

ANNUAL REVIEW OF INDUSTRY EXPERIENCE - PRELIMINARY REPORT

AS OF DECEMBER 31, 2016

COMMERCIAL VEHICLES

ALBERTA AUTO INSURANCE RATE BOARD

4 JULY 2017

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Introduction

This report was prepared by Oliver, Wyman Limited (Oliver Wyman), actuarial consultants to the Alberta Automobile Insurance Rate Board (the Board), as part of the Board's "2017 Annual Review" of Industry experience to determine benchmarks for commercial vehicle rate filings submitted between October 1, 2017 and September 30, 2018.

This report presents the preliminary results of our analysis of Alberta's Industry loss and expense experience for commercial vehicles reported as of December 31, 2016. The scope of our analysis includes all coverages:

Basic Coverage: Third Party Liability (TPL) and Accident Benefits (AB)

Additional Coverage: Collision, Comprehensive, All Perils, Specified Perils, and Underinsured Motorist

Data and Reliances

The data utilized in this study and presented in this report is based on information published by the General Insurance Statistical Agency (GISA) that has been compiled by the Insurance Bureau of Canada (IBC). Consistent with the reports published by GISA (and to increase the volume of data), fleet vehicles are included. We have not audited, verified, or reviewed this data for reasonableness, accuracy, or consistency, as it is outside the scope of our study. In the event material errors are found in this data, our findings may need to be revised.

Limitations

The assumptions and judgments we have made in selecting the factors, provisions, and methodologies that we present in this report for the Board's consideration in determining benchmarks that apply to commercial vehicle rate filings submitted between October 1, 2017 and September 30, 2018 are based on data and information made available to us at the time of this analysis. Our assumptions, judgments, and findings are subject to uncertainty as is inherent in any loss forecast.

Our analysis reflects the experience of the insurance industry as a whole, including the Facility Association (FA) and may not be appropriate for an individual insurance company whose portfolio of risks, rates, expenses, and operating characteristics may differ from the insurance industry averages that underlie our findings.

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Summary of Findings

In this report we present:

- assumptions, factors, and provisions we recommend¹ serve as benchmarks for rate filings submitted between October 1, 2017 and September 30, 2018
- other assumptions, factors, and provisions for the Board's consideration as it reviews rate filings submitted between October 1, 2017 and September 30, 2018

We note that our recommended assumptions, factors, and provisions that we present in this report are preliminary, subject to our consideration of feedback provided by interested parties.

Analysis of Industry Claim Cost and Expense Experience

The analysis that we present in this report is of Industry claim cost and expense experience in Alberta over recent past years. We consider the Industry claim experience through December 31, 2016 as reported to GISA.

Other Comments

In this report we present assumptions, factors, and provisions for the Board's consideration in its review of individual rate filings. The projection of future rate needs is subject to considerable

¹ We refer to these as selections in this report.

uncertainty. For this reason, we provide rationale for the assumptions, factors, and provisions we present, as well as information to help the Board evaluate their reasonableness.

We suggest that the Board also consider the reasonableness of additional information provided by interested parties that may be more current or that may provide more insight into the Industry commercial vehicle claim experience (particularly as respects the Bodily Injury coverage and theft losses) that has emerged or is expected to emerge. However, in doing so the Board should also consider that the experience of one insurer may not be representative of the experience of the Industry.

We also suggest the Board recognize that while it may be that, alone, an alternative assumption, factor, or provision may be reasonable, it may not be reasonable to combine alternative assumptions, factors, or provisions.

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Analysis – General Discussion

Introduction

In the sections that follow we present:

- an analysis and discussion of Industry loss development factors and trend rates
- the Industry loss development factors and trend rates we recommend² the Board consider in reviewing Industry's overall performance, and to serve as benchmarks to apply to rate filings submitted between October 1, 2017 and September 30, 2018
- other assumptions, factors, and provisions for the Board to consider in reviewing Industry's overall performance, and to consider in reviewing rate filings submitted between October 1, 2017 and September 30, 2018

The projection of future rate needs is subject to uncertainty. Therefore, we provide rationale for the assumptions, factors, provisions, and calculations that we present, as well as information to help the Board evaluate their reasonableness and the reasonableness of the views that may be presented by other interested parties.

Claim Cost – Data

The source for the claim data that we analyze is the 2017-2 AUTO7002 Automobile Industry Exhibit (as of December 31, 2016) provided by GISA. We refer to this as the AIX report.

² See previous comments on recommendations.

The claim data that is available through the Industry AIX report is in two categories:

Paid Claim Amounts – claim cost payments made by an insurance company; includes payments that were made on claims that are now closed, as well as payments made on claims that are still open (referred to as partial payments).

Case Reserves – the insurance company’s estimate of the amount of future claim cost payments to be made on individual claims; a case reserve is assigned to each individual open claim.

The total of the paid claim amounts made on each closed or open claim and the case reserve carried on each open claim is what is referred to as reported incurred claim amounts.

The case reserves (and hence the reported incurred claim amounts) reflect the views and opinions of the respective insurance company claim adjusters that handle the individual claims, and are based on the information available to the claim adjusters as of a particular point in time. Over time, the case reserves are revised by the claim adjusters to more accurately reflect the payments that are made or that are expected to be made based on additional information that becomes available to the claim adjusters.

It is important to note two points about case reserves:

1. How insurance companies determine case reserves varies from company to company. For example, it is typical for insurance companies to instruct their claim adjusters to post a pre-set amount (e.g., \$10,000 for Bodily Injury claims) as the case reserve when a claim is first reported and before any investigation is performed. This is referred to as the “initial claim reserve.” In a sense, the initial claim reserve serves as a placeholder until investigation is conducted and a more accurate estimate can be established by the claim adjusters. For those companies that follow this approach, the amount of the initial case reserve and the length of time the initial claim reserve remains posted varies by company and, for a particular company, could change over time.

2. The case reserves do not reflect the “actuarial reserve” (also referred to as the bulk reserve or the IBNR reserve) that insurance companies record in their financial statements. This actuarial reserve, which is estimated by the insurance company actuaries, is an aggregate amount that is intended to provide for (1) any overall inadequacies or redundancies in the case reserves that are established on individual claims, and (2) claims (accidents) that occurred but have not yet been reported to the insurance company as of the time of the financial statement. How insurance companies (their actuaries) determine the “actuarial reserve” varies from company to company.

Estimating Ultimate Claim Counts and Ultimate Claim Amounts by Accident Half-Year – General Approach

We estimate the final (ultimate) number of all claims and cost³ of all claims that arise from events that occur in the first and second half of the year, separately, through to December 2016 (referred to as “accident half-years”) and then use those estimates to measure and select loss trend rates.

We estimate the final/ultimate claim cost by accident half-year by performing our own estimate of the needed actuarial reserve for all insurance companies in aggregate (i.e., the Industry), and adding that amount to the reported incurred claim amounts that insurance companies report to GISA and which are published by GISA. In doing so we consider the Industry’s reported claim amounts (the aggregate paid claim amounts and individual claim case reserves), but we do not consider the actuarial reserves established by each insurance company as they are not reported to GISA.

We estimate the Industry actuarial reserve by applying what are referred to as “loss development factors” to the reported incurred claim amounts. The selection of loss development factors that

³ By “final” or “ultimate” cost we mean the amount paid by insurance companies at the time that all claims that occur in a particular year have been reported and settled.

we apply is based on an analysis that we perform to determine how accurate the individual claim case reserves established by insurance companies (in aggregate) have been historically. We refer to the historical accuracy of the individual claim case reserves as loss development patterns.

We select loss⁴ development factors to estimate the actuarial reserve need, hence the final claim cost, for each accident half-year through December 2016 (we group claims by the accident half-year that the events that give rise to the claims occur), separately for each of the coverages.⁵ We follow a similar approach (using what are referred to as claim count development factors) to estimate the final number of claims that will arise from events that have occurred by accident half-year through December 2016, separately for each of the coverages.

Our selection of loss development factors and claim count development factors for each of the Basic coverages and Additional coverages is discussed in the next section.

⁴ We use the terms “loss,” “claim amount,” and “claim cost” interchangeably in this report. In this report, all these terms include a provision for allocated loss adjustment expenses (ALAE).

⁵ This actuarial technique is often referred to as the “Incurred Loss Development Method” or the “Reported Incurred Loss Development Method.”

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Selection of Claim Count and Claim Amount Development Factors

The data we use to select loss development factors and claim count development factors is the 2016-2 AUTO7002 Industry Alberta accident half-year⁶ reported incurred loss and allocated loss adjustment expense (ALAE) and claim count data.

Estimation of Industry Ultimate Claim Counts and Loss Amounts

The Industry Alberta experience upon which the loss trend rates are based must be adjusted to an ultimate claim count and loss 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, 2016. We select development factors based on a review of the Industry Alberta loss development patterns; we do this by coverage⁷. Our selected development factors are generally based on: (a) the volume weighted average of the last four observed development factors for the half-years ending December for development period 6 months to 12 months⁸ if there is evidence of seasonality⁹; and (b) the volume weighted average of the last six observed development factors for the development periods beyond 12 months or beyond 6 months if no evidence of 6 to 12 month seasonality. The exceptions are as follows.

⁶ Accident half-year refers to either the period January 1 through June 30, or July 1 through December 31 of the indicated year. We use the terms “accident half-year” and “semester” (i.e., first semester or second semester; or the June semester or December semester) interchangeably in this report. We also refer to accident half-years or semesters as XXXX-1 or XXXX-2, or XXXX.1 or XXXX.2 where “XXXX” refers to the indicated year.

⁷ Our review of Third Party Liability is split between Bodily Injury and Property Damage.

⁸ The 6-12 month development period refers to the six months following the end of the particular accident half-year. For example, the 6-12 month development period for the 2016-2 accident half-year is the period spanning January 1, 2017 through June 30, 2017. Other development periods referenced in this report (e.g., 12-18) are similarly defined.

⁹ Evidence of seasonality was found to be present for Bodily Injury claim counts, Property Damage claim counts and amounts, Collision claim amounts, and Comprehensive claim counts.

Coverage	Count/Amount	Interval	Selected Factor
Bodily Injury	Claim Amount	6-12; 12-ult.	10 point volume weighted average; 4 point volume weighted average
Property Damage	Claim Count	36-ult.	1.00
Property Damage	Claim Amount	108-ult.	1.00
Accident Benefits	Claim Count	6-126; 126-ult.	10 point volume weighted average; 1.00
Accident Benefits	Claim Amount	12-126; 126-ult.	10 point volume weighted average; 1.00
Collision	Claim Count	36-ult.	1.00
Collision	Claim Amount	48-ult.	1.00
Comprehensive	Claim Count	30-ult.	1.00
Comprehensive	Claim Amount	30-ult.	1.00
All Perils	Claim Count	6-36; 36-ult.	10 point volume weighted average; 1.00
All Perils	Claim Amount	6-36; 36-ult.	10 point volume weighted average; 1.00
Specified Perils	Claim Count	6-36; 36-ult.	20 point volume weighted average; 1.00
Specified Perils	Claim Amount	6-36; 36-ult.	20 point volume weighted average; 1.00
Underinsured Motorist	Claim Count	6-84; 84-ult.	All year volume weighted average; 1.00
Underinsured Motorist	Claim Amount	6-ult.	All year volume weighted average

As part of our analysis we examined the claim count and claim amount development triangles for each of the top eight commercial automobile insurers in Alberta¹⁰. During the course of our review we identified insurers that reported Bodily Injury claim counts or claim amounts over recent accident half-years that appeared to be inconsistent with their reported claim counts and claim amounts over prior accident half-years. We had discussed the numbers with actuaries of each of the insurers, and learned the following.

- One insurer experienced a rather significant delay in claim reporting/recording that affected accident half-year 2015-2, with a “catch-up” occurring during the first five months of 2016.
- One insurer changed the way it recorded (and reported to GISA) its Bodily Injury claims – essentially not reporting claims for which it was believed that no loss (indemnity or ALAE) amounts would be paid. This change began during the first half of 2015.

As respects Bodily Injury claim counts, we now find that the above changes in claim reporting do not materially affect the development patterns or selection of ultimate claim counts.¹¹ However, as respect Bodily Injury claim amount, we find that the above changes in claim reporting cause the 6-12 development factor that we would have otherwise selected (the four point volume weighted average as noted in the above chart) to be too high by about 5%. We, therefore, select the ten point weighted average factor, which is about 5% lower than the four point volume weighted average factor.

¹⁰ The top eight insurers represent 80% of the total market.

¹¹ We understand that GISA has made an adjustment to the claim count 6-12 month development factor. We will explore this difference with GISA.

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Selection of Loss Trend Rates

Introduction

Loss trend rates are factors that are used to determine rate level indications. They 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 application of trend rates is, essentially, a two-step process. The data in the experience period under consideration is adjusted to reflect changes in cost conditions that have taken place (i.e., “past trend”), and then the data is further adjusted to reflect future changes in cost conditions that are expected to occur during the period 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. Future trend rates should reflect those same patterns that occurred during the experience period, as well as the likelihood that those patterns may change.

To derive estimates of appropriate loss trend rates, we performed a regression analysis using a model we developed, on our estimates of the Industry Alberta ultimate claim frequency, claim severity and loss cost¹² by accident half-year that we derived through the application of loss development factors and claim count development factors that we select (as we discuss in Section 4).

We performed our regression analysis by coverage. In doing so, we reflect parameters that could have an impact on the trends, such as time and seasonality. We also consider the results of

¹² Our severity and loss cost estimates include allocated loss adjustment expenses and a provision for the unallocated loss adjustment expenses.

statistical tests that we apply. As respects the Adjusted R-square, we generally refer to values of 80% or greater as "high," values between 40% and 80% as "moderate," and values below 40% as "low." We consider p-values under 5% to be significant. The confidence intervals that are presented represent a 95% probability range.

The identification of the underlying trend patterns over the experience period 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 modeled the data several different ways in an attempt to identify the underlying trends during the experience period: with and without certain data points to improve our understanding of the sensitivity of the calculated loss trend rates to the inclusion or exclusion of those points, and over time periods that are longer than the experience period as a means of increasing the stability/reliability of the data being analyzed and to assess changes in trend patterns that may have occurred. In selecting future trend rates, if appropriate, we adjusted our selected past trend rates after giving consideration to the changes that have occurred over the recent past if there is evidence of new patterns emerging.

Selection of Loss Trend Rates¹³

Time Period

We present the experience by accident half-year, spanning the period 2002-1 to 2016-2.

¹³ The past frequency rates, severities, and loss costs discussed in this section, including those presented in the graphs, represent our estimates of what the frequency rates, severities, and loss costs have been. Our estimates are based on our ultimate claim count and claim amount estimates discussed in the previous section; and include the allocated loss adjustment expenses and a provision for the unallocated loss adjustment expenses. Other actuaries may very well have different ultimate claim count and claim amount estimates, and hence different estimates of past frequency rates, severities, and loss costs.

Seasonality

Some coverages exhibit what is referred to as “seasonality” – where claim costs (number of claims or claim amounts) incurred during the first half of a year are generally higher/lower than claim costs incurred during the second half of a year. In the coverage-by-coverage discussion that follows, we state whether or not seasonality is applied.

Weather

We noted in our 2016 AR report that Alberta experienced relatively mild weather (low snow precipitation) during the second half of 2015, and that this may have contributed to a general decline in frequency.¹⁴ The recorded snow precipitation level at the Edmonton and Calgary airports during the first half of 2016 was also relatively low¹⁵, while the snow precipitation level in the second half of 2016 was more normal - about 45% higher than the second half of 2015, but just 5% below the average level of snow precipitation for the second half of a year in these areas. The estimated Bodily Injury and Property Damage claim frequencies for the second half of 2016 are each close to 15% lower than the second half of 2015, while the estimated Collision frequency is about 3% higher than the second half of 2015. We continue to believe that weather conditions – particularly snow precipitation - (among other factors) affect claim frequency. However, recognizing the limitations of the available weather data and of its use¹⁶, and that based on our analysis snow precipitation doesn’t materially improve the regression fits over those in which we include the unemployment rate as a parameter (see below), we have not considered, nor present, snow precipitation level as a parameter in our trend analysis.

¹⁴ The snow precipitation level for the Edmonton and Calgary airports during the second half of 2015 was the lowest recorded level for the second half of a year since 2007, and about 35% below the average of all prior years (second half) since 1995.

¹⁵ The snow precipitation level for the Edmonton and Calgary airports during the first half of 2016 was the lowest recorded level for the first half of a year (over the period 1995-2016) and about 70% below the average of all prior years (first half) since 1995.

¹⁶ The Edmonton and Calgary airport areas are not fully representative of the driving conditions throughout Alberta, the available data for these two areas may not be complete (and there are gaps of various degrees in the recorded snowfall throughout the province), and there is some overlap with seasonality. Also, other factors, such as mileage driven, road congestion, and distracted driving are likely also affecting frequency.

Unemployment

Alberta's unemployment rate reached 8.1% in 2016, the highest level in twenty years.¹⁷ The sharp rise in the unemployment rate, which is coincident with the low level of snowfall, may be contributing to the recent decline in claim frequency. We have not explicitly included unemployment as a parameter in our regression analysis that underlies our selected trend rates. However, we present exhibits with unemployment as a parameter for informational purposes in Appendix B, and present graphs of fitted frequency regressions with unemployment as a parameter within the Bodily Injury, Property Damage, and Collision trend discussions.

Reforms and Level Changes

The purpose of the reform or level change parameter is to isolate and, in a sense, remove the impact that reforms or other events had on the level of claim costs so that the underlying claim cost trend can be identified. Our selected Bodily Injury trend rate is based on claim experience after the 2004 reforms, so we do not include a reform parameter in our regression analysis.

Other Considerations

In selecting loss trend rates, we also consider:

- variance in results based on different historical time periods selected (i.e., changes in trend patterns)
- relationship between frequency and severity trend patterns
- uncertainty in the estimated values

¹⁷ Source: Statistics Canada

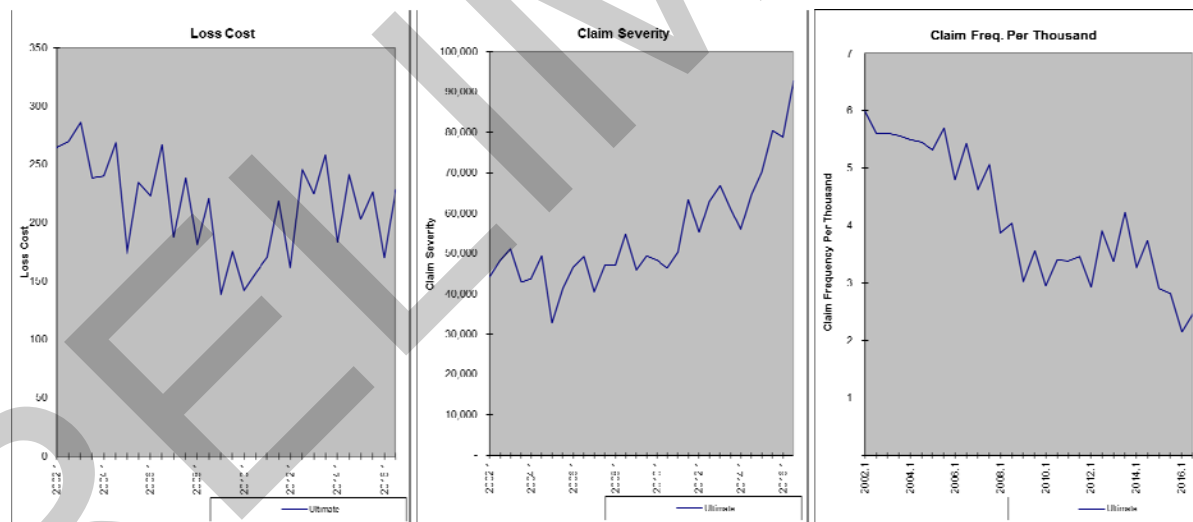
Our Selected Trend Rates

Bodily Injury

Based on data as of December 31, 2015, we selected a past loss cost trend rate of +5.0%.

We estimate that during 2016, as compared to 2015, claim frequency decreased by 19.2%, severity increased by 14.8%, and loss cost decreased by 7.2%.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2.



The historical data points (as depicted in the above graphs) indicate a considerable amount of variability. Following a sharp decline in 2005 (likely related to the reforms), severity has generally exhibited an upward trend including large increases in 2015 and 2016. Frequency

exhibited a downward trend until about 2010 when it began to flatten and then increase until declining rather significantly in 2015 and 2016. Following a period of decline, loss cost began to rise after 2009, but has leveled off (small decline) since 2011.

The modeled severity, frequency, and loss cost trends, associated Adjusted R-square values, p-values, and confidence intervals, over various time periods, with and without a seasonality parameter, with and without an unemployment rate parameter, with no level changes, and with no data exclusions, are presented in Appendix B. We show modeled trends ending 2016-1 and 2016-2 given the uncertainty surrounding the estimated Bodily Injury claim costs.

The modeled severity trends, without seasonality or unemployment (which we do not find to be significant), over the periods beginning 2005 through 2011 and ending either 2016-1 or 2016-2 generally fall within the range of +6.0% to +9.0%¹⁸ with moderate Adjusted R-square values and significant p-values for time. We select a severity trend of +6.5% based on the modeled trends over the longer time periods ending 2016-1 and 2016-2.

The selection of a frequency trend is challenging.

The modeled frequency trends over the periods beginning 2005 through 2010 and ending 2016-2, with seasonality (which we find to be significant), range from about -5.5% to -3.5%, but with moderate to low Adjusted R-squares. However, this time period spans a period of declining frequency (through 2010), flat to increasing frequency (through 2014), and sharply decreasing frequency (in 2015 and 2016). We note that the modeled trends beginning after 2008 and ending 2016 gradually decline and have higher Adjusted R-squares, and this is due to the greater impact of the noted sharp decline in frequency in 2015 and 2016.

The sharp decline in frequency in 2015 and 2016 (from 3.51 claims per 1,000 vehicles in 2014 to 2.31 claims per 1,000 vehicles in 2016) is coincident with the noted change in economic

¹⁸ The higher trends are over the more recent periods where the impact of the relatively high severities in 2015 and 2016 is greatest.

conditions (sharp rise in the unemployment rate). This suggests that the high unemployment levels may have had some impact on claim frequency.¹⁹

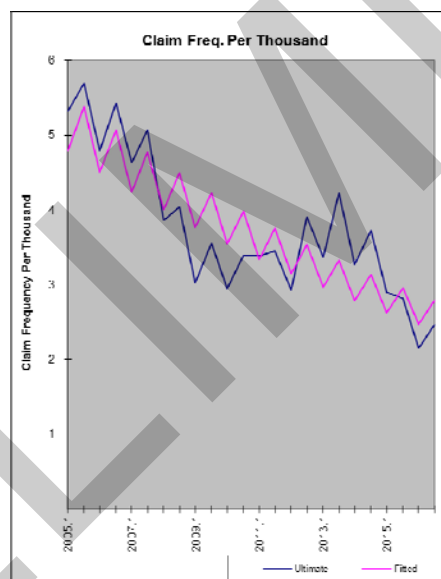
Below we present graphs of fitted regression lines over the period 2005-1 through 2016-2. The p-value of each parameter is in parentheses; the Adjusted R-square and modeled trend rate are also shown.

Model #1

Parameters: Time (0.0%), Seasonality (1.5%)

Adjusted R-square (72%)

Trend (-5.8%)



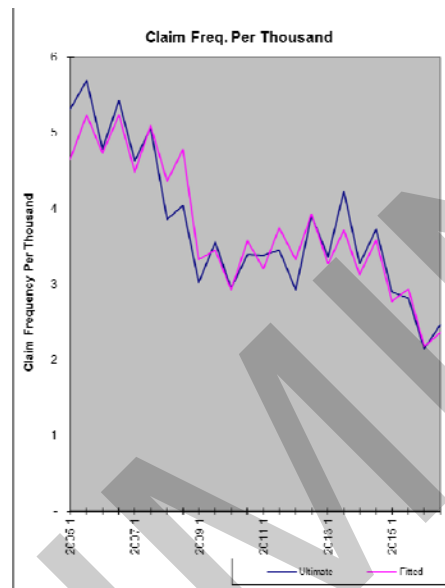
¹⁹ Perhaps fewer miles driven and less traffic congestion.

Model #2

Parameters: Time (0.0%), Seasonality (0.1%), Unemployment (0.0%)

Adjusted R-Square (89%)

Trend (-3.5%)



The results (but not the graphs) over other time periods are presented in Appendix B.

Model #2 shows that the fit significantly improves with the addition of the unemployment parameter. The better fit can also be seen in Table 1.

Table 1

Accident Year	Actual Frequency	Fitted Model #1	Fitted Model #2
2012	3.42	3.33	3.61
2013	3.81	3.14	3.49
2014	3.51	2.96	3.35
2015	2.86	2.79	2.86
2016	2.31	2.62	2.27

Another consideration is to perform the regression from 2005-1 to 2014-2 and compare the fitted/projected frequency rates with the actual frequency rates in 2015 and 2016. Under Model #2 (time, seasonality, and unemployment), the results are as follows.

Table 2

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	3.42	3.60	
2013	3.81	3.47	
2014	3.51	3.33	
2015	2.86		2.83
2016	2.31		2.23

Table 2 shows the fitted frequencies are about the same as the Model #2 fitted frequencies shown in Table 1 (where the trend period includes 2015 and 2016) – with the projected frequencies for 2015 and 2016 being relatively close to the actual frequencies.

These results suggest that consideration should be given to including the unemployment rate as a parameter. If unemployment were included as a parameter, it would be necessary to forecast

the unemployment rate at July 1, 2019²⁰ and calculate the average frequency “trend”²¹ from the experience period used in rate indication calculations to July 1, 2019. Forecasting unemployment rates is, of course, subject to a high degree of uncertainty.

We provide an example for illustration purposes.

This example is based on Model #2 (over the entire 2005-1 to 2016-2 time period).

If we assume the average unemployment rate for 2019 is 7.1%²², then the fitted/projected frequency rates are as follows.

Table 3

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	3.42	3.61	
2013	3.81	3.49	
2014	3.51	3.35	
2015	2.86	2.86	
2016	2.31	2.27	
1/1/19-12/31/19			2.24

If we then assume equal weight is applied to each of the five years in the 2012-2016 experience period, the average annual frequency “trend”²³ rate to the 1/1/19-12/31/19 accident year is -5.5%.

²⁰ This is the assumed average accident date under the rates that will be subject to the trend Benchmarks.

²¹ What we refer to as “trend” represents average annual change in the ratio of the fitted frequencies to the projected frequency. Hence, this is not the same as trend in the more traditional sense.

²² The source for the forecasted unemployment rates is the Government of Alberta 2017 Economic Outlook (part of the 2017 Budget).

²³ See note 21

Of course, the indicated “trend” depends on the experience period used and the weights that are applied.

We welcome the thoughts of interested parties on the question of introducing the Alberta unemployment rate in the selection of the frequency trend rate (as well as any other aspects of the regression modeling we have performed).

As our preliminary estimate, we select a past/future frequency trend of -5.5%%, which represents the approximate modeled frequency trend over the periods beginning 2005 and 2006, ending 2016-2 (with seasonality).

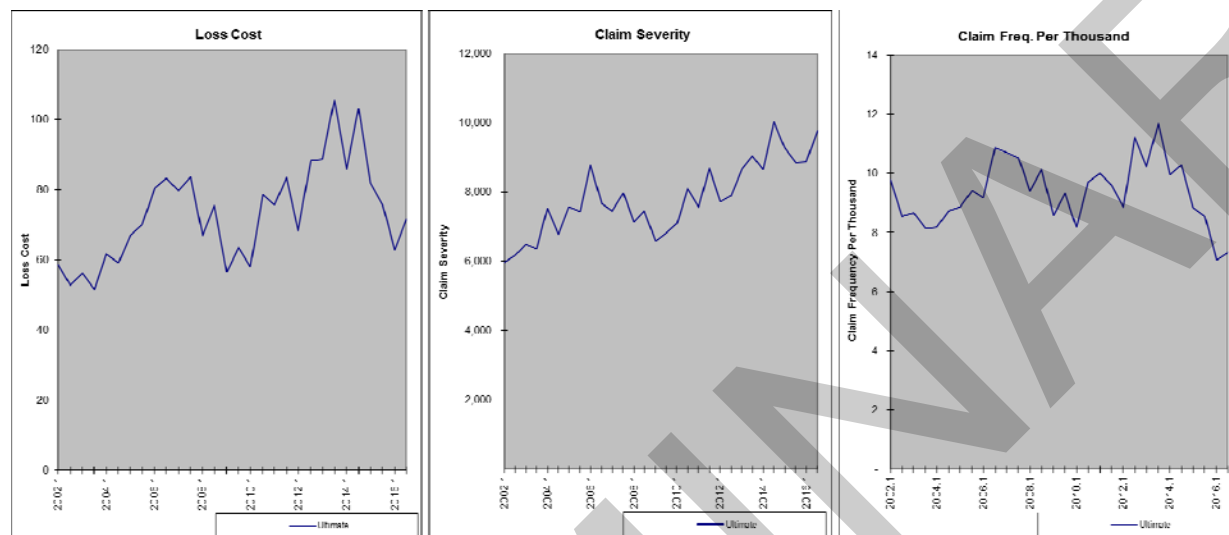
As a result we select a past and future loss cost trend rate of +1.0% – four points lower than our 2016 AR selected trend.

Property Damage

Based on data as of December 31, 2015, we selected a past loss cost trend rate of +5.5%.

We estimate that during 2016, as compared to 2015, claim frequency decreased by 17.3%, severity increased by 3.1%, and loss cost decreased by 14.7%. As discussed earlier, this large decline in frequency may be, in part, attributed to economic conditions.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2.



The historical data points indicate a considerable amount of variability – particularly for frequency. Severity has generally trended upward (including a decline from 2007 to 2009). Similar to Bodily Injury, frequency trended downward from 2006 until about 2010, then began to rise until declining rather significantly in 2015 and 2016. Following a period of decline, loss cost began to rise after 2009, but declined sharply in 2015 and 2016.

The modeled severity, frequency, and loss cost trends, associated Adjusted R-square values, p-values, and confidence intervals over various time periods ending 2016-2, with and without a seasonality parameter, with and without an unemployment rate parameter, with no level changes, and with no data exclusions, are presented in Appendix B.

The modeled severity trends, without seasonality or unemployment, over the periods beginning 2005 through 2012 and ending 2016-2 generally fall within the range of +2.5% to +4.5% with moderate Adjusted R-square values and significant p-values for time. We select a severity trend of +4.5% based on the modeled trends over the time periods with the higher Adjusted R-squares.

Our discussion regarding frequency is similar to that for Bodily Injury.

The modeled frequency trends over the periods beginning 2005 through 2009 and ending 2016-2, without seasonality (which we do not find to be significant), generally cluster around -1.5%, but with low Adjusted R-squares and p-values for time that are not significant. However, this time period spans a period of declining frequency (through 2010), flat to increasing frequency (through 2014), and sharply decreasing frequency (in 2015 and 2016). We note that the modeled trends beginning after 2008 and ending 2016 gradually decline, have higher Adjusted R-squares, with p-values for time that are significant – and this is due to the greater impact of the noted sharp decline in frequency in 2015 and 2016.

The sharp decline in frequency in 2015 and 2016 (from 20.24 claims per 1,000 vehicles in 2014 to 14.39 claims per 1,000 vehicles in 2016) is coincident with the noted change in economic conditions (sharp rise in the unemployment rate). This suggests that the high unemployment levels may have had some impact on claim frequency.

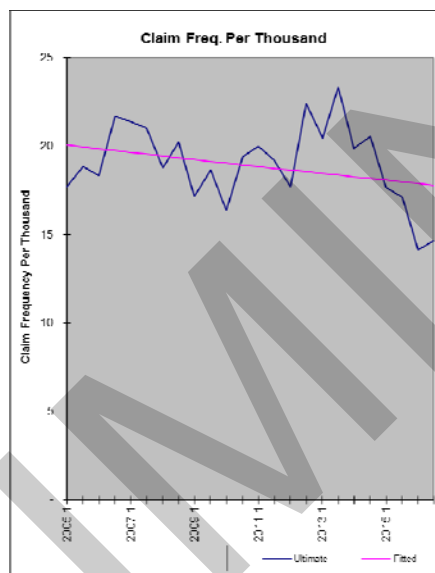
Below we present graphs of fitted regression lines over the period 2005-1 through 2016-2. The p-value of each parameter is in parentheses; the Adjusted R-square and modeled trend rate are also shown.

Model #1

Parameters: Time (15.8%)

Adjusted R-square (5%)

Trend (-1.0%)

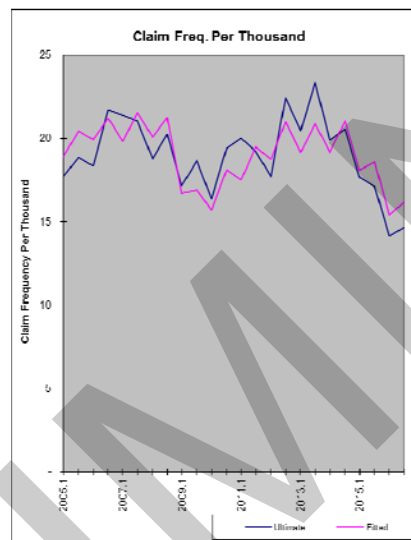


Model #2

Parameters: Time (18.0%), Seasonality (5.0%), Unemployment (0.0%)

Adjusted R-Square (61%)

Trend (+0.8%)



The results (but not the graphs) over other time periods are presented in Appendix B.

Model #2 shows that the fit significantly improves with the addition of the unemployment parameter, but the fit is not as strong as it is for Bodily Injury and the p-value for time is not significant. The better fit (as compared to Model #1) can also be seen in Table 4.

Table 4

Accident Year	Actual Frequency	Fitted Model #1	Fitted Model #2
2012	20.10	18.61	19.84
2013	21.95	18.42	20.00
2014	20.24	18.23	20.09
2015	17.39	18.04	18.34
2016	14.39	17.85	15.78

Another consideration is to perform the regression from 2005-1 to 2014-2 and compare the fitted/projected frequency rates with the actual frequency rates in 2015 and 2016. Under Model #2 (time, seasonality, and unemployment), the results are as follows.

Table 5

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	20.10	20.44	
2013	21.95	20.75	
2014	20.24	21.02	
2015	17.39		19.96
2016	14.39		18.23

Table 5 shows the fitted frequencies are not quite as close to the actual frequencies as are the Model #2 fitted frequencies shown in Table 1 (where the trend period includes 2015 and 2016). It also shows that the 2015 and 2016 projected frequencies are not as close to the actual 2015 and 2016 frequencies as we find to be the case for Bodily Injury.

Nevertheless, these results suggest that consideration should be given to including the unemployment rate as a parameter. As noted previously, if unemployment were included as a parameter, it would be necessary to forecast the unemployment rate at July 1, 2019 and calculate the average frequency “trend”²⁴ from the experience period used in rate indication calculations to July 1, 2019.

We provide an example for illustration purposes.

This example is based on Model #2 (over the entire 2005-1 to 2016-2 time period).

If we assume the average unemployment rate for 2019 is 7.1%²⁵, then the fitted/projected frequency rates are as follows.

Table 6

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	20.10	19.84	
2013	21.95	20.00	
2014	20.24	20.09	
2015	17.39	18.34	
2016	14.39	15.78	
1/1/19-12/31/19			17.47

²⁴ What we refer to as “trend” represents average annual change in the ratio of the fitted frequencies to the projected frequency. Hence, this is not the same as trend in the more traditional sense.

²⁵ The source for the forecasted unemployment rates is the Government of Alberta 2017 Economic Outlook (part of the 2017 Budget).

If we then assume equal weight is applied to each of the five years in the 2012-2016 experience period, the average annual frequency “trend”²⁶ rate to the 1/1/19-12/31/19 accident year is -1.0%.

As previously noted, the indicated “trend” depends on the experience period used and the weights that are applied.

Again, we welcome the thoughts of interested parties on the question of introducing the Alberta unemployment rate in the selection of the frequency trend rate.

As our preliminary estimate, we select a past/future frequency trend of +0.0%% based on the low Adjusted R-square values and non-significant p-values for time associated with the long-term regression models (without seasonality or unemployment).

As a result we select a past and future loss cost trend rate of +4.5% – one point lower than our 2016 AR selected trend.

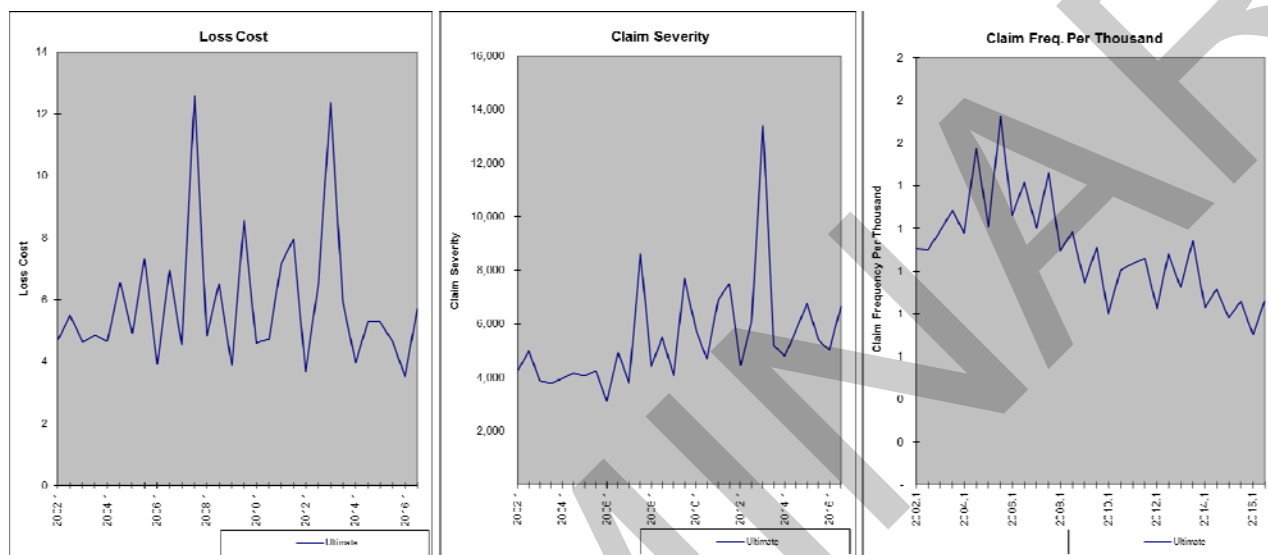
Accident Benefits

Based on data as of December 31, 2015, we selected a past loss cost trend rate of +0.0%.

