# Nova Scotia

# Commercial Vehicles

# Oliver Wyman Selected Loss Trend Rates
# Based on Industry Data Through December 31, 2012

## Selected Trend Rates - Summary

The following table presents our selected past and future annual loss cost trend rates as of December 2012. We discuss and present our methodology and assumptions in selecting our trend rates in this report.

| Coverage | Past Loss Cost | Future Loss Cost |
|---|---|---|
| Bodily Injury | -3.0% | -3.0% |
| Property Damage | +0.0% | +0.0% |
| Accident Benefits | +0.0% | +0.0% |
| Collision | -1.5% | -1.5% |
| Comprehensive | -1.5% | -1.5% |
| Specified Perils | -1.5% | -1.5% |

In selecting loss trend rates we consider the Bill 52 reforms enacted on April 28, 2010 that changed the definition of a minor injury and the cap amount applied to such minor injuries for pain and suffering awards. We also consider the Fair Insurance Act effective April 1, 2012 that enhanced the Accident Benefit coverage limits. We discuss these considerations more fully in this report.

## *Loss Trend Rates*

Loss trend rates are factors that are applied to the experience period incurred losses to adjust for the cost levels that are anticipated during the policy period covered under the proposed rate program.

The selection and application of trend rates is, essentially, a two-step process. The data in the experience period under consideration must be adjusted to reflect changes in cost conditions that have taken place (i.e., "past trend"), and then the data must be further adjusted to reflect changes in cost conditions that are expected to take place between the present time and the time during which the new premiums will be in effect (i.e., "future trend").

Therefore, past trend rates should reflect the underlying trend patterns that occurred during the experience period, which we have assumed to be the five years ending December 31, 2012. Future trend rates should reflect those same patterns that occurred during the experience period, as well as the likelihood that those patterns may change.

The identification of the underlying trend patterns over the experience period, which is a matter of actuarial judgment, is challenging because factors such as statistical fluctuation in the data points, changes in the underlying exposure, or abnormal weather conditions, etc., can make the underlying trend patterns difficult to discern. For this reason, we model the data several different ways in an attempt to identify the underlying trends during the experience period: with and without certain data points that are considered to be statistical outliers, and over time periods that are longer than the experience period as a means of increasing the stability/reliability of the data being analyzed.

We select trend rates based on Industry Nova Scotia data to determine appropriate loss trends for use in deriving the rate level indications. We derive annual loss trend rates based on a regression model using Industry historical accident year loss and loss adjustment expense data that we project to ultimate cost level (when all claims are reported and settled) using the Industry loss development factors we select.

We generally consider the Industry Nova Scotia data for the accident years spanning 2003 through 2012 for purposes of selecting trend rates. For purposes of data stability we typically

review the data in annual accident periods. As described more fully below, due to the introduction of Bill 1 in November 2003 and Bill 52 in April 2010, which increases the Bodily Injury minor injury cap on pain and suffering to $7,500[1] from $2,500, we first adjust the experience data by accident half-year, but the trend analysis is performed on the adjusted annual accident year experience.

### Estimation of Industry Ultimate Claim Counts and Loss Amounts

The Industry Nova Scotia experience upon which the loss trend rates are based must be adjusted to an ultimate claim count and claim amount level. We do so through the application of what are referred to as development factors to the reported claim counts and claim amounts as of December 31, 2012. We select development factors based on a review of the Industry Nova Scotia loss development patterns; we do this by coverage. Our selected development factors are generally based on the volume weighted average of the last twelve observed (accident half-year) development factors. The exceptions are as follows:

| | | | |
|---|---|---|---|
| Bodily Injury | Claim Count | 114-ultimate | 1.00 |
| Bodily Injury | Claim Amount | 114-ultimate | 1.00 |
| Property Damage | Claim Count | 114-ultimate | 1.00 |
| Property Damage | Claim Amount | 96-ultimate | 1.00 |
| Accident Benefits Including UM | Claim Count | 72-78, 114-ultimate | 1.00 |
| Accident Benefits Including UM | Claim Amount | 6-ultimate | All period average excluding high/low |
| Collision | Claim Count | 54-66, 114-ultimate | 1.00 |
| Collision | Claim Amount | 114-ultimate | 1.00 |
| Comprehensive | Claim Count | 114-ultimate | 1.00 |
| Comprehensive | Claim Amount | 66-72,114-ultimate | 1.00 |
| All Perils | Claim Count | 84-90, 114- ultimate | 1.00 |
| All Perils | Claim Amount | 66-ultimate | 1.00 |

Exhibit II, Page 1 and Exhibit II, Page 2 attached present our selected cumulative claim count and claim amount development factors, respectively. We note that as a result of these selected

[1] *The amount of the cap is indexed, and increased to $7,956 on January 1, 2012 and $8,100 on January 1, 2013.*

development factors, our estimated ultimate claim amounts by accident half-year have changed from our last study, and these changes contribute to the changes in our selected trend rates.

### Consideration of Severity, Frequency, and Loss Cost Trend Patterns

In selecting past and future trend rates by coverage, we typically examine the separate trend patterns for claim severity and claim frequency, and then combine the selected severity and frequency trend rates to arrive at a selected loss cost trend rate. However, our review of the severity and frequency trend patterns over the recent past suggests to us that we may not fully reflect the correlation that seemingly exists between severity and frequency if we separately select severity and frequency trend rates over different time periods. For this reason we tend to select past and future trend rates by directly examining the trend pattern for loss cost.

## Impact of the Economy

Because the data points are somewhat erratic, it is difficult to discern whether the change in economic conditions has had any impact on loss costs. For this reason, we have not explicitly reflected the change in economic conditions in making our trend selections.

### Selection of Past Trend Rates

#### The Time Period We Considered

In our judgment, a ten-year period is, generally, a reasonable time period for determining the underlying trend rates for the Bodily Injury and Accident Benefits coverages, while the five-year period is a reasonable time period for determining the underlying trend rates for the property damage, collision, and comprehensive coverages. However, given the relatively low volume of claim data, and the volatility of the data points, we also consider the indicated loss cost trends over the ten-year periods ending December 31, 2012 and ending December 31, 2011, as well as the indicated loss cost trend over the five-year periods ending December 31, 2012 and ending December 31, 2011 in selecting loss trend rates.

## The Data Points We Considered

We recognize that the indicated trends produced by the regression model (particularly those over a five-year period) can be sensitive to one or two of the data points. And since the points represent estimates of ultimate claim frequency rates, or in the case of severity, estimates of ultimate average loss amounts per claim, errors in estimation could lead to over or under estimation of the underlying trend rates. We also recognize that consideration must be given to how closely the regression model fits the data points, and that adjustments may be necessary for outlying data points. For these reasons in selecting what we believe to be appropriate loss cost trend rates we consider the indicated trends with the exclusion of various data points.

