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 on page 18.1 shows the derivation of the proposed relativities. DCRB and countrywide average severities 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 severity is then calculated and these average severities are related to the countrywide average severity for all hazard groups combined 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.

Page 18.2 shows the calculation of the overall countrywide average severity that is used in page 18.1.

Derivation of State and Hazard Group Relativities Delaware December 1, 2023 Filing

| Hazard Group | Current Relativity (1) | DCRB Average Severity (2) | Ratio to DCRB Total (3) | Ratio DCRB to Countrywide Total (4) | Ratio to NCCI Total (5) | Countrywide Average Severity (6) | # Claims (7) | Credibility (8) | Credibility Weighted Average Severity (9) | Ratio to Countrywide Total (10) | Selected State & Hazard Group Relativity (11) |
|-----------------|------------------------------|------------------------------------|----------------------------------|---|----------------------------------|---|--------------------|--------------------|---|---|---|
| Α | ì.628 | 29,605 | 1.952 | 2.128 | 1.602 | 39,322 | ` [′] 724 | 0.068 | 38,661 | 1.629 | 1.629 |
| В | 1.327 | 34,683 | 1.667 | 1.816 | 1.307 | 48,176 | 1,154 | 0.086 | 47,016 | 1.340 | 1.340 |
| С | 1.159 | 47,110 | 1.227 | 1.337 | 1.169 | 53,899 | 3,092 | 0.141 | 52,942 | 1.190 | 1.190 |
| D | 0.979 | 49,149 | 1.176 | 1.282 | 0.993 | 63,440 | 2,487 | 0.127 | 61,625 | 1.022 | 1.022 |
| Ε | 0.821 | 83,691 | 0.691 | 0.753 | 0.840 | 74,963 | 1,344 | 0.093 | 75,775 | 0.831 | 0.831 |
| F | 0.659 | 81,648 | 0.708 | 0.771 | 0.685 | 91,960 | 971 | 0.079 | 91,145 | 0.691 | 0.691 |
| G | 0.584 | 147,409 | 0.392 | 0.427 | 0.597 | 105,448 | 488 | 0.056 | 107,798 | 0.584 | 0.584 |
| All | | 57,802 | | 1.090 | | 62,988 | 10,260 | 0.257 | 61,655 | | |

⁽¹⁾ Prior Year Values

⁽²⁾ From DCRB Unit Statistical Data

 $^{(3) = (2)}_{AII} / (2)_{i}$

 $^{(4) = (6)}_{AII} / (2)_{i}$

⁽⁵⁾ From NCCI Item Filing R-1413 - 2017 Update to the Retrospective Rating Plan Parameters

The value for each hazard group = (Countrywide Average Severity for the Hazard Group / Countrywide Overall Average Severity)

 $^{(6) = (6)}_{AII} / (5)_i$ with the value, $(5)_{AII}$, calculated on page 18.2

⁽⁷⁾ From DCRB Unit Statistical Data

 $^{(8) = [#} claims by TOI / 155,000]^0.5$

^{(9) = [}DCRB Average Severity * Credibility] + [Countrywide Average Severity * (1-Credibility)]

 $^{(10) = (6)}_{AII} / (9)_{i}$

^{(11) = (10),} rounded to three decimals

Projected Countrywide Average Severity

| NCCI Effective Date | NCCI Countrywide Average Severity | Exponential Trends | | | |
|---------------------------|---|--------------------|--------|--|--|
| 1/1/2007 | 44,457 | 12 year | 1.70% | | |
| 1/1/2008 | 51,533 | 11 year | 1.00% | | |
| 1/1/2009 | 55,578 | 10 year | 0.60% | | |
| 1/1/2010 | 57,375 | 9 year | 0.50% | | |
| 1/1/2011 | 57,797 | 8 year | 0.60% | | |
| 1/1/2011 | 57,797 | 7 year (selected) | 0.90% | | |
| 1/1/2013 | 57,027 | 6 year | 1.50% | | |
| 1/1/2014 | 55,818 | 5 year | 2.10% | | |
| 1/1/2015 | 55,954 | 4 year | 2.10% | | |
| 1/1/2016 | 59,215 | 3 year | 0.40% | | |
| 1/1/2017 | 60,022 | 2 year | -0.50% | | |
| 1/1/2018 | 59,736 * | - | | | |

Selected Countrywide Average Severity = $59,736 * [(1.009) ^ 5.9167 \text{ years}] = 62,988$ where 5.9167 years is the difference between one year past the filing effective date (12/1/2024). and one year past the latest NCCI effective date (1/1/2019).

^{*} From NCCI Item Filing R-1413 - 2017 Update to the Retrospective Rating Plan Parameters