

**PENNSYLVANIA COMPENSATION RATING BUREAU**

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**Summary of Material for Modification of Experience  
April 1, 2022 Loss Cost Revision**

**As Filed**

**PENNSYLVANIA 2022 LOSS COST FILING**

**EFFECTIVE DATE - April 1, 2022**

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\* Incurred Losses exclude IBNR and Bulk Reserves.

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## EXHIBIT I

### INDICATED CHANGE IN LOSS COSTS

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
(1) Policy Year 2017 Ratio of Loss to Expected Loss	0.5560	0.6022	1.1582
(2) Policy Year 2018 Ratio of Loss to Expected Loss	0.5581	0.6291	1.1872
(3) Policy Year 2019 Ratio of Loss to Expected Loss	0.5107	0.5397	1.0504
(4) Average (Midpoint = 1/1/2019)	0.5416	0.5903	1.1319
(5) Policy Year 2017 Ratio Trended to 4/1/2023 +	0.4313	0.4872	0.9185
(6) Policy Year 2018 Ratio Trended to 4/1/2023 +	0.4544	0.5298	0.9842
(7) Policy Year 2019 Ratio Trended to 4/1/2023 +	0.4364	0.4733	0.9097
(8) Average at 4/1/2023	0.4407	0.4968	0.9375
(9) Indicated Change in Loss Costs	0.4407	0.4968	0.9375
			<b>-6.25%</b>

### CHANGES IN MANUAL LOSS COST LEVEL BY INDUSTRY GROUP

	<u>Mfg.</u>	<u>Cont.</u>	<u>Other</u>	<u>Total</u>
(10) Current Collectible Premium Ratio	1.0426	1.1272	0.9955	
(11) Anticipated Collectible Premium Ratio	1.0336	1.1350	0.9984	
(12) Final Indicated Change in Manual Loss Cost Level (9T) * (11) / (10)	0.9294	0.9440	0.9402	0.9389

+ Refer to pages 20 and 21

**EXHIBIT II**

**CALCULATION OF EMPLOYER ASSESSMENT FACTOR AND  
LOADING FOR LOSS BASED ASSESSMENTS**

<b>(1)</b>	2020 PCRB Member Paid Loss*	2,051,577,901
<b>(2)</b>	2021/2022 Fiscal Year Membership Assessment Amount	
	a. Administration Fund	58,722,138
	b. Subsequent Injury Fund	131,421
	c. Supersedeas Fund	17,175,821
	d. Uninsured Employers Guaranty Fund	5,178,174
	e. Total	<u>81,207,554</u>
<b>(3)</b>	2020 Employer Assessment Premium Base	3,032,959,619
<b>(4)</b>	2021/2022 Fiscal Year Membership Assessment Rate	
	a. Administration Fund (2a) / (3)	0.0194
	b. Subsequent Injury Fund (2b) / (3)	0.0000
	c. Supersedeas Fund (2c) / (3)	0.0057
	d. Uninsured Employers Guaranty Fund (2d) / (3)	0.0017
	e. Employer Assessment Factor (4a) + (4b) + (4c) + (4d)	<u>0.0268</u>
<b>(5)</b>	2021/2022 Fiscal Year Budget for the Office of Small Business Advocate	280,000
<b>(6)</b>	2021/2022 Fiscal Year Membership Assessment Rate for the Office of Small Business Advocate (5) / (1)	0.0001
<b>(7)</b>	Merit Rating Plan Increment Factor	0.0032
<b>(8)</b>	Certified Safety Committee Program Increment Factor	0.0107
<b>(9)</b>	Overall Adjustment for the Office of Small Business Advocate, Merit Rating Plan and Certified Safety Committee Program (6) + (7) + (8)	0.0140

\* Loss payments on deductible policies have been adjusted to a first dollar basis.

**EXHIBIT III - 1**

**POLICY YEAR LOSS RATIO 2019**

(1) Standard Earned Premium Reported (Table I)			1,411,487,490
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			1.0032
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0063
(5) Factor to Remove Loss Based Assessments			0.9866
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,405,831,081
(7) Loss Cost Change to 04/1/21 Level			0.8311
(8) Expected Loss at Current Level (6) * (7)			1,168,386,211
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	229,314,169	391,008,319	620,322,488
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	2.6704	1.6620	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0000	1.0000	
(12) Ultimate Incurred Losses (9) * (10) * (11)	612,360,557	649,855,826	1,262,216,383
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	612,360,557	649,855,826	1,262,216,383
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.5241	0.5562	1.0803
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	394,722,564	528,682,535	923,405,099
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.4694	1.1564	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0018	1.0000	
(19) Ultimate Incurred Losses (16) * (17) * (18)	581,042,281	611,368,483	1,192,410,764
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	581,042,281	611,368,483	1,192,410,764
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.4973	0.5233	1.0206
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	596,701,419	630,612,155	1,227,313,574
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.5107	0.5397	1.0504
(25) Normalized Claim Frequency (Exhibit VI-2)	0.5371	0.5371	
(26) Severity Ratio * (24) / (25)	0.9508	1.0048	1.9556

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 2**

**POLICY YEAR LOSS RATIO 2018**

(1) Standard Earned Premium Reported (Table I)				1,734,395,974
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)				0.9982
(3) Expense Constant Removal Factor				1.0000
(4) PCCPAP On-Level Factor				1.0063
(5) Factor to Remove Loss Based Assessments				0.9864
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)				1,718,487,425
(7) Loss Cost Change to 04/1/21 Level				0.6544
(8) Expected Loss at Current Level (6) * (7)				1,124,578,171
<b>Losses - Paid-to-20th Method</b>				
	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>	
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	435,355,511	527,672,957		963,028,468
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.4707	1.3373		
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0012	1.0000		
(12) Ultimate Incurred Losses (9) * (10) * (11)	641,073,816	705,657,045		1,346,730,861
(13) Benefit Level Factor	1.0000	1.0000		
(14) Adjusted Losses (12) * (13)	641,073,816	705,657,045		1,346,730,861
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.5701	0.6275		1.1976
<b>Losses - Incurred Method</b>				
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	555,348,512	641,894,512		1,197,243,024
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.1039	1.1050		
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0019	1.0000		
(19) Ultimate Incurred Losses (16) * (17) * (18)	614,212,171	709,293,436		1,323,505,607
(20) Benefit Level Factor	1.0000	1.0000		
(21) Adjusted Losses (19) * (20)	614,212,171	709,293,436		1,323,505,607
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.5462	0.6307		1.1769
<b>Losses - Average of Incurred and Paid-to-20th Method</b>				
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	627,642,994	707,475,241		1,335,118,235
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.5581	0.6291		1.1872
(25) Normalized Claim Frequency (Exhibit VI-2)	0.6049	0.6049		
(26) Severity Ratio * (24) / (25)	0.9227	1.0400		1.9627

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 3**

**POLICY YEAR LOSS RATIO 2017**

(1) Standard Earned Premium Reported (Table I)			1,584,357,531
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9991
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0068
(5) Factor to Remove Loss Based Assessments			0.9863
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,571,861,915
(7) Loss Cost Change to 04/1/21 Level			0.6770
(8) Expected Loss at Current Level (6) * (7)			1,064,150,516
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	492,661,291	520,693,263	1,013,354,554
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.2199	1.2616	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0061	1.0000	
(12) Ultimate Incurred Losses (9) * (10) * (11)	604,681,693	656,906,621	1,261,588,314
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	604,681,693	656,906,621	1,261,588,314
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.5682	0.6173	1.1855
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	561,076,478	573,524,506	1,134,600,984
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0251	1.0894	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0059	1.0000	
(19) Ultimate Incurred Losses (16) * (17) * (18)	578,554,582	624,797,597	1,203,352,179
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	578,554,582	624,797,597	1,203,352,179
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.5437	0.5871	1.1308
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	591,618,138	640,852,109	1,232,470,247
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.5560	0.6022	1.1582
(25) Normalized Claim Frequency (Exhibit VI-2)	0.6285	0.6285	
(26) Severity Ratio * (24) / (25)	0.8846	0.9581	1.8427

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 4**

**POLICY YEAR LOSS RATIO 2016**

(1) Standard Earned Premium Reported (Table I)			1,512,238,503
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9998
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0078
(5) Factor to Remove Loss Based Assessments			0.9853
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,501,330,338
(7) Loss Cost Change to 04/1/21 Level			0.6465
(8) Expected Loss at Current Level (6) * (7)			970,610,064
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	489,954,798	486,633,067	976,587,865
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.1399	1.2334	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0111	1.0000	
(12) Ultimate Incurred Losses (9) * (10) * (11)	564,720,646	600,213,225	1,164,933,871
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	564,720,646	600,213,225	1,164,933,871
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.5818	0.6184	1.2002
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	525,940,694	522,315,156	1,048,255,850
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0102	1.0876	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0107	1.0000	
(19) Ultimate Incurred Losses (16) * (17) * (18)	536,973,699	568,069,964	1,105,043,663
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	536,973,699	568,069,964	1,105,043,663
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.5532	0.5853	1.1385
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	550,847,173	584,141,595	1,134,988,768
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.5675	0.6018	1.1693
(25) Normalized Claim Frequency (Exhibit VI-2)	0.6651	0.6651	
(26) Severity Ratio * (24) / (25)	0.8532	0.9048	1.7580

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.



**EXHIBIT III - 5**

**POLICY YEAR LOSS RATIO 2015**

(1) Standard Earned Premium Reported (Table I)			1,503,443,279
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9999
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0076
(5) Factor to Remove Loss Based Assessments			0.9853
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,492,451,607
(7) Loss Cost Change to 04/1/21 Level			0.6299
(8) Expected Loss at Current Level (6) * (7)			940,095,267
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	525,087,666	492,663,354	1,017,751,020
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.1034	1.2211	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0140	1.0000	
(12) Ultimate Incurred Losses (9) * (10) * (11)	587,469,293	601,591,222	1,189,060,515
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	587,469,293	601,591,222	1,189,060,515
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.6249	0.6399	1.2648
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	550,125,582	532,025,356	1,082,150,938
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0081	1.0950	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0135	1.0000	
(19) Ultimate Incurred Losses (16) * (17) * (18)	562,078,330	582,567,765	1,144,646,095
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	562,078,330	582,567,765	1,144,646,095
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.5979	0.6197	1.2176
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	574,773,812	592,079,494	1,166,853,306
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.6114	0.6298	1.2412
(25) Normalized Claim Frequency (Exhibit VI-2)	0.7106	0.7106	
(26) Severity Ratio * (24) / (25)	0.8603	0.8862	1.7465

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 6**

**POLICY YEAR LOSS RATIO 2014**

(1) Standard Earned Premium Reported (Table I)			1,510,269,466
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9998
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0066
(5) Factor to Remove Loss Based Assessments			0.9857
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,498,198,152
(7) Loss Cost Change to 04/1/21 Level			0.5939
(8) Expected Loss at Current Level (6) * (7)			889,779,882
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	561,751,456	547,543,421	1,109,294,877
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0865	1.2115	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0148	0.9982	
(12) Ultimate Incurred Losses (9) * (10) * (11)	619,401,952	662,147,298	1,281,549,250
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	619,401,952	662,147,298	1,281,549,250
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.6961	0.7442	1.4403
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	581,411,975	583,049,159	1,164,461,134
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0086	1.0980	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0145	0.9981	
(19) Ultimate Incurred Losses (16) * (17) * (18)	594,906,200	638,953,178	1,233,859,378
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	594,906,200	638,953,178	1,233,859,378
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.6686	0.7181	1.3867
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	607,154,076	650,550,238	1,257,704,314
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.6824	0.7311	1.4135
(25) Normalized Claim Frequency (Exhibit VI-2)	0.7709	0.7709	
(26) Severity Ratio * (24) / (25)	0.8852	0.9484	1.8336

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 7**

**POLICY YEAR LOSS RATIO 2013**

(1) Standard Earned Premium Reported (Table I)			1,510,268,872
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9996
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0067
(5) Factor to Remove Loss Based Assessments			0.9853
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,497,438,759
(7) Loss Cost Change to 04/1/21 Level			0.5656
(8) Expected Loss at Current Level (6) * (7)			846,951,362
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	569,292,604	538,784,459	1,108,077,063
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0727	1.1987	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0154	0.9939	
(12) Ultimate Incurred Losses (9) * (10) * (11)	620,098,510	641,878,441	1,261,976,951
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	620,098,510	641,878,441	1,261,976,951
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.7322	0.7579	1.4901
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	583,938,254	566,615,538	1,150,553,792
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0061	1.0898	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0151	0.9935	
(19) Ultimate Incurred Losses (16) * (17) * (18)	596,396,726	613,513,320	1,209,910,046
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	596,396,726	613,513,320	1,209,910,046
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.7042	0.7244	1.4286
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	608,247,618	627,695,881	1,235,943,499
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.7182	0.7411	1.4593
(25) Normalized Claim Frequency (Exhibit VI-2)	0.8433	0.8433	
(26) Severity Ratio * (24) / (25)	0.8516	0.8788	1.7304

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 8**

**POLICY YEAR LOSS RATIO 2012**

(1) Standard Earned Premium Reported (Table I)			1,537,436,491
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			0.9997
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0067
(5) Factor to Remove Loss Based Assessments			0.9858
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,525,301,718
(7) Loss Cost Change to 04/1/21 Level			0.5400
(8) Expected Loss at Current Level (6) * (7)			823,662,928
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	558,488,917	522,624,319	1,081,113,236
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0609	1.1880	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0154	0.9927	
(12) Ultimate Incurred Losses (9) * (10) * (11)	601,643,596	616,358,264	1,218,001,860
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	601,643,596	616,358,264	1,218,001,860
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.7304	0.7483	1.4787
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	582,860,717	567,885,814	1,150,746,531
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0035	1.0878	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0150	0.9921	
(19) Ultimate Incurred Losses (16) * (17) * (18)	593,653,111	612,860,128	1,206,513,239
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	593,653,111	612,860,128	1,206,513,239
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.7207	0.7441	1.4648
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	597,648,354	614,609,196	1,212,257,550
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.7256	0.7462	1.4718
(25) Normalized Claim Frequency (Exhibit VI-2)	0.8612	0.8612	
(26) Severity Ratio * (24) / (25)	0.8425	0.8664	1.7089