## Adjustment of Bodily Injury Data for Reforms

In our opinion, the Bodily Injury data is not sufficiently credible for estimating the effect of the reforms on the Bodily Injury loss costs. We, therefore, assume the Bill 1 reform savings estimate of -21% for private passenger vehicles that we presented in our May 12, 2010 report to the Superintendent of Insurance applies to commercial vehicles. Hence, we reduce the pre-reform Bodily Injury loss costs by 21% before performing the trend analysis. In addition, we assume the same Bill 52 reform costs estimate of +17% as we assume for our private passenger vehicle trend also applies to commercial vehicles and make an appropriate adjustment to the estimated Bodily Injury losses for Bill 52 as the final adjustment to the data before performing the trend analysis.

## Our Selected Past Trend Rates

### *Bodily Injury*

Based on data as of December 31, 2011, we selected a past loss cost trend rate of -5.0%.

The unadjusted annual data through December 31, 2012 shows the 2012 loss cost to have increased by approximately 11% over the 2011 loss cost. This increase is in sharp contrast to the large increase from 2009 to 2010 at +110%, followed by a decline from 2010 to 2011 at 33%. Although the introduction of Bill 52 in April 2010 would have affected the loss costs in 2010, we suggest the steep increase in 2010 over 2009 is due to volatility, and not Bill 52.

We present the following calculated historical annual loss cost trend rates below based on the loss costs adjusted for the historical reforms.

Ten-year ending 2012: -5.3%
Ten-year ending 2011: -7.5%
Ten-year ending 2010: -9.2%

Ten-year ending 2012 ex high/low: -3.2%
Ten-year ending 2011 ex high/low: -5.1%
Ten-year ending 2010 ex high/low: -6.4%

Five-year ending 2012: +2.1%
Five-year ending 2011: +2.0%
Five-year ending 2010: +2.8%

Five-year ending 2012 ex high/low: -0.5%
Five-year ending 2011 ex high/low: -2.1%
Five-year ending 2010 ex high/low: -3.5%

We select a past trend rate of **-3%,** the approximate average of the above indicated trend rates.

*Property Damage*

Based on data as of December 31, 2011, we selected a past loss cost trend rate of +0.0%.

The data through December 31, 2012 shows the 2012 loss cost to have decreased by approximately 6% compared to the 2011 loss cost.

Historical loss cost trends are as follows:

Ten-year ending 2012: -0.4%
Ten-year ending 2011: +0.3%

Ten-year ending 2012 ex high/low: -0.9%

Ten-year ending 2011 ex high/low: +0.1%

Five-year ending 2012: +0.6%
Five-year ending 2011: +0.3%

Five-year ending 2012 ex high/low: -0.5%
Five-year ending 2011 ex high/low: +1.7%

We select a past trend rate of **+0.0%,** the approximate average of the above indicated trend rates.

*Accident Benefits*

Based on data as of December 31, 2011, we selected a past loss cost trend rate of +0.0%.

The data through December 31, 2012 shows the 2012 loss cost to have decreased by approximately 12%, over the 2011 loss cost. This is attributed to a 10% increase in severity and a 20% decrease in frequency. This decrease is in sharp contrast to the large increase from 2010 to 2011 at +113%. Although the introduction of the Fair Insurance Act in 2012 was expected to increase loss costs, the 10% increase in the 2012 severity[2] is more than offset by the 20% decrease in the frequency.

With the Fair Insurance Act reform implemented in 2012, and the uncertainty as to the affect these reforms may have on the Commercial Automobile claims costs, we present the loss trend rates for the periods ending December 31, 2010, 2011 and 2012.

Historically, the loss cost has exhibited considerable year-to-year volatility.

Historical loss cost trends are as follows:

Ten-year ending 2012: -0.5%
Ten-year ending 2011: -3.9%
Ten-year ending 2010: -7.8%

[2] *There have not been any death benefit/funeral claims in the last five years ending 2012; and therefore the +10% increase in the 2012 severity is not due to the increased benefit level for these subcoverages.*

Ten-year ending 2012 ex high/low: +0.7%
Ten-year ending 2011 ex high/low: -3.3%
Ten-year ending 2010 ex high/low: -10.2%

Five-year ending 2012: -1.6%
Five-year ending 2011: +3.6%
Five-year ending 2010: -16.3%

Five-year ending 2012 ex high/low: +21.2%
Five-year ending 2011 ex high/low: +19.0%
Five-year ending 2010 ex high/low: -10.2%

In light of these indicated trend rates and the loss cost volatility, we continue to select a past trend rate of +**0.0%**.

*Collision*

Based on data as of December 31, 2011, we selected a past loss cost trend rate of -0.5%.

The data through December 31, 2012 shows the 2012 loss cost to be higher than the 2011 loss cost by approximately 1%.

Historical loss cost trends are as follows:

Ten-year ending 2012: +2.6%
Ten-year ending 2011: +3.6%

Ten-year ending 2012 ex high/low: +1.2%
Ten-year ending 2011 ex high/low: +2.4%

Five-year ending 2012: -5.0%
Five-year ending 2011: -6.3%

Five-year ending 2012 ex high/low: -3.8%
Five-year ending 2011 ex high/low: -6.8%

We select a past trend rate of **-1.5%,** the approximate average of the above trend rates.

*Comprehensive*

Based on data as of December 31, 2011, we selected a past loss cost trend rate of -1.5%.

The data through December 31, 2012 shows the 2012 loss cost to be lower than the 2011 loss cost by approximately 4%. However this 4% decrease follows an increase of 23% in the loss cost from 2010 to 2011.

Historical loss cost trends are as follows:

Ten-year ending 2012: +1.0%
Ten-year ending 2011: +1.3%

Ten-year ending 2012 ex high/low: -0.9%
Ten-year ending 2011 ex high/low: -0.3%

Five-year ending 2012: -2.4%
Five-year ending 2011: -8.5%

Five-year ending 2012 ex high/low: +2.2%
Five-year ending 2011 ex high/low: -3.0%

We select a past trend rate of **-1.5%,** the approximate average of the above trend rates.

*Specified Perils*
Due to insufficient data, we select the same past loss cost trend rate as we do for Comprehensive, -1.5%.

### Selection of Future Trend Rates

The data is not credible enough to discern any changes in trend patterns that may have occurred over the past one to three years. Hence, for all coverages we select a future trend rate that is the same as our selected past trend rate.

