

DELAWARE COMPENSATION RATING BUREAU, INC.

ACTUARIAL COMMITTEE

Summary of Material for Modification of Experience
December 1, 2021 Residual Market Rate and Voluntary Market Loss Commission

Superseded

As Filed

DELAWARE 2021 RESIDUAL MARKET RATE AND VOLUNTARY MARKET LOSS COST FILING

PROPOSED EFFECTIVE DATE - DECEMBER 1, 2021

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EXHIBIT I

INDICATED CHANGE IN RATE LEVEL

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
(1a) Policy Year 2016 Loss and Loss Adjustment Expense Ratio	0.3392	0.3778	0.7170
(1b) Policy Year 2017 Loss and Loss Adjustment Expense Ratio	0.3064	0.3415	0.6479
(1c) Policy Year 2018 Loss and Loss Adjustment Expense Ratio	0.2740	0.2927	0.5667
(1d) Policy Year 2019 Loss and Loss Adjustment Expense Ratio	0.3171	0.3065	0.6236
(1e) Average (Midpoint = 7/1/2018)	0.3092	0.3296	0.6388
(2a) Policy Year 2016 Loss and LAE Ratio Trended to 12/1/2022	0.2342	0.3015	
(2b) Policy Year 2017 Loss and LAE Ratio Trended to 12/1/2022	0.2253	0.2879	
(2c) Policy Year 2018 Loss and LAE Ratio Trended to 12/1/2022	0.2145	0.2558	
(2d) Policy Year 2019 Loss and LAE Ratio Trended to 12/1/2022	0.2642	0.2773	
(2e) Average at 12/1/2022	0.2346	0.2873	0.5152
(3a) Excess Loss Factor at \$1,732,150 (Post-Legislative Basis)			0.0702
(3b) Provision for Excess Loss (4a) - (2e)			0.0389
(4a) Total Trended Loss and LAE Ratio (2e) / (1.0 - (3a))	0.2383	0.3158	0.5541
(4b) Percentage of Total		56.99%	
(5) Permissible Loss and Loss Adjustment Ratio			0.6812
(6) Indicated Change in Rates (4a) / (5)			0.8134
(7) Estimated Effect of the 7/1/22 Benefit Change			1.0036
(8) Indicated Change in Residual Market Rate Level (6) * (7)			0.8163
			-18.37%
(9) Indicated Change in Voluntary Market Loss Costs (8) / Change in Average LCMs [1.4094 / 1.3600] LCM = (1 / Loss, LAE and Administrative Assessment Ratio)			0.8060
			-19.40%
	Mfg.	Cont.	Other
(10) Current Collectible Premium Ratio	1.0913	1.0498	0.9260
(11) Proposed Collectible Premium Ratio	1.0621	1.0579	0.9069
(12) Change in Collectible Premium Ratio (11) / (10)	0.9732	1.0077	0.9794
			0.9841
(13) Change in Residual Market Manual Rate Level (8) * (12)	0.7944	0.8226	0.7995
			0.8033
(14) Change in Voluntary Market Manual Loss Cost Level (9) * (12)	0.7844	0.8122	0.7894
			0.7932
(15) Current Offset for Residual Market Surcharge			0.9957
(16) Proposed Offset for Residual Market Surcharge			0.9965
(17) Adjusted Change in Voluntary Market Manual Loss Cost Level (14) * (16) / (15)	0.7850	0.8129	0.7900
			0.7938

EXHIBIT II
EXPENSE LOADING

	<u>Current %</u>	<u>Proposed %</u>
LOSS AND LOSS ADJUSTMENT EXPENSE		
Losses	54.43	53.26
Loss Adjustment Expense	14.23	14.86 ^a
Loss & Loss Adjustment	68.66	68.12
UNDERWRITING EXPENSES		
Commission	5.45	5.32
Other Acquisition	2.04	1.97
General Expenses	2.84	2.47
Premium Discount	8.59	8.53
State Premium Tax	2.00	2.00
Other State Tax	0.32	0.31
Uncollectible Premium	2.30	2.86
Administrative Assessment	3.20	2.83 ^b
Workers Compensation Fund	2.00	2.00
Deviations	0.00	0.00
Policyholder Dividends	0.00	0.00
Underwriting Profit	2.88	3.79
Underwriting Expense Total	61.34	31.88

a - As ratio to loss, Loss Adjustment Expense = 2790

b - As ratio to loss, Administrative Assessment = 0.0532

RESIDUAL MARKET MINIMUM PREMIUM:

It is proposed that the Minimum Premium formula increase from $(280 * \text{Rate}) + \text{Expense Constant}$ to

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

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 145.00 in the Minimum Premium formula for the Farm Classes, (0006, 0016, 0036, 0036, 0083).

RESIDUAL MARKET EXPENSE CONSTANT:

It is proposed that the expense constant increase from \$320 to \$330.

EXHIBIT III

INTERNAL RATE OF RETURN ANALYSIS
STATE OF DELAWARE - 2021
TABLE I: INPUTS, ASSUMPTIONS & OUTPUTS

Section 1: Inputs & Assumptions		
(1) Commissions *		5.32
(2) Other Expenses		4.55
(2A) Other Acquisitions *	1.77	
(2B) General Expenses *	2.47	
(2C) Other Tax **	0.31	
(3) State Premium Taxes & Uncollectible Premium		
(3A) Tax1 - Premium Tax **		2.00
(3B) Uncollectible Premium **		2.86
(3C) Tax3 - Workers Compensation Fund **		
(4) Premium Discount ***		8.53
(5) Deviations		0.00
(6) Dividends to Policyholders		0.00
(7) Premium Written		1,000,000
Investment Income		
(8A) Pre-Tax Return on Assets		3.86
(8B) Investment Income Tax Rate		0.66
(8C) Post-Tax Return on Assets		3.20
(10) Reserve to Surplus Ratio		1.86
(11) Internal Rate of Return (Cost of Capital)		9.56
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		70.95
(2) Profit & Contingencies		3.79

EXHIBIT IV - 1

POLICY YEAR LOSS RATIO 2019*

(1) Standard Earned Premium Reported (Table I)			168,535,685
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			1.0461
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			0.9985
(4) Expense Constant Removal Factor			0.9972
(5) DCCPAP On-Level Factor			1.0142
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			178,040,104
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	9,993,703	15,679,273	25,672,976
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	2.521	2.5724	
(10) Ultimate Incurred Losses (8) * (9)	43,493,595	40,333,362	83,826,957
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	23,953,164	27,637,037	51,590,201
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.7749	1.6279	
(13) Ultimate Incurred Losses (11) * (12)	42,514,471	44,990,333	87,504,804
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	43,004,033	42,661,848	85,665,881
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0266	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	56,465,216	54,564,504	111,029,720
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3171	0.3065	0.6236
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6176	0.6176	
(20) Severity Ratio** (18) / (19)	0.5135	0.4963	1.0098

* 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 2018*

(1) Standard Earned Premium Reported (Table I)			177,487,214
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.9352
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			0.9985
(4) Expense Constant Removal Factor			0.9975
(5) DCCPAP On-Level Factor			1.0142
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			167,669,454
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	15,994,683	20,384,614	36,389,297
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1891	1.8815	
(10) Ultimate Incurred Losses (8) * (9)	35,013,961	38,372,466	73,386,427
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	26,304,950	27,215,994	53,520,944
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.2845	1.4098	
(13) Ultimate Incurred Losses (11) * (12)	33,788,708	38,369,108	72,157,816
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	34,401,335	38,370,787	72,772,122
(15) Factor to 20th Benefit Level (Exhibit V-3)	1.0442	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	45,944,077	49,076,237	95,020,314
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.2740	0.2927	0.5667
(19) Normalized Claim Frequency (Exhibit VII-3)	0.5908	0.5908	
(20) Severity Ratio** (18) / (19)	0.4638	0.4954	0.9592

* 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 2017*

(1) Standard Earned Premium Reported (Table I)			177,594,492
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.9024
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0005
(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)			162,068,901
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	24,999,101	26,786,487	51,784,588
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.5770	1.6573	
(10) Ultimate Incurred Losses (8) * (9)	39,423,582	44,391,588	83,815,170
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	30,490,262	32,414,614	62,904,876
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1599	1.3008	
(13) Ultimate Incurred Losses (11) * (12)	35,365,655	42,164,930	77,530,585
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	37,394,619	43,278,259	80,672,878
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0383	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	49,659,519	55,352,893	105,012,412
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3064	0.3415	0.6479
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6594	0.6594	
(20) Severity Ratio** (18) / (19)	0.4647	0.5179	0.9826

* 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 2016*

(1) Standard Earned Premium Reported (Table I)			165,707,468
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.8807
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0004
(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)			147,832,053
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	27,695,428	28,913,093	56,609,521
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.2392	1.5437	
(10) Ultimate Incurred Losses (8) * (9)	37,089,717	44,634,685	81,724,402
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	33,923,180	34,632,150	68,555,330
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.1046	1.2327	
(13) Ultimate Incurred Losses (11) * (12)	37,471,545	42,691,051	80,162,596
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	37,280,631	43,662,868	80,943,499
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0518	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	50,151,851	55,844,808	105,996,659
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3392	0.3778	0.7170
(19) Normalized Claim Frequency (Exhibit VII-3)	0.6427	0.6427	
(20) Severity Ratio** (18) / (19)	0.5278	0.5879	1.1157

* 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 2015*

(1) Standard Earned Premium Reported (Table I)	146,140,787
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)	0.9303
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)	1.0002
(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)	137,753,043

Losses - Paid-to-20th Method

	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	30,538,810	29,844,077	60,426,887
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.2223	1.4644	
(10) Ultimate Incurred Losses (8) * (9)	37,327,587	43,768,100	81,095,687

Losses - Incurred Method

(11) Incurred Losses (Table I-B & I-C)	33,554,027	32,621,317	66,175,344
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0737	1.1856	
(13) Ultimate Incurred Losses (11) * (12)	36,026,959	38,675,833	74,702,792

Losses - Average of Incurred and Paid-to-20th

(14) Ultimate Incurred Losses ((11) + (13)) / 2	36,677,273	41,221,967	77,899,240
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0679	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	50,095,437	52,722,896	102,818,333
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3637	0.3827	0.7464
(19) Normalized Claim Frequency (Exhibit VII-3)	0.7473	0.7473	
(20) Severity Ratio** (18) / (19)	0.4867	0.5121	0.9988

* 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 2014*

(1) Standard Earned Premium Reported (Table I)			147,920,627
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.8433
(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)			126,125,091
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	30,245,327	26,499,145	56,714,472
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0559	1.4022	
(10) Ultimate Incurred Losses (8) * (9)	34,960,573	37,115,035	72,075,608
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	31,588,864	29,865,279	61,454,143
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0543	1.1513	
(13) Ultimate Incurred Losses (11) * (12)	33,304,139	34,383,896	67,688,035
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	34,132,356	35,749,466	69,881,822
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0695	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	46,689,326	45,723,567	92,412,893
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3702	0.3625	0.7327
(19) Normalized Claim Frequency (Exhibit VII-3)	0.7238	0.7238	
(20) Severity Ratio** (18) / (19)	0.5114	0.5008	1.0122

* 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 2013*

(1) Standard Earned Premium Reported (Table I)			133,292,271
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			0.9275
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0003
(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)			124,958,315
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	35,405,202	32,118,193	67,524,395
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.142	1.3507	
(10) Ultimate Incurred Losses (8) * (9)	39,448,476	43,383,394	82,831,870
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	38,321,322	35,573,144	73,894,466
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0411	1.1254	
(13) Ultimate Incurred Losses (11) * (12)	39,896,328	40,034,016	79,930,344
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	39,672,402	41,708,705	81,381,107
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.0820	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	54,901,764	53,345,434	108,247,198
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4394	0.4269	0.8663
(19) Normalized Claim Frequency (Exhibit VII-3)	0.8259	0.8259	
(20) Severity Ratio** (18) / (19)	0.5320	0.5169	1.0489

* 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 2012*

(1) Standard Earned Premium Reported (Table I)			115,175,309
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			1.1378
(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)			132,638,283
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	34,613,977	30,824,789	65,438,766
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	0.862	1.3069	
(10) Ultimate Incurred Losses (8) * (9)	37,597,702	40,284,917	77,882,619
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	37,189,219	32,880,243	70,069,462
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0316	1.1054	
(13) Ultimate Incurred Losses (11) * (12)	38,364,398	36,345,821	74,710,219
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	37,981,050	38,315,369	76,296,419
(15) Factor to 20th Benefit Level (Exhibit V-3)	1.1056	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	53,707,575	49,005,357	102,712,932
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4049	0.3695	0.7744
(19) Normalized Claim Frequency (Exhibit VII-3)	0.8008	0.8008	
(20) Severity Ratio** (18) / (19)	0.5056	0.4614	0.9670