We estimate that during 2016, as compared to 2015, claim frequency decreased by 3.9%, severity decreased by 2.1%, and loss cost decreased by 6.9%.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2.

²⁶ See note 24



The historical data points reveal a considerable amount of variability with severity generally exhibiting an upward trend with relatively high data points in 2007-2 and 2013-1; frequency exhibiting a downward trend, including a relatively flat trend from about 2009 to 2014, followed by declines in 2015 and 2016; and loss cost exhibiting a somewhat flat trend, also with relatively high 2007-2 and 2013-1 data points.

The modeled severity, frequency, and loss cost trends, associated Adjusted R-square values, p-values, and confidence intervals over various time periods ending 2016-2, with and without a seasonality parameter, with and without an unemployment rate parameter, with no level changes, with and without 2007-2 and 2013-1, are presented in Appendix B.

We note that the frequency rate did not decline as sharply in 2015 and 2016 as it did for the other major coverages. We, therefore, do not discuss results including the unemployment rate as a parameter, although we present modeled trends including unemployment in Appendix B.

All of the modeled severity trends ending 2016-2, without seasonality (which we do not find to be significant), have low Adjusted R-square values and p-values for time that are not significant.

The modeled frequency trends over the time periods beginning 2005 through 2011 and ending 2016-2 generally fall within the range of approximately -3.5% to -5.0%, with moderate Adjusted R-square values and significant p-values for time. The modeled frequency trends are more negative over the more recent time periods and this is due to the greater impact of the frequency decline in 2015 and 2016.

All of the modeled loss cost trends ending 2016-2, without seasonality (which we do not find to be significant), have low Adjusted R-square values and p-values for time that are not significant.

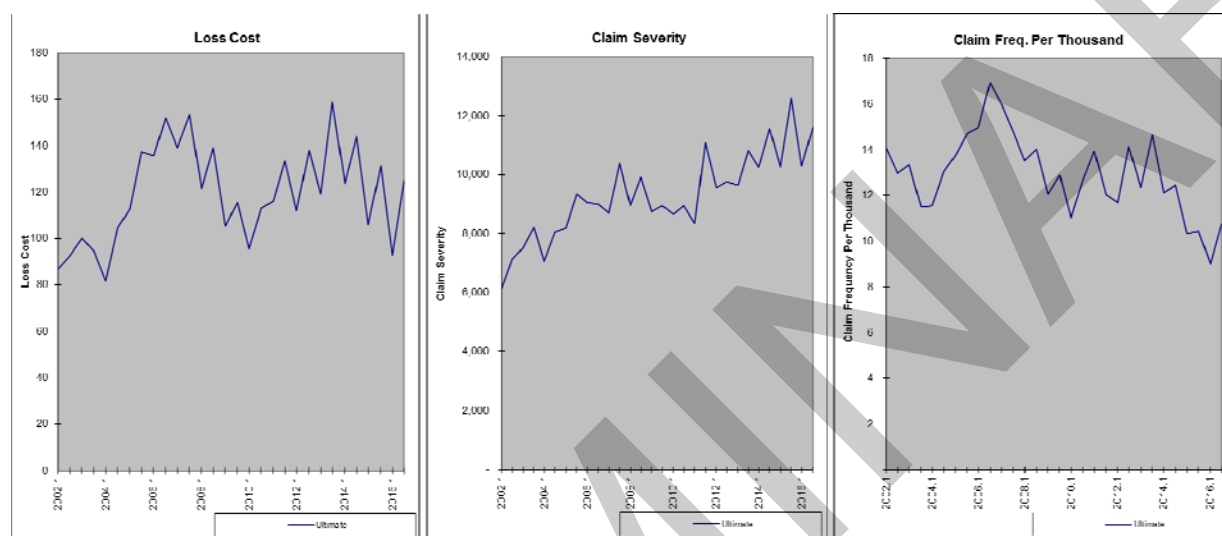
Given the loss cost results, we select a past loss cost trend rate of +0.0%, the same as our prior selected trend.

Collision

Based on data as of December 31, 2015, we selected a past loss cost trend rate of +5.0%.

We estimate that during 2016, as compared to 2015, claim frequency decreased by 4.7%, severity decreased by 3.8%, and loss cost decreased by 8.4%.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2.



The historical data points indicate a considerable amount of variability. Severity has exhibited a generally upward trend, including a decline beginning in 2008 and a continuation of the upward trend beginning in 2010; frequency has exhibited changing trend patterns, but a downward trend since 2006 that has been relatively flat from 2009 through 2014, with a sharp decline in 2015 and more modest decline in 2016; and loss cost has exhibited an upward trend through 2007, followed by a downward trend through 2010, an upward trend through 2014, and declines in 2015 and 2016.

The modeled severity, frequency, and loss cost trends, associated Adjusted R-square values, p-values, and confidence intervals over various time periods ending 2016-2, with and without a seasonality parameter, with and without an unemployment rate parameter, with no level changes, are presented in Appendix B.

The modeled severity trends, including seasonality (which we find to be significant), over all time periods ending 2016-2 generally fall within the range of +2.5% to +4.0%, with moderate

Adjusted R-square values and significant p-values. The higher modeled trends generally begin around 2009, which generally coincides with the change in pattern observed in the graph – a trend that is tempered by the decline in severity in 2016. We select a severity trend of +4.0% based on the modeled trends over the periods beginning 2009 and 2010, which have the highest Adjusted R-squares.

Our discussion regarding frequency is similar to that for Bodily Injury and Property Damage.

The modeled frequency trends over the periods beginning 2005 through 2010-1 and ending 2016-2, without seasonality (which we do not find to be significant), generally fall within the range of -3.5% to -3.0%, but with moderate to low Adjusted R-squares. However, this time period spans a period of declining frequency (through 2010), flat to increasing frequency (through 2014) and sharply decreasing frequency (in 2015 and 2016). We note that the modeled trends beginning after 2010 and ending 2016 gradually decrease, have modestly higher Adjusted R-squares, with p-values for time that are significant – and this is due to the greater impact of the noted sharp decline in frequency in 2015 and 2016.

The sharp decline in frequency in 2015 and 2016 (from 24.54 claims per 1,000 vehicles in 2014 to 19.76 claims per 1,000 vehicles in 2016) is coincident with the noted change in economic conditions. This suggests that the high unemployment levels may have had some impact on claim frequency.

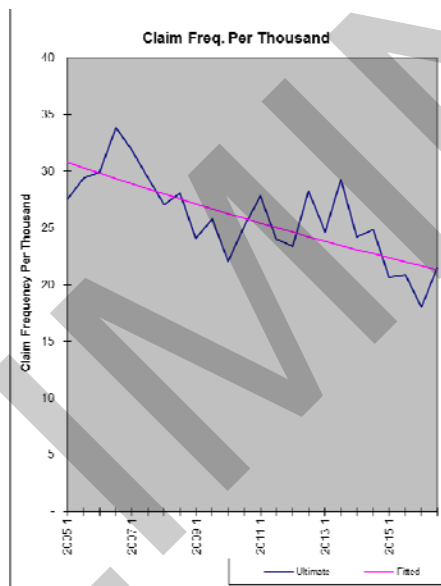
Below we present graphs of fitted regression lines over the period 2005-1 through 2016-2. The p-value of each parameter is in parentheses; the Adjusted R-square and modeled trend rate are also shown.

Model #1

Parameters: Time (0.0%)

Adjusted R-square (54%)

Trend (-3.2%)

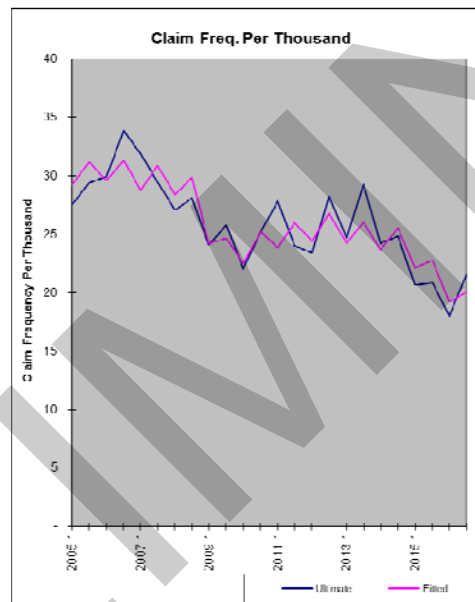


Model #2

Parameters: Time (0.3%), Seasonality (3.1%), Unemployment (0.1%)

Adjusted R-Square (77%)

Trend (-1.8%)



The results (but not the graphs) over other time periods are presented in Appendix B.

Model #2 shows that the fit significantly improves with the addition of the unemployment parameter. The better fit can also be seen in Table 7.

Table 7

Accident Year	Actual Frequency	Fitted Model #1	Fitted Model #2
2012	25.87	24.43	25.59
2013	27.04	23.66	25.20
2014	24.54	22.91	24.59
2015	20.74	22.19	22.44
2016	19.76	21.49	19.60

Another consideration is to perform the regression from 2005-1 to 2014-2 and compare the fitted/projected frequency rates with the actual frequency rates in 2015 and 2016. Under Model #2 (time, seasonality, and unemployment), the results are as follows.

Table 8

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	25.87	26.09	
2013	27.04	25.73	
2014	24.54	25.30	
2015	20.74		23.24
2016	19.76		20.46

Table 8 shows the fitted frequencies are not quite as close to the actual frequencies as are the Model #2 fitted frequencies shown in Table 1 (where the trend period includes 2015 and 2016). It also shows that the 2015 and 2016 projected frequencies are not as close to the actual 2015 and 2016 frequencies as we find to be the case for Bodily Injury.

Nevertheless, these results suggest that consideration should be given to including the unemployment rate as a parameter. As noted previously, if unemployment were included as a parameter, it would be necessary to forecast the unemployment rate at July 1, 2019 and calculate the average frequency “trend”²⁷ from the experience period used in rate indication calculations to July 1, 2019.

We provide an example for illustration purposes.

This example is based on Model #2 (over the entire 2005-1 to 2016-2 time period).

If we assume the average unemployment rate for 2019 is 7.1%²⁸, then the fitted/projected frequency rates are as follows.

Table 9

Accident Year	Actual Frequency	Fitted Frequency	Projected Frequency
2012	25.87	25.59	
2013	27.04	25.20	
2014	24.54	24.59	
2015	20.74	22.44	
2016	19.76	19.60	
1/1/19-12/31/19			19.62

²⁷ What we refer to as “trend” represents average annual change in the ratio of the fitted frequencies to the projected frequency. Hence, this is not the same as trend in the more traditional sense.

²⁸ The source for the forecasted unemployment rates is the Government of Alberta 2017 Economic Outlook (part of the 2017 Budget).

If we then assume equal weight is applied to each of the five years in the 2012-2016 experience period, the average annual frequency “trend”²⁹ rate to the 1/1/19-12/31/19 accident year is -3.1%.

Of course, the indicated “trend” depends on the experience period used and the weights that are applied.

Again, we welcome the thoughts of interested parties on the question of introducing the Alberta unemployment rate in the selection of the frequency trend rate.

As our preliminary estimate, we select a past/future frequency trend of -3.5%, which represents the approximate modeled frequency trend, without seasonality, over the periods beginning 2005 through 2007 and ending 2016-2.

As a result we select a past and future loss cost trend rate of +0.5% – four and one-half points lower than our 2016 AR selected trend.

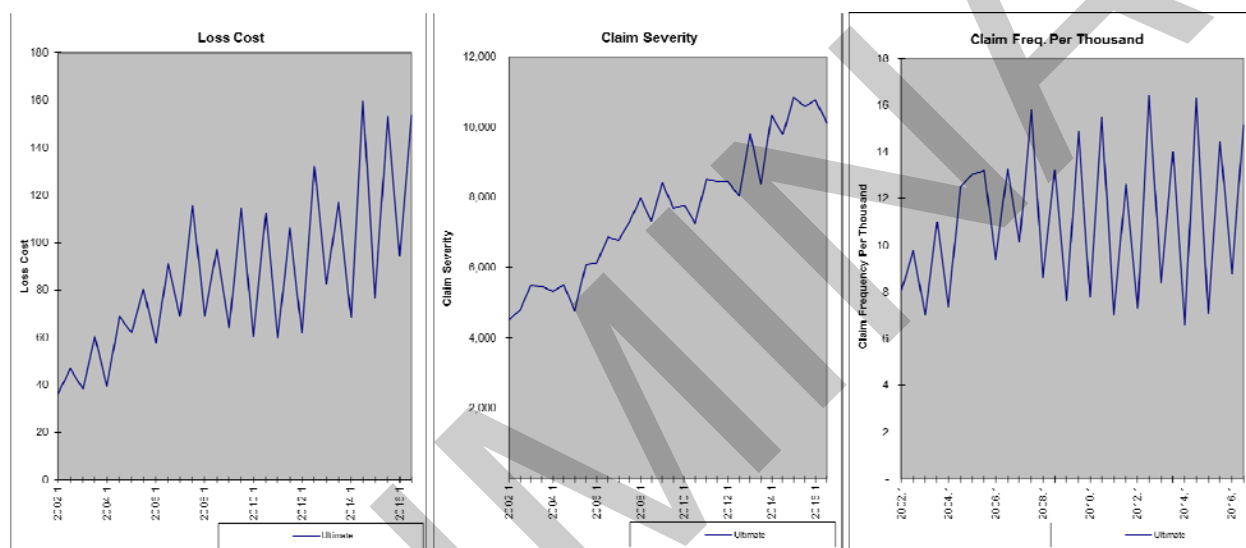
Comprehensive

Based on data as of December 31, 2015, we selected a past loss cost trend rate of +1.0% through December 31, 2014, a level change at 2015 of +12%, and a future trend rate beginning January 1, 2015 of +8%.

We estimate that during 2016, as compared to 2015, including catastrophe related claims, claim frequency increased by 10.8%, severity decreased by 2.9%, and loss cost increased by 7.6%.

²⁹ See note 27

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2.

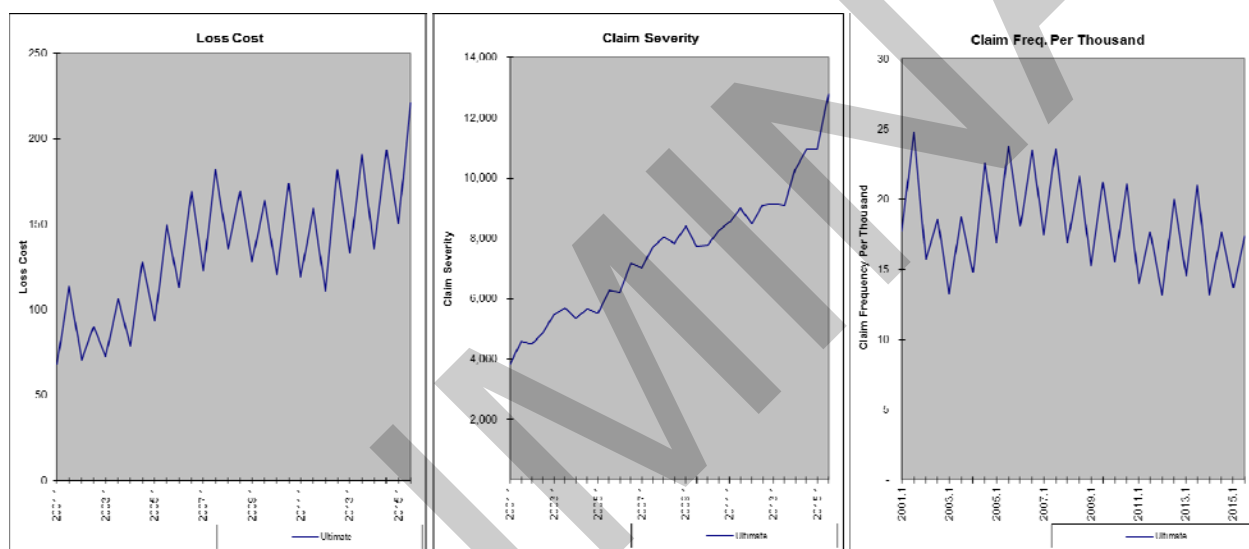


The historical data points show a considerable amount of variability; with severity generally exhibiting an upward trend; frequency exhibiting a somewhat flat, but highly seasonal trend; and loss cost exhibiting an upward trend.

This high degree of variability (particularly for frequency and loss cost) is in part due to the seasonal nature of the claims, but is also likely due to the exposure to catastrophes. (See discussion of catastrophe losses later in this report.)

GISA does not publish updated catastrophe claim experience coincident with its mid-year data release, so we repeat the discussion of catastrophe losses that we presented in our 2016 AR report.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002 through 2015, excluding claims attributed to catastrophes (as defined by GISA).



As can be seen from the graphs, the removal of catastrophe related claims somewhat reduces the variability. Subject to the remaining variability, severity has exhibited an upward trend – higher over the longer time periods, with relatively large increases in 2014 and 2015; frequency has exhibited a declining trend beginning 2006; and loss cost has exhibited an upward trend through 2008, a downward trend from 2008 through the first half of 2012, and an upward trend thereafter.

The measured loss cost, severity, and frequency trends, associated Adjusted R-square values, p-values, and confidence intervals over various trend measurement periods, with seasonality for loss cost and frequency, including and excluding losses attributed to catastrophes are presented in Exhibit 3.

Excluding losses attributed to catastrophes, the measured severity trends over the periods beginning 2002 through 2009 and ending 2014-2 (to exclude the rise in theft claims discussed later) generally fall within the range of +4.5% to +6.5% with moderate to high Adjusted R-square values and significant p-values. However, these trends, as well as the higher trends beginning 2010 are quite affected by a 17% increase in severity in 2014 over 2013 (not due to theft claims). The measured trends through 2013 are lower. Prior to consideration of the increase in theft losses in 2015 (discussed below), we select a severity trend of +4.0% based on the measured trends beginning 2006-1 ending 2013-2 (consistent with frequency as discussed below)³⁰.

The measured frequency trends over the time periods beginning 2006 through 2008 and ending 2014-2 range from approximately -3.5% to -3.0%, with high Adjusted R-square values and significant p-values. However, these trends are also affected by a rather sharp decline in 2014. The measured frequency trends through 2013 are slightly higher. Prior to the consideration of the increase in theft losses in 2015 (discussed below), we select a frequency trend of -3.0% based on the measured trends beginning 2006-1 ending 2013-2.

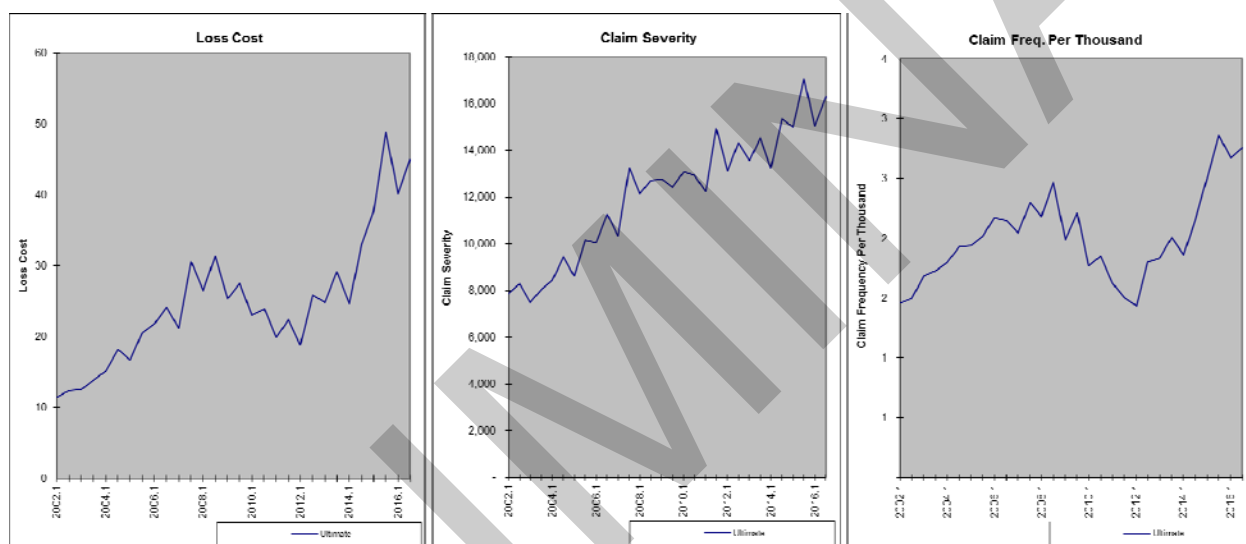
The selected +4.0% severity trend and -3.0% frequency trend approximately equate to a +1.0% loss cost trend. Therefore, prior to the consideration of the increase in theft losses in 2015 (discussed below), we select a loss cost trend of +1.0%.

Comprehensive - Theft

Unlike private passenger vehicles, theft losses flattened in 2016. We estimate that during 2016 theft claim frequency increased by 1.2%, severity decreased by 2.8%, and loss cost increased by 1.2%.

³⁰ The +4% trend is also consistent with the measured trend from 2002 through 2013, with a level change (that is significant) at 2006-1.

The following graphs display our estimate of the actual loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2002-1 through 2016-2 for Comprehensive-Theft Only.



The historical data points show a relatively high increasing severity trend; a generally declining frequency trend from 2008 through 2012, an increasing trend thereafter including a very sharp increase in 2015, but that leveled off in 2016; and a generally increasing loss cost trend pattern through 2008, then declining through 2011, and since increasing until a leveling off in 2016.

Comprehensive - Summary

We await the release of the Catastrophe Report to complete our discussion of the Comprehensive coverage trend rates.

Specified Perils

Due to insufficient data, we will select the same past and future loss cost trend rate we select for Comprehensive.

All Perils

Due to insufficient data, we will select a past and future loss cost trend rate that is in line with our selected rates for Collision and Comprehensive.

Underinsured Motorist

Due to insufficient data, we select the same past loss cost trend rate we select for Bodily Injury-severity, +6.5%

Selected Trend Rates - Summary

The following table summarizes our preliminary selected loss trend rates by sub-coverage compared to the loss trend rates we selected in those that we selected in our 2016 AR.

Estimated Annual Past/Future Loss Cost Trend Rates

Coverages	2016 AR	2017 AR
TPL-Bodily Injury	+5.0%	+1.0%
TPL-Property Damage	+5.5%	+4.5%
TPL - Subtotal	+5.25%	+2.5%
Accident Benefits	+0.0%	+0.0%
Collision	+5.0%	+0.5%
Comprehensive	+1.0%/+8.0% ³¹	NA*
All Perils	+5.0%	NA*
Specified Perils	+1.0%/+8.0% ³²	NA*
Underinsured Motorists	+5.0%	+6.5%

* We await GISA's release of the 2016 Catastrophe Report to complete our trend analysis for these coverages. We expect the report to be released in July.

³¹ With level change adjustment of +12% at 2015; future trend rate begins January 1, 2015.

³² With level change adjustment of +12% at 2015; future trend rate begins January 1, 2015.

6

Loss Adjustment Expenses

In determining their rate level needs, insurers should include provisions in their claim costs for allocated loss adjustment expenses (such as the legal expenses associated with claim settlement) and for unallocated loss adjustment expenses (the claim and settlement related expense that cannot be associated directly with individual claims) that are based on their experience.

For the analysis we perform of loss development factors, allocated loss adjustment expenses are included with the reported Industry loss data. For the analysis we perform of trends, we provide for unallocated loss adjustment expenses (ULAE) through the application of factors that are published and applied by GISA in the AIX reports to the accident year experience.

As points of reference for the Board as it reviews individual insurer rate filings, we provide the Board with the Industry average ULAE expense provisions published by GISA that are applied to the loss and allocated loss adjustment estimates.

ULAE Provision - Total Auto Province of Alberta

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
9.7%	8.7%	8.9%	8.4%	10.5%	10.2%	9.5%	9.1%	9.9%	9.3%	10.3%	8.5%

We include these provisions in our analysis of trends and note that the 8.5% provision for Accident Year 2016 represents a 1.8 percentage point reduction from the Accident Year 2015 provision.

7

Catastrophe Provision

As GISA has not yet updated its Catastrophe report through December 31, 2016, we repeat the discussion and recommendation we presented in our 2016 AR report. We note that it is our understanding that the losses arising from the Fort McMurray wildfires will not be considered catastrophe losses by GISA. Nevertheless, we believe that the fortuitous nature of these losses should be considered by insurers in calculating their rate level needs. Treating these losses as catastrophe related losses is one approach.

Comprehensive coverage (in particular) claim costs are affected by the occurrence (or non-occurrence) of catastrophes. GISA defines catastrophes as “weather-related events such as windstorms, hail, and flooding that caused multiple losses to the insurance industry.” Since catastrophic losses cannot be predicted, in determining rate level indications insurers should remove actual Comprehensive coverage claim costs attributed to catastrophes that occurred in the experience period and include a provision for the amount of catastrophe losses that would be expected on average in any given year.

The table below provides information on the catastrophe losses that have occurred in Alberta over the years 2002–2015 for commercial vehicle Comprehensive coverage as reported by GISA. The table shows, among other things, the relationship (presented as factors) between the dollars of catastrophic losses to non-catastrophic losses. For example, over the last ten years approximately \$73 million of catastrophic losses have been reported as compared to approximately \$333 million of non-catastrophic losses – a ratio of about 22%. Over the last five years approximately \$50 million of catastrophic losses have been reported as compared to approximately \$182 million of non-catastrophic losses – a ratio of about 28%.

In a written letter to the Board following the Open meeting and following GISA's release of the 2015 Catastrophe Report, IBC stated that it continues to recommend a benchmark provision for private passenger vehicles that is based on the weighted average of the last five accident years. We assume that IBC holds the same position with respect to commercial vehicles, which, we note, would be a factor of 1.28.

We acknowledge that the province has experienced a higher level of catastrophe related Comprehensive claims over the past five years as compared to the prior five years, and that this more recent experience should be given greater weight. However, we find the approach of averaging the ten year and five year weighted averages to be reasonable. This approach results in an average provision of 25%.

However, the 25% doesn't fully reflect the higher level of theft losses that we assume will exist after 2015.³³ Making such an adjustment reduces the 25% to 20%³⁴, which we find to be a reasonable provision for catastrophe losses.

³³ We refer here to the 55% theft loss cost increase in 2015 and the assumed future loss cost trend of +10%.

³⁴ Prior to 2015, theft represented approximately 33% of non-catastrophe losses. 33 increased by the assumed 35% level change in 2015 and trended at 10% per year for 3.25 years is 61. 67 trended at 1% for 3.25 years is 69. The time weighted average of catastrophe losses to non-catastrophe losses excluding theft is 1.39. 39% of 69 is 27. 27 as a percent of 130 (61 + 69) is approximately 20%.

ALBERTA								
COMMERCIAL VEHICLES - COMPREHENSIVE COVERAGE								
		Reported	Reported	Catastrophe	Reported	Reported	Reported	Indicated
	Accident	Total #	Catastrophe	# Claims	Comprehensive	Non-Catastrophe	Catastrophe	Catastrophe
	Year	Claims	# Claims	%	Losses (\$ 000'S)	Losses (\$ 000'S)	Losses (\$ 000'S)	Factor
	2002	3,062	120	3.9%	13,156	12,716	440	1.03
	2003	3,128	347	11.1%	15,682	14,247	1,435	1.10
	2004	3,531	214	6.1%	17,456	16,683	773	1.05
	2005	4,816	1,070	22.2%	23,897	20,372	3,525	1.17
	2006	4,462	367	8.2%	26,997	25,540	1,457	1.06
	2007	5,721	1,203	21.0%	37,474	30,827	6,647	1.22
	2008	5,111	603	11.8%	35,867	32,966	2,901	1.09
	2009	5,233	993	19.0%	37,607	30,774	6,833	1.22
	2010	5,318	1,135	21.3%	35,906	30,561	5,345	1.17
	2011	4,511	879	19.5%	34,930	29,232	5,698	1.19
	2012	5,646	1,719	30.4%	42,240	31,866	10,374	1.33
	2013	5,542	1,138	20.5%	44,882	36,540	8,342	1.23
	2014	5,995	1,934	32.3%	54,687	39,815	14,872	1.37
	2015	6,062	1,576	26.0%	55,948	44,980	10,968	1.24
	Totals							
	All Year	68,138	13,298	19.5%	476,729	397,119	79,610	1.20
	Last 10	53,601	11,547	21.5%	406,537	333,100	73,437	1.22
	Last 5	27,756	7,246	26.1%	232,686	182,432	50,254	1.28
Avg. of Last 10 and 5								1.25
	Recommended							1.20

EX THEFT							
ALBERTA							
COMMERCIAL VEHICLES - COMPREHENSIVE COVERAGE							
Accident Year	Reported Total # Claims	Reported Catastrophe # Claims	Catastrophe # Claims %	Reported Comprehensive Losses (\$ 000'S)	Reported Non-Catastrophe Losses (\$ 000'S)	Reported Catastrophe Losses (\$ 000'S)	Indicated Catastrophe Factor
2002	2,556	120	4.7%	13,156	8,954	440	1.05
2003	2,536	347	13.7%	15,682	10,028	1,435	1.14
2004	2,872	214	7.5%	17,456	11,329	773	1.07
2005	4,089	1,070	26.2%	23,897	14,133	3,525	1.25
2006	3,616	367	10.1%	26,997	17,232	1,457	1.08
2007	4,768	1,203	25.2%	37,474	20,378	6,647	1.33
2008	4,025	603	15.0%	35,867	20,481	2,901	1.14
2009	4,255	993	23.3%	37,607	19,649	6,833	1.35
2010	4,493	1,135	25.3%	35,906	20,810	5,345	1.26
2011	3,796	879	23.2%	34,930	20,372	5,698	1.28
2012	4,878	1,719	35.2%	42,240	22,147	10,374	1.47
2013	4,595	1,138	24.8%	44,882	24,312	8,342	1.34
2014	4,946	1,934	39.1%	54,687	25,843	14,872	1.58
2015	4,541	1,576	34.7%	55,948	22,644	10,968	1.48
Totals							
All Year	55,966	13,298	23.8%	476,729	258,312	79,610	1.31
Last 10	43,913	11,547	26.3%	406,537	213,868	73,437	1.34
Last 5	22,756	7,246	31.8%	232,686	115,319	50,254	1.44
Avg. of Last 10 and 5							1.39

8

Investment Income on Cash Flow

The selected provision for claim cost should be adjusted (reduced) to reflect the investment income earned on the cash flows arising from the insurance operations (i.e., the premium collected before it is used to pay claim costs and other expenses). It has been the Board's position that the selected investment rate can be a risk-free rate based on Government of Canada bond yields.

We now calculate an investment rate of 1.90% in a manner consistent with the way in which we calculate the investment rate of 1.75% presented in our 2017 AR report for Private Passenger Vehicles - that is, based on the Alberta Government's June 2017 forecast of risk-free investment rates.

The latest Alberta Government forecasts for short-term 3-month bills and 3-year bond yields are as follows:³⁵

Year	3-Month	3-Year
2018	1.18%	1.79%
2019	1.88%	2.30%

Weighting the forecasted 3-month (25%) and 3-year (75%)³⁶ yields results in average yields of approximately 1.64% for 2018 and 2.20% for 2019. Weighting these estimated 2018 and 2019 yields by 50%/50%³⁷, respectively, results in an average yield of 1.90% (rounded).

³⁵ Source: Alberta Treasury Board and Finance.

³⁶ The 25%/75% weights are intended to approximate a duration of 2.3 years – the average number of years to settle Basic and Additional coverages claims.

³⁷ The 50%/50% weights target an average written date of January 1, 2019. This date is based on the following assumptions: (a) the interest rate will apply to filings submitted between October 1, 2017 and September 30, 2018, (b) the average filing submitted

As the calculated investment rate of 1.90% is close to the calculated and recommended investment rate of 1.75% for Private Passenger Vehicles, we recommend the Board consider the 1.75% rate as the risk-free interest rate Benchmark for Commercial Vehicles (all coverages).

Should the Government of Alberta again update its interest rate forecast before October 1, 2017, we recommend the Board consider any such updates in determining the risk-free interest rate Benchmark.

during this time period is April 1, 2018, (c) the average lag between filing submission and effective date is three months, (d) the filing effective date is July 1, 2018, and (e) the average written date is January 1, 2019.

9

Health Cost Recovery

The Alberta Treasury Board and Finance announced the 2017 Health Cost Recovery assessment factor (percentage) to be 5.67%.

Consistent with the position the Board has taken with respect to the Health Cost Recovery assessment, we recommend the Benchmark remain at 5.67% until the 2018 assessment is announced.

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Operating Expenses

In determining their rate level needs, insurers should include a provision for operating expenses that is based on their experience and expected future expense costs. To put the expense provisions of individual insurers in some perspective, we provide the Board with the Industry average expense provisions.

We recommend the same 26.7% operating expense provision that we recommend for private passenger vehicles serve as the benchmark for commercial vehicles.

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Profit

The Board's current position is to allow a profit provision of 7% of premium.

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Definition of Key Terms

To assist the reader in his or her understanding of our report, in this section we define and explain several insurance terms.

Insurance Coverages

We begin with a general description of the insurance coverages. We note that throughout this discussion of the insurance coverages, the term “insured” is generally used to mean the family of the owner of the policy, as well as any passengers or other drivers using the car with the owner’s permission.

Third Party Liability (TPL)

There are two parts to this Basic Coverage:

Bodily Injury (BI) coverage protects the insured against liability arising from an accident that causes bodily injury to another person. Coverage amounts available in Alberta range from the legal minimum of \$200,000 per claim to well over \$2,000,000 per claim.

Property Damage (PD) coverage protects the insured against liability arising from an accident that causes damage to the property of another person.

All drivers must purchase at least the legally required minimum amount of TPL coverage available in Alberta.

Accident Benefits (AB)

This Basic Coverage provides for such items as reimbursement of lost income, medical care costs, and funeral costs; it also provides benefits to the dependents of a deceased insured.

Underinsured Motorist (UIM)

This Additional Coverage protects the insured if he or she is caused bodily injury by an at-fault driver who is insured, but who does not have sufficient insurance to cover the liability; in this case the insured collects, from his or her own insurer, the amount of the damage that is in excess of the at-fault driver's liability coverage and up to the limit of UIM coverage purchased.

Collision

This Additional Coverage generally provides coverage (subject to a deductible) for damage to the insured's vehicle arising out of a collision.

Comprehensive

This Additional Coverage generally provides coverage (subject to a deductible) for damage to the insured's vehicle arising out of a peril other than collision (e.g., theft, vandalism, flood, hail, fire, etc.).

All Perils

This Additional Coverage combines the coverages for both collision and comprehensive into one coverage, subject to a common deductible level.

Specified Perils

This Additional Coverage, like collision and comprehensive, provides coverage (subject to a deductible) for specific perils to the insured's vehicle.

Other Terms

Accident Year

Accident year is the year in which an incident that gives rise to a claim occurred, regardless of when the claim is actually reported to an insurance company. For example, a claim reported on January 15, 2015 for injuries suffered in an automobile accident that occurred on December 15, 2014, is considered to be an accident year 2014 claim.

Allocated Loss Adjustment Expense (ALAE)

ALAE is the claim and settlement expense that can be associated directly with individual claims (e.g., legal expenses). (See ULAE)

Base Rate and Rate Differentials

Insurers generally determine the premium for a particular insured by multiplying a base rate by a series of rate differentials (or rate factors, or rate relativities) that reflect the particular characteristics of the insured. The terms rate differentials, rate factors and rate relativities are used interchangeably. Typically, there is one base rate for each combination of coverage and rating territory. For example, assume a base rate for the TPL coverage of \$200 in Territory #1 and a base rate for the TPL coverage of \$300 in Territory #2. Also assume the rate differential for a married male driver, age 40, is 1.25. The TPL premium for this driver would be \$250 in Territory #1 (\$200 times 1.25) and \$375 in Territory #2 (\$300 times 1.25).

Case Reserve

The Case Reserve is the provision established by insurance companies for the payment of future losses and claim related expenses associated with a particular claim.

Claim Frequency

Claim Frequency is the average number of claims that occur in a year, per insured vehicle. Claim frequency is a measure of the incidence of automobile claims. For example, if an insurance company provided insurance on 100 vehicles in year 2015 and 5 TPL claims occurred during 2015, the company's TPL claim frequency for 2015 would be 5 percent.

Claim Severity

Claim Severity is the average reported incurred loss and ALAE per claim. Claim severity is a measure of the average cost of automobile claims. For example, if the 5 claims in the previous example resulted in a total incurred loss and ALAE of \$100,000, the claim severity would be \$20,000.

Claim Count Development

Claim Count Development refers to the change in the number of reported claims for a particular accident year over time. (See Loss Development)

CLEAR

CLEAR refers to Canadian Loss Experience Automobile Rating, a system of categorizing Private Passenger vehicles, by make and model-year, for physical damage coverage rating purposes. CLEAR was developed by the Vehicle Information Centre of Canada (VICC), a part of the Insurance Bureau of Canada. CLEAR considers such elements as the reparability and damageability of the make and model-year. (See MSRP)

Combined Ratio

Combined Ratio is a common measure of premium adequacy. This is the sum of the loss ratio plus the expense ratio (operating expenses divided by written premium). A combined ratio in excess of 100 percent is an indication of premium inadequacy, before consideration of profit and investment income.

Earned Premium

Earned Premium is the amount of written premium that is associated with the portion of the policy term that has expired. For example, assume an automobile policy with a 12-month term is sold on January 1 for \$1,000. The amount of earned premium would be \$500 on June 30.

Exposure Unit

Exposure unit is a measure of loss potential. In commercial vehicle insurance, the exposure unit that is commonly used is the number of insured vehicles. For example, all else being equal, it would be expected that the cost to an insurance company to insure 50 cars would be twice the cost to insure 25 cars.

Health Cost Recovery Assessment

As per Provincial legislation, each insurer is assessed to achieve a target amount set by Government. The Minister of Finance publishes the assessment percentage applied to Third

Party Liability written premiums every year. GISA calculates and provides the assessment as a percentage of earned third party liability premiums. Under the legislation, the Government has no subrogation rights against the at-fault parties who are insured by policies of TPL insurance; but instead, collects the assessment.

Loss Cost (Pure Premium)

Loss Cost is the average incurred loss and ALAE per insured vehicle. The loss cost is the product of claim frequency and claim severity. Using the above example, a claim frequency of 5 percent, multiplied by a claim severity of \$20,000, produces a TPL loss cost of \$1,000.