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 9**

**POLICY YEAR LOSS RATIO 2011**

(1) Standard Earned Premium Reported (Table I)			1,642,868,564
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			1.0000
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0057
(5) Factor to Remove Loss Based Assessments			0.9862
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,629,432,101
(7) Loss Cost Change to 04/1/21 Level			0.5201
(8) Expected Loss at Current Level (6) * (7)			847,467,636
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	614,960,325	579,882,841	1,194,843,166
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0534	1.1773	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0156	0.9920	
(12) Ultimate Incurred Losses (9) * (10) * (11)	657,916,398	677,266,374	1,335,182,772
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	657,916,398	677,266,374	1,335,182,772
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.7763	0.7992	1.5755
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	630,287,145	612,816,339	1,243,103,484
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0025	1.0829	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0153	0.9916	
(19) Ultimate Incurred Losses (16) * (17) * (18)	641,556,748	658,041,092	1,299,597,840
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	641,556,748	658,041,092	1,299,597,840
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.7570	0.7765	1.5335
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	649,736,573	667,653,733	1,317,390,306
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.7667	0.7878	1.5545
(25) Normalized Claim Frequency (Exhibit VI-2)	0.9186	0.9186	
(26) Severity Ratio * (24) / (25)	0.8346	0.8576	1.6922

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT III - 10**

**POLICY YEAR LOSS RATIO 2010**

(1) Standard Earned Premium Reported (Table I)			1,589,788,794
(2) Premium Development Factor to Ultimate Level (Exhibit V-1)			1.0000
(3) Expense Constant Removal Factor			1.0000
(4) PCCPAP On-Level Factor			1.0055
(5) Factor to Remove Loss Based Assessments			0.9859
(6) Standard Earned Premium on Level (1) * (2) * (3) * (4) * (5)			1,575,993,322
(7) Loss Cost Change to 04/1/21 Level			0.5244
(8) Expected Loss at Current Level (6) * (7)			826,450,898
<b>Losses - Paid-to-20th Method</b>	<b>Indemnity</b>	<b>Medical</b>	<b>Total</b>
(9) Paid Losses Reported (Table I-D-Reported & I-E-Reported)	641,566,682	571,739,960	1,213,306,642
(10) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0481	1.1703	
(11) Adjustment to Post-HB 1840 & HB 1846 Loss Levels	1.0156	0.9920	
(12) Ultimate Incurred Losses (9) * (10) * (11)	682,944,114	663,738,980	1,346,683,094
(13) Benefit Level Factor	1.0000	1.0000	
(14) Adjusted Losses (12) * (13)	682,944,114	663,738,980	1,346,683,094
(15) Policy Year Ratio of Losses to Expected Losses (14) / (8)	0.8264	0.8031	1.6295
<b>Losses - Incurred Method</b>			
(16) Incurred Losses Reported (Table I-B-Reported & I-C-Reported)	654,149,371	606,998,442	1,261,147,813
(17) Loss Development Factor to Ultimate Valuation (Exhibit V-3 & V-5)	1.0012	1.0816	
(18) Adjustment to Post-HB 1840 & HB 1846 Loss Level	1.0154	0.9915	
(19) Ultimate Incurred Losses (16) * (17) * (18)	665,035,512	650,937,299	1,315,972,811
(20) Benefit Level Factor	1.0000	1.0000	
(21) Adjusted Losses (19) * (20)	665,035,512	650,937,299	1,315,972,811
(22) Policy Year Ratio of Losses to Expected Losses (21) / (8)	0.8047	0.7876	1.5923
<b>Losses - Average of Incurred and Paid-to-20th Method</b>			
(23) Adjusted Ultimate Incurred Losses ((14) + (21)) / 2	673,989,813	657,338,140	1,331,327,953
(24) Policy Year Ratio of Losses to Expected Losses (23) / (8)	0.8155	0.7954	1.6109
(25) Normalized Claim Frequency (Exhibit VI-2)	0.9810	0.9810	
(26) Severity Ratio * (24) / (25)	0.8313	0.8108	1.6421

\* Severity Ratio represents loss ratio adjusted to a common level of claim frequency.

**EXHIBIT IV - 1****POLICY YEARS 2010 - 2015  
PREMIUM ON-LEVEL FACTORS**

<u>POLICY YEAR</u>	<u>(1) LOSS COST DATE</u>	<u>(2) LOSS COST CHANGE</u>	<u>(3) CUM. INDEX OF COL (2)</u>	<u>(4) PORTION OF YEAR ON-LEVEL</u>	<u>(5) PRODUCT (3) * (4)</u>	<u>FACTOR TO ADJUST to 04/01/21 LC LEVEL</u>
2010	4/01/09	BASE	1.0000	0.2929	0.2929	0.5244
	4/01/10	1.0068	1.0068	0.7071	0.7119	
	4/01/11	0.5233	0.5269	-----	-----	
	to 04/01/21			1.0000	1.0048	
2011	4/01/10	BASE	1.0000	0.2923	0.2923	0.5201
	4/01/11	1.0087	1.0087	0.7077	0.7139	
	4/01/12	0.5188	0.5233	-----	-----	
	to 04/01/21			1.0000	1.0062	
2012	4/01/11	BASE	1.0000	0.3083	0.3083	0.5400
	4/01/12	0.9434	0.9434	0.6917	0.6525	
	4/01/13	0.5499	0.5188	-----	-----	
	to 04/01/21			1.0000	0.9608	
2013	4/01/12	BASE	1.0000	0.3067	0.3067	0.5656
	4/01/13	0.9599	0.9599	0.6933	0.6655	
	4/01/14	0.5729	0.5499	-----	-----	
	to 04/01/21			1.0000	0.9722	
2014	4/01/13	BASE	1.0000	0.3118	0.3118	0.5939
	4/01/14	0.9485	0.9485	0.6882	0.6528	
	4/01/15	0.6040	0.5729	-----	-----	
	to 04/01/21			1.0000	0.9646	
2015	4/01/14	BASE	1.0000	0.3138	0.3138	0.6299
	4/01/15	0.9401	0.9401	0.6862	0.6451	
	4/01/16	0.6425	0.6040	-----	-----	
	to 04/01/21			1.0000	0.9589	

**EXHIBIT IV - 2**

**POLICY YEARS 2016 - 2019  
PREMIUM ON-LEVEL FACTORS**

<u>POLICY YEAR</u>	<u>(1) LOSS COST DATE</u>	<u>(2) LOSS COST CHANGE</u>	<u>(3) CUM. INDEX OF COL (2)</u>	<u>(4) PORTION OF YEAR ON-LEVEL</u>	<u>(5) PRODUCT (3) * (4)</u>	<u>FACTOR TO ADJUST to 04/01/21 LC LEVEL</u>
2016	4/01/15	BASE	1.0000	0.3073	0.3073	
	4/01/16	0.9910	0.9910	0.6927	0.6865	
	4/01/17	0.6483	0.6425	-----	-----	
	to 04/01/21			1.0000	0.9938	0.6465
2017	4/01/16	BASE	1.0000	0.3179	0.3179	
	4/01/17	0.9379	0.9379	0.6821	0.6397	
	2/01/18	0.6912	0.6483	-----	-----	
	to 04/01/21			1.0000	0.9576	0.6770
2018	4/01/17	BASE	1.0000	0.1577	0.1577	
	2/01/18	1.0606	1.0606	0.1355	0.1437	
	4/01/18	1.0070	1.0680	0.7068	0.7549	
	1/01/19	0.6472	0.6912	-----	-----	
	to 04/01/21			1.0000	1.0563	0.6544
2019	1/01/19	BASE	1.0000	0.3314	0.3314	
	4/01/19	0.8705	0.8705	0.6686	0.5820	
	4/01/20	0.8720	0.7591	-----	-----	
	to 04/01/21			1.0000	0.9134	0.8311
2020	4/01/19	BASE	1.0000	0.3243	0.3243	
	4/01/20	0.8992	0.8992	0.6757	0.6076	
	4/01/21	0.9698	0.8720	-----	-----	
				1.0000	0.9319	0.9357



**EXHIBIT V - 1**

**DEVELOPMENT FACTORS**

**PREMIUM**

<u>Reports in Ratio</u>	<u>Policy Year</u>	<u>2019-2020 Ratio</u>	<u>Policy Year</u>	<u>2018-2019 Ratio</u>	<u>Policy Year</u>	<u>2017-2018 Ratio</u>	<u>Policy Year</u>	<u>2016-2017 Ratio</u>	<u>Unweighted Average</u>	<u>Selected Average</u>	<u>Cumulative Average</u>
2nd to 1st	2018	1.0125	2017	1.0128	2016	1.0088	2015	1.0090	1.0108	1.0050	1.0032
3rd to 2nd	2017	0.9977	2016	0.9990	2015	0.9991	2014	1.0005	0.9991	0.9991	0.9982
4th to 3rd	2016	0.9998	2015	0.9990	2014	0.9981	2013	1.0005	0.9993	0.9993	0.9991
5th to 4th	2015	0.9999	2014	1.0003	2013	1.0000	2012	0.9995	0.9999	0.9999	0.9998
6th to 5th	2014	1.0001	2013	1.0001	2012	1.0001	2011	1.0002	1.0001	1.0001	0.9999
7th to 6th	2013	1.0000	2012	1.0001	2011	1.0004	2010	1.0003	1.0002	1.0002	0.9998
8th to 7th	2012	1.0000	2011	0.9996	2010	1.0000	2009	0.9999	0.9999	0.9999	0.9996
9th to 8th	2011	1.0000	2010	1.0000	2009	1.0000	2008	0.9988	0.9997	0.9997	0.9997
10th to 9th	2010	1.0000	2009	1.0000	2008	1.0000	2007	1.0000	1.0000	1.0000	1.0000
11th to 10th	2009	1.0000	2008	1.0000	2007	1.0000	2006	1.0000	1.0000	1.0000	1.0000
12th to 11th	2008	1.0000	2007	1.0000	2006	1.0000	2005	1.0000	1.0000	1.0000	1.0000
13th to 12th	2007	1.0000	2006	1.0000	2005	1.0000	2004	1.0000	1.0000	1.0000	1.0000
14th to 13th	2006	1.0000	2005	1.0000	2004	1.0000	2003	1.0000	1.0000	1.0000	1.0000
15th to 14th	2005	1.0000	2004	1.0000	2003	1.0000	2002	1.0000	1.0000	1.0000	1.0000
16th to 15th	2004	1.0000	2003	1.0000	2002	0.9999	2001	1.0000	1.0000	1.0000	1.0000
17th to 16th	2003	1.0000	2002	1.0001	2001	1.0001	2000	1.0000	1.0000	1.0000	1.0000
18th to 17th	2002	1.0000	2001	1.0000	2000	1.0001	1999	1.0000	1.0000	1.0000	1.0000
19th to 18th	2001	1.0000	2000	1.0000	1999	1.0000	1998	1.0000	1.0000	1.0000	1.0000
20th to 19th	2000	1.0000	1999	1.0000	1998	1.0000	1997	1.0000	1.0000	1.0000	1.0000

<u>Policy Year</u>	<u>Present Valuation</u>	<u>Premium Development Factor</u>
2001	Nineteenth	1.0000
2002	Eighteenth	1.0000
2003	Seventeenth	1.0000
2004	Sixteenth	1.0000
2005	Fifteenth	1.0000
2006	Fourteenth	1.0000
2007	Thirteenth	1.0000
2008	Twelfth	1.0000
2009	Eleventh	1.0000
2010	Tenth	1.0000
2011	Ninth	1.0000
2012	Eighth	0.9997
2013	Seventh	0.9996
2014	Sixth	0.9998
2015	Fifth	0.9999
2016	Fourth	0.9998
2017	Third	0.9991
2018	Second	0.9982
2019	First	1.0032

