 1991	332,222,044	332,402,928	1.0005
1990	32,726,331	32,789,453	1.0019	1991	30,079,074	30,059,033	0.9993
1991	30,488,384	30,452,411	0.9988	1992	26,091,252	26,092,441	1.0000
1992	26,219,626	26,216,213	0.9999	1993	29,822,365	29,855,347	1.0011
1993	29,766,999	29,853,145	1.0029	1994	23,006,944	23,046,885	1.0017
1994	23,333,987	23,400,703	1.0029	1995	24,074,935	24,086,316	1.0005
1995	24,275,476	24,306,053	1.0013	1996	29,005,748	29,110,676	1.0036
1996	29,880,935	29,884,358	1.0001	1997	27,808,996	27,806,009	0.9999
1997	28,888,518	29,122,331	1.0081	1998	23,806,491	23,826,506	1.0008
1998	25,112,649	25,178,021	1.0026	1999	28,277,567	28,277,567	1.0000
1999	29,687,469	29,687,476	1.0000	2000	34,554,400	34,686,758	1.0038
2000	38,042,474	38,049,524	1.0002	2001	32,243,565	32,295,462	1.0016
2001	33,012,720	33,083,257	1.0021	2002	32,588,478	32,574,877	0.9996
2002	33,456,740	33,444,092	0.9996	2003	37,862,530	37,952,623	1.0024
2003	37,605,054	37,862,530	1.0068	2004	39,317,378	39,377,659	1.0015
2004	39,298,549	39,384,115	1.0022	2005	39,643,494	39,674,805	1.0008
2005	39,550,805	39,745,017	1.0049	2006	43,278,540	43,411,070	1.0031
2006	43,032,617	43,329,101	1.0069	2007	41,599,478	41,959,624	1.0087
2007	41,390,588	41,689,119	1.0072	2008	39,263,983	39,626,742	1.0092
2008	38,595,421	39,276,314	1.0176	2009	42,841,373	43,149,031	1.0072
2009	41,996,098	42,877,458	1.0210	2010	38,495,272	39,039,445	1.0141
2010	38,392,734	38,555,762	1.0042	2011	37,199,295	37,577,161	1.0102
2011	36,951,629	37,283,249	1.0090	2012	34,606,484	35,220,637	1.0177
2012	33,376,877	34,613,977	1.0371	2013	36,251,907	36,749,581	1.0137
2013	35,468,019	36,356,411	1.0250	2014	30,245,041	30,847,026	1.0199
2014	28,091,047	30,245,327	1.0767	2015	30,538,810	31,945,560	1.0461
2015	28,475,986	30,538,810	1.0724	2016	27,654,392	30,074,869	1.0875
2016	23,105,034	27,695,428	1.1987	2017	24,867,542	28,676,914	1.1532
2017	17,789,354	24,999,101	1.4053	2018	15,895,236	22,600,374	1.4218
2018	8,126,314	16,063,809	1.9768	2019	9,878,398	19,097,447	1.9333
2019	1,869,651	9,936,138	5.3144	2020	1,582,643	8,099,550	5.1177
2020		1,597,397		2021		1,870,311	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

* Losses limited on a per-claim basis, with the actual limitation varying by policy year as described in Exhibit 1a.

Losses are expressed on a post-HB373 basis.