Loss Development

Loss Development is the amount by which reported incurred losses and ALAE for a particular accident year change over time. The two main reasons why reported incurred losses and ALAE amounts change (or develop) over time are:

- (a) Reported incurred losses and ALAE only include case reserve estimates on claims for which the claim adjuster has knowledge, i.e., case reserves are only established on the claims that have been reported to the insurance company. Since typically some period of time elapses between the time of the incident and when it is reported as a claim, the number of reported claims for an accident year would be expected to increase over time. Claims that are reported after the close of an accident year are referred to as “late-reported” claims; and
- (b) Reported incurred losses and ALAE also develop because, for a number of reasons, the initial case reserves established by claims adjusters, can not fully and accurately reflect the amount the claim will ultimately settle at. This pattern of under-reserving and over-reserving is common within the insurance Industry (although the degree to which reported incurred losses and ALAE are under-reserved or over-reserved varies by company, jurisdiction, line of business, etc.). We further note that, over time, the percentage by which reported incurred losses and ALAE develop for a given accident year should decline. This is because as accident years become more mature (i.e., become older), fewer and fewer reserve estimates

are adjusted to reflect newly reported late claims, actual payments, and additional information that becomes available to the claims adjuster.

Loss Ratio

Loss ratio is the common measure of premium adequacy. Loss ratio is usually defined as estimated ultimate incurred losses and ALAE, divided by earned premium. But the ultimate incurred losses and ALAE may also include provisions for ULAE and the Health Cost Recovery assessment. A loss ratio that exceeds a company's break-even loss ratio (100 percent less budgeted expenses) would suggest premium inadequacy.

Loss Reserving Methods: Incurred Loss Development Method and Paid Loss Development Method

Loss reserving methods are often based on historical data grouped into a triangle format. A common approach is to have the rows represent the accident years, and the columns representing the value of the loss at specific dates, such as 12 months, 24 months, 36 months etc., from the beginning of the accident year. The historical changes in the loss data from period to period is reviewed to estimate a pattern to predict how current accident years losses will change over time as claims are settled and closed. The Incurred Loss Development Method refers to the triangle method of analysis, based on reported incurred losses. The Paid Loss Development Method refers to the triangle method of analysis, based on paid losses.

MSRP

MSRP refers to the Manufacturer's Suggested Retail Price, and is a system of categorizing Private Passenger vehicles, by make and model-year, for rating purposes for physical damage coverages, according to the original price of the vehicle. (See CLEAR)

Operating Expenses

Insurance company expenses, other than ALAE and ULAE, are typically categorized as Commissions, Other Acquisition, General, Taxes, Licenses, and Fees.

Paid Losses

The total aggregate dollar amount of losses paid on all reported claims as of a certain date.

Premium Drift

Premium Drift is a more general term, and refers to the changes in the amount of premium collected by insurance companies that are attributed to the purchase of newer and more expensive cars (i.e., rate group drift) as well as to changes in the amount of insurance coverage that is purchased (e.g., the purchase of higher limits of liability coverage would increase the amount of premium collected by insurance companies, while the purchase of higher physical damage deductibles would reduce the amount of premium collected by insurance companies). (See Rate Group Drift)

Rate Group Drift

Rate Group Drift refers to the amount of additional premium collected by insurance companies that is attributed to the purchase of newer and more expensive cars by insureds. The premiums charged by insurance companies are higher for newer and more expensive cars. Therefore, as insureds purchase newer and more expensive cars, the amount of premium collected by insurance companies increases. (See Premium Drift)

Ratemaking Methods: Pure Premium Method and Loss Ratio Method

The Pure Premium Method of ratemaking develops indicated rates that are expected to provide for the expected losses and expenses, and provide for the expected profit. The Loss Ratio Method of ratemaking develops indicated rate changes rather than indicated rates.

Rating Territory

Automobile premiums vary by the principal garaging location of the vehicle. Based on Insurance Bureau of Canada's automobile statistical plan, Alberta is currently divided into three areas, or rating territories, of principal garaging location; and, therefore, has three separate sets of rates depending upon which of the three territories the vehicle is principally garaged. (see Statistical Territory)

Reported Incurred Loss

The sum of:

- (a) the total aggregate dollar amount of losses paid on all reported claims as of a certain date (referred to as the valuation date), and
- (b) the total aggregate dollar amount of losses set in reserve by the claim adjusters on each open claim (referred to as “case reserves”) as of a certain date (the same evaluation date as for the paid loss amounts).

For example, if two claims were filed against an insurance company, one that settled for \$50,000 and the other that was open with a paid amount of \$25,000 and a “case reserve” (i.e., the claim adjuster’s estimate of the dollars still to be paid on the claim) of \$30,000, then the total reported incurred loss on the two claims would be \$105,000 (the sum of \$50,000, plus \$25,000, plus \$30,000).

Reserve

A Reserve is the aggregate provision identified by an insurance company for the payment of future losses and claim related expenses associated with claims that have been incurred.

Surplus

Surplus is the excess of the assets of an insurance company over its liabilities.

Statistical Territory

Automobile premiums vary by the principal garaging location of the vehicle. Alberta is divided into four statistical territories, of principal garaging location. Specific statistical territories are grouped together to represent a specific rating territory. In some cases there is one statistical

territory in a rating territory, in other cases the rating territory is comprised of two or more statistical territories. (See Rating Territory.)

Total Return on Equity

Total Return on Equity (ROE) refers to an insurer's profit as a percentage of its surplus, where profit is the sum of (a) underwriting profit, and (b) investment income earned on both the underwriting operations of the company and on the surplus carried by the company.

Unallocated Loss Adjustment Expense (ULAE)

ULAE is the claim and settlement related expense that cannot be associated directly with individual claims (e.g., claim adjuster salaries). (See ALAE)

Underwriting Profit

Underwriting Profit is defined as earned premium, less reported incurred losses and ALAE, less ULAE, less operational expenses.

Underwriting Profit Margin

Underwriting Profit Margin is the provision that is included in the insurance premium for underwriting profit to be earned by the company.

Ultimate Incurred Loss

An estimate of the total amount of loss dollars that will ultimately be paid to settle all claims that occur during a particular accident year.

Written Premium

Written Premium represents the total amount of premium charged by an insurance company for the insurance policies it has sold. It is generally measured over a one-year period.

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Closing

This report was prepared by Paula Elliott, FCAS, FCIA and Ted Zubulake, FCAS, FCIA, MAAA of Oliver Wyman.

We are available to answer any questions the Board may have on our report.

Sincerely,



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Appendix A

Exhibit 1: Selected reported claim count and reported incurred claim amount development factors.

Exhibit 2: Historical reported claim count and reported incurred claim amount triangles.

Exhibit 3: Calculation of loss cost discount factors.

TPL BI
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	140,574	842	1.000	842
Dec-02	145,898	817	1.000	817
Jun-03	138,623	777	1.000	777
Dec-03	142,184	791	1.000	791
Jun-04	138,549	761	1.000	761
Dec-04	145,566	793	1.000	793
Jun-05	144,352	767	1.000	767
Dec-05	146,449	834	0.999	833
Jun-06	147,591	708	0.999	708
Dec-06	156,062	848	0.999	847
Jun-07	164,487	763	0.999	762
Dec-07	176,457	895	0.998	893
Jun-08	176,619	683	0.999	682
Dec-08	177,732	719	0.998	718
Jun-09	168,131	509	0.998	508
Dec-09	170,780	611	0.994	607
Jun-10	166,454	494	0.993	491
Dec-10	173,705	595	0.992	590
Jun-11	168,712	577	0.990	571
Dec-11	174,155	610	0.985	601
Jun-12	172,213	513	0.984	505
Dec-12	175,750	700	0.980	686
Jun-13	175,281	604	0.977	590
Dec-13	186,158	811	0.970	787
Jun-14	187,215	634	0.965	612
Dec-14	205,346	805	0.952	766
Jun-15	209,003	647	0.936	606
Dec-15	215,156	656	0.923	606
Jun-16	209,034	521	0.864	450
Dec-16	214,602	552	0.956	528
Total	5,112,837	20,837		20,494

TPL BI
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	140,574	34,208	1.000	34,208
Dec-02	145,898	36,160	1.000	36,160
Jun-03	138,623	36,305	1.000	36,305
Dec-03	142,184	31,038	1.000	31,038
Jun-04	138,549	30,190	1.000	30,190
Dec-04	145,566	35,456	1.000	35,456
Jun-05	144,352	22,758	1.006	22,889
Dec-05	146,449	31,123	1.008	31,369
Jun-06	147,591	30,061	1.009	30,331
Dec-06	156,062	37,975	1.010	38,350
Jun-07	164,487	28,039	1.011	28,338
Dec-07	176,457	38,108	1.015	38,681
Jun-08	176,619	28,965	1.022	29,606
Dec-08	177,732	35,715	1.015	36,234
Jun-09	168,131	20,707	1.018	21,088
Dec-09	170,780	26,464	1.024	27,104
Jun-10	166,454	20,749	1.035	21,471
Dec-10	173,705	24,172	1.027	24,815
Jun-11	168,712	25,098	1.045	26,237
Dec-11	174,155	33,808	1.030	34,837
Jun-12	172,213	24,710	1.032	25,501
Dec-12	175,750	37,171	1.065	39,585
Jun-13	175,281	31,707	1.131	35,855
Dec-13	186,158	36,662	1.194	43,757
Jun-14	187,215	24,089	1.302	31,365
Dec-14	205,346	31,768	1.427	45,340
Jun-15	209,003	23,365	1.648	38,514
Dec-15	215,156	23,296	1.896	44,168
Jun-16	209,034	15,970	2.050	32,737
Dec-16	214,602	17,619	2.564	45,174
Total	5,112,837	873,455		996,703

TPL PD
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	140,574	2,756	1.000	2,756
Dec-02	145,898	2,497	1.000	2,497
Jun-03	138,623	2,399	1.000	2,399
Dec-03	142,184	2,312	1.000	2,312
Jun-04	138,549	2,267	1.000	2,267
Dec-04	145,566	2,542	1.000	2,542
Jun-05	144,352	2,558	1.000	2,558
Dec-05	146,449	2,761	1.000	2,761
Jun-06	147,591	2,708	1.000	2,708
Dec-06	156,062	3,389	1.000	3,389
Jun-07	164,487	3,518	1.000	3,518
Dec-07	176,457	3,710	1.000	3,710
Jun-08	176,619	3,317	1.000	3,317
Dec-08	177,732	3,596	1.000	3,596
Jun-09	168,131	2,887	1.000	2,887
Dec-09	170,780	3,189	1.000	3,189
Jun-10	166,454	2,721	1.000	2,721
Dec-10	173,705	3,373	1.000	3,373
Jun-11	168,712	3,375	1.000	3,375
Dec-11	174,155	3,345	1.000	3,345
Jun-12	172,213	3,053	1.000	3,053
Dec-12	175,750	3,942	1.000	3,942
Jun-13	175,281	3,589	1.000	3,589
Dec-13	186,158	4,345	1.000	4,345
Jun-14	187,215	3,725	1.000	3,725
Dec-14	205,346	4,231	0.997	4,220
Jun-15	209,003	3,709	0.996	3,696
Dec-15	215,156	3,655	1.007	3,682
Jun-16	209,034	2,910	1.015	2,954
Dec-16	214,602	2,728	1.152	3,143
Total	5,112,837	95,108		95,569

TPL PD
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	140,574	15,148	1.000	15,148
Dec-02	145,898	14,151	1.000	14,151
Jun-03	138,623	14,238	1.000	14,238
Dec-03	142,184	13,435	1.000	13,435
Jun-04	138,549	15,484	1.000	15,484
Dec-04	145,566	15,634	1.000	15,634
Jun-05	144,352	17,623	1.000	17,626
Dec-05	146,449	18,699	1.000	18,704
Jun-06	147,591	21,888	1.000	21,894
Dec-06	156,062	23,907	1.000	23,914
Jun-07	164,487	24,095	1.000	24,102
Dec-07	176,457	27,113	1.000	27,121
Jun-08	176,619	21,833	1.000	21,840
Dec-08	177,732	24,762	1.000	24,763
Jun-09	168,131	17,193	1.001	17,203
Dec-09	170,780	19,721	0.996	19,647
Jun-10	166,454	17,593	0.997	17,541
Dec-10	173,705	24,895	0.996	24,805
Jun-11	168,712	23,392	0.997	23,318
Dec-11	174,155	26,553	1.000	26,552
Jun-12	172,213	21,649	0.997	21,589
Dec-12	175,750	28,619	0.995	28,475
Jun-13	175,281	28,488	0.994	28,320
Dec-13	186,158	35,996	0.993	35,730
Jun-14	187,215	29,660	0.993	29,444
Dec-14	205,346	39,284	0.986	38,736
Jun-15	209,003	31,570	0.983	31,046
Dec-15	215,156	29,376	1.006	29,538
Jun-16	209,034	22,619	1.069	24,179
Dec-16	214,602	18,390	1.538	28,275
Total	5,112,837	683,008		692,453

AB Total
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	136,659	302	1.000	302
Dec-02	142,701	314	1.000	314
Jun-03	135,229	322	1.000	322
Dec-03	137,862	354	1.000	354
Jun-04	135,450	319	1.000	319
Dec-04	142,414	449	1.000	449
Jun-05	140,371	339	1.000	339
Dec-05	143,329	494	1.000	494
Jun-06	144,515	364	1.000	364
Dec-06	152,715	432	1.000	432
Jun-07	159,525	383	1.000	383
Dec-07	169,443	495	1.000	495
Jun-08	167,848	368	1.000	368
Dec-08	169,118	400	1.000	400
Jun-09	160,175	303	1.000	303
Dec-09	164,034	365	1.000	365
Jun-10	159,334	255	0.999	255
Dec-10	167,114	336	0.999	336
Jun-11	164,476	341	0.999	341
Dec-11	170,768	363	0.999	363
Jun-12	170,080	281	0.999	281
Dec-12	174,490	377	0.999	377
Jun-13	174,196	322	0.999	322
Dec-13	185,445	425	0.998	424
Jun-14	185,714	309	0.996	308
Dec-14	200,706	371	0.990	367
Jun-15	202,461	323	0.980	317
Dec-15	209,355	369	0.975	360
Jun-16	202,546	301	0.945	284
Dec-16	204,929	445	0.791	352
Total	4,973,003	10,821		10,687

AB Total
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	136,659	1,181	1.000	1,181
Dec-02	142,701	1,438	1.000	1,438
Jun-03	135,229	1,146	1.000	1,146
Dec-03	137,862	1,225	1.000	1,225
Jun-04	135,450	1,147	1.000	1,147
Dec-04	142,414	1,691	1.000	1,691
Jun-05	140,371	1,256	1.000	1,256
Dec-05	143,329	1,914	1.000	1,914
Jun-06	144,515	1,044	1.000	1,044
Dec-06	152,715	1,956	1.000	1,956
Jun-07	159,525	1,343	0.999	1,341
Dec-07	169,443	3,923	0.998	3,915
Jun-08	167,848	1,499	0.999	1,497
Dec-08	169,118	2,033	1.000	2,034
Jun-09	160,175	1,124	0.999	1,123
Dec-09	164,034	2,541	0.999	2,539
Jun-10	159,334	1,341	0.998	1,338
Dec-10	167,114	1,420	1.009	1,432
Jun-11	164,476	2,108	1.022	2,153
Dec-11	170,768	2,389	1.039	2,483
Jun-12	170,080	1,111	1.035	1,149
Dec-12	174,490	1,982	1.054	2,088
Jun-13	174,196	3,788	1.034	3,918
Dec-13	185,445	1,967	1.020	2,006
Jun-14	185,714	1,310	1.029	1,348
Dec-14	200,706	1,925	1.008	1,941
Jun-15	202,461	1,909	1.019	1,945
Dec-15	209,355	1,696	1.039	1,762
Jun-16	202,546	1,245	1.059	1,319
Dec-16	204,929	2,055	1.049	2,154
Total	4,973,003	52,706		53,486

Collision
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	63,286	1,785	1.000	1,785
Dec-02	65,765	1,703	1.000	1,703
Jun-03	64,166	1,710	1.000	1,710
Dec-03	65,683	1,509	1.000	1,509
Jun-04	64,280	1,483	1.000	1,483
Dec-04	66,212	1,725	1.000	1,725
Jun-05	65,604	1,804	1.000	1,804
Dec-05	68,684	2,020	1.000	2,020
Jun-06	70,100	2,097	1.000	2,097
Dec-06	74,814	2,530	1.000	2,530
Jun-07	79,056	2,523	1.000	2,523
Dec-07	84,739	2,500	1.000	2,500
Jun-08	86,340	2,338	1.000	2,338
Dec-08	90,091	2,527	1.000	2,527
Jun-09	87,498	2,109	1.000	2,109
Dec-09	87,050	2,244	1.000	2,244
Jun-10	83,790	1,848	1.000	1,848
Dec-10	85,591	2,159	1.000	2,159
Jun-11	83,472	2,325	1.000	2,325
Dec-11	86,408	2,076	1.000	2,076
Jun-12	86,613	2,025	1.000	2,025
Dec-12	90,576	2,558	1.000	2,558
Jun-13	91,136	2,249	1.000	2,249
Dec-13	95,614	2,800	1.000	2,800
Jun-14	95,952	2,321	1.000	2,321
Dec-14	103,905	2,588	0.998	2,584
Jun-15	105,247	2,189	0.993	2,173
Dec-15	106,958	2,283	0.976	2,228
Jun-16	102,290	2,031	0.908	1,843
Dec-16	102,104	3,105	0.707	2,195
Total	2,503,023	65,164		63,992

Collision
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	63,286	10,083	1.000	10,083
Dec-02	65,765	11,165	1.000	11,165
Jun-03	64,166	11,746	1.000	11,746
Dec-03	65,683	11,338	1.000	11,338
Jun-04	64,280	9,491	1.000	9,491
Dec-04	66,212	12,595	1.000	12,595
Jun-05	65,604	13,467	1.000	13,467
Dec-05	68,684	17,203	1.000	17,203
Jun-06	70,100	17,489	1.000	17,489
Dec-06	74,814	20,930	1.000	20,930
Jun-07	79,056	20,174	1.000	20,174
Dec-07	84,739	23,851	1.000	23,851
Jun-08	86,340	19,360	1.000	19,360
Dec-08	90,091	23,114	1.000	23,114
Jun-09	87,498	16,695	1.000	16,695
Dec-09	87,050	18,176	1.000	18,176
Jun-10	83,790	14,526	1.000	14,526
Dec-10	85,591	17,539	1.000	17,539
Jun-11	83,472	17,710	1.000	17,710
Dec-11	86,408	21,039	1.000	21,039
Jun-12	86,613	17,750	1.000	17,750
Dec-12	90,576	22,896	1.000	22,896
Jun-13	91,136	19,739	1.000	19,739
Dec-13	95,614	27,648	0.997	27,574
Jun-14	95,952	21,841	0.997	21,766
Dec-14	103,905	27,480	0.994	27,311
Jun-15	105,247	20,598	0.981	20,209
Dec-15	106,958	26,802	0.949	25,435
Jun-16	102,290	20,257	0.863	17,485
Dec-16	102,104	30,298	0.774	23,466
Total	2,503,023	563,001		551,321

**Comprehensive
Estimated Ultimate Incurred Counts
Incurred Counts Development Method**

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	84,158	1,353	1.000	1,353
Dec-02	87,376	1,709	1.000	1,709
Jun-03	85,800	1,201	1.000	1,201
Dec-03	87,604	1,927	1.000	1,927
Jun-04	87,034	1,284	1.000	1,284
Dec-04	90,035	2,247	1.000	2,247
Jun-05	89,971	2,348	1.000	2,348
Dec-05	93,644	2,468	1.000	2,468
Jun-06	95,454	1,797	1.000	1,797
Dec-06	100,625	2,665	1.000	2,665
Jun-07	106,279	2,158	1.000	2,158
Dec-07	112,706	3,563	1.000	3,563
Jun-08	114,668	1,978	1.000	1,978
Dec-08	118,897	3,133	1.000	3,133
Jun-09	116,536	1,780	1.000	1,780
Dec-09	116,182	3,454	1.000	3,454
Jun-10	113,049	1,756	1.000	1,756
Dec-10	115,178	3,562	1.000	3,562
Jun-11	113,142	1,595	1.000	1,595
Dec-11	115,919	2,916	1.000	2,916
Jun-12	116,238	1,705	1.000	1,705
Dec-12	120,111	3,940	1.000	3,940
Jun-13	120,961	2,031	1.000	2,031
Dec-13	125,827	3,521	1.000	3,521
Jun-14	126,358	1,674	1.000	1,674
Dec-14	134,853	4,397	1.000	4,397
Jun-15	136,903	1,938	1.001	1,940
Dec-15	139,071	4,005	1.004	4,020
Jun-16	135,704	2,389	0.998	2,384
Dec-16	135,587	4,320	0.951	4,109
Total	3,335,870	74,814		74,616

**Comprehensive
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s**

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	84,158	5,612	1.000	5,612
Dec-02	87,376	7,544	1.000	7,544
Jun-03	85,800	6,028	1.000	6,028
Dec-03	87,604	9,650	1.000	9,650
Jun-04	87,034	6,221	1.000	6,221
Dec-04	90,035	11,235	1.000	11,235
Jun-05	89,971	10,198	1.000	10,198
Dec-05	93,644	13,703	1.000	13,703
Jun-06	95,454	10,141	1.000	10,141
Dec-06	100,625	16,853	1.000	16,853
Jun-07	106,279	13,471	1.000	13,471
Dec-07	112,706	23,960	1.000	23,960
Jun-08	114,668	14,565	1.000	14,565
Dec-08	118,897	21,256	1.000	21,256
Jun-09	116,536	13,560	1.000	13,560
Dec-09	116,182	24,070	1.000	24,070
Jun-10	113,049	12,399	1.000	12,399
Dec-10	115,178	23,518	1.000	23,518
Jun-11	113,142	12,405	1.000	12,405
Dec-11	115,919	22,517	1.000	22,517
Jun-12	116,238	13,177	1.000	13,177
Dec-12	120,111	29,067	1.000	29,067
Jun-13	120,961	18,097	1.000	18,097
Dec-13	125,827	26,768	1.000	26,768
Jun-14	126,358	15,815	1.000	15,815
Dec-14	134,853	39,317	1.000	39,317
Jun-15	136,903	19,053	1.001	19,076
Dec-15	139,071	38,585	1.001	38,616
Jun-16	135,704	23,817	0.994	23,665
Dec-16	135,587	36,517	1.051	38,370
Total	3,335,870	539,118		540,874

Comprehensive - Theft
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	84,158	245	1.000	245
Dec-02	87,376	261	1.000	261
Jun-03	85,800	289	1.000	289
Dec-03	87,604	303	1.000	303
Jun-04	87,034	312	1.000	312
Dec-04	90,035	347	1.000	347
Jun-05	89,971	349	1.000	349
Dec-05	93,644	378	1.000	378
Jun-06	95,454	414	1.000	414
Dec-06	100,625	432	1.000	432
Jun-07	106,279	435	1.000	435
Dec-07	112,706	518	1.000	518
Jun-08	114,668	500	1.000	500
Dec-08	118,897	586	1.000	586
Jun-09	116,536	464	1.000	464
Dec-09	116,182	514	1.000	514
Jun-10	113,049	399	1.000	399
Dec-10	115,178	426	1.000	426
Jun-11	113,142	367	1.000	367
Dec-11	115,919	348	1.000	348
Jun-12	116,238	334	1.000	334
Dec-12	120,111	433	1.000	433
Jun-13	120,961	443	1.000	443
Dec-13	125,827	504	1.000	504
Jun-14	126,358	470	1.000	470
Dec-14	134,853	579	0.999	578
Jun-15	136,903	684	1.000	684
Dec-15	139,071	796	0.999	795
Jun-16	135,704	730	0.992	724
Dec-16	135,587	798	0.936	747
Total	3,335,870	13,658		13,600

Comprehensive - Theft
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	84,158	1,777	1.000	1,777
Dec-02	87,376	1,985	1.000	1,985
Jun-03	85,800	1,982	1.000	1,982
Dec-03	87,604	2,234	1.000	2,234
Jun-04	87,034	2,384	1.000	2,384
Dec-04	90,035	2,970	1.000	2,970
Jun-05	89,971	2,744	1.000	2,745
Dec-05	93,644	3,499	1.000	3,500
Jun-06	95,454	3,829	1.000	3,830
Dec-06	100,625	4,476	1.000	4,478
Jun-07	106,279	4,125	1.000	4,127
Dec-07	112,706	6,311	1.000	6,313
Jun-08	114,668	5,603	1.000	5,602
Dec-08	118,897	6,882	0.999	6,877
Jun-09	116,536	5,364	0.999	5,360
Dec-09	116,182	5,785	0.999	5,782
Jun-10	113,049	4,741	1.000	4,740
Dec-10	115,178	5,006	0.999	5,001
Jun-11	113,142	4,107	0.999	4,104
Dec-11	115,919	4,749	1.000	4,750
Jun-12	116,238	4,012	1.000	4,012
Dec-12	120,111	5,711	0.996	5,686
Jun-13	120,961	5,492	0.996	5,469
Dec-13	125,827	6,701	0.995	6,670
Jun-14	126,358	5,741	0.993	5,701
Dec-14	134,853	8,197	0.991	8,122
Jun-15	136,903	9,407	0.990	9,313
Dec-15	139,071	12,474	0.987	12,309
Jun-16	135,704	10,289	0.975	10,037
Dec-16	135,587	11,219	1.000	11,222
Total	3,335,870	159,797		159,082

**Specified Perils
Estimated Ultimate Incurred Counts
Incurred Counts Development Method**

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	18,532	28	1.000	28
Dec-02	18,305	55	1.000	55
Jun-03	17,618	53	1.000	53
Dec-03	17,457	52	1.000	52
Jun-04	16,996	42	1.000	42
Dec-04	16,702	62	1.000	62
Jun-05	16,041	48	1.000	48
Dec-05	15,906	49	1.000	49
Jun-06	15,578	41	1.000	41
Dec-06	15,681	54	1.000	54
Jun-07	16,206	43	1.000	43
Dec-07	15,927	62	1.000	62
Jun-08	15,789	39	1.000	39
Dec-08	15,677	75	1.000	75
Jun-09	15,045	38	1.000	38
Dec-09	14,555	91	1.000	91
Jun-10	14,039	38	1.000	38
Dec-10	13,876	56	1.000	56
Jun-11	13,262	30	1.000	30
Dec-11	12,881	80	1.000	80
Jun-12	12,243	35	1.000	35
Dec-12	11,986	85	1.000	85
Jun-13	11,790	43	1.000	43
Dec-13	11,713	73	1.000	73
Jun-14	11,562	25	1.000	25
Dec-14	11,979	75	1.000	75
Jun-15	12,188	45	0.997	45
Dec-15	12,019	107	0.993	106
Jun-16	12,117	41	0.976	40
Dec-16	12,276	82	0.945	78
Total	435,948	1,647		1,641

**Specified Perils
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s**

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	18,532	288	1.000	288
Dec-02	18,305	522	1.000	522
Jun-03	17,618	412	1.000	412
Dec-03	17,457	296	1.000	296
Jun-04	16,996	263	1.000	263
Dec-04	16,702	591	1.000	591
Jun-05	16,041	315	1.000	315
Dec-05	15,906	486	1.000	486
Jun-06	15,578	466	1.000	466
Dec-06	15,681	789	1.000	789
Jun-07	16,206	288	1.000	288
Dec-07	15,927	718	1.000	718
Jun-08	15,789	389	1.000	389
Dec-08	15,677	622	1.000	622
Jun-09	15,045	532	1.000	532
Dec-09	14,555	581	1.000	581
Jun-10	14,039	332	1.000	332
Dec-10	13,876	362	1.000	362
Jun-11	13,262	208	1.000	208
Dec-11	12,881	543	1.000	543
Jun-12	12,243	323	1.000	323
Dec-12	11,986	895	1.000	895
Jun-13	11,790	341	1.000	341
Dec-13	11,713	567	1.000	567
Jun-14	11,562	232	1.000	232
Dec-14	11,979	778	1.000	778
Jun-15	12,188	277	0.998	276
Dec-15	12,019	1,100	0.997	1,097
Jun-16	12,117	447	0.994	444
Dec-16	12,276	734	0.993	729
Total	435,948	14,699		14,687

All Perils
Estimated Ultimate Incurred Counts
Incurred Counts Development Method

Accident Semester	Car-Years as of 12/31/2016	Claim Counts as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Counts
(1)	(2)	(3)	(4)	(5)
Jun-02	21,247	653	1.000	653
Dec-02	21,687	634	1.000	634
Jun-03	17,976	488	1.000	488
Dec-03	17,216	509	1.000	509
Jun-04	16,500	512	1.000	512
Dec-04	18,090	639	1.000	639
Jun-05	18,901	623	1.000	623
Dec-05	18,051	679	1.000	679
Jun-06	19,740	618	1.000	618
Dec-06	21,111	784	1.000	784
Jun-07	24,351	802	1.000	802
Dec-07	25,796	1,029	1.000	1,029
Jun-08	27,302	784	1.000	784
Dec-08	26,586	970	1.000	970
Jun-09	24,305	631	1.000	631
Dec-09	24,932	871	1.000	871
Jun-10	24,890	601	1.000	601
Dec-10	27,261	919	1.000	919
Jun-11	27,759	752	1.000	752
Dec-11	28,595	904	1.000	904
Jun-12	27,844	746	1.000	746
Dec-12	27,765	1,137	1.000	1,137
Jun-13	28,464	934	1.000	934
Dec-13	31,293	1,366	1.000	1,366
Jun-14	32,251	940	1.000	940
Dec-14	37,242	1,417	0.998	1,415
Jun-15	40,514	1,029	0.993	1,022
Dec-15	41,903	1,417	0.980	1,388
Jun-16	42,670	1,100	0.930	1,022
Dec-16	45,347	1,430	0.855	1,222
Total	807,589	25,918		25,595

All Perils
Estimated Ultimate Incurred Losses
Incurred Losses Development Method
Losses in \$ 000s

Accident Semester	Car-Years as of 12/31/2016	Losses as of 12/31/2016	Cumulative Development Factors	Estimated Ultimate Incurred Losses
(1)	(2)	(3)	(4)	(5)
Jun-02	21,247	5,830	1.000	5,830
Dec-02	21,687	8,029	1.000	8,029
Jun-03	17,976	5,901	1.000	5,901
Dec-03	17,216	6,085	1.000	6,085
Jun-04	16,500	6,254	1.000	6,254
Dec-04	18,090	7,369	1.000	7,369
Jun-05	18,901	7,830	1.000	7,830
Dec-05	18,051	9,960	1.000	9,960
Jun-06	19,740	10,805	1.000	10,805
Dec-06	21,111	13,180	1.000	13,180
Jun-07	24,351	11,259	1.000	11,259
Dec-07	25,796	14,396	1.000	14,396
Jun-08	27,302	13,186	1.000	13,186
Dec-08	26,586	16,048	1.000	16,048
Jun-09	24,305	9,259	1.000	9,259
Dec-09	24,932	11,003	1.000	11,003
Jun-10	24,890	8,558	1.000	8,558
Dec-10	27,261	12,688	1.000	12,688
Jun-11	27,759	12,941	1.000	12,941
Dec-11	28,595	17,951	1.000	17,951
Jun-12	27,844	14,034	1.000	14,034
Dec-12	27,765	19,070	1.000	19,070
Jun-13	28,464	16,951	1.000	16,951
Dec-13	31,293	24,455	1.000	24,455
Jun-14	32,251	18,546	1.000	18,546
Dec-14	37,242	28,231	0.997	28,160
Jun-15	40,514	22,661	0.988	22,387
Dec-15	41,903	23,144	0.970	22,455
Jun-16	42,670	18,131	0.927	16,813
Dec-16	45,347	20,111	1.069	21,504
Total	807,589	413,868		412,909

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
TPL BI
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	140,574	977	1,012	935	898	881	874	874	861	861	854	849	846	843	842	842	842	843	844	844	843	843	842	842	842	842	842	842	842	842	842
Dec-02	145,898	982	956	890	866	859	853	852	852	847	842	835	823	826	821	822	822	822	821	817	817	817	817	817	817	817	817	817	817	817	817
Jun-03	138,623	889	902	851	837	836	829	826	818	816	813	796	788	786	783	786	786	785	784	781	780	780	777	778	777	777	777	777	777	777	777
Dec-03	142,184	810	886	857	862	840	838	827	821	813	803	801	797	797	796	794	794	793	792	792	792	791	791	791	791	791	791	791	791	791	791
Jun-04	138,549	837	900	840	822	804	792	788	785	778	775	773	769	770	770	767	765	765	765	765	762	761	761	761	761	761	761	761	761	761	761
Dec-04	145,566	871	907	850	845	847	840	838	822	815	815	808	802	799	797	796	796	796	795	795	794	795	794	794	794	793	793	793	793	793	793
Jun-05	144,352	817	843	821	785	808	808	786	772	773	773	775	768	769	769	771	770	771	770	771	771	771	771	771	771	771	771	771	771	771	771
Dec-05	146,449	953	1,017	966	938	916	873	865	855	844	841	842	841	838	838	838	835	833	832	833	834	834	834	834	834	834	834	834	834	834	834
Jun-06	147,591	837	883	821	799	754	733	729	727	720	718	714	712	713	711	711	710	710	710	710	710	709	708	708	708	708	708	708	708	708	708
Dec-06	156,062	953	1,034	987	907	893	894	894	896	886	882	865	866	861	862	856	851	850	850	848	848	848	848	848	848	848	848	848	848	848	848
Jun-07	164,487	882	948	810	786	802	803	810	804	800	783	781	774	775	768	768	765	765	763	763	763	763	763	763	763	763	763	763	763	763	763
Dec-07	176,457	974	996	922	913	908	902	901	900	882	881	910	907	899	898	894	893	893	894	895	895	895	895	895	895	895	895	895	895	895	895
Jun-08	176,619	692	759	743	732	738	713	716	708	708	702	702	693	690	688	688	683	683	683	683	683	683	683	683	683	683	683	683	683	683	683
Dec-08	177,732	663	780	761	778	769	763	754	752	741	734	727	725	722	722	722	720	719	719	719	719	719	719	719	719	719	719	719	719	719	719
Jun-09	168,131	558	576	548	550	566	526	528	522	524	515	514	511	510	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509
Dec-09	170,780	635	734	681	679	642	629	625	628	612	613	611	611	610	610	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611
Jun-10	166,454	555	570	560	521	531	518	516	507	505	500	500	498	497	494	494	494	494	494	494	494	494	494	494	494	494	494	494	494	494	494
Dec-10	173,705	671	716	672	667	631	621	611	606	602	600	598	593	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595
Jun-11	168,712	755	702	663	643	621	596	594	585	587	583	580	577	577	577	577	577	577	577	577	577	577	577	577	577	577	577	577	577	577	577
Dec-11	174,155	761	732	694	664	635	622	617	612	608	608	608	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610
Jun-12	172,213	604	617	574	543	543	525	524	518	516	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513
Dec-12	175,750	708	809	753	743	714	708	703	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700
Jun-13	175,281	676	703	641	633	608	599	602	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604
Dec-13	186,158	836	917	854	841	824	823	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811
Jun-14	187,215	708	686	645	635	640	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634
Dec-14	205,346	854	898	813	808	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805
Jun-15	209,003	663	679	661	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647
Dec-15	215,156	589	680	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656
Jun-16	209,034	510	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521
Dec-16	214,602	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
TPL BI
Incurred Losses
Data as of 12/31/16
Losses in \$ 000s

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
	(1)																															
Jun-02	140,574	22,564	27,346	29,790	32,117	31,735	34,166	35,106	34,516	35,379	34,433	34,526	34,562	34,106	33,834	33,808	34,146	34,084	34,065	34,048	34,076	34,169	34,208	34,208	34,208	34,208	34,208	34,208	34,208	34,208	34,208	
Dec-02	145,898	21,430	28,193	31,846	33,408	35,142	35,867	35,908	36,272	35,591	36,586	36,978	35,873	36,053	36,079	36,321	36,105	36,192	36,143	36,224	36,163	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	
Jun-03	138,623	21,094	26,288	26,894	29,243	30,591	32,309	33,419	33,799	36,040	35,651	35,158	35,121	35,310	35,943	35,852	35,946	36,237	36,373	35,800	36,044	36,348	36,294	36,359	36,305	36,305	36,305	36,305	36,305	36,305	36,305	
Dec-03	142,184	23,015	29,482	30,837	31,376	32,899	33,760	33,962	33,907	34,590	32,235	32,547	31,912	30,532	30,462	30,428	30,566	30,895	30,893	30,893	31,086	31,093	31,199	31,246	31,246	31,246	31,246	31,210	31,038			
Jun-04	138,549	19,126	25,106	24,684	25,406	26,428	26,926	27,230	27,771	27,909	28,224	28,205	28,479	29,625	29,614	29,753	30,163	29,860	29,819	29,826	29,581	29,580	29,703	29,748	30,212	30,190	30,190					
Dec-04	145,566	22,427	27,566	27,867	29,154	30,451	30,146	30,938	31,486	31,995	32,950	32,922	33,103	33,480	34,754	33,962	35,696	34,514	34,558	34,595	34,591	34,601	34,582	34,660	34,674	35,456						
Jun-05	144,352	13,003	16,926	18,277	18,218	18,519	20,022	19,276	19,709	19,978	20,301	21,691	21,313	21,479	21,551	21,853	21,905	22,099	22,342	22,713	22,740	22,731	22,978	22,979	22,758							
Dec-05	146,449	17,277	23,587	25,593	25,658	28,117	29,537	30,016	30,450	30,229	29,926	29,600	29,762	29,790	29,801	30,207	30,537	30,288	30,361	30,613	30,986	31,068	31,123	31,123								
Jun-06	147,591	18,367	23,731	23,512	27,475	27,178	28,332	27,013	26,669	27,652	28,067	28,160	28,641	29,024	28,776	29,099	29,377	30,010	30,102	30,114	30,216	30,236	30,061									
Dec-06	156,062	16,543	22,967	23,026	23,677	25,366	27,786	29,971	30,394	30,308	30,693	32,181	34,058	34,745	36,456	36,349	37,978	38,289	37,340	37,909	37,973	37,975										
Jun-07	164,487	13,865	18,350	19,874	18,640	22,361	23,358	23,592	24,416	26,088	27,373	27,741	27,440	28,195	28,290	28,633	28,037	28,032	28,053	28,031	28,039											
Dec-07	176,457	19,627	26,282	27,036	28,747	29,871	30,657	31,728	32,774	33,447	34,429	35,514	36,315	36,868	37,371	37,560	37,940	38,067	37,738	38,108												
Jun-08	176,619	13,524	17,523	19,492	19,417	19,506	21,013	23,317	25,518	26,406	27,953	28,096	27,710	28,202	28,307	28,225	28,697	28,697	28,965													
Dec-08	177,732	18,835	24,779	24,837	26,797	26,620	27,391	31,671	33,171	33,910	33,628	33,678	34,074	34,417	34,658	35,575	35,336	35,715														
Jun-09	168,131	13,934	14,823	15,105	15,444	16,929	18,334	18,984	20,428	20,588	21,036	21,165	20,235	20,163	20,664	20,633	20,707															
Dec-09	170,780	16,290	17,308	18,249	18,309	19,884	21,594	24,619	25,684	25,821	27,208	27,432	25,921	26,011	26,129	26,464																
Jun-10	166,454	10,951	14,001	14,608	14,692	15,224	15,824	18,669	19,919	21,090	21,197	21,800	21,372	22,422	20,749																	
Dec-10	173,705	13,786	17,886	18,343	18,779	19,308	20,691	22,371	23,536	23,303	23,625	23,292	23,577	24,172																		
Jun-11	168,712	13,211	16,816	16,306	18,593	18,580	20,566	22,189	22,426	23,988	25,744	24,836	25,098																			
Dec-11	174,155	19,227	22,230	23,192	24,320	27,446	29,199	29,572	31,699	33,096	33,003																					
Jun-12	172,213	11,724	12,734	14,014	15,505	17,800	19,620	20,495	22,373	23,391	24,710																					
Dec-12	175,750	19,392	23,402	22,737	25,108	28,988	32,126	33,866	34,291	37,171																						
Jun-13	175,281	13,398	17,505	18,791	21,052	23,059	26,125	29,831	31,707																							
Dec-13	186,158	16,724	21,677	24,015	26,882	30,987	32,912	36,662																								
Jun-14	187,215	13,695	16,521	16,608	19,280	22,108	24,089																									
Dec-14	205,346	16,842	20,012	22,181	26,229	31,768																										
Jun-15	209,003	14,602	19,417	20,450	23,365																											
Dec-15	215,156	14,238	20,382	23,296																												
Jun-16	209,034	11,948	15,970																													
Dec-16	214,602	17,619																														