**EXHIBIT V - 2**

**REPORTED DEVELOPMENT FACTORS**

**INDEMNITY LOSSES  
PAID METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average
2nd to 1st	a	2018	2017	1.8327	2016	1.7967	2015	1.7865	2014	1.8713	1.8222	1.8137	1.8198
3rd to 2nd	a	2017	2016	1.2209	2015	1.2113	2014	1.2311	2013	1.2582	1.2079	1.2090	1.2233
4th to 3rd	a	2016	2015	1.0719	2014	1.0825	2013	1.0815	2012	1.0979	1.0712	1.0750	1.0809
5th to 4th	a	2015	2014	1.0296	2013	1.0376	2012	1.0359	2011	1.0380	1.0336	1.0341	1.0352
6th to 5th	a	2014	2013	1.0182	2012	1.0134	2011	1.0259	2010	1.0275	1.0158	1.0192	1.0215
7th to 6th	a	2013	2012	1.0113	2011	1.0148	2010	1.0159	2009	1.0220	1.0131	1.0140	1.0162
8th to 7th	a	2012	2011	1.0110	2010	1.0114	2009	1.0132	2008	1.0111	1.0112	1.0107	1.0113
9th to 8th	a	2011	2010	1.0042	2009	1.0104	2008	1.0067	2007	1.0104	1.0073	1.0071	1.0077
10th to 9th	a	2010	2009	1.0048	2008	1.0055	2007	1.0081	2006	1.0088	1.0052	1.0061	1.0070
11th to 10th	a	2009	2008	1.0038	2007	1.0050	2006	1.0069	2005	1.0081	1.0044	1.0053	1.0062
12th to 11th	a	2008	2007	1.0034	2006	1.0052	2005	1.0079	2004	1.0068	1.0043	1.0055	1.0057
13th to 12th	a	2007	2006	1.0040	2005	1.0051	2004	1.0059	2003	1.0045	1.0046	1.0050	1.0051
14th to 13th	a	2006	2005	1.0031	2004	1.0049	2003	1.0054	2002	1.0045	1.0040	1.0045	1.0044
15th to 14th	a	2005	2004	1.0031	2003	1.0077	2002	1.0039	2001	1.0033	1.0054	1.0049	1.0040
16th to 15th	a	2004	2003	1.0048	2002	1.0038	2001	1.0037	2000	1.0029	1.0043	1.0041	1.0035
17th to 16th	a	2003	2002	1.0020	2001	1.0048	2000	1.0019	1999	1.0022	1.0034	1.0029	1.0025
18th to 17th	a	2002	2001	1.0023	2000	1.0024	1999	1.0015	1998	1.0016	1.0023	1.0021	1.0020
19th to 18th	a	2001	2000	1.0016	1999	1.0018	1998	1.0015	1997	1.0016	1.0017	1.0016	1.0017
20th to 19th	a	2000	1999	1.0008	1998	1.0010	1997	1.0017	1996	1.0020	1.0009	1.0012	1.0017
21st to 20th	a	1999	1998	1.0018	1997	1.0009	1996	1.0016	1995	1.0029	1.0014	1.0014	1.0022
22nd to 21st	a	1998	1997	1.0009	1996	1.0022	1995	1.0022	1994	1.0030	1.0017	1.0019	1.0027
23rd to 22nd	a	1997	1996	1.0018	1995	1.0027	1994	1.0027	1993	1.0041	1.0023	1.0024	1.0031
24th to 23rd	a	1996	1995	1.0019	1994	1.0033	1993	1.0042	1992	1.0041	1.0026	1.0031	1.0035
25th to 24th	a	1995	1994	1.0023	1993	1.0045	1992	1.0035	1991	1.0036	1.0034	1.0034	1.0034
26th to 25th	a	1994	1993	1.0028	1992	1.0032	1991	1.0037	1990	1.0029	1.0030	1.0032	1.0031
27th to 26th	a	1993	1992	1.0030	1991	1.0039	1990	1.0028	1989	1.0024	1.0035	1.0032	1.0030
28th to 27th	a	1992	1991	1.0036	1990	1.0030	1989	1.0027	1988	1.0026	1.0020	1.0033	1.0028
29th to 28th	a	1991	1990	1.0027	1989	1.0023	1988	1.0022	1987	1.0016	1.0025	1.0024	1.0021
30th to 29th	a	1990	1989	1.0021	1988	1.0020	1987	1.0015	1986	1.0015	1.0020	1.0019	1.0019

**INCURRED METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average
2nd to 1st	b	2018	2017	1.3533	2016	1.3301	2015	1.3372	2014	1.3303	1.3376	1.3351	1.3346
3rd to 2nd	b	2017	2016	1.0865	2015	1.0797	2014	1.0864	2013	1.0948	1.0795	1.0795	1.0840
4th to 3rd	b	2016	2015	1.0101	2014	1.0173	2013	1.0105	2012	1.0319	1.0160	1.0164	1.0183
5th to 4th	b	2015	2014	1.0004	2013	1.0049	2012	1.0050	2011	1.0040	1.0026	1.0010	1.0024
6th to 5th	b	2014	2013	1.0016	2012	0.9982	2011	1.0035	2010	1.0002	0.9999	1.0011	1.0023
7th to 6th	b	2013	2012	1.0011	2011	1.0048	2010	1.0001	2009	1.0058	1.0029	1.0020	1.0037
8th to 7th	b	2012	2011	1.0030	2010	1.0027	2009	1.0021	2008	0.9999	1.0028	1.0026	1.0024
9th to 8th	b	2011	2010	1.0008	2009	1.0017	2008	1.0029	2007	1.0015	1.0013	1.0018	1.0017
10th to 9th	b	2010	2009	1.0011	2008	1.0018	2007	0.9995	2006	1.0033	1.0025	1.0015	1.0016
11th to 10th	b	2009	2008	1.0004	2007	0.9990	2006	1.0022	2005	1.0011	1.0014	0.9997	1.0005
12th to 11th	b	2008	2007	1.0007	2006	0.9999	2005	1.0026	2004	1.0011	1.0014	1.0003	1.0010
13th to 12th	b	2007	2006	1.0020	2005	1.0009	2004	1.0020	2003	1.0007	1.0015	1.0017	1.0013
14th to 13th	b	2006	2005	1.0012	2004	0.9990	2003	1.0016	2002	1.0016	1.0001	1.0003	1.0008
15th to 14th	b	2005	2004	1.0004	2003	1.0003	2002	0.9993	2001	1.0014	1.0004	1.0000	1.0005
16th to 15th	b	2004	2003	0.9989	2002	0.9979	2001	1.0011	2000	1.0001	0.9999	0.9984	0.9996
17th to 16th	b	2003	2002	0.9986	2001	0.9995	2000	1.0012	1999	1.0005	0.9991	0.9997	1.0001
18th to 17th	b	2002	2001	0.9999	2000	1.0001	1999	1.0000	1998	1.0003	1.0000	1.0000	1.0002
19th to 18th	b	2001	2000	0.9999	1999	1.0004	1998	1.0009	1997	0.9999	1.0001	1.0004	1.0007
20th to 19th	b	2000	1999	1.0003	1998	0.9994	1997	1.0007	1996	1.0004	0.9999	1.0002	1.0001
21st to 20th	b	1999	1998	1.0008	1997	1.0011	1996	1.0007	1995	0.9998	1.0009	1.0008	1.0001
22nd to 21st	b	1998	1997	1.0007	1996	1.0011	1995	0.9996	1994	1.0009	1.0018	1.0009	1.0008
23rd to 22nd	b	1997	1996	1.0005	1995	0.9996	1994	1.0002	1993	0.9998	1.0002	1.0001	1.0001
24th to 23rd	b	1996	1995	0.9989	1994	1.0004	1993	0.9999	1992	1.0011	0.9997	0.9997	1.0001
25th to 24th	b	1995	1994	1.0004	1993	0.9991	1992	1.0000	1991	1.0008	0.9997	0.9998	1.0001
26th to 25th	b	1994	1993	1.0005	1992	1.0004	1991	1.0024	1990	0.9995	1.0006	1.0004	1.0007
27th to 26th	b	1993	1992	1.0003	1991	1.0034	1990	1.0005	1989	1.0003	1.0005	1.0018	1.0010
28th to 27th	b	1992	1991	1.0009	1990	0.9997	1989	1.0007	1988	1.0003	1.0004	1.0004	1.0004
29th to 28th	b	1991	1990	0.9998	1989	0.9993	1988	0.9995	1987	0.9992	0.9995	0.9998	0.9996
30th to 29th	b	1990	1989	1.0002	1988	0.9999	1987	0.9994	1986	1.0004	1.0000	0.9998	1.0001
Beyond 30th	b	1989 & Prior	1988 & Prior	1.0020	1987 & Prior	0.9996	1986 & Prior	1.0012	1985 & Prior	1.0004	1.0021	1.0013	1.0011

a From Table I - D - Reported  
b From Table I - B - Reported

**EXHIBIT V - 3**

**POST-HB 1840 DEVELOPMENT FACTORS**

**INDEMNITY LOSSES  
PAID METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average	Selected Average	Cumulative Average	
2nd to 1st	a	2018	2017	1.8216	2016	1.7944	2015	1.7865	2014	1.8713	1.8157	1.8086	1.8167	1.8157	2.6704	
3rd to 2nd	a	2017	2016	1.2177	2015	1.2107	2014	1.2311	2013	1.2582	1.2056	1.2073	1.2222	1.2056	1.4707	
4th to 3rd	a	2016	2015	1.0694	2014	1.0823	2013	1.0815	2012	1.0979	1.0702	1.0742	1.0804	1.0702	1.2199	
5th to 4th	a	2015	2014	1.0292	2013	1.0350	2012	1.0359	2011	1.0380	1.0331	1.0337	1.0350	1.0331	1.1399	
6th to 5th	a	2014	2013	1.0179	2012	1.0259	2011	1.0226	2010	1.0275	1.0156	1.0190	1.0214	1.0156	1.1034	
7th to 6th	a	2013	2012	1.0112	2011	1.0159	2010	1.0167	2009	1.0220	1.0129	1.0139	1.0161	1.0129	1.0865	
8th to 7th	a	2012	2011	1.0109	2010	1.0097	2009	1.0132	2008	1.0111	1.0111	1.0106	1.0112	1.0111	1.0727	
9th to 8th	a	2011	2010	1.0102	2009	1.0067	2008	1.0068	2007	1.0104	1.0072	1.0070	1.0076	1.0072	1.0609	
10th to 9th	a	2010	2009	1.0047	2008	1.0055	2007	1.0076	2006	1.0088	1.0051	1.0061	1.0069	1.0051	1.0534	
11th to 10th	a	2009	2008	1.0038	2007	1.0050	2006	1.0072	2005	1.0081	1.0044	1.0052	1.0062	1.0044	1.0481	
12th to 11th	a	2008	2007	1.0033	2006	1.0051	2005	1.0079	2004	1.0068	1.0042	1.0054	1.0056	1.0042	1.0435	
13th to 12th	a	2007	2006	1.0040	2005	1.0050	2004	1.0061	2003	1.0045	1.0045	1.0050	1.0051	1.0045	1.0391	
14th to 13th	a	2006	2005	1.0031	2004	1.0048	2003	1.0053	2002	1.0045	1.0040	1.0044	1.0044	1.0040	1.0344	
15th to 14th	a	2005	2004	1.0031	2003	1.0076	2002	1.0033	2001	1.0020	1.0054	1.0049	1.0040	1.0054	1.0304	
16th to 15th	a	2004	2003	1.0048	2002	1.0037	2001	1.0029	2000	1.0021	1.0043	1.0041	1.0034	1.0043	1.0249	
17th to 16th	a	2003	2002	1.0019	2001	1.0047	2000	1.0019	1999	1.0017	1.0033	1.0028	1.0025	1.0033	1.0206	
18th to 17th	a	2002	2001	1.0022	2000	1.0024	1999	1.0015	1998	1.0020	1.0023	1.0020	1.0019	1.0023	1.0172	
19th to 18th	a	2001	2000	1.0016	1999	1.0018	1998	1.0015	1997	1.0019	1.0017	1.0016	1.0017	1.0017	1.0149	
20th to 19th	a	2000	1999	1.0008	1998	1.0010	1997	1.0017	1996	1.0028	1.0009	1.0012	1.0017	1.0009	1.0131	
21st to 20th	a	1999	1998	1.0018	1997	1.0009	1996	1.0016	1995	1.0039	1.0014	1.0014	1.0022	1.0122	b	1.0122
22nd to 21st	a	1998	1997	1.0009	1996	1.0025	1995	1.0022	1994	1.0046	1.0017	1.0019	1.0026			
23rd to 22nd	a	1997	1996	1.0018	1995	1.0026	1994	1.0026	1993	1.0041	1.0022	1.0023	1.0030			
24th to 23rd	a	1996	1995	1.0018	1994	1.0031	1993	1.0040	1992	1.0040	1.0025	1.0030	1.0034			
25th to 24th	a	1995	1994	1.0022	1993	1.0042	1992	1.0033	1991	1.0036	1.0032	1.0032	1.0033			
26th to 25th	a	1994	1993	1.0027	1992	1.0030	1991	1.0036	1990	1.0029	1.0029	1.0031	1.0030			
27th to 26th	a	1993	1992	1.0028	1991	1.0038	1990	1.0027	1989	1.0030	1.0033	1.0031	1.0029			
28th to 27th	a	1992	1991	1.0034	1990	1.0029	1989	1.0026	1988	1.0019	1.0032	1.0030	1.0027			
29th to 28th	a	1991	1990	1.0026	1989	1.0022	1988	1.0022	1987	1.0016	1.0024	1.0023	1.0020			
30th to 29th	a	1990	1989	1.0020	1988	1.0019	1987	1.0015	1986	1.0024	1.0020	1.0018	1.0019			

