#### 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.

Due to the impact of Senate Bill 1 and consistent with an adjustment to medical severity trend that was a part of the compromise reached with the Insurance Department for the 2009 Filing, medical severity trend is separated between pre-Senate Bill 1 and Post Senate Bill 1 trends. The difference between the two trend rates is a reduction of 1.5 points in medical trend attributed in the resolution of the 2009 filing to effects of the implementation of a medical fee schedule which was substantially operational beginning 9/1/2008. The original adjustment to medical trend was a reduction of 1.8 points; however, certain provisions of Senate Bill 1 were not able to be implemented as initially intended, reducing the estimated impact to 1.5 points as noted above. Senate Bill 238 corrected for those unimplemented provisions of Senate Bill 1 and restored the adjustment to medical trend to a 1.8 point reduction effective January 31, 2013.

In addition, for this filing staff is also taking into account the impact of savings attributable to Senate Bill 238 and House Bill 175.

# **INDICATED CHANGE IN RATE LEVEL**

(1a) (1b) (1c) (1d) (1e)	Policy Year 2008 Loss and Loss Adjustment Expense Ratio Policy Year 2009 Loss and Loss Adjustment Expense Ratio Policy Year 2010 Loss and Loss Adjustment Expense Ratio Policy Year 2011 Loss and Loss Adjustment Expense Ratio Average (Midpoint = 7/1/2010)	Indemnity 0.2544 0.2732 0.2599 0.3172 0.2762	Medical 0.4603 0.5157 0.6351 0.7176 0.5822	Total 0.7147 0.7889 0.8950 1.0348 0.8584
(2a) (2b) (2c) (2d) (2e)	Policy Year 2008 Loss and LAE Ratio Trended to 12/1/2014 Policy Year 2009 Loss and LAE Ratio Trended to 12/1/2014 Policy Year 2010 Loss and LAE Ratio Trended to 12/1/2014 Policy Year 2011 Loss and LAE Ratio Trended to 12/1/2014 Average at 12/1/2014	0.2447 0.2645 0.2532 0.3111 0.2684	0.6736 0.7071 0.8158 0.8636 0.7650	1.0334
(3ai) (3aii) (3aiii) (3a)	Senate Bill 1 Adjustment Senate Bill 238 Adjustment House Bill 175 Adjustment Combined Legislative Adjustment	1.0000 1.0000 1.0000 1.0000	0.8260 0.9958 0.9289 0.7640	
(3b)	Average Trended Loss and LAE Ratio Legislation (2e)*(3a)	0.2684	0.5845	0.8529
(4a) (4b)	Excess Loss Factor at \$1,919,854 (Post-Legislative Basis) * Provision for Excess Loss (5a)-(3b)			0.1187 0.1149
(5a) (5b)	Total Trended Loss and LAE Ratio (3b)/(1.0-(4a)) Percentage of Total	0.2754 28.46%	0.6924 71.54%	0.9678
(6)	Permissible Loss and Loss Adjustment Ratio			0.7009
(7)	Indicated Change in Rates (5a) / (6)			1.3808
(8)	Estimated Effect of the 7/1/14 Benefit Change			1.0032
(9)	Indicated Change in Residual Market Rate Level (7) * (8)			1.3852
(10)	Indicated Change in Voluntary Market Loss Costs (9) * [0.7239 / 0.7074]			1.4175

# CHANGES IN MANUAL PREMIUM LEVEL BY INDUSTRY GROUP

		Mfg.	Cont.	Other	Total
(11) (12) (13)	Current Collectible Premium Ratio Proposed Collectible Premium Ratio Change in Collectible Premium Ratio (12) / (11)	0.8705 0.9171 1.0535	0.9489 0.9579 1.0095	0.8331 0.8393 1.0074	1.0139
(14)	Change in Residual Market Manual Rate Level (9) * (13)	1.4593	1.3984	1.3955	1.4045
(15)	Change in Voluntary Market Manual Loss Cost Level (10) * (13)	1.4933	1.4310	1.4280	1.4372
(16) (17)	Current Offset for Residual Market Surcharge Proposed Offset for Residual Market Surcharge				0.9910 0.9902
(18)	Adjusted Change in Voluntary Market Manual Loss Cost Level (15) * (17)/(16)	1.4921	1.4298	1.4268	1.4360

<sup>\* \$2,630,000</sup> on a Pre-Legislative basis.