TABLE I - E - Individual Losses Limited *

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

MEDICAL PAID LOSSES

Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year	Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior				Prior			
to 1988	62,693,105	63,016,184	1.0052	to 1989	73,485,256	73,784,420	1.0041
1988	10,271,062	10,288,887	1.0017	1989	13,305,830	13,424,763	1.0089
1989	13,275,886	13,305,830	1.0023	1990	12,988,079	13,110,636	1.0094
1990	12,910,165	12,990,593	1.0062	1991	13,307,183	13,333,112	1.0019
1991	13,232,662	13,307,183	1.0056	1992	13,830,394	13,881,194	1.0037
1992	13,809,256	13,831,181	1.0016	1993	14,849,509	15,015,744	1.0112
1993	14,522,907	14,849,821	1.0225	1994	12,878,952	12,897,823	1.0015
1994	12,809,511	12,884,459	1.0059	1995	13,989,179	14,086,447	1.0070
1995	13,941,070	13,995,091	1.0039	1996	18,274,535	18,453,547	1.0098
1996	18,111,886	18,275,235	1.0090	1997	15,839,244	16,094,383	1.0161
1997	15,603,553	15,841,203	1.0152	1998	14,613,013	14,684,831	1.0049
1998	14,548,217	14,613,295	1.0045	1999	18,024,026	18,050,561	1.0015
1999	17,784,582	18,041,009	1.0144	2000	23,941,716	24,205,479	1.0110
2000	23,844,413	23,991,691	1.0062	2001	19,780,353	20,026,916	1.0125
2001	19,613,217	19,803,194	1.0097	2002	23,808,627	23,918,499	1.0046
2002	23,678,158	24,029,548	1.0148	2003	26,117,190	26,597,821	1.0184
2003	25,493,134	26,122,584	1.0247	2004	29,435,634	29,898,096	1.0157
2004	28,780,731	29,460,229	1.0236	2005	29,156,001	29,657,989	1.0172
2005	28,859,689	29,162,107	1.0105	2006	30,660,984	30,867,041	1.0067
2006	30,091,005	30,662,580	1.0190	2007	32,324,549	33,088,859	1.0236
2007	31,941,430	32,325,328	1.0120	2008	32,258,826	33,051,449	1.0246
2008	31,296,851	32,267,029	1.0310	2009	35,053,377	35,757,344	1.0201
2009	34,028,790	35,053,377	1.0301	2010	38,474,016	39,182,391	1.0184
2010	37,231,905	38,474,016	1.0334	2011	34,008,811	34,378,635	1.0109
2011	33,188,935	34,008,811	1.0247	2012	29,742,331	30,621,163	1.0295
2012	28,811,198	29,742,331	1.0323	2013	31,459,971	32,302,350	1.0268
2013	29,684,134	31,459,971	1.0598	2014	24,836,262	25,784,888	1.0382
2014	23,611,106	24,836,262	1.0519	2015	28,138,946	29,229,793	1.0388
2015	25,838,121	28,138,946	1.0890	2016	24,863,882	27,407,612	1.1023
2016	18,120,383	24,863,882	1.3721	2017	18,082,998	24,156,896	1.3359
2017	4,403,048	18,082,998	4.1069	2018	4,324,898	15,532,833	3.5915
2018		4,324,898		2019		4,143,263	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year	Policy Year Valued	As of 12/31/20	As of 12/31/21	Ratio to Prior Year
Prior				Prior			
to 1990	87,159,982	87,540,040	1.0044	to 1991	99,906,605	100,389,694	1.0048
1990	13,110,636	13,429,130	1.0243	1991	13,190,144	13,279,453	1.0068
1991	13,333,112	13,387,226	1.0041	1992	13,821,128	13,825,790	1.0003
1992	13,881,194	13,918,887	1.0027	1993	15,092,893	15,111,987	1.0013
1993	15,027,667	15,134,942	1.0071	1994	12,797,979	12,923,196	1.0098
1994	12,897,823	12,918,024	1.0016	1995	13,894,440	13,926,351	1.0023
1995	14,086,447	14,115,499	1.0021	1996	18,104,318	18,338,345	1.0129
1996	18,453,156	18,501,018	1.0026	1997	15,738,827	15,803,138	1.0041
1997	16,085,927	16,120,822	1.0022	1998	14,170,756	14,182,757	1.0008
1998	14,684,831	14,747,908	1.0043	1999	17,713,896	17,730,862	1.0010
1999	18,050,484	18,282,300	1.0128	2000	22,693,503	22,749,941	1.0025
2000	24,205,479	24,341,532	1.0056	2001	19,900,206	19,963,314	1.0032
2001	20,026,191	20,177,767	1.0076	2002	23,882,702	23,917,494	1.0015
2002	23,918,499	24,157,846	1.0100	2003	26,738,272	26,884,805	1.0055
2003	26,532,051	26,738,322	1.0078	2004	30,184,395	30,424,324	1.0079
2004	29,898,096	30,184,395	1.0096	2005	30,110,928	30,298,840	1.0062
2005	29,653,425	30,153,601	1.0169	2006	31,338,728	31,956,762	1.0197
2006	30,863,375	31,361,930	1.0162	2007	33,685,415	33,985,703	1.0089
2007	33,087,705	33,690,360	1.0182	2008	33,362,042	33,738,384	1.0113
2008	33,050,805	33,366,544	1.0096	2009	36,765,307	37,014,515	1.0068
2009	35,757,344	36,779,831	1.0286	2010	39,639,785	40,493,896	1.0215
2010	39,101,475	39,659,958	1.0143	2011	34,552,910	34,842,466	1.0084
2011	34,378,285	34,592,585	1.0062	2012	30,788,289	31,044,826	1.0083
2012	30,621,141	30,824,789	1.0067	2013	32,622,848	33,024,459	1.0123
2013	32,242,268	32,725,961	1.0150	2014	26,446,552	27,089,722	1.0243
2014	25,783,096	26,452,695	1.0260	2015	29,881,926	30,199,136	1.0106
2015	29,229,793	29,888,077	1.0225	2016	28,772,204	29,952,964	1.0410
2016	27,407,365	28,914,093	1.0550	2017	26,580,363	27,722,713	1.0430
2017	24,152,727	26,785,487	1.1090	2018	20,147,857	21,854,932	1.0847
2018	15,509,515	20,420,664	1.3167	2019	15,473,871	21,938,230	1.4178
2019	4,143,263	15,584,138	3.7613	2020	2,885,789	14,436,257	5.0025
2020		2,910,462		2021		3,030,662	

