

1 **Transcript Reference: Nov 18, 2014, Pages 154-157**

2

3 Undertaking confirmed in writing from Legal Counsel Jennifer Newbury

4

5 For property damage and accident benefits: Provide the Loss Cost 15 year regressions on two
6 periods: 1998-H1 to 2004 H-1 and 2004-H2 to 2012-H2.

7

8 Include for the above:

9 • the fitted values, residuals, and projected values to 2015-H2;

10 • the fit statistics including R^2 and the adjusted R^2 and the P-value;

11 • the charts showing the actual and fitted values 1998-H1 to 2015-H2.

12

13 **Response:**

14

15 See Attachment #1.

Province of Newfoundland and Labrador
Board of Commissioners of Public Utilities
Commercial Automobile

Accident Benefits

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Fitted Loss Cost | Residual | Ultimate Severity | Fitted Severity | Residual | Ultimate Freq. per 1000 | Fitted Freq. per 1000 | Residual |
|-----------------|------|-------------|------|------------------|-----------------|-----------------|-----------------|--------------------------|--------------------|------------------|----------|-------------------|-----------------|------------|-------------------------|-----------------------|----------|
| 1998.1 | 1 | 0 | 0 | 5,902 | 19 | 64 | 1.145 | 74 | 12.49 | | | 3,879 | | | 3.22 | | |
| 1998.2 | 2 | 1 | 0 | 6,459 | 18 | 42 | 1.145 | 48 | 7.44 | | | 2,530 | | | 2.94 | | |
| 1999.1 | 3 | 0 | 0 | 6,358 | 15 | 52 | 1.108 | 57 | 9.00 | | | 3,816 | | | 2.36 | | |
| 1999.2 | 4 | 1 | 0 | 6,403 | 18 | 106 | 1.108 | 117 | 18.32 | | | 6,515 | | | 2.81 | | |
| 2000.1 | 5 | 0 | 0 | 6,439 | 31 | 196 | 1.093 | 181 | 28.11 | | | 5,838 | | | 4.81 | | |
| 2000.2 | 6 | 1 | 0 | 6,913 | 28 | 246 | 1.093 | 269 | 38.84 | | | 9,590 | | | 4.05 | | |
| 2001.1 | 7 | 0 | 0 | 7,029 | 21 | 130 | 1.082 | 141 | 20.00 | | | 6,695 | | | 2.99 | | |
| 2001.2 | 8 | 1 | 0 | 8,086 | 30 | 121 | 1.082 | 130 | 16.12 | | | 4,349 | | | 3.71 | | |
| 2002.1 | 9 | 0 | 0 | 7,806 | 44 | 104 | 1.068 | 111 | 14.25 | | | 2,528 | | | 5.64 | | |
| 2002.2 | 10 | 1 | 0 | 7,567 | 51 | 322 | 1.068 | 344 | 45.40 | | | 6,738 | | | 6.74 | | |
| 2003.1 | 11 | 0 | 0 | 7,184 | 32 | 271 | 1.076 | 291 | 40.57 | | | 9,108 | | | 4.45 | | |
| 2003.2 | 12 | 1 | 0 | 8,140 | 25 | 118 | 1.076 | 128 | 15.66 | | | 5,100 | | | 3.07 | | |
| 2004.1 | 13 | 0 | 0 | 8,337 | 27 | 285 | 1.080 | 308 | 36.96 | | | 11,414 | | | 3.24 | | |
| 2004.2 | 14 | 1 | 1 | 8,385 | 30 | 427 | 1.080 | 461 | 54.94 | 19.33 | (35.61) | 15,355 | 8,389 | (8,966.53) | 3.58 | 3.03 | (0.55) |
| 2005.1 | 15 | 0 | 1 | 7,951 | 34 | 178 | 1.065 | 190 | 23.86 | 18.67 | (4.99) | 5,587 | 5,333 | 746.27 | 4.27 | 2.98 | (1.29) |
| 2005.2 | 16 | 1 | 1 | 8,270 | 23 | 270 | 1.065 | 288 | 34.85 | 18.43 | (16.42) | 12,598 | 6,279 | (6,319.41) | 2.77 | 2.94 | 0.17 |
| 2006.1 | 17 | 0 | 1 | 8,088 | 23 | 65 | 1.072 | 70 | 8.68 | 17.99 | 9.32 | 3,069 | 5,224 | 3,156.43 | 2.83 | 2.89 | 0.06 |
| 2006.2 | 18 | 1 | 1 | 8,578 | 17 | 100 | 1.072 | 107 | 12.52 | 17.57 | 5.05 | 6,352 | 5,170 | (181.72) | 1.97 | 2.85 | 0.88 |
| 2007.1 | 19 | 0 | 1 | 8,497 | 22 | 62 | 1.072 | 66 | 7.82 | 17.16 | 9.34 | 3,052 | 5,117 | 3,064.96 | 2.56 | 2.80 | 0.24 |
| 2007.2 | 20 | 1 | 1 | 9,034 | 27 | 184 | 1.072 | 197 | 21.84 | 16.75 | (5.08) | 7,387 | 6,094 | (1,322.72) | 2.96 | 2.76 | (0.19) |
| 2008.1 | 21 | 0 | 1 | 9,054 | 25 | 131 | 1.075 | 141 | 15.59 | 16.36 | 0.77 | 5,754 | 6,011 | 257.11 | 2.71 | 2.72 | 0.01 |
| 2008.2 | 22 | 1 | 1 | 9,631 | 29 | 87 | 1.075 | 93 | 8.67 | 15.97 | 6.31 | 3,173 | 5,959 | 2,786.61 | 3.05 | 2.68 | (0.37) |
| 2009.1 | 23 | 0 | 1 | 9,567 | 24 | 126 | 1.073 | 135 | 14.12 | 15.00 | 1.48 | 5,524 | 5,908 | 383.95 | 2.56 | 2.64 | 0.08 |
| 2009.2 | 24 | 1 | 1 | 10,269 | 19 | 68 | 1.073 | 73 | 7.11 | 15.23 | 8.12 | 3,768 | 5,857 | 2,088.80 | 1.89 | 2.60 | 0.71 |
| 2010.1 | 25 | 0 | 1 | 10,157 | 21 | 109 | 1.066 | 116 | 11.38 | 14.87 | 3.48 | 5,387 | 5,806 | 418.88 | 2.11 | 2.58 | 0.45 |
| 2010.2 | 26 | 1 | 1 | 10,521 | 29 | 152 | 1.066 | 160 | 15.25 | 14.52 | (0.73) | 5,612 | 5,756 | 144.21 | 2.72 | 2.52 | (0.19) |
| 2011.1 | 27 | 0 | 1 | 10,425 | 17 | 122 | 1.052 | 129 | 12.33 | 14.18 | 1.85 | 7,543 | 5,706 | (1,836.65) | 1.63 | 2.48 | 0.85 |
| 2011.2 | 28 | 1 | 1 | 10,978 | 44 | 302 | 1.052 | 318 | 28.93 | 13.84 | (15.09) | 7,187 | 5,657 | (1,530.50) | 4.02 | 2.45 | (1.58) |
| 2012.1 | 29 | 0 | 1 | 10,954 | 23 | 172 | 1.052 | 181 | 16.48 | 13.52 | (2.97) | 7,854 | 5,808 | (2,245.85) | 2.10 | 2.41 | 0.31 |
| 2012.2 | 30 | 1 | 1 | 11,858 | 40 | 247 | 1.052 | 260 | 21.92 | 13.20 | (8.73) | 6,495 | 5,559 | (935.77) | 3.38 | 2.37 | (1.00) |

