

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.

Superseded

COLLECTIBLE PREMIUM RATIOS *

Manual Years 2013 to 2015 Market Profile Report Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2013	225,449,562	241,632,020	0.9330
2014	252,084,702	257,069,149	0.9806
2015	243,347,982	257,522,319	0.9450
TOTAL	720,882,247	756,223,487	0.9533
MANUFACTURING AND UTILITIES			
2013	28,370,800	27,292,576	1.0395
2014	35,149,978	34,503,031	1.0188
2015	39,120,220	38,025,991	1.0288
TOTAL	102,640,998	99,821,597	1.0282
CONTRACTING AND QUARRYING			
2013	42,020,839	41,355,911	1.0161
2014	48,967,719	46,492,736	1.0532
2015	45,603,488	44,844,625	1.0169
TOTAL	136,592,047	132,693,273	1.0294
OTHER INDUSTRIES			
2013	155,057,923	172,983,533	0.8964
2014	167,967,005	176,073,381	0.9540
2015	158,624,274	174,651,703	0.9082
TOTAL	481,649,202	523,708,617	0.9197

* 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>							
2012	0.9338	1.0000	1.6642	1.8198	1.3812	3.9061	0.2560
2013	0.9726	1.0000	1.9104	1.8198	1.2739	4.3074	0.2322
2014	1.0017	1.0000	2.4064	1.8198	1.1751	5.1547	0.1940
<u>Contracting and Quarrying</u>							
2012	0.9338	1.0000	1.7233	1.8219	1.3812	4.0494	0.2470
2013	0.9726	1.0000	1.8459	1.8219	1.2739	4.1668	0.2400
2014	1.0017	1.0000	2.4941	1.8219	1.1751	5.3487	0.1870
<u>Other Industries</u>							
2012	0.9338	1.0000	1.5818	1.6278	1.3812	3.3210	0.3011
2013	0.9726	1.0000	1.7902	1.6278	1.2739	3.6105	0.2770
2014	1.0017	1.0000	2.4287	1.6278	1.1751	4.6536	0.2149

* Permissible Loss Ratio = 0.5650
 Collectible Premium Ratios
 Manufacturing = 1.0282
 Contracting = 1.0294
 All Other = 0.9197

Experience Rating Plan Parameters

- | | | |
|---|---|-------------|
| (1) | Eligibility Point = (3,161 = 1 yr Prem) 3 yr = | \$9,483 |
| (2) | Permissible Loss Ratio = | 0.5927 (a) |
| (3) | Expected Losses needed to achieve 5% credibility
(1) * (2) = \$9,483 * 0.5927 = | \$5,621 |
| (4) | Max Value : $\frac{0.25 * \$5,621}{0.05} =$ | \$28,105 |
| (5) | K-Value
a) If (3) is assigned 5% credibility, then
$K = \frac{E * (1 - c)}{c} = \frac{\$5,621 * (1 - .05)}{.05} =$ | \$106,799 |
| (6) | .055 Credibility Interval - the .0525 left endpoint
corresponds to $E = \frac{(K * C)}{(1 - C)} = \frac{\$106,799 * .0525}{.9475} =$ | \$5,918 |
| (7) | Right endpoint for .05 credibility interval = | \$5,917 |
| (8) | Self rating point = 25 * average serious claim

= 25 * \$331,465 = | \$8,286,625 |
| | 6% of (8) rounded to the nearest \$1,000 = | \$497,000 |
| | Selected = | \$497,000 |
| (a) Standard LR / CPR = Manual LR
0.5650 / 0.9533 = 0.5927 | | |