### Selected Trend Rates - Summary

The following table presents our selected past and future annual frequency, severity, and loss cost (the product of frequency and severity) trend rates.

| Coverage | Past Loss Cost | Future Loss Cost |
|---|---|---|
| Bodily Injury | -3.0% | -3.0% |
| Property Damage | +0.0% | +0.0% |
| Accident Benefits | +0.0% | +0.0% |
| Collision | -1.5% | -1.5% |
| Comprehensive | -1.5% | -1.5% |
| Specified Perils | -1.5% | -1.5% |

### *Reform Factors*

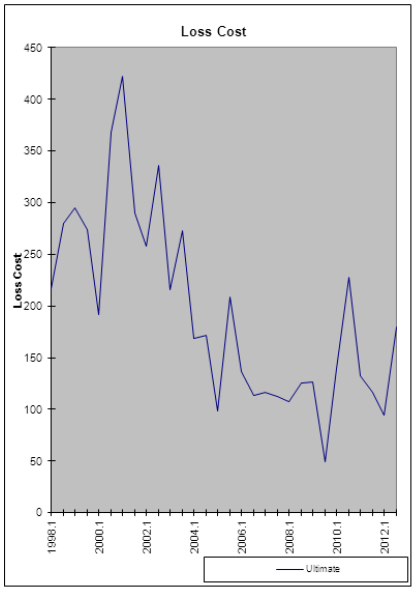
For reasons of data credibility, we select a Bill 1 reform factor for Bodily Injury of -21% and a Bill 52 reform factor for Bodily Injury of +17% - the same as we selected in our prior loss trend report and the same as that we presented in our May 12, 2010 report to the Superintendent of Insurance. Given the limited and volatile commercial automobile accident benefits claims experience, we make no direct adjustment to the 2012 Accident Benefit loss cost experience at this time for the FAIR Insurance reforms implemented in April 2012.

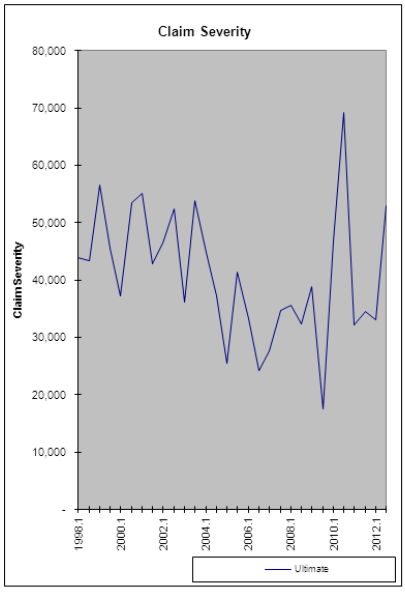
## Exhibits

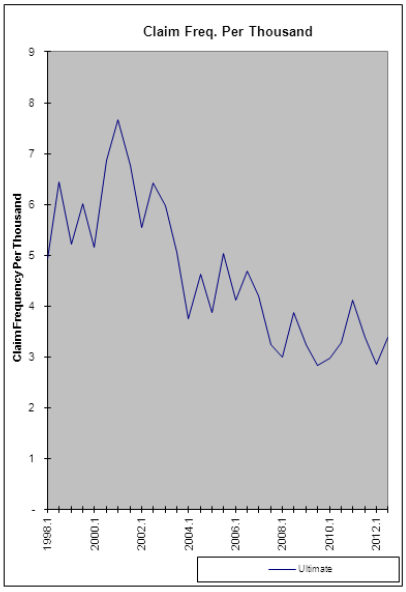
In Exhibit I we present the historical loss cost, severity and frequency data by accident half year over the fifteen year period from 1998 to 2012, as well as the data points in graph form. In Exhibit II we present our selected cumulative claim count and claim amount development factors.

**Third Party Liability - Bodily Injury**

| | Accident Period | Time x | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Ultimate Severity | Ultimate Freq. per 1000 |
|---|---|---|---|---|---|---|---|---|---|---|
| x | 1998.1 | 1 | 22,901 | 113 | 4,533 | 1.094 | 4,959 | 216.53 | 43,883 | 4.93 |
| x | 1998.2 | 2 | 22,795 | 147 | 5,837 | 1.094 | 6,385 | 280.11 | 43,436 | 6.45 |
| x | 1999.1 | 3 | 22,637 | 118 | 6,147 | 1.088 | 6,688 | 295.44 | 56,677 | 5.21 |
| x | 1999.2 | 4 | 22,959 | 138 | 5,785 | 1.088 | 6,295 | 274.17 | 45,613 | 6.01 |
| x | 2000.1 | 5 | 22,509 | 116 | 3,996 | 1.082 | 4,324 | 192.09 | 37,273 | 5.15 |
| x | 2000.2 | 6 | 22,992 | 158 | 7,826 | 1.082 | 8,467 | 368.27 | 53,591 | 6.87 |
| x | 2001.1 | 7 | 23,720 | 182 | 9,410 | 1.065 | 10,021 | 422.49 | 55,063 | 7.67 |
| x | 2001.2 | 8 | 24,108 | 163 | 6,566 | 1.065 | 6,992 | 290.05 | 42,899 | 6.76 |
| x | 2002.1 | 9 | 22,681 | 126 | 5,427 | 1.077 | 5,845 | 257.72 | 46,392 | 5.56 |
| x | 2002.2 | 10 | 23,064 | 148 | 7,194 | 1.077 | 7,748 | 335.94 | 52,352 | 6.42 |
| x | 2003.1 | 11 | 22,451 | 134 | 4,487 | 1.078 | 4,837 | 215.45 | 36,098 | 5.97 |
| x | 2003.2 | 12 | 23,120 | 117 | 5,847 | 1.078 | 6,303 | 272.63 | 53,874 | 5.06 |
| x | 2004.1 | 13 | 23,228 | 87 | 3,428 | 1.140 | 3,908 | 168.24 | 44,920 | 3.75 |
| x | 2004.2 | 14 | 24,230 | 112 | 3,652 | 1.140 | 4,164 | 171.84 | 37,175 | 4.62 |
| x | 2005.1 | 15 | 24,264 | 94 | 2,183 | 1.097 | 2,394 | 98.67 | 25,485 | 3.87 |
| x | 2005.2 | 16 | 25,169 | 127 | 4,781 | 1.097 | 5,243 | 208.32 | 41,337 | 5.04 |
| x | 2006.1 | 17 | 24,461 | 101 | 3,048 | 1.099 | 3,348 | 136.88 | 33,213 | 4.12 |
| x | 2006.2 | 18 | 25,257 | 118 | 2,614 | 1.099 | 2,871 | 113.69 | 24,237 | 4.69 |
| x | 2007.1 | 19 | 24,821 | 104 | 2,614 | 1.105 | 2,888 | 116.37 | 27,650 | 4.21 |
| x | 2007.2 | 20 | 25,329 | 82 | 2,588 | 1.105 | 2,860 | 112.91 | 34,731 | 3.25 |
| x | 2008.1 | 21 | 24,745 | 74 | 2,419 | 1.095 | 2,648 | 107.01 | 35,639 | 3.00 |
| x | 2008.2 | 22 | 26,566 | 103 | 3,045 | 1.095 | 3,333 | 125.47 | 32,400 | 3.87 |
| x | 2009.1 | 23 | 26,059 | 85 | 2,976 | 1.106 | 3,290 | 126.26 | 38,889 | 3.25 |
| x | 2009.2 | 24 | 26,326 | 74 | 1,180 | 1.106 | 1,305 | 49.57 | 17,538 | 2.83 |
| x | 2010.1 | 25 | 25,844 | 77 | 3,260 | 1.108 | 3,611 | 139.71 | 46,890 | 2.98 |
| x | 2010.2 | 26 | 26,674 | 88 | 5,487 | 1.108 | 6,077 | 227.83 | 69,237 | 3.29 |
| x | 2011.1 | 27 | 26,282 | 108 | 3,152 | 1.105 | 3,484 | 132.55 | 32,255 | 4.11 |
| x | 2011.2 | 28 | 27,201 | 92 | 2,869 | 1.105 | 3,171 | 116.59 | 34,512 | 3.38 |
| x | 2012.1 | 29 | 27,100 | 77 | 2,310 | 1.105 | 2,553 | 94.22 | 33,082 | 2.85 |
| x | 2012.2 | 30 | 28,242 | 96 | 4,585 | 1.105 | 5,067 | 179.42 | 52,928 | 3.39 |

