

DELAWARE COMPENSATION RATING BUREAU, INC.

Indicated Residual Market Rate Change

Page 1 presents the overall indicated changes in rates and loss costs.

Derivation of the indemnity and medical trend factors and trended loss ratios shown on page 1 is presented on pages 2 through 4.

Page 5 shows the derivation of overall frequency trend factors for each of the latest four policy years.

INDICATED CHANGE IN RATE LEVEL

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

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

DETERMINATION OF TREND

INDEMNITY

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

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

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

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

Trended Loss Ratio

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

* See Page 12.5 for column (4).

DETERMINATION OF TREND

MEDICAL

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

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

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

10 Point Exponential Regression = 0.5% (y = 0.542165 * 1.004977 ^ x)

CPI-U 6 Point Exponential Regression = 3.2% *

Selected Annual Trend Factor from 1/31/2018 and later = **1.9%**

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

Trended Loss Ratio

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

* See page 12.4

** See Page 12.5 for column (7).

CPI for All Urban Consumers (CPI-U)
12-Month Percent Change and Trends

Years: 2010 to 2022

Year ²	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2010	2.6	2.1	2.3	2.2	2.0	1.1	1.2	1.1	1.1	1.2	1.1	1.5	1.6
2011	1.6	2.1	2.7	3.2	3.6	3.6	3.6	3.8	3.9	3.5	3.4	3.0	3.2
2012	2.9	2.9	2.7	2.3	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	2.1
2013	1.6	2.0	1.5	1.1	1.4	1.8	2.0	1.5	1.2	1.0	1.2	1.5	1.5
2014	1.6	1.1	1.5	2.0	2.1	2.1	2.0	1.7	1.7	1.7	1.3	0.8	1.6
2015	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7	0.1
2016	1.4	1.0	0.9	1.1	1.0	1.0	0.8	1.1	1.5	1.6	1.7	2.1	1.3
2017	2.5	2.7	2.4	2.2	1.9	1.6	1.7	1.9	2.2	2.0	2.2	2.1	2.1
2018	2.1	2.2	2.4	2.5	2.8	2.9	2.9	2.7	2.3	2.5	2.2	1.9	2.4
2019	1.6	1.5	1.9	2.0	1.8	1.6	1.8	1.7	1.7	1.8	2.1	2.3	1.8
2020	2.5	2.3	1.5	0.3	0.1	0.6	1.0	1.3	1.4	1.2	1.2	1.4	1.2
2021	1.4	1.7	2.6	4.2	5.0	5.4	5.4	5.3	5.4	6.2	6.8	7.0	4.7
2022 ¹	7.5	7.9	8.5	8.3	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.4

Year	12 Mon Rolling ³	CPI-U	Period	CPI-U Exp Fit	Notes
	CPI-U	Index		Trend	
2010	1.6	1.016	2010-2017	1.5%	1. Values in blue were assumed to be the same as the latest value available. 2. CPI-U was not used as the basis for the DE Medical Fee Schedule until 1/31/2018. 3. Rolling year average is December of prior year to November of the current year.
2011	3.0	1.047	2010-2022	2.0%	
2012	2.2	1.070	2013-2022	2.2%	
2013	1.5	1.086	2016-2022	3.0%	
2014	1.7	1.105			
2015	0.1	1.106			
2016	1.2	1.119			
2017	2.1	1.142			
2018	2.5	1.171	2017-2022	3.22%	
2019	1.8	1.191	2018-2022	3.6%	
2020	1.3	1.207	2019-2022	4.5%	
2021	4.2	1.258	2020-2022	6.2%	
2022	8.3	1.362			

DETERMINATION OF TREND

CLAIM FREQUENCY

Policy Year Frequency per \$1 million of Expected Losses

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

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

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

Selected Annual Trend:

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

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