* 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 2011*

(1) Standard Earned Premium Reported (Table I)			105,712,444
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			1.3259
(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)			141,741,481
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	37,283,249	34,571,585	71,875,834
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0663	1.2691	
(10) Ultimate Incurred Losses (8) * (9)	39,755,128	43,901,450	83,656,578
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	38,122,853	38,851,279	76,974,132
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0246	1.0897	
(13) Ultimate Incurred Losses (11) * (12)	39,060,675	42,336,239	81,396,914
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	39,407,902	43,118,845	82,526,747
(15) Factor to 20th Benefit Level (Exhibit V-3)	1.1216	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	56,531,676	55,149,003	111,680,679
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.3988	0.3891	0.7879
(19) Normalized Claim Frequency (Exhibit VII-3)	0.8895	0.8895	
(20) Severity Ratio** (18) / (19)	0.4483	0.4374	0.8857

* 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 2010*

(1) Standard Earned Premium Reported (Table I)			105,791,129
(2) Factor to 12/1/20 Rate Level (Exhibit V-1)			1.3168
(3) Premium Development Factor to Ultimate Level (Exhibit VI-1)			1.0000
(4) Expense Constant Removal Factor			0.9970
(5) DCCPAP On-Level Factor			1.0141
(6) Other Adjustments			1.0000
(7) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5) * (6)			140,846,160
Losses - Paid-to-20th Method	Indemnity	Medical	Total
(8) Paid Losses (Table I-D & I-E)	38,555,762	39,661,958	78,215,720
(9) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0517	1.2361	
(10) Ultimate Incurred Losses (8) * (9)	40,549,095	49,023,674	89,572,769
Losses - Incurred Method			
(11) Incurred Losses (Table I-B & I-C)	39,929,798	44,599,162	84,528,960
(12) Loss Development Factor to Ultimate Valuation (Exhibit VI-2 & VI-4)	1.0192	1.0772	
(13) Ultimate Incurred Losses (11) * (12)	40,696,450	48,042,217	88,738,667
Losses - Average of Incurred and Paid-to-20th			
(14) Ultimate Incurred Losses (11) + (13) / 2	40,622,773	48,532,946	89,155,719
(15) Factor to 12/1/20 Benefit Level (Exhibit V-3)	1.1181	1.0000	
(16) Factor to Include Loss Adjustment Expense	1.2790	1.2790	
(17) Adjusted Losses (14) * (15) * (16)	58,092,592	62,073,638	120,166,230
(18) Policy Year Loss and Loss Adjustment Expense Ratio (17) / (7)	0.4125	0.4407	0.8532
(19) Normalized Claim Frequency (Exhibit VII-3)	0.9640	0.9640	
(20) Severity Ratio** (18) / (19)	0.4279	0.4571	0.8850

* 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 2015 - 2019
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 12/1/20 RATE LEVEL
2019	VOL	12/01/18	BASE	0.7457	**	0.8672	0.6467	
		12/01/19	0.8671	0.6466		0.0518	0.0335	
		12/01/20	0.8844	0.5719		-----	-----	
						0.9190	0.6802	
	RM	12/01/18	BASE	1.0000		0.0764	0.0764	
		12/01/19	0.8725	0.8725		0.0046	0.004	
		12/01/20	0.912	0.7957		-----	-----	
						0.0810	0.0804	
*	Loss, LAE and LBA portion of 12/1/18 rate.						0.7606	1.0461
2018	VOL	12/01/17	BASE	0.7308	*	0.4282	0.3129	
		6/01/18	1.0000	0.7308		0.4170	0.3047	
		12/01/18	0.9000	0.6577		0.0551	0.0362	
		12/01/19	0.7669	0.5044		-----	-----	
		TO 12/1/20				0.9003	0.6538	
	RM	12/01/17	BASE	1.0000		0.0449	0.0449	
		6/01/18	0.9514	0.9514		0.0488	0.0464	
		12/01/18	0.9271	0.8820		0.0060	0.0053	
		12/01/19	0.7957	0.7018		-----	-----	
		TO 12/1/20				0.0997	0.0966	
*	Loss, LAE and LBA portion of 12/1/17 rate.						0.7504	0.9352
2017	VOL	12/01/16	BASE	0.6999	*	0.8238	0.5766	
		12/01/17	0.9700	0.6789		0.0590	0.0401	
		6/01/18	0.6902	0.4686		-----	-----	
		TO 12/1/20				0.8828	0.6167	
	RM	12/01/16	BASE	1.0000		0.1074	0.1074	
		12/01/17	0.9427	0.9427		0.0098	0.0092	
		6/01/18	0.7019	0.6617		-----	-----	
		TO 12/1/20				0.1172	0.1166	
*	Loss, LAE and LBA portion of 12/1/16 rate.						0.7333	0.9024
2016	VOL	12/01/15	BASE	0.7102	*	0.8071	0.5732	
		12/01/16	1.0000	0.7102		0.0514	0.0365	
		12/01/17	0.6695	0.4755		-----	-----	
		TO 12/1/20				0.8585	0.6097	
	RM	12/01/15	BASE	1.0000		0.1322	0.1322	
		12/01/16	1.0000	1.0000		0.0093	0.0093	
		12/01/17	0.6616	0.6616		-----	-----	
		TO 12/1/20				0.1415	0.1415	
*	Loss, LAE and LBA portion of 12/1/15 rate.						0.7512	0.8807
2015	VOL	12/01/14	BASE	0.7095	*	0.7768	0.5511	
		12/01/15	1.0720	0.7606		0.0564	0.0429	
		12/01/16	0.6695	0.5092		-----	-----	
		TO 12/1/20				0.8332	0.5940	
	RM	12/01/14	BASE	1.0000		0.1552	0.1552	
		12/01/15	1.0709	1.0709		0.0116	0.0124	
		12/01/16	0.6616	0.7085		-----	-----	
		TO 12/1/20				0.1668	0.1676	
*	Loss, LAE and LBA portion of 12/1/14 rate.						0.7616	0.9303

EXHIBIT V - 2
POLICY YEARS 2010 - 2014
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 12/1/20 RATE LEVEL
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	0.7177	0.4598		-----	-----	
		TO 12/1/20				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	0.7086	0.6399		-----	-----	
		TO 12/1/20				0.1447	0.1438	
*	Loss, LAE and LBA portion of 12/1/13 rate.						0.7588	0.8433
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	0.6351	0.5121		-----	-----	
		TO 12/1/20				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	0.6398	0.7127		-----	-----	
		TO 12/1/20				0.1844	0.1858	
*	Loss, LAE and LBA portion of 12/1/12 rate.						0.7684	0.9275
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	0.7241	0.6468		-----	-----	
		TO 12/1/20				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	0.7128	0.8986		-----	-----	
		TO 12/1/20				0.1501	0.1532	
*	Loss, LAE and LBA portion of 12/1/11 rate.						0.7898	1.1378
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	0.8809	0.7626		-----	-----	
		TO 12/1/20				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	0.8985	1.0626		-----	-----	
		TO 12/1/20				0.1079	0.1091	
*	Loss, LAE and LBA portion of 12/1/10 rate.						0.8014	1.3259
2010	VOL	12/01/09	BASE	0.7574	*	0.8561	0.6484	
		12/01/10	0.9749	0.7384		0.0679	0.0501	
		12/01/11	0.9920	0.7325		-----	-----	
		TO 12/1/20				0.9240	0.6985	
	RM	12/01/09	BASE	1.0000		0.0696	0.0696	
		12/01/10	0.9594	0.9594		0.0064	0.0061	
		12/01/11	1.0626	1.0195		-----	-----	
		TO 12/1/20				0.0760	0.0757	
*	Loss, LAE and LBA portion of 12/1/09 rate.						0.7742	1.3168

EXHIBIT V - 3
POLICY YEARS 2010 - 2019
INDEMNITY LOSS ON-LEVEL FACTORS

POLICY YEAR	(1) LAW AMENDMENT DATE	(2) BENEFIT CHANGE	(3) CUM. INDEX OF COL (2)	(4) PORTION OF YEAR ON-LEVEL	(5) PRODUCT (3) * (4)	FACTOR TO ADJUST TO 7/1/21 BENEFIT LEVEL
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	1.0124	1.0490	-----	-----	
				1.0000	1.0218	1.0266
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	1.0254	1.0345	-----	-----	
	TO 7/01/21			1.0000	0.9907	
						1.0442
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	1.0490	1.0515	-----	-----	
	TO 7/01/21			1.0000		
						1.0383
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	1.0345	1.0709	-----	-----	
	TO 7/01/21			1.0000	1.0182	
						1.0518
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	1.0180	0.1250	0.1269	
	7/01/17	1.0515	1.0673	-----	-----	
	TO 7/01/21			1.0000	0.9994	
						1.0679
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	1.0806	1.0806	-----	-----	
	TO 7/01/21			1.0000	1.0104	
						1.0695
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	1.0673	1.1067	-----	-----	
	TO 7/01/21			1.0000	1.0228	
						1.0820
2012	6/13/11	BASE	1.0000	0.1264	0.1264	
	7/01/12	1.0161	1.0161	0.7486	0.7607	
	7/01/13	1.0242	1.0407	0.1250	0.1301	
	7/01/14	1.0806	1.1246	-----	-----	
	TO 7/01/21			1.0000	1.0172	
						1.1056
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	1.1067	1.1173	-----	-----	
	TO 7/01/21			1.0000	0.9962	
						1.1216
2010	6/16/09	BASE	1.0000	0.1124	0.1124	
	6/22/10	0.9974	0.9974	0.7367	0.7348	
	6/13/11	0.9936	0.9910	0.1509	0.1495	
	7/02/12	1.1245	1.1144	-----	-----	
	TO 7/01/21			1.0000	0.9967	
						1.1181