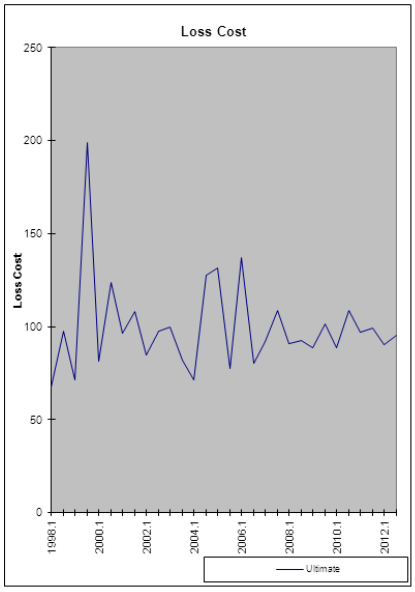


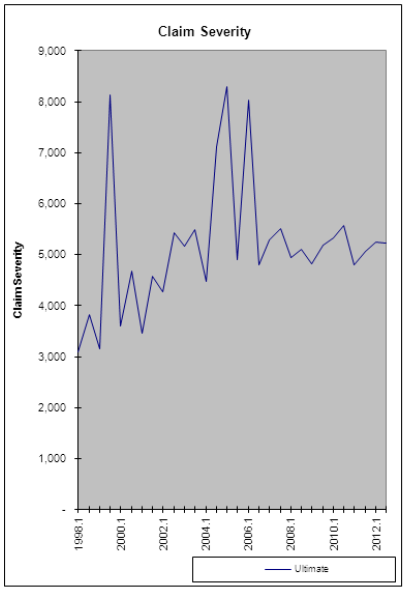



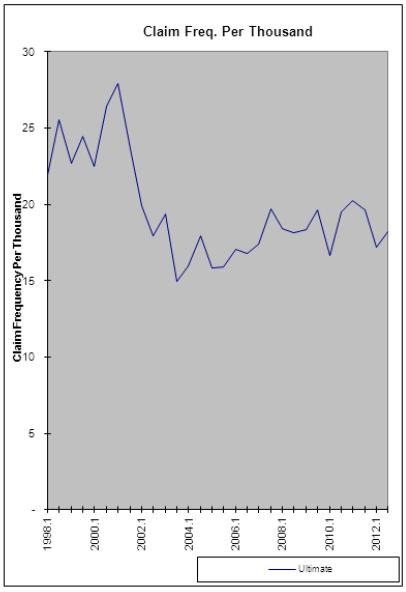



**Third Party Liability - Property Damage**

| | Accident Period | Time x | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Ultimate Severity | Ultimate Freq. per 1000 |
|---|---|---|---|---|---|---|---|---|---|---|
| x | 1998.1 | 1 | 22,901 | 503 | 1,418 | 1.094 | 1,551 | 67.72 | 3,083 | 21.96 |
| x | 1998.2 | 2 | 22,795 | 583 | 2,033 | 1.094 | 2,224 | 97.58 | 3,815 | 25.58 |
| x | 1999.1 | 3 | 22,637 | 513 | 1,489 | 1.088 | 1,620 | 71.58 | 3,159 | 22.66 |
| x | 1999.2 | 4 | 22,959 | 562 | 4,199 | 1.088 | 4,568 | 198.96 | 8,128 | 24.48 |
| x | 2000.1 | 5 | 22,509 | 506 | 1,689 | 1.082 | 1,827 | 81.17 | 3,611 | 22.48 |
| x | 2000.2 | 6 | 22,992 | 607 | 2,626 | 1.082 | 2,841 | 123.57 | 4,681 | 26.40 |
| x | 2001.1 | 7 | 23,720 | 663 | 2,152 | 1.065 | 2,292 | 96.63 | 3,457 | 27.95 |
| x | 2001.2 | 8 | 24,108 | 570 | 2,452 | 1.065 | 2,611 | 108.32 | 4,581 | 23.64 |
| x | 2002.1 | 9 | 22,681 | 451 | 1,790 | 1.077 | 1,928 | 84.99 | 4,274 | 19.88 |
| x | 2002.2 | 10 | 23,064 | 414 | 2,091 | 1.077 | 2,252 | 97.63 | 5,439 | 17.95 |
| x | 2003.1 | 11 | 22,451 | 435 | 2,082 | 1.078 | 2,245 | 99.99 | 5,160 | 19.38 |
| x | 2003.2 | 12 | 23,120 | 345 | 1,754 | 1.078 | 1,891 | 81.80 | 5,482 | 14.92 |
| x | 2004.1 | 13 | 23,228 | 371 | 1,457 | 1.140 | 1,661 | 71.50 | 4,477 | 15.97 |
| x | 2004.2 | 14 | 24,230 | 434 | 2,710 | 1.140 | 3,089 | 127.51 | 7,119 | 17.91 |
| x | 2005.1 | 15 | 24,264 | 384 | 2,909 | 1.097 | 3,190 | 131.46 | 8,306 | 15.83 |
| x | 2005.2 | 16 | 25,169 | 400 | 1,785 | 1.097 | 1,957 | 77.76 | 4,893 | 15.89 |
| x | 2006.1 | 17 | 24,461 | 418 | 3,055 | 1.099 | 3,356 | 137.20 | 8,029 | 17.09 |
| x | 2006.2 | 18 | 25,257 | 424 | 1,849 | 1.099 | 2,031 | 80.41 | 4,792 | 16.78 |
| x | 2007.1 | 19 | 24,821 | 432 | 2,069 | 1.105 | 2,286 | 92.09 | 5,293 | 17.40 |
| x | 2007.2 | 20 | 25,329 | 499 | 2,490 | 1.105 | 2,751 | 108.61 | 5,515 | 19.69 |
| x | 2008.1 | 21 | 24,745 | 455 | 2,052 | 1.095 | 2,246 | 90.75 | 4,935 | 18.39 |
| x | 2008.2 | 22 | 26,566 | 482 | 2,246 | 1.095 | 2,458 | 92.52 | 5,099 | 18.14 |
| x | 2009.1 | 23 | 26,059 | 478 | 2,083 | 1.106 | 2,303 | 88.39 | 4,821 | 18.33 |
| x | 2009.2 | 24 | 26,326 | 517 | 2,421 | 1.106 | 2,676 | 101.66 | 5,180 | 19.63 |
| x | 2010.1 | 25 | 25,844 | 431 | 2,072 | 1.108 | 2,295 | 88.81 | 5,327 | 16.67 |
| x | 2010.2 | 26 | 26,674 | 520 | 2,616 | 1.108 | 2,897 | 108.61 | 5,571 | 19.49 |
| x | 2011.1 | 27 | 26,282 | 532 | 2,311 | 1.105 | 2,554 | 97.19 | 4,799 | 20.25 |
| x | 2011.2 | 28 | 27,201 | 534 | 2,443 | 1.105 | 2,701 | 99.28 | 5,055 | 19.64 |
| x | 2012.1 | 29 | 27,100 | 466 | 2,209 | 1.105 | 2,442 | 90.11 | 5,243 | 17.19 |
| x | 2012.2 | 30 | 28,242 | 515 | 2,436 | 1.105 | 2,692 | 95.33 | 5,231 | 18.23 |