**INCURRED METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average	Selected Average	Cumulative Average	
2nd to 1st	c	2018	2017	1.3449	2016	1.3284	2015	1.3372	2014	1.3303	1.3312	1.3302	1.3316	1.3312	1.4694	
3rd to 2nd	c	2017	2016	1.0832	2015	1.0791	2014	1.0864	2013	1.0948	1.0768	1.0776	1.0828	1.0768	1.1039	
4th to 3rd	c	2016	2015	1.0205	2014	1.0170	2013	1.0105	2012	1.0319	1.0148	1.0155	1.0178	1.0148	1.0251	
5th to 4th	c	2015	2014	1.0042	2013	0.9976	2012	1.0050	2011	1.0040	1.0021	1.0006	1.0021	1.0021	1.0102	
6th to 5th	c	2014	2013	0.9978	2012	1.0034	2011	1.0078	2010	1.0002	0.9995	1.0008	1.0021	0.9995	1.0081	
7th to 6th	c	2013	2012	1.0043	2011	1.0000	2010	1.0068	2009	1.0058	1.0026	1.0017	1.0035	1.0026	1.0086	
8th to 7th	c	2012	2011	1.0024	2010	1.0020	2009	1.0043	2008	0.9999	1.0025	1.0023	1.0022	1.0025	1.0061	
9th to 8th	c	2011	2010	1.0006	2009	1.0015	2008	1.0015	2007	1.0013	1.0011	1.0017	1.0016	1.0011	1.0035	
10th to 9th	c	2010	2009	1.0009	2008	1.0017	2007	1.0033	2006	1.0025	1.0013	1.0007	1.0016	1.0013	1.0025	
11th to 10th	c	2009	2008	0.9989	2007	1.0022	2006	1.0011	2005	1.0014	0.9996	1.0005	1.0008	0.9996	1.0012	
12th to 11th	c	2008	2007	0.9997	2006	1.0025	2005	1.0011	2004	1.0014	1.0002	1.0009	1.0011	1.0002	1.0016	
13th to 12th	c	2007	2006	1.0007	2005	1.0020	2004	1.0009	2003	1.0007	1.0013	1.0015	1.0012	1.0013	1.0014	
14th to 13th	c	2006	2005	0.9989	2004	1.0005	2003	1.0016	2002	1.0016	1.0000	1.0002	1.0007	1.0000	1.0001	
15th to 14th	c	2005	2004	1.0000	2003	0.9992	2002	1.0014	2001	1.0013	1.0002	0.9998	1.0004	1.0002	1.0001	
16th to 15th	c	2004	2003	0.9977	2002	1.0011	2001	1.0001	2000	0.9999	0.9983	0.9992	0.9995	0.9983	1.0000	
17th to 16th	c	2003	2002	0.9994	2001	1.0009	2000	1.0012	1999	1.0005	0.9990	0.9996	1.0001	0.9990	1.0017	
18th to 17th	c	2002	2001	1.0000	2000	1.0000	1999	1.0006	1998	1.0003	0.9999	0.9999	1.0001	0.9999	1.0028	
19th to 18th	c	2001	2000	1.0003	1999	1.0009	1998	0.9999	1997	1.0021	1.0001	1.0003	1.0006	1.0001	1.0029	
20th to 19th	c	2000	1999	0.9993	1998	1.0007	1997	1.0004	1996	0.9999	0.9998	1.0001	1.0001	0.9998	1.0028	
21st to 20th	c	1999	1998	1.0010	1997	1.0006	1996	0.9998	1995	0.9984	1.0009	1.0008	1.0001	1.0031	d	1.0031
22nd to 21st	c	1998	1997	1.0011	1996	0.9996	1995	1.0009	1994	1.0017	1.0009	1.0004	1.0008			
23rd to 22nd	c	1997	1996	0.9995	1995	1.0002	1994	0.9998	1993	1.0002	1.0000	1.0001	1.0000			
24th to 23rd	c	1996	1995	1.0003	1994	0.9999	1993	0.9999	1992	1.0011	0.9996	0.9997	1.0000			
25th to 24th	c	1995	1994	0.9990	1993	1.0000	1992	1.0000	1991	1.0008	0.9996	0.9997	1.0000			
26th to 25th	c	1994	1993	1.0002	1992	1.0023	1991	0.9995	1990	1.0006	1.0003	1.0010	1.0006			
27th to 26th	c	1993	1992	1.0031	1991	1.0004	1990	1.0003	1989	1.0005	1.0017	1.0012	1.0009			
28th to 27th	c	1992	1991	0.9995	1990	1.0006	1989	1.0003	1988	1.0004	1.0001	1.0003	1.0003			
29th to 28th	c	1991	1990	0.9992	1989	1.0002	1988	0.9995	1987	0.9992	0.9995	0.9997	0.9996			
30th to 29th	c	1990	1989	0.9998	1988	0.9994	1987	1.0004	1986	1.0004	1.0000	0.9998	1.0000			
Beyond 30th	c	1989 & Prior	1988 & Prior	1.0018	1987 & Prior	0.9995	1986 & Prior	1.0012	1985 & Prior	1.0004	1.0017	1.0010	1.0009			

a From Table I - D - Adjusted

b Selected Paid Tail Factor = Incurred Tail Factor \* Selected Paid Bridge Factor (1.0031 \* 1.0091 = 1.0122)

c From Table I - B - Adjusted

d Derived separately. See Exhibit 7 of the April 1, 2022 Filing.

**EXHIBIT V - 4**

**REPORTED DEVELOPMENT FACTORS**

**MEDICAL LOSSES  
PAID METHOD**

Reports in Ratio	Policy Year	2019-2020 Year	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average
2nd to 1st	a	2018	2017	1.2351	2016	1.2446	2015	1.2487	2014	1.2601	1.2180	1.2268	1.2379
3rd to 2nd	a	2017	2016	1.0595	2015	1.0600	2014	1.0626	2013	1.0770	1.0600	1.0600	1.0639
4th to 3rd	a	2016	2015	1.0254	2014	1.0181	2013	1.0298	2012	1.0369	1.0229	1.0213	1.0261
5th to 4th	a	2015	2014	1.0083	2013	1.0117	2012	1.0156	2011	1.0176	1.0100	1.0096	1.0124
6th to 5th	a	2014	2013	1.0068	2012	1.0118	2011	1.0146	2010	1.0156	1.0079	1.0092	1.0116
7th to 6th	a	2013	2012	1.0098	2011	1.0113	2010	1.0141	2009	1.0134	1.0106	1.0096	1.0113
8th to 7th	a	2012	2011	1.0098	2010	1.0081	2009	1.0116	2008	1.0114	1.0090	1.0098	1.0104
9th to 8th	a	2011	2010	1.0086	2009	1.0094	2008	1.0099	2007	1.0144	1.0090	1.0082	1.0097
10th to 9th	a	2010	2009	1.0071	2008	1.0048	2007	1.0117	2006	1.0151	1.0060	1.0070	1.0095
11th to 10th	a	2009	2008	1.0054	2007	1.0076	2006	1.0098	2005	1.0100	1.0065	1.0075	1.0084
12th to 11th	a	2008	2007	1.0052	2006	1.0080	2005	1.0105	2004	1.0097	1.0066	1.0090	1.0095
13th to 12th	a	2007	2006	1.0087	2005	1.0085	2004	1.0078	2003	1.0108	1.0086	1.0100	1.0097
14th to 13th	a	2006	2005	1.0069	2004	1.0077	2003	1.0082	2002	1.0149	1.0073	1.0080	1.0094
15th to 14th	a	2005	2004	1.0060	2003	1.0085	2002	1.0108	2001	1.0090	1.0073	1.0079	1.0087
16th to 15th	a	2004	2003	1.0068	2002	1.0079	2001	1.0128	2000	1.0056	1.0079	1.0092	1.0082
17th to 16th	a	2003	2002	1.0083	2001	1.0116	2000	1.0076	1999	1.0077	1.0100	1.0092	1.0087
18th to 17th	a	2002	2001	1.0081	2000	1.0065	1999	1.0088	1998	1.0086	1.0073	1.0078	1.0077
19th to 18th	a	2001	2000	1.0039	1999	1.0075	1998	1.0077	1997	1.0106	1.0057	1.0068	1.0078
20th to 19th	a	2000	1999	1.0046	1998	1.0085	1997	1.0086	1996	1.0106	1.0066	1.0069	1.0080
21st to 20th	a	1999	1998	1.0051	1997	1.0066	1996	1.0114	1995	1.0090	1.0058	1.0077	1.0076
22nd to 21st	a	1998	1997	1.0063	1996	1.0070	1995	1.0098	1994	1.0109	1.0067	1.0077	1.0087
23rd to 22nd	a	1997	1996	1.0056	1995	1.0071	1994	1.0078	1993	1.0106	1.0069	1.0068	1.0076
24th to 23rd	a	1996	1995	1.0057	1994	1.0063	1993	1.0087	1992	1.0080	1.0099	1.0069	1.0077
25th to 24th	a	1995	1994	1.0037	1993	1.0069	1992	1.0070	1991	1.0048	1.0053	1.0060	1.0060
26th to 25th	a	1994	1993	1.0068	1992	1.0051	1991	1.0058	1990	1.0061	1.0059	1.0059	1.0058
27th to 26th	a	1993	1992	1.0048	1991	1.0047	1990	1.0049	1989	1.0078	1.0059	1.0055	1.0059
28th to 27th	a	1992	1991	1.0052	1990	1.0040	1989	1.0049	1988	1.0069	1.0044	1.0046	1.0047
29th to 28th	a	1991	1990	1.0034	1989	1.0044	1988	1.0069	1987	1.0037	1.0039	1.0049	1.0049
30th to 29th	a	1990	1989	1.0037	1988	1.0047	1987	1.0041	1986	1.0068	1.0061	1.0042	1.0051

**INCURRED METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average
2nd to 1st	b	2018	2017	1.0451	2016	1.0466	2015	1.0467	2014	1.0703	1.0323	1.0371	1.0456
3rd to 2nd	b	2017	2016	1.0136	2015	0.9999	2014	1.0198	2013	1.0193	1.0143	1.0095	1.0135
4th to 3rd	b	2016	2015	1.0015	2014	1.0018	2013	0.9969	2012	1.0043	1.0016	1.0017	1.0013
5th to 4th	b	2015	2014	0.9919	2013	0.9945	2012	1.0304	2011	1.0084	0.9932	0.9910	1.0024
6th to 5th	b	2014	2013	1.0001	2012	0.9946	2011	1.0003	2010	0.9983	0.9973	0.9983	1.0003
7th to 6th	b	2013	2012	1.0012	2011	1.0137	2010	1.0079	2009	1.0161	1.0075	1.0052	1.0079
8th to 7th	b	2012	2011	0.9996	2010	1.0041	2009	0.9969	2008	0.9989	1.0018	1.0041	1.0016
9th to 8th	b	2011	2010	1.0063	2009	1.0025	2008	0.9975	2007	1.0062	1.0044	1.0026	1.0023
10th to 9th	b	2010	2009	1.0028	2008	0.9996	2007	1.0035	2006	1.0040	1.0012	1.0020	1.0024
11th to 10th	b	2009	2008	0.9998	2007	1.0021	2006	1.0031	2005	1.0046	1.0083	1.0010	1.0017
12th to 11th	b	2008	2007	1.0028	2006	1.0008	2005	1.0076	2004	0.9994	1.0018	1.0037	1.0036
13th to 12th	b	2007	2006	1.0066	2005	1.0011	2004	1.0049	2003	1.0031	1.0068	1.0038	1.0045
14th to 13th	b	2006	2005	1.0075	2004	1.0067	2003	1.0102	2002	1.0045	1.0030	1.0071	1.0081
15th to 14th	b	2005	2004	1.0054	2003	1.0004	2002	1.0070	2001	1.0055	1.0017	1.0029	1.0043
16th to 15th	b	2004	2003	0.9974	2002	0.9998	2001	1.0195	2000	1.0015	1.0044	0.9986	1.0056
17th to 16th	b	2003	2002	1.0033	2001	0.9973	2000	1.0016	1999	1.0023	1.0031	1.0003	1.0007
18th to 17th	b	2002	2001	0.9979	2000	1.0010	1999	1.0079	1998	0.9983	1.0007	0.9994	1.0022
19th to 18th	b	2001	2000	0.9985	1999	1.0025	1998	1.0011	1997	1.0142	1.0046	1.0005	1.0007
20th to 19th	b	2000	1999	1.0056	1998	1.0020	1997	1.0043	1996	0.9981	1.0053	1.0038	1.0040
21st to 20th	b	1999	1998	0.9998	1997	1.0020	1996	1.0037	1995	1.0070	0.9990	1.0009	1.0018
22nd to 21st	b	1998	1997	0.9989	1996	0.9984	1995	1.0028	1994	1.0013	1.0044	0.9986	1.0000
23rd to 22nd	b	1997	1996	1.0088	1995	0.9933	1994	1.0041	1993	1.0023	1.0048	1.0010	1.0021
24th to 23rd	b	1996	1995	1.0001	1994	1.0007	1993	1.0078	1992	1.0029	1.0036	1.0004	1.0029
25th to 24th	b	1995	1994	1.0013	1993	1.0021	1992	0.9966	1991	1.0004	0.9988	1.0017	1.0000
26th to 25th	b	1994	1993	1.0004	1992	0.9989	1991	1.0019	1990	1.0016	1.0043	0.9997	1.0004
27th to 26th	b	1993	1992	1.0010	1991	1.0054	1990	1.0019	1989	1.0013	1.0051	1.0032	1.0028
28th to 27th	b	1992	1991	1.0066	1990	1.0019	1989	1.0014	1988	1.0010	1.0011	1.0043	1.0033
29th to 28th	b	1991	1990	1.0000	1989	1.0021	1988	1.0040	1987	0.9984	1.0008	1.0010	1.0020
30th to 29th	b	1990	1989	1.0013	1988	0.9988	1987	1.0024	1986	1.0134	1.0061	1.0000	1.0008
Beyond 30th	b	1989 & Prior	1988 & Prior	1.0157	1987 & Prior	1.0075	1986 & Prior	1.0234	1985 & Prior	1.0094	1.0116	1.0155	1.0122

