

DELAWARE COMPENSATION RATING BUREAU, INC.

Indicated Residual Market Rate Change

Page 1 presents the overall indicated changes in rates and loss costs.

Derivation of the indemnity and medical trend factors and trended loss ratios shown on page 1 is presented on pages 2 and 3.

Page 4 shows the derivation of overall frequency trend factors for each of the latest four policy years.

Staff is taking into account the impact of direct savings attributable to House Bill 373.

INDICATED CHANGE IN RATE LEVEL

| | <u>Indemnity</u> | <u>Medical</u> | <u>Total</u> |
|---|------------------|----------------|----------------|
| (1a) Policy Year 2014 Loss and Loss Adjustment Expense Ratio | 0.2885 | 0.4834 | 0.7719 |
| (1b) Policy Year 2015 Loss and Loss Adjustment Expense Ratio | 0.2877 | 0.5343 | 0.8220 |
| (1c) Policy Year 2016 Loss and Loss Adjustment Expense Ratio | 0.2535 | 0.5213 | 0.7748 |
| (1d) Policy Year 2017 Loss and Loss Adjustment Expense Ratio | 0.2498 | 0.5069 | 0.7567 |
| (1e) Average (Midpoint = 7/1/2016) | 0.2699 | 0.5115 | 0.7814 |
| (2a) Policy Year 2014 Loss and LAE Ratio Trended to 12/1/2019 | 0.2243 | 0.4941 | |
| (2b) Policy Year 2015 Loss and LAE Ratio Trended to 12/1/2019 | 0.2334 | 0.5441 | |
| (2c) Policy Year 2016 Loss and LAE Ratio Trended to 12/1/2019 | 0.2146 | 0.5289 | |
| (2d) Policy Year 2017 Loss and LAE Ratio Trended to 12/1/2019 | 0.2206 | 0.5124 | |
| (2e) Average at 12/1/2020 | 0.2232 | 0.5199 | 0.7431 |
| (3a) House Bill 373 Adjustment | 1.0000 | 0.6607 | |
| (3b) Average Trended Loss and LAE Ratio Post-Legislation (2e) * (3a) | 0.2232 | 0.3435 | 0.5667 |
| (4a) Excess Loss Factor at \$1,657,464 (Post-Legislative Basis) * | | | 0.0853 |
| (4b) Provision for Excess Loss (5a) - (3b) | | | 0.0528 |
| (5a) Total Trended Loss and LAE Ratio (3b) / (1.0 - (4a)) | 0.2294 | 0.3901 | 0.6195 |
| (5b) Percentage of Total | 37.03% | 62.97% | |
| (6) Permissible Loss and Loss Adjustment Ratio | | | 0.7128 |
| (7) Indicated Change in Rates (5a) / (6) | | | 0.8691 |
| (8) Estimated Effect of the 7/1/20 Benefit Change | | | 1.0039 |
| (9) Indicated Change in Residual Market Rate Level (7) * (8) | | | 0.8725 |
| | | | -12.75% |
| (10) Indicated Change in Voluntary Market Loss Costs (9) * [0.7411 / 0.7457] | | | 0.8671 |
| | | | -13.29% |

CHANGES IN MANUAL PREMIUM LEVEL BY INDUSTRY GROUP

| | Mfg. | Cont. | Other | Total |
|---|-------------|--------------|--------------|--------------|
| (11) Current Collectible Premium Ratio | 1.0983 | 1.0435 | 0.9156 | |
| (12) Proposed Collectible Premium Ratio | 1.1130 | 1.0522 | 0.9358 | |
| (13) Change in Collectible Premium Ratio (12) / (11) | 1.0134 | 1.0083 | 1.0221 | 1.0182 |
| (14) Change in Residual Market Manual Rate Level (9) * (13) | 0.8842 | 0.8797 | 0.8918 | 0.8884 |
| (15) Change in Voluntary Market Manual Loss Cost Level (10) * (13) | 0.8787 | 0.8743 | 0.8863 | 0.8829 |
| (16) Current Offset for Residual Market Surcharge | | | | 0.9942 |
| (17) Proposed Offset for Residual Market Surcharge | | | | 0.9946 |
| (18) Adjusted Change in Voluntary Market Manual Loss Cost Level (15) * (17) / (16) | 0.8791 | 0.8747 | 0.8867 | 0.8833 |

* \$2,533,000 on a Post-HB175, Pre-HB373 basis.