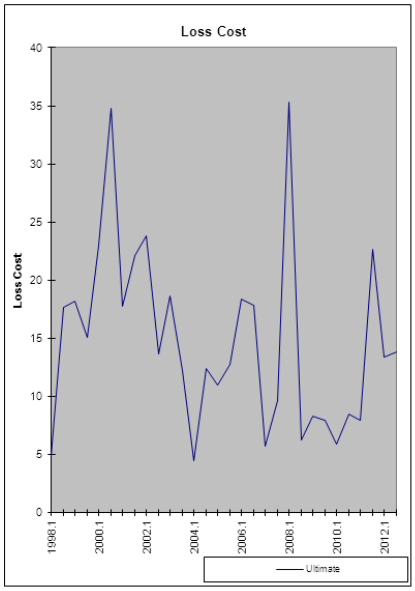


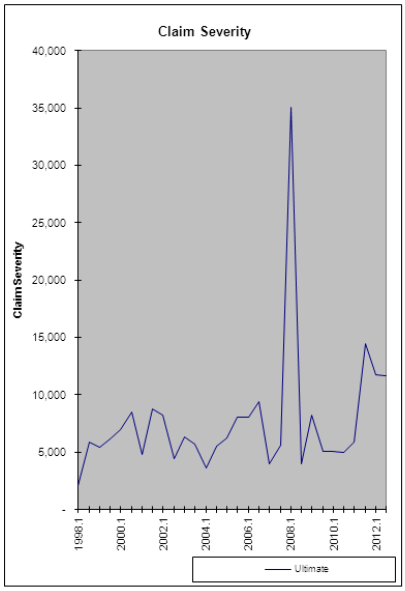



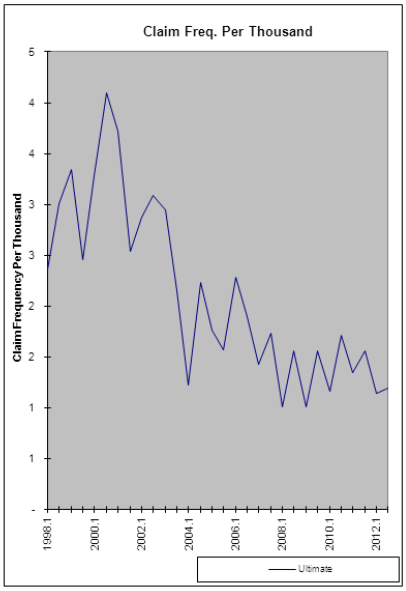



**Accident Benefits**

| | Accident Period | Time x | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Ultimate Severity | Ultimate Freq. per 1000 |
|---|---|---|---|---|---|---|---|---|---|---|
| x | 1998.1 | 1 | 22,008 | 52 | 99 | 1.094 | 109 | 4.94 | 2,091 | 2.36 |
| x | 1998.2 | 2 | 21,944 | 66 | 354 | 1.094 | 387 | 17.63 | 5,863 | 3.01 |
| x | 1999.1 | 3 | 21,861 | 73 | 367 | 1.088 | 399 | 18.24 | 5,463 | 3.34 |
| x | 1999.2 | 4 | 22,343 | 55 | 309 | 1.088 | 336 | 15.06 | 6,116 | 2.46 |
| x | 2000.1 | 5 | 21,957 | 72 | 467 | 1.082 | 505 | 22.99 | 7,011 | 3.28 |
| x | 2000.2 | 6 | 22,483 | 92 | 723 | 1.082 | 783 | 34.82 | 8,508 | 4.09 |
| x | 2001.1 | 7 | 23,118 | 86 | 385 | 1.065 | 410 | 17.74 | 4,768 | 3.72 |
| x | 2001.2 | 8 | 23,680 | 60 | 493 | 1.065 | 525 | 22.15 | 8,743 | 2.53 |
| x | 2002.1 | 9 | 22,265 | 64 | 492 | 1.077 | 530 | 23.79 | 8,277 | 2.87 |
| x | 2002.2 | 10 | 22,661 | 70 | 287 | 1.077 | 309 | 13.64 | 4,414 | 3.09 |
| x | 2003.1 | 11 | 22,077 | 65 | 382 | 1.078 | 412 | 18.67 | 6,342 | 2.94 |
| x | 2003.2 | 12 | 22,799 | 49 | 259 | 1.078 | 280 | 12.26 | 5,705 | 2.15 |
| x | 2004.1 | 13 | 22,808 | 28 | 89 | 1.140 | 101 | 4.44 | 3,613 | 1.23 |
| x | 2004.2 | 14 | 23,713 | 53 | 258 | 1.140 | 294 | 12.42 | 5,555 | 2.24 |
| x | 2005.1 | 15 | 23,795 | 42 | 239 | 1.097 | 262 | 11.01 | 6,237 | 1.77 |
| x | 2005.2 | 16 | 24,802 | 39 | 288 | 1.097 | 315 | 12.72 | 8,088 | 1.57 |
| x | 2006.1 | 17 | 24,088 | 55 | 402 | 1.099 | 442 | 18.33 | 8,029 | 2.28 |
| x | 2006.2 | 18 | 24,750 | 47 | 403 | 1.099 | 442 | 17.87 | 9,409 | 1.90 |
| x | 2007.1 | 19 | 24,431 | 35 | 126 | 1.105 | 139 | 5.69 | 3,972 | 1.43 |
| x | 2007.2 | 20 | 24,880 | 43 | 217 | 1.105 | 240 | 9.64 | 5,575 | 1.73 |
| x | 2008.1 | 21 | 24,829 | 25 | 801 | 1.095 | 876 | 35.29 | 35,107 | 1.01 |
| x | 2008.2 | 22 | 26,262 | 41 | 149 | 1.095 | 164 | 6.23 | 3,988 | 1.56 |
| x | 2009.1 | 23 | 25,902 | 26 | 195 | 1.106 | 215 | 8.32 | 8,272 | 1.01 |
| x | 2009.2 | 24 | 26,231 | 41 | 189 | 1.106 | 209 | 7.98 | 5,107 | 1.56 |
| x | 2010.1 | 25 | 25,731 | 30 | 138 | 1.108 | 153 | 5.93 | 5,110 | 1.16 |
| x | 2010.2 | 26 | 26,527 | 45 | 203 | 1.108 | 225 | 8.48 | 4,951 | 1.71 |
| x | 2011.1 | 27 | 26,169 | 35 | 187 | 1.105 | 207 | 7.90 | 5,878 | 1.34 |
| x | 2011.2 | 28 | 27,159 | 42 | 557 | 1.105 | 616 | 22.66 | 14,496 | 1.56 |
| x | 2012.1 | 29 | 27,056 | 31 | 327 | 1.105 | 362 | 13.38 | 11,737 | 1.14 |
| x | 2012.2 | 30 | 28,189 | 34 | 353 | 1.105 | 390 | 13.85 | 11,623 | 1.19 |