Projection Period

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | Ultimate Counts | Adjusted Ultimate Losses | Project'n Factor | Fitted Loss Cost | Project'n Factor | Fitted Severity | Project'n Factor | Fitted Freq. per 1000 |
|-----------------|------|-------------|------|------------------|-----------------|-----------------|-----------------|--------------------------|------------------|------------------|------------------|-----------------|------------------|-----------------------|
| 2008 | 21.5 | 0.5 | 1 | 18,684 | 54 | 218 | 54 | 234 | 0.7393 | 16.16 | 0.8957 | 5,985 | 0.8253 | 2.70 |
| 2009 | 23.5 | 0.5 | 1 | 19,836 | 44 | 194 | 44 | 208 | 0.7754 | 15.41 | 0.9114 | 5,882 | 0.8507 | 2.62 |
| 2010 | 25.5 | 0.5 | 1 | 20,678 | 50 | 261 | 50 | 276 | 0.8133 | 14.69 | 0.9274 | 5,781 | 0.8769 | 2.54 |
| 2011 | 27.5 | 0.5 | 1 | 21,403 | 61 | 424 | 61 | 446 | 0.8530 | 14.01 | 0.9437 | 5,681 | 0.9039 | 2.47 |
| 2012 | 29.5 | 0.5 | 1 | 22,812 | 63 | 419 | 63 | 441 | 0.8947 | 13.38 | 0.9602 | 5,583 | 0.9317 | 2.38 |
| 2013 | 31.5 | 0.5 | 1 | | | | | | 0.9384 | 12.73 | 0.9771 | 5,487 | 0.9604 | 2.32 |
| 2014 | 33.5 | 0.5 | 1 | | | | | | 0.9842 | 12.14 | 0.9942 | 5,392 | 0.9899 | 2.25 |
| 2015 | 35.5 | 0.5 | 1 | | | | | | 1.0323 | 11.57 | 1.0117 | 5,300 | 1.0204 | 2.18 |
| 2016 | 37.5 | 0.5 | 1 | | | | | | 1.0827 | 11.04 | 1.0294 | 5,208 | 1.0518 | 2.12 |