EXHIBIT VI - 1

DEVELOPMENT FACTORS

PREMIUM

<u>Reports in Ratio</u>	<u>Policy Year</u>	<u>Calendar Years 16-17</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>Unweighted Average</u>	<u>Cumulative Average</u>
2nd to 1st	2015	1.0063	2016	1.0073	2017	1.0061	2018	1.0156	1.0000 *	0.9985
3rd to 2nd	2014	0.9990	2015	0.9986	2016	0.9950	2017	0.9994	0.9980	0.9985
4th to 3rd	2013	1.0002	2014	0.9998	2015	1.0007	2016	0.9996	1.0001	1.0005
5th to 4th	2012	1.0014	2013	1.0001	2014	1.0001	2015	0.9991	1.0002	1.0004
6th to 5th	2011	1.0000	2012	1.0001	2013	0.9992	2014	0.9998	0.9998	1.0002
7th to 6th	2010	0.9999	2011	1.0001	2012	1.0001	2013	1.0003	1.0001	1.0004
8th to 7th	2009	1.0000	2010	1.0009	2011	1.0002	2012	1.0000	1.0003	1.0003
9th to 8th	2008	0.9996	2009	1.0001	2010	1.0001	2011	1.0000	1.0000	1.0000
10th to 9th	2007	1.0000	2008	1.0004	2009	1.0000	2010	1.0000	1.0000 *	1.0000
11th to 10th	2006	1.0000	2007	1.0000	2008	1.0000	2009	1.0000	1.0000 *	1.0000
12th to 11th	2005	1.0000	2006	1.0000	2007	1.0002	2008	1.0000	1.0000 *	1.0000
13th to 12th	2004	1.0000	2005	1.0000	2006	1.0000	2007	0.9998	1.0000 *	1.0000
14th to 13th	2003	1.0000	2004	1.0000	2005	1.0000	2006	1.0000	1.0000 *	1.0000
15th to 14th	2002	1.0000	2003	1.0000	2004	1.0000	2005	1.0000	1.0000 *	1.0000
16th to 15th	2001	1.0000	2002	1.0000	2003	1.0000	2004	1.0000	1.0000 *	1.0000
17th to 16th	2000	1.0000	2001	1.0000	2002	1.0000	2003	1.0000	1.0000 *	1.0000
18th to 17th	1999	1.0000	2000	1.0000	2001	1.0000	2002	1.0000	1.0000 *	1.0000
19th to 18th	1998	1.0001	1999	1.0000	2000	1.0000	2001	1.0000	1.0000 *	1.0000
20th to 19th	1997	1.0001	1998	1.0000	1999	1.0000	2000	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 Years 16-17	Policy Year	Calendar Years 17-18	Policy Year	Calendar Years 18-19	Policy Year	Calendar Years 19-20	Unweighted Average	Fitted Value	Cumulative Average		
2nd to 1st	a	2015		2.1482	2016	2.0033	2017	1.8234	2018	1.9765	1.9879	1.9881	4.3521
3rd to 2nd	a	2014		1.4071	2015	1.3183	2016	1.4317	2017	1.4053	1.3906	1.3881	2.1891
4th to 3rd	a	2013		1.2102	2014	1.1499	2015	1.1546	2016	1.1987	1.1784	1.1776	1.5770
5th to 4th	a	2012		1.0971	2013	1.0914	2014	1.0610	2015	1.0724	1.0805	1.0956	1.3392
6th to 5th	a	2011		1.0530	2012	1.0432	2013	1.0416	2014	1.0889	1.0567	1.0575	1.2223
7th to 6th	a	2010		1.0525	2011	1.0497	2012	1.0396	2013	1.0184	1.0401	1.0374	1.1559
8th to 7th	a	2009		1.0710	2010	1.0329	2011	1.0202	2012	1.0371	1.0403	1.0258	1.1142
9th to 8th	a	2008		1.0211	2009	1.0334	2010	1.0211	2011	1.0090	1.012	1.0186	1.0862
10th to 9th	a	2007		1.0111	2008	1.0363	2009	1.0088	2010	1.0042	1.0101	1.0139	1.0663
11th to 10th	a	2006		1.0147	2007	1.0225	2008	1.0139	2009	1.0210	1.012	1.0107	1.0517
12th to 11th	a	2005		1.0061	2006	1.0050	2007	1.0115	2008	1.0176	1.0101	1.0084	1.0406
13th to 12th	a	2004		1.0059	2005	1.0018	2006	1.0118	2007	1.0068	1.0066	1.0067	1.0319
14th to 13th	a	2003		1.0089	2004	1.0089	2005	1.0016	2006	1.0069	1.0066	1.0055	1.0251
15th to 14th	a	2002		1.0001	2003	1.0048	2004	1.0042	2005	1.0049	1.0035	1.0046	1.0194
16th to 15th	a	2001		1.0023	2002	1.0004	2003	1.0024	2004	1.0022	1.0022	1.0038	1.0148
17th to 16th	a	2000		1.0119	2001	1.0017	2002	0.9980	2003	1.0068	1.0046	1.0032	1.0109
18th to 17th	a	1999		1.0043	2000	1.0019	2001	0.9980	2002	0.9996	1.0010	1.0028	1.0077
19th to 18th	a	1998		1.0067	1999	1.0010	2000	1.0048	2001	1.0049	1.0037	1.0024	1.0049
20th to 19th	a	1997		1.0049	1998	1.0010	1999	1.0000	2000	1.0002	1.0015	1.0042	1.0025
21st to 20th	a	1996		1.0016	1997	1.0015	1998	1.0016	1999	1.0000	1.0012	0.9983	0.9983
22nd to 21st	a	1995		1.0008	1996	1.0010	1997	1.0032	1998	1.0016	1.0019		
23rd to 22nd	a	1994		1.0011	1995	1.0011	1996	1.0012	1997	1.0011	1.0029		
24th to 23rd	a	1993		1.0034	1994	1.0039	1995	1.0011	1996	1.0011	1.0021		
25th to 24th	a	1992		0.9993	1993	1.0022	1994	1.0021	1995	1.0013	1.0012		
26th to 25th	a	1991		1.0010	1992	0.9991	1993	1.0014	1994	1.0029	1.0011		
27th to 26th	a	1990		1.0011	1991	0.9996	1992	0.9982	1993	1.0029	1.0005		
28th to 27th	a	1989		0.9965	1990	1.0015	1991	0.9995	1992	0.9999	0.9994		
29th to 28th	a	1988		0.9998	1989	0.9997	1990	1.0009	1991	0.9988	0.9998		
30th to 29th	a	1987		1.0056	1988	1.0000	1989	1.0011	1990	1.0019	1.0022		

INCURRED METHOD

Reports in Ratio	Policy Year	Calendar Years 16-17	Policy Year	Calendar Years 17-18	Policy Year	Calendar Years 18-19	Policy Year	Calendar Years 19-20	Unweighted Average	Fitted Value	Cumulative Average	
2nd to 1st	b	2015	1.4607	2016	1.4357	2017	1.3337	2018	1.2968	1.3817	1.3818	1.7749
3rd to 2nd	b	2014	1.0982	2015	1.0946	2016	1.1330	2017	1.1108	1.1092	1.1074	1.2845
4th to 3rd	b	2013	1.0302	2014	1.0238	2015	1.0495	2016	1.0490	1.0451	1.0501	1.1599
5th to 4th	b	2012	1.0278	2013	1.0238	2014	1.0309	2015	1.0397	1.0306	1.0287	1.1046
6th to 5th	b	2011	1.0088	2012	1.0111	2013	1.0144	2014	1.0175	1.0130	1.0184	1.0737
7th to 6th	b	2010	1.0303	2011	1.0194	2012	1.0229	2013	1.0099	1.0206	1.0127	1.0543
8th to 7th	b	2009	1.0167	2010	1.0031	2011	0.9998	2012	1.0205	1.0100	1.0092	1.0411
9th to 8th	b	2008	1.0063	2009	1.0022	2010	1.0139	2011	1.0056	1.0118	1.0069	1.0316
10th to 9th	b	2007	0.9953	2008	1.0222	2009	1.0124	2010	0.9978	1.0073	1.0053	1.0246
11th to 10th	b	2006	1.0030	2007	0.9999	2008	1.0034	2009	1.0052	1.0029	1.0042	1.0192
12th to 11th	b	2005	1.0038	2006	0.9966	2007	1.0020	2008	1.0128	1.0038	1.0034	1.0149
13th to 12th	b	2004	1.0020	2005	0.9992	2006	1.0049	2007	1.0013	1.0019	1.0028	1.0115
14th to 13th	b	2003	0.9993	2004	1.0064	2005	1.0025	2006	1.0020	1.0025	1.0023	1.0086
15th to 14th	b	2002	0.9998	2003	0.9999	2004	1.0020	2005	1.0029	1.0010	1.0019	1.0063
16th to 15th	b	2001	0.9958	2002	0.9983	2003	0.9949	2004	0.9999	0.9972	1.0016	1.0044
17th to 16th	b	2000	0.9986	2001	1.0000	2002	0.9971	2003	1.0047	1.0001	1.0014	1.0028
18th to 17th	b	1999	1.0028	2000	1.0004	2001	0.9977	2002	0.9993	1.0001	1.0012	1.0014
19th to 18th	b	1998	1.0001	1999	0.9965	2000	1.0015	2001	0.9987	0.9993	1.0010	1.0002
20th to 19th	b	1997	0.9993	1998	1.0017	1999	1.0000	2000	0.9990	1.0000	1.0009	0.9992
21st to 20th	b	1996	1.0001	1997	1.0006	1998	0.9997	1999	1.0000	1.0001	0.9983	d 0.9983
22nd to 21st	b	1995	0.9998	1996	0.9915	1997	1.0024	1998	1.0000	0.9984		
23rd to 22nd	b	1994	1.0024	1995	1.0005	1996	0.9979	1997	1.0014	1.0006		
24th to 23rd	b	1993	1.0005	1994	1.0044	1995	0.9986	1996	0.9993	1.0007		
25th to 24th	b	1992	0.9985	1993	0.9964	1994	1.0022	1995	1.0021	0.9998		
26th to 25th	b	1991	0.9970	1992	0.9989	1993	0.9998	1994	1.0008	0.9991		
27th to 26th	b	1990	1.0029	1991	0.9989	1992	0.9982	1993	1.0013	1.0003		
28th to 27th	b	1989	0.9976	1990	1.0010	1991	0.9989	1992	0.9987	0.9991		
29th to 28th	b	1988	0.9994	1989	0.9999	1990	0.9993	1991	0.9988	0.9994		
30th to 29th	b	1987	1.0068	1988	0.9996	1989	1.0000	1990	1.0006	1.0018		
Beyond 30th	b	1986 & Prior	1.0016	1987 & Prior	0.9805	1988 & Prior	0.9980	1989 & Prior	1.0014	0.9954		

a From Table I-D

b From Table I-B

c Selected Paid to Incurred Loss Development Factor

d Derived Separately See Exhibit 3 of the December 31, 2021 Filing

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	1.9879	0.9879	0.9881	1.9881
3rd to 2nd	1.3906	0.3906	0.3881	1.3881
4th to 3rd	1.1784	0.1784	0.1776	1.1776
5th to 4th	1.0805	0.0805	0.0956	1.0956
6th to 5th	1.0567	0.0567	0.0575	1.0575
7th to 6th	1.0401	0.0401	0.0374	1.0374
8th to 7th	1.0403	0.0403	0.0258	1.0258
9th to 8th	1.0212	0.0212	0.0186	1.0186
10th to 9th	1.0151	0.0151	0.0139	1.0139
11th to 10th	1.0180	0.0180	0.0107	1.0107
12th to 11th	1.0101	0.0101	0.0084	1.0084
13th to 12th	1.0066	0.0066	0.0067	1.0067
14th to 13th	1.0066	0.0066	0.0055	1.0055
15th to 14th	1.0035	0.0035	0.0046	1.0046
16th to 15th	1.0018	0.0018	0.0038	1.0038
17th to 16th	1.0046	0.0046	0.0032	1.0032
18th to 17th	1.0010	0.0010	0.0028	1.0028
19th to 18th	1.0037	0.0037	0.0024	1.0024
20th to 19th*	1.0042	0.0042	0.0042	1.0042

$$Y = \exp(a+b/x+c*\ln(x))$$

$$a = 1.856273 \quad b = -1.868193 \quad c = -2.695862$$

* Selected Paid to Incurred Loss Development Factor

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	1.3817	0.3817	0.3818	1.3818
3rd to 2nd	1.1092	0.1092	0.1074	1.1074
4th to 3rd	1.0451	0.0451	0.0501	1.0501
5th to 4th	1.0306	0.0306	0.0287	1.0287
6th to 5th	1.0130	0.0130	0.0184	1.0184
7th to 6th	1.0100	0.0100	0.0127	1.0127
8th to 7th	1.0118	0.0118	0.0092	1.0092
9th to 8th	1.0073	0.0073	0.0069	1.0069
10th to 9th	1.0073	0.0073	0.0053	1.0053
11th to 10th	1.0029	0.0029	0.0042	1.0042
12th to 11th	1.0038	0.0038	0.0034	1.0034
13th to 12th	1.0019	0.0019	0.0028	1.0028
14th to 13th	1.0025	0.0025	0.0023	1.0023
15th to 14th	1.0010	0.0010	0.0019	1.0019
16th to 15th	0.9972	-0.0028	0.0016	1.0016
17th to 16th	1.0001	0.0001	0.0014	1.0014
18th to 17th	1.0001	0.0001	0.0012	1.0012
19th to 18th	0.9993	-0.0007	0.0010	1.0010
20th to 19th	1.0000	0.0000	0.0009	1.0009
Beyond 20th +	0.9983	-0.0017	-0.0017	0.9983