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
AB Total
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	Number of Accidents																													
		6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	136,659	392	308	299	297	299	298	300	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302
Dec-02	142,701	392	354	323	321	317	319	318	316	316	317	316	316	316	316	316	314	314	314	314	314	314	314	314	314	314	314	314	314	314	302
Jun-03	135,229	359	337	332	328	326	327	326	323	323	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	
Dec-03	137,862	375	370	355	357	355	356	356	356	356	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
Jun-04	135,450	395	334	318	321	320	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319		
Dec-04	142,414	457	440	438	446	449	450	450	451	450	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449		
Jun-05	140,371	412	359	339	337	338	340	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339		
Dec-05	143,329	540	505	485	493	501	499	498	498	497	497	497	497	497	496	494	494	494	494	494	494	494	494	494	494	494	494	494			
Jun-06	144,515	429	367	368	363	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364	364			
Dec-06	152,715	567	473	444	438	435	435	435	435	435	435	435	435	435	434	434	434	434	432	432	432	432	432	432	432	432	432	432			
Jun-07	159,525	451	407	390	381	385	384	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383				
Dec-07	169,443	560	507	499	500	495	495	495	494	495	494	494	494	494	494	494	494	494	495	495	495	495	495	495	495	495	495				
Jun-08	167,848	416	387	379	381	374	369	370	369	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368				
Dec-08	169,118	481	425	412	403	403	400	400	400	400	401	401	401	401	401	400	400	400	400	400	400	400	400	400	400	400	400				
Jun-09	160,175	356	311	303	305	305	304	304	303	303	303	304	303																		

Reported Count Development Factors

[illegible]

Average Incurred Count Development Factors

[illegible][illegible]

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Collision
Incurred Losses
Data as of 12/31/16
Losses in \$ 000s

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
	(1)																															
Jun-02	63,286	12,229	10,803	10,307	10,235	10,139	10,159	10,130	10,130	10,100	10,089	10,084	10,083	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,081	10,081	10,081	10,084	10,083	10,083	10,083	10,083	10,083	10,083	
Dec-02	65,765	12,293	11,895	11,466	11,382	11,294	11,232	11,227	11,218	11,212	11,210	11,207	11,211	11,210	11,210	11,199	11,193	11,193	11,182	11,174	11,172	11,172	11,171	11,165	11,165	11,165	11,165	11,165	11,165	11,165	11,165	
Jun-03	64,166	13,377	12,464	11,955	11,866	11,836	11,805	11,789	11,790	11,780	11,781	11,731	11,736	11,739	11,748	11,759	11,759	11,759	11,746	11,746	11,747	11,747	11,746	11,746	11,746	11,746	11,746	11,746	11,746	11,746	11,746	
Dec-03	65,683	12,618	11,909	11,681	11,383	11,335	11,373	11,364	11,357	11,357	11,350	11,350	11,347	11,347	11,347	11,345	11,345	11,342	11,342	11,342	11,342	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	
Jun-04	64,280	11,057	10,341	9,927	9,740	9,523	9,515	9,513	9,514	9,513	9,513	9,512	9,510	9,509	9,509	9,510	9,502	9,500	9,497	9,497	9,497	9,496	9,496	9,496	9,495	9,492	9,492	9,491				
Dec-04	66,212	13,880	13,725	12,850	12,725	12,724	12,659	12,612	12,607	12,625	12,628	12,634	12,635	12,633	12,636	12,634	12,634	12,630	12,596	12,596	12,595	12,595	12,595	12,595	12,595	12,595	12,595	12,595	12,595	12,595	12,595	
Jun-05	65,604	14,997	14,565	13,812	13,675	13,532	13,512	13,524	13,528	13,535	13,524	13,512	13,511	13,498	13,497	13,479	13,476	13,477	13,475	13,475	13,471	13,469	13,468	13,467	13,467	13,467	13,467	13,467	13,467	13,467	13,467	
Dec-05	68,684	17,518	18,510	17,791	17,500	17,402	17,359	17,351	17,353	17,328	17,322	17,313	17,337	17,214	17,210	17,207	17,225	17,222	17,220	17,213	17,210	17,208	17,207	17,203								
Jun-06	70,100	19,717	19,728	18,404	17,837	17,699	17,630	17,554	17,521	17,518	17,510	17,520	17,519	17,519	17,510	17,506	17,505	17,503	17,501	17,501	17,501	17,489	17,489	17,489	17,489	17,489	17,489	17,489	17,489	17,489	17,489	
Dec-06	74,814	22,981	24,265	22,651	21,620	21,232	21,145	21,103	21,078	21,077	20,940	20,938	20,942	20,942	20,936	20,936	20,936	20,931	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	20,930	
Jun-07	79,056	23,760	23,805	22,232	21,412	20,733	20,630	20,559	20,557	20,555	20,305	20,287	20,268	20,191	20,188	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	20,174	
Dec-07	84,739	25,084	27,858	26,039	25,186	24,086	24,016	24,046	24,002	23,943	23,938	23,901	23,901	23,881	23,875	23,858	23,857	23,854	23,852	23,851												
Jun-08	86,340	23,169	22,840	20,879	20,046	19,592	19,524	19,532	19,473	19,459	19,386	19,379	19,372	19,377	19,366	19,365	19,366	19,364	19,360													
Dec-08	90,091	27,306	26,894	24,373	23,736	23,258	23,238	23,145	23,150	23,148	23,140	23,136	23,143	23,128	23,128	23,127	23,114	23,114														
Jun-09	87,498	21,203	18,668	17,199	17,010	16,813	16,780	16,791	16,775	16,776	16,756	16,697	16,698	16,696	16,696	16,696	16,695															
Dec-09	87,050	22,576	19,837	18,719	18,349	18,314	18,250	18,264	18,239	18,185	18,175	18,163	18,163	18,185	18,182	18,176																
Jun-10	83,790	18,630	16,128	15,033	14,784	14,573	14,540	14,547	14,518	14,527	14,541	14,538	14,533	14,529	14,526																	
Dec-10	85,591	23,081	20,657	18,612	17,999	17,713	17,661	17,641	17,565	17,552	17,550	17,541	17,539	17,539																		
Jun-11	83,472	24,818	19,971	18,365	18,015	17,807	17,774	17,747	17,722	17,716	17,716	17,714	17,710																			
Dec-11	86,408	25,785	23,052	21,796	21,391	21,173	21,108	21,093	20,997	21,027	21,031	21,039																				
Jun-12	86,613	22,460	20,385	18,666	18,199	17,833	17,779	17,777	17,770	17,759	17,750																					
Dec-12	90,576	29,027	27,364	24,399	23,569	23,172	23,042	22,993	22,902	22,896																						
Jun-13	91,136	27,717	22,949	20,626	20,042	19,768	19,748	19,761	19,739																							
Dec-13	95,614	34,966	31,529	28,483	27,751	27,666	27,664																									
Jun-14	95,952	29,217	24,986	23,022	22,205	21,926	21,841																									
Dec-14	103,905	35,721	32,729	29,104	27,872	27,480																										
Jun-15	105,247	28,888	23,354	21,209	20,598																											
Dec-15	106,958	34,204	28,538	26,802																												
Jun-16	102,290	24,389	20,257																													
Dec-16	102,104	30,298																														

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Comprehensive
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	84,158	1,249	1,336	1,356	1,351	1,352	1,354	1,354	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353	1,353
Dec-02	87,376	1,673	1,712	1,708	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709	1,709
Jun-03	85,800	1,183	1,198	1,204	1,204	1,204	1,203	1,203	1,203	1,203	1,202	1,202	1,202	1,202	1,202	1,202	1,202	1,202	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201	1,201
Dec-03	87,604	1,941	1,941	1,932	1,929	1,928	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	1,927	
Jun-04	87,034	1,267	1,268	1,283	1,285	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	1,284	
Dec-04	90,035	2,226	2,254	2,243	2,247	2,246	2,248	2,249	2,248	2,249	2,249	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	2,247	
Jun-05	89,971	2,040	2,392	2,354	2,349	2,346	2,351	2,351	2,350	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	
Dec-05	93,644	2,503	2,467	2,474	2,470	2,471	2,471	2,470	2,470	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	2,468	
Jun-06	95,454	1,754	1,812	1,801	1,795	1,798	1,799	1,798	1,798	1,798	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797	
Dec-06	100,625	2,757	2,728	2,675	2,666	2,664	2,665	2,666	2,666	2,666	2,666	2,666	2,666	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	
Jun-07	106,279	2,114	2,208	2,163	2,160	2,157	2,157	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	
Dec-07	112,706	3,664	3,642	3,565	3,562	3,562	3,565	3,564	3,564	3,565	3,565	3,565	3,565	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	3,563	
Jun-08	114,668	2,067	2,040	1,983	1,979	1,979	1,980	1,980	1,981	1,981	1,980	1,979	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	1,978	
Dec-08	118,897	3,327	3,159	3,139	3,135	3,134	3,134	3,134	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	3,133	
Jun-09	116,536	1,851	1,825	1,785	1,781	1,783	1,781	1,781	1,781	1,781	1,779	1,779	1,779	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	1,780	
Dec-09	116,182	3,623	3,470	3,455	3,455	3,452	3,453	3,453	3,454	3,453	3,453	3,453	3,453	3,453	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	3,454	
Jun-10	113,049	1,788	1,779	1,804	1,780	1,757	1,757	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	1,756	
Dec-10	115,178	3,757	3,597	3,571	3,566	3,565	3,562	3,562	3,562	3,563	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	
Jun-11	113,142	1,747	1,610	1,605	1,596	1,597	1,595	1,594	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	1,595	
Dec-11	115,919	3,151	2,965	2,926	2,923	2,916	2,916	2,915	2,915	2,915	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	
Jun-12	116,238	1,713	1,762	1,713	1,703	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	1,705	
Dec-12	120,111	4,108	3,971	3,934	3,942	3,941	3,940	3,941	3,941	3,940	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	3,941	
Jun-13	120,961	1,978	2,051	2,039	2,031	2,031	2,030	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	
Dec-13	125,827	3,700	3,514	3,504	3,514	3,512	3,520	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	3,521	
Jun-14	126,358	1,739	1,677	1,672	1,671	1,675	1,674																								
Dec-14	134,853	4,752	4,403	4,341	4,378	4,397																									
Jun-15	136,903	2,033	1,972	1,940	1,938																										
Dec-15	139,071	4,095	3,986	4,005																											
Jun-16	135,704	2,346	2,389																												
Dec-16	135,587	4,320																													

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Comprehensive
Incurred Losses
Data as of 12/31/16
Losses in \$ 000s

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	84,158	5,262	5,655	5,660	5,650	5,650	5,654	5,653	5,651	5,651	5,650	5,650	5,650	5,650	5,650	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612
Dec-02	87,376	7,250	7,800	7,666	7,661	7,652	7,664	7,562	7,557	7,556	7,556	7,558	7,545	7,545	7,544	7,544	7,543	7,543	7,543	7,543	7,542	7,542	7,542	7,542	7,542	7,542	7,544	7,544	7,544	7,544	7,544
Jun-03	85,800	5,380	6,159	6,140	6,125	6,143	6,062	6,029	6,037	6,036	6,036	6,036	6,036	6,036	6,036	6,036	6,036	6,036	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028
Dec-03	87,604	9,272	9,699	9,792	9,723	9,722	9,655	9,651	9,652	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,654	9,654	9,653	9,650			
Jun-04	87,034	5,949	6,247	6,293	6,242	6,242	6,245	6,222	6,223	6,224	6,223	6,223	6,222	6,222	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221
Dec-04	90,035	10,291	11,232	11,213	11,275	11,262	11,261	11,264	11,256	11,251	11,251	11,248	11,248	11,248	11,248	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235				
Jun-05	89,971	9,000	10,499	10,264	10,175	10,178	10,198	10,196	10,198	10,199	10,199	10,199	10,199	10,199	10,199	10,199	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198
Dec-05	93,644	12,436	13,813	13,795	13,801	13,741	13,736	13,724	13,722	13,716	13,716	13,716	13,716	13,719	13,719	13,719	13,699	13,699	13,699	13,699	13,699	13,699	13,699	13,699	13,703	13,703					
Jun-06	95,454	9,391	10,249	10,253	10,176	10,123	10,133	10,126	10,127	10,127	10,124	10,126	10,125	10,130	10,130	10,139	10,139	10,138	10,138	10,142	10,132	10,139	10,139	10,139	10,141						
Dec-06	100,625	14,288	17,234	16,824	16,773	16,835	16,835	16,836	16,840	16,829	16,829	16,831	16,831	16,831	16,831	16,832	16,828	16,853	16,859	16,859	16,859	16,853	16,853								
Jun-07	106,279	11,632	13,661	13,596	13,593	13,563	13,531	13,517	13,517	13,507	13,506	13,506	13,505	13,505	13,504	13,503	13,502	13,502	13,502	13,502	13,502	13,471									
Dec-07	112,706	20,890	24,176	24,089	24,018	23,977	24,015	23,983	23,997	23,993	23,981	23,984	23,983	23,978	23,977	23,972	23,972	23,972	23,960	23,960											
Jun-08	114,668	13,194	14,822	14,649	14,557	14,557	14,550	14,568	14,576	14,591	14,615	14,609	14,621	14,614	14,610	14,610	14,610	14,610	14,565												
Dec-08	118,897	19,839	21,419	21,274	21,290	21,283	21,275	21,273	21,259	21,258	21,252	21,256	21,256	21,256	21,256	21,256	21,256	21,256	21,256	21,256											
Jun-09	116,536	13,019	13,760	13,559	13,499	13,475	13,496	13,498	13,519	13,526	13,510	13,520	13,557	13,536	13,560																
Dec-09	116,182	22,876	24,390	24,276	24,299	24,220	24,224	24,213	24,214	24,204	24,069	24,070	24,068	24,070	24,070	24,070															
Jun-10	113,049	12,236	12,757	12,442	12,426	12,427	12,429	12,437	12,385	12,388	12,397	12,384	12,386	12,395	12,399																
Dec-10	115,178	22,939	23,853	23,660	23,576	23,537	23,527	23,521	23,519	23,519	23,520	23,520	23,518																		
Jun-11	113,142	12,880	12,969	12,714	12,720	12,678	12,489	12,483	12,419	12,416	12,410	12,407	12,405																		
Dec-11	115,919	21,345	22,758	22,630	22,646	22,595	22,582	22,549	22,526	22,520	22,518	22,517																			
Jun-12	116,238	12,019	13,382	13,215	13,211	13,237	13,228	13,192	13,175	13,177	13,177																				
Dec-12	120,111	26,530	29,307	29,080	29,086	29,069	29,065	29,065	29,067																						
Jun-13	120,961	15,273	18,645	18,305	18,182	18,105	18,098	18,096	18,097																						
Dec-13	125,827	25,332	26,860	26,774	26,801	26,784	26,766	26,768																							
Jun-14	126,358	14,639	16,049	15,935	15,791	15,805	15,815																								
Dec-14	134,853	36,750	39,373	38,895	39,095	39,317																									
Jun-15	136,903	18,473	19,392	19,074	19,053																										
Dec-15	139,071	36,593	38,388	38,585																											
Jun-16	135,704	23,185	23,817																												
Dec-16	135,587	36,517																													

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Comprehensive - Theft
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	84,158	239	241	246	242	243	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245
Dec-02	87,376	283	263	261	262	262	262	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261
Jun-03	85,800	299	291	292	291	292	291	291	291	291	290	290	290	290	290	290	290	290	289	289	289	289	289	289	289	289	289	289	289	289	289
Dec-03	87,604	323	307	304	304	304	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303
Jun-04	87,034	318	307	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312
Dec-04	90,035	354	348	348	349	349	349	349	348	349	349	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347
Jun-05	89,971	358	349	349	350	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349
Dec-05	93,644	389	379	379	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378	378
Jun-06	95,454	422	417	412	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414
Dec-06	100,625	454	440	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
Jun-07	106,279	458	445	436	435	434	434	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435
Dec-07	112,706	549	533	519	517	516	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518
Jun-08	114,668	542	519	501	501	501	501	501	501	501	501	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Dec-08	118,897	622	594	587	587	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586
Jun-09	116,536	599	473	469	465	466	465	465	465	465	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464
Dec-09	116,182	555	524	516	514	514	514	514	515	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514
Jun-10	113,049	432	407	407	401	400	400	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399
Dec-10	115,178	444	432	425	425	424	425	425	425	425	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426	426
Jun-11	113,142	422	383	374	366	367	366	366	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367
Dec-11	115,919	388	353	352	349	349	349	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348
Jun-12	116,238	344	340	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
Dec-12	120,111	460	445	436	434	435	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434	434
Jun-13	120,961	483	451	445	443	444	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443
Dec-13	125,827	539	501	503	503	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504
Jun-14	126,358	485	473	468	471	471	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470
Dec-14	134,853	637	586	578	580	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579
Jun-15	136,903	741	691	687	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684
Dec-15	139,071	832	798	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796
Jun-16	135,704	771	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730	730
Dec-16	135,587	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798	798

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Comprehensive - Theft
Incurred Losses
Data as of 12/31/16
Losses in \$ 000s

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180		
	(1)																																
Jun-02	84,158	1,750	1,843	1,821	1,814	1,814	1,816	1,815	1,815	1,815	1,815	1,815	1,815	1,815	1,815	1,815	1,776	1,776	1,776	1,776	1,776	1,776	1,776	1,777	1,777	1,777	1,777	1,777	1,777	1,777	1,777		
Dec-02	87,376	2,247	2,214	2,075	2,076	2,078	2,078	1,992	1,986	1,985	1,985	1,987	1,987	1,987	1,987	1,986	1,986	1,985	1,985	1,985	1,984	1,984	1,984	1,984	1,984	1,985	1,986	1,986	1,985	1,985			
Jun-03	85,800	1,989	2,104	2,073	2,059	2,078	2,002	1,991	1,991	1,989	1,989	1,989	1,989	1,989	1,989	1,989	1,989	1,989	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982			
Dec-03	87,604	2,386	2,298	2,366	2,302	2,301	2,235	2,235	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,237	2,237	2,236	2,234				
Jun-04	87,034	2,241	2,361	2,392	2,404	2,403	2,407	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,384	2,384	2,384	2,384	2,384	2,384	2,384	2,384	2,384			
Dec-04	90,035	2,798	2,937	2,964	3,011	2,994	2,993	2,994	2,986	2,986	2,986	2,983	2,983	2,983	2,983	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970			
Jun-05	89,971	2,783	2,846	2,804	2,748	2,746	2,746	2,745	2,745	2,745	2,745	2,745	2,745	2,745	2,745	2,745	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744			
Dec-05	93,644	3,286	3,632	3,605	3,569	3,503	3,501	3,500	3,495	3,492	3,492	3,492	3,492	3,492	3,495	3,495	3,495	3,495	3,495	3,495	3,495	3,495	3,495	3,495	3,495	3,499	3,499	3,499	3,499	3,499			
Jun-06	95,454	3,548	3,945	3,914	3,888	3,827	3,837	3,831	3,831	3,832	3,833	3,833	3,833	3,833	3,838	3,838	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839	3,839			
Dec-06	100,625	3,974	4,590	4,480	4,468	4,484	4,477	4,481	4,485	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,476	4,476	4,476	4,476	4,476			
Jun-07	106,279	3,974	4,313	4,168	4,172	4,172	4,137	4,132	4,133	4,128	4,128	4,128	4,127	4,127	4,127	4,126	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125		
Dec-07	112,706	5,814	6,499	6,406	6,319	6,286	6,325	6,326	6,339	6,337	6,326	6,328	6,328	6,330	6,329	6,324	6,324	6,324	6,311	6,311													
Jun-08	114,668	5,566	5,686	5,633	5,601	5,594	5,604	5,608	5,608	5,608	5,610	5,603	5,602	5,607	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603		
Dec-08	118,897	6,536	7,029	6,903	6,920	6,906	6,900	6,900	6,902	6,888	6,887	6,881	6,881	6,881	6,881	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882	6,882		
Jun-09	116,536	5,471	5,398	5,366	5,303	5,286	5,297	5,307	5,320	5,327	5,318	5,325	5,362	5,362	5,340	5,364	5,364																
Dec-09	116,182	5,723	6,087	5,927	5,994	5,936	5,936	5,924	5,925	5,917	5,782	5,783	5,783	5,783	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785	5,785		
Jun-10	113,049	4,970	4,883	4,737	4,734	4,744	4,748	4,755	4,745	4,745	4,754	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741	4,741		
Dec-10	115,178	4,894	5,045	4,994	4,997	4,996	5,002	5,000	4,998	5,008	5,009	5,010	5,006	5,006																			
Jun-11	113,142	4,429	4,196	4,128	4,117	4,117	4,119	4,112	4,120	4,116	4,111	4,109	4,107																				
Dec-11	115,919	4,505	4,827	4,842	4,810	4,784	4,769	4,753	4,749	4,749	4,749																						
Jun-12	116,238	3,723	4,020	4,015	4,049	4,059	4,061	4,025	4,009	4,011	4,012																						
Dec-12	120,111	5,323	5,835	5,756	5,725	5,742	5,719	5,709	5,711	5,711																							
Jun-13	120,961	5,560	5,682	5,587	5,552	5,507	5,500	5,492	5,492																								
Dec-13	125,827	6,614	6,741	6,724	6,712	6,728	6,701	6,701																									
Jun-14	126,358	5,317	5,810	5,780	5,752	5,742	5,741																										
Dec-14	134,853	7,998	8,405	8,220	8,215																												
Jun-15	136,903	9,392	9,587	9,432	9,407																												
Dec-15	139,071	12,764	12,550	12,474																													
Jun-16	135,704	10,917	10,289																														
Dec-16	135,587	11,219																															

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Specified Perils
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	18,532	26	29	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
Dec-02	18,305	60	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Jun-03	17,618	50	54	53	54	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Dec-03	17,457	58	54	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Jun-04	16,996	43	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Dec-04	16,702	62	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
Jun-05	16,041	49	50	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Dec-05	15,906	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
Jun-06	15,578	42	43	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
Dec-06	15,681	63	56	55	55	54	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Jun-07	16,206	38	44	45	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Dec-07	15,927	73	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
Jun-08	15,789	40	41	40	40	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
Dec-08	15,677	79	76	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
Jun-09	15,045	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Dec-09	14,555	99	93	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
Jun-10	14,039	32	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Dec-10	13,876	59	59	57	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Jun-11	13,262	31	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Dec-11	12,881	84	87	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Jun-12	12,243	32	38	36	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Dec-12	11,986	96	86	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
Jun-13	11,790	35	39	42	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Dec-13	11,713	79	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
Jun-14	11,562	30	27	26	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Dec-14	11,979	81	78	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
Jun-15	12,188	46	46	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Dec-15	12,019	120	108	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
Jun-16	12,117	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
Dec-16	12,276	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
Specified Perils
Incurred Losses
Data as of 12/31/16
Losses in \$ 000s

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
	(1)																															
Jun-02	18,532	295	290	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	
Dec-02	18,305	611	564	567	520	520	520	518	518	518	518	518	518	518	518	521	521	522	522	522	522	522	522	522	522	522	522	522	522	522	288	
Jun-03	17,618	347	402	411	412	405	404	404	404	554	559	569	569	569	412	412	412	412	412	412	412	412	412	412	412	412	412	412	412	412		
Dec-03	17,457	314	300	298	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296		
Jun-04	16,996	282	300	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263		
Dec-04	16,702	531	591	594	593	593	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591		
Jun-05	16,041	291	330	320	316	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315		
Dec-05	15,906	477	484	477	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486		
Jun-06	15,578	395	464	463	463	463	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466		
Dec-06	15,681	797	733	777	782	781	778	795	795	795	800	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789		
Jun-07	16,206	148	280	293	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	
Dec-07	15,927	829	730	717	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718		
Jun-08	15,789	413	432	427	398	389	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391		
Dec-08	15,677	577	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622		
Jun-09	15,045	570	533	533	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532		
Dec-09	14,555	612	584	581	584	583	583	583	586	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581		
Jun-10	14,039	286	311	332	332	335	335	335	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332		
Dec-10	13,876	360	378	377	377	374	375	365	360	360	360	360	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362		
Jun-11	13,262	283	211	207	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208		
Dec-11	12,881	575	590	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543		
Jun-12	12,243	332	342	331	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327		
Dec-12	11,986	815	879	887	890	891	887	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895	895		
Jun-13	11,790	259	319	344	345	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341		
Dec-13	11,713	565	574	571	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567		
Jun-14	11,562	298	256	242	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232		
Dec-14	11,979	887	826	777	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778		
Jun-15	12,188	309	255	262	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277		
Dec-15	12,019	1,020	1,099	1,100																												
Jun-16	12,117	473	447																													
Dec-16	12,276	734																														

Province of Alberta
Alberta Automobile Insurance Board - Commercial Automobile
All Perils
Reported Counts
Data as of 12/31/16

Accident Semester	Car-Years	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	(1)																														
Jun-02	21,247	715	684	658	655	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653
Dec-02	21,687	709	676	661	652	649	646	638	636	636	635	636	635	635	635	635	635	635	635	635	634	634	634	634	634	634	634	634	634	634	634
Jun-03	17,976	488	528	502	496	494	491	489	489	489	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488	488
Dec-03	17,216	553	529	517	509	508	509	510	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509
Jun-04	16,500	545	535	522	515	515	515	513	513	513	513	513	513	513	513	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512
Dec-04	18,090	622	673	645	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639
Jun-05	18,901	645	675	630	624	626	626	626	623	623	624	624	624	623	623	623	623	623	623	623	623	623	623	623	623	623	623	623	623	623	623
Dec-05	18,051	710	699	688	682	681	680	680	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679	679
Jun-06	19,740	702	664	641	628	624	623	620	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618	618
Dec-06	21,111	885	866	815	793	790	787	786	785	784	784	784	785	785	785	785	785	784	784	784	784	784	784	784	784	784	784	784	784	784	784
Jun-07	24,351	918	903	843	815	809	801	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802	802
Dec-07	25,796	1,188	1,146	1,074	1,038	1,030	1,027	1,028	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029
Jun-08	27,302	889	866	812	800	787	787	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784
Dec-08	26,586	1,097	1,043	990	976	974	971	971	971	971	971	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970
Jun-09	24,305	750	670	646	633	638	631	631	631	631	631	632	631	631	631	631	631	631	631	631	631	631	631	631	631	631	631	631	631	631	631
Dec-09	24,932	933	917	892	883	872	871	871	870	870	870	870	870	870	870	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871
Jun-10	24,890	683	629	693	600	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601	601
Dec-10	27,261	1,051	953	930	920	918	918	918	918	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919
Jun-11	27,759	1,017	808	768	757	759	756	756	756	757	757	756	752																		
Dec-11	28,595	1,146	962	929	919	907	907	904	904	904	904	904																			
Jun-12	27,844	863	837	772	757	748	746	746	746	746	746																				
Dec-12	27,765	1,385	1,257	1,177	1,147	1,143	1,137	1,137	1,137	1,137	1,137																				
Jun-13	28,464	1,091	1,036	946	942	938	934	934	934																						
Dec-13	31,293	1,621	1,464	1,404	1,383	1,365	1,367	1,366																							
Jun-14	32,251	1,115	996	952	942	941	940																								
Dec-14	37,242	1,699	1,514	1,445	1,422	1,417																									
Jun-15	40,514	1,251	1,106	1,033	1,029																										
Dec-15	41,903	1,467	1,450	1,417																											
Jun-16	42,670	1,108	1,100																												
Dec-16	45,347	1,430																													

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Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	33,327	33,946	33,943	34,018	34,011	34,208	34,208	34,208	34,208	34,208	34,208	34,208	34,208	34,208	34,208
2002-2	35,670	35,772	36,077	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160	36,160
2003-1	33,735	33,961	34,920	35,350	36,194	36,294	36,294	36,305	36,305	36,305	36,305	36,305	36,305	36,305	36,305
2003-2	30,250	30,481	30,486	30,745	30,832	30,987	30,989	30,993	30,995	30,996	31,004				31,038
2004-1	28,986	29,004	29,018	29,021	29,060	29,200	29,335	29,392	29,425	29,432					30,190
2004-2	33,155	34,109	34,275	34,349	34,349	34,363	34,370	34,377	34,422						35,456
2005-1	20,842	21,417	21,472	21,500	21,554	22,081	22,084	22,415							22,889
2005-2	28,322	28,422	28,964	29,718	29,940	29,945	29,952								31,369
2006-1	28,341	28,449	28,665	28,833	29,759										30,331
2006-2	34,676	35,693	35,770	36,135	36,142										38,350
2007-1	26,711	27,433	27,841	27,845											28,338
2007-2	35,171	35,804	36,247												38,681
2008-1	26,617	27,041													29,606
2008-2	33,541														36,234
2009-1															21,088
2009-2															27,104
2010-1															21,471
2010-2															24,815
2011-1															26,237
2011-2															34,837
2012-1															25,501
2012-2															39,585
2013-1															35,855
2013-2															43,757
2014-1															31,365
2014-2															45,340
2015-1															38,514
2015-2															44,168
2016-1															32,737
2016-2															45,174
Accident Year	Portion of Ultimate Losses Paid by Month of Development														Selected Ultimate
	108	120		132		144		156		168		180			
2002	98.93%		99.61%		100.00%		100.00%		100.00%		100.00%		100.00%		70,368
2003	95.35%		97.76%		99.68%		99.93%		99.94%		99.95%				67,343
2004	94.69%		96.42%		96.81%		97.13%		97.27%						65,646
2005	91.67%		93.01%		95.88%		96.51%								54,258
2006	91.91%		94.06%		96.26%										68,681
2007	93.41%		95.63%												67,019
2008	92.01%														65,839
2009															48,192
2010															46,286
2011															61,073
2012															65,086
2013															79,612
2014															76,705
2015															82,681
2016															77,911
	Cumulative Paid Losses														
Arithmetic Averages	108	120		132		144		156		168		180			Ultimate
All Years	94.00%		96.08%		97.72%		98.39%		99.07%		99.97%		100.00%		100.00%
10 Year															
8 Year															
6 Year	93.17%		96.08%												
4 Year	92.25%		94.78%		97.15%		98.39%								
3 Year	92.45%		94.23%		96.31%		97.86%		99.07%						
All Year ex h/i/o	93.47%		95.97%		97.58%		98.53%		99.94%						
6 Year ex h/i/o	93.01%		95.97%												
\$ Weighted Averages															
All Years	94.09%		96.20%		97.82%		98.52%		99.10%		99.98%		100.00%		100.00%
10 Year															
8 Year															
6 Year	93.22%		96.20%												
4 Year	92.28%		94.86%		97.22%		98.52%								
3 Year	92.44%		94.32%		96.34%		97.96%		99.10%						
Selected Pay Pattern	92.44%		94.32%		96.34%		97.96%		99.10%		99.98%		100.00%		100.00%
Incremental	2.75%		1.87%		2.02%		1.62%		1.14%		0.88%		0.02%		0.00%

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Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	6,138	11,621	12,874	13,292	13,417	13,471	13,546	13,655	13,638	13,788	13,780	13,782	15,146	15,146	15,148	15,148
2002-2	5,937	12,003	13,188	13,605	13,910	14,055	14,078	14,092	14,105	14,126	14,130	14,152	14,151	14,151	14,151	14,151
2003-1	5,822	11,093	13,250	13,602	13,907	13,918	13,924	13,963	14,009	14,118	14,162	14,161	14,161	14,161	14,163	14,238
2003-2	4,663	10,790	11,829	12,514	12,909	12,947	13,209	13,235	13,402	13,403	13,404	13,403	13,406	13,434	13,435	13,435
2004-1	6,146	11,582	12,927	14,693	14,889	15,268	15,312	15,350	15,365	15,376	15,383	15,382	15,383	15,472	15,474	15,478
2004-2	5,749	12,000	13,427	13,921	14,259	14,476	14,721	14,802	14,809	14,855	14,925	14,992	15,000	15,357	15,519	15,527
2005-1	5,919	11,931	13,600	16,553	17,140	17,456	17,358	17,369	17,380	17,555	17,569	17,593	17,606	17,606	17,624	17,624
2005-2	6,105	15,152	17,148	17,891	18,516	18,661	18,685	18,811	18,918	18,934	18,950	18,957	18,649	18,651	18,651	18,662
2006-1	6,663	15,663	18,473	19,331	20,523	20,579	20,616	20,668	20,962	21,035	21,073	21,472	21,478	21,481	21,593	21,593
2006-2	5,192	15,909	19,832	21,490	22,122	22,207	22,779	22,826	22,864	22,911	23,018	23,369	23,363	23,375	23,365	23,823
2007-1	5,958	16,042	20,125	22,319	23,363	23,472	23,616	23,673	23,619	24,080	24,108	24,093	24,093	24,097	24,095	24,088
2007-2	5,495	17,970	22,251	24,411	25,720	26,134	26,365	26,470	26,650	26,677	26,736	26,747	26,776	26,777	26,827	26,843
2008-1	6,110	15,539	18,815	19,837	21,005	21,062	21,095	21,237	21,253	21,472	21,527	21,541	21,541	21,555	21,555	21,555
2008-2	6,306	19,159	22,457	23,563	24,314	24,458	24,516	24,529	24,570	24,724	24,721	24,730	24,741	24,742	24,750	24,752
2009-1	6,278	14,332	16,022	16,495	16,637	16,699	16,999	17,017	17,034	17,045	17,043	17,044	17,044	17,193	17,193	17,193
2009-2	5,957	16,228	17,919	18,574	18,845	18,933	19,230	19,361	19,577	19,584	19,602	19,615	19,617	19,617	19,617	19,617
2010-1	6,975	13,815	15,508	16,537	16,827	17,194	17,311	17,429	17,440	17,449	17,460	17,460	17,517	17,531		
2010-2	6,924	18,174	21,705	23,293	24,449	24,547	24,563	24,624	24,628	24,659	24,661	24,661	24,661			
2011-1	8,527	18,314	20,952	21,801	22,557	22,733	22,989	23,000	23,001	23,027	23,058	23,227				
2011-2	7,377	19,615	22,422	24,011	24,936	25,126	25,228	25,381	25,565	25,685	26,290					
2012-1	7,327	16,133	18,776	19,935	20,624	20,959	20,973	20,975	20,995	21,044						
2012-2	5,998	19,871	24,176	26,416	27,170	27,875	28,288	28,362	28,424							
2013-1	8,633	19,571	23,883	25,094	26,150	26,315	26,553	27,579								
2013-2	7,296	24,314	30,088	33,710	35,251	35,448	35,510									
2014-1	9,694	20,812	25,422	27,241	28,529	28,615										
2014-2	7,833	28,059	34,410	37,726	38,606											
2015-1	10,997	23,969	28,839	30,177												
2015-2	9,005	23,391	27,121													
2016-1	8,484	17,611														
2016-2	8,169															

Accident Year	Portion of Ultimate Losses Paid by Month of Development						
	12	24	36	48	60	72	96
2002	59.93%	90.38%	93.45%	94.65%	95.20%	95.26%	100.00%
2003	56.94%	91.90%	96.94%	98.19%	99.45%	99.61%	100.00%
2004	55.70%	90.36%	94.89%	96.64%	97.00%	97.39%	99.61%
2005	49.64%	92.76%	99.01%	99.24%	100.39%	100.58%	99.85%
2006	45.53%	85.49%	93.22%	94.85%	95.83%	97.12%	98.14%
2007	42.05%	87.01%	96.04%	97.69%	99.04%	99.23%	99.40%
2008	46.87%	90.76%	97.37%	98.18%	98.80%	99.27%	99.36%
2009	55.06%	93.39%	96.45%	98.36%	99.38%	99.45%	99.89%
2010	48.97%	90.31%	98.34%	99.16%	99.36%	99.47%	99.63%
2011	51.52%	88.68%	95.59%	96.71%	97.44%	99.29%	
2012	44.20%	88.11%	96.13%	98.40%	98.81%		
2013	41.95%	86.15%	96.12%	98.50%			
2014	42.01%	90.42%	98.59%				
2015	54.43%	94.58%					
2016	49.15%						