Avg Annual Trend -4.66% -1.72% -2.99%

| | | | |
|-----------------------|-----------------|----------|----------|
| Regression Constant | 26.99 | 7.218 | 3.7405 |
| Coefficients Time | 0.9764 | 0.9913 | 0.9850 |
| Regression Statistics | Deg. of Freedom | 15.0000 | 15.0000 |
| F-Statistic | 0.7460 | 0.1459 | 1.3529 |
| R2 | 0.0474 | 0.0098 | 0.0827 |
| SSReg | 0.2320 | 0.0308 | 0.0937 |
| SSResid | 4.6958 | 3.1709 | 1.0389 |
| Adjusted R2 | -0.0161 | (0.0564) | 0.0216 |
| p-Values | Constant | 0.0001 | 0.0004 |
| Time | 0.4013 | 0.7079 | 0.2629 |
| T-Statistics | Constant | 5.2954 | 4.4923 |
| Time | -0.8637 | (0.3819) | (1.1631) |

From: Board of Newfound and Public Utilities
 Board of Commissioners of Public Utilities
 Commercial Automobile

| Accident Benefits | | | | | | | | | | | | | | | |
|-------------------|-------------|-------------|------|----------|----------|----------|----------|----------|--------|------------|--------|----------|----------|-------------|----------|
| Accident | Time | Seasonality | Bill | Expenses | Ultimate | Ultimate | Ultimate | Ultimate | Losses | Adjustment | Losses | Adjusted | Adjusted | Fitted Loss | Residual |
| Period | Seasonality | Seasonality | Bill | Expenses | Ultimate | Ultimate | Ultimate | Ultimate | Losses | Adjustment | Losses | Adjusted | Adjusted | Fitted Loss | Residual |
| 1998.1 | 1 | 0 | 0 | 5,802 | 19 | 64 | 145 | 145 | 74 | 74 | 12.62 | 11.52 | (0.97) | 3,788 | (110.80) |
| 1998.2 | 2 | 1 | 0 | 6,459 | 19 | 42 | 145 | 145 | 48 | 48 | 12.63 | 12.63 | 0.00 | 2,530 | 2.94 |
| 1998.1 | 3 | 0 | 0 | 6,356 | 15 | 52 | 106 | 106 | 57 | 57 | 13.55 | 13.55 | 0.00 | 4,005 | 2.38 |
| 1999.1 | 4 | 1 | 0 | 6,403 | 18 | 105 | 106 | 106 | 117 | 117 | 13.52 | 13.52 | 0.00 | 4,525 | 2.81 |
| 2000.1 | 5 | 0 | 0 | 6,438 | 31 | 165 | 103 | 103 | 181 | 181 | 16.54 | 16.54 | 0.00 | 4,809 | 4.81 |
| 2000.2 | 6 | 0 | 0 | 6,813 | 28 | 246 | 103 | 103 | 268 | 268 | 16.24 | 16.24 | 0.00 | 4,809 | 4.05 |
| 2001.1 | 7 | 0 | 0 | 7,092 | 21 | 130 | 102 | 102 | 141 | 141 | 16.12 | 16.12 | 0.00 | 4,809 | 3.71 |
| 2001.2 | 8 | 1 | 0 | 8,006 | 30 | 121 | 102 | 102 | 130 | 130 | 16.12 | 16.12 | 0.00 | 4,809 | 3.57 |
| 2002.1 | 9 | 0 | 0 | 7,800 | 104 | 108 | 108 | 108 | 111 | 111 | 14.25 | 14.25 | 0.00 | 4,809 | 3.80 |
| 2002.2 | 10 | 1 | 0 | 7,587 | 51 | 108 | 108 | 108 | 111 | 111 | 14.25 | 14.25 | 0.00 | 4,809 | 3.82 |
| 2003.1 | 11 | 0 | 0 | 7,184 | 32 | 227 | 107 | 107 | 244 | 244 | 14.08 | 14.08 | 0.00 | 4,809 | 3.71 |
| 2003.2 | 12 | 0 | 0 | 7,184 | 32 | 227 | 107 | 107 | 244 | 244 | 14.08 | 14.08 | 0.00 | 4,809 | 3.71 |
| 2004.1 | 1 | 0 | 0 | 8,337 | 27 | 285 | 106 | 106 | 308 | 308 | 15.66 | 15.66 | 0.00 | 4,809 | 4.43 |
| 2004.2 | 13 | 0 | 0 | 8,337 | 27 | 285 | 106 | 106 | 308 | 308 | 15.66 | 15.66 | 0.00 | 4,809 | 4.43 |
| 2005.1 | 14 | 0 | 0 | 8,385 | 30 | 427 | 106 | 106 | 401 | 401 | 15.94 | 15.94 | 0.00 | 4,809 | 4.27 |
| 2005.2 | 15 | 0 | 0 | 7,961 | 34 | 427 | 106 | 106 | 190 | 190 | 14.85 | 14.85 | 0.00 | 4,809 | 2.77 |
| 2006.1 | 16 | 1 | 1 | 8,270 | 23 | 270 | 106 | 106 | 268 | 268 | 14.85 | 14.85 | 0.00 | 4,809 | 2.83 |
| 2006.2 | 17 | 0 | 0 | 8,068 | 23 | 65 | 107 | 107 | 70 | 70 | 12.52 | 12.52 | 0.00 | 4,809 | 1.97 |
| 2007.1 | 18 | 0 | 0 | 8,497 | 22 | 62 | 107 | 107 | 66 | 66 | 12.52 | 12.52 | 0.00 | 4,809 | 1.97 |
| 2007.2 | 19 | 1 | 1 | 8,578 | 17 | 100 | 107 | 107 | 107 | 107 | 12.52 | 12.52 | 0.00 | 4,809 | 1.97 |
| 2008.1 | 20 | 0 | 0 | 9,034 | 27 | 184 | 107 | 107 | 197 | 197 | 12.52 | 12.52 | 0.00 | 4,809 | 2.96 |
| 2008.2 | 21 | 0 | 0 | 9,054 | 25 | 131 | 107 | 107 | 141 | 141 | 12.52 | 12.52 | 0.00 | 4,809 | 2.71 |
| 2009.1 | 22 | 1 | 1 | 9,631 | 28 | 87 | 107 | 107 | 83 | 83 | 14.12 | 14.12 | 0.00 | 4,809 | 3.05 |
| 2009.2 | 23 | 0 | 0 | 9,667 | 24 | 126 | 107 | 107 | 135 | 135 | 14.12 | 14.12 | 0.00 | 4,809 | 3.05 |
| 2010.1 | 24 | 1 | 1 | 10,269 | 19 | 68 | 107 | 107 | 73 | 73 | 14.12 | 14.12 | 0.00 | 4,809 | 2.56 |
| 2010.2 | 25 | 0 | 0 | 10,157 | 21 | 109 | 106 | 106 | 116 | 116 | 14.12 | 14.12 | 0.00 | 4,809 | 2.11 |
| 2011.1 | 26 | 1 | 1 | 10,521 | 29 | 152 | 106 | 106 | 150 | 150 | 15.25 | 15.25 | 0.00 | 4,809 | 1.89 |
| 2011.2 | 27 | 0 | 0 | 10,425 | 17 | 122 | 106 | 106 | 128 | 128 | 15.25 | 15.25 | 0.00 | 4,809 | 1.63 |
| 2012.1 | 28 | 1 | 1 | 10,978 | 44 | 302 | 105 | 105 | 318 | 318 | 16.48 | 16.48 | 0.00 | 4,809 | 4.02 |
| 2012.2 | 29 | 0 | 0 | 10,964 | 23 | 172 | 105 | 105 | 181 | 181 | 16.48 | 16.48 | 0.00 | 4,809 | 2.10 |
| 2012.3 | 30 | 1 | 1 | 11,858 | 40 | 247 | 105 | 105 | 260 | 260 | 17.52 | 17.52 | 0.00 | 4,809 | 3.36 |