a From Table I - E - Reported  
b From Table I - C - Reported

**EXHIBIT V - 5**

**POST-HB 1846 DEVELOPMENT FACTORS**

**MEDICAL LOSSES  
PAID METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average	Selected Average	Cumulative Average
2nd to 1st	a	2018	2017	1.2351	2016	1.2446	2015	1.2487	2014	1.2608	1.2180	1.2268	1.2380	1.2428	1.6620
3rd to 2nd	a	2017	2016	1.0595	2015	1.0600	2014	1.0628	2013	1.0776	1.0600	1.0600	1.0641	1.0600	1.3373
4th to 3rd	a	2016	2015	1.0254	2014	1.0204	2013	1.0181	2012	1.0372	1.0229	1.0213	1.0262	1.0229	1.2616
5th to 4th	a	2015	2014	1.0083	2013	1.0118	2012	1.0089	2011	1.0177	1.0101	1.0097	1.0125	1.0101	1.2334
6th to 5th	a	2014	2013	1.0068	2012	1.0091	2011	1.0147	2010	1.0157	1.0080	1.0093	1.0116	1.0080	1.2211
7th to 6th	a	2013	2012	1.0099	2011	1.0114	2010	1.0142	2009	1.0134	1.0107	1.0097	1.0113	1.0107	1.2115
8th to 7th	a	2012	2011	1.0099	2010	1.0082	2009	1.0116	2008	1.0110	1.0091	1.0098	1.0104	1.0091	1.1987
9th to 8th	a	2011	2010	1.0087	2009	1.0094	2008	1.0095	2007	1.0139	1.0091	1.0082	1.0096	1.0091	1.1880
10th to 9th	a	2010	2009	1.0072	2008	1.0048	2007	1.0113	2006	1.0146	1.0060	1.0069	1.0093	1.0060	1.1773
11th to 10th	a	2009	2008	1.0054	2007	1.0073	2006	1.0091	2005	1.0097	1.0064	1.0073	1.0082	1.0064	1.1703
12th to 11th	a	2008	2007	1.0050	2006	1.0077	2005	1.0134	2004	1.0095	1.0064	1.0087	1.0092	1.0064	1.1629
13th to 12th	a	2007	2006	1.0084	2005	1.0082	2004	1.0125	2003	1.0107	1.0083	1.0097	1.0095	1.0083	1.1556
14th to 13th	a	2006	2005	1.0067	2004	1.0075	2003	1.0094	2002	1.0149	1.0071	1.0079	1.0093	1.0071	1.1460
15th to 14th	a	2005	2004	1.0059	2003	1.0084	2002	1.0090	2001	1.0092	1.0072	1.0078	1.0087	1.0072	1.1380
16th to 15th	a	2004	2003	1.0067	2002	1.0078	2001	1.0129	2000	1.0081	1.0073	1.0091	1.0082	1.0073	1.1299
17th to 16th	a	2003	2002	1.0083	2001	1.0117	2000	1.0078	1999	1.0084	1.0100	1.0093	1.0088	1.0100	1.1218
18th to 17th	a	2002	2001	1.0082	2000	1.0066	1999	1.0091	1998	1.0092	1.0074	1.0080	1.0080	1.0074	1.1106
19th to 18th	a	2001	2000	1.0040	1999	1.0078	1998	1.0094	1997	1.0115	1.0059	1.0071	1.0082	1.0059	1.1025
20th to 19th	a	2000	1999	1.0048	1998	1.0089	1997	1.0080	1996	1.0117	1.0069	1.0072	1.0085	1.0069	1.0960
21st to 20th	a	1999	1998	1.0053	1997	1.0070	1996	1.0123	1995	1.0099	1.0067	1.0062	1.0082	1.0082	1.0886
22nd to 21st	a	1998	1997	1.0067	1996	1.0076	1995	1.0108	1994	1.0125	1.0072	1.0084	1.0097	b	1.0886
23rd to 22nd	a	1997	1996	1.0060	1995	1.0078	1994	1.0121	1993	1.0080	1.0069	1.0075	1.0085		
24th to 23rd	a	1996	1995	1.0063	1994	1.0070	1993	1.0099	1992	1.0118	1.0067	1.0077	1.0089		
25th to 24th	a	1995	1994	1.0041	1993	1.0079	1992	1.0087	1991	1.0059	1.0060	1.0069	1.0070		
26th to 25th	a	1994	1993	1.0077	1992	1.0059	1991	1.0063	1990	1.0077	1.0068	1.0068	1.0069		
27th to 26th	a	1993	1992	1.0056	1991	1.0084	1990	1.0061	1989	1.0100	1.0070	1.0066	1.0072		
28th to 27th	a	1992	1991	1.0062	1990	1.0048	1989	1.0061	1988	1.0058	1.0055	1.0057	1.0064		
29th to 28th	a	1991	1990	1.0042	1989	1.0055	1988	1.0088	1987	1.0084	1.0049	1.0062	1.0064		
30th to 29th	a	1990	1989	1.0046	1988	1.0061	1987	1.0054	1986	1.0087	1.0054	1.0054	1.0068		

**INCURRED METHOD**

Reports in Ratio	Policy Year	2019-2020 Ratio	Policy Year	2018-2019 Ratio	Policy Year	2017-2018 Ratio	Policy Year	2016-2017 Ratio	Policy Year	2015-2016 Ratio	2 Year Average	3 Year Average	5 Year Average	Selected Average	Cumulative Average
2nd to 1st	c	2018	2017	1.0451	2016	1.0466	2015	1.0478	2014	1.0717	1.0323	1.0371	1.0461	1.0465	1.1564
3rd to 2nd	c	2017	2016	1.0136	2015	0.9999	2014	1.0202	2013	1.0201	1.0144	1.0095	1.0138	1.0144	1.1050
4th to 3rd	c	2016	2015	1.0018	2014	1.0018	2013	0.9973	2012	1.0047	1.0017	1.0017	1.0014	1.0017	1.0894
5th to 4th	c	2015	2014	0.9945	2013	0.9866	2012	1.0309	2011	1.0088	0.9932	0.9910	1.0025	0.9932	1.0876
6th to 5th	c	2014	2013	0.9946	2012	1.0003	2011	1.0084	2010	0.9987	0.9974	0.9983	1.0004	0.9974	1.0950
7th to 6th	c	2013	2012	1.0138	2011	1.0007	2010	1.0082	2009	1.0162	1.0075	1.0052	1.0080	1.0075	1.0980
8th to 7th	c	2012	2011	1.0041	2010	1.0089	2009	0.9971	2008	0.9991	1.0019	1.0042	1.0018	1.0019	1.0898
9th to 8th	c	2011	2010	1.0064	2009	1.0026	2008	0.9989	2007	1.0062	1.0045	1.0026	1.0024	1.0045	1.0878
10th to 9th	c	2010	2009	0.9996	2008	1.0034	2007	1.0022	2006	1.0041	1.0012	1.0019	1.0024	1.0012	1.0829
11th to 10th	c	2009	2008	0.9998	2007	1.0021	2006	1.0046	2005	1.0083	1.0010	1.0016	1.0036	1.0010	1.0816
12th to 11th	c	2008	2007	1.0027	2006	1.0007	2005	1.0073	2004	0.9996	1.0017	1.0036	1.0035	1.0017	1.0806
13th to 12th	c	2007	2006	1.0063	2005	1.0010	2004	1.0048	2003	1.0069	1.0037	1.0040	1.0044	1.0037	1.0787
14th to 13th	c	2006	2005	1.0072	2004	1.0065	2003	1.0046	2002	1.0033	1.0069	1.0079	1.0063	1.0069	1.0748
15th to 14th	c	2005	2004	1.0053	2003	1.0004	2002	1.0069	2001	1.0019	1.0029	1.0042	1.0040	1.0029	1.0675
16th to 15th	c	2004	2003	0.9975	2002	0.9998	2001	1.0196	2000	1.0048	0.9987	1.0056	1.0047	0.9987	1.0645
17th to 16th	c	2003	2002	1.0033	2001	0.9973	2000	1.0016	1999	1.0035	1.0003	1.0007	1.0017	1.0003	1.0659
18th to 17th	c	2002	2001	0.9979	2000	1.0010	1999	1.0081	1998	1.0010	0.9995	1.0023	1.0013	0.9995	1.0656
19th to 18th	c	2001	2000	0.9985	1999	1.0025	1998	1.0012	1997	1.0052	1.0005	1.0007	1.0045	1.0005	1.0662
20th to 19th	c	2000	1999	1.0057	1998	1.0021	1997	1.0045	1996	0.9982	1.0039	1.0041	1.0033	1.0039	1.0656
21st to 20th	c	1999	1998	0.9998	1997	1.0021	1996	1.0040	1995	1.0079	1.0010	1.0020	1.0026	1.0615	d
22nd to 21st	c	1998	1997	0.9988	1996	0.9983	1995	1.0016	1994	1.0053	0.9986	1.0001	1.0014		
23rd to 22nd	c	1997	1996	1.0095	1995	0.9927	1994	1.0046	1993	1.0028	1.0011	1.0023	1.0031		
24th to 23rd	c	1996	1995	1.0002	1994	1.0008	1993	1.0035	1992	1.0045	1.0005	1.0033	1.0036		
25th to 24th	c	1995	1994	1.0015	1993	1.0023	1992	0.9961	1991	0.9988	1.0019	1.0000	0.9999		
26th to 25th	c	1994	1993	1.0004	1992	0.9988	1991	1.0023	1990	1.0021	1.0055	0.9996	1.0005	1.0018	
27th to 26th	c	1993	1992	1.0012	1991	1.0064	1990	1.0024	1989	1.0018	1.0067	1.0038	1.0033	1.0037	
28th to 27th	c	1992	1991	1.0078	1990	1.0023	1989	1.0017	1988	1.0017	1.0051	1.0039	1.0030		
29th to 28th	c	1991	1990	1.0000	1989	1.0026	1988	1.0050	1987	0.9981	1.0013	1.0013	1.0025	1.0014	
30th to 29th	c	1990	1989	1.0016	1988	0.9984	1987	1.0031	1986	1.0182	1.0086	1.0000	1.0010	1.0060	
Beyond 30th	c	1989 & Prior	1988 & Prior	1.0195	1.0095	1.0095	1987 & Prior	1.0306	1986 & Prior	1.0073	1985 & Prior	1.0141	1.0145	1.0199	1.0162

a From Table I - E - Adjusted

b Selected Paid Tail Factor = Incurred Tail Factor \* Selected Paid Bridge Factor (1.0615 \* 1.0255 = 1.0886)

c From Table I - C - Adjusted

d Derived separately. See Exhibit 7 of the April 1, 2022 Filing.

**EXHIBIT VI - 1**

**DETERMINATION OF TREND**

**INDEMNITY**

Policy Year	2013	2014	2015	2016	2017	2018	2019
Actual Loss Ratio	0.7182	0.6824	0.6114	0.5675	0.5560	0.5581	0.5107
Normalized Frequency	0.8433	0.7709	0.7106	0.6651	0.6285	0.6049	0.5371
Severity Loss Ratio	0.8516	0.8852	0.8603	0.8532	0.8846	0.9227	0.9508
<b>x</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>y</b>	0.8516	0.8852	0.8603	0.8532	0.8846	0.9227	0.9508

**7 Point Exponential Regression:  $y = 0.832086 * 1.015889 ^ x$**

**Selected Annual Severity Trend Factor =** **1.59%**

Policy Year	Annual Severity Trend Factor (1)	Trend Period # of Years to 4/1/23 (2)	Severity Trend Factor (3) = (1) ^ (2)	Frequency Trend Factor (4) #
2017	1.0159	5.2500	1.0863	0.7142
2018	1.0159	4.2500	1.0693	0.7614
2019	1.0159	3.2500	1.0526	0.8119

**Trended Loss Ratio**

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3) * (4)	Trended Loss Ratio (7) = (5) * (6)
2017	0.5560	0.7758	0.4313
2018	0.5581	0.8142	0.4544
2019	0.5107	0.8546	0.4364

**MEDICAL**

Policy Year	2013	2014	2015	2016	2017	2018	2019
Actual Loss Ratio	0.7411	0.7311	0.6298	0.6018	0.6022	0.6291	0.5397
Normalized Frequency	0.8433	0.7709	0.7106	0.6651	0.6285	0.6049	0.5371
Severity Loss Ratio	0.8788	0.9484	0.8862	0.9048	0.9581	1.0400	1.0048
<b>x</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>y</b>	0.8788	0.9484	0.8862	0.9048	0.9581	1.0400	1.0048

**7 Point Exponential Regression:  $y = 0.858719 * 1.024011 ^ x$**

**Selected Annual Severity Trend Factor =** **2.40%**

Policy Year	Annual Severity Trend Factor (1)	Trend Period # of Years to 4/1/23 (2)	Severity Trend Factor (3) = (1) ^ (2)	Frequency Trend Factor (4) #
2017	1.0240	5.2500	1.1327	0.7142
2018	1.0240	4.2500	1.1061	0.7614
2019	1.0240	3.2500	1.0802	0.8119

**Trended Loss Ratio**

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3) * (4)	Trended Loss Ratio (7) = (5) * (6)
2017	0.6022	0.8090	0.4872
2018	0.6291	0.8422	0.5298
2019	0.5397	0.8770	0.4733

**EXHIBIT VI - 2**

**DETERMINATION OF TREND**

**CLAIM FREQUENCY**

Policy Year Frequency per \$1 million of Expected Losses

Policy Year	Claim Frequency	Normalized Frequency
2009	27.89	1.0000
2010	27.36	0.9810
2011	25.62	0.9186
2012	24.02	0.8612
2013	23.52	0.8433
2014	21.50	0.7709
2015	19.82	0.7106
2016	18.55	0.6651
2017	17.53	0.6285
2018	16.87	0.6049
2019*	14.98	0.5371

Policy Year	2012	2013	2014	2015	2016	2017	2018
<b>x</b>	1	2	3	4	5	6	7
<b>y</b>	0.8612	0.8433	0.7709	0.7106	0.6651	0.6285	0.6049

**7 Point Exponential Regression:  $y = 0.930934 * 0.937887 ^ x$**

**Selected Annual Frequency Trend Factor =**

<b>-6.2%</b>
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Policy Year	Annual Frequency Trend Factor (1)	Trend Period # of Years to 4/1/23 (2)	Frequency Trend Factor (3) = (1) ^ (2)
2017	0.9379	5.2500	0.7142
2018	0.9379	4.2500	0.7614
2019	0.9379	3.2500	0.8119

\* Policy Year 2019 was excluded from trend due to being significantly impacted by COVID-19 disruptions.