Cumulative Paid Losses							
	12	24	36	48	60	72	96
Arithmetic Averages							
All Years	49.60%	90.02%	96.32%	97.55%	98.25%	98.67%	99.53%
10 Year	47.62%	89.49%	96.69%	97.77%	98.55%	98.67%	
8 Year	48.41%	90.30%	96.83%	97.73%	98.63%	98.98%	99.53%
6 Year	47.21%	89.71%	96.87%	98.22%	98.80%	98.97%	99.38%
4 Year	46.88%	89.82%	96.61%	98.19%	98.75%	99.37%	99.20%
3 Year	48.53%	90.38%	96.95%	97.87%	98.54%	99.40%	99.55%
All Year ex hi/lo	49.39%	90.02%	96.36%	97.67%	98.35%	98.85%	99.68%
6 Year ex hi/lo	46.72%	89.38%	96.76%	98.36%	99.00%	99.31%	99.55%

\$ Weighted Averages							
	12	24	36	48	60	72	96
All Years	48.53%	89.83%	96.43%	97.62%	98.28%	98.76%	99.45%
10 Year	47.20%	89.44%	96.68%	97.78%	98.50%	98.76%	
8 Year	47.86%	90.17%	96.86%	97.74%	98.55%	98.99%	99.45%
6 Year	46.95%	89.74%	96.92%	98.20%	98.76%	98.96%	99.33%
4 Year	46.59%	89.86%	96.74%	98.18%	98.68%	99.36%	99.17%
3 Year	48.23%	90.31%	97.05%	97.92%	98.49%	99.39%	99.52%

Selected Pay Pattern	48.23%	90.31%	97.05%	97.92%	98.49%	99.39%	99.60%	99.52%
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Incremental	48.23%	42.08%	6.74%	0.87%	0.57%	0.90%	0.21%	-0.08%
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	48.23%	42.08%	6.74%	0.87%	0.57%	0.90%	0.21%	-0.08%	0.02%	0.02%	0.14%	0.23%	0.06%	0.00%	0.00%	0.00%

Discounted Value at 1.8%: 0.9794

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TPL PD

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148	15,148
2002-2	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151	14,151
2003-1	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238	14,238
2003-2	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435	13,435
2004-1	15,479	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484	15,484
2004-2	15,585	15,586	15,593	15,595	15,600	15,600	15,602	15,619	15,634						15,634
2005-1	17,624	17,624	17,625	17,625	17,623	17,623	17,623	17,623							17,626
2005-2	18,665	18,666	18,666	18,677	18,679	18,679	18,679								18,704
2006-1	21,593	21,595	21,639	21,648	21,649	21,670									21,894
2006-2	23,834	23,860	23,861	23,861	23,868										23,914
2007-1	24,088	24,095	24,095	24,095											24,102
2007-2	26,866	26,870	26,883												27,121
2008-1	21,834	21,833													21,840
2008-2	24,752														24,763
2009-1															17,203
2009-2															19,647
2010-1															17,541
2010-2															24,805
2011-1															23,318
2011-2															26,552
2012-1															21,589
2012-2															28,475
2013-1															28,320
2013-2															35,730
2014-1															29,444
2014-2															38,736
2015-1															31,046
2015-2															29,538
2016-1															24,179
2016-2															28,275
Accident Year	Portion of Ultimate Losses Paid by Month of Development														Selected Ultimate
	108	120	132			144		156		168		180			
2002	100.00%	100.00%	100.00%			100.00%		100.00%		100.00%		100.00%			29,299
2003	100.00%	100.00%	100.00%			100.00%		100.00%		100.00%					27,672
2004	99.84%	99.87%	99.89%			99.90%		100.00%							31,118
2005	99.88%	99.89%	99.92%			99.92%									36,330
2006	99.17%	99.35%	99.41%												45,808
2007	99.49%	99.52%													51,223
2008	99.96%														46,603
2009															36,850
2010															42,347
2011															49,869
2012															50,065
2013															64,050
2014															68,181
2015															60,584
2016															52,454
	Cumulative Paid Losses														
Arithmetic Averages	108	120	132			144		156		168		180			Ultimate
All Years	99.76%	99.77%	99.84%			99.96%		100.00%		100.00%		100.00%			100.00%
10 Year															
8 Year															
6 Year	99.73%	99.77%													
4 Year	99.63%	99.66%	99.81%			99.96%									
3 Year	99.54%	99.59%	99.74%			99.94%		100.00%							
All Year ex hi/lo	99.84%	99.82%	99.94%			99.96%		100.00%							
6 Year ex hi/lo	99.80%	99.82%													
\$ Weighted Averages															
All Years	99.72%	99.72%	99.80%			99.95%		100.00%		100.00%		100.00%			100.00%
10 Year															
8 Year															
6 Year	99.69%	99.72%													
4 Year	99.61%	99.62%	99.76%			99.95%									
3 Year	99.54%	99.56%	99.71%			99.94%		100.00%							
Selected Pay Pattern	99.54%		99.56%		99.71%		99.94%		100.00%		100.00%		100.00%		100.00%
Incremental	0.02%	0.02%	0.14%		0.23%		0.06%		0.00%		0.00%		0.00%		0.00%

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AB Total

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	305	688	908	982	1,022	1,158	1,173	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181
2002-2	292	814	1,041	1,191	1,297	1,309	1,346	1,350	1,354	1,355	1,369	1,373	1,378	1,385	1,383	1,385
2003-1	260	771	951	1,067	1,107	1,115	1,119	1,119	1,119	1,120	1,125	1,136	1,146	1,146	1,146	1,146
2003-2	237	777	1,026	1,163	1,212	1,219	1,223	1,223	1,223	1,223	1,225	1,225	1,225	1,225	1,225	1,225
2004-1	249	740	946	1,044	1,118	1,121	1,122	1,122	1,126	1,129	1,133	1,147	1,147	1,147	1,147	1,147
2004-2	372	1,081	1,306	1,482	1,532	1,543	1,558	1,559	1,680	1,682	1,690	1,690	1,690	1,690	1,691	1,691
2005-1	358	800	994	1,170	1,252	1,257	1,257	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256
2005-2	500	1,329	1,485	1,659	1,740	1,783	1,866	1,868	1,870	1,873	1,877	1,877	1,878	1,882	1,882	1,882
2006-1	365	831	942	980	1,024	1,025	1,026	1,026	1,030	1,030	1,046	1,047	1,047	1,047	1,044	1,044
2006-2	262	906	1,439	1,663	1,790	1,801	1,812	1,816	1,819	1,835	1,849	1,900	1,920	1,953	1,956	1,959
2007-1	424	986	1,075	1,147	1,257	1,303	1,343	1,343	1,343	1,343	1,343	1,343	1,343	1,343	1,343	1,343
2007-2	506	1,454	1,926	2,299	2,436	2,460	2,494	2,514	2,866	2,886	3,094	3,106	3,815	3,821	3,831	3,836
2008-1	443	959	1,237	1,448	1,488	1,493	1,495	1,495	1,495	1,496	1,496	1,496	1,496	1,496	1,496	1,496
2008-2	547	1,494	1,659	1,746	1,836	1,864	1,897	1,937	1,937	2,036	2,035	1,936	2,033	2,033	2,033	2,033
2009-1	294	793	929	1,069	1,100	1,102	1,124	1,124	1,124	1,124	1,124	1,124	1,124	1,124	1,124	1,124
2009-2	431	1,307	1,508	1,660	1,802	1,878	1,941	1,984	2,052	2,100	2,160	2,212	2,269	2,315	2,346	
2010-1	318	722	927	993	1,064	1,072	1,073	1,073	1,073	1,073	1,073	1,073	1,123	1,341		
2010-2	372	955	1,164	1,318	1,397	1,400	1,404	1,405	1,406	1,418	1,418	1,418	1,420			
2011-1	589	1,670	1,836	2,005	2,046	2,052	2,058	2,072	2,077	2,077	2,079	2,079				
2011-2	566	1,462	1,831	2,017	2,207	2,260	2,301	2,305	2,341	2,362	2,383					
2012-1	385	706	891	1,001	1,088	1,103	1,110	1,111	1,111							
2012-2	237	823	1,041	1,159	1,708	1,714	1,716	1,717	1,843							
2013-1	487	1,063	1,544	1,680	1,883	1,942	1,966	1,989								
2013-2	495	1,281	1,629	1,810	1,937	1,946	1,946									
2014-1	298	823	1,049	1,187	1,249	1,252										
2014-2	381	1,054	1,426	1,609	1,818											
2015-1	416	968	1,316	1,605												
2015-2	392	1,076	1,377													
2016-1	394	875														
2016-2	436															

Accident Year	Portion of Ultimate Losses Paid by Month of Development							
	12	24	36	48	60	72	84	96
2002	37.43%	77.23%	93.78%	96.49%	96.81%	97.36%	97.70%	97.91%
2003	42.53%	88.30%	98.17%	98.78%	98.84%	99.58%	100.00%	100.00%
2004	39.18%	82.84%	93.48%	94.45%	99.01%	99.96%	99.96%	100.00%
2005	41.02%	83.76%	94.55%	98.50%	98.61%	98.84%	98.88%	99.01%
2006	36.42%	80.62%	93.82%	94.57%	94.96%	96.54%	98.91%	100.01%
2007	28.38%	58.47%	71.14%	72.99%	80.07%	84.42%	98.13%	98.43%
2008	42.64%	87.99%	94.28%	96.05%	97.21%	99.98%	99.93%	99.93%
2009	33.42%	70.37%	79.28%	83.68%	86.73%	89.67%	92.67%	94.76%
2010	39.50%	77.86%	89.10%	89.41%	89.49%	89.92%	99.66%	
2011	48.23%	82.74%	91.86%	94.32%	95.28%	96.23%		
2012	29.12%	63.07%	86.82%	87.32%	91.23%			
2013	26.29%	55.85%	65.48%	66.42%				
2014	36.61%	79.43%	93.33%					
2015	36.68%	80.42%						
2016	37.74%							

Cumulative Paid Losses								
	12	24	36	48	60	72	84	96
Arithmetic Averages								
All Years	37.01%	76.35%	88.08%	89.42%	93.48%	95.25%	98.43%	98.76%
10 Year	35.86%	73.68%	85.97%	87.77%	93.14%	95.25%		
8 Year	35.95%	74.72%	83.91%	85.60%	91.70%	94.45%	98.52%	98.76%
6 Year	35.78%	73.23%	84.31%	86.20%	90.00%	92.79%	98.03%	98.69%
4 Year	34.33%	69.69%	84.37%	84.37%	90.68%	93.95%	97.60%	98.28%
3 Year	37.01%	71.90%	81.88%	82.69%	92.00%	91.94%	97.42%	97.71%
All Year ex hi/lo	36.97%	77.07%	89.22%	90.78%	94.35%	96.01%	99.03%	99.21%
6 Year ex hi/lo	35.04%	75.20%	86.77%	88.68%	90.68%	93.09%	98.90%	99.34%

\$ Weighted Averages								
	12	24	36	48	60	72	84	96
All Years	36.31%	74.45%	85.75%	86.98%	92.56%	94.47%	98.26%	98.63%
10 Year	35.27%	72.06%	83.87%	85.59%	92.24%	94.47%		
8 Year	35.60%	73.55%	81.90%	83.52%	91.04%	93.79%	98.32%	98.63%
6 Year	35.48%	71.88%	82.44%	84.46%	89.50%	92.32%	97.91%	98.57%
4 Year	33.13%	67.74%	82.04%	82.16%	91.05%	94.30%	97.51%	98.21%
3 Year	37.01%	68.91%	78.39%	80.70%	92.54%	92.48%	97.19%	97.78%

Selected Pay Pattern	37.01%	68.91%	78.39%	80.70%	92.54%	92.48%	97.19%	97.78%
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Incremental	37.01%	31.90%	9.48%	2.31%	11.84%	-0.06%	4.71%	0.59%
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	37.01%	31.90%	9.48%	2.31%	11.84%	-0.06%	4.71%	0.59%	1.91%	0.34%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%

Discounted Value at 1.8%: 0.9656

Province of Alberta
Alberta Automobile Insurance Rate Board
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AB Total

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181	1,181
2002-2	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438		1,438
2003-1	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146	1,146		1,146
2003-2	1,225	1,225	1,225	1,225	1,225	1,225	1,225	1,225	1,225	1,225	1,225	1,225			1,225
2004-1	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147					1,147
2004-2	1,691	1,691	1,691	1,691	1,691	1,691	1,691	1,691	1,691						1,691
2005-1	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256							1,256
2005-2	1,883	1,906	1,906	1,914	1,914	1,914	1,914								1,914
2006-1	1,044	1,044	1,044	1,044	1,044	1,044									1,044
2006-2	1,956	1,956	1,956	1,956	1,956										1,956
2007-1	1,343	1,343	1,343	1,343											1,341
2007-2	3,874	3,907	3,923												3,915
2008-1	1,499	1,499													1,497
2008-2	2,033														2,034
2009-1															1,123
2009-2															2,539
2010-1															1,338
2010-2															1,432
2011-1															2,153
2011-2															2,483
2012-1															1,149
2012-2															2,088
2013-1															3,918
2013-2															2,006
2014-1															1,348
2014-2															1,941
2015-1															1,945
2015-2															1,762
2016-1															1,319
2016-2															2,154

Accident Year	Portion of Ultimate Losses Paid by Month of Development							Selected Ultimate
	108	120	132	144	156	168	180	
2002	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	2,618
2003	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		2,371
2004	100.00%	100.00%	100.00%	100.00%	100.00%			2,837
2005	99.04%	99.77%	100.00%	100.00%				3,170
2006	100.00%	100.00%	100.00%					3,000
2007	99.26%	100.18%						5,257
2008	100.04%							3,531
2009								3,662
2010								2,770
2011								4,637
2012								3,237
2013								5,924
2014								3,289
2015								3,707
2016								3,474

Cumulative Paid Losses								
Arithmetic Averages	108	120	132	144	156	168	180	Ultimate
All Years	99.76%	99.99%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.72%	99.99%						
4 Year	99.59%	99.99%	100.00%	100.00%				
3 Year	99.77%	99.98%	100.00%	100.00%	100.00%			
All Year ex hi/lo	99.85%	100.00%	100.00%	100.00%	100.00%			
6 Year ex hi/lo	99.82%	100.00%						
\$ Weighted Averages	108	120	132	144	156	168	180	Ultimate
All Years	99.70%	100.01%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.66%	100.01%						
4 Year	99.55%	100.01%	100.00%	100.00%				
3 Year	99.68%	100.02%	100.00%	100.00%	100.00%			
Selected Pay Pattern	99.68%	100.02%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Incremental	1.91%	0.34%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

Collision

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	8,983	10,383	10,215	10,196	10,099	10,105	10,101	10,111	10,084	10,081	10,076	10,080	10,080	10,080	10,080	10,080
2002-2	9,160	11,409	11,281	11,241	11,218	11,158	11,156	11,161	11,170	11,170	11,170	11,174	11,174	11,174	11,164	11,166
2003-1	10,117	12,017	11,835	11,789	11,773	11,755	11,757	11,755	11,753	11,755	11,710	11,718	11,720	11,730	11,748	11,747
2003-2	9,213	11,434	11,558	11,324	11,306	11,351	11,353	11,349	11,351	11,350	11,350	11,347	11,347	11,347	11,345	11,345
2004-1	8,558	9,796	9,778	9,615	9,495	9,497	9,503	9,504	9,505	9,505	9,504	9,504	9,504	9,504	9,502	9,500
2004-2	8,871	13,011	12,681	12,626	12,640	12,586	12,581	12,590	12,599	12,609	12,630	12,634	12,633	12,632	12,631	12,630
2005-1	10,975	13,905	13,702	13,582	13,481	13,476	13,491	13,500	13,529	13,519	13,507	13,506	13,488	13,487	13,474	13,472
2005-2	11,834	17,546	17,458	17,282	17,250	17,239	17,237	17,262	17,264	17,271	17,288	17,299	17,204	17,204	17,202	17,221
2006-1	14,335	18,303	17,971	17,696	17,607	17,574	17,542	17,513	17,510	17,510	17,519	17,519	17,519	17,510	17,506	17,505
2006-2	14,228	22,173	22,108	21,371	21,115	21,049	21,043	21,035	21,042	20,922	20,919	20,929	20,931	20,927	20,927	20,927
2007-1	15,835	21,904	21,742	21,254	20,666	20,563	20,506	20,504	20,509	20,271	20,273	20,263	20,191	20,188	20,174	20,174
2007-2	15,357	25,618	25,410	24,910	23,941	23,901	23,955	23,905	23,869	23,878	23,877	23,879	23,861	23,861	23,858	23,857
2008-1	15,507	21,023	20,527	19,872	19,516	19,489	19,502	19,439	19,435	19,363	19,365	19,362	19,362	19,359	19,359	19,360
2008-2	14,957	24,630	23,934	23,562	23,133	23,142	23,104	23,111	23,121	23,125	23,121	23,121	23,114	23,114	23,114	23,114
2009-1	15,074	17,632	17,020	16,906	16,740	16,726	16,732	16,741	16,728	16,736	16,680	16,683	16,683	16,683	16,683	16,682
2009-2	13,045	18,467	18,342	18,138	18,142	18,127	18,143	18,137	18,169	18,165	18,159	18,160	18,170	18,170	18,158	18,158
2010-1	12,792	14,817	14,659	14,569	14,482	14,477	14,492	14,493	14,506	14,531	14,528	14,524	14,520	14,517		
2010-2	12,338	18,625	18,126	17,780	17,619	17,620	17,608	17,554	17,550	17,549	17,540	17,538	17,539			
2011-1	16,302	18,263	17,899	17,811	17,720	17,733	17,708	17,708	17,702	17,702	17,703	17,698				
2011-2	15,299	21,164	21,074	21,114	21,073	21,039	21,043	20,959	21,012	21,021	21,029					
2012-1	15,465	18,465	18,152	17,924	17,769	17,763	17,765	17,760	17,750	17,749						
2012-2	14,879	23,991	23,440	23,151	23,032	22,966	22,959	22,880	22,879							
2013-1	17,373	20,430	19,938	19,782	19,694	19,695	19,706	19,712								
2013-2	18,861	28,457	27,459	27,331	27,499	27,553	27,604									
2014-1	19,638	22,508	22,312	21,992	21,776											
2014-2	18,802	29,659	28,204	27,505	27,251											
2015-1	18,648	21,456	20,847	20,442												
2015-2	20,779	27,087	26,317													
2016-1	16,212	18,937														
2016-2	18,288															

Accident Year	Portion of Ultimate Losses Paid by Month of Development							
	12	24	36	48	60	72	84	96
2002	91.97%	101.08%	100.35%	100.09%	100.02%	100.01%	100.03%	99.98%
2003	91.97%	101.15%	99.90%	100.11%	100.10%	99.94%	99.97%	100.04%
2004	84.52%	100.95%	100.23%	100.00%	100.08%	100.22%	100.23%	100.20%
2005	83.92%	101.21%	100.18%	100.22%	100.37%	100.40%	100.07%	100.01%
2006	84.67%	103.61%	100.70%	100.35%	100.35%	100.05%	100.06%	100.03%
2007	84.64%	105.99%	101.09%	100.99%	100.26%	100.26%	100.05%	100.02%
2008	84.71%	103.14%	100.35%	100.16%	100.03%	100.02%	100.00%	100.00%
2009	87.97%	101.08%	99.99%	100.03%	100.09%	99.92%	99.95%	99.91%
2010	84.69%	101.97%	100.10%	100.11%	100.05%	100.00%	99.97%	
2011	86.61%	100.35%	100.15%	100.00%	99.91%	99.94%		
2012	82.04%	101.77%	100.37%	100.18%	99.96%			
2013	83.04%	99.85%	99.75%	100.01%				
2014	84.17%	102.28%	99.85%					
2015	92.53%	102.44%						
2016	90.90%							

Arithmetic Averages	Cumulative Paid Losses							
	12	24	36	48	60	72	84	96
All Years	86.56%	101.92%	100.23%	100.19%	100.11%	100.08%	100.04%	100.02%
10 Year	86.13%	102.25%	100.25%	100.21%	100.12%	100.08%		
8 Year	86.49%	101.61%	100.20%	100.23%	100.13%	100.10%	100.04%	100.02%
6 Year	86.55%	101.44%	100.03%	100.08%	100.05%	100.03%	100.02%	100.03%
4 Year	87.66%	101.59%	100.03%	100.08%	100.00%	99.97%	99.99%	99.99%
3 Year	89.20%	101.52%	99.99%	100.06%	99.97%	99.95%	99.97%	99.98%
All Year ex hi/lo	86.45%	101.75%	100.20%	100.13%	100.10%	100.05%	100.02%	100.01%
6 Year ex hi/lo	86.18%	101.59%	100.02%	100.08%	100.03%	100.00%	100.02%	100.02%

\$ Weighted Averages								
	12	24	36	48	60	72	84	96
All Years	86.29%	102.05%	100.24%	100.21%	100.11%	100.08%	100.03%	100.02%
10 Year	86.11%	102.27%	100.25%	100.22%	100.12%	100.08%		
8 Year	86.48%	101.62%	100.20%	100.24%	100.12%	100.09%	100.03%	100.02%
6 Year	86.50%	101.44%	100.02%	100.08%	100.05%	100.04%	100.02%	100.02%
4 Year	87.47%	101.58%	100.01%	100.07%	100.00%	99.97%	100.00%	99.99%
3 Year	89.02%	101.52%	99.97%	100.06%	99.97%	99.95%	99.97%	99.98%

Selected Pay Pattern	89.02%	101.52%	99.97%	100.06%	99.97%	99.95%	99.97%	99.98%
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Incremental	89.02%	12.51%	-1.56%	0.09%	-0.09%	-0.02%	0.02%	0.01%
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	89.02%	12.51%	-1.56%	0.09%	-0.09%	-0.02%	0.02%	0.01%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Discounted Value at 1.8%: 0.9897

Data Source: AU20112ALB

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

Collision

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	10,080	10,080	10,080	10,080	10,080	10,080	10,080	10,084	10,083	10,083	10,083	10,083	10,083	10,083	10,083
2002-2	11,166	11,165	11,162	11,161	11,162	11,161	11,165	11,165	11,165	11,165	11,165	11,165	11,165	11,165	11,165
2003-1	11,747	11,746	11,746	11,747	11,747	11,746	11,746	11,746	11,746	11,746	11,746	11,746	11,746	11,746	11,746
2003-2	11,342	11,342	11,342	11,342	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338	11,338
2004-1	9,498	9,496	9,496	9,495	9,495	9,495	9,494	9,492	9,492	9,491					9,491
2004-2	12,630	12,596	12,596	12,595	12,595	12,595	12,595	12,595	12,595	12,595					12,595
2005-1	13,473	13,471	13,471	13,469	13,468	13,467	13,467	13,467							13,467
2005-2	17,219	17,217	17,210	17,207	17,205	17,203	17,203								17,203
2006-1	17,503	17,501	17,501	17,489	17,489	17,489									17,489
2006-2	20,930	20,930	20,930	20,930	20,930										20,930
2007-1	20,174	20,174	20,174	20,174											20,174
2007-2	23,854	23,852	23,851												23,851
2008-1	19,358	19,357													19,360
2008-2	23,114														23,114
2009-1															16,695
2009-2															18,176
2010-1															14,526
2010-2															17,539
2011-1															17,710
2011-2															21,039
2012-1															17,750
2012-2															22,896
2013-1															19,739
2013-2															27,574
2014-1															21,766
2014-2															27,311
2015-1															20,209
2015-2															25,435
2016-1															17,485
2016-2															23,466
Accident Year	Portion of Ultimate Losses Paid by Month of Development														Selected Ultimate
	108	120	132	144	156	168	180								
2002	99.99%	99.97%	99.97%	100.00%	100.00%	100.00%	100.00%								21,248
2003	100.02%	100.03%	100.00%	100.00%	100.00%	100.00%	100.00%								23,083
2004	100.18%	100.02%	100.02%	100.00%	100.00%	100.00%	100.00%								22,086
2005	100.06%	100.03%	100.01%	100.00%	100.00%	100.00%	100.00%								30,670
2006	100.03%	100.00%	100.00%	100.00%											38,419
2007	100.01%	100.00%													44,025
2008	99.99%														42,474
2009															34,871
2010															32,065
2011															38,749
2012															40,646
2013															47,313
2014															49,077
2015															45,643
2016															40,951
Arithmetic Averages	Cumulative Paid Losses														Ultimate
	108	120	132	144	156	168	180								
All Years	100.04%	100.01%	100.00%	100.00%	100.00%	100.00%	100.00%								100.00%
10 Year															
8 Year															
6 Year	100.05%	100.01%													
4 Year	100.02%	100.01%	100.01%	100.00%	100.00%	100.00%	100.00%								
3 Year	100.01%	100.01%	100.01%	100.00%	100.00%	100.00%	100.00%								
All Year ex hi/lo	100.02%	100.01%	100.00%	100.00%	100.00%	100.00%	100.00%								
6 Year ex hi/lo	100.03%	100.01%													
\$ Weighted Averages															
	108	120	132	144	156	168	180								
All Years	100.03%	100.01%	100.00%	100.00%	100.00%	100.00%	100.00%								100.00%
10 Year															
8 Year															
6 Year	100.04%	100.01%													
4 Year	100.02%	100.01%	100.01%	100.00%	100.00%	100.00%	100.00%								
3 Year	100.01%	100.01%	100.01%	100.00%	100.00%	100.00%	100.00%								
Selected Pay Pattern	100.01%		100.01%		100.01%		100.00%		100.00%		100.00%		100.00%		100.00%
Incremental	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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Comprehensive

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	4,133	5,517	5,589	5,606	5,606	5,612	5,611	5,611	5,611	5,610	5,610	5,610	5,610	5,611	5,611	5,612
2002-2	5,435	7,638	7,640	7,647	7,639	7,643	7,560	7,555	7,554	7,554	7,555	7,542	7,542	7,542	7,542	7,541
2003-1	3,870	6,000	6,119	6,113	6,122	6,055	6,021	6,030	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028
2003-2	6,904	9,408	9,661	9,651	9,655	9,654	9,651	9,652	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653
2004-1	4,700	6,130	6,254	6,230	6,232	6,235	6,222	6,223	6,223	6,223	6,222	6,221	6,221	6,220	6,220	6,220
2004-2	7,562	10,988	11,165	11,261	11,248	11,246	11,249	11,243	11,239	11,239	11,235	11,235	11,235	11,235	11,235	11,235
2005-1	5,496	9,178	10,158	10,152	10,161	10,193	10,194	10,197	10,198	10,198	10,199	10,199	10,199	10,199	10,199	10,198
2005-2	8,323	13,410	13,757	13,789	13,733	13,731	13,719	13,718	13,715	13,715	13,715	13,715	13,715	13,719	13,719	13,699
2006-1	6,666	9,832	10,184	10,151	10,110	10,113	10,115	10,116	10,120	10,116	10,119	10,118	10,118	10,118	10,119	10,127
2006-2	8,963	16,174	16,727	16,749	16,814	16,818	16,825	16,826	16,821	16,822	16,824	16,824	16,824	16,824	16,825	16,822
2007-1	7,713	12,522	13,459	13,562	13,546	13,520	13,508	13,508	13,504	13,502	13,502	13,502	13,502	13,502	13,501	13,499
2007-2	13,739	22,999	23,881	23,947	23,922	23,914	23,897	23,963	23,963	23,963	23,964	23,964	23,964	23,959	23,959	23,960
2008-1	8,987	14,134	14,517	14,509	14,527	14,546	14,556	14,562	14,573	14,583	14,597	14,599	14,602	14,601	14,601	14,602
2008-2	12,670	20,532	21,177	21,228	21,252	21,256	21,256	21,259	21,259	21,252	21,252	21,256	21,256	21,256	21,256	21,256
2009-1	9,404	13,096	13,395	13,458	13,452	13,475	13,485	13,494	13,499	13,501	13,510	13,532	13,536	13,519	13,535	13,535
2009-2	15,974	23,549	24,100	24,106	24,050	24,062	24,066	24,068	24,061	24,069	24,070	24,068	24,070	24,070	24,070	24,070
2010-1	9,029	12,252	12,374	12,398	12,389	12,424	12,423	12,382	12,384	12,385	12,381	12,383	12,395	12,399		
2010-2	15,190	22,675	23,466	23,479	23,504	23,526	23,521	23,517	23,517	23,517	23,516	23,518	23,518			
2011-1	8,503	12,061	12,368	12,402	12,387	12,395	12,404	12,413	12,411	12,408	12,405	12,404				
2011-2	14,193	21,552	22,328	22,538	22,547	22,553	22,546	22,525	22,520	22,517	22,516					
2012-1	8,474	12,465	13,016	13,089	13,162	13,177	13,172	13,173	13,174							
2012-2	16,167	27,348	28,464	28,782	29,001	29,017	29,024	29,045	29,047							
2013-1	9,742	17,662	18,008	18,082	18,076	18,086	18,095	18,096								
2013-2	16,529	25,550	26,340	26,702	26,759	26,760	26,767									
2014-1	10,204	15,151	15,643	15,752	15,793											
2014-2	22,946	37,015	38,359	38,968	39,284											
2015-1	12,568	18,613	18,961	19,013												
2015-2	25,608	37,281	38,185													
2016-1	16,289	22,976														
2016-2	25,438															

Accident Year	Portion of Ultimate Losses Paid by Month of Development							
	12	24	36	48	60	72	84	96
2002	83.25%	100.69%	100.73%	100.11%	100.06%	100.07%	99.98%	99.98%
2003	82.30%	100.61%	100.20%	100.02%	100.02%	100.02%	100.02%	100.02%
2004	78.44%	99.65%	100.15%	100.09%	100.03%	100.00%	100.00%	100.00%
2005	73.22%	100.03%	100.10%	100.06%	100.05%	100.05%	100.07%	100.07%
2006	69.63%	99.57%	99.75%	99.80%	99.79%	99.81%	99.81%	99.85%
2007	70.16%	100.03%	100.03%	99.93%	100.09%	100.10%	100.08%	100.08%
2008	74.83%	99.62%	99.94%	99.99%	100.06%	100.08%	100.10%	100.10%
2009	77.25%	99.81%	99.72%	99.81%	99.82%	99.92%	99.89%	99.93%
2010	76.41%	99.85%	100.03%	99.96%	99.96%	99.95%	100.00%	
2011	75.18%	99.45%	100.06%	100.11%	100.02%	99.99%		
2012	67.78%	98.36%	99.85%	99.89%	99.95%			
2013	76.21%	99.01%	99.96%	100.00%				
2014	69.10%	98.15%	99.92%					
2015	76.65%	99.14%						
2016	78.04%							

Cumulative Paid Losses								
	12	24	36	48	60	72	84	96
Arithmetic Averages								
All Years	75.23%	99.57%	100.03%	99.98%	99.99%	100.00%	99.99%	100.00%
10 Year	74.16%	99.30%	99.93%	99.96%	99.98%	100.00%		
8 Year	74.58%	99.18%	99.94%	99.94%	99.97%	99.99%	100.00%	100.00%
6 Year	73.83%	99.00%	99.92%	99.96%	99.98%	99.98%	99.99%	100.00%
4 Year	75.00%	98.67%	99.94%	99.99%	99.94%	99.99%	100.02%	99.99%
3 Year	74.60%	98.77%	99.91%	100.00%	99.97%	99.96%	100.00%	100.04%
All Year ex hi/lo	75.19%	99.60%	100.00%	99.99%	100.00%	100.01%	100.00%	100.01%
6 Year ex hi/lo	74.29%	98.99%	99.94%	99.96%	99.99%	99.99%	100.01%	100.02%

\$ Weighted Averages								
	12	24	36	48	60	72	84	96
All Years	74.55%	99.36%	99.98%	99.96%	99.98%	100.00%	100.00%	100.01%
10 Year	74.24%	99.22%	99.93%	99.96%	99.97%	100.00%		
8 Year	74.59%	99.10%	99.93%	99.94%	99.97%	99.99%	100.00%	100.01%
6 Year	74.04%	98.93%	99.92%	99.96%	99.98%	99.98%	99.99%	100.01%
4 Year	75.06%	98.68%	99.94%	99.98%	99.93%	99.99%	100.02%	100.00%
3 Year	74.76%	98.76%	99.91%	99.99%	99.97%	99.96%	100.00%	100.04%

Selected Pay Pattern	74.76%	98.76%	99.91%	99.99%	99.97%	99.96%	100.00%	100.04%
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Incremental	74.76%	23.99%	1.15%	0.08%	-0.02%	-0.02%	0.04%	0.04%
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	74.76%	23.99%	1.15%	0.08%	-0.02%	-0.02%	0.04%	0.04%	-0.05%	-0.02%	-0.01%	0.04%	0.00%	-0.01%	0.00%	0.00%

Discounted Value at 1.8%: 0.9868

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Comprehensive

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612	5,612
2002-2	7,541	7,541	7,541	7,541	7,541	7,541	7,541	7,542	7,543	7,544	7,544	7,544	7,544		7,544
2003-1	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028	6,028		6,028
2003-2	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,653	9,654	9,653	9,650				9,650
2004-1	6,220	6,220	6,221	6,221	6,221	6,221	6,221	6,221	6,221	6,221					6,221
2004-2	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235						11,235
2005-1	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198	10,198						10,198
2005-2	13,699	13,699	13,699	13,699	13,699	13,703	13,703								13,703
2006-1	10,127	10,131	10,132	10,139		10,138									10,141
2006-2	16,823	16,830	16,831	16,830	16,834										16,853
2007-1	13,499	13,499	13,500	13,471											13,471
2007-2	23,960	23,960	23,960												23,960
2008-1	14,602	14,562													14,565
2008-2	21,256														21,256
2009-1															13,560
2009-2															24,070
2010-1															12,399
2010-2															23,518
2011-1															12,405
2011-2															22,517
2012-1															13,177
2012-2															29,067
2013-1															18,097
2013-2															26,768
2014-1															15,815
2014-2															39,317
2015-1															19,076
2015-2															38,616
2016-1															23,665
2016-2															38,370

Accident Year	Portion of Ultimate Losses Paid by Month of Development							Selected Ultimate
	108	120	132	144	156	168	180	
2002	99.98%	99.98%	99.98%	99.98%	100.00%	100.00%	100.00%	13,156
2003	100.02%	100.02%	100.02%	100.02%	100.02%	100.00%		15,678
2004	100.00%	100.00%	100.00%	100.00%	100.00%			17,456
2005	99.98%	99.98%	99.98%	100.00%				23,901
2006	99.85%	99.91%	99.92%					26,994
2007	100.08%	100.00%						37,430
2008	99.99%							35,821
2009								37,631
2010								35,917
2011								34,922
2012								42,244
2013								44,864
2014								55,132
2015								57,693
2016								62,036

Cumulative Paid Losses								
Arithmetic Averages	108	120	132	144	156	168	180	Ultimate
All Years	99.98%	99.98%	99.98%	100.00%	100.01%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.99%	99.98%						
4 Year	99.98%	99.97%	99.98%	100.00%				
3 Year	99.97%	99.96%	99.97%	100.01%	100.01%			
All Year ex hi/lo	99.99%	99.99%	99.99%	100.00%	100.00%			
6 Year ex hi/lo	100.00%	99.99%						

\$ Weighted Averages								
All Years	99.99%	99.98%	99.97%	100.00%	100.01%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.99%	99.98%						
4 Year	99.99%	99.97%	99.97%	100.00%				
3 Year	99.99%	99.97%	99.96%	100.01%	100.01%			

Selected Pay Pattern	99.99%	99.97%	99.96%	100.01%	100.01%	100.00%	100.00%	100.00%
Incremental	-0.05%	-0.02%	-0.01%	0.04%	0.00%	-0.01%	0.00%	0.00%

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Comprehensive - Theft

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	1,360	1,767	1,765	1,776	1,776	1,778	1,775	1,775	1,775	1,774	1,774	1,774	1,774	1,775	1,775	1,776
2002-2	1,628	2,176	2,066	2,072	2,074	2,075	1,990	1,984	1,983	1,984	1,984	1,984	1,984	1,984	1,984	1,983
2003-1	1,381	2,050	2,059	2,051	2,058	1,995	1,983	1,983	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982
2003-2	1,816	2,233	2,245	2,231	2,234	2,234	2,235	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236
2004-1	1,800	2,303	2,381	2,392	2,394	2,396	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383	2,383
2004-2	2,257	2,853	2,931	2,998	2,981	2,979	2,980	2,974	2,974	2,974	2,970	2,970	2,970	2,970	2,970	2,970
2005-1	1,944	2,800	2,795	2,744	2,743	2,743	2,744	2,744	2,744	2,744	2,745	2,745	2,745	2,745	2,745	2,744
2005-2	2,436	3,541	3,597	3,562	3,501	3,499	3,498	3,494	3,492	3,492	3,492	3,492	3,495	3,495	3,495	3,495
2006-1	2,465	3,783	3,889	3,867	3,814	3,817	3,820	3,820	3,825	3,826	3,826	3,826	3,826	3,827	3,827	3,827
2006-2	2,732	4,442	4,466	4,464	4,481	4,474	4,479	4,480	4,475	4,475	4,475	4,475	4,475	4,475	4,475	4,476
2007-1	2,773	4,056	4,144	4,159	4,165	4,130	4,126	4,127	4,127	4,127	4,127	4,127	4,127	4,127	4,126	4,125
2007-2	4,077	6,160	6,273	6,272	6,250	6,240	6,242	6,309	6,307	6,308	6,308	6,309	6,310	6,311	6,311	6,311
2008-1	3,870	5,403	5,586	5,592	5,594	5,604	5,608	5,608	5,608	5,610	5,603	5,602	5,604	5,603	5,603	5,603
2008-2	4,456	6,664	6,864	6,869	6,878	6,885	6,888	6,888	6,881	6,881	6,881	6,881	6,881	6,881	6,882	6,882
2009-1	3,884	5,086	5,226	5,278	5,271	5,282	5,295	5,305	5,308	5,311	5,317	5,341	5,341	5,323	5,338	5,338
2009-2	4,032	5,864	5,843	5,825	5,772	5,778	5,781	5,783	5,776	5,782	5,783	5,783	5,785	5,785	5,785	
2010-1	3,803	4,795	4,722	4,732	4,734	4,747	4,744	4,745	4,745	4,745	4,741	4,741	4,741	4,741		
2010-2	3,487	4,909	4,974	4,982	4,983	5,001	4,999	4,997	5,006	5,006	5,006	5,006	5,006			
2011-1	2,804	4,014	4,095	4,101	4,104	4,106	4,107	4,115	4,112	4,110	4,107	4,106				
2011-2	3,231	4,604	4,697	4,744	4,748	4,752	4,752	4,748	4,749	4,749	4,749					
2012-1	2,760	3,859	3,979	3,999	4,006	4,011	4,006	4,008	4,009	4,010						
2012-2	3,499	5,603	5,673	5,675	5,698	5,703	5,702	5,704								
2013-1	3,894	5,406	5,511	5,516	5,491	5,490	5,491									
2013-2	4,703	6,517	6,620	6,677	6,704	6,695	6,701									
2014-1	3,873	5,550	5,712	5,732	5,739	5,739										
2014-2	5,355	8,090	8,147	8,184	8,186											
2015-1	6,014	9,281	9,372	9,387												
2015-2	8,639	12,298	12,341													
2016-1	8,102	10,070														
2016-2	7,484															

