

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 and 3.

Page 4 shows the derivation of overall frequency trend factors for each of the latest four policy years.

Staff is taking into account the impact of direct savings attributable to House Bill 373.

INDICATED CHANGE IN RATE LEVEL

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
(1a) Policy Year 2012 Loss and Loss Adjustment Expense Ratio	0.2614	0.4256	0.6870
(1b) Policy Year 2013 Loss and Loss Adjustment Expense Ratio	0.2925	0.4933	0.7858
(1c) Policy Year 2014 Loss and Loss Adjustment Expense Ratio	0.2546	0.4461	0.7007
(1d) Policy Year 2015 Loss and Loss Adjustment Expense Ratio	0.2384	0.5472	0.7856
(1e) Average (Midpoint = 7/1/2014)	0.2617	0.4781	0.7398
(2a) Policy Year 2012 Loss and Loss Adjustment Expense Ratio	0.2435	0.5040	
(2b) Policy Year 2013 Loss and Loss Adjustment Expense Ratio	0.2758	0.5677	
(2c) Policy Year 2014 Loss and Loss Adjustment Expense Ratio	0.2429	0.4989	
(2d) Policy Year 2015 Loss and Loss Adjustment Expense Ratio	0.2302	0.5947	
(2e) Average at 12/1/2018	0.2481	0.5413	0.7894
(3a) House Bill 373 Adjustment	1.0000	0.6859	
(3b) Average Trended Loss and LAE Ratio Post-Legislation (2e) * (3a)	0.2481	0.3713	0.6194
(4a) Excess Loss Factor at \$1,930,710 (Post-Legislative Basis) *			0.0817
(4b) Provision for Excess Loss (5a) - (3b)			0.0551
(5a) Total Trended Loss and LAE Ratio (3b) / (1.0 - (4a))	0.2614	0.4131	0.6745
(5b) Percentage of Total	38.75%	61.25%	
(6) Permissible Loss and Loss Adjustment Ratio			0.7056
(7) Indicated Change in Rates (5a) / (6)			0.9559
(8) Estimated Effect of the 7/1/18 Benefit Change			0.9948
(9) Indicated Change in Residual Market Rate Level (7) * (8)			0.9509
(9a) Factor to Adjust for Compromise With Insurance Department			0.99135
(9b) Change in Residual Market Rate Level to Reflect Compromise (9) * (9a)			0.9427
			-5.73%
(10) Indicated Change in Voluntary Market Loss Costs (9) * [0.7308 / 0.7102]			0.9785
(10a) Factor to Adjust for Compromise With Insurance Department			0.99135
(10b) Change in Voluntary Market Loss Cost Level to Reflect Compromise (10) * (10a)			0.9700
			-3.00%

CHANGES IN MANUAL PREMIUM LEVEL BY INDUSTRY GROUP

	Mfg.	Cont.	Other	Total
(11) Current Collectible Premium Ratio	1.0282	1.0294	0.9197	
(12) Proposed Collectible Premium Ratio	1.0910	1.0442	0.9299	
(13) Change in Collectible Premium Ratio (12) / (11)	1.0611	1.0144	1.0111	1.0182
(14) Change in Residual Market Manual Rate Level (9b) * (13)	1.0003	0.9563	0.9532	0.9599
(15) Change in Voluntary Market Manual Loss Cost Level (10b) * (13)	1.0293	0.9840	0.9808	0.9877
(16) Current Offset for Residual Market Surcharge				0.9905
(17) Proposed Offset for Residual Market Surcharge				0.9927
(18) Adjusted Change in Voluntary Market Manual Loss Cost Level (15) * (17) / (16)	1.0316	0.9862	0.9830	0.9899

* \$2,744,000 on a Post-HB175, Pre-HB373 basis.

