

DELAWARE COMPENSATION RATING BUREAU, INC

Review of Experience Rating Plan Parameters

Page 20.1 contains Collectible Premium Ratios.

Page 20.2 contains Expected Loss Cost Factors. They are applied to residual market rates by classification to produce Table A, Expected Loss Factors, which are the basis for the calculation of Expected Losses.

Page 20.3 contains the derivation of various factors, i.e., maximum single loss size, self-rating point, that are used to produce Table B.

**COLLECTIBLE PREMIUM RATIOS \***

Manual Years 2002 to 2004 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2002	199,867,349	186,107,611	1.0739
2003	227,748,788	213,395,774	1.0673
2004	235,669,761	238,826,747	0.9868
<b>TOTAL</b>	<b>663,285,898</b>	<b>638,330,132</b>	<b>1.0391</b>
MANUFACTURING AND UTILITIES			
2002	33,156,829	30,419,958	1.0900
2003	37,057,431	32,289,647	1.1477
2004	35,243,644	32,477,739	1.0852
<b>TOTAL</b>	<b>105,457,904</b>	<b>95,187,344</b>	<b>1.1079</b>
CONTRACTING AND QUARRYING			
2002	41,256,955	36,971,728	1.1159
2003	49,684,647	45,107,678	1.1015
2004	54,698,322	53,262,374	1.0270
<b>TOTAL</b>	<b>145,639,924</b>	<b>135,341,780</b>	<b>1.0761</b>
OTHER INDUSTRIES			
2002	125,453,565	118,715,925	1.0568
2003	141,006,710	135,998,449	1.0368
2004	145,727,795	153,086,634	0.9519
<b>TOTAL</b>	<b>412,188,070</b>	<b>407,801,008</b>	<b>1.0108</b>

\* Excludes classifications and coverages not subject to experience rating.

**CALCULATION OF EXPECTED LOSS RATE FACTORS**

<b>Policy Year Beginning 12/1 (1)</b>	<b>Average Law Multiplier (2)</b>	<b>Adjustment Factor (3)</b>	<b>Loss Ratio Development Factor (4)</b>	<b>Expense Allowance 1 / (PLR/CPR) (5)</b>	<b>Trend Factor (6)</b>	<b>Product (2) * (3) * (4) * (5) * (6) (7)</b>	<b>Expected Loss Rate Factor 1.0 / (7) (8)</b>
<b><u>Manufacturing and Utilities</u></b>							
2003	1.0203	1.0000	1.9276	1.6698	1.3704	4.5005	0.2222
2004	1.0168	1.0000	2.2424	1.6698	1.2627	4.8074	0.2080
2005	1.0116	1.0000	2.9131	1.6698	1.1659	5.7371	0.1743
<b><u>Contracting and Quarrying</u></b>							
2003	1.0203	1.0000	2.0681	1.6219	1.3704	4.6900	0.2132
2004	1.0168	1.0000	2.3384	1.6219	1.2627	4.8694	0.2054
2005	1.0116	1.0000	3.0133	1.6219	1.1659	5.7642	0.1735
<b><u>Other Industries</u></b>							
2003	1.0203	1.0000	1.8567	1.5234	1.3704	3.9549	0.2529
2004	1.0168	1.0000	2.2081	1.5234	1.2627	4.3189	0.2315
2005	1.0116	1.0000	3.0054	1.5234	1.1659	5.3999	0.1852

### Experience Rating Plan Parameters

(1)	Eligibility Point = (3,161 = 1 yr Prem)      3 yr =	\$9,483
(2)	Permissible Loss Ratio =	0.6385 (a)
(3)	Expected Losses needed to achieve 5% credibility (1)*(2) = \$9,483*0.6385 =	\$6,055
(4)	Max Value : $\frac{0.25 * \$6,055}{0.05} =$	\$30,275
(5)	K-Value a) If (3) is assigned 5% credibility, then $K = \frac{E(1-c)}{c} = \frac{\$6,055 * (1-.05)}{.05} =$	\$115,045
(6)	.055 Credibility Interval - the .0525 left endpoint corresponds to $E = \frac{(K * C)}{(1-C)} = \frac{115,045 * .0525}{.9475} =$	\$6,375
(7)	Right endpoint for .05 credibility interval =	\$6,374
(8)	Self rating point = 25 * average serious claim  = 25 * 306,775 =	\$7,669,375
	6% of (8) rounded to the nearest \$1,000 =	460,000
	Selected =	460,000

(a) Standard LR / CPR = Manual LR  
0.6635/1.0391 = 0.6385