

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 2001 to 2003 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2001	173,110,436	161,189,881	1.0740
2002	199,719,988	185,902,045	1.0743
2003	225,166,036	212,509,365	1.0596
TOTAL	597,996,460	559,601,291	1.0686
MANUFACTURING AND UTILITIES			
2001	30,011,321	27,313,655	1.0988
2002	33,270,314	30,450,547	1.0926
2003	37,099,295	33,662,319	1.1021
TOTAL	100,380,930	91,426,521	1.0979
CONTRACTING AND QUARRYING			
2001	37,892,551	34,440,876	1.1002
2002	41,232,645	36,960,849	1.1156
2003	49,550,773	45,018,536	1.1007
TOTAL	128,675,969	116,420,261	1.1053
OTHER INDUSTRIES			
2001	105,206,564	99,435,350	1.0580
2002	125,217,029	118,490,649	1.0568
2003	138,515,968	133,828,510	1.0350
TOTAL	368,939,561	351,754,509	1.0489

* Excludes classifications and coverages not subject to experience rating.

CALCULATION OF EXPECTED LOSS RATE FACTOR

Policy Year Beginning 12/1	Average Law Multiplier	Adjustment Factor	Loss Ratio Development Factor	Expense Allowance 1 / (PLR/CPR)	Trend Factor	Product (2) * (3) * (4) * (5) * (6)	Expected Loss Rate Factor 1.0 / (7)	Factor to Reflect Approved Rate Levels	Adjusted Expected LC Factors (8)*(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Manufacturing and Utilities</u>									
2002	1.0209	1.0000	1.9857	1.7339	1.3425	4.7188	0.2119	1.0405	0.2205
2003	1.0174	1.0000	2.3171	1.7339	1.2458	5.0922	0.1964	1.0405	0.2044
2004	1.0134	1.0000	2.8814	1.7339	1.1569	5.8574	0.1707	1.0405	0.1776
<u>Contracting and Quarrying</u>									
2002	1.0209	1.0000	2.0297	1.7456	1.3425	4.8559	0.2059	1.0404	0.2142
2003	1.0174	1.0000	2.4441	1.7456	1.2458	5.4076	0.1849	1.0404	0.1924
2004	1.0134	1.0000	2.9425	1.7456	1.1569	6.0220	0.1661	1.0404	0.1728
<u>Other Industries</u>									
2002	1.0209	1.0000	1.8564	1.6565	1.3425	4.2146	0.2373	1.0404	0.2469
2003	1.0174	1.0000	2.2516	1.6565	1.2458	4.7274	0.2115	1.0404	0.2200
2004	1.0134	1.0000	2.9428	1.6565	1.1569	5.7152	0.1750	1.0404	0.1821

Experience Rating Plan Parameters

(1)	Eligibility Point = (3,161 = 1 yr Prem) 3 yr =	\$9,483
(2)	Permissible Loss Ratio =	0.5926 (a)
(3)	Expected Losses needed to achieve 5% credibility (1)*(2) = \$9,483*0.5926 =	\$5,620
(4)	Max Value : $\frac{0.25 * \$5,620}{0.05} =$	\$28,100
(5)	K-Value a) If (3) is assigned 5% credibility, then $K = \frac{E(1-c)}{c} = \frac{\$5,620 * (1-.05)}{.05} =$	\$106,780
(6)	.055 Credibility Interval - the .0525 left endpoint corresponds to $E = \frac{(K * C)}{(1-C)} = \frac{106,780 * .0525}{.9475} =$	\$5,917
(7)	Right endpoint for .05 credibility interval =	\$5,916
(8)	Self rating point = 25 * average serious claim = 25 * 282,425 =	\$7,060,625
	6% of (8) rounded to the nearest \$1,000 =	424,000
	Selected =	424,000

(a) Standard LR / CPR = Manual LR
0.6332/1.0686 = 0.5926