#### DELAWARE COMPENSATION RATING BUREAU, INC.

#### **Excess Loss Ratios and Loss Limitations**

Page 1 shows a history of excess loss factor revisions since 1981. Also shown are loss limits consistent with an excess loss ratio of 0.0757 for those filings, the 0.0757 ratio corresponding to a loss limit of \$1,500,000 effective with the December 1, 2004 filing when a limited loss approach was first introduced. An exponential curve fit to the loss limitations from 1981 to 2004 showed an average annual change of 6.27% in loss limits which is applicable to policy year December 1, 2004 and prior. An exponential curve fit to the loss limitations from 12/1/04 to 12/1/12 showed an average annual change of 7.27% in loss limits which is applicable to policy years subsequent to December 1, 2004.

Page 2 shows the calculation of loss limits by policy year tied to a limit of \$2,630,000 for policies effective during the twelve months beginning December 1, 2012 and with the underlying annual changes in the loss limit as described above.

All calculations on pages 1 and 2 are made on a pre-Senate Bill 1 basis and indicate that a loss limit of \$2,630,000 is appropriate for the policy period beginning December 1, 2012.

The Bureau developed overall empirical distributions using Delaware data with losses adjusted to both pre-Senate Bill 1 and post-Senate Bill 1 bases. A comparison of these distributions indicated that a pre-Senate Bill 1 loss limit of \$2,630,000 produced an excess loss factor comparable to a post-Senate Bill 1 loss limit of \$2,229,397.

Page 3 shows the calculation of the excess loss ratio consistent with a loss limitation (post-Senate Bill 1) of \$2,229,397 per claim in the current filing. Excess ratios, prior to adjustments for expense and risk load, are weighted with standard premiums by hazard group to get an average excess ratio of 0.0990.

### Delaware December 1, 2012 Rate & Loss Cost Filing Loss Limitations for Excess Loss Factor = .0757 All Losses at Pre-Senate Bill 1 Levels

## Applicable to policy years beginning 12/1/04 and Earlier

Effective Date	Time (t)	Loss Limit at ELF = 0.0757
3/1/1981	1.0000	204,563
2/1/1988	7.9167	457,840
8/1/1994	14.4167	841,596
8/1/1997	17.4167	852,441
10/1/1998	18.5833	650,000
12/1/1999	19.7500	655,000
3/1/2001	21.0000	681,000
12/1/2001	21.7500	685,000
12/1/2002	22.7500	781,000
12/1/2003	23.7500	1,081,000
12/1/2004	24.7500	1,500,000

Annual Trend = .0627

## Applicable to Policy Years after 12/1/04

Effective Date	Time (t)	Loss Limit at ELF = 0.0757	
12/1/2004	1.0000	1,500,000	
12/1/2005	2.0000	2,116,000	
12/1/2006	3.0000	2,824,000	
12/1/2007	4.0000	3,465,000	
12/1/2008	5.0000	3,553,800	
12/1/2009	6.0000	2,578,707	
12/1/2010	7.0000	2,081,258	
12/1/2011	8.0000	2,085,950	
12/1/2012	9.0000	2,630,000 *	

Annual Trend from 12/1/2004 to 12/1/2012 =  $(2,630,000 / 1,500,000) ^ (1 / 8) = 1.0727$ 

Annual Trend = .0727

<sup>\*</sup> Selection used in Delaware December 1, 2011 loss cost filing.

# Delaware December 1, 2012 Rate & Loss Cost Filing Calculation of Policy Year Loss Limitations All Losses at Pre-Senate Bill 1 Levels

			Trend			
			period			
			To/From	Annual		Loss
Policy Year '	* Midpoint	Time (t)	12/1/2005	Trend +	Trend Factor	Limit
(1)	(2)	(3)	(4)	(5)	$(6) = [1+(5)]^{4}$	(7) = (6) *
						1,500,000
1983	01/01/84	1.0000	-21.9167	0.0627	0.263733	395,600
1984	01/01/85	2.0000	-20.9167	0.0627	0.280269	420,404
1985	01/01/86	3.0000	-19.9167	0.0627	0.297842	446,763
1986	01/01/87	4.0000	-18.9167	0.0627	0.316517	474,776
1987	01/01/88	5.0000	-17.9167	0.0627	0.336363	504,544
1988	01/01/89	6.0000	-16.9167	0.0627	0.357453	536,179
1989	01/01/90	7.0000	-15.9167	0.0627	0.379865	569,797
1990	01/01/91	8.0000	-14.9167	0.0627	0.403682	605,524
1991	01/01/92	9.0000	-13.9167	0.0627	0.428993	643,490
1992	01/01/93	10.0000	-12.9167	0.0627	0.455891	683,837
1993	01/01/94	11.0000	-11.9167	0.0627	0.484476	726,713
1994	01/01/95	12.0000	-10.9167	0.0627	0.514852	772,278
1995	01/01/96	13.0000	-9.9167	0.0627	0.547133	820,700
1996	01/01/97	14.0000	-8.9167	0.0627	0.581439	872,158
1997	01/01/98	15.0000	-7.9167	0.0627	0.617895	926,842
1998	01/01/99	16.0000	-6.9167	0.0627	0.656637	984,955
1999	01/01/00	17.0000	-5.9167	0.0627	0.697808	1,046,712
2000	01/01/01	18.0000	-4.9167	0.0627	0.741561	1,112,341
2001	01/01/02	19.0000	-3.9167	0.0627	0.788056	1,182,085
2002	01/01/03	20.0000	-2.9167	0.0627	0.837468	1,256,201
2003	01/01/04	21.0000	-1.9167	0.0627	0.889977	1,334,965
2004	01/01/05	22.0000	-0.9167	0.0627	0.945778	1,418,667
12/1/04	12/01/05	22.9167	0.0000	-	1.000000	1,500,000
2005	01/01/06	23.0000	0.0833	0.0727	1.005863	1,508,795
2006	01/01/07	24.0000	1.0833	0.0727	1.078989	1,618,484
2007	01/01/08	25.0000	2.0833	0.0727	1.157432	1,736,148
2008	01/01/09	26.0000	3.0833	0.0727	1.241577	1,862,366
2009	01/01/10	27.0000	4.0833	0.0727	1.331840	1,997,760
2010	01/01/11	28.0000	5.0833	0.0727	1.428664	2,142,997
2011	01/01/12	29.0000	6.0833	0.0727	1.532528	2,298,793
12/01/12	12/01/13	30.9167	8.0000	0.0727	1.753179	2,629,768
						2,630,000 (Selected)

<sup>\*</sup> Beginning 1/1/XX unless otherwise noted.

<sup>+</sup> See page 1.

# Delaware December 1, 2012 Rate & Loss Cost Filing Average Excess Ratio for Losses Limited at \$2,229,397 # (Post-Senate Bill 1 Basis)

Hazard Group	Standard Earned Premium	Average Excess Ratio \$2,229,397 #
Α	42,835,321	0.0536
В	125,376,818	0.0723
С	315,499,997	0.0842
D	87,089,160	0.0937
Е	178,112,830	0.1136
F	105,633,619	0.1535
G	23,983,067	0.1840
TOTAL	878,530,812	0.0990

<sup># \$2,229,397</sup> represents a loss limit on a post-Senate Bill 1 basis consistent with a pre-Senate Bill 1 loss limit of \$2,630,000.