TABLE I

## POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

## ACCUMULATED STANDARD EARNED PREMIUM

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	16,341,273,497	16,341,273,515	1.0000
1989	2,028,102,615	2,028,102,615	1.0000
1990	2,290,405,048	2,290,405,048	1.0000
1991	2,398,443,076	2,398,447,133	1.0000
1992	2,244,438,656	2,244,438,656	1.0000
1993	2,409,615,601	2,409,616,845	1.0000
1994	1,820,873,362	1,821,087,752	1.0001
1995	1,679,960,543	1,679,960,543	1.0000
1996	1,596,023,271	1,596,023,271	1.0000
1997	1,312,458,966	1,312,458,966	1.0000
1998	1,258,395,757	1,258,423,653	1.0000
1999	1,270,965,472	1,270,946,009	1.0000
2000	1,331,848,694	1,331,794,138	1.0000
2001	1,426,111,586	1,426,050,363	1.0000
2002	1,497,895,978	1,498,049,368	1.0001
2003	1,566,331,758	1,566,331,758	1.0000
2004	1,667,728,303	1,667,722,969	1.0000
2005	1,831,932,415	1,831,925,456	1.0000
2006	1,805,813,476	1,805,813,415	1.0000
2007	1,869,442,095	1,869,437,052	1.0000
2008	1,727,205,412	1,727,203,847	1.0000
2009	1,534,026,890	1,534,022,429	1.0000
2010	1,606,373,793	1,606,361,214	1.0000
2011	1,654,324,979	1,653,655,957	0.9996
2012	1,542,713,155	1,542,803,561	1.0001
2013	1,504,277,408	1,504,403,960	1.0001
2014	1,507,321,348	1,507,723,746	1.0003
2015	1,512,655,374	1,511,102,707	0.9990
2016	1,520,645,231	1,519,086,323	0.9990
2017	1,573,072,809	1,593,195,295	1.0128
2018	945,077,895	1,714,078,344	1.8137
2019		822,938,945	

  

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	17,670,085,342	17,670,085,175	1.0000
1990	2,219,239,604	2,219,239,604	1.0000
1991	2,315,408,417	2,315,408,429	1.0000
1992	2,153,973,267	2,153,973,267	1.0000
1993	2,306,223,515	2,306,223,515	1.0000
1994	1,745,581,878	1,745,581,878	1.0000
1995	1,599,496,641	1,599,496,641	1.0000
1996	1,518,284,059	1,518,284,059	1.0000
1997	1,254,684,804	1,254,684,804	1.0000
1998	1,198,302,249	1,198,288,497	1.0000
1999	1,210,416,924	1,210,416,924	1.0000
2000	1,272,107,245	1,272,107,245	1.0000
2001	1,368,962,065	1,368,962,065	1.0000
2002	1,447,567,784	1,447,567,784	1.0000
2003	1,530,387,890	1,530,387,890	1.0000
2004	1,641,645,578	1,641,607,361	1.0000
2005	1,808,447,730	1,808,406,811	1.0000
2006	1,791,192,342	1,791,174,193	1.0000
2007	1,851,278,351	1,851,271,275	1.0000
2008	1,702,620,400	1,702,620,401	1.0000
2009	1,520,912,325	1,520,906,325	1.0000
2010	1,589,792,531	1,589,788,794	1.0000
2011	1,642,875,756	1,642,868,564	1.0000
2012	1,537,463,587	1,537,436,491	1.0000
2013	1,510,249,425	1,510,268,872	1.0000
2014	1,510,104,135	1,510,269,466	1.0001
2015	1,503,518,707	1,503,443,279	0.9999
2016	1,512,610,282	1,512,238,503	0.9998
2017	1,588,060,896	1,584,357,531	0.9977
2018	1,713,034,224	1,734,395,974	1.0125
2019	823,692,771	1,411,487,490	1.7136
2020		717,424,433	

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 - REPORTED

## POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

## INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	12,536,348,582	12,545,446,134	1.0007
1989	2,114,447,991	2,113,257,631	0.9994
1990	2,148,928,748	2,149,762,658	1.0004
1991	1,887,457,005	1,888,538,648	1.0006
1992	1,604,260,278	1,610,986,043	1.0042
1993	1,317,113,155	1,316,885,559	0.9998
1994	1,212,325,627	1,212,628,899	1.0003
1995	1,038,648,738	1,039,236,247	1.0006
1996	925,362,423	922,409,808	0.9968
1997	937,666,482	937,580,155	0.9999
1998	967,394,993	968,874,019	1.0015
1999	1,058,250,803	1,058,834,940	1.0006
2000	1,122,993,629	1,124,490,021	1.0013
2001	1,116,695,836	1,117,197,894	1.0004
2002	1,215,770,815	1,213,970,457	0.9985
2003	1,204,940,196	1,203,437,632	0.9988
2004	1,285,574,519	1,286,002,397	1.0003
2005	1,312,728,247	1,316,239,480	1.0027
2006	1,341,133,588	1,342,464,895	1.0010
2007	1,418,385,403	1,418,815,982	1.0003
2008	1,306,644,340	1,307,248,051	1.0005
2009	1,187,275,004	1,188,213,386	1.0008
2010	1,271,860,745	1,274,574,696	1.0021
2011	1,236,018,024	1,240,193,811	1.0034
2012	1,140,843,536	1,151,318,350	1.0092
2013	1,153,454,671	1,149,307,828	0.9964
2014	1,151,880,341	1,151,501,491	0.9997
2015	1,078,474,034	1,091,246,905	1.0118
2016	998,951,840	1,047,604,683	1.0487
2017	939,103,144	1,101,242,213	1.1727
2018	409,281,109	1,048,925,641	2.5628
2019		415,737,375	

  

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	14,156,286,230	14,171,666,847	1.0011
1990	2,091,112,058	2,092,416,786	1.0006
1991	1,832,609,846	1,832,312,671	0.9998
1992	1,547,621,196	1,552,607,953	1.0032
1993	1,260,705,515	1,261,440,598	1.0006
1994	1,171,053,832	1,171,594,784	1.0005
1995	995,268,235	996,005,365	1.0007
1996	875,090,780	874,600,932	0.9994
1997	901,216,092	905,072,238	1.0043
1998	928,934,332	928,779,604	0.9998
1999	1,010,772,961	1,011,100,151	1.0003
2000	1,074,768,528	1,077,617,852	1.0027
2001	1,078,477,058	1,077,695,937	0.9993
2002	1,182,241,897	1,181,061,035	0.9990
2003	1,180,974,910	1,181,878,885	1.0008
2004	1,268,438,895	1,266,206,359	0.9982
2005	1,307,980,197	1,311,629,927	1.0028
2006	1,340,814,732	1,346,361,577	1.0041
2007	1,414,819,338	1,420,709,112	1.0042
2008	1,296,967,544	1,299,150,997	1.0017
2009	1,178,432,687	1,178,554,634	1.0001
2010	1,258,761,727	1,261,147,813	1.0019
2011	1,238,756,239	1,243,103,484	1.0035
2012	1,149,267,728	1,150,746,531	1.0013
2013	1,149,252,949	1,150,553,792	1.0011
2014	1,163,521,788	1,164,461,134	1.0008
2015	1,086,274,307	1,082,150,938	0.9962
2016	1,042,228,947	1,048,255,850	1.0058
2017	1,088,184,278	1,134,600,984	1.0427
2018	1,049,712,887	1,197,243,024	1.1405
2019	413,762,305	923,405,099	2.2317
2020		326,910,126	

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 - B - REPORTED

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	8,166,302,630	8,169,151,949	1.0003
1989	1,284,658,652	1,284,495,801	0.9999
1990	1,308,409,512	1,307,509,771	0.9993
1991	1,128,983,751	1,128,622,483	0.9997
1992	951,095,607	954,306,118	1.0034
1993	819,182,695	819,483,127	1.0004
1994	749,258,414	748,602,570	0.9991
1995	620,182,502	620,456,975	1.0004
1996	512,864,282	512,684,207	0.9996
1997	513,756,060	514,346,623	1.0011
1998	514,185,888	514,753,115	1.0011
1999	586,537,040	586,187,998	0.9994
2000	622,484,205	622,741,640	1.0004
2001	632,878,753	632,914,192	1.0001
2002	665,383,227	665,070,131	0.9995
2003	650,093,485	648,706,679	0.9979
2004	684,488,172	684,679,902	1.0003
2005	690,227,385	689,570,339	0.9990
2006	711,269,557	711,935,820	1.0009
2007	748,026,318	747,951,409	0.9999
2008	697,884,714	697,199,628	0.9990
2009	634,374,590	635,540,788	1.0018
2010	656,317,948	657,463,972	1.0017
2011	631,253,595	632,962,317	1.0027
2012	578,653,909	581,406,963	1.0048
2013	577,266,184	576,231,510	0.9982
2014	572,309,775	575,135,388	1.0049
2015	540,419,708	552,234,529	1.0219
2016	481,488,514	523,122,060	1.0865
2017	388,683,934	525,997,010	1.3533
2018	117,806,395	420,154,804	3.5665
2019		125,277,791	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	9,144,319,521	9,146,898,069	1.0003
1990	1,275,275,231	1,275,536,055	1.0002
1991	1,097,815,468	1,097,546,537	0.9998
1992	918,204,389	919,018,822	1.0009
1993	787,100,436	787,349,994	1.0003
1994	723,347,632	723,720,520	1.0005
1995	594,443,117	594,654,627	1.0004
1996	485,114,198	484,568,745	0.9989
1997	494,511,713	494,782,655	1.0005
1998	493,466,084	493,802,243	1.0007
1999	558,925,708	559,353,232	1.0008
2000	596,485,143	596,665,841	1.0003
2001	610,532,724	610,460,541	0.9999
2002	646,990,195	646,934,792	0.9999
2003	637,191,402	636,295,484	0.9986
2004	675,817,191	675,097,532	0.9989
2005	687,161,371	687,453,693	1.0004
2006	712,809,297	713,668,810	1.0012
2007	749,945,790	751,480,347	1.0020
2008	694,327,694	694,801,451	1.0007
2009	633,107,994	633,336,443	1.0004
2010	653,442,295	654,149,371	1.0011
2011	629,791,879	630,287,145	1.0008
2012	581,135,024	582,860,717	1.0030
2013	583,318,146	583,938,254	1.0011
2014	580,509,597	581,411,975	1.0016
2015	549,926,271	550,125,582	1.0004
2016	520,703,205	525,940,694	1.0101
2017	523,180,839	561,076,478	1.0724
2018	420,090,038	555,348,512	1.3220
2019	125,169,273	394,722,564	3.1535
2020		99,578,244	

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 - C - REPORTED

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

MEDICAL INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	4,370,045,952	4,376,294,185	1.0014
1989	829,789,339	828,761,830	0.9988
1990	840,519,236	842,252,887	1.0021
1991	758,473,254	759,916,165	1.0019
1992	653,164,671	656,679,925	1.0054
1993	497,930,460	497,402,432	0.9989
1994	463,067,213	464,026,329	1.0021
1995	418,466,236	418,779,272	1.0007
1996	412,498,141	409,725,601	0.9933
1997	423,910,422	423,233,532	0.9984
1998	453,209,105	454,120,904	1.0020
1999	471,713,763	472,646,942	1.0020
2000	500,509,424	501,748,381	1.0025
2001	483,817,083	484,283,702	1.0010
2002	550,387,588	548,900,326	0.9973
2003	554,846,711	554,730,953	0.9998
2004	601,086,347	601,322,495	1.0004
2005	622,500,862	626,669,141	1.0067
2006	629,864,031	630,529,075	1.0011
2007	670,359,085	670,864,573	1.0008
2008	608,759,626	610,048,423	1.0021
2009	552,900,414	552,672,598	0.9996
2010	615,542,797	617,110,724	1.0025
2011	604,764,429	607,231,494	1.0041
2012	562,189,627	569,911,387	1.0137
2013	576,188,487	573,076,318	0.9946
2014	579,570,566	576,366,103	0.9945
2015	538,054,326	539,012,376	1.0018
2016	517,463,326	524,482,623	1.0136
2017	550,419,210	575,245,203	1.0451
2018	291,474,714	628,770,837	2.1572
2019		290,459,584	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	5,011,966,709	5,024,768,778	1.0026
1990	815,836,827	816,880,731	1.0013
1991	734,794,378	734,766,134	1.0000
1992	629,416,807	633,589,131	1.0066
1993	473,605,079	474,090,604	1.0010
1994	447,706,200	447,874,264	1.0004
1995	400,825,118	401,350,738	1.0013
1996	389,976,582	390,032,187	1.0001
1997	406,704,379	410,289,583	1.0088
1998	435,468,248	434,977,361	0.9989
1999	451,847,253	451,746,919	0.9998
2000	478,283,385	480,952,011	1.0056
2001	467,944,334	467,235,396	0.9985
2002	535,251,702	534,126,243	0.9979
2003	543,783,508	545,583,401	1.0033
2004	592,621,704	591,108,827	0.9974
2005	620,818,826	624,176,234	1.0054
2006	628,005,435	632,692,767	1.0075
2007	664,873,548	669,228,765	1.0066
2008	602,639,850	604,349,546	1.0028
2009	545,324,693	545,218,191	0.9998
2010	605,319,432	606,998,442	1.0028
2011	608,964,360	612,816,339	1.0063
2012	568,132,704	567,885,814	0.9996
2013	565,934,803	566,615,538	1.0012
2014	583,012,191	583,049,159	1.0001
2015	536,348,036	532,025,356	0.9919
2016	521,525,742	522,315,156	1.0015
2017	565,003,439	573,524,506	1.0151
2018	629,622,849	641,894,512	1.0195
2019	288,593,032	528,682,535	1.8319
2020		227,331,882	

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 - D - REPORTED

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY PAID LOSSES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	8,093,339,858	8,104,914,374	1.0014
1989	1,263,293,159	1,265,803,347	1.0020
1990	1,286,682,296	1,289,605,028	1.0023
1991	1,103,697,220	1,107,051,005	1.0030
1992	926,286,908	929,931,440	1.0039
1993	799,249,729	801,781,105	1.0032
1994	727,548,391	730,794,525	1.0045
1995	606,042,726	608,030,051	1.0033
1996	502,463,849	503,833,590	1.0027
1997	507,433,903	508,748,173	1.0026
1998	509,678,223	510,133,737	1.0009
1999	580,151,693	580,747,969	1.0010
2000	615,375,765	616,474,541	1.0018
2001	624,760,218	626,268,641	1.0024
2002	650,741,796	653,878,216	1.0048
2003	635,331,158	637,732,219	1.0038
2004	662,440,768	667,543,558	1.0077
2005	673,627,420	676,936,999	1.0049
2006	692,395,657	695,939,114	1.0051
2007	726,800,789	730,565,340	1.0052
2008	681,701,205	685,139,609	1.0050
2009	619,854,360	623,287,791	1.0055
2010	636,372,733	642,972,721	1.0104
2011	608,986,173	615,900,459	1.0114
2012	544,473,494	552,558,365	1.0148
2013	548,447,275	555,813,606	1.0134
2014	527,337,826	547,143,502	1.0376
2015	478,321,102	512,035,057	1.0705
2016	374,928,431	457,749,551	1.2209
2017	225,349,752	412,987,896	1.8327
2018	41,901,467	239,973,059	5.7271
2019		44,657,772	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	9,063,125,344	9,074,958,306	1.0013
1990	1,257,657,242	1,260,306,160	1.0021
1991	1,076,782,934	1,079,721,843	1.0027
1992	894,291,558	897,481,736	1.0036
1993	769,369,463	771,672,986	1.0030
1994	705,804,284	707,800,208	1.0028
1995	582,152,417	583,494,412	1.0023
1996	476,305,024	477,198,836	1.0019
1997	488,924,933	489,814,050	1.0018
1998	488,846,544	489,278,053	1.0009
1999	553,482,352	554,486,687	1.0018
2000	590,206,947	590,700,193	1.0008
2001	603,872,549	604,830,053	1.0016
2002	635,787,764	637,226,675	1.0023
2003	626,211,472	627,447,840	1.0020
2004	659,224,572	662,416,614	1.0048
2005	673,900,625	676,019,965	1.0031
2006	696,787,091	698,975,889	1.0031
2007	732,566,364	735,525,706	1.0040
2008	682,324,564	684,630,494	1.0034
2009	622,483,712	624,868,133	1.0038
2010	638,518,999	641,566,682	1.0048
2011	612,385,769	614,960,325	1.0042
2012	552,393,024	558,488,917	1.0110
2013	562,917,951	569,292,604	1.0113
2014	551,728,522	561,751,456	1.0182
2015	510,000,715	525,087,666	1.0296
2016	457,094,417	489,954,798	1.0719
2017	412,306,137	492,661,291	1.1949
2018	240,307,405	435,355,511	1.8117
2019	44,760,194	229,314,169	5.1232
2020		37,952,728	