| Projection Period | | | | | | | | | | | | | | | |
|-------------------|-------------|-------------|------|----------|----------|----------|----------|----------|--------|------------|--------|----------|----------|-------------|----------|
| Accident | Time | Seasonality | Bill | Expenses | Ultimate | Ultimate | Ultimate | Ultimate | Losses | Adjustment | Losses | Adjusted | Adjusted | Fitted Loss | Residual |
| Period | Seasonality | Seasonality | Bill | Expenses | Ultimate | Ultimate | Ultimate | Ultimate | Losses | Adjustment | Losses | Adjusted | Adjusted | Fitted Loss | Residual |
| 2013 | 31 | 0 | 0 | 12,282 | 63 | 419 | 104 | 104 | 441 | 441 | 20.19% | 20.19% | 0.00 | 12,282 | 0.00 |
| 2014 | 32 | 0 | 0 | 12,403 | 61 | 424 | 104 | 104 | 446 | 446 | 20.19% | 20.19% | 0.00 | 12,403 | 0.00 |
| 2015 | 33 | 0 | 0 | 12,408 | 50 | 261 | 104 | 104 | 276 | 276 | 20.19% | 20.19% | 0.00 | 12,408 | 0.00 |
| 2016 | 34 | 0 | 0 | 12,436 | 44 | 194 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,436 | 0.00 |
| 2017 | 35 | 0 | 0 | 12,497 | 54 | 218 | 104 | 104 | 234 | 234 | 20.19% | 20.19% | 0.00 | 12,497 | 0.00 |
| 2018 | 36 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2019 | 37 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2020 | 38 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2021 | 39 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2022 | 40 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2023 | 41 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2024 | 42 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2025 | 43 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2026 | 44 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2027 | 45 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2028 | 46 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2029 | 47 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2030 | 48 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2031 | 49 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2032 | 50 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2033 | 51 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2034 | 52 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2035 | 53 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2036 | 54 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2037 | 55 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2038 | 56 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2039 | 57 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2040 | 58 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2041 | 59 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |
| 2042 | 60 | 0 | 0 | 12,521 | 54 | 208 | 104 | 104 | 208 | 208 | 20.19% | 20.19% | 0.00 | 12,521 | 0.00 |

Province of Newfoundland and Labrador
Board of Commissioners of Public Utilities
Commercial Automobile