Accident Year	Portion of Ultimate Losses Paid by Month of Development							
	12	24	36	48	60	72	84	96
2002	90.22%	102.12%	102.38%	100.08%	99.88%	99.89%	99.93%	99.93%
2003	91.71%	101.90%	100.31%	100.06%	100.06%	100.06%	100.06%	100.07%
2004	85.18%	99.41%	100.42%	100.17%	100.05%	99.99%	99.99%	99.99%
2005	83.85%	101.55%	100.00%	99.97%	99.87%	99.88%	99.94%	99.93%
2006	78.42%	100.32%	99.88%	99.90%	99.92%	99.93%	99.94%	99.94%
2007	77.91%	99.93%	99.43%	99.33%	99.95%	99.96%	99.98%	99.97%
2008	79.00%	99.81%	100.02%	100.11%	100.15%	100.03%	100.04%	100.04%
2009	81.83%	99.81%	99.22%	99.50%	99.51%	99.84%	99.70%	99.84%
2010	85.01%	99.63%	99.87%	100.03%	100.10%	100.05%	100.05%	
2011	81.82%	99.37%	99.99%	100.14%	100.04%	100.00%		
2012	75.87%	99.73%	100.11%	100.12%	100.17%			
2013	83.28%	99.97%	100.45%	100.43%				
2014	78.90%	100.41%	100.74%					
2015	82.88%	100.49%						
2016	82.57%							

Cumulative Paid Losses								
Arithmetic Averages	12	24	36	48	60	72	84	96
All Years	82.56%	100.32%	100.22%	99.99%	99.97%	99.96%	99.96%	99.96%
10 Year	80.91%	99.95%	99.97%	99.97%	99.98%	99.96%		
8 Year	81.52%	99.90%	99.98%	99.95%	99.96%	99.96%	99.96%	99.96%
6 Year	80.89%	99.93%	100.06%	100.06%	99.99%	99.97%	99.94%	99.95%
4 Year	81.91%	100.15%	100.32%	100.18%	99.95%	99.98%	99.94%	99.95%
3 Year	81.45%	100.29%	100.43%	100.23%	100.10%	99.96%	99.93%	99.95%
All Year ex hi/lo	82.37%	100.25%	100.11%	100.01%	100.00%	99.97%	99.98%	99.97%
6 Year ex hi/lo	81.54%	99.94%	100.11%	100.10%	100.06%	99.98%	99.97%	99.96%

\$ Weighted Averages								
	12	24	36	48	60	72	84	96
All Years	81.75%	100.17%	100.11%	99.97%	99.97%	99.96%	99.95%	99.96%
10 Year	81.16%	100.01%	100.00%	99.96%	99.98%	99.96%		
8 Year	81.72%	100.00%	100.01%	99.95%	99.97%	99.96%	99.95%	99.96%
6 Year	81.34%	100.05%	100.10%	100.06%	99.98%	99.97%	99.94%	99.95%
4 Year	82.05%	100.23%	100.37%	100.20%	99.94%	99.98%	99.94%	99.95%
3 Year	81.79%	100.33%	100.47%	100.25%	100.10%	99.95%	99.93%	99.95%

Selected Pay Pattern	81.79%	100.33%	100.47%	100.25%	100.10%	99.95%	99.93%	99.95%
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Incremental	81.79%	18.54%	0.13%	-0.22%	-0.15%	-0.15%	-0.03%	0.03%
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	81.79%	18.54%	0.13%	-0.22%	-0.15%	-0.15%	-0.03%	0.03%	0.04%	-0.03%	0.00%	0.05%	0.01%	-0.02%	0.00%	0.00%

Discounted Value at 1.8%: 0.9884

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

Comprehensive - Theft

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	1,776	1,776	1,776	1,776	1,776	1,776	1,777	1,777	1,777	1,777	1,777	1,777	1,777	1,777	1,777
2002-2	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,984	1,985	1,985	1,985	1,985	1,985	1,985	1,985
2003-1	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982
2003-2	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,237	2,236	2,236	2,234			2,234
2004-1	2,383	2,383	2,384	2,384	2,384	2,384	2,384	2,384	2,384	2,384					2,384
2004-2	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970						2,970
2005-1	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744							2,745
2005-2	3,495	3,495	3,495	3,495	3,495	3,499	3,499								3,500
2006-1	3,828	3,828	3,828	3,829	3,829	3,829									3,830
2006-2	4,476	4,476	4,476	4,476	4,476										4,478
2007-1	4,125	4,125	4,125	4,125											4,127
2007-2	6,311	6,311	6,311												6,313
2008-1	5,603	5,603													5,602
2008-2	6,882														6,877
2009-1															5,360
2009-2															5,782
2010-1															4,740
2010-2															5,001
2011-1															4,104
2011-2															4,750
2012-1															4,012
2012-2															5,686
2013-1															5,469
2013-2															6,670
2014-1															5,701
2014-2															8,122
2015-1															9,313
2015-2															12,309
2016-1															10,037
2016-2															11,222

Accident Year	Portion of Ultimate Losses Paid by Month of Development							Selected Ultimate
	108	120	132	144	156	168	180	
2002	99.92%	99.92%	99.93%	99.94%	99.99%	100.00%	100.00%	3,762
2003	100.07%	100.07%	100.07%	100.07%	100.09%	100.00%		4,215
2004	99.99%	100.00%	100.00%	100.00%	100.00%			5,354
2005	99.93%	99.93%	99.93%	99.99%				6,244
2006	99.96%	99.97%	99.97%					8,307
2007	99.97%	99.97%						10,440
2008	100.04%							12,480
2009								11,142
2010								9,742
2011								8,855
2012								9,698
2013								12,139
2014								13,822
2015								21,622
2016								21,259

Arithmetic Averages	Cumulative Paid Losses							Ultimate
	108	120	132	144	156	168	180	
All Years	99.98%	99.98%	99.98%	100.00%	100.02%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.99%	99.98%						
4 Year	99.97%	99.97%	99.99%	100.00%				
3 Year	99.99%	99.96%	99.97%	100.02%	100.02%			
All Year ex hi/lo	99.98%	99.97%	99.97%	99.99%	100.00%			
6 Year ex hi/lo	99.99%	99.97%						
Weighted Averages								
All Years	99.99%	99.97%	99.98%	100.00%	100.02%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	99.99%	99.97%						
4 Year	99.98%	99.97%	99.98%	100.00%				
3 Year	100.00%	99.96%	99.97%	100.01%	100.02%			

Selected Pay Pattern	100.00%		99.96%		99.97%		100.01%		100.02%		100.00%		100.00%		100.00%
Incremental	0.04%		-0.03%		0.00%		0.05%		0.01%		-0.02%		0.00%		0.00%

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

Spec Perils

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)															
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
2002-1	199	284	286	288	288	288	288	288	288	288	288	288	288	288	288	288
2002-2	348	554	566	520	520	520	518	518	518	518	518	518	518	518	521	521
2003-1	265	398	402	405	402	402	402	402	402	406	406	409	409	412	412	412
2003-2	227	291	298	296	296	296	296	296	296	296	296	296	296	296	296	296
2004-1	196	287	263	263	263	263	263	263	263	263	263	263	263	263	263	263
2004-2	442	577	591	593	593	591	591	591	591	591	591	591	591	591	591	591
2005-1	179	302	316	313	315	315	315	315	315	315	315	315	315	315	315	315
2005-2	322	484	477	486	486	486	486	486	486	486	486	486	486	486	486	486
2006-1	341	449	462	463	463	466	466	466	466	466	466	466	466	466	466	466
2006-2	618	701	758	775	777	778	795	795	795	795	789	789	789	789	789	789
2007-1	71	254	287	288	288	288	288	288	288	288	288	288	288	288	288	288
2007-2	558	699	717	718	718	718	718	718	718	718	718	718	718	718	718	718
2008-1	317	408	427	388	389	391	391	391	391	391	391	391	391	391	389	389
2008-2	414	599	622	622	622	622	622	622	622	622	622	622	622	622	622	622
2009-1	473	521	531	532	532	532	532	532	532	532	532	532	532	532	532	532
2009-2	447	555	581	582	583	583	583	581	581	581	581	581	581	581	581	581
2010-1	208	303	332	332	335	335	335	335	332	332	332	332	332	332		
2010-2	269	357	372	372	374	374	374	365	360	360	363	362	362			
2011-1	157	200	207	208	208	208	208	208	208	208	208	208				
2011-2	379	532	543	543	543	543	543	543	543	543	543	208				
2012-1	226	316	327	327	327	327	327	327	327	323						
2012-2	599	848	871	880	885	887	895	895	895							
2013-1	125	319	335	336	341	341	341	341								
2013-2	322	563	567	567	567	567	567									
2014-1	188	235	232	232	232	232										
2014-2	526	731	771	778	778											
2015-1	131	200	252	277												
2015-2	748	1,083	1,084													
2016-1	283	432														
2016-2	480															

Accident Year	Portion of Ultimate Losses Paid by Month of Development							
	12	24	36	48	60	72	84	96
2002	77.99%	105.50%	99.80%	99.61%	99.61%	99.61%	99.61%	99.98%
2003	88.11%	99.20%	98.49%	98.53%	99.11%	99.59%	100.00%	100.00%
2004	85.29%	100.00%	100.22%	100.00%	100.00%	100.00%	100.00%	100.00%
2005	77.77%	98.49%	99.99%	100.00%	100.00%	100.00%	100.00%	100.00%
2006	84.99%	97.15%	98.97%	100.44%	100.44%	99.99%	100.00%	100.00%
2007	80.66%	99.93%	99.97%	100.00%	100.00%	100.00%	100.00%	100.00%
2008	81.26%	99.79%	100.15%	100.15%	100.15%	100.15%	100.15%	100.00%
2009	87.00%	100.09%	100.19%	100.19%	100.00%	100.00%	100.00%	100.00%
2010	82.43%	101.37%	102.11%	102.20%	99.79%	100.20%	100.00%	
2011	77.09%	100.00%	100.00%	100.00%	100.00%	100.00%		
2012	75.11%	98.39%	99.57%	100.33%	100.00%			
2013	70.60%	99.48%	100.00%	100.00%				
2014	75.45%	99.37%	100.02%					
2015	69.05%	99.15%						
2016	77.79%							

Cumulative Paid Losses								
Arithmetic Averages	12	24	36	48	60	72	84	96
All Years	79.37%	99.85%	99.96%	100.12%	99.92%	99.95%	99.97%	100.00%
10 Year	77.64%	99.47%	100.10%	100.33%	99.95%	99.95%		
8 Year	76.82%	99.70%	100.25%	100.41%	100.05%	100.04%	100.02%	100.00%
6 Year	74.18%	99.62%	100.32%	100.48%	99.99%	100.06%	100.02%	100.00%
4 Year	73.22%	99.10%	99.90%	100.63%	99.95%	100.09%	100.04%	100.00%
3 Year	74.10%	99.33%	99.86%	100.11%	99.93%	100.07%	100.05%	100.00%
All Year ex hi/lo	79.50%	99.60%	99.90%	100.07%	99.95%	99.97%	100.00%	100.00%
6 Year ex hi/lo	74.57%	99.50%	100.05%	100.17%	100.00%	100.04%	100.00%	100.00%

\$ Weighted Averages								
	12	24	36	48	60	72	84	96
All Years	79.02%	99.67%	99.91%	100.13%	99.96%	99.96%	99.98%	100.00%
10 Year	77.32%	99.32%	100.00%	100.30%	99.99%	99.96%		
8 Year	76.43%	99.58%	100.17%	100.36%	100.07%	100.04%	100.02%	100.00%
6 Year	73.95%	99.45%	100.21%	100.40%	100.00%	100.05%	100.03%	100.00%
4 Year	73.11%	99.06%	99.87%	100.54%	99.96%	100.08%	100.04%	100.00%
3 Year	73.75%	99.31%	99.84%	100.14%	99.94%	100.05%	100.05%	100.00%

Selected Pay Pattern	73.75%		99.31%		99.84%		100.14%		99.94%		100.05%		100.05%		100.00%	
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Incremental	73.75%		25.56%		0.53%		0.30%		-0.19%		0.11%		0.00%		-0.05%	
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Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	To Ult
Annual Pay Pattern	73.75%	25.56%	0.53%	0.30%	-0.19%	0.11%	0.00%	-0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Discounted Value at 1.8%: 0.9868

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

Spec Perils

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
2002-2	522	522	522	522	522	522	522	522	522	522	522	522	522	522	522
2003-1	412	412	412	412	412	412	412	412	412	412	412	412	412	412	412
2003-2	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296
2004-1	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263
2004-2	591	591	591	591	591	591	591	591	591	591	591	591	591	591	591
2005-1	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315
2005-2	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
2006-1	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466
2006-2	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789
2007-1	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
2007-2	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718
2008-1	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389
2008-2	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622
2009-1															532
2009-2															581
2010-1															332
2010-2															362
2011-1															208
2011-2															543
2012-1															323
2012-2															895
2013-1															341
2013-2															567
2014-1															232
2014-2															778
2015-1															276
2015-2															1,097
2016-1															444
2016-2															729

Accident Year	Portion of Ultimate Losses Paid by Month of Development							Selected Ultimate
	108	120	132	144	156	168	180	
2002	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	810
2003	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	709
2004	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	855
2005	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	802
2006	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,256
2007	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,006
2008	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,012
2009	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,113
2010	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	694
2011	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	750
2012	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,218
2013	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	908
2014	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,010
2015	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,373
2016	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,173

	Cumulative Paid Losses							
Arithmetic Averages	108	120	132	144	156	168	180	Ultimate
All Years	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	100.00%	100.00%						
4 Year	100.00%	100.00%	100.00%	100.00%				
3 Year	100.00%	100.00%	100.00%	100.00%	100.00%			
All Year ex hi/lo	100.00%	100.00%	100.00%	100.00%	100.00%			
6 Year ex hi/lo	100.00%	100.00%						

\$ Weighted Averages									
All Years	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year									
8 Year									
6 Year	100.00%	100.00%							
4 Year	100.00%	100.00%	100.00%		100.00%				
3 Year	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			

Selected Pay Pattern	Cumulative Paid Losses														Ultimate
	108	120	132	144	156	168	180	108	120	132	144	156	168	180	
Incremental	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Province of Alberta
Alberta Automobile Insurance Rate Board
2017 Commercial Vehicle Review

All Perils

Accident Half Year	Paid Losses and Allocated Loss Adjustment Expenses - Data as of 12/31/2015 (Losses in \$ 000s)														Selected Ultimate
	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
2002-1	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830	5,830
2002-2	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029	8,029
2003-1	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901	5,901
2003-2	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085
2004-1	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254	6,254
2004-2	7,394	7,394	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369	7,369
2005-1	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877	7,877
2005-2	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960	9,960
2006-1	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809	10,809
2006-2	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180	13,180
2007-1	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259	11,259
2007-2	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396	14,396
2008-1	13,144	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150	13,150
2008-2	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048	16,048
2009-1															9,259
2009-2															11,003
2010-1															8,558
2010-2															12,688
2011-1															12,941
2011-2															17,951
2012-1															14,034
2012-2															19,070
2013-1															16,951
2013-2															24,455
2014-1															18,546
2014-2															28,160
2015-1															22,387
2015-2															22,455
2016-1															16,813
2016-2															21,504

Accident Year	Portion of Ultimate Losses Paid by Month of Development							Selected Ultimate
	108	120	132	144	156	168	180	
2002	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	13,859
2003	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	11,987
2004	100.18%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	13,624
2005	100.27%	100.27%	100.00%	100.00%	100.00%	100.00%	100.00%	17,789
2006	100.01%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	23,985
2007	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25,655
2008	99.88%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29,234
2009								20,262
2010								21,246
2011								30,892
2012								33,104
2013								41,407
2014								46,706
2015								44,842
2016								38,317

Cumulative Paid Losses								
Arithmetic Averages	108	120	132	144	156	168	180	Ultimate
All Years	100.05%	100.04%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	100.06%	100.04%						
4 Year	100.04%	100.07%	100.00%	100.00%				
3 Year	99.96%	100.09%	100.00%	100.00%	100.00%			
All Year ex hi/lo	100.04%	100.00%	100.00%	100.00%	100.00%			
6 Year ex hi/lo	100.05%	100.00%						
\$ Weighted Averages								
All Years	100.03%	100.04%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10 Year								
8 Year								
6 Year	100.03%	100.04%						
4 Year	100.01%	100.06%	100.00%	100.00%				
3 Year	99.96%	100.07%	100.00%	100.00%	100.00%			
Selected Pay Pattern	99.96%	100.07%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Incremental	0.05%	0.11%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.00%

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Appendix B

Exhibit 1: Modeled trend results for various time periods.

The Alberta unemployment rate used as a parameter is based on the following reported/estimated unemployment rates.³⁸

2002-1	5.5		2011-1	5.7
2002-2	5.2		2011-2	5.2
2003-1	5.5		2012-1	4.9
2003-2	4.7		2012-2	4.3
2004-1	4.8		2013-1	4.7
2004-2	4.5		2013-2	4.5
2005-1	4.0		2014-1	4.8
2005-2	3.9		2014-2	4.5
2006-1	3.4		2015-1	5.7
2006-2	3.5		2015-2	6.3
2007-1	3.6		2016-1	8.0
2007-2	3.4		2016-2	8.3
2008-1	3.5		2017 (est.)	8.0
2008-2	3.7		2018 (est.)	7.6
2009-1	6.1		2019 (est.)	7.1
2009-2	6.9		2020 (est.)	6.3
2010-1	7.1			
2010-2	6.1			

³⁸ Sources: Stats Canada; Government of Alberta 2017 Budget

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Bodily Injury
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	2.7	+1.8	0.66	0.5%	0.0%	0.0%	6.4	+1.7	0.83	0.0%	6.4%	84.9%	-3.5	+1.3	0.89	0.0%	0.1%	0.0%
2005.2-2016.2	2.7	+2	0.65	0.8%	0.0%	0.0%	6.1	+1.7	0.8	0.0%	10.5%	91.6%	-3.2	+1.3	0.9	0.0%	0.0%	0.0%
2006.1-2016.2	3	+2.1	0.65	0.7%	0.1%	0.0%	6	+1.9	0.78	0.0%	11.5%	92.7%	-2.9	+1.3	0.89	0.0%	0.1%	0.0%
2006.2-2016.2	3.5	+2	0.71	0.2%	0.0%	0.0%	6.4	+1.9	0.8	0.0%	5.6%	96.0%	-2.7	+1.4	0.89	0.1%	0.1%	0.0%
2007.1-2016.2	4.1	+1.9	0.76	0.0%	0.0%	0.0%	6.8	+1.9	0.82	0.0%	10.0%	88.4%	-2.5	+1.4	0.87	0.2%	0.2%	0.0%
2007.2-2016.2	4.4	+1.9	0.77	0.0%	0.0%	0.0%	6.8	+2.1	0.79	0.0%	12.2%	89.1%	-2.3	+1.4	0.87	0.4%	0.1%	0.0%
2008.1-2016.2	4.7	+2	0.79	0.0%	0.0%	0.0%	6.9	+2.2	0.78	0.0%	17.2%	82.0%	-2	+1.5	0.83	1.1%	0.2%	0.0%
2008.2-2016.2	5	+2.1	0.79	0.0%	0.0%	0.1%	7.3	+2.3	0.78	0.0%	11.4%	59.2%	-2.2	+1.6	0.82	1.3%	0.5%	0.0%
2009.1-2016.2	5.3	+2.3	0.8	0.0%	0.1%	0.2%	8.1	+2.1	0.85	0.0%	19.2%	20.5%	-2.6	+1.6	0.84	0.4%	0.2%	0.0%
2009.2-2016.2	5.2	+2.6	0.75	0.1%	0.2%	0.4%	8.3	+2.5	0.82	0.0%	18.6%	24.4%	-2.9	+1.8	0.85	0.5%	0.4%	0.0%
2010.1-2016.2	5.7	+3.2	0.75	0.2%	0.6%	0.5%	8.3	+3.1	0.8	0.0%	23.0%	30.2%	-2.5	+2.1	0.85	2.9%	1.1%	0.0%
2010.2-2016.2	6.3	+4.2	0.66	0.7%	0.8%	1.0%	8.3	+4.1	0.76	0.1%	27.1%	38.0%	-1.8	+2.7	0.86	16.6%	1.0%	0.0%
2011.1-2016.2	3.6	+4.7	0.71	11.3%	0.2%	5.6%	5.4	+4.3	0.8	1.8%	6.2%	6.3%	-1.7	+3.9	0.85	33.7%	2.3%	0.1%
2011.2-2016.2	4	+6.8	0.64	20.2%	0.5%	9.7%	3	+5.1	0.81	19.4%	8.3%	2.2%	0.9	+4.3	0.91	63.5%	0.6%	0.0%
2012.1-2016.2	4	+11.1	0.62	39.8%	1.5%	20.1%	2.9	+8.2	0.8	40.9%	14.0%	7.0%	1.1	+7	0.9	72.3%	1.9%	0.3%
2012.2-2016.2	-3.2	+11.2	0.71	50.7%	1.0%	79.8%	-0.3	+11.4	0.78	94.5%	18.1%	5.8%	-2.9	+8.4	0.93	43.0%	2.0%	1.6%
2013.1-2016.2	-7.8	+15.3	0.74	24.1%	1.3%	69.6%	-1.2	+18.7	0.75	86.9%	26.4%	12.4%	-6.7	+11.1	0.94	17.9%	1.8%	6.7%
2013.2-2016.2	-1.4	+26.1	0.79	87.2%	2.0%	74.9%	11.8	+18.8	0.94	12.3%	7.7%	45.7%	-11.8	+15.4	0.96	10.4%	2.4%	27.0%
2014.1-2016.2	24.4	+82.9	0.85	27.1%	17.7%	22.1%	31.8	+43.2	0.98	6.6%	62.1%	30.8%	-5.6	+62.9	0.93	73.1%	22.2%	40.1%

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2004.2-2016.1	1.8	+1.8	0.65	4.6%	0.0%	0.0%	5.7	+1.6	0.76	0.0%	6.8%	71.0%	-3.7	+1.2	0.89	0.0%	0.1%	0.0%
2005.1-2016.1	2.6	+1.7	0.71	0.4%	0.0%	0.0%	6.4	+1.6	0.81	0.0%	13.4%	40.9%	-3.5	+1.3	0.88	0.0%	0.3%	0.0%
2005.2-2016.1	2.6	+1.8	0.71	0.8%	0.1%	0.0%	6	+1.6	0.79	0.0%	22.9%	40.6%	-3.2	+1.3	0.89	0.0%	0.1%	0.0%
2006.1-2016.1	2.8	+2	0.71	0.6%	0.2%	0.0%	5.9	+1.8	0.76	0.0%	23.5%	42.7%	-2.9	+1.3	0.88	0.0%	0.2%	0.0%
2006.2-2016.1	3.3	+1.9	0.75	0.2%	0.0%	0.0%	6.2	+1.8	0.78	0.0%	13.3%	54.8%	-2.8	+1.4	0.87	0.1%	0.2%	0.0%
2007.1-2016.1	3.9	+1.8	0.79	0.0%	0.0%	0.0%	6.6	+1.8	0.79	0.0%	20.2%	62.4%	-2.5	+1.5	0.85	0.3%	0.4%	0.0%
2007.2-2016.1	4.1	+1.9	0.8	0.0%	0.1%	0.0%	6.4	+2	0.75	0.0%	27.8%	58.2%	-2.2	+1.5	0.84	0.7%	0.2%	0.0%
2008.1-2016.1	4.4	+2	0.81	0.0%	0.1%	0.0%	6.5	+2.2	0.73	0.0%	32.6%	65.4%	-2	+1.6	0.8	2.0%	0.3%	0.0%
2008.2-2016.1	4.6	+2.2	0.8	0.1%	0.2%	0.1%	6.8	+2.4	0.71	0.0%	26.7%	89.2%	-2.1	+1.8	0.79	2.6%	0.9%	0.0%
2009.1-2016.1	4.9	+2.5	0.8	0.1%	0.3%	0.3%	7.8	+2.4	0.79	0.0%	31.9%	52.0%	-2.7	+1.8	0.81	0.9%	0.5%	0.0%
2009.2-2016.1	4.6	+3	0.75	0.5%	0.7%	0.5%	8	+2.8	0.75	0.0%	31.4%	53.9%	-3.1	+2.1	0.81	0.9%	1.1%	0.0%
2010.1-2016.1	5.2	+3.4	0.76	0.6%	2.1%	0.6%	8.1	+3.4	0.72	0.0%	38.9%	62.5%	-2.7	+2.4	0.82	3.3%	3.0%	0.0%
2010.2-2016.1	5.9	+4.3	0.68	1.2%	2.4%	1.0%	8	+4.4	0.65	0.2%	42.6%	68.0%	-2	+2.9	0.83	15.7%	2.8%	0.1%
2011.1-2016.1	3.6	+5	0.71	12.8%	1.0%	6.4%	5.4	+4.7	0.67	2.7%	11.9%	16.2%	-1.7	+4.1	0.83	35.8%	6.6%	0.4%
2011.2-2016.1	4	+7.3	0.64	22.2%	1.7%	10.3%	3	+5.7	0.65	23.0%	15.0%	6.6%	0.9	+4.5	0.9	63.4%	2.1%	0.1%
2012.1-2016.1	4.8	+12.7	0.62	36.3%	5.8%	19.5%	3.1	+9.8	0.62	45.0%	25.5%	17.9%	1.7	+7.8	0.89	59.6%	7.2%	0.8%
2012.2-2016.1	-2.5	+12.6	0.73	62.0%	3.9%	52.1%	-0.2	+13.9	0.55	97.0%	31.7%	14.3%	-2.3	+9.2	0.93	53.6%	7.0%	2.2%
2013.1-2016.1	-6.7	+19.6	0.74	36.9%	5.5%	97.2%	-1	+25.8	0.47	91.0%	42.8%	25.9%	-5.8	+13.8	0.94	28.7%	7.1%	8.8%
2013.2-2016.1	-1.1	+41.3	0.76	92.1%	9.3%	67.8%	11.7	+30.8	0.86	22.3%	18.1%	52.6%	-11.4	+17.9	0.97	12.3%	7.5%	18.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Bodily Injury
With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	0.1	+1.9	0.32	87.6%	0.2%	6.3	+1.3	0.84	0.0%	5.5%	-5.8	+1.6	0.72	0.0%	1.5%
2005.2-2016.2	0.1	+2.1	0.3	91.4%	0.3%	6	+1.3	0.81	0.0%	9.3%	-5.6	+1.7	0.7	0.0%	1.2%
2006.1-2016.2	0.3	+2.3	0.28	81.7%	0.5%	6	+1.5	0.79	0.0%	10.2%	-5.4	+1.8	0.64	0.0%	2.1%
2006.2-2016.2	0.9	+2.4	0.37	41.6%	0.2%	6.4	+1.5	0.82	0.0%	4.8%	-5.2	+2	0.62	0.0%	1.8%
2007.1-2016.2	1.7	+2.5	0.39	15.9%	0.4%	6.8	+1.6	0.83	0.0%	9.1%	-4.8	+2.2	0.54	0.0%	3.4%
2007.2-2016.2	2.2	+2.7	0.43	9.0%	0.3%	6.8	+1.8	0.8	0.0%	11.1%	-4.3	+2.4	0.51	0.2%	2.1%
2008.1-2016.2	3	+2.8	0.47	3.4%	0.7%	7	+2	0.79	0.0%	16.1%	-3.7	+2.6	0.39	0.8%	4.2%
2008.2-2016.2	3.8	+3	0.53	1.5%	0.4%	7.4	+2.2	0.79	0.0%	11.6%	-3.4	+2.9	0.37	2.6%	3.9%
2009.1-2016.2	4.7	+3.2	0.58	0.6%	0.8%	8.3	+2.2	0.84	0.0%	22.9%	-3.3	+3.3	0.29	5.3%	5.7%
2009.2-2016.2	4.4	+3.7	0.49	2.0%	1.5%	8.6	+2.5	0.82	0.0%	20.4%	-3.9	+3.7	0.31	4.4%	9.6%
2010.1-2016.2	4	+4.2	0.48	6.0%	1.8%	8.8	+2.9	0.8	0.0%	28.5%	-4.5	+4.2	0.31	4.2%	8.3%
2010.2-2016.2	3.1	+4.8	0.34	16.9%	3.5%	9.2	+3.4	0.76	0.0%	27.0%	-5.5	+4.6	0.38	2.6%	14.4%
2011.1-2016.2	0.5	+4	0.58	77.0%	0.3%	8.2	+3.8	0.72	0.1%	16.5%	-7.1	+4.9	0.48	1.2%	7.3%
2011.2-2016.2	-0.2	+4.7	0.52	92.7%	0.7%	8	+4.6	0.63	0.3%	22.2%	-7.6	+5.9	0.48	2.2%	11.8%
2012.1-2016.2	-1.4	+5.6	0.57	57.6%	0.8%	9.5	+5.4	0.69	0.3%	41.3%	-10	+6.2	0.61	0.9%	4.7%
2012.2-2016.2	-4.2	+4.2	0.75	5.2%	0.4%	9.9	+7	0.6	1.1%	42.7%	-12.8	+5.4	0.81	0.1%	5.6%
2013.1-2016.2	-5.7	+5.1	0.78	3.8%	0.4%	11.6	+9.3	0.61	2.0%	66.9%	-15.5	+5.1	0.89	0.1%	1.4%
2013.2-2016.2	-4.1	+6.2	0.83	14.7%	0.6%	16.7	+5.3	0.94	0.1%	6.0%	-17.8	+4.4	0.95	0.0%	1.2%
2014.1-2016.2	-3.2	+10.7	0.75	41.6%	2.6%	19.2	+5.9	0.97	0.1%	10.9%	-18.8	+7	0.92	0.4%	2.9%

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2004.2-2016.1	-0.2	+2	0.34	79.5%	0.1%	5.5	+1.3	0.77	0.0%	5.3%	-5.5	+1.5	0.73	0.0%	0.9%
2005.1-2016.1	0.1	+2.1	0.3	90.8%	0.3%	6	+1.3	0.82	0.0%	9.5%	-5.5	+1.7	0.7	0.0%	1.1%
2005.2-2016.1	0.1	+2.3	0.28	94.9%	0.5%	5.6	+1.3	0.79	0.0%	17.3%	-5.2	+1.8	0.68	0.0%	0.8%
2006.1-2016.1	0.2	+2.5	0.26	85.4%	0.8%	5.5	+1.5	0.77	0.0%	17.7%	-5	+2	0.62	0.0%	1.4%
2006.2-2016.1	1	+2.7	0.35	42.9%	0.3%	6	+1.5	0.78	0.0%	9.3%	-4.7	+2.2	0.6	0.0%	1.1%
2007.1-2016.1	1.8	+2.7	0.36	17.4%	0.6%	6.4	+1.6	0.8	0.0%	15.8%	-4.3	+2.3	0.51	0.2%	2.0%
2007.2-2016.1	2.5	+3	0.41	9.4%	0.4%	6.3	+1.8	0.76	0.0%	20.5%	-3.6	+2.5	0.51	0.9%	0.9%
2008.1-2016.1	3.3	+3.2	0.45	3.7%	0.8%	6.4	+2.1	0.75	0.0%	26.7%	-2.9	+2.6	0.4	3.6%	1.8%
2008.2-2016.1	4.3	+3.4	0.52	1.4%	0.4%	6.8	+2.3	0.73	0.0%	21.2%	-2.3	+2.9	0.41	11.8%	1.3%
2009.1-2016.1	5.4	+3.6	0.59	0.6%	0.7%	7.7	+2.3	0.8	0.0%	36.5%	-2.1	+3.4	0.33	19.7%	2.2%
2009.2-2016.1	5.1	+4.2	0.49	1.9%	1.4%	7.9	+2.7	0.77	0.0%	35.2%	-2.6	+3.9	0.32	18.4%	4.2%
2010.1-2016.1	4.7	+4.9	0.48	5.3%	1.8%	8.1	+3.2	0.74	0.0%	43.5%	-3.1	+4.5	0.33	15.6%	4.1%
2010.2-2016.1	3.8	+5.8	0.33	15.9%	3.8%	8.3	+3.9	0.68	0.1%	44.1%	-4.1	+5.2	0.35	11.4%	8.4%
2011.1-2016.1	1	+4.8	0.57	62.9%	0.5%	7.2	+4.2	0.61	0.4%	27.6%	-5.7	+5.6	0.46	5.3%	4.8%
2011.2-2016.1	0.2	+6	0.51	92.7%	1.3%	6.5	+5.3	0.44	1.9%	40.9%	-5.9	+7.2	0.44	10.2%	8.4%
2012.1-2016.1	-1	+7.2	0.54	73.5%	1.5%	8	+6.2	0.53	1.7%	62.1%	-8.4	+7.6	0.59	4.1%	4.1%
2012.2-2016.1	-5.1	+5.6	0.76	7.0%	1.3%	7.9	+8.8	0.35	6.2%	70.1%	-12	+7.4	0.77	1.1%	7.7%
2013.1-2016.1	-6.9	+6.5	0.8	4.7%	1.3%	9.5	+12.2	0.35	8.5%	89.1%	-15	+7.3	0.86	0.6%	3.0%
2013.2-2016.1	-5	+10.4	0.82	22.9%	2.6%	16.6	+9.2	0.88	0.8%	13.7%	-18.6	+7.2	0.94	0.5%	4.6%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Bodily Injury
With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	3.1	+2.5	0.33	1.6%	0.1%	6.6	+1.8	0.81	0.0%	72.8%	-3.3	+1.6	0.83	0.0%	0.0%
2005.2-2016.2	2.9	+2.7	0.32	3.4%	0.2%	6.2	+1.8	0.79	0.0%	82.0%	-3.1	+1.7	0.82	0.2%	0.0%
2006.1-2016.2	3.5	+2.8	0.36	1.7%	0.2%	6.2	+2	0.76	0.0%	81.7%	-2.6	+1.7	0.81	0.6%	0.0%
2006.2-2016.2	3.8	+3	0.36	1.5%	0.2%	6.5	+2	0.77	0.0%	87.6%	-2.6	+1.8	0.79	0.9%	0.0%
2007.1-2016.2	4.6	+2.8	0.45	0.2%	0.1%	7	+2	0.8	0.0%	99.3%	-2.2	+1.9	0.77	2.3%	0.0%
2007.2-2016.2	4.6	+3	0.45	0.4%	0.2%	6.9	+2.2	0.77	0.0%	95.9%	-2.1	+2	0.74	4.1%	0.0%
2008.1-2016.2	5.2	+3	0.5	0.2%	0.4%	7.1	+2.3	0.76	0.0%	90.3%	-1.7	+2	0.69	8.9%	0.0%
2008.2-2016.2	5.1	+3.3	0.49	0.4%	0.6%	7.3	+2.5	0.75	0.0%	77.0%	-2.1	+2.1	0.69	5.8%	0.0%
2009.1-2016.2	5.8	+3.4	0.53	0.2%	1.7%	8.3	+2.2	0.83	0.0%	24.6%	-2.3	+2.3	0.66	5.6%	0.0%
2009.2-2016.2	5.2	+3.9	0.45	1.1%	2.5%	8.4	+2.6	0.81	0.0%	27.7%	-2.9	+2.5	0.69	2.8%	0.0%
2010.1-2016.2	6.5	+4.5	0.5	0.7%	1.4%	8.6	+3.1	0.79	0.0%	39.4%	-2	+2.8	0.73	15.3%	0.0%
2010.2-2016.2	6.3	+5.9	0.31	3.3%	4.3%	8.3	+4.1	0.75	0.1%	39.6%	-1.8	+3.7	0.72	31.2%	0.2%
2011.1-2016.2	5.7	+8	0.13	13.1%	10.5%	6.4	+4.9	0.72	1.5%	16.9%	-0.6	+5	0.74	78.4%	0.3%
2011.2-2016.2	4.5	+11.4	-0.04	37.7%	24.1%	3.2	+5.8	0.74	22.9%	4.4%	1.2	+7	0.76	69.3%	0.4%
2012.1-2016.2	9.4	+16.6	0.07	20.2%	14.5%	4.9	+8.6	0.74	20.5%	16.1%	4.3	+10	0.78	33.6%	0.6%
2012.2-2016.2	-0.4	+20.7	-0.05	96.4%	62.3%	0.7	+12	0.73	88.4%	9.4%	-1.1	+13.4	0.82	84.4%	4.4%
2013.1-2016.2	3.2	+30.1	-0.16	79.0%	53.5%	2.8	+17.2	0.71	69.1%	20.4%	0.4	+19.3	0.79	95.8%	7.2%
2013.2-2016.2	8.3	+60.4	-0.23	69.9%	53.8%	15.8	+26.1	0.84	14.1%	93.1%	-6.5	+31.9	0.8	60.6%	32.2%
2014.1-2016.2	57.5	+65.4	0.7	3.7%	3.5%	36.4	+17.5	0.98	0.4%	4.9%	15.5	+43.2	0.88	29.9%	6.2%

