

DELAWARE COMPENSATION RATING BUREAU, INC.

State and Hazard Group Relativities

The attached exhibit pages present an analysis of Delaware State and Hazard Group relativities.

The exhibit shows the derivation of the December 1, 2018 proposed relativities. DCRB and NCCI average costs are shown by hazard group and in total. A credibility weight is calculated for each hazard group based on the number of claims. A credibility weighted average cost is then calculated and these average costs are related to the NCCI overall average cost to generate the indicated (and selected) relativities. An adjustment has been made to recognize the impact of Senate Bill 1, Senate Bill 238, House Bill 175 and House Bill 373 on Delaware average costs.

The bottom of the exhibit presents the approved December 1, 2017 relativities.

**Derivation of State Hazard Group Relativities
Delaware December 1, 2018 Filing**

| Hazard Group | DCRB Average Cost (1) | Ratio to DCRB Total (2)=(1)All/(1)i | Ratio to NCCI Total (3)=(4)All/(4)i | NCCI Average Cost (4) | Ratio to NCCI Total (5)=(4)All/(4)i | # Claims (6) | Credibility * (7) | Cred Wtd Average Cost** (8) | Ratio to NCCI Total (9)=(4)All/(8)i | Selected St & HG Relativity (10) |
|--------------|--------------------------|--|--|--------------------------|--|-----------------|----------------------|--------------------------------|--|-------------------------------------|
| A | 56,834 | 1.728 | 1.051 | 37,292 | 1.602 | 672 | 0.066 | 38,582 | 1.548 | 1.548 |
| B | 74,799 | 1.313 | 0.799 | 45,689 | 1.307 | 1,587 | 0.101 | 48,629 | 1.228 | 1.228 |
| C | 80,639 | 1.218 | 0.741 | 51,116 | 1.169 | 3,633 | 0.153 | 55,633 | 1.074 | 1.074 |
| D | 94,260 | 1.042 | 0.634 | 60,165 | 0.993 | 909 | 0.077 | 62,790 | 0.951 | 0.951 |
| E | 121,616 | 0.808 | 0.491 | 71,093 | 0.840 | 1,845 | 0.109 | 76,600 | 0.780 | 0.780 |
| F | 157,690 | 0.623 | 0.379 | 87,212 | 0.685 | 668 | 0.066 | 91,864 | 0.650 | 0.650 |
| G | 536,748 | 0.183 | 0.111 | 100,004 | 0.597 | 113 | 0.027 | 111,796 | 0.534 | 0.534 |
| All | 98,219 | | 0.608 | 59,736 | | 9,427 | 0.247 | 69,241 | | |

* Credibility = [# claims by TOI / 155,000]^{0.5}

** DCRB Avg Cost * Cred + NCCI Avg Cost * (1-Cred)

Delaware December 1, 2017 Filing

| Hazard Group | Approved Relativity |
|--------------|---------------------|
| A | 1.542 |
| B | 1.211 |
| C | 1.070 |
| D | 0.939 |
| E | 0.766 |
| F | 0.646 |
| G | 0.539 |