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 - E - REPORTED

## POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

## MEDICAL PAID LOSSES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	4,200,524,588	4,217,490,642	1.0040
1989	792,318,082	796,067,311	1.0047
1990	813,339,649	816,906,243	1.0044
1991	727,965,553	730,851,343	1.0040
1992	626,933,009	631,343,525	1.0070
1993	479,230,211	481,667,289	1.0051
1994	438,084,504	441,109,272	1.0069
1995	397,364,827	399,851,346	1.0063
1996	386,720,331	389,469,071	1.0071
1997	401,190,638	404,009,279	1.0070
1998	421,287,091	424,065,715	1.0066
1999	447,632,180	451,451,855	1.0085
2000	474,784,069	478,352,905	1.0075
2001	466,602,460	469,641,321	1.0065
2002	516,219,044	522,212,054	1.0116
2003	528,354,582	532,508,602	1.0079
2004	569,382,359	574,248,264	1.0085
2005	586,865,507	591,380,633	1.0077
2006	596,058,378	601,128,044	1.0085
2007	642,213,879	647,355,070	1.0080
2008	583,067,591	587,480,805	1.0076
2009	524,983,208	527,521,934	1.0048
2010	571,442,018	576,791,041	1.0094
2011	568,296,747	572,914,200	1.0081
2012	513,572,085	519,384,430	1.0113
2013	525,890,916	530,652,525	1.0091
2014	533,613,189	539,878,915	1.0117
2015	481,108,480	490,903,853	1.0204
2016	449,653,109	476,836,674	1.0605
2017	399,208,679	493,075,169	1.2351
2018	125,134,296	438,304,866	3.5027
2019		132,369,342	

  

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	4,826,169,963	4,846,721,990	1.0043
1990	791,856,672	794,771,452	1.0037
1991	706,215,830	708,616,204	1.0034
1992	605,115,527	608,259,781	1.0052
1993	458,256,852	460,475,815	1.0048
1994	425,265,848	428,154,883	1.0068
1995	382,560,360	383,968,463	1.0037
1996	370,981,207	373,099,344	1.0057
1997	387,529,359	389,694,677	1.0056
1998	406,484,838	409,039,627	1.0063
1999	431,079,184	433,261,819	1.0051
2000	456,639,580	458,750,580	1.0046
2001	453,546,877	455,320,435	1.0039
2002	508,666,184	512,810,779	1.0081
2003	521,791,818	526,124,950	1.0083
2004	566,166,988	570,030,855	1.0068
2005	585,517,003	589,055,264	1.0060
2006	598,532,649	602,649,785	1.0069
2007	641,366,232	646,923,404	1.0087
2008	580,241,158	583,253,227	1.0052
2009	523,917,723	526,737,126	1.0054
2010	567,688,925	571,739,960	1.0071
2011	574,936,483	579,882,841	1.0086
2012	517,552,001	522,624,319	1.0098
2013	533,537,435	538,784,459	1.0098
2014	543,825,877	547,543,421	1.0068
2015	488,592,218	492,663,354	1.0083
2016	474,589,544	486,633,067	1.0254
2017	491,431,622	520,693,263	1.0595
2018	439,443,297	527,672,957	1.2008
2019	131,872,588	391,008,319	2.9650
2020		91,497,310	

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 - ADJUSTED TO A POST-HB 1840 & HB 1846 BASIS

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	10,481,245,820	10,489,584,427	1.0008
1989	1,815,957,319	1,814,663,491	0.9993
1990	1,861,773,921	1,862,581,493	1.0004
1991	1,653,931,398	1,654,906,187	1.0006
1992	1,424,312,628	1,430,532,412	1.0044
1993	1,187,660,953	1,187,284,708	0.9997
1994	1,111,229,367	1,111,476,422	1.0002
1995	972,550,891	973,029,963	1.0005
1996	891,325,976	888,310,438	0.9966
1997	916,162,562	916,035,505	0.9999
1998	950,856,205	952,312,191	1.0015
1999	1,047,691,729	1,048,232,680	1.0005
2000	1,118,457,087	1,119,907,419	1.0013
2001	1,118,548,241	1,118,992,800	1.0004
2002	1,223,731,180	1,221,819,544	0.9984
2003	1,218,570,902	1,216,953,178	0.9987
2004	1,305,935,646	1,306,198,666	1.0002
2005	1,338,839,518	1,342,224,055	1.0025
2006	1,372,087,968	1,373,290,830	1.0009
2007	1,454,325,104	1,454,605,464	1.0002
2008	1,337,536,708	1,338,014,451	1.0004
2009	1,199,882,217	1,200,721,270	1.0007
2010	1,277,315,360	1,279,870,507	1.0020
2011	1,241,152,628	1,245,159,565	1.0032
2012	1,145,825,183	1,156,066,227	1.0089
2013	1,159,095,873	1,154,714,597	0.9962
2014	1,159,770,777	1,158,989,100	0.9993
2015	1,086,758,639	1,098,990,066	1.0113
2016	1,006,005,782	1,053,695,019	1.0474
2017	944,563,003	1,105,347,482	1.1702
2018	410,953,413	1,051,188,722	2.5579
2019		416,507,987	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	11,885,336,507	11,899,994,611	1.0012
1990	1,811,997,950	1,813,180,348	1.0007
1991	1,606,203,181	1,605,828,322	0.9998
1992	1,374,352,317	1,379,120,990	1.0035
1993	1,136,814,379	1,137,429,214	1.0005
1994	1,073,413,276	1,073,821,659	1.0004
1995	931,876,563	932,531,063	1.0007
1996	842,598,266	842,073,604	0.9994
1997	880,567,078	884,391,020	1.0043
1998	913,058,760	912,879,178	0.9998
1999	1,000,634,715	1,000,930,637	1.0003
2000	1,070,423,996	1,073,238,762	1.0026
2001	1,080,197,951	1,079,377,190	0.9992
2002	1,189,872,392	1,188,625,870	0.9990
2003	1,194,241,423	1,195,078,193	1.0007
2004	1,288,365,011	1,286,027,975	0.9982
2005	1,333,772,448	1,337,344,205	1.0027
2006	1,371,569,368	1,377,025,749	1.0040
2007	1,450,417,652	1,456,209,372	1.0040
2008	1,327,444,631	1,329,556,744	1.0016
2009	1,190,894,928	1,190,951,451	1.0000
2010	1,264,069,754	1,266,366,877	1.0018
2011	1,243,653,018	1,247,899,275	1.0034
2012	1,154,026,642	1,155,334,692	1.0011
2013	1,154,751,560	1,155,919,890	1.0010
2014	1,171,078,565	1,171,826,685	1.0006
2015	1,093,985,612	1,089,587,433	0.9960
2016	1,048,294,602	1,053,867,026	1.0053
2017	1,092,264,151	1,137,912,939	1.0418
2018	1,051,972,907	1,198,296,514	1.1391
2019	414,530,900	924,110,792	2.2293
2020		327,173,043	

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 - B - ADJUSTED TO A POST-HB 1840 & HB 1846 BASIS

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	7,328,022,613	7,330,112,987	1.0003
1989	1,160,484,070	1,160,217,751	0.9998
1990	1,185,946,769	1,185,020,691	0.9992
1991	1,027,972,122	1,027,504,000	0.9995
1992	871,080,321	873,784,851	1.0031
1993	757,447,734	757,599,518	1.0002
1994	701,242,145	700,530,084	0.9990
1995	596,279,579	596,445,615	1.0003
1996	513,297,680	513,054,683	0.9995
1997	521,920,444	522,470,276	1.0011
1998	522,358,743	522,902,930	1.0010
1999	595,858,929	595,466,700	0.9993
2000	632,377,108	632,588,483	1.0003
2001	642,935,177	642,913,117	1.0000
2002	675,946,641	675,522,266	0.9994
2003	660,413,308	658,911,343	0.9977
2004	695,344,714	695,371,586	1.0000
2005	701,179,390	700,395,648	0.9989
2006	722,549,685	723,087,503	1.0007
2007	759,890,057	759,664,929	0.9997
2008	708,954,477	708,143,423	0.9989
2009	644,439,611	645,506,480	1.0017
2010	666,720,638	667,707,858	1.0015
2011	641,244,975	642,784,847	1.0024
2012	587,783,886	590,303,169	1.0043
2013	586,364,999	585,095,892	0.9978
2014	581,248,652	583,671,438	1.0042
2015	548,704,313	559,977,690	1.0205
2016	488,542,456	529,212,396	1.0832
2017	394,143,793	530,102,279	1.3449
2018	119,478,699	422,417,885	3.5355
2019		126,048,403	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	8,212,513,082	8,214,369,116	1.0002
1990	1,155,803,098	1,155,941,592	1.0001
1991	999,456,004	999,109,389	0.9997
1992	840,716,369	841,312,717	1.0007
1993	727,635,286	727,764,595	1.0002
1994	676,880,581	677,120,900	1.0004
1995	571,421,711	571,550,592	1.0002
1996	485,455,267	484,875,000	0.9988
1997	502,320,804	502,559,542	1.0005
1998	501,277,662	501,588,967	1.0006
1999	567,771,256	568,167,512	1.0007
2000	605,915,077	606,061,216	1.0002
2001	620,176,487	620,064,664	0.9998
2002	657,156,217	657,035,154	0.9998
2003	647,213,664	646,250,541	0.9985
2004	686,372,479	685,548,320	0.9988
2005	697,944,662	698,159,011	1.0003
2006	723,974,625	724,743,675	1.0011
2007	761,690,874	763,127,378	1.0019
2008	705,226,454	705,628,871	1.0006
2009	643,045,412	643,208,438	1.0003
2010	663,620,313	664,238,426	1.0009
2011	639,562,578	639,956,856	1.0006
2012	590,027,632	591,582,572	1.0026
2013	592,293,168	592,780,763	1.0008
2014	589,122,480	589,833,631	1.0012
2015	557,637,576	557,562,077	0.9999
2016	526,768,860	531,551,870	1.0091
2017	527,260,712	564,388,433	1.0704
2018	422,350,058	556,402,002	1.3174
2019	125,937,868	395,428,257	3.1399
2020		99,841,161	

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 - C - ADJUSTED TO A POST-HB 1840 & HB 1846 BASIS

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

MEDICAL INCURRED LOSSES EXCLUDING BULK AND IBNR RESERVES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	3,153,223,207	3,159,471,440	1.0020
1989	655,473,249	654,445,740	0.9984
1990	675,827,151	677,560,802	1.0026
1991	625,959,276	627,402,187	1.0023
1992	553,232,307	556,747,561	1.0064
1993	430,213,219	429,685,191	0.9988
1994	409,987,222	410,946,338	1.0023
1995	376,271,312	376,584,348	1.0008
1996	378,028,296	375,255,756	0.9927
1997	394,242,119	393,565,229	0.9983
1998	428,497,462	429,409,261	1.0021
1999	451,832,800	452,765,979	1.0021
2000	486,079,980	487,318,937	1.0025
2001	475,613,064	476,079,683	1.0010
2002	547,784,540	546,297,278	0.9973
2003	558,157,593	558,041,835	0.9998
2004	610,590,931	610,827,079	1.0004
2005	637,660,128	641,828,407	1.0065
2006	649,538,283	650,203,327	1.0010
2007	694,435,047	694,940,535	1.0007
2008	628,582,231	629,871,028	1.0021
2009	555,442,606	555,214,790	0.9996
2010	610,594,722	612,162,649	1.0026
2011	599,907,653	602,374,718	1.0041
2012	558,041,297	565,763,057	1.0138
2013	572,730,873	569,618,704	0.9946
2014	578,522,126	575,317,663	0.9945
2015	538,054,326	539,012,376	1.0018
2016	517,463,326	524,482,623	1.0136
2017	550,419,210	575,245,203	1.0451
2018	291,474,714	628,770,837	2.1572
2019		290,459,584	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	3,672,823,426	3,685,625,495	1.0035
1990	656,194,852	657,238,756	1.0016
1991	606,747,177	606,718,933	1.0000
1992	533,635,948	537,808,272	1.0078
1993	409,179,093	409,664,618	1.0012
1994	396,532,695	396,700,759	1.0004
1995	360,454,852	360,980,472	1.0015
1996	357,142,999	357,198,604	1.0002
1997	378,246,274	381,831,478	1.0095
1998	411,781,098	411,290,211	0.9988
1999	432,863,459	432,763,125	0.9998
2000	464,508,920	467,177,546	1.0057
2001	460,021,464	459,312,526	0.9985
2002	532,716,175	531,590,716	0.9979
2003	547,027,758	548,827,651	1.0033
2004	601,992,532	600,479,655	0.9975
2005	635,827,786	639,185,194	1.0053
2006	647,594,743	652,282,075	1.0072
2007	688,726,778	693,081,995	1.0063
2008	622,218,177	623,927,873	1.0027
2009	547,849,516	547,743,014	0.9998
2010	600,449,441	602,128,451	1.0028
2011	604,090,440	607,942,419	1.0064
2012	563,999,010	563,752,120	0.9996
2013	562,458,392	563,139,127	1.0012
2014	581,956,086	581,993,054	1.0001
2015	536,348,036	532,025,356	0.9919
2016	521,525,742	522,315,156	1.0015
2017	565,003,439	573,524,506	1.0151
2018	629,622,849	641,894,512	1.0195
2019	288,593,032	528,682,535	1.8319
2020		227,331,882	