Third Party Liability - Property Damage

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Fitted Loss Cost | Residuals | Ultimate Severity | Fitted Severity | Residuals | Ultimate Freq per 1000 | Fitted Freq per 1000 | Residuals |
|-----------------|------|-------------|------|------------------|-----------------|-----------------|-----------------|--------------------------|--------------------|------------------|-----------|-------------------|-----------------|-----------|------------------------|----------------------|-----------|
| 1998.1 | 1 | 0 | 0 | 7,520 | 182 | 470 | 1,145 | 538 | 71.59 | 89.75 | (18.16) | 2,958 | 3,278 | (319.57) | 24.20 | 27.38 | (3.18) |
| 1998.2 | 2 | 1 | 0 | 8,312 | 214 | 789 | 1,145 | 903 | 108.68 | 91.94 | 16.73 | 4,221 | 3,399 | 824.84 | 25.75 | 27.07 | (1.33) |
| 1999.1 | 3 | 0 | 0 | 7,876 | 211 | 500 | 1,105 | 552 | 70.15 | 84.20 | (14.05) | 2,618 | 3,519 | (900.84) | 26.79 | 26.77 | 0.02 |
| 1999.2 | 4 | 1 | 0 | 7,925 | 185 | 700 | 1,105 | 775 | 67.76 | 96.50 | 1.26 | 4,188 | 3,647 | 541.07 | 23.35 | 26.46 | (3.12) |
| 2000.1 | 5 | 0 | 0 | 7,874 | 218 | 712 | 1,093 | 779 | 98.90 | 98.87 | 0.03 | 3,572 | 3,778 | (206.39) | 27.69 | 26.17 | 1.52 |
| 2000.2 | 6 | 1 | 0 | 8,370 | 231 | 1,058 | 1,093 | 1,156 | 138.17 | 101.29 | 36.88 | 5,006 | 3,915 | 1,091.04 | 27.60 | 25.87 | 1.73 |
| 2001.1 | 7 | 0 | 0 | 8,417 | 315 | 1,149 | 1,082 | 1,243 | 147.72 | 103.77 | 43.95 | 3,947 | 4,057 | (110.10) | 37.43 | 25.58 | 11.85 |
| 2001.2 | 8 | 1 | 0 | 9,548 | 215 | 725 | 1,082 | 785 | 82.19 | 106.31 | (24.12) | 3,850 | 4,204 | (553.62) | 29.52 | 25.29 | (2.77) |
| 2002.1 | 9 | 0 | 0 | 9,092 | 248 | 960 | 1,088 | 1,025 | 112.73 | 108.91 | 3.82 | 4,133 | 4,356 | (223.12) | 27.28 | 25.00 | 2.27 |
| 2002.2 | 10 | 1 | 0 | 9,190 | 220 | 1,035 | 1,088 | 1,105 | 120.29 | 111.58 | 8.71 | 5,025 | 4,514 | 511.15 | 23.64 | 24.72 | (0.78) |
| 2003.1 | 11 | 0 | 0 | 9,088 | 281 | 1,203 | 1,078 | 1,295 | 142.46 | 114.31 | 28.15 | 4,607 | 4,677 | (69.70) | 30.62 | 24.44 | 6.48 |
| 2003.2 | 12 | 1 | 0 | 9,880 | 196 | 948 | 1,078 | 1,018 | 105.19 | 117.11 | (11.92) | 5,195 | 4,846 | 348.58 | 20.25 | 24.16 | (3.92) |
| 2004.1 | 13 | 0 | 0 | 9,383 | 183 | 780 | 1,080 | 842 | 89.92 | 119.98 | (30.06) | 4,601 | 5,022 | (420.99) | 18.54 | 23.89 | (4.35) |
| 2004.2 | 14 | 1 | 1 | 9,830 | 144 | 747 | 1,080 | 808 | 82.02 | | | 5,599 | | 5,599.25 | 14.85 | | 14.85 |
| 2005.1 | 15 | 0 | 1 | 9,882 | 175 | 708 | 1,068 | 755 | 77.96 | | | 4,313 | | 4,313.13 | 18.07 | | 18.07 |
| 2005.2 | 16 | 1 | 1 | 9,950 | 181 | 942 | 1,068 | 1,004 | 100.83 | | | 5,549 | | 5,548.51 | 18.17 | | 18.17 |
| 2006.1 | 17 | 0 | 1 | 9,883 | 195 | 871 | 1,072 | 934 | 96.47 | | | 4,790 | | 4,790.36 | 20.14 | | 20.14 |
| 2006.2 | 18 | 1 | 1 | 10,236 | 189 | 745 | 1,072 | 799 | 78.02 | | | 4,226 | | 4,225.65 | 18.46 | | 18.46 |
| 2007.1 | 19 | 0 | 1 | 10,087 | 213 | 998 | 1,072 | 1,070 | 100.00 | | | 5,022 | | 5,022.48 | 21.12 | | 21.12 |
| 2007.2 | 20 | 1 | 1 | 10,189 | 194 | 933 | 1,072 | 1,000 | 98.03 | | | 5,154 | | 5,154.09 | 19.02 | | 19.02 |
| 2008.1 | 21 | 0 | 1 | 9,737 | 178 | 1,118 | 1,075 | 1,201 | 123.36 | | | 6,825 | | 6,824.85 | 18.08 | | 18.08 |
| 2008.2 | 22 | 1 | 1 | 10,382 | 179 | 855 | 1,075 | 919 | 88.54 | | | 5,135 | | 5,135.01 | 17.24 | | 17.24 |
| 2009.1 | 23 | 0 | 1 | 10,223 | 175 | 740 | 1,073 | 793 | 77.61 | | | 4,536 | | 4,535.54 | 17.11 | | 17.11 |
| 2009.2 | 24 | 1 | 1 | 10,931 | 215 | 1,407 | 1,073 | 1,509 | 138.08 | | | 7,023 | | 7,023.10 | 19.66 | | 19.66 |
| 2010.1 | 25 | 0 | 1 | 10,775 | 190 | 1,100 | 1,058 | 1,152 | 107.82 | | | 6,099 | | 6,098.65 | 17.68 | | 17.68 |
| 2010.2 | 26 | 1 | 1 | 11,140 | 198 | 907 | 1,058 | 957 | 85.91 | | | 4,824 | | 4,824.14 | 17.81 | | 17.81 |
| 2011.1 | 27 | 0 | 1 | 11,010 | 241 | 1,236 | 1,052 | 1,301 | 118.15 | | | 5,390 | | 5,390.02 | 21.92 | | 21.92 |
| 2011.2 | 28 | 1 | 1 | 11,524 | 220 | 1,197 | 1,052 | 1,260 | 109.32 | | | 5,733 | | 5,732.68 | 19.07 | | 19.07 |
| 2012.1 | 29 | 0 | 1 | 11,448 | 210 | 1,052 | 1,052 | 1,107 | 95.65 | | | 5,266 | | 5,265.91 | 18.35 | | 18.35 |
| 2012.2 | 30 | 1 | 1 | 12,361 | 221 | 1,221 | 1,052 | 1,285 | 103.95 | | | 5,802 | | 5,802.19 | 17.92 | | 17.92 |