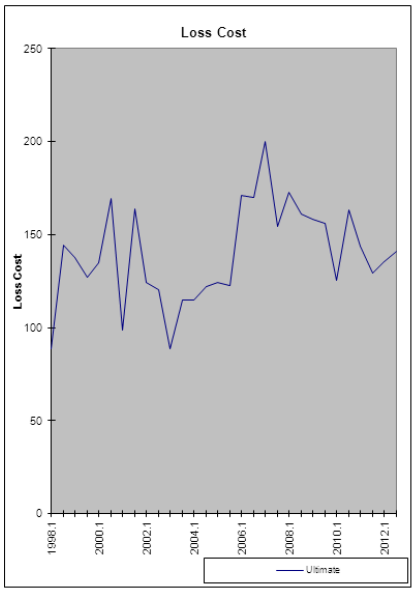


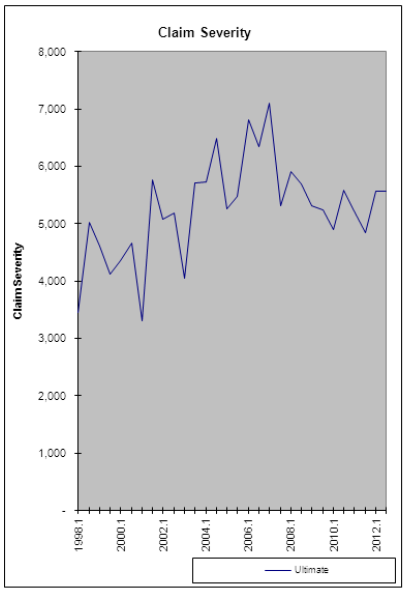



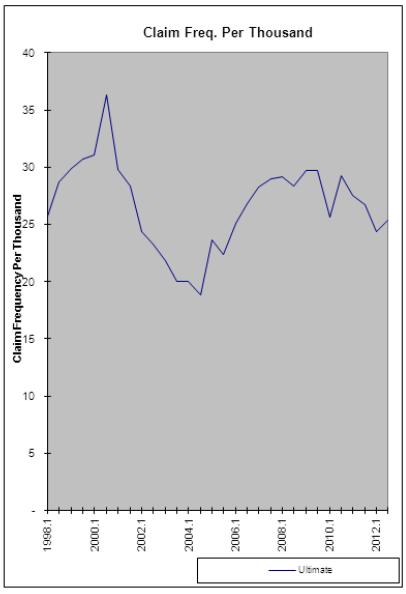



**Collision**

| | Accident Period | Time x | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Ultimate Severity | Ultimate Freq. per 1000 |
|---|---|---|---|---|---|---|---|---|---|---|
| x | 1998.1 | 1 | 5,875 | 151 | 476 | 1.094 | 520 | 88.56 | 3,445 | 25.70 |
| x | 1998.2 | 2 | 6,017 | 173 | 795 | 1.094 | 870 | 144.55 | 5,028 | 28.75 |
| x | 1999.1 | 3 | 6,126 | 183 | 776 | 1.088 | 844 | 137.78 | 4,612 | 29.87 |
| x | 1999.2 | 4 | 6,049 | 186 | 705 | 1.088 | 767 | 126.87 | 4,126 | 30.75 |
| x | 2000.1 | 5 | 6,087 | 189 | 760 | 1.082 | 823 | 135.16 | 4,353 | 31.05 |
| x | 2000.2 | 6 | 6,386 | 232 | 1,000 | 1.082 | 1,081 | 169.35 | 4,662 | 36.33 |
| x | 2001.1 | 7 | 6,738 | 201 | 626 | 1.065 | 666 | 98.90 | 3,315 | 29.83 |
| x | 2001.2 | 8 | 6,878 | 195 | 1,057 | 1.065 | 1,126 | 163.65 | 5,772 | 28.35 |
| x | 2002.1 | 9 | 6,269 | 153 | 723 | 1.077 | 778 | 124.15 | 5,087 | 24.41 |
| x | 2002.2 | 10 | 6,184 | 144 | 693 | 1.077 | 746 | 120.69 | 5,183 | 23.29 |
| x | 2003.1 | 11 | 6,000 | 131 | 492 | 1.078 | 531 | 88.48 | 4,052 | 21.83 |
| x | 2003.2 | 12 | 6,034 | 121 | 642 | 1.078 | 692 | 114.62 | 5,716 | 20.05 |
| x | 2004.1 | 13 | 5,980 | 120 | 603 | 1.140 | 687 | 114.89 | 5,726 | 20.07 |
| x | 2004.2 | 14 | 6,169 | 116 | 661 | 1.140 | 754 | 122.16 | 6,496 | 18.80 |
| x | 2005.1 | 15 | 6,136 | 145 | 695 | 1.097 | 762 | 124.24 | 5,258 | 23.63 |
| x | 2005.2 | 16 | 6,385 | 143 | 715 | 1.097 | 784 | 122.85 | 5,486 | 22.40 |
| x | 2006.1 | 17 | 6,340 | 159 | 986 | 1.099 | 1,084 | 170.92 | 6,815 | 25.08 |
| x | 2006.2 | 18 | 6,635 | 178 | 1,028 | 1.099 | 1,129 | 170.18 | 6,344 | 26.83 |
| x | 2007.1 | 19 | 6,660 | 188 | 1,208 | 1.105 | 1,334 | 200.32 | 7,097 | 28.23 |
| x | 2007.2 | 20 | 7,002 | 203 | 977 | 1.105 | 1,080 | 154.21 | 5,319 | 28.99 |
| x | 2008.1 | 21 | 6,921 | 202 | 1,091 | 1.095 | 1,194 | 172.55 | 5,912 | 29.18 |
| x | 2008.2 | 22 | 7,096 | 201 | 1,046 | 1.095 | 1,145 | 161.33 | 5,695 | 28.33 |
| x | 2009.1 | 23 | 6,991 | 208 | 1,000 | 1.106 | 1,105 | 158.04 | 5,312 | 29.75 |
| x | 2009.2 | 24 | 7,162 | 213 | 1,010 | 1.106 | 1,117 | 155.96 | 5,244 | 29.74 |
| x | 2010.1 | 25 | 7,083 | 182 | 804 | 1.108 | 890 | 125.67 | 4,898 | 25.66 |
| x | 2010.2 | 26 | 7,303 | 214 | 1,078 | 1.108 | 1,194 | 163.54 | 5,592 | 29.25 |
| x | 2011.1 | 27 | 7,188 | 198 | 937 | 1.105 | 1,036 | 144.06 | 5,225 | 27.57 |
| x | 2011.2 | 28 | 7,431 | 198 | 871 | 1.105 | 963 | 129.60 | 4,854 | 26.70 |
| x | 2012.1 | 29 | 7,362 | 179 | 903 | 1.105 | 998 | 135.58 | 5,563 | 24.37 |
| x | 2012.2 | 30 | 7,560 | 192 | 966 | 1.105 | 1,068 | 141.25 | 5,569 | 25.36 |