$$Y = a*b^x*x^c$$

$$a = 0.402011 \quad b = 0.949650 \quad c = -1.754997$$

+ Derived Separately See Exhibit 3 of the December 31, 2021 Filing

DEVELOPMENT FACTORS

MEDICAL LOSSES
PAID METHOD - LIMITED LOSS BASIS

		Calendar		Calendar		Calendar		Calendar	
Reports in Ratio	Policy Year	Years 12-13	Policy Year	Years 13-14	Policy Year	Years 14-15	Policy Year	Years 15-16	
2nd to 1st	a	2011	1.3538	2012	1.3604	2013	1.4553	2014	1.4064
3rd to 2nd	a	2010	1.1659	2011	1.1127	2012	1.1744	2013	1.1890
4th to 3rd	a	2009	1.0989	2010	1.1042	2011	1.0794	2012	1.0851
5th to 4th	a	2008	1.0908	2009	1.0575	2010	1.0721	2011	1.0176
6th to 5th	a	2007	1.0467	2008	1.0532	2009	1.0852	2010	1.0457
7th to 6th	a	2006	1.0464	2007	1.0357	2008	1.0508	2009	1.0631
8th to 7th	a	2005	1.0386	2006	1.0455	2007	1.0336	2008	1.0420
9th to 8th	a	2004	1.0252	2005	1.0287	2006	1.0442	2007	1.0319
10th to 9th	a	2003	1.0398	2004	1.0274	2005	1.0196	2006	1.0199
11th to 10th	a	2002	1.0348	2003	1.0320	2004	1.0314	2005	1.0412
12th to 11th	a	2001	1.0233	2002	1.0330	2003	1.0216	2004	1.0198
13th to 12th	a	2000	1.0273	2001	1.0212	2002	1.0495	2003	1.0215
14th to 13th	a	1999	1.0122	2000	1.0217	2001	1.0135	2002	1.0146
15th to 14th	a	1998	1.0106	1999	1.0046	2000	1.0190	2001	1.0112
16th to 15th	a	1997	1.0172	1998	1.0047	1999	1.0167	2000	1.0106
17th to 16th	a	1996	1.0243	1997	1.0226	1998	1.0089	1999	1.0064
18th to 17th	a	1995	1.0276	1996	1.0181	1997	1.0099	1998	1.0145
19th to 18th	a	1994	1.0114	1995	1.0141	1996	1.0079	1997	1.0185
20th to 19th	a	1993	1.0146	1994	1.0243	1995	1.0079	1996	1.0144
21st to 20th	a	1992	1.0082	1993	1.0086	1994	1.0054	1995	1.0061
22nd to 21st	a	1991	1.0086	1992	1.0116	1993	1.0127	1994	1.0092
23rd to 22nd	a	1990	1.0128	1991	1.0083	1992	1.0072	1993	1.0104
24th to 23rd	a	1989	1.0130	1990	1.0072	1991	1.0030	1992	1.0040
25th to 24th	a	1988	1.0065	1989	1.0167	1990	1.0079	1991	1.0030
26th to 25th	a	1987	1.0332	1988	1.0050	1989	1.0196	1990	1.0044
27th to 26th	a	1986	1.0123	1987	1.0112	1988	1.0023	1989	1.0031
28th to 27th	a			1986	1.0037	1987	1.0083	1988	1.0014
29th to 28th	a					1986	1.0044	1987	1.0144
30th to 29th	a							1986	1.0017

INCURRED METHOD

Reports in Ratio	Policy Year	Calendar	Policy Year	Calendar	Policy Year	Calendar	Policy Year	Calendar	
		Years 12-13		Years 13-14		Years 14-15		Years 15-16	
2nd to 1st	b	2011	1.1849	2012	1.2377	2013	1.2919	2014	1.1976
3rd to 2nd	b	2010	1.1308	2011	1.0855	2012	1.1434	2013	1.1483
4th to 3rd	b	2009	1.0529	2010	1.0692	2011	1.0454	2012	1.0549
5th to 4th	b	2008	1.0529	2009	1.1216	2010	1.0654	2011	1.0333
6th to 5th	b	2007	1.0358	2008	1.0812	2009	1.0573	2010	1.0620
7th to 6th	b	2006	1.0396	2007	1.0224	2008	1.0442	2009	1.0311
8th to 7th	b	2005	1.0117	2006	1.0615	2007	1.0285	2008	1.0636
9th to 8th	b	2004	1.0037	2005	1.0329	2006	1.0079	2007	1.0397
10th to 9th	b	2003	1.0037	2004	1.0161	2005	1.0266	2006	1.0294
11th to 10th	b	2002	0.9763	2003	1.0119	2004	1.0345	2005	1.0264
12th to 11th	b	2001	0.9936	2002	1.0135	2003	1.0120	2004	1.0377
13th to 12th	b	2000	1.0208	2001	0.9987	2002	1.0212	2003	1.0244
14th to 13th	b	1999	0.9926	2000	0.9887	2001	1.0236	2002	1.0221
15th to 14th	b	1998	1.0145	1999	0.9764	2000	0.9915	2001	1.0348
16th to 15th	b	1997	1.0111	1998	0.9990	1999	1.0185	2000	1.0124
17th to 16th	b	1996	1.0210	1997	1.0017	1998	1.0029	1999	0.9934
18th to 17th	b	1995	0.9968	1996	0.9846	1997	1.0035	1998	1.0206
19th to 18th	b	1994	1.0116	1995	0.9932	1996	1.0199	1997	0.9985
20th to 19th	b	1993	0.9801	1994	0.9761	1995	1.0025	1996	0.9986
21st to 20th	b	1992	1.0014	1993	1.0122	1994	1.0058	1995	1.0042
22nd to 21st	b	1991	0.9944	1992	1.0034	1993	1.0070	1994	0.9865
23rd to 22nd	b	1990	0.9917	1991	0.9838	1992	1.0153	1993	1.0001
24th to 23rd	b	1989	1.0027	1990	1.0027	1991	1.0039	1992	1.0083
25th to 24th	b	1988	0.9995	1989	1.0077	1990	1.0115	1991	0.9996
26th to 25th	b	1987	1.0281	1988	0.9967	1989	1.0121	1990	1.0134
27th to 26th	b	1986	0.9757	1987	1.0041	1988	1.0040	1989	1.0050
28th to 27th	b			1986	1.0056	1987	1.0083	1988	1.0017
29th to 28th	b					1986	1.0013	1987	1.0077
30th to 29th	b							1986	1.0004
Beyond 30th	b	1985 & Prior	1.0553	1985 & Prior	1.0165	1985 & Prior	0.9826	1985 & Prior	1.0067

a From Table I-E

b From Table I-C

DEVELOPMENT FACTORS

MEDICAL LOSSES
PAID METHOD - LIMITED LOSS BASIS

Reports in Ratio	Policy Year	Calendar Years 16-17	Policy Year	Calendar Years 17-18	Policy Year	Calendar Years 18-19	Policy Year	Calendar Years 19-20	Unweighted Average	Fitted Value	Cumulative Average
2nd to 1st	a	2015	1.3369	2016	1.3721	2017	1.3359	2018	1.3168	1.3672	2.5724
3rd to 2nd	a	2014	1.1406	2015	1.0890	2016	1.1023	2017	1.1090	1.1354	1.8815
4th to 3rd	a	2013	1.0735	2014	1.0509	2015	1.0388	2016	1.0550	1.0732	1.6573
5th to 4th	a	2012	1.0657	2013	1.0598	2014	1.0381	2015	1.0225	1.0530	1.5437
6th to 5th	a	2011	1.0568	2012	1.0323	2013	1.0268	2014	1.0311	1.0472	1.4644
7th to 6th	a	2010	1.0408	2011	1.0247	2012	1.0295	2013	1.0150	1.0383	1.4022
8th to 7th	a	2009	1.0426	2010	1.0334	2011	1.0109	2012	1.0067	1.0317	1.3507
9th to 8th	a	2008	1.0235	2009	1.0301	2010	1.0184	2011	1.0062	1.0299	1.3069
10th to 9th	a	2007	1.0396	2008	1.0310	2009	1.0201	2010	1.0143	1.0292	1.2691
11th to 10th	a	2006	1.0216	2007	1.0120	2008	1.0246	2009	1.0286	1.0285	1.2361
12th to 11th	a	2005	1.0179	2006	1.0190	2007	1.0236	2008	1.0096	1.0210	1.2069
13th to 12th	a	2004	1.0175	2005	1.0105	2006	1.0067	2007	1.0182	1.0216	1.1809
14th to 13th	a	2003	1.0321	2004	1.0236	2005	1.0172	2006	1.0162	1.0189	1.1578
15th to 14th	a	2002	1.0131	2003	1.0247	2004	1.0157	2005	1.0169	1.0170	1.1368
16th to 15th	a	2001	1.0148	2002	1.0148	2003	1.0184	2004	1.0096	1.0131	1.1180
17th to 16th	a	2000	1.0066	2001	1.0097	2002	1.0046	2003	1.0078	1.0114	1.1009
18th to 17th	a	1999	1.0034	2000	1.0062	2001	1.0125	2002	1.0100	1.0128	1.0853
19th to 18th	a	1998	1.0209	1999	1.0144	2000	1.0110	2001	1.0076	1.0150	1.0710
20th to 19th	a	1997	1.0065	1998	1.0045	1999	1.0015	2000	1.0056	1.0250	1.0580
21st to 20th	a	1996	1.0097	1997	1.0152	1998	1.0049	1999	1.0028	1.0089	1.0322
22nd to 21st	a	1995	1.0039	1996	1.0090	1997	1.0161	1998	1.0049	1.0094	
23rd to 22nd	a	1994	1.0059	1995	1.0039	1996	1.0098	1997	1.0022	1.0076	
24th to 23rd	a	1993	1.0092	1994	1.0059	1995	1.0070	1996	1.0026	1.0077	
25th to 24th	a	1992	1.0022	1993	1.0225	1994	1.0015	1995	1.0035	1.0080	
26th to 25th	a	1991	1.0042	1992	1.0016	1993	1.0112	1994	1.0016	1.0101	
27th to 26th	a	1990	1.0088	1991	1.0056	1992	1.0037	1993	1.0071	1.0068	
28th to 27th	a	1989	1.0137	1990	1.0062	1991	1.0019	1992	1.0027	1.0054	
29th to 28th	a	1988	1.0005	1989	1.0023	1990	1.0094	1991	1.0041	1.0059	
30th to 29th	a	1987	1.0091	1988	1.0017	1989	1.0098	1990	1.0243	1.0091	

INCURRED METHOD

Reports in Ratio	Policy Year	Calendar Years 16-17	Policy Year	Calendar Years 17-18	Policy Year	Calendar Years 18-19	Policy Year	Calendar Years 19-20	Unweighted Average	Fitted Value	Cumulative Average
2nd to 1st	b	2015	1.1077	2016	1.0724	2017	1.0505	2018	1.0042	1.1566	1.6279
3rd to 2nd	b	2014	1.0726	2015	1.0604	2016	1.0449	2017	1.0309	1.0840	1.4098
4th to 3rd	b	2013	1.0736	2014	1.0395	2015	0.9722	2016	1.0023	1.0406	1.3008
5th to 4th	b	2012	1.0128	2013	1.0507	2014	1.0293	2015	1.0245	1.0432	1.2327
6th to 5th	b	2011	1.0266	2012	1.0040	2013	1.0321	2014	0.9878	1.0396	1.1856
7th to 6th	b	2010	1.0467	2011	1.0020	2012	0.9968	2013	1.0001	1.0229	1.1513
8th to 7th	b	2009	1.0319	2010	1.0128	2011	0.9962	2012	0.9838	1.0244	1.1254
9th to 8th	b	2008	1.0120	2009	1.0349	2010	0.9800	2011	1.0043	1.0132	1.1054
10th to 9th	b	2007	1.0005	2008	1.0093	2009	1.0181	2010	0.9977	1.0150	1.0897
11th to 10th	b	2006	1.0008	2007	1.0013	2008	0.9726	2009	1.0080	1.0042	1.0772
12th to 11th	b	2005	0.9914	2006	1.0055	2007	0.9882	2008	0.9947	1.0007	1.0672
13th to 12th	b	2004	1.0395	2005	1.0121	2006	0.9818	2007	0.9923	1.0114	1.0591
14th to 13th	b	2003	1.0118	2004	1.0285	2005	1.0059	2006	0.9970	1.0088	1.0526
15th to 14th	b	2002	1.0023	2003	1.0105	2004	0.9981	2005	0.9927	1.0026	1.0474
16th to 15th	b	2001	1.0055	2002	0.9850	2003	0.9906	2004	1.0276	1.0062	1.0432
17th to 16th	b	2000	1.0202	2001	1.0083	2002	0.9981	2003	0.9904	1.0045	1.0399
18th to 17th	b	1999	1.0153	2000	0.9677	2001	0.9758	2002	0.9996	0.9955	1.0372
19th to 18th	b	1998	0.9980	1999	0.9998	2000	0.9869	2001	0.9906	0.9998	1.0351
20th to 19th	b	1997	1.0174	1998	1.0028	1999	0.9960	2000	1.0020	0.9969	1.0334
21st to 20th	b	1996	0.9940	1997	1.0151	1998	0.9958	1999	0.9967	1.0032	1.0322
22nd to 21st	b	1995	0.9735	1996	1.0010	1997	0.9870	1998	0.9884	0.9927	
23rd to 22nd	b	1994	1.0041	1995	1.0037	1996	0.9798	1997	0.9976	0.9970	
24th to 23rd	b	1993	0.9994	1994	1.0152	1995	0.9966	1996	0.9965	1.0032	
25th to 24th	b	1992	1.0000	1993	1.0081	1994	1.0129	1995	0.9974	1.0046	
26th to 25th	b	1991	1.0019	1992	0.9955	1993	1.0126	1994	0.9881	1.0061	
27th to 26th	b	1990	0.9929	1991	1.0069	1992	1.0030	1993	0.9776	0.9962	
28th to 27th	b	1989	1.0068	1990	1.0106	1991	1.0004	1992	0.9966	1.0043	
29th to 28th	b	1988	1.0013	1989	0.9971	1990	1.0009	1991	1.0040	1.0021	
30th to 29th	b	1987	0.9915	1988	1.0016	1989	1.0021	1990	0.9857	0.9963	
Beyond 30th	b	1986 & Prior	1.0318	1987 & Prior	0.9960	1988 & Prior	1.0187	1989 & Prior	1.0545	1.0203	

