# 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

		Indemnity	Medical	Total
(1a)	Policy Year 2008 Loss and Loss Adjustment Expense Ratio	0 2544	0 4603	0 7147
(1b)	Policy Year 2009 Loss and Loss Adjustment Expense Ratio	0 2732	0.5157	0 7889
(1c)	Policy Year 2010 Loss and Loss Adjustment Expense Ratio	0 2599	0.6351	0.8950
(1d)	Policy Year 2011 Loss and Loss Adjustment Expense Ratio	0.3172	0.7176	1.0348
(1e)	Average (Midpoint = $7/1/2010$ )	0 2762	0.5822	0 8584
(10)		0.2. 02	010022	0.0001
(2a)	Policy Year 2008 Loss and LAE Ratio Trended to 12/1/2014	0.2447	0.6736	
(2b)	Policy Year 2009 Loss and LAE Ratio Trended to 12/1/2014	0.2645	0.7071	
(2c)	Policy Year 2010 Loss and LAE Ratio Trended to 12/1/2014	0.2532	0.8158	
(2d)	Policy Year 2011 Loss and LAE Ratio Trended to 12/1/2014	0.3111	0.8636	
(2e)	Average at 12/1/2014	0.2684	0.7650	1.0334
( -)				
(3ai)	Senate Bill 1 Adjustment	1.0000	0.8260	
(3aii)	Senate Bill 238 Adjustment	1.0000	0.9958	
(3aiii)	House Bill 175 Adjustment	1.0000	0.9401	
(3a)	Combined Legislative Adjustment	1.0000	0.7733	
(3b)	Average Trended Loss and LAE Ratio Legislation (2e)*(3a)	0.2684	0.5916	0.8600
(4a)	Excess Loss Factor at \$1,940,101 (Post-Legislative Basis) *			0.1177
(4b)	Provision for Excess Loss (5a)-(3b)			0.1147
(5a)	Total Trended Loss and LAE Ratio (3b)/(1.0-(4a))	0.2755	0.6992	0.9747
(5b)	Percentage of Total	28.27%	71.73%	
(0)				0 7000
(6)	Permissible Loss and Loss Adjustment Ratio			0.7009
(7)	Indicated Change in Rates (5a) / (6)			1 3906
(-)				
(8)	Estimated Effect of the 7/1/14 Benefit Change			1.0032
(9)	Indicated Change in Residual Market Rate Level (7) * (8)			1.3950
(10)	Indicated Change in Voluntary Market Loss Costs (9) * [0.7239 / 0.7074]			1,4275
()				

## CHANGES IN MANUAL PREMIUM LEVEL BY INDUSTRY GROUP

		Mfg.	Cont.	Other	Total
(11)	Current Collectible Premium Ratio	0.8705	0.9489	0.8331	
(12)	Proposed Collectible Premium Ratio	0.9171	0.9579	0.8393	
(13)	Change in Collectible Premium Ratio (12) / (11)	1.0535	1.0095	1.0074	1.0139
(14)	Change in Residual Market Manual Rate Level (9) * (13)	1.4696	1.4083	1.4053	1.4144
(15)	Change in Voluntary Market Manual Loss Cost Level (10) * (13)	1.5039	1.4411	1.4381	1.4473
(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)	1.5027	1.4399	1.4369	1.4461

\* \$2,630,000 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
	У	0.5064	0.5195	0.5394	0.5422	0.5789	0.5513	0.7285
	7 Point Ex	ponential Reg	ression: y =	= 0.468731 *	1.046793	^ x		
	Selected /	Annual Trend F	actor to 12	/1/14		4.7%		
Policy		Appual	т	rond Poriod		Soverity		Froquency
Year		Trend	I			Trend Eactor		Trend Eactor
i cai		(1)		(2)		$(3) = (1)^{(2)}$		(4) #
2008		1.047		5.9167		1.3107		0.7337
2009		1.047		4.9167		1.2521		0.7731
2010		1.047		3.9167		1.1962		0.8146
2011		1.047		2.9167		1.1427		0.8584
Trended Loss Ratio								
Policy		Actual Loss		Combined		Trended		
Year		Ratio	Т	rend Factor		Loss Ratio		
		(5)	(	$(6) = (3)^*(4)$		$(7) = (5)^*(6)$		
2008		0.2544		0.9617		0.2447		
2009		0.2732		0.9680		0.2645		
2010		0.2599		0.9744		0.2532		
2011		0.3172		0.9809		0.3111		
Average						0.2684		

# See Page 12.4 for column (4).

#### DETERMINATION OF TREND

Policy Year		2005	2006	2007	2008	2009	2010	2011			
Actual Loss Ratio		0.4560	0.4346	0.4791	0.4603	0.5157	0.6351	0.7176			
Normalized Frequency		0.6041	0.5686	0.5276	0.4692	0.4719	0.4714	0.4354			
Severity Loss Ratio		0.7548	0.7643	0.9081	0.9810	1.0928	1.3473	1.6481			
	x	1	2	3	4	5	6	7			
	У	0.7548	0.7643	0.9081	0.9810	1.0928	1.3473	1.6481			
	7 Point Exponential Regression: y = 0.611671 * 1.139711956 ^ x										
	Selected Annu	al Trend Facto	or to 9/1/08 =			14.0%					
	An	Annual Senate Bill 1 Adjustment to Severity Trend									
		From 9/1/08 to 1/31/13 = After 1/31/13 =				-1.5% -1.8%					
	Selected Annual Trend Factor										
	Fron	From 9/1/08 to 1/31/13 = After 1/31/13 =			12.5% 12.2%						
Policy Year	Annual Trend Factor to 1/31/13 (1)	Trend Period # Years (2)	Severity Trend Factor to 1/31/13 (3) = (1)^(2)	Annual Trend Factor From 2/1/13 to 12/1/14 (4)	Trend Period # Years (5)	Severity Trend Factor 2/1/13 to 12/1/14 (6) = (4)^(5)	Frequency Trend Factor (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 2011	1.125 1.125	2.0833 1.0833	1.2774 1.1358	1.122 1.122	1.8333 1.8333	1.2344 1.2344	0.8146 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 2009 2010 2011		0.4603 0.5157 0.6351 0.7176		1.4635 1.3711 1.2845 1.2035		0.6736 0.7071 0.8158 0.8636					
Average						0.7650					

#### MEDICAL

# 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%

	Frequency		Frequency
Policy	Trend	# of Years	Trend
Year	Factor	to 12/1/13	to 12/1/13
	(1)	(2)	(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