

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
<b>SELECTED</b>			<b>0.8706</b>
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
<b>SELECTED</b>			<b>0.9171</b>
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
<b>SELECTED</b>			<b>0.9579</b>
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
<b>SELECTED</b>			<b>0.8393</b>

\* Excludes classifications and coverages not subject to experience rating.

**CALCULATION OF EXPECTED LOSS RATE FACTORS**

<b>Policy Year Beginning 12/1</b>	<b>Average Law Multiplier</b>	<b>Adjustment Factor</b>	<b>Loss Ratio Development Factor</b>	<b>Expense Allowance ** 1 / (PLR/CPR)</b>	<b>Trend Factor</b>	<b>Product (2) * (3) * (4) *(5) * (6)</b>	<b>Expected Loss Rate Factor 1.0 / (7)</b>	<b>Factor to Reflect Approved Rate Levels*</b>	<b>Combined Effect (8) * (9)</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>
<b><u>Manufacturing and Utilities</u></b>									
2009	0.9173	1.0000	1.7667	1.5666	1.4879	3.7775	0.2647	1.2434	0.3291
2010	0.9277	1.0000	2.0062	1.5666	1.3452	3.9222	0.2550	1.2434	0.3171
2011	0.9340	1.0000	3.2447	1.5666	1.2174	5.7798	0.1730	1.2434	0.2151
<b><u>Contracting and Quarrying</u></b>									
2009	0.9173	1.0000	1.8546	1.6363	1.4879	4.1419	0.2414	1.2435	0.3002
2010	0.9277	1.0000	2.2313	1.6363	1.3452	4.5563	0.2195	1.2435	0.2729
2011	0.9340	1.0000	3.1901	1.6363	1.2174	5.9354	0.1685	1.2435	0.2095
<b><u>Other Industries</u></b>									
2009	0.9173	1.0000	1.7581	1.4337	1.4879	3.4402	0.2907	1.2435	0.3615
2010	0.9277	1.0000	2.0774	1.4337	1.3452	3.7168	0.2690	1.2435	0.3345
2011	0.9340	1.0000	2.9887	1.4337	1.2174	4.8722	0.2052	1.2435	0.2552

\* (12/1/13 Final Indicated Change in Manual Rate Level)/(12/1/13 Approved Indicated Change in Manual Rate Level)  
by Industry Group, from Page 1.

\*\* 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