a From Table I-E

b From Table I-C

c Selected Paid to Incurred Loss Development Factor

d Derived Separately See Exhibit 3 of the December 31, 2021 Filing

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	1.3672	0.3672	0.3672	1.3672
3rd to 2nd	1.1354	0.1354	0.1353	1.1353
4th to 3rd	1.0732	0.0732	0.0736	1.0736
5th to 4th	1.0530	0.0530	0.0541	1.0541
6th to 5th	1.0472	0.0472	0.0444	1.0444
7th to 6th	1.0383	0.0383	0.0381	1.0381
8th to 7th	1.0317	0.0317	0.0335	1.0335
9th to 8th	1.0260	0.0260	0.0298	1.0298
10th to 9th	1.0292	0.0292	0.0267	1.0267
11th to 10th	1.0285	0.0285	0.0242	1.0242
12th to 11th	1.0210	0.0210	0.0220	1.0220
13th to 12th	1.0216	0.0216	0.0200	1.0200
14th to 13th	1.0189	0.0189	0.0184	1.0184
15th to 14th	1.0170	0.0170	0.0169	1.0169
16th to 15th	1.0131	0.0131	0.0155	1.0155
17th to 16th	1.0114	0.0114	0.0144	1.0144
18th to 17th	1.0128	0.0128	0.0133	1.0133
19th to 18th	1.0150	0.0150	0.0123	1.0123
20th to 19th*	1.0250	0.0250	0.0250	1.0250

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

$$a = -0.007680 \quad b = 0.426727 \quad c = -1.369750 \quad d = 3.034472 \quad e = -1.711111$$

* Selected Paid to Incurred Loss Development Factor

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	1.1566	0.1566	0.1547	1.1547
3rd to 2nd	1.0840	0.0840	0.0838	1.0838
4th to 3rd	1.0406	0.0406	0.0553	1.0553
5th to 4th	1.0432	0.0432	0.0397	1.0397
6th to 5th	1.0306	0.0306	0.0298	1.0298
7th to 6th	1.0229	0.0229	0.0230	1.0230
8th to 7th	0.0244	0.0244	0.0181	1.0181
9th to 8th	0.0132	0.0132	0.0144	1.0144
10th to 9th	0.0150	0.0150	0.0116	1.0116
11th to 10th	0.0042	0.0042	0.0094	1.0094
12th to 11th	1.0007	0.0007	0.0076	1.0076
13th to 12th	1.0114	0.0114	0.0062	1.0062
14th to 13th	0.0088	0.0088	0.0050	1.0050
15th to 14th	1.0026	0.0026	0.0040	1.0040
16th to 15th	1.0062	0.0062	0.0032	1.0032
17th to 16th	1.0045	0.0045	0.0026	1.0026
18th to 17th	0.9955	-0.0045	0.0020	1.0020
19th to 18th	0.9998	-0.0002	0.0016	1.0016
20th to 19th	0.9969	-0.0031	0.0012	1.0012
Beyond 20th +	1.0322	0.0322	0.0322	1.0322

$$Y = a + b \ln(x) + c/x^{0.5}$$

$$a = -0.156672 \quad b = 0.029359 \quad c = 0.311327$$

+ Derived Separately See Exhibit 3 of the December 31, 2021 Filing

EXHIBIT VII - 1

DETERMINATION OF TREND

INDEMNITY

Policy Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Actual Loss Ratio	0.4125	0.4125	0.4049	0.4394	0.3702	0.3637	0.3392	0.3064	0.2740	0.3171
Normalized Frequency	0.9640	0.8895	0.8008	0.8259	0.7238	0.7473	0.6427	0.6594	0.5908	0.6176
Severity Loss Ratio	0.4279	0.4637	0.5056	0.5320	0.5114	0.4867	0.5278	0.4647	0.4638	0.5135
x	1	2	3	4	5	6	7	8	9	10
y	0.4279	0.4637	0.5056	0.5320	0.5114	0.4867	0.5278	0.4647	0.4638	0.5135

7 Point Exponential Regression: $y = 0.524723 * 0.987654 ^ x$ Selected Annual Trend =

Policy Year	Annual Trend Factor (1)	Trend Period # Years to 12/1/22 (2)	Severity Trend Factor (3) = (1) ⁽²⁾	Frequency Trend Factor (4) #
2016	0.9877	5.9167	0.9191	0.7434
2017	0.9877	4.9167	0.9191	0.7816
2018	0.9877	3.9167	0.9527	0.8217
2019	0.9877	2.9167	0.9644	0.8640

Trended Loss Ratio

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3)*(4)	Trended Loss Ratio (7) = (5)*(6)
2016	0.3392	0.6907	0.2343
2017	0.3064	0.7353	0.2253
2018	0.2740	0.8127	0.2145
2019	0.3171	0.8332	0.2642
Average			0.2346

See Page 24 for column (4).

EXHIBIT VII - 2

DETERMINATION OF TREND

MEDICAL

Policy Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Actual Loss Ratio	0.4407	0.3891	0.3695	0.4269	0.3625	0.3827	0.3778	0.3415	0.2927	0.3065
Normalized Frequency	0.9640	0.8895	0.8008	0.8259	0.7238	0.7473	0.6427	0.6594	0.5908	0.6176
Severity Loss Ratio	0.4571	0.4374	0.4614	0.5169	0.5008	0.5121	0.5879	0.5179	0.4954	0.4963

x	1	2	3	4	5	6	7	8	9	10
y	0.4571	0.4374	0.4614	0.5169	0.5008	0.5121	0.5879	0.5179	0.4954	0.4963

7 Point Exponential Regression: $y = 0.534797 * 0.995282^x$

Selected Annual Trend Factor to 1/31/2018 = **-0.47%**

10 Point Exponential Regression: $y = 0.455567 * 1.015871^x$

Selected Annual Trend Factor from 1/31/2018 and later = **1.59%**

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 12/1/22 (4)	Trend Period # of Years from 1/31/18 to 12/1/22 (5)	Severity Trend Factor from 1/31/18 to 12/1/22 (6) = (4) ^ (5)	Frequency Trend Factor (7) #
2016	0.9953	1.0833	0.9949	1.0159	4.8334	1.0711	0.7434
2017	0.9953	0.0833	0.9996	1.0159	4.8334	1.0711	0.7816
2018	0.9953	0.0000	1.0000	1.0159	2.9167	1.0470	0.8217
2019	0.9953	0.0000	1.0000	1.0159	2.9167	1.0470	0.8640

Trended Loss Ratio

Policy Year	Actual Loss Ratio (8)	Combined Trend Factor (9) = (3)*(6)*(7)	Trended Loss Ratio (10) = (8)*(9)
2016	0.3778	0.8411	0.3015
2017	0.3415	0.8411	0.2879
2018	0.2927	0.8740	0.2558
2019	0.3065	0.9046	0.2773
Average			0.2806

See Page 24 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
2009	11.95	1.0000
2010	11.52	0.9640
2011	10.63	0.8895
2012	9.57	0.8008
2013	9.87	0.8259
2014	8.65	0.7238
2015	8.93	0.7473
2016	7.68	0.6594
2017	7.88	0.6594
2018	7.06	0.5908
2019	7.38	0.6176

Policy Year	2013	2014	2015	2016	2017	2018	2019
x	1	2	3	4	5	6	7
y	0.8259	0.7238	0.7473	0.6271	0.6594	0.5908	0.6176

7 Point (2013 - 2019) Exponential Regression: $y = 0.834199 * 0.951111 ^ x$

Selected Annual Trend = -4.9%

Policy Year	Annual Trend Factor (1)	# of Years to 12/1/22 (2)	Frequency Trend Factor (3) = (1)^(2)
2016	0.9511	5.9167	0.7434
2017	0.9511	4.9167	0.7816
2018	0.9511	3.9167	0.8217
2019	0.9511	2.9167	0.8640

TABLE I

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

ACCUMULATED STANDARD EARNED PREMIUM

Policy Year Valued	As of 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior to 1987	564,297,200	564,297,203	1.0000	Prior to 1988	650,116,801	650,116,791	1.0000
1987	85,943,515	85,943,515	1.0000	1988	102,949,395	102,949,395	1.0000
1988	102,949,395	102,949,395	1.0000	1989	110,768,371	110,768,371	1.0000
1989	110,768,371	110,768,371	1.0000	1990	99,934,859	99,934,859	1.0000
1990	99,948,026	99,947,912	1.0000	1991	95,947,530	95,966,485	1.0002
1991	95,933,003	95,962,865	1.0003	1992	87,086,969	87,086,969	1.0000
1992	87,086,967	87,086,969	1.0000	1993	87,801,353	87,801,353	1.0000
1993	87,798,331	87,801,353	1.0000	1994	82,320,327	82,320,327	1.0000
1994	82,331,367	82,320,327	0.9999	1995	78,691,441	78,691,441	1.0000
1995	78,691,441	78,691,441	1.0000	1996	82,678,809	82,575,994	0.9999
1996	82,672,594	82,678,809	1.0001	1997	81,863,105	81,965,920	1.0001
1997	81,857,161	81,863,105	1.0001	1998	86,448,932	86,448,932	1.0000
1998	86,443,563	86,448,932	1.0001	1999	80,897,648	80,897,648	1.0000
1999	80,897,648	80,897,648	1.0000	2000	89,553,605	89,553,605	1.0000
2000	89,553,797	89,553,797	1.0000	2001	88,074,135	88,074,135	1.0000
2001	88,080,811	88,080,811	1.0000	2002	114,189,999	114,189,999	1.0000
2002	114,192,701	114,192,701	1.0000	2003	129,543,523	129,543,523	1.0000
2003	129,543,523	129,543,523	1.0000	2004	152,893,886	152,893,886	1.0000
2004	152,893,886	152,895,078	1.0000	2005	186,170,904	186,170,904	1.0000
2005	186,169,392	186,171,051	1.0000	2006	205,768,535	205,768,535	1.0000
2006	205,773,242	205,776,172	1.0000	2007	199,891,429	199,891,429	1.0000
2007	199,887,660	199,891,429	1.0000	2008	151,013,810	151,013,810	1.0004
2008	151,069,626	151,013,810	0.9996	2009	118,569,653	118,569,653	1.0001
2009	118,571,401	118,569,653	1.0000	2010	106,015,702	106,015,702	1.0009
2010	106,015,702	106,009,876	0.9999	2011	105,745,325	105,743,602	1.0001
2011	105,745,325	105,743,602	1.0000	2012	115,084,547	115,247,366	1.0014
2012	115,084,547	115,247,366	1.0014	2013	135,193,150	135,225,120	1.0002
2013	135,193,150	135,225,120	1.0002	2014	148,219,374	148,064,859	0.9998
2014	148,219,374	148,064,859	0.9990	2015	145,539,422	146,452,216	0.9986
2015	145,539,422	146,452,216	1.0063	2016	87,557,081	165,480,644	1.0073
2016	87,557,081	165,480,644	1.8900	2017		176,718,905	1.8921
2017		93,396,340		2018		95,938,159	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1989	752,956,395	752,956,400	1.0000	Prior to 1990	863,423,977	863,423,831	1.0000
1989	110,749,576	110,749,576	1.0000	1990	99,915,475	99,915,475	1.0000
1990	99,918,040	99,918,040	1.0000	1991	95,961,795	95,978,940	1.0002
1991	95,943,791	95,934,541	0.9999	1992	87,055,817	87,055,817	1.0000
1992	87,056,860	87,056,860	1.0000	1993	87,753,360	87,753,360	1.0000
1993	87,770,982	87,770,982	1.0000	1994	82,284,648	82,284,648	1.0000
1994	82,285,706	82,285,706	1.0000	1995	78,651,340	78,651,340	1.0000
1995	78,651,340	78,651,340	1.0000	1996	82,533,546	82,533,546	1.0000
1996	82,533,546	82,533,546	1.0000	1997	81,908,125	81,908,125	1.0000
1997	81,921,800	81,921,800	1.0000	1998	86,384,318	86,384,318	1.0000
1998	86,403,533	86,403,533	1.0000	1999	80,832,002	80,832,002	1.0000
1999	80,847,508	80,847,508	1.0000	2000	89,472,562	89,472,562	1.0000
2000	89,482,794	89,482,794	1.0000	2001	87,995,899	87,995,899	1.0000
2001	88,003,203	88,003,203	1.0000	2002	114,125,292	114,125,292	1.0000
2002	114,130,309	114,130,309	1.0000	2003	129,449,663	129,449,663	1.0000
2003	129,497,030	129,497,030	1.0000	2004	152,795,198	152,795,197	1.0000
2004	152,848,419	152,848,419	1.0000	2005	186,050,914	186,050,914	1.0000
2005	186,118,336	186,118,337	1.0000	2006	205,640,535	205,640,534	1.0000
2006	205,712,731	205,717,577	1.0000	2007	199,785,157	199,752,892	0.9998
2007	199,830,762	199,865,396	1.0002	2008	151,005,306	151,005,305	1.0000
2008	151,065,057	151,069,567	1.0000	2009	118,466,735	118,465,646	1.0000
2009	118,585,410	118,590,101	1.0000	2010	105,791,129	105,791,129	1.0000
2010	106,106,904	106,116,744	1.0001	2011	105,712,444	105,712,444	1.0000
2011	105,754,587	105,773,822	1.0002	2012	115,174,650	115,175,309	1.0000
2012	115,258,614	115,267,794	1.0001	2013	133,255,764	133,292,271	1.0003
2013	135,232,793	135,130,720	0.9992	2014	147,952,085	147,920,627	0.9998
2014	148,028,975	148,049,227	1.0001	2015	146,278,365	146,140,787	0.9991
2015	146,248,253	146,348,416	1.0007	2016	165,772,885	165,707,468	0.9996
2016	166,693,833	165,860,349	0.9950	2017	177,696,292	177,594,492	0.9994
2017	176,718,905	177,798,628	1.0061	2018	174,758,019	177,487,214	1.0156
2018	95,919,617	174,862,412	1.8230	2019	92,777,028	168,535,685	1.8166
2019		92,799,139		2020		85,405,165	