# **DETERMINATION OF TREND**

# INDEMNITY

Policy Year	_	2005	2006	2007	2008	2009	2010	2011
Actual Loss Ratio	_	0.3059	0.2954	0.2846	0.2544	0.2732	0.2599	0.3172
Normalized Frequency		0.6041	0.5686	0.5276	0.4692	0.4719	0.4714	0.4354
Severity Loss Ratio		0.5064	0.5195	0.5394	0.5422	0.5789	0.5513	0.7285
	x	1	2	3	4	5	6	7
		0.5064	0.5195	0.5394	0.5422	0.5789	0.5513	0.7285

7 Point Exponential Regression: y = 0.468731 * 1.046793 ^ x							
	Selected Annual Trend Facto	or to 12/1/14	4.7%				
Policy Year	Annual Trend (1)	Trend Period # Years (2)	Severity Trend Factor $(3) = (1)^{(2)}$	Frequency Trend Factor (4) #			
2008 2009 2010 2011	1.047 1.047 1.047 1.047	5.9167 4.9167 3.9167 2.9167	1.3107 1.2521 1.1962 1.1427	0.7337 0.7731 0.8146 0.8584			
Trended Loss Ratio							
Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3)*(4)	Trended Loss Ratio (7) = (5)*(6)				
2008 2009 2010 2011	0.2544 0.2732 0.2599 0.3172	0.9617 0.9680 0.9744 0.9809	0.2447 0.2645 0.2532 0.3111				
Average			0.2684				

<sup>#</sup> See Page 12.4 for column (4).

### **DETERMINATION OF TREND**

### MEDICAL

Policy Year		2005	2006	2007	2008	2009	2010
Actual Loss Ratio		0.4560	0.4346	0.4791	0.4603	0.5157	0.6351
Normalized Frequency		0.6041	0.5686	0.5276	0.4692	0.4719	0.4714
Severity Loss Ratio		0.7548	0.7643	0.9081	0.9810	1.0928	1.3473
	X	1	2	3	4	5	6
	У	0.7548	0.7643	0.9081	0.9810	1.0928	1.3473
	7 Point Expon	ential Regress	ion: y = 0.61167	1 * 1.13971195	6 ^ x		
	Selected Annu	al Trend Facto	or to 9/1/08 =			14.0%	
	An		ill 1 Adjustment	•	end	. =0/	
		Fron	n 9/1/08 to 1/31/	13 =		-1.5%	
			After 1/31/13 =			-1.8%	
		Selecte	ed Annual Trend	Factor			
		Fron	n 9/1/08 to 1/31/ <sup>,</sup>	13 =		12.5%	
			After 1/31/13 =			12.2%	
				Annual Trend		Severity	
	Annual Trend		Severity Trend	Factor From		Trend Factor	r
Policy	Factor to	Trend Period	Factor to	2/1/13 to	Trend Period	2/1/13 to	Frequency
Year	1/31/13	# Years	1/31/13	12/1/14	# Years	12/1/14	Trend Factor
	(1)	(2)	$(3) = (1)^{(2)}$	(4)	(5)	$(6) = (4)^{(5)}$	(7) #
2008	1.125	4.0833	1.6159	1.122	1.8333	1.2344	0.7337
2009	1.125	3.0833	1.4367	1.122	1.8333	1.2344	0.7731
2010	1.125	2.0833	1.2774	1.122	1.8333	1.2344	0.8146
2011	1.125	1.0833	1.1358	1.122	1.8333	1.2344	0.8584

### **Trended Loss Ratio**

Policy Year	Actual Loss Ratio (8)	Combined Trend Factor (9) = (3)*(6)*(7)	Trended Loss Ratio (10) = (8)*(9)
2008	0.4603	1.4635	0.6736
2009	0.5157	1.3711	0.7071
2010	0.6351	1.2845	0.8158
2011	0.7176	1.2035	0.8636
Average			0.7650

2011

0.7176 0.4354 1.6481

1.6481

<sup>#</sup> See Page 12.4 for column (7).

### **DETERMINATION OF TREND**

# **Claim Frequency**

Policy Year Frequency per \$1 million of Expected Losses {1 = PY 1999, 13 = PY 2011}

Policy	Claim	Normalized
Year	Frequency	Frequency
1999	18.31	1.0000
2000	16.60	0.9066
2001	14.47	0.7903
2002	14.66	0.8007
2003	14.03	0.7663
2004	12.36	0.6751
2005	11.06	0.6041
2006	10.41	0.5686
2007	9.66	0.5276
2008	8.59	0.4692
2009	8.64	0.4719
2010	8.63	0.4714
2011	7.97	0.4354

Policy Year	2005	2006	2007	2008	2009	2010	2011
x	1	2	3	4	5	6	7
У	0.6041	0.5686	0.5276	0.4692	0.4719	0.4714	0.4354

7 Point (2005 - 2011) Exponential Regression:  $y = 0.621412 * 0.94889039 ^ x$ 

# **Selected Frequency Trend Factor**

-5.1%

Policy Year	Frequency Trend Factor (1)	# of Years to 12/1/13 (2)	Frequency Trend to 12/1/13 (3) = (1) ^ (2)
2008	0.9490	5.9167	0.7337
2009	0.9490	4.9167	0.7731
2010	0.9490	3.9167	0.8146
2011	0.9490	2.9167	0.8584