Projection Period

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | Ultimate Counts | Adjusted Ultimate Losses | Project'n Factor | Fitted Loss Cost | Project'n Factor | Fitted Severity | Project'n Factor | Fitted Freq per 1000 |
|-----------------|------|-------------|------|------------------|-----------------|-----------------|-----------------|--------------------------|------------------|------------------|------------------|-----------------|------------------|----------------------|
| 2008 | 21.5 | 0.5 | 1 | 20,119 | 355 | 1,973 | 355 | 2,120 | 1.3588 | 147.37 | 1.5089 | 6,794 | 0.8660 | 21.89 |
| 2009 | 23.5 | 0.5 | 1 | 21,154 | 390 | 2,148 | 390 | 2,303 | 1.2944 | 154.68 | 1.4612 | 7,295 | 0.8859 | 21.20 |
| 2010 | 25.5 | 0.5 | 1 | 21,915 | 369 | 2,007 | 389 | 2,119 | 1.2333 | 162.35 | 1.3609 | 7,832 | 0.9062 | 20.73 |
| 2011 | 27.5 | 0.5 | 1 | 22,534 | 461 | 2,433 | 461 | 2,561 | 1.1750 | 170.40 | 1.2675 | 8,409 | 0.9270 | 20.26 |
| 2012 | 29.5 | 0.5 | 1 | 23,806 | 432 | 2,273 | 432 | 2,391 | 1.1195 | 178.85 | 1.1805 | 9,029 | 0.9484 | 19.81 |
| 2013 | 31.5 | 0.5 | 1 | | | | | | 1.0565 | 187.71 | 1.0896 | 9,695 | 0.9702 | 19.36 |
| 2014 | 33.5 | 0.5 | 1 | | | | | | 1.0163 | 197.02 | 1.0240 | 10,409 | 0.9925 | 18.93 |
| 2015 | 35.5 | 0.5 | 1 | | | | | | 0.9583 | 206.79 | 0.9537 | 11,176 | 1.0153 | 18.50 |
| 2016 | 37.5 | 0.5 | 1 | | | | | | 0.9225 | 217.04 | 0.8882 | 12,000 | 1.0386 | 18.09 |

Avg Annual Trend 4.95% 7.37% -2.25%

| Regression Coefficients | Constant | Time | 97.8007 | 1.0245 | 3.163 | 1.0362 | 27.6948 | 0.9867 | | | | | |
|-------------------------|-----------------|-------------|---------|--------|---------|-------------|---------|----------|--------|--------|--------|--------|----------|
| Regression Statistics | Deg. of Freedom | F-Statistic | R2 | SSReg | SSResid | Adjusted R2 | 11.0000 | 9.1826 | 0.7721 | 0.0656 | 0.0235 | 0.3348 | (0.0194) |
| p-Values | Constant | Time | 0.0000 | 0.1910 | 0.0000 | 0.0114 | 0.0000 | 0.3984 | | | | | |
| T-Statistics | Constant | Time | 32.4575 | 1.3936 | 86.5341 | 3.0303 | 32.3594 | (0.8787) | | | | | |

Province of Newfoundland and Labrador
Board of Commissioners of Public Utilities
Commercial Automobile