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 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior				Prior			
to 1987	269,280,713	269,656,416	1.0014	to 1988	311,167,743	310,564,834	0.9981
1987	41,205,080	41,312,687	1.0026	1988	39,105,479	39,112,059	1.0002
1988	39,108,017	39,105,479	0.9999	1989	44,719,035	44,677,372	0.9991
1989	44,704,442	44,719,035	1.0003	1990	47,447,792	47,629,697	1.0038
1990	47,452,071	47,449,423	0.9999	1991	43,965,429	44,023,412	1.0013
1991	44,032,286	43,966,719	0.9985	1992	40,355,767	40,264,433	0.9977
1992	40,394,912	40,355,766	0.9990	1993	45,425,458	45,442,044	1.0004
1993	45,418,057	45,423,676	1.0001	1994	37,037,766	37,347,046	1.0084
1994	36,925,017	37,037,766	1.0031	1995	39,023,281	39,089,849	1.0017
1995	39,426,958	39,022,247	0.9897	1996	50,799,151	50,560,255	0.9953
1996	50,911,116	50,791,229	0.9976	1997	46,259,064	46,534,996	1.0070
1997	45,982,429	46,256,142	1.0060	1998	40,504,430	40,590,577	1.0096
1998	40,522,095	40,503,000	0.9995	1999	49,016,658	48,908,187	0.9978
1999	48,641,380	49,014,024	1.0077	2000	65,522,179	64,669,370	0.9870
2000	65,041,626	65,520,387	1.0074	2001	56,789,035	56,978,823	1.0033
2001	56,806,836	56,787,980	0.9997	2002	59,535,321	59,091,480	0.9925
2002	59,506,842	59,532,438	1.0004	2003	68,634,633	68,950,213	1.0038
2003	68,312,757	68,626,253	1.0046	2004	73,450,668	74,475,527	1.0166
2004	72,076,289	73,451,527	1.0191	2005	72,990,189	73,356,635	1.0050
2005	74,189,444	72,990,189	0.9838	2006	78,993,900	79,030,580	1.0005
2006	79,181,077	78,991,115	0.9976	2007	79,616,757	80,063,717	1.0056
2007	79,516,685	79,334,288	0.9977	2008	76,552,089	76,419,321	1.0166
2008	75,859,743	76,552,089	1.0091	2009	83,740,157	86,000,000	1.0277
2009	81,609,628	83,746,953	1.0262	2010	84,563,031	85,260,446	1.0083
2010	81,389,155	84,560,837	1.0390	2011	80,950,000	76,777,452	1.0105
2011	74,620,560	75,948,240	1.0178	2012	60,662,920	60,660,394	1.0021
2012	66,495,106	67,862,856	1.0206	2013	72,538,154	73,630,114	1.0151
2013	69,037,215	72,537,657	1.0507	2014	56,894,002	59,486,866	1.0456
2014	52,420,457	56,891,881	1.0853	2015	60,347,008	63,501,061	1.0523
2015	48,350,014	60,346,599	1.2481	2016	50,000,000	61,607,351	1.2851
2016	18,576,038	47,939,665	2.5807	2017	19,206,744	50,534,479	2.6311
2017		19,206,514		2018		21,240,040	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior				Prior			
to 1989	349,730,979	349,917,950	1.0005	to 1990	395,166,111	395,979,650	1.0021
1989	44,677,372	44,704,611	1.0006	1990	47,615,421	47,435,417	0.9962
1990	47,626,573	47,615,000	0.9998	1991	44,005,264	44,022,020	1.0004
1991	44,023,412	44,005,365	0.9996	1992	40,275,409	40,194,811	0.9980
1992	40,263,391	40,275,409	1.0003	1993	45,652,040	45,336,078	0.9931
1993	45,441,730	45,629,811	1.0041	1994	37,565,674	37,421,151	0.9962
1994	37,336,910	37,565,674	1.0061	1995	38,996,816	39,010,666	1.0004
1995	39,078,244	38,994,618	0.9979	1996	50,060,549	49,968,669	0.9982
1996	50,000,000	50,000,000	0.9999	1997	46,345,464	46,345,397	1.0000
1997	46,532,000	46,532,000	0.9999	1998	40,519,145	40,340,986	0.9956
1998	40,590,250	40,519,145	0.9982	1999	48,784,600	48,721,367	0.9987
1999	48,855,914	48,780,130	0.9984	2000	64,262,840	64,278,512	1.0002
2000	64,248,800	64,248,800	0.9999	2001	56,321,300	56,067,747	0.9955
2001	56,300,000	56,302,430	0.9988	2002	58,694,509	58,661,795	0.9994
2002	58,836,703	58,692,832	0.9976	2003	68,338,378	68,229,243	0.9984
2003	68,936,102	68,452,297	0.9930	2004	74,646,827	75,602,429	1.0128
2004	74,630,585	74,643,025	1.0002	2005	73,639,259	73,509,705	0.9982
2005	73,348,296	73,644,666	1.0040	2006	78,608,167	78,591,762	0.9998
2006	79,031,666	78,610,856	0.9947	2007	79,432,354	79,202,369	0.9971
2007	79,787,414	79,433,508	0.9956	2008	76,900,533	77,215,034	1.0041
2008	77,810,611	76,899,382	0.9883	2009	87,372,456	87,946,898	1.0066
2009	86,068,910	87,372,457	1.0151	2010	84,720,128	84,528,960	0.9977
2010	85,265,546	84,901,442	0.9957	2011	76,593,589	76,974,132	1.0050
2011	76,747,452	76,592,721	0.9980	2012	69,864,109	70,069,462	1.0029
2012	69,360,394	70,072,240	1.0103	2013	73,515,789	73,894,466	1.0052
2013	73,630,114	75,310,930	1.0228	2014	61,279,867	61,454,143	1.0028
2014	59,486,866	61,277,807	1.0301	2015	64,115,295	66,175,344	1.0321
2015	63,501,061	64,114,865	1.0097	2016	66,889,627	68,555,330	1.0249
2016	61,607,351	66,888,374	1.0857	2017	58,893,282	62,904,876	1.0681
2017	50,534,479	58,918,177	1.1659	2018	47,386,830	53,520,944	1.1294
2018	21,215,229	47,417,331	2.2351	2019	19,481,552	51,590,201	2.6482
2019		19,480,146		2020		14,856,544	

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 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior				Prior			
to 1987	215,223,908	215,271,145	1.0002	to 1988	245,835,066	245,273,230	0.9977
1987	29,969,187	30,172,590	1.0068	1988	28,747,466	28,737,390	0.9996
1988	28,763,957	28,747,466	0.9994	1989	31,240,118	31,237,378	0.9999
1989	31,316,799	31,240,118	0.9976	1990	33,508,360	33,542,819	1.0010
1990	33,412,586	33,510,201	1.0029	1991	30,570,248	30,536,467	0.9989
1991	30,662,180	30,571,554	0.9970	1992	26,331,966	26,303,076	0.9989
1992	26,370,931	26,331,966	0.9985	1993	29,987,417	29,879,574	0.9964
1993	29,972,595	29,987,417	1.0005	1994	23,611,833	23,716,447	1.0044
1994	23,554,271	23,611,833	1.0024	1995	24,391,759	24,404,132	1.0005
1995	24,397,809	24,391,759	0.9998	1996	30,438,130	30,178,184	0.9915
1996	30,431,665	30,434,658	1.0001	1997	29,135,093	29,151,623	1.0005
1997	29,153,023	29,133,170	0.9993	1998	25,178,054	25,220,813	1.0051
1998	25,166,913	25,178,054	1.0004	1999	29,841,438	29,736,681	0.9965
1999	29,757,758	29,841,438	1.0028	2000	38,569,662	38,586,763	1.0004
2000	38,623,781	38,569,582	0.9986	2001	33,881,295	33,881,411	1.0000
2001	34,022,318	33,878,324	0.9958	2002	33,772,348	33,713,781	0.9983
2002	33,805,023	33,772,348	0.9990	2003	38,705,010	38,717,738	0.9999
2003	38,736,624	38,701,307	0.9991	2004	39,581,165	39,444,227	1.0064
2004	39,510,257	39,588,556	1.0020	2005	40,190,182	40,199,782	0.9992
2005	40,036,637	40,190,095	1.0038	2006	44,174,306	44,021,945	0.9966
2006	44,037,264	44,171,506	1.0030	2007	42,850,619	42,844,319	0.9999
2007	42,768,419	42,568,736	0.9953	2008	38,800,964	38,817,093	1.00236
2008	38,557,412	38,800,964	1.0063	2009	43,971,447	44,119,376	1.0212
2009	43,250,157	43,970,447	1.0167	2010	39,448,095	39,571,001	1.0031
2010	38,288,028	39,447,574	1.0303	2011	37,496,819	37,917,354	1.0194
2011	36,872,914	37,196,322	1.0088	2012	37,435,903	37,830,783	1.0111
2012	34,477,142	35,435,872	1.0278	2013	37,523,337	38,414,622	1.0238
2013	36,424,283	37,523,267	1.0302	2014	28,638,714	30,112,880	1.0515
2014	26,077,099	28,637,057	1.0982	2015	28,092,117	30,751,096	1.0946
2015	19,231,656	28,092,495	1.4607	2016	20,541,481	28,541,815	1.4357
2016	7,685,787	19,879,210	2.5865	2017	7,175,048	20,598,031	2.8708
2017		7,175,013		2018		8,623,272	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior				Prior			
to 1989	273,825,310	273,761,392	0.9998	to 1990	305,562,001	305,607,586	1.0001
1989	31,237,378	31,236,816	1.0000	1990	33,518,084	33,539,594	1.0006
1990	33,542,210	33,518,084	0.9993	1991	30,506,098	30,468,207	0.9988
1991	30,536,467	30,468,207	0.9980	1992	26,257,503	26,224,249	0.9987
1992	26,302,821	26,224,249	0.9972	1993	29,882,301	29,920,354	1.0013
1993	29,879,574	29,872,219	0.9998	1994	23,765,144	23,784,531	1.0008
1994	23,711,818	23,765,144	1.0022	1995	24,364,026	24,415,530	1.0021
1995	24,398,439	24,364,026	0.9986	1996	30,091,992	30,070,089	0.9993
1996	30,024,124	30,043,771	0.9979	1997	29,195,836	29,237,594	1.0014
1997	29,151,023	29,237,594	1.0024	1998	25,214,409	25,214,150	1.0000
1998	25,220,813	25,214,150	0.9997	1999	29,701,389	29,701,378	1.0000
1999	29,701,391	29,701,389	1.0000	2000	38,559,753	38,522,864	0.9990
2000	38,599,149	38,558,016	1.0015	2001	33,795,439	33,752,959	0.9987
2001	33,816,920	33,786,152	0.9977	2002	33,582,794	33,560,783	0.9993
2002	33,679,920	33,582,794	0.9971	2003	38,433,551	38,612,821	1.0047
2003	38,697,021	38,498,711	0.9949	2004	39,903,283	39,900,402	0.9999
2004	39,823,887	39,903,283	1.0020	2005	40,256,100	40,371,375	1.0029
2005	40,156,549	40,257,042	1.0025	2006	44,241,066	44,329,434	1.0020
2006	44,022,927	44,240,473	1.0049	2007	42,653,623	42,707,017	1.0013
2007	42,568,788	42,653,623	1.0020	2008	39,850,045	40,360,418	1.0128
2008	39,716,586	39,850,045	1.0034	2009	45,463,265	45,700,674	1.0052
2009	44,904,376	45,463,266	1.0124	2010	40,018,917	39,929,798	0.9978
2010	39,572,001	40,122,514	1.0139	2011	37,909,899	38,122,853	1.0056
2011	37,917,354	37,909,305	0.9998	2012	36,441,272	37,189,219	1.0205
2012	35,830,783	36,649,819	1.0229	2013	37,945,537	38,321,322	1.0099
2013	38,414,622	38,966,037	1.0144	2014	31,045,423	31,588,864	1.0175
2014	30,112,880	31,044,196	1.0309	2015	32,274,077	33,554,027	1.0397
2015	30,751,096	32,274,000	1.0495	2016	32,337,659	33,923,180	1.0490
2016	28,541,815	32,336,804	1.1330	2017	27,449,928	30,490,262	1.1108
2017	20,598,031	27,470,712	1.3337	2018	20,284,681	26,304,950	1.2968
2018	8,611,073	20,292,767	2.3566	2019	7,588,156	23,953,164	3.1567
2019		7,587,836		2020		5,267,127	