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 - D - ADJUSTED TO A POST-HB 1840 & HB 1846 BASIS

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

INDEMNITY PAID LOSSES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	7,262,865,653	7,273,050,069	1.0014
1989	1,141,404,332	1,143,613,046	1.0019
1990	1,166,544,007	1,169,115,718	1.0022
1991	1,005,390,833	1,008,341,828	1.0029
1992	848,925,743	852,132,566	1.0038
1993	739,647,267	741,874,624	1.0030
1994	681,854,736	684,711,009	1.0042
1995	583,222,008	585,030,275	1.0031
1996	503,058,874	504,387,523	1.0026
1997	515,504,043	516,818,313	1.0025
1998	517,783,883	518,239,397	1.0009
1999	589,378,396	589,974,672	1.0010
2000	625,162,703	626,261,479	1.0018
2001	634,695,621	636,204,044	1.0024
2002	661,086,952	664,223,372	1.0047
2003	645,430,922	647,831,983	1.0037
2004	672,968,654	678,071,444	1.0076
2005	684,331,972	687,641,551	1.0048
2006	703,394,435	706,937,892	1.0050
2007	738,348,123	742,112,674	1.0051
2008	692,529,724	695,968,128	1.0050
2009	629,702,931	633,136,362	1.0055
2010	646,478,103	653,078,091	1.0102
2011	618,645,617	625,559,903	1.0112
2012	553,093,949	561,178,820	1.0146
2013	557,116,492	564,482,823	1.0132
2014	535,606,314	555,411,990	1.0370
2015	485,680,014	519,393,969	1.0694
2016	380,393,900	463,215,020	1.2177
2017	228,374,816	416,012,960	1.8216
2018	42,442,270	240,513,862	5.6668
2019		44,657,772	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	8,140,387,435	8,150,799,258	1.0013
1990	1,140,152,852	1,142,483,634	1.0020
1991	980,772,582	983,358,528	1.0026
1992	819,474,348	822,281,386	1.0034
1993	711,884,675	713,911,545	1.0028
1994	661,296,639	663,052,853	1.0027
1995	560,131,507	561,352,588	1.0022
1996	476,828,691	477,695,689	1.0018
1997	496,680,622	497,569,739	1.0018
1998	496,613,966	497,045,475	1.0009
1999	562,275,870	563,280,205	1.0018
2000	599,576,870	600,070,116	1.0008
2001	613,452,650	614,410,154	1.0016
2002	645,846,707	647,285,618	1.0022
2003	636,128,782	637,365,150	1.0019
2004	669,621,258	672,813,300	1.0048
2005	684,557,162	686,676,502	1.0031
2006	707,799,270	709,988,068	1.0031
2007	744,145,326	747,104,668	1.0040
2008	693,108,591	695,414,521	1.0033
2009	632,319,578	634,703,999	1.0038
2010	648,554,372	651,602,055	1.0047
2011	621,990,090	624,564,646	1.0041
2012	561,010,900	567,106,793	1.0109
2013	571,697,977	578,072,630	1.0112
2014	560,066,299	570,089,233	1.0179
2015	517,330,389	532,417,340	1.0292
2016	462,552,064	495,412,445	1.0710
2017	415,326,207	495,681,361	1.1935
2018	240,848,961	435,897,067	1.8098
2019	44,760,194	229,314,169	5.1232
2020		37,952,728	

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 - E - ADJUSTED TO A POST-HB 1840 & HB 1846 BASIS

POLICY YEAR DATA ACCUMULATED TO END OF CALENDAR YEAR

MEDICAL PAID LOSSES

Policy Year Valued	As of 12/31/18	As of 12/31/19	Ratio to Prior Year
Prior to 1989	2,983,701,843	3,000,667,897	1.0057
1989	618,001,992	621,751,221	1.0061
1990	648,647,564	652,214,158	1.0055
1991	595,451,575	598,337,365	1.0048
1992	527,000,645	531,411,161	1.0084
1993	411,512,970	413,950,048	1.0059
1994	385,004,513	388,029,281	1.0079
1995	355,169,903	357,656,422	1.0070
1996	352,250,486	354,999,226	1.0078
1997	371,522,335	374,340,976	1.0076
1998	396,575,448	399,354,072	1.0070
1999	427,751,217	431,570,892	1.0089
2000	460,354,625	463,923,461	1.0078
2001	458,398,441	461,437,302	1.0066
2002	513,615,996	519,609,006	1.0117
2003	531,665,464	535,819,484	1.0078
2004	578,886,943	583,752,848	1.0084
2005	602,024,773	606,539,899	1.0075
2006	615,732,630	620,802,296	1.0082
2007	666,289,841	671,431,032	1.0077
2008	602,890,196	607,303,410	1.0073
2009	527,525,400	530,064,126	1.0048
2010	566,493,943	571,842,966	1.0094
2011	563,439,971	568,057,424	1.0082
2012	509,423,755	515,236,100	1.0114
2013	522,433,302	527,194,911	1.0091
2014	532,564,749	538,830,475	1.0118
2015	481,108,480	490,903,853	1.0204
2016	449,653,109	476,836,674	1.0605
2017	399,208,679	493,075,169	1.2351
2018	125,134,296	438,304,866	3.5027
2019		132,369,342	

Policy Year Valued	As of 12/31/19	As of 12/31/20	Ratio to Prior Year
Prior to 1990	3,487,026,680	3,507,578,707	1.0059
1990	632,214,697	635,129,477	1.0046
1991	578,168,629	580,569,003	1.0042
1992	509,334,668	512,478,922	1.0062
1993	393,830,866	396,049,829	1.0056
1994	374,092,343	376,981,378	1.0077
1995	342,190,094	343,598,197	1.0041
1996	338,147,624	340,265,761	1.0063
1997	359,071,254	361,236,572	1.0060
1998	382,797,688	385,352,477	1.0067
1999	412,095,390	414,278,025	1.0053
2000	442,865,115	444,976,115	1.0048
2001	445,624,007	447,397,565	1.0040
2002	506,130,657	510,275,252	1.0082
2003	525,036,068	529,369,200	1.0083
2004	575,537,816	579,401,683	1.0067
2005	600,525,963	604,064,224	1.0059
2006	618,121,957	622,239,093	1.0067
2007	665,219,462	670,776,634	1.0084
2008	599,819,485	602,831,554	1.0050
2009	526,442,546	529,261,949	1.0054
2010	562,818,934	566,869,969	1.0072
2011	570,062,563	575,008,921	1.0087
2012	513,418,307	518,490,625	1.0099
2013	530,061,024	535,308,048	1.0099
2014	542,769,772	546,487,316	1.0068
2015	488,592,218	492,663,354	1.0083
2016	474,589,544	486,633,067	1.0254
2017	491,431,622	520,693,263	1.0595
2018	439,443,297	527,672,957	1.2008
2019	131,872,588	391,008,319	2.9650
2020		91,497,310	

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.

## EXHIBIT VII

### LOSS COST FORMULAE

The experience used for classification relativities for the April 1, 2022 revision will include all available risks. It is proposed that catastrophes be limited in accordance with the procedure previously employed in other Bureau 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 April 1, 2022 filing. The values for these respective tables will be established such that the credibilities 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 loss cost worksheets.

Most 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 loss costs have been derived, are separately identified within the filing material.

The calculation of classification loss costs will be made using the following procedure:

- (1) Determine the present pure premiums 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 April 1, 2022 loss cost level.
- (3) Determine Expected Losses (serious, non-serious, medical-only and total) for each classification by multiplying the exposures from the experience period by the present pure premiums.
- (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 two years for each classification and obtaining the total Actual Losses for all classifications combined.
- (6) Calculate Expected Losses by multiplying the present pure premiums by the exposures from the last two years for each classification and by the overall average loss cost change.
- (7) Obtain correction factors by dividing the Expected Losses derived in (6) by the Actual Losses derived in (5).

## LOSS COST FORMULAE (CONTINUED)

- (8) Multiply the indicated (pre-test) pure premiums from (4) times the correction factors derived in (7) to obtain indicated (post-test) pure premiums.
- (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 loss costs on April 1, 2022 level for each category of loss.
- (10) Select proposed total pure premiums for each classification, using the middle value from the total pure premiums derived in (2), (8) and (9) above. If the proposed pure premium selected on this basis is different from the formula pure premium derived in (9) above, partial pure premiums are to be allocated between categories (serious, non-serious and medical-only) in the same proportion as the partial pure premiums comprising the formula pure premium.
- (11) Test the proposed total pure premiums selected in (10) by multiplying by the exposures of the two latest years for each classification and obtaining the total Expected Losses for all classifications combined.
- (12) Obtain a correction factor by dividing the Expected Losses derived in (6) above by the Expected Losses derived in (11) above.
- (13) Calculate the “composite pure premium multiplier” as the product of the following items:
  - (a) The pure premium correction factor determined in (12) above.
  - (b) The proposed experience rating plan off-balance factor.
- (14) Apply the composite pure premium multiplier obtained in (13) above to the proposed total pure premiums to obtain classification loss costs.
- (15) Test to assure that the maximum departure of the classification loss costs derived in (14) above from current loss costs are in accordance with the following parameters:

Maximum Change in Loss Cost:  
Upward: The overall average change plus 25% rounded to the nearest 1%.  
Downward: The overall average change minus 25% rounded to the nearest 1%.
- (16) Loss costs are to be rounded to the nearest \$.01.
- (17) Test the limited loss costs derived in (16) above to determine if balance has been achieved within 0.0005 of the indicated change in loss cost level. 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.

**EXHIBIT VIII****COLLECTIBLE PREMIUM RATIOS \***

Manual Years 2016 to 2018 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
<b>ALL INDUSTRIES</b>			
2016	2,662,330,621	2,604,554,972	1.0222
2017	2,696,125,753	2,617,725,905	1.0299
2018	2,950,761,183	2,841,818,076	1.0383
<b>TOTAL</b>	<b>8,309,217,557</b>	<b>8,064,098,953</b>	<b>1.0304</b>
<b>MANUFACTURING AND UTILITIES</b>			
2016	530,157,851	512,820,438	1.0338
2017	525,664,064	508,825,513	1.0331
2018	569,547,239	550,830,179	1.0340
<b>TOTAL</b>	<b>1,625,369,154</b>	<b>1,572,476,130</b>	<b>1.0336</b>
<b>CONTRACTING AND QUARRYING</b>			
2016	517,894,278	460,868,168	1.1237
2017	545,851,412	481,586,607	1.1334
2018	620,190,610	541,166,112	1.1460
<b>TOTAL</b>	<b>1,683,936,300</b>	<b>1,483,620,887</b>	<b>1.1350</b>
<b>OTHER INDUSTRIES</b>			
2016	1,614,278,492	1,630,866,366	0.9898
2017	1,624,610,277	1,627,313,785	0.9983
2018	1,761,023,334	1,749,821,785	1.0064
<b>TOTAL</b>	<b>4,999,912,103</b>	<b>5,008,001,936</b>	<b>0.9984</b>

\* Excludes classifications and coverages not subject to experience rating.

**EXHIBIT IX**

**CALCULATION OF EXPECTED LOSS COST FACTORS (a)**

<b>Policy Year Beginning 4/1 (1)</b>	<b>HB 1846 Adjustment Factor (2)</b>	<b>Protz &amp; HB 1840 Adjustment Factor (3)</b>	<b>Loss Ratio Development Factor (4)</b>	<b>Collectible Premium Ratio (5)</b>	<b>Trend Factor (6)</b>	<b>Product (2) * (3) * (4) * (5) * (6) (7)</b>	<b>Expected Loss Cost Factor 1.0 / (7) (8)</b>
<b><u>Manufacturing and Utilities</u></b>							
2018	1.0000	1.0003	1.0980	1.0336	0.8383	0.9516	1.0509
2019	1.0000	1.0000	1.1613	1.0336	0.8760	1.0515	0.9510
2020	1.0000	1.0000	1.3877	1.0336	0.9154	1.3130	0.7616
<b><u>Contracting and Quarrying</u></b>							
2018	1.0000	1.0003	1.1436	1.1350	0.8383	1.0884	0.9188
2019	1.0000	1.0000	1.1912	1.1350	0.8760	1.1844	0.8443
2020	1.0000	1.0000	1.4320	1.1350	0.9154	1.4878	0.6721
<b><u>Other Industries</u></b>							
2018	1.0000	1.0003	1.0855	0.9984	0.8383	0.9088	1.1004
2019	1.0000	1.0000	1.1623	0.9984	0.8760	1.0165	0.9838
2020	1.0000	1.0000	1.4032	0.9984	0.9154	1.2824	0.7798

a Apply to pure Loss Costs (pre-LBA, Merit Rating Plan, PCCPAP and Certified Safety Committee adjustments).

**EXHIBIT X**

**RETROSPECTIVE DEVELOPMENT FACTORS \***

Retrospective development factors for first, second and third adjustments are calculated below. They are intended for application to retrospective plans with no loss limitation.

First Adjustment	RDF =	0.2535
Second Adjustment	RDF =	0.1302
Third Adjustment	RDF =	0.0837

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 Factors for given Hazard Group and Loss Limitation  
RDF = Retrospective Development Factors without Loss Limitation

For Example:

$$\text{The \$25,000 limit Hazard Group C ELF} = 0.663$$

$$\begin{aligned} \text{Then First Adjustment RDF} &= (1 - 0.663) * 0.2535 \\ &= 0.0854 \end{aligned}$$

\* The use of retrospective development factors is optional.