

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 2000 to 2002 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2000	169,300,908	152,431,085	1.1107
2001	173,588,848	161,242,570	1.0766
2002	199,703,695	184,952,843	1.0798
<b>TOTAL</b>	<b>542,593,451</b>	<b>498,626,498</b>	<b>1.0882</b>
MANUFACTURING AND UTILITIES			
2000	28,780,827	24,669,622	1.1667
2001	30,032,763	27,413,548	1.0955
2002	33,191,476	30,551,997	1.0864
<b>TOTAL</b>	<b>92,005,066</b>	<b>82,635,167</b>	<b>1.1134</b>
CONTRACTING AND QUARRYING			
2000	38,195,818	33,356,100	1.1451
2001	38,135,094	34,534,177	1.1043
2002	40,962,067	36,788,606	1.1134
<b>TOTAL</b>	<b>117,292,979</b>	<b>104,678,883</b>	<b>1.1205</b>
OTHER INDUSTRIES			
2000	102,324,263	94,405,363	1.0839
2001	105,420,991	99,294,845	1.0617
2002	125,550,152	117,612,240	1.0675
<b>TOTAL</b>	<b>333,295,406</b>	<b>311,312,448</b>	<b>1.0706</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>Factor to Reflect Approved Rate Levels (9)</b>	<b>Adjusted Expected LC Factors (8)*(9) (10)</b>
<b><u>Manufacturing and Utilities</u></b>									
2001	1.0213	1.0000	1.6713	1.7222	1.4377	4.2263	0.2366	1.0196	0.2412
2002	1.0135	1.0000	1.9649	1.7222	1.3106	4.4949	0.2225	1.0196	0.2269
2003	1.0098	1.0000	2.4489	1.7222	1.1961	5.0940	0.1963	1.0196	0.2001
<b><u>Contracting and Quarrying</u></b>									
2001	1.0213	1.0000	1.7248	1.7332	1.4377	4.3894	0.2278	1.0195	0.2322
2002	1.0135	1.0000	2.0012	1.7332	1.3106	4.6072	0.2171	1.0195	0.2213
2003	1.0098	1.0000	2.6779	1.7332	1.1961	5.6059	0.1784	1.0195	0.1819
<b><u>Other Industries</u></b>									
2001	1.0213	1.0000	1.6356	1.6560	1.4377	3.9770	0.2514	1.0197	0.2564
2002	1.0135	1.0000	1.8695	1.6560	1.3106	4.1123	0.2432	1.0197	0.2480
2003	1.0098	1.0000	2.4362	1.6560	1.1961	4.8728	0.2052	1.0197	0.2092

### Experience Rating Plan Parameters

- |     |   |  |
|-----|---|--|
| (1) | Eligibility Point = (3,161 = 1 yr Prem)      3 yr =   | \$9,483                                      |
| (2) | Permissible Loss Ratio =  | 0.5941 (a)                                   |
| (3) | Expected Losses needed to achieve 5% credibility<br>(1)*(2) = \$9,483*0.5941 =                                    | \$5,634                                      |
| (4) | Max Value : $\frac{0.25 * \$5,634}{0.05} =$   | \$28,170                                     |
| (5) | K-Value<br>a) If (3) is assigned 5% credibility, then<br>$K = \frac{E(1-c)}{c} = \frac{\$5,634 * (1-.05)}{.05} =$ | \$107,046                                    |
| (6) | .055 Credibility Interval - the .0525 left endpoint<br>corresponds to $E = \frac{(K * C)}{(1-C)} =$               | $\frac{107,046 * .0525}{.9475} =$<br>\$5,931 |
| (7) | Right endpoint for .05 credibility interval =   | \$5,930                                      |
| (8) | Self rating point = 25 * average serious claim #<br><br>= 25 * 255,819 =  | \$6,395,475                                  |
|     | 6% of (8) rounded to the nearest \$1,000 =  | 384,000                                      |
|     | Selected =  | 384,000                                      |

(a) Standard LR / CPR = Manual LR  
0.6465/1.0882 = 0.5941