Third Party Liability - Property Damage

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Fitted Loss Cost | Residuals | Ultimate Severity | Fitted Severity | Residuals | Ultimate Freq. per 1000 | Fitted Freq. per 1000 | Residuals |
|-----------------|------|-------------|------|------------------|-----------------|-----------------|-----------------|--------------------------|--------------------|------------------|-----------|-------------------|-----------------|-----------|-------------------------|-----------------------|-----------|
| 1998.1 | 1 | 0 | 0 | 7,520 | 182 | 470 | 1,145 | 538 | 71.59 | | | 2,958 | | | 24.20 | | |
| 1998.2 | 2 | 1 | 0 | 8,312 | 214 | 789 | 1,145 | 903 | 108.68 | | | 4,221 | | | 25.75 | | |
| 1999.1 | 3 | 0 | 0 | 7,875 | 211 | 500 | 1,106 | 552 | 70.15 | | | 2,518 | | | 26.79 | | |
| 1999.2 | 4 | 1 | 0 | 7,925 | 185 | 700 | 1,106 | 775 | 97.76 | | | 4,188 | | | 23.35 | | |
| 2000.1 | 5 | 0 | 0 | 7,874 | 218 | 712 | 1,093 | 779 | 98.90 | | | 3,572 | | | 27.69 | | |
| 2000.2 | 6 | 1 | 0 | 8,370 | 231 | 1,058 | 1,093 | 1,156 | 138.17 | | | 5,006 | | | 27.60 | | |
| 2001.1 | 7 | 0 | 0 | 8,417 | 315 | 1,148 | 1,082 | 1,243 | 147.72 | | | 3,947 | | | 37.43 | | |
| 2001.2 | 8 | 1 | 0 | 9,548 | 215 | 725 | 1,082 | 785 | 82.19 | | | 3,650 | | | 22.52 | | |
| 2002.1 | 9 | 0 | 0 | 9,092 | 248 | 950 | 1,068 | 1,025 | 112.73 | | | 4,133 | | | 27.28 | | |
| 2002.2 | 10 | 1 | 0 | 9,190 | 220 | 1,035 | 1,068 | 1,105 | 120.29 | | | 5,025 | | | 23.94 | | |
| 2003.1 | 11 | 0 | 0 | 9,088 | 261 | 1,203 | 1,076 | 1,295 | 142.48 | | | 4,607 | | | 30.92 | | |
| 2003.2 | 12 | 1 | 0 | 9,680 | 196 | 946 | 1,076 | 1,018 | 105.19 | | | 5,195 | | | 20.25 | | |
| 2004.1 | 13 | 0 | 0 | 9,363 | 183 | 760 | 1,060 | 842 | 89.92 | | | 4,601 | | | 19.54 | | |
| 2004.2 | 14 | 1 | 1 | 9,830 | 144 | 747 | 1,080 | 808 | 82.02 | 87.89 | (5.87) | 5,599 | 4,937 | 662.01 | 14.65 | 17.80 | (3.15) |
| 2005.1 | 15 | 0 | 1 | 9,682 | 175 | 708 | 1,096 | 755 | 77.96 | 89.10 | (11.14) | 4,313 | 4,983 | (670.18) | 18.07 | 17.88 | 0.20 |
| 2005.2 | 16 | 1 | 1 | 9,960 | 181 | 942 | 1,096 | 1,004 | 100.83 | 90.32 | 10.52 | 5,549 | 5,030 | 518.69 | 18.17 | 17.95 | 0.22 |
| 2006.1 | 17 | 0 | 1 | 9,683 | 195 | 871 | 1,072 | 934 | 96.47 | 91.55 | 4.91 | 4,790 | 5,077 | (286.40) | 20.14 | 18.03 | 2.10 |
| 2006.2 | 18 | 1 | 1 | 10,236 | 189 | 745 | 1,072 | 799 | 78.02 | 92.81 | (14.79) | 4,226 | 5,124 | (898.49) | 18.46 | 18.11 | 0.35 |
| 2007.1 | 19 | 0 | 1 | 10,067 | 213 | 998 | 1,072 | 1,070 | 106.06 | 94.08 | 11.98 | 5,022 | 5,172 | (149.48) | 21.12 | 18.19 | 2.93 |
| 2007.2 | 20 | 1 | 1 | 10,199 | 194 | 933 | 1,072 | 1,000 | 98.03 | 95.37 | 2.66 | 5,154 | 5,220 | (66.14) | 19.02 | 18.27 | 0.75 |
| 2008.1 | 21 | 0 | 1 | 9,737 | 176 | 1,118 | 1,075 | 1,201 | 123.36 | 95.88 | 26.68 | 6,825 | 5,289 | 1,555.90 | 18.08 | 18.35 | (0.27) |
| 2008.2 | 22 | 1 | 1 | 10,382 | 179 | 855 | 1,075 | 919 | 88.54 | 98.00 | (9.47) | 5,135 | 5,318 | (183.11) | 17.24 | 18.43 | (1.19) |
| 2009.1 | 23 | 0 | 1 | 10,223 | 175 | 740 | 1,073 | 793 | 77.61 | 99.35 | (21.74) | 4,536 | 5,368 | (832.22) | 17.11 | 18.51 | (1.40) |
| 2009.2 | 24 | 1 | 1 | 10,931 | 215 | 1,407 | 1,073 | 1,509 | 138.08 | 100.71 | 37.37 | 7,023 | 5,418 | 1,605.25 | 19.66 | 18.59 | 1.07 |
| 2010.1 | 25 | 0 | 1 | 10,775 | 190 | 1,100 | 1,056 | 1,162 | 107.82 | 102.09 | 5.73 | 6,099 | 5,468 | 630.24 | 17.68 | 18.67 | (0.99) |
| 2010.2 | 26 | 1 | 1 | 11,140 | 198 | 907 | 1,056 | 957 | 85.91 | 103.49 | (17.58) | 4,824 | 5,519 | (695.31) | 17.81 | 18.75 | (0.94) |
| 2011.1 | 27 | 0 | 1 | 11,010 | 241 | 1,236 | 1,052 | 1,301 | 118.15 | 104.91 | 13.24 | 5,390 | 5,571 | (180.94) | 21.92 | 18.83 | 3.09 |
| 2011.2 | 28 | 1 | 1 | 11,524 | 220 | 1,197 | 1,052 | 1,260 | 109.32 | 105.35 | 2.97 | 5,733 | 5,823 | (90.73) | 19.07 | 18.91 | 0.16 |
| 2012.1 | 29 | 0 | 1 | 11,448 | 210 | 1,052 | 1,052 | 1,107 | 96.65 | 107.80 | (11.15) | 5,266 | 5,675 | (409.52) | 18.35 | 18.99 | (0.64) |
| 2012.2 | 30 | 1 | 1 | 12,361 | 221 | 1,221 | 1,052 | 1,285 | 103.95 | 109.28 | (5.33) | 5,802 | 5,728 | 73.80 | 17.92 | 19.08 | (1.16) |

