

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 2005 to 2007 Unit Data

| Manual Year | Premium at Manual Rates | Collected Premium (Excluding Constants) | Collectible Premium Ratio (2)/(3) |
|-----------------------------|-------------------------|---|-----------------------------------|
| (1) | (2) | (3) | (4) |
| ALL INDUSTRIES | | | |
| 2005 | 292,143,521 | 293,734,969 | 0.9946 |
| 2006 | 318,843,146 | 333,494,291 | 0.9561 |
| 2007 | 322,602,939 | 341,963,463 | 0.9434 |
| TOTAL | 933,589,606 | 969,192,723 | 0.9633 |
| MANUFACTURING AND UTILITIES | | | |
| 2005 | 42,776,411 | 38,823,484 | 1.1018 |
| 2006 | 43,401,987 | 42,159,566 | 1.0295 |
| 2007 | 48,640,105 | 49,230,042 | 0.9880 |
| TOTAL | 134,818,503 | 130,213,092 | 1.0354 |
| CONTRACTING AND QUARRYING | | | |
| 2005 | 68,859,562 | 66,291,130 | 1.0387 |
| 2006 | 74,350,697 | 72,963,479 | 1.0190 |
| 2007 | 69,012,901 | 69,091,255 | 0.9989 |
| TOTAL | 212,223,160 | 208,345,864 | 1.0186 |
| OTHER INDUSTRIES | | | |
| 2005 | 180,507,548 | 188,620,355 | 0.9570 |
| 2006 | 201,090,462 | 218,371,246 | 0.9209 |
| 2007 | 204,949,933 | 223,642,166 | 0.9164 |
| TOTAL | 586,547,943 | 630,633,767 | 0.9301 |

* Excludes classifications and coverages not subject to experience rating.

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> | | | | | | | |
| 2006 | 0.9414 | 1.0000 | 1.7832 | 1.6058 | 1.1561 | 3.1165 | 0.3209 |
| 2007 | 0.9768 | 1.0000 | 2.0494 | 1.6058 | 1.1000 | 3.5360 | 0.2828 |
| 2008 | 0.9874 | 1.0000 | 2.7029 | 1.6058 | 1.0641 | 4.5603 | 0.2193 |
| <u>Contracting and Quarrying</u> | | | | | | | |
| 2006 | 0.9414 | 1.0000 | 1.8426 | 1.5797 | 1.1561 | 3.1679 | 0.3157 |
| 2007 | 0.9768 | 1.0000 | 2.1445 | 1.5797 | 1.1000 | 3.6400 | 0.2747 |
| 2008 | 0.9874 | 1.0000 | 2.7087 | 1.5797 | 1.0641 | 4.4958 | 0.2224 |
| <u>Other Industries</u> | | | | | | | |
| 2006 | 0.9414 | 1.0000 | 1.7697 | 1.4425 | 1.1561 | 2.7783 | 0.3599 |
| 2007 | 0.9768 | 1.0000 | 2.0932 | 1.4425 | 1.1000 | 3.2443 | 0.3082 |
| 2008 | 0.9874 | 1.0000 | 2.7602 | 1.4425 | 1.0641 | 4.1834 | 0.2390 |

Experience Rating Plan Parameters

| | | |
|-----|---|-------------|
| (1) | Eligibility Point = (3,161 = 1 yr Prem) 3 yr = | \$9,483 |
| (2) | Permissible Loss Ratio = | 0.6694 (a) |
| (3) | Expected Losses needed to achieve 5% credibility (1)*(2) = \$9,483*0.6694 = | \$6,348 |
| (4) | Max Value : $\frac{0.25 * \$6,348}{0.05} =$ | \$31,740 |
| (5) | K-Value a) If (3) is assigned 5% credibility, then $K = \frac{E(1-c)}{c} = \frac{\$6,348 * (1-.05)}{.05} =$ | \$120,612 |
| (6) | .055 Credibility Interval - the .0525 left endpoint corresponds to $E = \frac{(K * C)}{(1-C)} = \frac{120,612 * .0525}{.9475} =$ | \$6,683 |
| (7) | Right endpoint for .05 credibility interval = | \$6,682 |
| (8) | Self rating point = 25 * average serious claim = 25 * 274,391 = | \$6,859,775 |
| | 6% of (8) rounded to the nearest \$1,000 = | 412,000 |
| | Selected = | 412,000 |

(a) Standard LR / CPR = Manual LR
0.6448/0.9633 = 0.6694