NOTE: So as to maximize the use of available data, the companies used in one stage of development were allowed to be independent of those used in the other stage of development; therefore, the figures shown at each valuation may vary.

* Losses limited on a per-claim basis, with the actual limitation varying by policy year as described in Exhibit 1a.

Losses are expressed on a post-HB373 basis.

EXHIBIT VIII
DELAWARE COMPENSATION RATING BUREAU, INC.
RATE AND LOSS COST FORMULAE

The experience used for classification relativities for the December 1, 2022 revision will include all available risks. It is proposed that catastrophes be limited in accordance with the procedure previously employed in other DCRB filings. The experience period will be five (5) years for all classifications regardless of whether a classification might meet the full credibility requirements with less than five years of data. Credibility will be based on reported payrolls for classifications using payroll as the exposure base. For non-payroll classifications, expected losses will be used as the basis for credibility. Thus, two credibility tables will be prepared for use in the December 1, 2022 filing. The values for these respective tables will be established such that the credibility assigned to a payroll-based classification having the same portion of total statewide expected losses and payrolls attributable to its experience using each table would be equal. All occupational disease losses will be included in the exhibit of classification experience, with the total amount of such losses by type of injury being shown on a separate line on the classification rate worksheets.

The larger classifications are subject to standard procedures as described below. However, circumstances will sometimes require that some classifications' rating procedure be modified to recognize situations where the normal rating process would not be appropriate. Such classifications, and the manner in which their rates or loss costs have been derived, are separately identified within the filing material.

The calculation of assigned risk classification rates will be made in accordance with the following procedure:

- (1) Determine the pure premiums underlying present Manual Residual Market Rates by category (serious, non-serious, medical only and total) for each classification.
- (2) Adjust the present pure premiums by category (serious, non-serious, medical only and total) to the December 1, 2022 on-rate-level to obtain present on-rate-level pure premiums.
- (3) Determine Expected Losses (serious, non-serious, medical only and total) for each classification by multiplying the exposures from the experience period by the pure premiums underlying present Manual Rates.
- (4) Determine the indicated pure premiums (serious, non-serious, medical only and total) from the exposures and losses from the experience period.
- (5) Test the indicated total pure premiums by multiplying the exposures of the latest three years for each classification and obtaining the total Actual Losses for all classifications combined.
- (6) Calculate Expected Losses by multiplying the present pure premiums by the exposures from the last three years for each classification and by the overall average rate change.
- (7) Obtain correction factors by category of loss (serious, non-serious and medical only) by dividing the Expected Losses derived in (6) by the Actual Losses derived in (5).
- (8) Multiply the indicated (pre-test) pure premiums from (4) times the correction factors derived in (7) to obtain indicated (post-test) pure premiums.