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 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior				Prior			
to 1987	54,056,805	54,385,271	1.0061	to 1988	65,332,677	65,291,604	0.9994
1987	11,235,893	11,140,097	0.9915	1988	10,358,013	10,374,669	1.0016
1988	10,344,060	10,358,013	1.0013	1989	13,478,917	13,439,994	0.9971
1989	13,387,643	13,478,917	1.0068	1990	13,939,432	14,086,878	1.0106
1990	14,039,485	13,939,222	0.9929	1991	13,395,181	13,486,945	1.0069
1991	13,370,106	13,395,165	1.0019	1992	14,023,801	13,961,357	0.9955
1992	14,023,981	14,023,800	1.0000	1993	15,438,041	15,562,470	1.0081
1993	15,445,462	15,436,259	0.9994	1994	13,425,933	13,630,599	1.0152
1994	13,370,746	13,425,933	1.0041	1995	14,631,522	14,685,717	1.0037
1995	15,029,149	14,630,488	0.9735	1996	20,361,021	20,382,071	1.0010
1996	20,479,451	20,356,571	0.9940	1997	17,123,971	17,383,373	1.0150
1997	16,829,406	17,122,972	1.0174	1998	15,326,376	15,369,764	1.0058
1998	15,355,182	15,324,946	0.9980	1999	19,175,220	19,171,506	0.9998
1999	18,883,622	19,172,586	1.0153	2000	26,952,517	26,082,607	0.9677
2000	26,417,845	26,950,805	1.0202	2001	22,907,740	23,097,412	1.0083
2001	22,784,518	22,909,656	1.0055	2002	25,762,973	25,377,781	0.9850
2002	25,701,819	25,760,090	1.0023	2003	29,929,623	30,244,478	1.0104
2003	29,576,133	29,924,946	1.0118	2004	33,861,603	34,431,291	1.0285
2004	32,566,032	33,862,971	1.0398	2005	32,800,111	33,177,553	1.0121
2005	34,152,807	32,800,094	0.9604	2006	34,819,601	35,077,435	1.0055
2006	35,143,813	34,819,609	0.9908	2007	36,766,011	37,219,411	1.0123
2007	36,748,266	36,765,552	1.0005	2008	37,751,125	37,022,228	1.0093
2008	37,302,331	37,751,125	1.0120	2009	39,771,710	41,111,574	1.0349
2009	38,359,471	39,776,506	1.0369	2010	45,115,096	45,693,445	1.0128
2010	43,101,127	45,113,263	1.0467	2011	47,753,111	38,800,098	1.0020
2011	37,747,646	38,751,918	1.0266	2012	34,427,023	34,829,611	1.0340
2012	32,017,964	32,426,984	1.0128	2013	35,014,757	35,215,492	1.0057
2013	32,612,932	35,014,390	1.0736	2014	28,255,338	29,373,986	1.0396
2014	26,343,358	28,254,824	1.0726	2015	32,254,111	32,749,965	1.0154
2015	29,118,358	32,254,104	1.1077	2016	32,000,000	33,065,536	1.1784
2016	10,890,251	28,060,455	2.5767	2017	12,031,696	29,936,448	2.4881
2017		12,031,501		2018		12,616,768	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior				Prior			
to 1989	75,905,669	76,156,545	1.0033	to 1990	89,604,110	90,372,064	1.0086
1989	13,439,994	13,467,816	1.0021	1990	14,097,337	13,895,823	0.9857
1990	14,084,363	14,096,911	1.0009	1991	13,499,166	13,553,813	1.0040
1991	13,486,945	13,482,445	1.0001	1992	14,017,906	13,970,562	0.9966
1992	13,960,570	14,017,906	1.0030	1993	15,769,739	15,415,724	0.9776
1993	15,562,151	15,757,811	1.0126	1994	13,800,530	13,636,620	0.9881
1994	13,625,011	13,800,530	1.0129	1995	14,632,790	14,595,136	0.9974
1995	14,679,805	14,630,592	0.9966	1996	19,968,557	19,898,580	0.9965
1996	20,111,371	19,688,941	0.9798	1997	17,149,628	17,107,803	0.9976
1997	17,381,111	17,111,052	0.9870	1998	15,304,736	15,126,836	0.9884
1998	15,369,461	15,304,736	0.9958	1999	19,083,211	19,019,989	0.9967
1999	20,154,523	19,078,781	0.9960	2000	25,703,087	25,755,648	1.0020
2000	25,622,632	25,690,853	0.9869	2001	22,525,861	22,314,788	0.9906
2001	23,111,715	22,516,278	0.9758	2002	25,111,715	25,101,012	0.9996
2002	25,156,783	25,110,038	0.9981	2003	29,904,827	29,616,422	0.9904
2003	30,239,081	29,953,586	0.9906	2004	34,743,544	35,702,027	1.0276
2004	34,806,698	34,739,742	0.9981	2005	33,383,159	33,138,330	0.9927
2005	33,191,747	33,387,624	1.0059	2006	34,367,101	34,262,328	0.9970
2006	35,008,739	34,370,383	0.9818	2007	36,778,731	36,495,352	0.9923
2007	37,218,626	36,779,885	0.9882	2008	37,050,488	36,854,616	0.9947
2008	38,094,025	37,049,337	0.9726	2009	41,909,191	42,246,224	1.0080
2009	41,164,534	41,909,191	1.0181	2010	44,701,211	44,599,162	0.9977
2010	45,693,545	44,778,928	0.9800	2011	38,683,690	38,851,279	1.0043
2011	38,830,098	38,683,416	0.9962	2012	33,422,837	32,880,243	0.9838
2012	33,529,611	33,422,421	0.9968	2013	35,570,252	35,573,144	1.0001
2013	35,215,492	36,344,893	1.0321	2014	30,234,444	29,865,279	0.9878
2014	29,373,986	30,233,611	1.0293	2015	31,841,218	32,621,317	1.0245
2015	32,749,965	31,840,865	0.9722	2016	34,551,968	34,632,150	1.0023
2016	33,065,536	34,551,570	1.0449	2017	31,443,354	32,414,614	1.0309
2017	29,936,448	31,447,465	1.0505	2018	27,102,149	27,215,994	1.0042
2018	12,604,156	27,124,564	2.1520	2019	11,893,396	27,637,037	2.3237
2019		11,892,310		2020		9,589,417	

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 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior to 1987	213,827,066	214,023,012	1.0009	Prior to 1988	244,155,620	244,243,229	1.0004
1987	29,553,014	29,717,974	1.0056	1988	28,681,231	28,680,639	1.0000
1988	28,688,050	28,681,231	0.9998	1989	31,007,703	30,998,771	0.9997
1989	31,116,893	31,007,703	0.9965	1990	32,647,488	32,696,138	1.0015
1990	32,614,673	32,649,329	1.0011	1991	30,515,808	30,502,380	0.9996
1991	30,485,603	30,517,114	1.0010	1992	26,290,729	26,268,173	0.9991
1992	26,309,675	26,290,729	0.9993	1993	29,650,153	29,714,718	1.0022
1993	29,549,447	29,650,153	1.0034	1994	23,198,975	23,290,524	1.0039
1994	23,173,927	23,198,975	1.0011	1995	24,227,378	24,253,710	1.0011
1995	24,208,012	24,227,378	1.0008	1996	29,839,256	29,867,719	1.0010
1996	29,791,443	29,839,256	1.0016	1997	28,782,452	28,826,527	1.0011
1997	28,641,626	28,782,452	1.0049	1998	25,046,205	25,071,884	1.0029
1998	24,880,162	25,046,205	1.0067	1999	29,692,585	29,722,618	1.0010
1999	29,566,301	29,692,585	1.0043	2000	37,873,322	37,946,659	1.0019
2000	37,428,727	37,873,322	1.0119	2001	33,040,483	33,095,702	1.0017
2001	32,965,669	33,040,483	1.0023	2002	33,546,970	33,558,710	1.0004
2002	33,544,945	33,546,970	1.0001	2003	37,413,020	37,501,499	1.0024
2003	37,083,599	37,413,020	1.0089	2004	38,800,119	39,153,431	1.0089
2004	38,579,689	38,806,919	1.0059	2005	39,416,988	39,419,888	1.0018
2005	39,179,515	39,416,968	1.0061	2006	42,325,531	42,531,881	1.0050
2006	41,712,218	42,325,534	1.0147	2007	40,021,919	40,921,519	1.0225
2007	39,582,518	40,021,993	1.0111	2008	36,730,741	36,655,776	1.0363
2008	35,970,447	36,730,741	1.0211	2009	40,281,114	41,119,025	1.0334
2009	37,613,251	40,284,114	1.0710	2010	36,501,118	37,701,104	1.0329
2010	34,681,222	36,501,418	1.0525	2011	34,503,819	36,218,736	1.0497
2011	32,768,341	34,503,868	1.0530	2012	33,966,576	35,005,483	1.0432
2012	28,226,648	30,966,578	1.0971	2013	31,380,316	34,247,696	1.0914
2013	25,930,102	31,380,316	1.2102	2014	22,764,444	26,177,423	1.1499
2014	16,178,680	22,764,444	1.4071	2015	18,707,734	24,663,137	1.3183
2015	8,708,720	18,707,734	2.1482	2016	16,137,692	16,137,692	2.0033
2016	1,366,646	8,055,649	5.8945	2017	1,774,309	9,767,857	5.5052
2017		1,774,309		2018		1,669,404	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1989	272,724,848	272,760,355	1.0001	Prior to 1990	304,347,303	304,315,619	0.9999
1989	30,998,771	31,032,917	1.0011	1990	32,726,331	32,789,453	1.0019
1990	32,695,529	32,726,331	1.0009	1991	30,488,384	30,452,411	0.9988
1991	30,502,380	30,488,384	0.9996	1992	26,219,626	26,216,213	0.9999
1992	26,267,918	26,216,213	0.9982	1993	29,766,999	29,853,145	1.0029
1993	29,714,710	29,756,910	1.0014	1994	23,333,987	23,400,703	1.0029
1994	23,285,919	23,333,987	1.0021	1995	24,275,476	24,306,053	1.0013
1995	24,218,017	24,275,476	1.0011	1996	29,880,935	29,884,358	1.0001
1996	29,659,559	29,927,720	1.0012	1997	28,888,518	29,122,331	1.0081
1997	28,826,527	28,888,518	1.0032	1998	25,112,649	25,178,021	1.0026
1998	25,071,884	25,112,649	1.0016	1999	29,687,469	29,687,476	1.0000
1999	29,687,328	29,687,469	1.0000	2000	38,042,474	38,049,524	1.0002
2000	38,059,045	38,042,474	1.0048	2001	33,012,720	33,083,257	1.0021
2001	33,012,720	33,012,720	0.9980	2002	33,456,740	33,444,092	0.9996
2002	33,524,854	33,456,740	0.9980	2003	37,605,054	37,862,530	1.0068
2003	37,586,782	37,675,366	1.0024	2004	39,298,549	39,384,115	1.0022
2004	39,133,098	39,298,549	1.0042	2005	39,550,805	39,745,017	1.0049
2005	39,487,055	39,551,747	1.0016	2006	43,032,617	43,329,101	1.0069
2006	42,536,063	43,037,341	1.0118	2007	41,390,588	41,671,651	1.0068
2007	40,921,507	41,390,588	1.0115	2008	38,595,421	39,276,314	1.0176
2008	38,065,269	38,595,421	1.0139	2009	41,996,098	42,877,458	1.0210
2009	41,627,935	41,996,098	1.0088	2010	38,392,734	38,555,762	1.0042
2010	37,702,204	38,498,196	1.0211	2011	36,951,629	37,283,249	1.0090
2011	36,218,736	36,951,629	1.0202	2012	33,376,877	34,613,977	1.0371
2012	32,305,483	33,585,475	1.0396	2013	34,766,028	35,405,202	1.0184
2013	34,247,696	35,672,970	1.0416	2014	27,774,877	30,245,327	1.0889
2014	26,177,423	27,774,877	1.0610	2015	28,475,986	30,538,810	1.0724
2015	24,663,137	28,475,986	1.1546	2016	23,105,034	27,695,428	1.1987
2016	16,137,692	23,105,034	1.4317	2017	17,789,354	24,999,101	1.4053
2017	9,767,857	17,810,864	1.8234	2018	8,092,603	15,994,683	1.9765
2018	1,661,245	8,101,531	4.8768	2019	1,870,700	9,993,703	5.3422
2019		1,870,700		2020		1,596,798	