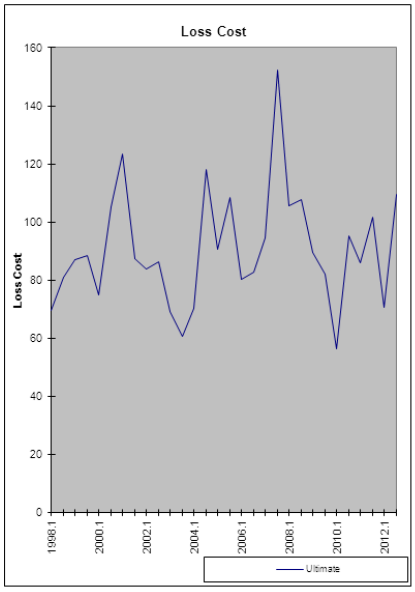


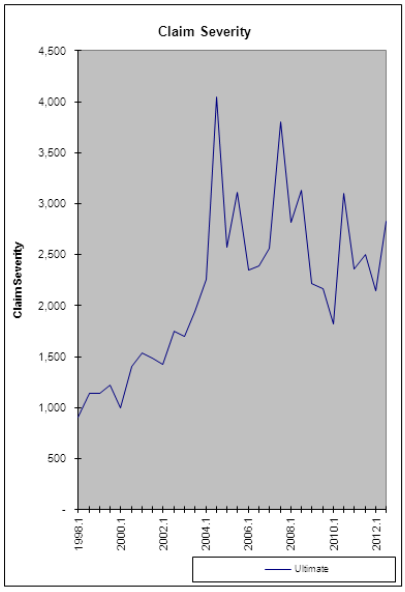



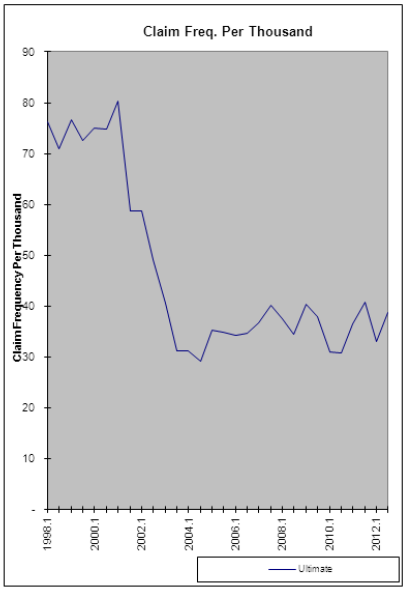



**Comprehensive**

| | Accident Period | Time x | Earned Exposures | Ultimate Counts | Ultimate Losses | ULAE Adjustment | Adjusted Ultimate Losses | Ultimate Loss Cost | Ultimate Severity | Ultimate Freq. per 1000 |
|---|---|---|---|---|---|---|---|---|---|---|
| x | 1998.1 | 1 | 8,267 | 631 | 525 | 1.094 | 574 | 69.47 | 910 | 76.33 |
| x | 1998.2 | 2 | 8,395 | 596 | 622 | 1.094 | 680 | 81.03 | 1,141 | 71.00 |
| x | 1999.1 | 3 | 8,597 | 659 | 688 | 1.088 | 748 | 87.03 | 1,135 | 76.66 |
| x | 1999.2 | 4 | 8,501 | 617 | 690 | 1.088 | 751 | 88.37 | 1,218 | 72.58 |
| x | 2000.1 | 5 | 8,398 | 630 | 583 | 1.082 | 630 | 75.06 | 1,001 | 75.01 |
| x | 2000.2 | 6 | 8,591 | 642 | 836 | 1.082 | 904 | 105.25 | 1,408 | 74.73 |
| x | 2001.1 | 7 | 9,044 | 726 | 1,049 | 1.065 | 1,117 | 123.50 | 1,538 | 80.28 |
| x | 2001.2 | 8 | 9,172 | 539 | 754 | 1.065 | 803 | 87.50 | 1,489 | 58.76 |
| x | 2002.1 | 9 | 8,679 | 510 | 676 | 1.077 | 728 | 83.93 | 1,428 | 58.77 |
| x | 2002.2 | 10 | 8,801 | 433 | 705 | 1.077 | 759 | 86.29 | 1,754 | 49.20 |
| x | 2003.1 | 11 | 8,439 | 343 | 541 | 1.078 | 583 | 69.11 | 1,700 | 40.64 |
| x | 2003.2 | 12 | 8,406 | 263 | 474 | 1.078 | 511 | 60.77 | 1,942 | 31.29 |
| x | 2004.1 | 13 | 8,295 | 259 | 512 | 1.140 | 584 | 70.35 | 2,253 | 31.22 |
| x | 2004.2 | 14 | 8,323 | 243 | 862 | 1.140 | 982 | 118.04 | 4,043 | 29.20 |
| x | 2005.1 | 15 | 8,182 | 289 | 677 | 1.097 | 743 | 90.76 | 2,570 | 35.32 |
| x | 2005.2 | 16 | 8,482 | 296 | 839 | 1.097 | 920 | 108.47 | 3,108 | 34.90 |
| x | 2006.1 | 17 | 8,398 | 287 | 613 | 1.099 | 674 | 80.24 | 2,348 | 34.18 |
| x | 2006.2 | 18 | 8,686 | 301 | 654 | 1.099 | 719 | 82.73 | 2,387 | 34.66 |
| x | 2007.1 | 19 | 8,672 | 319 | 741 | 1.105 | 818 | 94.37 | 2,565 | 36.79 |
| x | 2007.2 | 20 | 8,956 | 359 | 1,235 | 1.105 | 1,364 | 152.33 | 3,800 | 40.09 |
| x | 2008.1 | 21 | 8,912 | 334 | 861 | 1.095 | 942 | 105.70 | 2,820 | 37.48 |
| x | 2008.2 | 22 | 9,149 | 315 | 902 | 1.095 | 987 | 107.92 | 3,134 | 34.43 |
| x | 2009.1 | 23 | 9,071 | 367 | 735 | 1.106 | 812 | 89.53 | 2,213 | 40.46 |
| x | 2009.2 | 24 | 9,286 | 352 | 689 | 1.106 | 761 | 82.00 | 2,163 | 37.91 |
| x | 2010.1 | 25 | 9,246 | 287 | 472 | 1.108 | 523 | 56.56 | 1,822 | 31.04 |
| x | 2010.2 | 26 | 9,515 | 292 | 818 | 1.108 | 906 | 95.26 | 3,103 | 30.70 |
| x | 2011.1 | 27 | 9,413 | 343 | 733 | 1.105 | 810 | 86.02 | 2,360 | 36.45 |
| x | 2011.2 | 28 | 9,668 | 394 | 890 | 1.105 | 983 | 101.72 | 2,498 | 40.72 |
| x | 2012.1 | 29 | 9,619 | 317 | 616 | 1.105 | 681 | 70.75 | 2,148 | 32.94 |
| x | 2012.2 | 30 | 9,807 | 379 | 972 | 1.105 | 1,074 | 109.49 | 2,832 | 38.67 |



Oliver Wyman Selected Age-to-Ultimate Development Factors
As of December 31, 2012
Nova Scotia
Commercial Automobile (Excluding Farmers)

**As of 2012-2**
**Age-to-Ultimate Factors**
**Incurred Claim Amount**

| | Bodily Injury | Property Damage | Accident Benefits | Collision | Comprehensive |
|---|---|---|---|---|---|
| 180-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 174-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 168-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 162-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 156-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 150-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 144-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 138-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 132-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 126-Ult | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |
