

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 2008 to 2010 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2008	243,097,942	280,276,902	0.8673
2009	181,556,059	213,108,442	0.8519
2010	166,708,775	186,914,327	0.8919
TOTAL	591,362,776	680,299,671	0.8693
SELECTED			0.8706
MANUFACTURING AND UTILITIES			
2008	34,507,866	39,629,869	0.8708
2009	26,710,076	30,394,115	0.8788
2010	21,270,234	21,925,978	0.9701
TOTAL	82,488,176	91,949,962	0.8971
SELECTED			0.9171
CONTRACTING AND QUARRYING			
2008	49,082,708	51,322,117	0.9564
2009	34,678,748	36,949,879	0.9385
2010	33,570,584	34,298,854	0.9788
TOTAL	117,332,040	122,570,850	0.9573
SELECTED			0.9579
OTHER INDUSTRIES			
2008	159,507,368	189,324,916	0.8425
2009	120,167,235	145,764,448	0.8244
2010	111,867,957	130,689,495	0.8560
TOTAL	391,542,560	465,778,859	0.8406
SELECTED			0.8393

* Excludes classifications and coverages not subject to experience rating.

EXPECTED LOSS RATE FACTORS

CALCULATION OF EXPECTED LOSS RATE FACTORS

Policy Year Beginning 12/1 (1)	Average Law Multiplier (2)	Adjustment Factor (3)	Loss Ratio Development Factor (4)	Expense Allowance ** 1 / (PLR/CPR) (5)	Trend Factor (6)	Product (2) * (3) * (4) * (5) * (6) (7)	Expected Loss Rate Factor 1.0 / (7) (8)
<u>Manufacturing and Utilities</u>							
2009	0.9245	1.0000	1.7667	1.5666	1.4887	3.8092	0.2625
2010	0.9352	1.0000	2.0062	1.5666	1.3457	3.9554	0.2528
2011	0.9416	1.0000	3.2447	1.5666	1.2177	5.8283	0.1716
<u>Contracting and Quarrying</u>							
2009	0.9245	1.0000	1.8546	1.6363	1.4887	4.1766	0.2394
2010	0.9352	1.0000	2.2313	1.6363	1.3457	4.5949	0.2176
2011	0.9416	1.0000	3.1901	1.6363	1.2177	5.9851	0.1671
<u>Other Industries</u>							
2009	0.9245	1.0000	1.7581	1.4337	1.4887	3.4691	0.2883
2010	0.9352	1.0000	2.0774	1.4337	1.3457	3.7483	0.2668
2011	0.9416	1.0000	2.9887	1.4337	1.2177	4.9130	0.2035

** Permissible Loss Ratio = 0.5854
 Collectible Premium Ratios
 Manufacturing = 0.9171
 Contracting = 0.9579
 All Other = 0.8393

Experience Rating Plan Parameters

(1)	Eligibility Point = (3,161 = 1 yr Prem) 3 yr =	\$9,483
(2)	Permissible Loss Ratio =	0.6724 (a)
(3)	Expected Losses needed to achieve 5% credibility (1)*(2) = \$9,483*0.6724 =	\$6,376
(4)	Max Value : $\frac{0.25 * \$6,376}{0.05} =$	\$31,880
(5)	K-Value a) If (3) is assigned 5% credibility, then $K = \frac{E(1-c)}{c} = \frac{\$6,376 * (1-.05)}{.05} =$	\$121,144
(6)	.055 Credibility Interval - the .0525 left endpoint corresponds to $E = \frac{(K * C)}{(1-C)} = \frac{121,144 * .0525}{.9475} =$	\$6,712
(7)	Right endpoint for .05 credibility interval =	\$6,711
(8)	Self rating point = 25 * average serious claim = 25 * 344,468 =	\$8,611,700
	6% of (8) rounded to the nearest \$1,000 =	517,000
	Selected =	517,000

(a) Standard LR / CPR = Manual LR
0.5854/0.8706 = 0.6724