DETERMINATION OF TREND

INDEMNITY

Policy Year	2009	2010	2011	2012	2013	2014	2015
Actual Loss Ratio	0.2609	0.2568	0.2546	0.2614	0.2925	0.2546	0.2384
Normalized Frequency	0.6100	0.6100	0.5718	0.5123	0.5353	0.4630	0.4928
Severity Loss Ratio	0.4277	0.4210	0.4453	0.5102	0.5465	0.5498	0.4838
x	1	2	3	4	5	6	7
y	0.4277	0.4210	0.4453	0.5102	0.5465	0.5498	0.4838

7 Point Exponential Regression: $y = 0.410462 * 1.040379 ^ x$

Selected Annual Trend = 4.0%

Policy Year	Annual Trend Factor (1)	Trend Period # Years to 12/1/18 (2)	Severity Trend Factor (3) = (1)^(2)	Frequency Trend Factor (4) #
2012	1.0404	5.9167	1.2639	0.7372
2013	1.0404	4.9167	1.2149	0.7762
2014	1.0404	3.9167	1.1677	0.8172
2015	1.0404	2.9167	1.1224	0.8604

Trended Loss Ratio

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3)*(4)	Trended Loss Ratio (7) = (5)*(6)
2012	0.2614	0.9317	0.2435
2013	0.2925	0.9430	0.2758
2014	0.2546	0.9542	0.2429
2015	0.2384	0.9657	0.2302
Average			0.2481

See Page 12.4 for column (4).

DETERMINATION OF TREND

MEDICAL

Policy Year	2009	2010	2011	2012	2013	2014	2015
Actual Loss Ratio	0.3934	0.4761	0.4352	0.4256	0.4933	0.4461	0.5472
Normalized Frequency	0.6100	0.6100	0.5718	0.5123	0.5353	0.4630	0.4928
Severity Loss Ratio	0.6449	0.7805	0.7611	0.8307	0.9216	0.9634	1.1104
x	1	2	3	4	5	6	7
y	0.6449	0.7805	0.7611	0.8307	0.9216	0.9634	1.1104

7 Point Exponential Regression: $y = 0.615106 * 1.083386 ^ x$

Selected Annual Trend = 8.3%

Policy Year	Annual Trend Factor (1)	Trend Period # Years to 12/1/18 (2)	Severity Trend Factor (3) = (1)^(2)	Frequency Trend Factor (4) #
2012	1.0834	5.9167	1.6062	0.7372
2013	1.0834	4.9167	1.4826	0.7762
2014	1.0834	3.9167	1.3685	0.8172
2015	1.0834	2.9167	1.2631	0.8604

Trended Loss Ratio

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3)*(4)	Trended Loss Ratio (7) = (5)*(6)
2012	0.4256	1.1841	0.5040
2013	0.4933	1.1508	0.5677
2014	0.4461	1.1183	0.4989
2015	0.5472	1.0868	0.5947
Average			0.5413

See Page 12.4 for column (4).

DETERMINATION OF TREND

CLAIM FREQUENCY

Policy Year Frequency per \$1 million of Expected Losses

Policy Year	Claim Frequency	Normalized Frequency
2003	11.77	1.0000
2004	10.38	0.8819
2005	9.28	0.7884
2006	8.73	0.7417
2007	8.12	0.6899
2008	7.19	0.6109
2009	7.18	0.6100
2010	7.18	0.6100
2011	6.73	0.5718
2012	6.03	0.5123
2013	6.30	0.5353
2014	5.45	0.4630
2015	5.80	0.4928

Policy Year	2009	2010	2011	2012	2013	2014	2015
x	1	2	3	4	5	6	7
y	0.6100	0.6100	0.5718	0.5123	0.5353	0.4630	0.4928

7 Point (2009 - 2015) Exponential Regression: $y = 0.645767 * 0.956075^x$

Annual Trend = **-4.4%**

Policy Year	2007	2008	2011	2012	2013	2014	2015
x	1	2	3	4	5	6	7
y	0.6899	0.6109	0.5718	0.5123	0.5353	0.4630	0.4928

7 Point (2007 - 2008, 2011 - 2015) Exponential Regression: $y = 0.693214 * 0.943461^x$

Annual Trend = **-5.7%**

Selected Annual Trend (Average of -4.4% and -5.7%) = -5.0%

Policy Year	Annual Trend Factor (1)	# of Years to 12/1/18 (2)	Frequency Trend Factor (3) = (1)^(2)
2012	0.9498	5.9167	0.7372
2013	0.9498	4.9167	0.7762
2014	0.9498	3.9167	0.8172
2015	0.9498	2.9167	0.8604