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 12/31/16	As of 12/31/17	Ratio to Prior Year	Policy Year Valued	As of 12/31/17	As of 12/31/18	Ratio to Prior Year
Prior				Prior			
to 1987	52,165,237	52,482,698	1.0061	to 1988	62,693,105	63,016,184	1.0052
1987	10,347,241	10,441,192	1.0091	1988	10,271,062	10,288,887	1.0017
1988	10,266,283	10,271,062	1.0005	1989	13,275,886	13,305,830	1.0023
1989	13,096,681	13,275,886	1.0137	1990	12,910,165	12,990,593	1.0062
1990	12,797,686	12,910,165	1.0088	1991	13,232,662	13,307,183	1.0056
1991	13,176,793	13,232,662	1.0042	1992	13,809,256	13,831,181	1.0016
1992	13,778,696	13,809,256	1.0022	1993	14,522,907	14,849,821	1.0225
1993	14,390,133	14,522,907	1.0092	1994	12,809,511	12,884,459	1.0059
1994	12,734,229	12,809,511	1.0059	1995	13,941,070	13,995,091	1.0039
1995	13,886,651	13,941,070	1.0039	1996	18,111,886	18,275,235	1.0090
1996	17,937,305	18,111,886	1.0097	1997	15,603,553	15,841,203	1.0154
1997	15,503,069	15,603,553	1.0065	1998	14,548,217	14,613,295	1.0078
1998	14,250,595	14,548,217	1.0209	1999	17,784,582	18,041,009	1.0144
1999	17,724,351	17,784,582	1.0034	2000	23,844,413	23,991,691	1.0062
2000	23,688,670	23,844,465	1.0066	2001	19,613,217	19,803,194	1.0097
2001	19,331,427	19,617,892	1.0148	2002	23,678,158	24,029,510	1.0148
2002	23,373,117	23,678,184	1.0131	2003	25,493,134	26,112,584	1.0243
2003	24,700,198	25,493,134	1.0321	2004	28,780,731	29,160,220	1.0126
2004	28,285,322	28,780,731	1.0175	2005	28,859,731	29,160,220	1.0105
2005	28,353,253	28,859,689	1.0179	2006	30,091,005	30,680,580	1.0190
2006	29,453,418	30,091,005	1.0216	2007	31,941,470	32,325,500	1.0120
2007	30,725,569	31,941,430	1.0396	2008	31,296,851	31,670,029	1.0310
2008	30,578,198	31,296,851	1.0235	2009	34,020,790	35,000,977	1.0301
2009	32,638,184	34,028,790	1.0426	2010	37,231,005	38,470,016	1.0334
2010	35,771,044	37,231,905	1.0408	2011	38,880,500	39,008,811	1.0247
2011	31,405,964	33,188,935	1.0568	2012	29,611,198	30,742,331	1.0323
2012	27,036,050	28,811,198	1.0657	2013	29,684,134	31,459,971	1.0598
2013	27,651,527	29,684,134	1.0735	2014	23,534,016	24,731,583	1.0509
2014	20,632,322	23,534,046	1.1406	2015	25,838,001	28,138,946	1.0890
2015	19,327,070	25,838,121	1.3369	2016	24,000,383	24,863,882	1.3721
2016	4,297,125	18,120,383	4.2169	2017	4,403,048	18,082,998	4.1069
2017		4,403,048		2018		4,324,898	

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year	Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior				Prior			
to 1989	73,485,256	73,784,470	1.0041	to 1990	87,159,982	87,540,040	1.0044
1989	13,305,830	13,424,763	1.0089	1990	13,110,636	13,429,130	1.0243
1990	12,988,079	13,110,636	1.0094	1991	13,333,112	13,387,226	1.0041
1991	13,307,183	13,333,112	1.0023	1992	13,881,194	13,918,887	1.0027
1992	13,830,394	13,881,194	1.0037	1993	15,027,667	15,134,942	1.0071
1993	14,849,500	15,015,700	1.0112	1994	12,897,823	12,918,024	1.0016
1994	12,878,900	12,897,823	1.0015	1995	14,086,447	14,115,499	1.0021
1995	13,989,179	14,086,447	1.0070	1996	18,453,156	18,501,018	1.0026
1996	15,800,635	16,053,541	1.0098	1997	16,085,927	16,120,822	1.0022
1997	15,839,000	16,053,541	1.0161	1998	14,684,831	14,747,908	1.0043
1998	14,613,000	14,684,831	1.0049	1999	18,050,484	18,282,300	1.0128
1999	23,024,026	23,050,580	1.0015	2000	24,205,479	24,341,532	1.0056
2000	24,117,160	24,205,479	1.0110	2001	20,026,191	20,177,767	1.0076
2001	19,700,000	20,026,916	1.0125	2002	23,918,499	24,157,846	1.0100
2002	23,808,627	23,918,499	1.0046	2003	26,532,051	26,738,322	1.0078
2003	26,117,190	26,597,821	1.0184	2004	29,898,096	30,184,395	1.0096
2004	29,435,634	29,898,096	1.0157	2005	29,653,425	30,153,601	1.0169
2005	29,156,001	29,657,989	1.0172	2006	30,863,375	31,361,930	1.0162
2006	30,660,984	30,867,041	1.0067	2007	33,087,705	33,688,975	1.0182
2007	32,324,549	33,088,859	1.0236	2008	33,050,805	33,366,544	1.0096
2008	32,258,826	33,051,449	1.0246	2009	35,757,344	36,779,831	1.0286
2009	35,053,377	35,757,344	1.0201	2010	39,101,475	39,659,958	1.0143
2010	38,474,016	39,182,391	1.0184	2011	34,378,285	34,592,585	1.0062
2011	34,008,811	34,378,635	1.0109	2012	30,621,141	30,824,789	1.0067
2012	29,742,331	30,621,163	1.0295	2013	31,643,371	32,119,193	1.0150
2013	31,459,971	32,302,350	1.0268	2014	25,671,622	26,469,145	1.0311
2014	24,731,583	25,673,414	1.0381	2015	29,229,793	29,888,077	1.0225
2015	28,138,946	29,229,793	1.0388	2016	27,407,365	28,914,093	1.0550
2016	24,863,882	27,407,612	1.1023	2017	24,152,727	26,785,487	1.1090
2017	18,082,998	24,156,896	1.3359	2018	15,488,329	20,394,614	1.3168
2018	4,323,038	15,511,647	3.5881	2019	4,143,263	15,679,273	3.7843
2019		4,143,263		2020		2,904,131	

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, 2021 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, 2021 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, 2021 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 for 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 by 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, 2021 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 exposure 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 (9) 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 offset balance factor (Collectible Premium Ratio).
 - (c) The inverse of the permissible loss adjustment ratio.
 - (d) The estimated effect of the July 1, 2022 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 2018 to 2020 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			
2018	324,738,703	324,837,297	0.9991
2019	300,948,932	316,984,260	1.0534
2020	295,581,507	326,565,117	0.9051
TOTAL	921,269,141	968,386,694	0.9513
MANUFACTURING AND UTILITIES			
2018	41,918,100	45,268,688	1.0845
2019	36,866,705	35,229,129	1.0465
2020	34,547,580	32,819,325	1.0527
TOTAL	113,332,385	106,701,722	1.0621
CONTRACTING AND QUARRYING			
2018	63,610,534	63,401,325	1.0979
2019	63,328,056	60,100,066	1.0581
2020	52,316,117	51,860,688	1.0088
TOTAL	115,520,307	175,362,079	1.0579
OTHER INDUSTRIES			
2018	213,210,069	222,782,704	0.9570
2019	200,489,171	221,655,066	0.9045
2020	208,717,209	241,885,123	0.8629
TOTAL	622,416,449	686,322,892	0.9069

* 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>							
2017	1.0221	1.0000	1.3845	1.9942	1.0171	2.8702	0.3484
2018	1.0153	1.0000	1.6132	1.9942	1.0125	3.3071	0.3024
2019	1.0092	1.0000	2.0681	1.9942	1.0081	4.1271	0.2383
<u>Contracting and Quarrying</u>							
2017	1.0221	1.0000	1.4883	1.9863	1.0171	3.0732	0.3254
2018	1.0153	1.0000	1.6359	1.9863	1.0125	3.3403	0.2994
2019	1.0092	1.0000	2.0103	1.9863	1.0081	4.0624	0.2462
<u>Other Industries</u>							
2017	1.0221	1.0000	1.4077	1.7028	1.0171	2.4919	0.4013
2018	1.0153	1.0000	1.5915	1.7028	1.0125	2.7859	0.3590
2019	1.0092	1.0000	2.0051	1.7028	1.0081	3.4790	0.2874

** Permissible Loss Ratio = 0.5326
Collectible Premium Ratios
Manufacturing = 1.0621
Contracting = 1.0579
All Other = 0.9069

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	53.26
Loss Adjustment Expense	14.86
Loss & Loss Adjustment	68.12
Premium Discount	8.53
Acquisition	7.09
General Expenses	2.47
Profit and Contingencies	3.79
Taxes	2.31
Uncollectible Premium	2.86
Workers' Compensation Fund	2.00
Administrative Assessment	2.83
	31.88

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:

$$E = 0.0482 = \frac{ACQ}{L} = \frac{0.009}{0.0247} + \frac{PROFIT}{0.0379} - \frac{PREM DISC}{0.0853}$$

$$A = 0.0506 = 0.0532 \times \frac{1 - 0.0482 - 0.0717}{1 - 0.0023 - 0.0717}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0119$$

$$T = \frac{0.0482 + 0.5326(1 + 0.2790 + 0.0506)}{0.0482 + 0.5326(1 + 0.2790)} \times \frac{1}{1 - 0.0717 - 0.0119} = 1.1315$$

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 =	0.5025
Second Adjustment	RDF =	0.3749
Third Adjustment	RDF =	0.2984

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:

$$\text{\$25,000 limit Hazard Group C ELF} = 0.575$$

$$\text{First Adjustment RDF} = (1 - 0.575) \times 0.5025 = 0.2136$$

* The use of retrospective development factors is optional.