RATE AND LOSS COST FORMULAE (continued)

- (9) Determine “formula” pure premiums from (2) and (8) above for each type of loss (serious, non-serious and medical only), with credibility for each category of loss corresponding to either the amount of reported payroll (for all classifications in which payroll is the exposure base) or to the amount of Expected Losses (for all “non-payroll” classifications). Credibility weights will be taken from exhibits appearing in the Class Book. The complement of credibility is in each case to be assigned to the present on December 1, 2022 level pure premiums for each category of loss.
- (10) Select proposed total pure premiums for each classification, using the middle value from the total pure premiums derived in (2), (8) and (9) above. If the proposed pure premium selected on this basis is different from the formula pure premium derived in (9) above, partial pure premiums are to be allocated between categories (serious, non-serious and medical only) in the same proportion as the partial pure premiums comprising the formula pure premium.
- (11) Test the proposed total pure premiums selected in (10) by multiplying by the exposures of the three latest years for each classification and obtaining the total Expected Losses for all classifications combined.
- (12) Obtain a correction factor by dividing the Expected Losses derived in (6) above by the Expected Losses derived in (11) above.
- (13) Calculate the “composite pure premium multipliers” for each industry group as the product of the following items:
 - (a) The pure premium correction factor determined in (12) above.
 - (b) The proposed experience rating plan off-balance factor (Collectible Premium Ratio).
 - (c) The inverse of the permissible loss and loss adjustment ratio.
 - (d) The estimated effect of the July 1, 2023 benefit change.
- (14) Apply the composite pure premium multiplier obtained in (13) above to the proposed total pure premiums to obtain Manual Rates.
- (15) Test to assure that the maximum departure of the Manual Rates derived in (14) above from current Manual Rates is in accordance with the following parameters:

Maximum Change in Rates:
Upward: The industry group average change plus 25% rounded to the nearest 1%.
Downward: The industry group average change minus 25% rounded to the nearest 1%.
- (16) Manual rates are to be rounded to the nearest \$.01.
- (17) Test the Manual Rates derived in (16) above to determine if balance has been achieved within 0.0005 of the indicated change in rate level by industry group. If such balance has not been achieved, calculate the necessary correction factor to adjust the composite pure premium multipliers derived in (13) above to achieve the necessary balance. Perform steps (14) through (17) iteratively until the desired balance is achieved.

RATE AND LOSS COST FORMULAE (continued)

Non-reviewed Classifications

- (18) For classifications with insufficient credibility (non-reviewed classifications), an alternative calculation is used to derive indicated rates.

Insufficient credibility is defined as having five-year payroll less than that necessary to achieve 5% credibility for the non-serious component of pure premium. For non-payroll based classifications, expected losses replace payrolls.

For these non-reviewed classes, the indicated rate is calculated as follows:

- a) An average loss cost using Pennsylvania loss cost values and the Delaware distribution of business by class is calculated.
- b) Classification relativities are then calculated that relate the Pennsylvania loss cost by classification to the average overall loss cost calculated in (a) above.
- c) Indicated average loss costs are calculated by class by multiplying the relativities in (b) above times the average Delaware loss cost value for all classes combined times the average manual change in rates times the indicated composite pure premium multiplier.
- d) A second indicated rate is calculated by applying the average manual change in rates by industry group to the current Delaware rate for the class.
- e) A final indicated rate, subject to capping and balancing criteria previously described, is calculated by applying one-third weight to (c) above plus two-thirds weight to (d) above.

Loss Costs

The calculation of non-assigned risk classification loss costs will be made in accordance with the following procedure:

- (19) Multiply the proposed assigned risk Manual Rates by classification by the permissible loss, loss adjustment expense and loss based assessment ratio.

EXHIBIT IX

COLLECTIBLE PREMIUM RATIOS *

Manual Years 2019 to 2021 Market Profile Report Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2019	406,987,562	424,669,096	0.9584
2020	365,918,840	394,206,843	0.9282
2021	352,049,279	385,561,352	0.9131
TOTAL	1,124,955,681	1,204,437,291	0.9340
MANUFACTURING AND UTILITIES			
2019	52,103,450	49,266,127	1.0576
2020	43,998,970	42,771,494	1.0287
2021	40,148,245	36,502,768	1.0999
TOTAL	136,250,665	128,540,389	1.0600
CONTRACTING AND QUARRYING			
2019	90,530,872	85,400,513	1.0601
2020	80,243,623	79,426,650	1.0103
2021	77,567,841	77,920,491	0.9955
TOTAL	248,342,336	242,747,654	1.0230
OTHER INDUSTRIES			
2019	264,353,240	290,002,456	0.9116
2020	241,676,247	272,008,699	0.8885
2021	234,333,193	271,138,093	0.8643
TOTAL	740,362,680	833,149,248	0.8886

* Excludes classifications and coverages not subject to experience rating.