| 120-Ult | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |
| 114-Ult | 1.000 | 1.000 | 1.001 | 1.000 | 1.000 |
| 108-Ult | 0.997 | 1.000 | 1.003 | 1.000 | 1.000 |
| 102-Ult | 0.992 | 1.000 | 1.005 | 1.000 | 1.000 |
| 96-Ult | 0.989 | 1.000 | 1.005 | 1.000 | 1.000 |
| 90-Ult | 0.984 | 0.998 | 1.005 | 1.000 | 1.000 |
| 84-Ult | 0.997 | 0.999 | 1.007 | 1.000 | 1.000 |
| 78-Ult | 0.993 | 0.997 | 1.009 | 1.000 | 1.000 |
| 72-Ult | 0.961 | 0.993 | 1.013 | 1.000 | 1.000 |
| 66-Ult | 0.953 | 0.992 | 1.011 | 1.000 | 1.000 |
| 60-Ult | 1.001 | 0.997 | 1.024 | 1.000 | 1.000 |
| 54-Ult | 1.039 | 0.996 | 1.039 | 1.000 | 1.000 |
| 48-Ult | 1.053 | 1.002 | 1.060 | 1.000 | 1.000 |
| 42-Ult | 1.107 | 0.998 | 1.072 | 1.000 | 1.000 |
| 36-Ult | 1.186 | 1.014 | 1.080 | 0.996 | 0.999 |
| 30-Ult | 1.243 | 1.010 | 1.084 | 0.992 | 1.000 |
| 24-Ult | 1.285 | 1.014 | 1.141 | 0.986 | 1.002 |
| 18-Ult | 1.324 | 1.012 | 1.166 | 0.977 | 1.002 |
| 12-Ult | 1.330 | 1.055 | 1.186 | 0.936 | 0.998 |
| 6-Ult | 1.545 | 1.204 | 1.281 | 0.802 | 1.063 |

Oliver Wyman Selected Age-to-Ultimate Development Factors
As of December 31, 2012
Nova Scotia
Commercial Automobile (Excluding Farmers)

**As of 2012-2**
**Age-to-Ultimate Factors**
**Incurred Claim Count**

| | Bodily Injury | Property Damage | Accident Benefits | Collision | Comprehensive |
|---|---|---|---|---|---|
| 180-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 174-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 168-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 162-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 156-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 150-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 144-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 138-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 132-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 126-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 120-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 114-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 108-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 102-Ult | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 96-Ult | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 |
| 90-Ult | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 |
| 84-Ult | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 |
| 78-Ult | 0.996 | 1.000 | 1.000 | 1.000 | 1.000 |
| 72-Ult | 0.995 | 1.000 | 1.000 | 1.000 | 1.000 |
| 66-Ult | 0.992 | 1.000 | 1.000 | 1.000 | 1.000 |
| 60-Ult | 0.991 | 1.000 | 0.998 | 1.000 | 1.000 |
| 54-Ult | 0.989 | 1.000 | 1.000 | 1.000 | 1.000 |
| 48-Ult | 0.984 | 0.999 | 1.002 | 1.000 | 1.000 |
| 42-Ult | 0.979 | 0.999 | 1.000 | 1.000 | 1.000 |
| 36-Ult | 0.987 | 1.000 | 0.996 | 0.999 | 1.000 |
| 30-Ult | 0.997 | 1.000 | 0.988 | 0.998 | 1.000 |
| 24-Ult | 0.982 | 1.002 | 0.977 | 0.996 | 1.000 |
| 18-Ult | 0.957 | 1.006 | 0.944 | 0.992 | 1.002 |
| 12-Ult | 0.908 | 1.008 | 0.907 | 0.975 | 1.009 |
| 6-Ult | 0.912 | 1.093 | 0.819 | 0.892 | 1.178 |

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