# DELAWARE COMPENSATION RATING BUREAU, INC. 

Small Deductible Program

The attached exhibits review the impact of deductibles on loss costs and residual market manual rates. Staff has proposed small decreases to the loss elimination ratios and premium credit factors currently in effect.

## 2018 DELAWARE DEDUCTIBLE STUDY

Proposed Effective Date 12/1/18

| Deduct. <br> Level | Effect of <br> Deductible <br> on Losses | Selected | Loss <br> Elimination <br> Ratio | Current Loss <br> Elimination <br> Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 500 | 0.9852 | 0.986 | 0.014 | $(12)$ |
| 1,000 | 0.9729 | 0.974 | 0.026 | 0.016 |
| 1,500 | 0.9629 | 0.964 | 0.036 | 0.028 |
| 2,000 | 0.9544 | 0.956 | 0.044 | 0.046 |
| 2,500 | 0.9469 | 0.949 | 0.051 | 0.054 |
| 3,000 | 0.9403 | 0.943 | 0.057 | 0.060 |
| 3,500 | 0.9342 | 0.937 | 0.063 | 0.066 |
| 4,000 | 0.9285 | 0.932 | 0.068 | 0.071 |
| 4,500 | 0.9233 | 0.927 | 0.073 | 0.076 |
| 5,000 | 0.9184 | 0.922 | 0.078 | 0.081 |


| Deduct. Level | Effect of Deductible on Man.Rate | Selected |  | Current Premium Credit |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Premium |  |
|  |  |  | Credit |  |
|  |  | (15) | (16) | (17) |
| 500 | 0.9888 | 0.989 | 0.011 | 0.012 |
| 1,000 | 0.9796 | 0.980 | 0.020 | 0.021 |
| 1,500 | 0.9720 | 0.973 | 0.027 | 0.029 |
| 2,000 | 0.9656 | 0.967 | 0.033 | 0.035 |
| 2,500 | 0.9599 | 0.962 | 0.038 | 0.041 |
| 3,000 | 0.9550 | 0.957 | 0.043 | 0.046 |
| 3,500 | 0.9504 | 0.952 | 0.048 | 0.050 |
| 4,000 | 0.9461 | 0.949 | 0.051 | 0.054 |
| 4,500 | 0.9421 | 0.945 | 0.055 | 0.058 |
| 5,000 | 0.9384 | 0.941 | 0.059 | 0.062 |


|  |  | Total Incurred Losses | Adj Factor | Adj Factor | Adjusted Losses $(1)^{\star}(2)^{\star}(3)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Loss Range |  | (1) | (2) | (3) | (4) |
|  |  |  | a | b |  |
| 0 | 499 | 1,951,636 | 1.000 | 0.9996 | 1,950,855 |
| 500 | 999 | 4,866,603 | 0.995 | 0.9996 | 4,840,333 |
| 1,000 | 1,499 | 4,846,907 | 0.990 | 0.9996 | 4,796,519 |
| 1,500 | 1,999 | 4,620,824 | 0.985 | 0.9996 | 4,549,691 |
| 2,000 | 2,499 | 4,426,770 | 0.980 | 0.9996 | 4,336,499 |
| 2,500 | 2,999 | 3,908,425 | 0.975 | 0.9996 | 3,809,190 |
| 3,000 | 3,499 | 3,628,402 | 0.970 | 0.9996 | 3,518,142 |
| 3,500 | 3,999 | 3,421,763 | 0.965 | 0.9996 | 3,300,680 |
| 4,000 | 4,499 | 3,390,591 | 0.960 | 0.9996 | 3,253,665 |
| 4,500 | 4,999 | 3,077,727 | 0.955 | 0.9996 | 2,938,054 |
| 5,000 | \& UP | 769,629,053 | 0.950 | 0.9996 | 730,855,141 |
|  |  | \# Claims | Adj Losses |  | Adj Tot Ded |
|  | Deduct. | >= Deduct | < Deduct. | $[(2) * \text { * } 3)^{\star}$ | Collected |
|  | Level | Level | Level | (5)*(6)] | $(7)+(8)$ |
|  | (5) | (6) | (7) | (8) | (9) |
|  |  |  | c |  |  |
|  | 500 | 32,142 | 1,950,855 | 15,984,249 | 17,935,104 |
|  | 1,000 | 25,461 | 6,791,188 | 25,196,307 | 31,987,495 |
|  | 1,500 | 21,519 | 11,587,707 | 31,781,605 | 43,369,312 |
|  | 2,000 | 18,864 | 16,137,398 | 36,958,651 | 53,096,049 |
|  | 2,500 | 16,890 | 20,473,897 | 41,152,907 | 61,626,804 |
|  | 3,000 | 15,463 | 24,283,087 | 44,979,331 | 69,262,418 |
|  | 3,500 | 14,345 | 27,801,229 | 48,430,857 | 76,232,086 |
|  | 4,000 | 13,432 | 31,101,909 | 51,558,248 | 82,660,157 |
|  | 4,500 | 12,633 | 34,355,574 | 54,268,601 | 88,624,175 |
|  | 5,000 | 11,984 | 37,293,628 | 56,901,230 | 94,194,858 |


| Deduct. <br> Level | Effect of <br> Deductible <br> on Losses <br> $(5)$ | Effect of <br> Deductible <br> on Manual Rate |
| :---: | :---: | :---: |
|  | d | $(11)$ <br> (10) |
| 500 | 0.9852 | 0.9888 |
| 1,000 | 0.9729 | 0.9796 |
| 1,500 | 0.9629 | 0.9720 |
| 2,000 | 0.9544 | 0.9656 |
| 2,500 | 0.9469 | 0.9599 |
| 3,000 | 0.9403 | 0.9550 |
| 3,500 | 0.9342 | 0.9504 |
| 4,000 | 0.9285 | 0.9461 |
| 4,500 | 0.9233 | 0.9421 |
| 5,000 | 0.9184 | 0.9384 |

a Adjustment factor for the amount of the deductible which will actually be reimbursed to the insurer by the insured.
b Adjustment factor to put deductibles on a per occurrence basis instead of a per claim basis =
c Downward accumulation of Column (4).
d Effect of deductible on Losses
$=[\mathrm{A} / \mathrm{B}-\mathrm{Col}(9)+\mathrm{P} * \mathrm{C} * \mathrm{Col}(3)] /(\mathrm{A} / \mathrm{B})$
A = Total incurred indemnity on death claims plus total incurred medical on all claims = sum of Column (4) = 768,148,769
$B=$ Death indemnity losses plus all medical losses as a \% of all losses =

Per Table II 2018 , Sect C
1.All Losses 1,089,517,947
2.Death Indem (00) 89,999
3.All Medical (00) 7,232,536
$4 .[((2)+(3)) /(1)] * 100 \quad 0.672$
C = \# of death indemnity claims plus \# of claims with
some medical portion =
38,834
$P=$ Processing expense per claim $=$ 25.00
e Effect of deductible on Manual Rate
$=[($ Column (10) * permissible loss ratio) + fixed expenses $] /$
( 1 - variable expenses )
Fixed expenses $=$ LAE + General + Admin
=
0.1917

Variable expenses $=$ Acquisition + P\&C + Prem Tax

+ Workers' Comp. Fund + Misc. Tax + Prem Discount
+ Uncollectible Premium $=0.2193$

Permissible Loss Ratio $=\quad 0.5890$