EXHIBIT X

EXPECTED LOSS RATE FACTORS

CALCULATION OF EXPECTED LOSS RATE FACTORS

Policy Year Beginning 12/1 (1)	Average Law Multiplier (2)	Adjustment Factor (3)	Loss Ratio Development Factor (4)	Expense Allowance * 1 / (PLR/CPR) (5)	Trend Factor (6)	Product (2) * (3) * (4) * (5) * (6) (7)	Expected Loss Rate Factor 1.0 / (7) (8)
<u>Manufacturing and Utilities</u>							
2018	1.0320	1.0000	1.2858	1.8639	1.0436	2.5811	0.3874
2019	1.0250	1.0000	1.4626	1.8639	1.0324	2.8848	0.3466
2020	1.0190	1.0000	1.8125	1.8639	1.0214	3.5162	0.2844
<u>Contracting and Quarrying</u>							
2018	1.0320	1.0000	1.3272	1.7988	1.0436	2.5712	0.3889
2019	1.0250	1.0000	1.4454	1.7988	1.0324	2.7513	0.3635
2020	1.0190	1.0000	1.7619	1.7988	1.0214	3.2986	0.3032
<u>Other Industries</u>							
2018	1.0320	1.0000	1.2952	1.5625	1.0436	2.1796	0.4588
2019	1.0250	1.0000	1.4484	1.5625	1.0324	2.3949	0.4176
2020	1.0190	1.0000	1.8466	1.5625	1.0214	3.0031	0.3330

* Permissible Loss Ratio = 0.5687
Collectible Premium Ratios
Manufacturing = 1.0600
Contracting = 1.0230
All Other = 0.8886

EXHIBIT XI

CALCULATION OF TAX MULTIPLIER FOR USE IN RETROSPECTIVE RATING PLANS (O/T U.S.L. & H.W. Act Coverages)

Expense Provisions for O/T U.S.L. & H.W. Classes

Losses	56.87
Loss Adjustment Expense	15.29
Loss & Loss Adjustment	<u>72.16</u>
 Premium Discount	 8.38
Acquisition	6.40
General Expenses	2.48
Profit and Contingencies	0.49
Taxes	2.30
Uncollectible Premium	2.62
Workers' Compensation Fund	2.00
Administrative Assessment	<u>3.17</u>
	27.84

If

- T = Tax multiplier
- E = Expense provision in rates (General, Acquisition, and Profit), less premium discount
- L = Loss provision in rates
- C = Loss conversion factor
- B = Assessments made on premiums
- A = Assessments made on losses (adjusted so as not to collect profit and general expense dollars on the extra premium generated by the assessments)

Using average discount (Schedule Y) this yields:

$$E = 0.0099 = \frac{ACQ}{0.0640} + \frac{GEN}{0.0248} + \frac{PROFIT}{0.0049} - \frac{PREM DISC}{0.0838}$$

$$A = 0.0550 = 0.0558 \times \frac{1 - 0.0099 - 0.0692}{1 - 0.0034 - 0.0692}$$

Then

$$T = \frac{E + L(1 + C + A)}{E + L(1 + C)} \times \frac{1}{1 - B - S}$$

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0105$$

$$T = \frac{0.0099 + 0.5687(1 + 0.2689 + 0.0550)}{0.0099 + 0.5687(1 + 0.2689)} \times \frac{1}{1 - 0.0692 - 0.0105} = 1.1331$$

EXHIBIT XII

DELAWARE RETROSPECTIVE DEVELOPMENT FACTORS *

Retrospective development factors for first, second and third adjustments are calculated below. They are intended for use in retrospective plans with no loss limitation and applicable to the expected loss portion of premium.

First Adjustment	RDF =	0.4535
Second Adjustment	RDF =	0.3088
Third Adjustment	RDF =	0.2311

For those companies using retrospective development factors with loss limitations, the following formula may be used.

$$\text{RDF(LIM)} = (1.0 - \text{ELF}) \times \text{RDF}$$

RDF(LIM) = Retrospective Development Factors at limited basis
ELF = Excess Loss (Pure Premium) Factors exclusive of allocated loss adjustment expenses for given Hazard Group and Loss Limitation
RDF = Retrospective Development Factors without Loss Limitation

For Example:

$$\text{\$25,000 limit Hazard Group C ELF} = 0.577$$

$$\text{First Adjustment RDF} = (1 - 0.577) \times 0.4535 = 0.1918$$

* The use of retrospective development factors is optional.