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2004.2-2016.1	1.8	+2.4	0.34	12.3%	0.1%	5.7	+1.7	0.73	0.0%	54.8%	-3.7	+1.5	0.83	0.0%	0.0%
2005.1-2016.1	2.9	+2.3	0.47	1.4%	0.0%	6.5	+1.7	0.8	0.0%	28.7%	-3.3	+1.6	0.82	0.0%	0.0%
2005.2-2016.1	2.7	+2.5	0.47	3.3%	0.0%	6	+1.6	0.78	0.0%	30.5%	-3.1	+1.7	0.8	0.1%	0.0%
2006.1-2016.1	3.2	+2.6	0.49	1.7%	0.0%	6	+1.8	0.75	0.0%	31.8%	-2.7	+1.7	0.8	0.5%	0.0%
2006.2-2016.1	3.4	+2.7	0.49	1.8%	0.0%	6.2	+1.9	0.76	0.0%	37.2%	-2.7	+1.9	0.78	0.8%	0.0%
2007.1-2016.1	4.1	+2.6	0.55	0.3%	0.0%	6.6	+1.9	0.78	0.0%	47.1%	-2.3	+1.9	0.74	2.0%	0.0%
2007.2-2016.1	4	+2.8	0.55	0.7%	0.0%	6.4	+2	0.75	0.0%	41.4%	-2.3	+2.1	0.7	3.6%	0.0%
2008.1-2016.1	4.6	+2.9	0.57	0.4%	0.1%	6.6	+2.2	0.73	0.0%	52.4%	-1.9	+2.2	0.63	8.7%	0.0%
2008.2-2016.1	4.2	+3.2	0.58	1.2%	0.1%	6.7	+2.4	0.7	0.0%	62.4%	-2.3	+2.3	0.64	4.7%	0.0%
2009.1-2016.1	4.8	+3.6	0.59	1.2%	0.7%	7.8	+2.4	0.79	0.0%	66.8%	-2.8	+2.5	0.62	3.7%	0.1%
2009.2-2016.1	4	+4	0.52	4.6%	0.9%	7.8	+2.8	0.75	0.0%	68.6%	-3.5	+2.7	0.67	1.7%	0.1%
2010.1-2016.1	5.3	+4.4	0.59	1.9%	0.4%	8.1	+3.3	0.72	0.0%	82.4%	-2.6	+2.9	0.72	7.9%	0.0%
2010.2-2016.1	5.5	+5.6	0.45	4.8%	1.4%	7.9	+4.2	0.66	0.2%	79.5%	-2.2	+3.7	0.72	21.1%	0.1%
2011.1-2016.1	5.2	+7.6	0.3	14.3%	3.9%	6.2	+5.1	0.58	2.1%	41.9%	-0.9	+4.8	0.74	67.2%	0.2%
2011.2-2016.1	4.5	+11	0.15	35.6%	10.4%	3.2	+6.1	0.56	24.5%	13.7%	1.2	+6.5	0.78	67.5%	0.3%
2012.1-2016.1	9.9	+15.7	0.3	15.5%	5.9%	5.1	+9.1	0.58	21.0%	35.3%	4.6	+9.1	0.82	25.3%	0.3%
2012.2-2016.1	0.5	+19.1	0.3	94.4%	27.4%	1	+13.1	0.53	84.5%	20.5%	-0.5	+12	0.87	92.0%	1.7%
2013.1-2016.1	3.2	+28.9	0.19	76.6%	29.3%	2.8	+19.7	0.49	71.0%	34.1%	0.4	+18.1	0.84	95.0%	3.9%
2013.2-2016.1	6.5	+63.3	0.1	74.7%	40.4%	15.4	+32.4	0.72	19.9%	96.7%	-7.7	+28.9	0.87	46.9%	18.1%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Bodily Injury
No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	0.4	+2.4	-0.04	74.0%	6.4	+1.4	0.82	0.0%	-5.7	+1.8	0.64	0.0%
2005.2-2016.2	0.1	+2.6	-0.05	93.0%	6	+1.4	0.8	0.0%	-5.6	+1.9	0.6	0.0%
2006.1-2016.2	0.5	+2.8	-0.04	69.1%	6.1	+1.5	0.78	0.0%	-5.2	+2.1	0.55	0.0%
2006.2-2016.2	0.9	+3	-0.03	52.1%	6.4	+1.6	0.78	0.0%	-5.2	+2.3	0.5	0.0%
2007.1-2016.2	2	+3.1	0.05	17.3%	7	+1.7	0.81	0.0%	-4.6	+2.4	0.42	0.1%
2007.2-2016.2	2.2	+3.4	0.05	17.9%	6.8	+1.8	0.78	0.0%	-4.3	+2.7	0.35	0.4%
2008.1-2016.2	3.4	+3.5	0.17	5.0%	7.2	+2	0.77	0.0%	-3.5	+2.8	0.24	2.1%
2008.2-2016.2	3.8	+3.9	0.17	5.4%	7.4	+2.3	0.76	0.0%	-3.4	+3.2	0.2	4.3%
2009.1-2016.2	5.2	+4.1	0.32	1.3%	8.4	+2.2	0.83	0.0%	-3	+3.6	0.12	10.7%
2009.2-2016.2	4.4	+4.5	0.21	5.0%	8.6	+2.5	0.8	0.0%	-3.9	+3.9	0.19	5.8%
2010.1-2016.2	4.6	+5.2	0.18	7.2%	9	+2.9	0.79	0.0%	-4	+4.6	0.16	8.4%
2010.2-2016.2	3.1	+5.7	0.04	24.4%	9.2	+3.4	0.76	0.0%	-5.5	+4.8	0.29	3.2%
2011.1-2016.2	1.6	+6.3	-0.07	58.6%	8.5	+3.9	0.69	0.0%	-6.4	+5.6	0.32	3.2%
2011.2-2016.2	-0.2	+7	-0.11	95.2%	8	+4.7	0.6	0.3%	-7.6	+6.5	0.36	3.1%
2012.1-2016.2	0.1	+8.8	-0.12	97.1%	9.9	+5.1	0.7	0.2%	-8.8	+7.7	0.38	3.5%
2012.2-2016.2	-4.2	+7.9	0.06	25.6%	9.9	+6.6	0.62	0.8%	-12.8	+6.6	0.68	0.4%
2013.1-2016.2	-3.6	+10.6	-0.05	44.8%	12	+8.1	0.66	0.9%	-13.9	+8.6	0.64	1.0%
2013.2-2016.2	-4.1	+14.8	-0.09	51.6%	16.7	+7.2	0.87	0.1%	-17.8	+8.7	0.78	0.5%
2014.1-2016.2	0.9	+20.8	-0.25	90.8%	20.5	+7.1	0.94	0.1%	-16.2	+13.1	0.64	3.4%

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2004.2-2016.1	-0.5	+2.4	-0.04	67.6%	5.4	+1.4	0.74	0.0%	-5.6	+1.8	0.64	0.0%
2005.1-2016.1	0.1	+2.6	-0.05	92.5%	6	+1.4	0.8	0.0%	-5.5	+1.9	0.6	0.0%
2005.2-2016.1	-0.2	+2.8	-0.05	87.8%	5.5	+1.4	0.78	0.0%	-5.4	+2.1	0.56	0.0%
2006.1-2016.1	0.2	+3	-0.05	87.7%	5.5	+1.5	0.75	0.0%	-5	+2.3	0.49	0.0%
2006.2-2016.1	0.6	+3.3	-0.05	68.9%	5.8	+1.6	0.76	0.0%	-4.9	+2.5	0.44	0.1%
2007.1-2016.1	1.8	+3.4	0.02	26.6%	6.4	+1.7	0.79	0.0%	-4.3	+2.7	0.35	0.4%
2007.2-2016.1	2	+3.8	0.02	27.2%	6.2	+1.9	0.75	0.0%	-3.9	+3	0.27	1.5%
2008.1-2016.1	3.3	+4	0.13	8.7%	6.4	+2.1	0.74	0.0%	-2.9	+3.1	0.15	7.0%
2008.2-2016.1	3.7	+4.5	0.13	9.1%	6.7	+2.3	0.72	0.0%	-2.7	+3.6	0.1	12.7%
2009.1-2016.1	5.4	+4.7	0.28	2.5%	7.7	+2.3	0.8	0.0%	-2.1	+4	0.02	27.7%
2009.2-2016.1	4.4	+5.2	0.16	8.4%	7.7	+2.7	0.77	0.0%	-3.1	+4.5	0.08	16.7%
2010.1-2016.1	4.7	+6.2	0.14	11.4%	8.1	+3.1	0.75	0.0%	-3.1	+5.3	0.05	22.2%
2010.2-2016.1	2.9	+6.8	0	34.9%	8.1	+3.7	0.69	0.0%	-4.8	+5.7	0.17	9.9%
2011.1-2016.1	1	+7.6	-0.1	76.1%	7.2	+4.2	0.6	0.3%	-5.7	+6.7	0.2	9.6%
2011.2-2016.1	-1.2	+8.5	-0.11	75.3%	6.2	+5	0.46	1.8%	-7	+8.1	0.23	9.0%
2012.1-2016.1	-1	+11	-0.13	82.8%	8	+5.7	0.58	1.0%	-8.4	+9.9	0.25	9.5%
2012.2-2016.1	-6.9	+9.1	0.24	12.3%	7.6	+7.5	0.44	4.4%	-13.4	+8.8	0.62	1.3%
2013.1-2016.1	-6.9	+12.8	0.12	23.8%	9.5	+10.1	0.48	5.2%	-15	+11.7	0.58	2.9%
2013.2-2016.1	-8.9	+18.7	0.11	27.3%	15	+10.1	0.79	1.1%	-20.8	+10.9	0.81	0.9%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Property Damage
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	3.9	+1.4	0.73	0.0%	1.4%	0.0%	3	+1.3	0.53	0.0%	42.0%	3.3%	0.8	+1.2	0.61	17.6%	5.0%	0.0%
2005.2-2016.2	3.9	+1.5	0.72	0.0%	1.6%	0.0%	3.3	+1.3	0.55	0.0%	30.7%	2.7%	0.6	+1.3	0.62	31.1%	7.7%	0.0%
2006.1-2016.2	3.7	+1.6	0.72	0.0%	1.4%	0.0%	3.4	+1.4	0.54	0.0%	38.2%	2.9%	0.4	+1.3	0.65	57.7%	4.5%	0.0%
2006.2-2016.2	4	+1.6	0.75	0.0%	0.8%	0.0%	3.9	+1.1	0.76	0.0%	5.6%	1.1%	0.1	+1.3	0.7	86.3%	8.2%	0.0%
2007.1-2016.2	4.1	+1.7	0.74	0.0%	1.5%	0.0%	4	+1.1	0.77	0.0%	9.7%	1.3%	0.1	+1.4	0.68	93.7%	8.7%	0.0%
2007.2-2016.2	4.4	+1.8	0.77	0.0%	0.8%	0.0%	4.3	+1.1	0.8	0.0%	5.0%	1.7%	0.1	+1.5	0.66	85.4%	8.8%	0.0%
2008.1-2016.2	4.5	+1.9	0.77	0.0%	1.4%	0.0%	4.5	+1.1	0.84	0.0%	8.9%	2.5%	-0.1	+1.6	0.66	93.3%	6.9%	0.0%
2008.2-2016.2	4.2	+1.9	0.78	0.0%	2.9%	0.0%	4.6	+1.2	0.82	0.0%	8.4%	4.9%	-0.5	+1.5	0.74	53.1%	13.4%	0.0%
2009.1-2016.2	3.6	+1.9	0.82	0.1%	1.2%	0.0%	4.7	+1.3	0.82	0.0%	11.8%	8.1%	-1.1	+1.3	0.83	11.2%	2.6%	0.0%
2009.2-2016.2	3.1	+2.1	0.81	0.7%	2.2%	0.0%	4.5	+1.5	0.76	0.0%	17.5%	10.5%	-1.4	+1.5	0.84	6.6%	4.7%	0.0%
2010.1-2016.2	2.8	+2.6	0.78	3.3%	2.7%	0.0%	4	+1.7	0.71	0.0%	9.7%	25.8%	-1.1	+1.8	0.85	19.1%	8.9%	0.0%
2010.2-2016.2	2.5	+3.4	0.69	11.9%	4.3%	0.1%	3.8	+2.3	0.58	0.4%	13.4%	42.6%	-1.2	+2.4	0.83	27.1%	12.0%	0.0%
2011.1-2016.2	3.4	+4.7	0.7	12.4%	9.5%	0.2%	4.4	+3.2	0.57	1.1%	24.4%	33.0%	-0.9	+3.3	0.83	53.6%	19.5%	0.1%
2011.2-2016.2	5.7	+6.1	0.75	5.7%	6.0%	0.2%	4.4	+4.5	0.39	5.0%	28.6%	42.9%	1.2	+3.8	0.89	47.5%	7.7%	0.0%
2012.1-2016.2	8.6	+9.3	0.78	5.6%	16.8%	0.4%	8	+5.8	0.63	1.3%	73.6%	8.5%	0.6	+6.2	0.88	81.3%	10.9%	0.5%
2012.2-2016.2	4.3	+12.2	0.79	39.5%	20.5%	2.5%	8.6	+9.1	0.4	5.3%	73.4%	14.6%	-4	+5.4	0.96	12.3%	5.6%	1.1%
2013.1-2016.2	-2.3	+13.8	0.88	66.4%	6.6%	8.9%	4.6	+12.3	0.12	34.8%	38.0%	44.9%	-6.6	+6.9	0.97	6.2%	3.3%	4.3%
2013.2-2016.2	-4.7	+25.1	0.87	60.0%	11.6%	27.6%	7.1	+23.2	-0.08	38.3%	42.5%	43.5%	-11	+6.2	0.99	1.3%	1.3%	11.5%
2014.1-2016.2	3.9	+114.9	0.77	88.0%	52.8%	44.1%	11.8	+100.9	-0.34	61.4%	82.7%	60.8%	-7.1	+20.9	0.98	29.0%	14.3%	19.9%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Property Damage
With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	1	+1.9	0.12	26.7%	7.7%	2.2	+1.1	0.44	0.0%	35.4%	-1.1	+1.4	0.13	11.5%	10.0%
2005.2-2016.2	1	+2	0.09	32.6%	9.4%	2.3	+1.1	0.45	0.0%	27.9%	-1.3	+1.5	0.14	8.2%	14.7%
2006.1-2016.2	0.7	+2.2	0.09	50.1%	8.2%	2.4	+1.3	0.43	0.1%	33.0%	-1.6	+1.6	0.19	4.8%	10.1%
2006.2-2016.2	1.1	+2.4	0.13	32.7%	6.0%	3	+1.1	0.66	0.0%	6.1%	-1.8	+1.7	0.21	4.0%	14.8%
2007.1-2016.2	1.4	+2.6	0.13	28.6%	9.0%	3.3	+1.1	0.68	0.0%	10.6%	-1.8	+1.9	0.16	6.4%	17.3%
2007.2-2016.2	2	+2.8	0.2	15.6%	5.8%	3.6	+1.2	0.72	0.0%	5.2%	-1.6	+2.1	0.13	14.0%	14.8%
2008.1-2016.2	2.4	+3.2	0.21	11.7%	9.7%	4	+1.2	0.78	0.0%	10.4%	-1.6	+2.4	0.08	19.1%	17.6%
2008.2-2016.2	2.6	+3.6	0.18	13.3%	10.5%	4.3	+1.3	0.78	0.0%	7.1%	-1.6	+2.7	0.08	22.3%	21.2%
2009.1-2016.2	2.7	+4.1	0.18	16.7%	13.9%	4.6	+1.4	0.78	0.0%	12.4%	-1.7	+3.1	0.05	25.4%	22.8%
2009.2-2016.2	1.9	+4.5	0.04	36.4%	21.7%	4.3	+1.6	0.72	0.0%	18.9%	-2.3	+3.5	0.07	18.1%	32.9%
2010.1-2016.2	0.5	+4.8	0.08	81.4%	11.7%	3.7	+1.6	0.7	0.0%	7.2%	-3.1	+3.9	0.13	11.7%	23.9%
2010.2-2016.2	-1.2	+4.9	0.01	60.1%	20.4%	3.4	+1.9	0.6	0.2%	12.3%	-4.4	+4	0.28	3.5%	40.2%
2011.1-2016.2	-2.4	+5.5	0.09	36.1%	14.4%	3.5	+2.3	0.57	0.7%	17.4%	-5.7	+4.4	0.39	1.9%	23.7%
2011.2-2016.2	-3.2	+6.6	0.09	30.6%	22.1%	3.2	+2.7	0.41	2.5%	25.4%	-6.2	+5.2	0.38	2.9%	33.0%
2012.1-2016.2	-4.9	+7.7	0.18	18.5%	15.4%	3.8	+3.3	0.45	2.8%	42.4%	-8.4	+5.3	0.58	0.8%	11.9%
2012.2-2016.2	-8.3	+6.9	0.49	3.1%	24.6%	3.2	+4.1	0.21	9.9%	58.6%	-11.2	+3.8	0.85	0.0%	13.4%
2013.1-2016.2	-12.1	+5.9	0.78	0.4%	4.0%	1.2	+4.1	0.17	47.2%	19.8%	-13.1	+3.6	0.91	0.0%	3.0%
2013.2-2016.2	-14	+6.8	0.84	0.6%	7.2%	1.1	+5.9	-0.03	61.8%	28.4%	-14.9	+2.3	0.98	0.0%	1.1%
2014.1-2016.2	-15.7	+10.7	0.78	2.4%	9.7%	0	+9.7	-0.05	99.8%	29.5%	-15.7	+3.5	0.97	0.1%	2.2%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Property Damage
With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	4.1	+1.5	0.65	0.0%	0.0%	3.1	+1.2	0.54	0.0%	2.6%	1	+1.3	0.55	14.0%	0.0%
2005.2-2016.2	4	+1.7	0.64	0.0%	0.0%	3.3	+1.3	0.55	0.0%	2.2%	0.7	+1.4	0.58	29.8%	0.0%
2006.1-2016.2	4	+1.8	0.63	0.0%	0.0%	3.4	+1.4	0.55	0.0%	2.3%	0.5	+1.5	0.59	45.7%	0.0%
2006.2-2016.2	4.1	+1.9	0.64	0.0%	0.0%	3.9	+1.2	0.72	0.0%	1.0%	0.2	+1.4	0.66	78.9%	0.0%
2007.1-2016.2	4.4	+2	0.65	0.0%	0.0%	4.2	+1.2	0.75	0.0%	1.2%	0.2	+1.5	0.64	78.0%	0.0%
2007.2-2016.2	4.5	+2.2	0.65	0.0%	0.0%	4.3	+1.3	0.75	0.0%	1.6%	0.2	+1.6	0.62	79.2%	0.0%
2008.1-2016.2	4.8	+2.3	0.66	0.0%	0.0%	4.7	+1.2	0.81	0.0%	2.6%	0.1	+1.7	0.6	89.6%	0.0%
2008.2-2016.2	4.2	+2.3	0.7	0.1%	0.0%	4.7	+1.3	0.79	0.0%	4.0%	-0.4	+1.6	0.71	58.9%	0.0%
2009.1-2016.2	3.9	+2.4	0.72	0.4%	0.0%	4.8	+1.4	0.79	0.0%	8.2%	-0.9	+1.6	0.76	25.1%	0.0%
2009.2-2016.2	3.1	+2.6	0.71	2.0%	0.0%	4.5	+1.6	0.74	0.0%	10.8%	-1.4	+1.7	0.79	10.4%	0.0%
2010.1-2016.2	3.3	+3.1	0.67	3.6%	0.0%	4.2	+1.9	0.65	0.0%	20.6%	-0.9	+1.9	0.81	33.9%	0.0%
2010.2-2016.2	2.6	+4	0.55	17.9%	0.2%	3.8	+2.4	0.51	0.5%	44.6%	-1.2	+2.6	0.8	31.4%	0.0%
2011.1-2016.2	4.3	+5.1	0.61	8.2%	0.2%	4.8	+3.1	0.54	0.6%	23.9%	-0.5	+3.4	0.81	76.4%	0.1%
2011.2-2016.2	6	+7.3	0.62	8.8%	0.4%	4.5	+4.5	0.36	4.5%	39.8%	1.4	+4.5	0.84	49.4%	0.1%
2012.1-2016.2	10.7	+9.5	0.73	2.6%	0.2%	8.2	+4.9	0.67	0.4%	4.5%	2.3	+6.6	0.84	43.9%	0.3%
2012.2-2016.2	5.4	+12.6	0.76	32.4%	1.9%	8.8	+8	0.49	3.0%	9.8%	-3.2	+7	0.92	31.8%	1.7%
2013.1-2016.2	3.3	+17.3	0.75	63.4%	5.7%	6.6	+10.4	0.13	15.3%	23.5%	-3	+10	0.9	48.0%	4.2%
2013.2-2016.2	-0.2	+31	0.74	98.5%	22.7%	8.8	+19.4	-0.04	25.7%	29.2%	-8.3	+15.2	0.92	21.8%	25.1%
2014.1-2016.2	18.7	+48.6	0.8	26.5%	7.9%	16	+35.7	0.08	21.6%	22.9%	2.3	+16.3	0.96	68.1%	3.5%

Province of Alberta
Commercial Automobile (excl. Farmers)

Third Party Liability - Property Damage
No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	1.1	+2	0.02	23.8%	2.2	+1.1	0.44	0.0%	-1	+1.5	0.05	15.8%
2005.2-2016.2	1	+2.1	0	34.7%	2.3	+1.1	0.44	0.0%	-1.3	+1.5	0.09	9.0%
2006.1-2016.2	0.9	+2.3	-0.02	44.0%	2.4	+1.2	0.43	0.0%	-1.5	+1.7	0.11	7.2%
2006.2-2016.2	1.1	+2.5	-0.01	36.1%	3	+1.1	0.61	0.0%	-1.8	+1.8	0.15	4.5%
2007.1-2016.2	1.6	+2.8	0.02	25.0%	3.3	+1.2	0.65	0.0%	-1.7	+2	0.11	8.6%
2007.2-2016.2	2	+3.1	0.05	19.0%	3.6	+1.3	0.66	0.0%	-1.6	+2.2	0.06	15.3%
2008.1-2016.2	2.7	+3.3	0.1	10.3%	4.1	+1.2	0.75	0.0%	-1.4	+2.5	0.03	24.8%
2008.2-2016.2	2.6	+3.8	0.07	15.5%	4.3	+1.4	0.74	0.0%	-1.6	+2.8	0.03	23.2%
2009.1-2016.2	3.1	+4.3	0.09	14.0%	4.7	+1.5	0.75	0.0%	-1.5	+3.2	0.01	31.6%
2009.2-2016.2	1.9	+4.6	-0.01	37.5%	4.3	+1.7	0.7	0.0%	-2.3	+3.4	0.07	17.9%
2010.1-2016.2	1	+5.1	-0.07	68.0%	3.9	+1.8	0.63	0.0%	-2.8	+3.9	0.09	15.3%
2010.2-2016.2	-1.2	+5	-0.06	61.3%	3.4	+2	0.53	0.3%	-4.4	+3.9	0.3	3.2%
2011.1-2016.2	-1.8	+5.8	-0.05	50.9%	3.7	+2.3	0.52	0.5%	-5.3	+4.4	0.35	2.5%
2011.2-2016.2	-3.2	+6.7	0.01	32.1%	3.2	+2.8	0.38	2.5%	-6.2	+5.1	0.37	2.7%
2012.1-2016.2	-4	+8.2	0.02	30.0%	4.1	+3.2	0.47	1.7%	-7.8	+5.8	0.47	1.7%
2012.2-2016.2	-8.3	+7	0.44	3.1%	3.2	+3.8	0.29	7.9%	-11.2	+4.2	0.81	0.1%
2013.1-2016.2	-10.7	+8.1	0.54	2.3%	1.8	+4.2	0.01	34.3%	-12.2	+5.2	0.8	0.2%
2013.2-2016.2	-14	+8.9	0.69	1.3%	1.1	+5.8	-0.14	63.0%	-14.9	+4.6	0.91	0.1%
2014.1-2016.2	-13.3	+13.6	0.52	6.5%	1.1	+8.8	-0.21	73.8%	-14.2	+6.9	0.84	0.6%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	-0.7	+5.1	0.14	79.2%	3.1%	47.9%	3.5	+4.9	0.08	14.9%	34.1%	98.2%	-4	+1.2	0.88	0.0%	0.0%	0.9%
2005.2-2016.2	-0.9	+5.5	0.13	74.5%	4.2%	50.2%	3.3	+5.3	0.03	19.6%	37.9%	99.2%	-4.1	+1.3	0.87	0.0%	0.0%	1.1%
2006.1-2016.2	-0.9	+6	0.11	76.8%	5.4%	51.4%	2.9	+5.7	0	30.0%	34.1%	97.9%	-3.6	+1.2	0.87	0.0%	0.0%	0.4%
2006.2-2016.2	-1.6	+6.1	0.12	57.9%	9.1%	45.3%	1.9	+5.7	-0.1	47.8%	50.2%	92.5%	-3.5	+1.3	0.86	0.0%	0.0%	0.5%
2007.1-2016.2	-2	+6.5	0.1	53.9%	9.5%	45.3%	1.6	+6.1	-0.12	59.0%	46.3%	90.4%	-3.5	+1.4	0.83	0.0%	0.0%	0.7%
2007.2-2016.2	-2.7	+6.8	0.12	42.0%	14.9%	39.5%	0.7	+6.2	-0.17	82.0%	64.1%	78.0%	-3.3	+1.5	0.82	0.0%	0.0%	1.1%
2008.1-2016.2	-1.3	+7	-0.04	69.8%	24.7%	54.6%	1.8	+6.5	-0.18	56.1%	85.4%	96.2%	-3	+1.5	0.77	0.1%	0.0%	1.8%
2008.2-2016.2	-1.9	+7.4	-0.04	59.5%	34.3%	46.1%	1.1	+6.8	-0.22	73.9%	98.1%	78.5%	-2.9	+1.6	0.76	0.2%	0.0%	3.4%
2009.1-2016.2	-2.4	+8.3	-0.06	54.8%	33.4%	43.6%	0.7	+7.6	-0.23	83.7%	97.0%	74.3%	-3.1	+1.8	0.72	0.3%	0.1%	3.6%
2009.2-2016.2	-4.3	+8.9	-0.04	31.6%	48.1%	51.3%	-1.3	+8.1	-0.24	72.5%	79.5%	85.4%	-3.1	+2.1	0.71	0.8%	0.1%	4.6%
2010.1-2016.2	-2.1	+10.9	-0.11	68.3%	69.4%	35.6%	0.6	+9.8	-0.24	89.0%	61.5%	63.0%	-2.7	+2.5	0.67	4.0%	0.4%	4.6%
2010.2-2016.2	-3.4	+14.1	-0.14	60.4%	76.9%	55.7%	0.3	+13	-0.28	95.7%	62.9%	72.8%	-3.7	+3	0.7	2.3%	0.7%	20.7%
2011.1-2016.2	-8.7	+17.7	-0.06	30.7%	53.1%	100.0%	-3.7	+17	-0.31	63.8%	86.8%	91.5%	-5.3	+3.7	0.75	1.2%	0.4%	63.4%
2011.2-2016.2	-7.3	+25.9	-0.14	53.8%	54.0%	91.8%	-4	+24.4	-0.38	71.2%	87.2%	91.1%	-3.4	+4.7	0.79	13.7%	0.3%	26.6%
2012.1-2016.2	-2.3	+44.7	-0.32	90.1%	72.3%	76.3%	1.9	+42	-0.46	91.3%	73.1%	84.0%	-4.1	+7.5	0.74	23.6%	0.8%	50.5%
2012.2-2016.2	-24.6	+43	0.02	23.9%	86.5%	51.8%	-17.3	+45.5	-0.21	39.6%	57.4%	55.0%	-8.9	+8	0.86	4.2%	0.5%	65.9%
2013.1-2016.2	-39.7	+52.3	0.17	14.8%	49.9%	28.8%	-30.3	+62.1	-0.12	27.9%	95.1%	37.7%	-13.5	+9	0.9	1.8%	0.4%	18.9%
2013.2-2016.2	0.2	+79.7	0	99.4%	21.9%	87.6%	21	+73	-0.27	36.6%	87.0%	48.2%	-17.2	+13.4	0.92	3.4%	0.8%	13.0%
2014.1-2016.2	64	+769.9	-0.04	44.4%	94.0%	43.0%	77.8	+504.8	-0.1	29.6%	54.0%	32.0%	-7.8	+48.1	0.79	55.7%	9.7%	85.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total
With Seasonality and Unemployment; Excluding 2007.2 and 2013.1

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	-2.3	+3.2	0.42	16.5%	0.1%	74.1%	1.9	+3.1	0.39	21.1%	4.8%	16.4%	-4.1	+1.3	0.86	0.0%	0.0%	2.3%
2005.2-2016.2	-2.3	+3.5	0.41	18.9%	0.1%	74.5%	1.9	+3.3	0.35	23.8%	5.7%	17.8%	-4.1	+1.4	0.86	0.0%	0.0%	2.8%
2006.1-2016.2	-2.2	+3.9	0.36	25.9%	0.2%	76.2%	1.5	+3.6	0.33	39.3%	5.0%	17.4%	-3.6	+1.3	0.85	0.0%	0.0%	1.0%
2006.2-2016.2	-2.7	+3.9	0.36	17.8%	0.4%	86.2%	0.9	+3.6	0.19	61.4%	8.0%	21.5%	-3.5	+1.3	0.84	0.0%	0.0%	1.5%
2007.1-2016.2	-2.7	+4.4	0.31	21.2%	0.7%	87.2%	0.7	+3.9	0.18	71.5%	8.8%	24.2%	-3.3	+1.5	0.79	0.0%	0.0%	2.0%
2007.2-2016.2	-3	+4.7	0.3	19.9%	1.2%	94.7%	0.2	+4.1	0.04	93.6%	13.4%	32.9%	-3.1	+1.5	0.78	0.1%	0.0%	3.2%
2008.1-2016.2	-3	+4.7	0.3	19.9%	1.2%	94.7%	0.2	+4.1	0.04	93.6%	13.4%	32.9%	-3.1	+1.5	0.78	0.1%	0.0%	3.2%
2008.2-2016.2	-3.1	+5.1	0.29	21.3%	2.2%	99.5%	-0.1	+4.3	-0.06	96.7%	20.3%	45.1%	-3	+1.6	0.77	0.2%	0.1%	6.5%
2009.1-2016.2	-3.4	+5.7	0.25	22.4%	2.8%	92.7%	-0.2	+4.9	-0.08	92.4%	22.1%	52.2%	-3.2	+1.8	0.73	0.3%	0.1%	6.9%
2009.2-2016.2	-4.8	+6	0.28	11.0%	5.2%	98.7%	-1.8	+4.9	-0.09	43.9%	37.1%	40.8%	-3.1	+2.1	0.72	0.9%	0.2%	8.2%
2010.1-2016.2	-3.2	+7.3	0.12	35.0%	11.2%	72.5%	-0.5	+5.9	-0.27	86.0%	58.4%	68.5%	-2.7	+2.6	0.68	4.4%	0.5%	8.4%
2010.2-2016.2	-4.1	+9.5	0.09	35.9%	15.8%	90.4%	-0.4	+7.9	-0.32	91.8%	60.7%	75.9%	-3.7	+3.2	0.7	2.8%	0.9%	28.6%
2011.1-2016.2	-10.4	+9.7	0.45	4.8%	3.5%	34.0%	-5.3	+8.6	0.01	20.3%	23.3%	22.1%	-5.4	+3.9	0.76	1.5%	0.5%	78.2%
2011.2-2016.2	-5.8	+13	0.48	32.6%	2.3%	76.6%	-2.6	+12.3	-0.06	62.0%	19.9%	47.1%	-3.3	+4.7	0.82	14.6%	0.3%	30.9%
2012.1-2016.2	1.8	+20	0.38	82.0%	5.7%	59.8%	5.8	+17.6	-0.05	41.7%	43.0%	75.4%	-3.8	+7.8	0.78	27.6%	0.9%	52.6%
2012.2-2016.2	-6.9	+30.2	0.32	56.9%	11.4%	86.9%	1.7	+30.4	-0.55	88.0%	58.6%	95.5%	-8.4	+10.8	0.84	10.6%	1.6%	75.9%
2013.1-2016.2	0.2	+79.7	0	99.4%	21.9%	87.6%	21	+73	-0.27	36.6%	87.0%	48.2%	-17.2	+13.4	0.92	3.4%	0.8%	13.0%
2013.2-2016.2	0.2	+79.7	0	99.4%	21.9%	87.6%	21	+73	-0.27	36.6%	87.0%	48.2%	-17.2	+13.4	0.92	3.4%	0.8%	13.0%
2014.1-2016.2	64	+769.9	-0.04	44.4%	94.0%	43.0%	77.8	+504.8	-0.1	29.6%	54.0%	32.0%	-7.8	+48.1	0.79	55.7%	9.7%	85.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total
With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	-1.8	+3.8	0.16	35.5%	2.4%	3.4	+3.7	0.12	6.2%	32.6%	-5	+1.1	0.83	0.0%	0.0%
2005.2-2016.2	-2	+4.2	0.16	33.9%	3.5%	3.3	+4	0.08	9.6%	36.5%	-5.1	+1.1	0.83	0.0%	0.0%
2006.1-2016.2	-2	+4.6	0.13	37.8%	4.3%	2.9	+4.4	0.06	17.7%	32.6%	-4.8	+1.2	0.8	0.0%	0.0%
2006.2-2016.2	-2.9	+4.9	0.14	23.4%	7.3%	1.8	+4.5	-0.04	41.2%	48.1%	-4.6	+1.3	0.79	0.0%	0.0%
2007.1-2016.2	-3.2	+5.4	0.12	23.7%	7.8%	1.4	+5	-0.05	56.5%	44.1%	-4.5	+1.4	0.75	0.0%	0.0%
2007.2-2016.2	-4	+5.9	0.13	17.8%	11.9%	0.3	+5.3	-0.1	91.0%	60.5%	-4.3	+1.5	0.74	0.0%	0.0%
2008.1-2016.2	-2.1	+6.2	0	49.4%	22.0%	1.7	+5.7	-0.1	52.8%	84.6%	-3.7	+1.6	0.68	0.0%	0.1%
2008.2-2016.2	-2.6	+6.9	-0.01	44.0%	28.2%	0.8	+6.3	-0.14	78.0%	98.8%	-3.4	+1.7	0.68	0.1%	0.1%
2009.1-2016.2	-2.8	+8	-0.03	46.8%	30.3%	0.6	+7.2	-0.15	86.7%	95.2%	-3.4	+2	0.62	0.4%	0.1%
2009.2-2016.2	-4.8	+8.4	0	24.8%	45.7%	-1.5	+7.5	-0.14	68.4%	79.0%	-3.4	+2.3	0.61	0.8%	0.3%
2010.1-2016.2	-3.6	+9.9	-0.1	44.8%	59.2%	-0.1	+8.8	-0.16	98.0%	64.9%	-3.5	+2.7	0.55	1.7%	0.5%
2010.2-2016.2	-5.4	+11.1	-0.07	31.9%	75.3%	-0.8	+10.2	-0.17	87.1%	61.6%	-4.6	+2.6	0.67	0.3%	0.7%
2011.1-2016.2	-8.7	+12	0.06	15.1%	49.7%	-3.1	+11.6	-0.16	56.5%	84.0%	-5.8	+2.5	0.77	0.1%	0.2%
2011.2-2016.2	-8.1	+14.8	0	25.6%	50.6%	-3.1	+14.2	-0.21	63.3%	85.6%	-5.2	+2.9	0.77	0.4%	0.2%
2012.1-2016.2	-7	+19.2	-0.15	43.0%	61.5%	-1.1	+18.4	-0.26	89.2%	74.7%	-6	+3.5	0.76	0.6%	0.3%
2012.2-2016.2	-13.9	+18.5	0.11	13.7%	95.1%	-6.9	+19.3	-0.1	42.7%	47.6%	-7.6	+3.1	0.87	0.1%	0.2%
2013.1-2016.2	-17	+24.7	0.09	16.3%	80.3%	-9.2	+26.3	-0.12	42.5%	63.4%	-8.6	+3.8	0.87	0.3%	0.3%
2013.2-2016.2	-3.4	+17.2	0.24	61.4%	13.0%	5.6	+16.1	-0.16	37.5%	69.1%	-8.6	+5.6	0.85	1.5%	1.1%
2014.1-2016.2	-1	+30.4	-0.03	92.2%	27.5%	4.8	+28.2	-0.37	61.2%	72.0%	-5.6	+5.3	0.86	4.7%	1.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total