Projection Period

| Accident Period | Time | Seasonality | Bill | Earned Exposures | Ultimate Counts | Ultimate Losses | Ultimate Counts | Adjusted Ultimate Losses | Project'n Factor | Fitted Loss Cost | Project'n Factor | Fitted Severity | Project'n Factor | Fitted Freq. per 1000 |
|-----------------|------|-------------|-------|------------------|-----------------|-----------------|-----------------|--------------------------|------------------|------------------|------------------|-----------------|------------------|-----------------------|
| 2008 | 21.5 | 0.5 | 1 | 20,119 | 355 | 1,973 | 355 | 2,120 | 1.1882 | 97.34 | 1.1249 | 5,293 | 1.0563 | 18.39 |
| 2009 | 23.5 | 0.5 | 1,000 | 21,154 | 390 | 2,146 | 360 | 2,303 | 1.1583 | 100.03 | 1.1042 | 5,393 | 1.0472 | 18.55 |
| 2010 | 25.5 | 0.5 | 1 | 21,915 | 389 | 2,007 | 389 | 2,119 | 1.1252 | 102.79 | 1.0838 | 5,494 | 1.0382 | 18.71 |
| 2011 | 27.5 | 0.5 | 1 | 22,534 | 461 | 2,433 | 461 | 2,561 | 1.0950 | 105.62 | 1.0639 | 5,597 | 1.0293 | 18.87 |
| 2012 | 29.5 | 0.5 | 1 | 23,809 | 432 | 2,273 | 432 | 2,391 | 1.0656 | 108.54 | 1.0443 | 5,702 | 1.0204 | 19.04 |
| 2013 | 31.5 | 0.5 | 1 | | | | | | 1.0370 | 111.54 | 1.0251 | 5,809 | 1.0116 | 19.20 |
| 2014 | 33.5 | 0.5 | 1 | | | | | | 1.0091 | 114.62 | 1.0062 | 5,918 | 1.0029 | 19.37 |
| 2015 | 35.5 | 0.5 | 1 | | | | | | 0.9820 | 117.78 | 0.9877 | 6,029 | 0.9942 | 19.54 |
| 2016 | 37.5 | 0.5 | 1 | | | | | | 0.9555 | 121.03 | 0.9695 | 6,142 | 0.9857 | 19.71 |

Avg Annual Trend 2.76% 1.88% 0.87%

| | | | | |
|-------------------------|-----------------|---------|---------|----------|
| Regression Coefficients | Constant | 72.6375 | 4.335 | 16.7555 |
| | Time | 1.0137 | 1.0083 | 1.0043 |
| Regression Statistics | Deg. of Freedom | 15.0000 | 15.0000 | 15.0000 |
| | F-Statistic | 2.9857 | 1.8271 | 0.9346 |
| | R2 | 0.1660 | 0.1066 | 0.0587 |
| | SSReg | 0.0756 | 0.0352 | 0.0076 |
| | SSResid | 0.3800 | 0.2890 | 0.1225 |
| | Adjusted R2 | 0.1104 | 0.0492 | (0.0041) |
| p-Values | Constant | 0.0000 | 0.0000 | 0.0000 |
| | Time | 0.1045 | 0.1965 | 0.3480 |
| T-Statistics | Constant | 24.1309 | 54.0651 | 27.9510 |
| | Time | 1.7279 | 1.3517 | 0.9667 |