DETERMINATION OF TREND

INDEMNITY

| Policy Year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|
| Actual Loss Ratio | 0.3092 | 0.3032 | 0.3490 | 0.2885 | 0.2877 | 0.2535 | 0.2498 |
| Normalized Frequency | 0.7212 | 0.6476 | 0.6753 | 0.5801 | 0.6078 | 0.5307 | 0.5299 |
| Severity Loss Ratio | 0.4287 | 0.4682 | 0.5168 | 0.4973 | 0.4734 | 0.4776 | 0.4714 |
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| y | 0.4287 | 0.4682 | 0.5168 | 0.4973 | 0.4734 | 0.4776 | 0.4714 |

7 Point Exponential Regression: $y = 0.459701 * 1.008496 ^ x$

Selected Annual Trend = 0.8%

| Policy Year | Annual Trend Factor (1) | Trend Period # Years to 12/1/20 (2) | Severity Trend Factor (3) = (1)^(2) | Frequency Trend Factor (4) # |
|-------------|-------------------------|-------------------------------------|-------------------------------------|------------------------------|
| 2014 | 1.0085 | 5.9167 | 1.0513 | 0.7395 |
| 2015 | 1.0085 | 4.9167 | 1.0425 | 0.7782 |
| 2016 | 1.0085 | 3.9167 | 1.0337 | 0.8189 |
| 2017 | 1.0085 | 2.9167 | 1.0250 | 0.8618 |

Trended Loss Ratio

| Policy Year | Actual Loss Ratio (5) | Combined Trend Factor (6) = (3)*(4) | Trended Loss Ratio (7) = (5)*(6) |
|-------------|-----------------------|-------------------------------------|----------------------------------|
| 2014 | 0.2885 | 0.7774 | 0.2243 |
| 2015 | 0.2877 | 0.8113 | 0.2334 |
| 2016 | 0.2535 | 0.8465 | 0.2146 |
| 2017 | 0.2498 | 0.8833 | 0.2206 |
| Average | | | 0.2232 |

See Page 12.4 for column (4).

DETERMINATION OF TREND

MEDICAL

| Policy Year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|
| Actual Loss Ratio | 0.5042 | 0.4848 | 0.5660 | 0.4834 | 0.5343 | 0.5213 | 0.5069 |
| Normalized Frequency | 0.7212 | 0.6476 | 0.6753 | 0.5801 | 0.6078 | 0.5307 | 0.5299 |
| Severity Loss Ratio | 0.6991 | 0.7486 | 0.8381 | 0.8333 | 0.8791 | 0.9822 | 0.9566 |
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| y | 0.6991 | 0.7486 | 0.8381 | 0.8333 | 0.8791 | 0.9822 | 0.9566 |

7 Point Exponential Regression: $y = 0.677115 * 1.056228 ^ x$

Selected Annual Trend = 5.6%

| Policy Year | Annual Trend Factor (1) | Trend Period # Years to 12/1/20 (2) | Severity Trend Factor (3) = (1)^(2) | Frequency Trend Factor (4) # |
|-------------|-------------------------|-------------------------------------|-------------------------------------|------------------------------|
| 2014 | 1.0562 | 5.9167 | 1.3822 | 0.7395 |
| 2015 | 1.0562 | 4.9167 | 1.3086 | 0.7782 |
| 2016 | 1.0562 | 3.9167 | 1.2389 | 0.8189 |
| 2017 | 1.0562 | 2.9167 | 1.1730 | 0.8618 |

Trended Loss Ratio

| Policy Year | Actual Loss Ratio (5) | Combined Trend Factor (6) = (3)*(4) | Trended Loss Ratio (7) = (5)*(6) |
|-------------|-----------------------|-------------------------------------|----------------------------------|
| 2014 | 0.4834 | 1.0221 | 0.4941 |
| 2015 | 0.5343 | 1.0184 | 0.5441 |
| 2016 | 0.5213 | 1.0145 | 0.5289 |
| 2017 | 0.5069 | 1.0109 | 0.5124 |
| Average | | | 0.5199 |

See Page 12.4 for column (4).

DETERMINATION OF TREND

CLAIM FREQUENCY

Policy Year Frequency per \$1 million of Expected Losses

| Policy Year | Claim Frequency | Normalized Frequency |
|-------------|-----------------|----------------------|
| 2005 | 11.55 | 1.0000 |
| 2006 | 10.86 | 0.9403 |
| 2007 | 10.09 | 0.8736 |
| 2008 | 8.94 | 0.7740 |
| 2009 | 8.91 | 0.7714 |
| 2010 | 8.89 | 0.7697 |
| 2011 | 8.33 | 0.7212 |
| 2012 | 7.48 | 0.6476 |
| 2013 | 7.80 | 0.6753 |
| 2014 | 6.70 | 0.5801 |
| 2015 | 7.02 | 0.6078 |
| 2016 | 6.13 | 0.5307 |
| 2017 | 6.12 | 0.5299 |

| Policy Year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|--------|--------|--------|--------|--------|--------|--------|
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| y | 0.7212 | 0.6476 | 0.6753 | 0.5801 | 0.6078 | 0.5307 | 0.5299 |

7 Point (2011 - 2017) Exponential Regression: $y = 0.747557 * 0.950267 ^ x$

Selected Annual Trend = -5.0%

| Policy Year | Annual Trend Factor (1) | # of Years to 12/1/20 (2) | Frequency Trend Factor (3) = (1)^(2) |
|-------------|-------------------------|---------------------------|--------------------------------------|
| 2014 | 0.9503 | 5.9167 | 0.7395 |
| 2015 | 0.9503 | 4.9167 | 0.7782 |
| 2016 | 0.9503 | 3.9167 | 0.8189 |
| 2017 | 0.9503 | 2.9167 | 0.8618 |