With Seasonality; No Unemployment; Excluding 2007.2 and 2013.1

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	-1.9	+2.4	0.44	11.9%	0.0%	3.3	+2.5	0.35	1.2%	6.9%	-5	+1.1	0.83	0.0%	0.0%
2005.2-2016.2	-2	+2.7	0.44	14.6%	0.1%	3.3	+2.7	0.31	1.8%	7.8%	-5.1	+1.2	0.82	0.0%	0.0%
2006.1-2016.2	-1.8	+3	0.39	22.3%	0.2%	3	+3	0.29	5.1%	7.1%	-4.6	+1.2	0.79	0.0%	0.0%
2006.2-2016.2	-2.5	+3.2	0.4	12.4%	0.3%	2	+3	0.16	16.9%	11.0%	-4.4	+1.3	0.78	0.0%	0.0%
2007.1-2016.2	-2.5	+3.7	0.35	16.7%	0.5%	1.8	+3.5	0.15	29.4%	11.1%	-4.2	+1.5	0.71	0.0%	0.1%
2007.2-2016.2	-2.9	+4.1	0.35	15.4%	0.9%	0.9	+3.7	0.04	59.6%	16.1%	-3.8	+1.6	0.71	0.0%	0.0%
2008.1-2016.2	-2.9	+4.1	0.35	15.4%	0.9%	0.9	+3.7	0.04	59.6%	16.1%	-3.8	+1.6	0.71	0.0%	0.0%
2008.2-2016.2	-3.1	+4.6	0.34	17.5%	1.5%	0.4	+4.1	-0.03	84.5%	24.1%	-3.5	+1.7	0.71	0.1%	0.0%
2009.1-2016.2	-3.4	+5.3	0.31	19.4%	2.0%	0	+4.7	-0.03	99.3%	23.5%	-3.4	+2	0.66	0.3%	0.1%
2009.2-2016.2	-4.8	+5.6	0.35	8.9%	4.0%	-1.5	+4.7	-0.07	51.7%	40.9%	-3.4	+2.3	0.65	0.8%	0.2%
2010.1-2016.2	-3.6	+6.4	0.2	24.4%	7.7%	-0.1	+5.3	-0.17	96.7%	62.2%	-3.5	+2.7	0.59	1.8%	0.4%
2010.2-2016.2	-4.4	+7.4	0.19	22.7%	13.0%	0.2	+6.3	-0.18	94.2%	60.4%	-4.6	+2.7	0.69	0.4%	0.7%
2011.1-2016.2	-7.5	+7.2	0.45	5.1%	4.2%	-1.9	+6.7	-0.09	54.0%	36.7%	-5.7	+2.6	0.79	0.1%	0.2%
2011.2-2016.2	-4.6	+7.7	0.55	21.3%	1.5%	0.3	+7.7	0	92.5%	19.9%	-4.9	+3	0.81	0.7%	0.2%
2012.1-2016.2	-1.8	+9.1	0.45	64.8%	2.6%	4	+8	0.11	26.1%	31.8%	-5.5	+3.7	0.8	1.2%	0.3%
2012.2-2016.2	-5.1	+10.9	0.45	28.9%	7.5%	2.3	+10.8	-0.24	60.3%	53.9%	-7.3	+4	0.87	0.6%	0.7%
2013.1-2016.2	-3.4	+17.2	0.24	61.4%	13.0%	5.6	+16.1	-0.16	37.5%	69.1%	-8.6	+5.6	0.85	1.5%	1.1%
2013.2-2016.2	-3.4	+17.2	0.24	61.4%	13.0%	5.6	+16.1	-0.16	37.5%	69.1%	-8.6	+5.6	0.85	1.5%	1.1%
2014.1-2016.2	-1	+30.4	-0.03	92.2%	27.5%	4.8	+28.2	-0.37	61.2%	72.0%	-5.6	+5.3	0.86	4.7%	1.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total
With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	0	+5.6	-0.04	99.9%	40.2%	3.7	+4.9	0.08	11.9%	91.1%	-3.6	+1.9	0.68	0.1%	4.3%
2005.2-2016.2	-0.6	+6	-0.03	83.9%	44.1%	3.4	+5.3	0.04	17.9%	93.6%	-3.9	+2	0.68	0.1%	5.3%
2006.1-2016.2	-0.2	+6.4	-0.05	95.9%	43.8%	3.2	+5.7	0	24.8%	95.1%	-3.2	+1.9	0.66	0.3%	2.7%
2006.2-2016.2	-1.3	+6.4	0.01	67.2%	37.4%	2.1	+5.6	-0.07	44.5%	86.4%	-3.3	+2.1	0.64	0.4%	3.0%
2007.1-2016.2	-1.3	+6.9	-0.01	70.0%	39.1%	1.8	+6	-0.09	52.2%	84.8%	-3.1	+2.2	0.58	0.9%	3.8%
2007.2-2016.2	-2.4	+7.1	0.05	48.4%	32.2%	0.8	+6	-0.12	79.5%	73.0%	-3.1	+2.3	0.55	1.2%	4.3%
2008.1-2016.2	-0.8	+7	-0.08	80.3%	49.7%	1.8	+6.2	-0.1	53.1%	95.0%	-2.6	+2.3	0.44	2.9%	7.4%
2008.2-2016.2	-1.8	+7.4	-0.04	61.9%	38.0%	1.1	+6.5	-0.13	73.0%	77.8%	-2.8	+2.5	0.4	3.2%	7.3%
2009.1-2016.2	-1.9	+8.2	-0.06	62.2%	40.0%	0.7	+7.2	-0.14	82.5%	73.0%	-2.7	+2.8	0.29	6.0%	11.9%
2009.2-2016.2	-4.3	+8.7	0	30.7%	48.9%	-1.3	+7.7	-0.15	71.3%	85.5%	-3	+3.2	0.3	6.1%	15.0%
2010.1-2016.2	-1.7	+10.2	-0.02	71.6%	30.4%	0.3	+9.2	-0.16	95.3%	66.7%	-2	+3.6	0.29	25.5%	7.9%
2010.2-2016.2	-3.4	+13.2	-0.04	58.7%	53.3%	0.3	+12.3	-0.18	95.9%	72.2%	-3.7	+4.3	0.36	9.2%	35.4%
2011.1-2016.2	-7.6	+16.6	0.01	34.5%	89.9%	-4	+15.3	-0.17	57.8%	88.1%	-3.8	+5.9	0.33	18.9%	45.4%
2011.2-2016.2	-6.9	+24.3	-0.06	53.9%	88.3%	-4.1	+22.2	-0.21	68.6%	89.6%	-3	+8.5	0.26	45.1%	44.7%
2012.1-2016.2	0	+38.5	-0.15	99.9%	64.5%	-0.2	+34.6	-0.28	99.0%	91.3%	0.2	+12.5	0.2	97.6%	29.2%
2012.2-2016.2	-24.2	+36.8	0.18	19.8%	48.9%	-18.8	+39.3	-0.09	31.6%	45.5%	-6.6	+16.5	0.35	37.8%	87.8%
2013.1-2016.2	-33.8	+43.7	0.25	14.8%	33.7%	-30.9	+43.6	0.1	17.1%	26.9%	-4.2	+24	0.15	67.7%	75.6%
2013.2-2016.2	9.7	+85.2	-0.35	73.8%	62.8%	22	+52.7	0.03	25.8%	36.9%	-10.1	+41.7	0.12	54.5%	91.5%
2014.1-2016.2	69.8	+157.6	0.3	13.5%	13.8%	40.1	+111.9	0.07	23.9%	29.3%	21.2	+53.4	0.24	24.8%	18.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total

With Unemployment; No Seasonality; Excluding 2007.2 and 2013.1

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	-1.1	+4.4	-0.07	60.6%	94.3%	2.5	+3.3	0.27	13.3%	27.1%	-3.5	+2	0.66	0.2%	6.7%
2005.2-2016.2	-1.5	+4.7	-0.07	50.8%	97.4%	2.3	+3.6	0.23	19.1%	27.7%	-3.7	+2.1	0.66	0.2%	7.8%
2006.1-2016.2	-0.8	+5	-0.1	73.6%	95.1%	2.2	+3.9	0.19	24.2%	28.9%	-3	+2	0.64	0.6%	4.1%
2006.2-2016.2	-1.7	+5	-0.06	48.2%	84.6%	1.3	+3.8	0.07	46.8%	33.7%	-3	+2.1	0.6	0.9%	4.8%
2007.1-2016.2	-1.2	+5.4	-0.1	63.4%	91.4%	1.4	+4.1	0.05	46.6%	34.4%	-2.6	+2.2	0.51	2.4%	6.3%
2007.2-2016.2	-2	+5.7	-0.08	47.8%	80.7%	0.6	+4.2	-0.06	75.3%	45.2%	-2.6	+2.4	0.44	4.0%	7.9%
2008.1-2016.2	-2	+5.7	-0.08	47.8%	80.7%	0.6	+4.2	-0.06	75.3%	45.2%	-2.6	+2.4	0.44	4.0%	7.9%
2008.2-2016.2	-2.6	+6.1	-0.04	36.9%	64.6%	0.1	+4.4	-0.13	95.5%	62.9%	-2.8	+2.6	0.41	4.2%	7.8%
2009.1-2016.2	-2.5	+6.7	-0.09	44.8%	72.2%	0.2	+4.9	-0.14	93.6%	64.2%	-2.6	+2.9	0.29	7.3%	12.7%
2009.2-2016.2	-4.7	+6.9	0.03	16.9%	85.1%	-1.8	+4.8	-0.08	44.5%	45.7%	-3	+3.3	0.3	7.5%	15.8%
2010.1-2016.2	-2.2	+7.8	-0.07	55.5%	50.0%	-0.2	+5.6	-0.19	93.7%	76.2%	-2	+3.8	0.29	28.2%	8.9%
2010.2-2016.2	-3.9	+10	-0.05	40.7%	81.5%	-0.3	+7.5	-0.21	92.4%	78.3%	-3.6	+4.6	0.36	11.2%	35.4%
2011.1-2016.2	-7.7	+12.4	0.05	20.8%	77.8%	-4.1	+8.6	-0.07	31.7%	34.3%	-3.7	+6.3	0.32	21.5%	45.6%
2011.2-2016.2	-5.4	+18.6	-0.12	51.9%	98.7%	-2.5	+12.8	-0.22	66.2%	57.3%	-3	+9.3	0.24	47.1%	46.6%
2012.1-2016.2	7.7	+26.2	-0.14	48.0%	35.3%	7.6	+15.9	0	26.7%	55.1%	0.1	+14.3	0.16	99.0%	33.4%
2012.2-2016.2	-8	+35.2	-0.1	59.1%	93.5%	1.4	+26	-0.35	89.5%	96.7%	-9.3	+19.8	0.38	30.1%	92.6%
2013.1-2016.2	9.7	+85.2	-0.35	73.8%	62.8%	22	+52.7	0.03	25.8%	36.9%	-10.1	+41.7	0.12	54.5%	91.5%
2013.2-2016.2	9.7	+85.2	-0.35	73.8%	62.8%	22	+52.7	0.03	25.8%	36.9%	-10.1	+41.7	0.12	54.5%	91.5%
2014.1-2016.2	69.8	+157.6	0.3	13.5%	13.8%	40.1	+111.9	0.07	23.9%	29.3%	21.2	+53.4	0.24	24.8%	18.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total
No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	-1.4	+4.2	-0.02	49.1%	3.6	+3.7	0.12	5.3%	-4.8	+1.6	0.62	0.0%
2005.2-2016.2	-2	+4.5	-0.01	38.1%	3.3	+4	0.09	9.4%	-5.1	+1.7	0.63	0.0%
2006.1-2016.2	-1.6	+5	-0.03	50.7%	3.1	+4.4	0.05	15.3%	-4.6	+1.7	0.58	0.0%
2006.2-2016.2	-2.9	+5.2	0.02	26.3%	1.8	+4.5	-0.01	40.6%	-4.6	+1.9	0.55	0.0%
2007.1-2016.2	-2.8	+5.7	0	33.1%	1.5	+4.9	-0.03	51.4%	-4.3	+2	0.49	0.0%
2007.2-2016.2	-4	+6.1	0.04	19.7%	0.3	+5.2	-0.06	90.7%	-4.3	+2.2	0.44	0.1%
2008.1-2016.2	-1.7	+6.3	-0.04	57.7%	1.8	+5.5	-0.03	50.0%	-3.4	+2.3	0.34	0.6%
2008.2-2016.2	-2.6	+7	-0.02	44.2%	0.8	+6	-0.06	77.2%	-3.4	+2.6	0.3	1.4%
2009.1-2016.2	-2.4	+8	-0.04	53.8%	0.6	+6.9	-0.07	85.5%	-2.9	+2.9	0.2	4.8%
2009.2-2016.2	-4.8	+8.2	0.04	23.9%	-1.5	+7.2	-0.06	67.2%	-3.4	+3.2	0.23	4.2%
2010.1-2016.2	-3.3	+9.5	-0.04	47.0%	-0.3	+8.3	-0.08	93.2%	-3	+3.7	0.13	11.1%
2010.2-2016.2	-5.4	+10.5	0.02	29.7%	-0.8	+9.8	-0.09	86.6%	-4.6	+3.6	0.37	1.7%
2011.1-2016.2	-8.2	+11.5	0.11	15.9%	-3.3	+10.8	-0.05	52.0%	-5.1	+4.2	0.35	2.5%
2011.2-2016.2	-8.1	+14.1	0.06	23.9%	-3.1	+13.2	-0.08	61.2%	-5.2	+5.1	0.29	5.1%
2012.1-2016.2	-6.3	+17.7	-0.04	45.0%	-1.5	+16.5	-0.12	83.6%	-4.8	+6.3	0.17	12.8%
2012.2-2016.2	-13.9	+16.6	0.23	10.6%	-6.9	+18	-0.03	40.9%	-7.6	+6.4	0.44	3.1%
2013.1-2016.2	-16.4	+21.1	0.23	12.9%	-10.3	+22.5	0.02	32.6%	-6.9	+8.5	0.28	10.4%
2013.2-2016.2	-3.4	+19.7	-0.15	67.7%	5.6	+13.7	0.03	32.6%	-8.6	+11.3	0.29	12.1%
2014.1-2016.2	2.7	+28.7	-0.23	79.9%	5.8	+21	-0.08	46.8%	-2.9	+12.7	-0.14	56.2%

Province of Alberta
Commercial Automobile (excl. Farmers)

Accident Benefits - Total

No Seasonality; No Unemployment; Excluding 2007.2 and 2013.1

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	-1.2	+3.3	-0.02	46.1%	3.6	+2.6	0.26	0.9%	-4.6	+1.6	0.61	0.0%
2005.2-2016.2	-1.6	+3.6	-0.01	37.7%	3.5	+2.9	0.22	1.8%	-4.9	+1.7	0.61	0.0%
2006.1-2016.2	-0.9	+3.9	-0.04	63.4%	3.4	+3.2	0.18	3.4%	-4.2	+1.7	0.56	0.0%
2006.2-2016.2	-2	+4.1	0	32.5%	2.3	+3.2	0.07	14.6%	-4.2	+1.9	0.51	0.0%
2007.1-2016.2	-1.4	+4.6	-0.04	53.6%	2.3	+3.6	0.05	18.5%	-3.6	+2.1	0.42	0.2%
2007.2-2016.2	-2.2	+5.1	-0.01	36.6%	1.2	+3.8	-0.03	49.8%	-3.4	+2.4	0.34	0.8%
2008.1-2016.2	-2.2	+5.1	-0.01	36.6%	1.2	+3.8	-0.03	49.8%	-3.4	+2.4	0.34	0.8%
2008.2-2016.2	-3	+5.6	0.02	27.1%	0.4	+4.1	-0.07	83.4%	-3.4	+2.7	0.29	1.8%
2009.1-2016.2	-2.6	+6.4	-0.02	39.7%	0.3	+4.7	-0.07	87.8%	-2.9	+3	0.19	5.7%
2009.2-2016.2	-4.8	+6.4	0.11	13.6%	-1.5	+4.6	-0.04	51.1%	-3.4	+3.4	0.22	5.1%
2010.1-2016.2	-2.9	+7.1	-0.02	38.9%	0	+5	-0.09	98.5%	-3	+3.9	0.12	12.8%
2010.2-2016.2	-4.5	+8	0.05	24.6%	0.2	+6	-0.1	95.0%	-4.7	+3.8	0.36	2.3%
2011.1-2016.2	-6.6	+8.8	0.15	13.4%	-1.6	+6.6	-0.08	60.3%	-5.1	+4.5	0.35	3.3%
2011.2-2016.2	-5.3	+11	0.02	30.5%	0	+7.9	-0.12	99.3%	-5.3	+5.6	0.28	6.6%
2012.1-2016.2	-0.9	+12.7	-0.14	87.8%	4.3	+7.8	0.09	22.7%	-4.9	+7.3	0.15	16.2%
2012.2-2016.2	-7	+12.9	0.08	24.9%	1.8	+9.6	-0.13	66.3%	-8.6	+7.3	0.48	3.4%
2013.1-2016.2	-3.4	+19.7	-0.15	67.7%	5.6	+13.7	0.03	32.6%	-8.6	+11.3	0.29	12.1%
2013.2-2016.2	-3.4	+19.7	-0.15	67.7%	5.6	+13.7	0.03	32.6%	-8.6	+11.3	0.29	12.1%
2014.1-2016.2	2.7	+28.7	-0.23	79.9%	5.8	+21	-0.08	46.8%	-2.9	+12.7	-0.14	56.2%

Province of Alberta
Commercial Automobile (excl. Farmers)

Collision
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	0.9	+1	0.81	6.2%	0.0%	0.0%	2.8	+1	0.73	0.0%	0.1%	3.7%	-1.8	+1.1	0.77	0.3%	3.1%	0.1%
2005.2-2016.2	0.8	+1.1	0.81	12.5%	0.0%	0.0%	2.9	+1	0.7	0.0%	0.1%	4.1%	-2	+1.2	0.77	0.3%	5.0%	0.1%
2006.1-2016.2	0.7	+1.1	0.81	21.1%	0.0%	0.0%	3	+1.1	0.7	0.0%	0.2%	4.2%	-2.2	+1.3	0.78	0.2%	3.5%	0.1%
2006.2-2016.2	0.9	+1.2	0.82	14.0%	0.0%	0.0%	3.2	+1.1	0.73	0.0%	0.1%	4.8%	-2.2	+1.4	0.76	0.3%	4.8%	0.2%
2007.1-2016.2	1	+1.3	0.81	12.8%	0.0%	0.0%	3.1	+1.2	0.72	0.0%	0.2%	5.2%	-2.1	+1.4	0.71	0.8%	7.9%	0.2%
2007.2-2016.2	1.3	+1.2	0.85	3.0%	0.0%	0.0%	3.2	+1.3	0.7	0.0%	0.2%	6.9%	-1.8	+1.5	0.69	1.8%	4.3%	0.3%
2008.1-2016.2	1.5	+1.2	0.84	2.0%	0.0%	0.0%	3.5	+1.3	0.75	0.0%	0.4%	10.5%	-1.9	+1.6	0.65	2.0%	4.4%	0.4%
2008.2-2016.2	1.5	+1.3	0.84	2.6%	0.0%	0.0%	3.7	+1.3	0.75	0.0%	0.3%	19.8%	-2.1	+1.7	0.64	2.1%	7.4%	0.4%
2009.1-2016.2	1.4	+1.5	0.83	5.3%	0.0%	0.0%	3.9	+1.4	0.77	0.0%	0.6%	35.5%	-2.4	+1.8	0.64	1.3%	5.0%	0.3%
2009.2-2016.2	1.7	+1.7	0.82	4.8%	0.0%	0.0%	4.3	+1.5	0.78	0.0%	0.4%	27.8%	-2.5	+2.1	0.64	2.1%	7.5%	0.5%
2010.1-2016.2	1.8	+2.1	0.82	8.6%	0.0%	0.1%	4.3	+1.9	0.76	0.0%	0.8%	35.6%	-2.4	+2.6	0.62	6.3%	11.6%	1.0%
2010.2-2016.2	1.9	+2.7	0.77	13.9%	0.1%	0.2%	4.9	+2.4	0.74	0.1%	0.7%	19.8%	-2.9	+3.3	0.61	8.6%	16.4%	4.3%
2011.1-2016.2	0.3	+3.2	0.82	83.0%	0.0%	1.4%	4.1	+3.2	0.72	1.6%	0.7%	48.8%	-3.7	+4.5	0.61	10.6%	15.1%	13.9%
2011.2-2016.2	1.9	+4.1	0.85	32.0%	0.0%	0.9%	2.7	+4	0.6	15.2%	1.2%	99.2%	-0.8	+5.4	0.7	72.6%	6.3%	3.4%
2012.1-2016.2	1.3	+6.7	0.84	64.2%	0.2%	4.7%	5.7	+5.3	0.73	3.6%	3.4%	29.1%	-4.2	+7.2	0.78	21.6%	3.0%	21.2%
2012.2-2016.2	0.9	+10.4	0.83	83.9%	0.5%	13.2%	9.1	+6.5	0.81	1.3%	1.6%	7.1%	-7.5	+9.4	0.82	10.4%	3.8%	64.6%
2013.1-2016.2	-5.5	+10.4	0.92	22.8%	0.2%	46.6%	6.6	+9.2	0.81	11.1%	2.1%	24.4%	-11.3	+13	0.82	8.5%	3.8%	85.1%
2013.2-2016.2	-9.6	+16	0.93	16.6%	0.6%	98.1%	8.6	+17.1	0.72	19.2%	4.2%	28.1%	-16.8	+18.9	0.86	8.1%	5.1%	42.0%
2014.1-2016.2	-20.5	+42.9	0.92	19.5%	3.2%	41.0%	2.2	+61.1	0.69	88.2%	16.4%	89.0%	-22.3	+72.6	0.63	32.3%	19.8%	53.4%

Province of Alberta
Commercial Automobile (excl. Farmers)

Collision

With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	-1.1	+1.3	0.41	10.3%	0.1%	2.2	+0.8	0.68	0.0%	0.1%	-3.2	+1.1	0.6	0.0%	5.2%
2005.2-2016.2	-1.3	+1.5	0.41	8.2%	0.1%	2.2	+0.9	0.64	0.0%	0.2%	-3.4	+1.2	0.61	0.0%	8.2%
2006.1-2016.2	-1.4	+1.6	0.4	7.3%	0.2%	2.3	+1	0.64	0.0%	0.3%	-3.6	+1.3	0.61	0.0%	5.9%
2006.2-2016.2	-1.2	+1.7	0.42	17.0%	0.1%	2.5	+1	0.67	0.0%	0.1%	-3.6	+1.4	0.59	0.0%	6.8%
2007.1-2016.2	-1	+1.9	0.36	28.8%	0.3%	2.5	+1.1	0.66	0.0%	0.2%	-3.4	+1.6	0.5	0.0%	11.1%
2007.2-2016.2	-0.4	+1.9	0.44	66.6%	0.1%	2.6	+1.2	0.64	0.0%	0.2%	-3	+1.7	0.47	0.2%	6.1%
2008.1-2016.2	0.1	+2.1	0.4	94.5%	0.2%	3.1	+1.2	0.71	0.0%	0.4%	-2.9	+1.9	0.39	0.5%	8.1%
2008.2-2016.2	0.5	+2.3	0.44	62.5%	0.2%	3.4	+1.3	0.74	0.0%	0.2%	-2.8	+2.1	0.36	1.4%	8.8%
2009.1-2016.2	0.9	+2.6	0.43	45.8%	0.4%	3.9	+1.4	0.78	0.0%	0.5%	-2.8	+2.4	0.29	2.8%	10.8%
2009.2-2016.2	0.9	+3	0.39	50.2%	0.7%	4.2	+1.5	0.78	0.0%	0.4%	-3.1	+2.8	0.3	3.3%	15.9%
2010.1-2016.2	0.2	+3.4	0.43	87.5%	0.6%	4	+1.8	0.76	0.0%	0.5%	-3.6	+3.2	0.31	3.1%	13.1%
2010.2-2016.2	-0.7	+3.6	0.39	67.8%	1.2%	4.2	+2.1	0.72	0.1%	0.7%	-4.7	+3.3	0.44	1.1%	22.6%
2011.1-2016.2	-2.6	+3.2	0.65	10.2%	0.1%	3.4	+2.2	0.73	0.6%	0.4%	-5.8	+3.5	0.54	0.5%	10.9%
2011.2-2016.2	-2.8	+3.8	0.64	13.4%	0.3%	2.7	+2.4	0.65	2.8%	0.7%	-5.4	+4.2	0.48	2.1%	11.1%
2012.1-2016.2	-4.3	+4.1	0.73	4.5%	0.2%	3.6	+2.7	0.72	1.4%	1.6%	-7.6	+3.7	0.74	0.2%	1.5%
2012.2-2016.2	-5.5	+4.7	0.76	3.2%	0.4%	4	+3.3	0.68	2.3%	2.1%	-9.1	+3.5	0.85	0.1%	2.0%
2013.1-2016.2	-8.2	+3.5	0.92	0.2%	0.0%	2.5	+3.4	0.78	12.0%	0.8%	-10.4	+4.2	0.85	0.2%	1.5%
2013.2-2016.2	-9.5	+3.9	0.95	0.3%	0.1%	2.2	+4.9	0.67	27.9%	2.3%	-11.4	+5.5	0.86	0.6%	3.7%
2014.1-2016.2	-10.2	+6.3	0.92	1.6%	0.5%	0.2	+6.3	0.79	92.7%	2.2%	-10.4	+9.3	0.69	4.4%	10.9%

Province of Alberta
Commercial Automobile (excl. Farmers)

Collision

With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	1.3	+1.7	0.46	12.4%	0.0%	3.1	+1.2	0.55	0.0%	5.8%	-1.7	+1.2	0.72	1.0%	0.1%
2005.2-2016.2	1	+1.8	0.48	26.9%	0.0%	3	+1.3	0.5	0.0%	6.8%	-2	+1.3	0.74	0.6%	0.1%
2006.1-2016.2	1.1	+1.9	0.47	24.5%	0.0%	3.2	+1.4	0.52	0.0%	6.0%	-2.1	+1.4	0.73	0.7%	0.1%
2006.2-2016.2	1.1	+2	0.46	28.3%	0.1%	3.3	+1.5	0.52	0.0%	7.0%	-2.2	+1.5	0.71	0.7%	0.2%
2007.1-2016.2	1.4	+2.1	0.44	18.9%	0.1%	3.4	+1.6	0.5	0.0%	8.3%	-1.9	+1.5	0.67	1.7%	0.2%
2007.2-2016.2	1.5	+2.3	0.42	18.0%	0.1%	3.3	+1.7	0.46	0.1%	9.0%	-1.8	+1.6	0.62	3.7%	0.3%
2008.1-2016.2	1.9	+2.3	0.39	10.0%	0.3%	3.7	+1.7	0.56	0.0%	15.2%	-1.8	+1.7	0.56	5.0%	0.5%
2008.2-2016.2	1.7	+2.5	0.41	17.3%	0.3%	3.7	+1.8	0.54	0.0%	19.0%	-2	+1.8	0.57	3.5%	0.4%
2009.1-2016.2	1.9	+2.7	0.38	15.6%	0.8%	4.2	+1.9	0.6	0.0%	39.5%	-2.2	+2	0.54	3.5%	0.5%
2009.2-2016.2	1.7	+3.2	0.34	26.4%	1.2%	4.3	+2.2	0.56	0.1%	39.2%	-2.5	+2.3	0.55	3.4%	0.8%
2010.1-2016.2	2.5	+3.7	0.38	15.6%	1.0%	4.7	+2.6	0.54	0.2%	31.3%	-2.1	+2.7	0.55	11.9%	0.9%
2010.2-2016.2	2	+4.9	0.23	38.1%	4.1%	5	+3.4	0.45	0.8%	34.4%	-2.8	+3.5	0.56	10.1%	5.0%
2011.1-2016.2	2.2	+6.7	0.19	47.1%	7.6%	5.3	+4.7	0.35	2.7%	37.0%	-2.9	+4.7	0.55	20.1%	10.0%
2011.2-2016.2	2.4	+9.7	0.16	58.5%	14.0%	3	+6	0.07	27.8%	89.1%	-0.6	+6.4	0.56	83.4%	5.2%
2012.1-2016.2	6.5	+14.1	0.23	29.9%	9.3%	7.8	+6.9	0.48	2.7%	17.6%	-1.2	+9.5	0.55	76.9%	13.8%
2012.2-2016.2	3.9	+22	0.18	67.0%	26.5%	10.5	+10.7	0.43	4.4%	13.9%	-6	+13.1	0.62	32.2%	52.6%
2013.1-2016.2	7	+32.2	0.12	58.6%	28.1%	12.2	+15.2	0.33	8.0%	16.0%	-4.7	+19	0.51	56.1%	52.5%
2013.2-2016.2	-0.1	+56.8	0.1	99.6%	62.1%	13.4	+29	-0.01	24.1%	29.3%	-11.9	+30.8	0.53	36.4%	96.4%
2014.1-2016.2	33.2	+110.2	0.19	31.2%	22.2%	28	+49.8	0.32	13.0%	15.0%	4.1	+55.8	0.32	82.1%	46.8%

Province of Alberta
Commercial Automobile (excl. Farmers)

Collision

No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	-0.9	+1.7	0.01	28.4%	2.3	+1	0.49	0.0%	-3.2	+1.2	0.54	0.0%
2005.2-2016.2	-1.3	+1.8	0.05	16.3%	2.2	+1.1	0.43	0.0%	-3.4	+1.3	0.57	0.0%
2006.1-2016.2	-1.2	+2	0.03	22.2%	2.4	+1.2	0.45	0.0%	-3.5	+1.4	0.55	0.0%
2006.2-2016.2	-1.2	+2.2	0.01	28.8%	2.5	+1.3	0.45	0.0%	-3.6	+1.5	0.53	0.0%
2007.1-2016.2	-0.7	+2.4	-0.03	54.0%	2.6	+1.4	0.43	0.1%	-3.3	+1.7	0.45	0.1%
2007.2-2016.2	-0.4	+2.7	-0.05	75.2%	2.6	+1.6	0.39	0.3%	-3	+1.8	0.37	0.3%
2008.1-2016.2	0.4	+2.8	-0.06	75.4%	3.3	+1.6	0.53	0.0%	-2.8	+2	0.3	1.1%
2008.2-2016.2	0.5	+3.2	-0.06	72.3%	3.4	+1.8	0.51	0.1%	-2.8	+2.3	0.26	2.0%
2009.1-2016.2	1.4	+3.4	-0.02	40.5%	4.1	+1.8	0.61	0.0%	-2.6	+2.6	0.19	5.0%
2009.2-2016.2	0.9	+3.9	-0.05	60.7%	4.2	+2.1	0.57	0.1%	-3.1	+2.9	0.23	3.8%
2010.1-2016.2	0.9	+4.5	-0.07	67.6%	4.4	+2.4	0.54	0.2%	-3.3	+3.3	0.22	5.4%
2010.2-2016.2	-0.7	+4.7	-0.08	75.3%	4.2	+2.8	0.45	0.7%	-4.7	+3.3	0.4	1.2%
2011.1-2016.2	-1.6	+5.4	-0.05	51.7%	4	+3.4	0.36	2.3%	-5.4	+3.8	0.44	1.1%
2011.2-2016.2	-2.8	+6.3	0	34.4%	2.7	+3.5	0.17	11.4%	-5.4	+4.6	0.36	3.1%
2012.1-2016.2	-2.8	+7.8	-0.04	43.2%	4.2	+3.7	0.4	3.0%	-6.8	+5.2	0.45	2.0%
2012.2-2016.2	-5.5	+8.7	0.12	19.1%	4	+4.8	0.28	8.2%	-9.1	+5.1	0.65	0.5%
2013.1-2016.2	-5.8	+11.6	0.05	28.1%	3.7	+6.4	0.14	19.6%	-9.1	+6.9	0.55	2.1%
2013.2-2016.2	-9.5	+14	0.23	15.7%	2.2	+8.3	-0.1	52.6%	-11.4	+8.4	0.62	2.1%
2014.1-2016.2	-5.9	+20.7	-0.09	47.9%	2.8	+12.7	-0.14	57.3%	-8.5	+11.3	0.37	11.8%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	4.3	+1.9	0.87	0.0%	0.0%	79.5%	5.7	+1.4	0.83	0.0%	24.3%	62.0%	-1.3	+2.3	0.78	25.2%	0.0%	93.9%
2005.2-2016.2	4.7	+2	0.88	0.0%	0.0%	72.8%	5	+1.1	0.88	0.0%	2.1%	68.9%	-0.3	+2	0.87	75.0%	0.0%	89.2%
2006.1-2016.2	4.3	+2.1	0.89	0.0%	0.0%	79.3%	5	+1.1	0.86	0.0%	3.2%	71.2%	-0.7	+2.1	0.87	51.1%	0.0%	95.3%
2006.2-2016.2	4.3	+2.2	0.87	0.1%	0.0%	81.5%	4.7	+1.1	0.86	0.0%	1.0%	56.8%	-0.4	+2.1	0.88	71.8%	0.0%	96.3%
2007.1-2016.2	4.1	+2.4	0.88	0.2%	0.0%	77.8%	4.8	+1.2	0.85	0.0%	1.0%	60.5%	-0.7	+2.2	0.89	50.3%	0.0%	97.8%
2007.2-2016.2	4.5	+2.4	0.89	0.1%	0.0%	93.7%	4.6	+1.2	0.84	0.0%	0.6%	48.5%	-0.1	+2	0.92	91.6%	0.0%	75.7%
2008.1-2016.2	4.9	+2.4	0.9	0.0%	0.0%	87.1%	4.8	+1.2	0.83	0.0%	0.5%	61.5%	0.1	+2.1	0.92	88.1%	0.0%	64.6%
2008.2-2016.2	5.6	+2.2	0.92	0.0%	0.0%	41.1%	4.9	+1.3	0.83	0.0%	1.0%	81.3%	0.6	+2.1	0.93	51.1%	0.0%	32.4%
2009.1-2016.2	5.6	+2.5	0.92	0.0%	0.0%	47.3%	5.1	+1.4	0.81	0.0%	1.0%	99.9%	0.4	+2.3	0.93	69.6%	0.0%	45.2%
2009.2-2016.2	6.2	+2.8	0.92	0.0%	0.0%	55.5%	5.6	+1.5	0.85	0.0%	1.7%	84.8%	0.5	+2.6	0.93	65.5%	0.0%	49.2%
2010.1-2016.2	6.9	+3.3	0.93	0.1%	0.0%	84.2%	6.3	+1.6	0.87	0.0%	0.6%	39.5%	0.6	+3.3	0.92	70.0%	0.0%	55.4%
2010.2-2016.2	7.4	+4.3	0.91	0.3%	0.0%	95.7%	6.3	+2.1	0.85	0.0%	1.0%	45.9%	1	+4.3	0.91	61.3%	0.0%	76.0%
2011.1-2016.2	8.7	+6	0.92	0.8%	0.0%	67.6%	6.1	+3	0.77	0.1%	2.4%	62.6%	2.4	+5.9	0.91	37.2%	0.0%	87.4%
2011.2-2016.2	9	+8.6	0.89	3.5%	0.0%	67.9%	6.6	+4.3	0.75	0.7%	4.1%	55.9%	2.3	+8.5	0.9	53.6%	0.0%	91.5%
2012.1-2016.2	7.4	+13.6	0.89	21.8%	0.0%	93.9%	10.7	+4.6	0.88	0.1%	0.4%	4.3%	-3	+11	0.92	54.1%	0.0%	43.5%
2012.2-2016.2	3	+19.3	0.86	70.3%	0.1%	70.0%	10.8	+7.2	0.85	1.0%	0.8%	10.6%	-7	+15.3	0.92	30.3%	0.0%	26.8%
2013.1-2016.2	4.8	+32.8	0.84	69.4%	0.6%	86.4%	10.8	+12	0.68	5.7%	3.1%	21.0%	-5.5	+25.8	0.9	59.5%	0.2%	46.6%
2013.2-2016.2	24.3	+49.5	0.91	17.3%	0.6%	39.1%	18.2	+14.6	0.87	2.3%	2.1%	5.3%	5.2	+47.1	0.91	73.5%	0.5%	99.0%
2014.1-2016.2	22.3	+257.6	0.89	61.9%	7.5%	73.9%	9.9	+45.7	0.25	42.3%	20.8%	50.5%	11.4	+280.2	0.88	80.6%	7.1%	89.7%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive
With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	4.2	+1.5	0.88	0.0%	0.0%	5.5	+1.1	0.84	0.0%	25.1%	-1.3	+1.8	0.79	14.9%	0.0%
2005.2-2016.2	4.5	+1.5	0.88	0.0%	0.0%	4.9	+0.8	0.89	0.0%	1.9%	-0.4	+1.5	0.87	59.9%	0.0%
2006.1-2016.2	4.1	+1.6	0.89	0.0%	0.0%	4.8	+0.9	0.87	0.0%	2.9%	-0.7	+1.6	0.88	37.1%	0.0%
2006.2-2016.2	4.2	+1.8	0.88	0.0%	0.0%	4.5	+0.9	0.87	0.0%	1.0%	-0.3	+1.7	0.89	67.5%	0.0%
2007.1-2016.2	3.9	+1.9	0.88	0.0%	0.0%	4.7	+1	0.85	0.0%	0.9%	-0.7	+1.8	0.89	40.8%	0.0%
2007.2-2016.2	4.5	+2	0.9	0.0%	0.0%	4.4	+1	0.84	0.0%	0.6%	0	+1.7	0.92	96.3%	0.0%
2008.1-2016.2	5	+2.2	0.9	0.0%	0.0%	4.7	+1.1	0.84	0.0%	0.4%	0.3	+1.9	0.92	71.7%	0.0%
2008.2-2016.2	5.8	+2.1	0.92	0.0%	0.0%	4.9	+1.2	0.84	0.0%	0.8%	0.9	+2	0.93	33.8%	0.0%
2009.1-2016.2	5.7	+2.4	0.92	0.0%	0.0%	5.1	+1.4	0.83	0.0%	0.7%	0.5	+2.2	0.93	61.1%	0.0%
2009.2-2016.2	6.3	+2.6	0.93	0.0%	0.0%	5.6	+1.4	0.86	0.0%	1.3%	0.7	+2.5	0.93	55.6%	0.0%
2010.1-2016.2	7	+2.9	0.93	0.0%	0.0%	6.1	+1.5	0.87	0.0%	0.5%	0.9	+3	0.92	52.6%	0.0%
2010.2-2016.2	7.3	+3.4	0.92	0.1%	0.0%	6	+1.8	0.85	0.0%	0.8%	1.3	+3.4	0.92	41.3%	0.0%
2011.1-2016.2	7.9	+4.1	0.92	0.1%	0.0%	5.7	+2.1	0.79	0.0%	1.9%	2.1	+4	0.92	26.1%	0.0%
2011.2-2016.2	7.8	+5	0.9	0.6%	0.0%	5.7	+2.5	0.77	0.1%	3.3%	2	+4.9	0.91	37.1%	0.0%
2012.1-2016.2	7	+6.2	0.91	2.8%	0.0%	6.6	+2.9	0.79	0.1%	1.9%	0.3	+5.5	0.92	89.2%	0.0%
2012.2-2016.2	5.8	+7.5	0.88	10.3%	0.0%	5.9	+3.4	0.77	0.5%	1.8%	-0.2	+7	0.91	95.7%	0.0%
2013.1-2016.2	6.8	+10.5	0.87	14.7%	0.1%	5.1	+4.5	0.61	3.1%	4.8%	1.6	+9.4	0.91	67.3%	0.0%
2013.2-2016.2	10.7	+12	0.91	6.0%	0.2%	5.4	+6.5	0.58	7.4%	10.0%	5	+11	0.93	26.6%	0.1%
2014.1-2016.2	7.4	+18.4	0.92	27.3%	0.6%	2	+5.2	0.34	31.6%	13.5%	5.4	+19.4	0.92	43.1%	0.6%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive
With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	5.5	+5	0.18	2.8%	62.5%	5.6	+1.4	0.83	0.0%	70.0%	-0.1	+5.2	-0.08	95.3%	73.2%
2005.2-2016.2	5.2	+5.4	0.14	5.1%	65.1%	4.9	+1.2	0.85	0.0%	85.3%	0.2	+5.6	-0.09	92.8%	71.0%
2006.1-2016.2	5.6	+5.8	0.14	5.2%	64.2%	4.8	+1.3	0.83	0.0%	88.5%	0.7	+6.1	-0.1	80.0%	69.5%
2006.2-2016.2	5	+6.1	0.07	9.1%	61.1%	4.6	+1.3	0.8	0.0%	82.1%	0.4	+6.5	-0.1	90.2%	67.9%
2007.1-2016.2	5.5	+6.5	0.08	8.3%	65.5%	4.6	+1.4	0.78	0.0%	82.9%	0.8	+6.9	-0.11	80.1%	72.0%
2007.2-2016.2	5.2	+6.9	0.04	12.2%	64.0%	4.5	+1.5	0.74	0.0%	79.1%	0.6	+7.4	-0.12	85.6%	71.3%
2008.1-2016.2	6.4	+7.2	0.11	6.9%	84.0%	4.6	+1.6	0.71	0.0%	83.5%	1.7	+7.8	-0.12	63.9%	89.2%
2008.2-2016.2	6.1	+7.8	0.06	10.5%	80.0%	4.9	+1.6	0.74	0.0%	88.9%	1.2	+8.4	-0.13	76.6%	80.2%
2009.1-2016.2	7.1	+8.5	0.09	8.4%	99.7%	4.9	+1.8	0.69	0.0%	88.4%	2.1	+9.3	-0.13	62.0%	98.0%
2009.2-2016.2	6.3	+9.8	0.01	17.5%	95.2%	5.6	+1.9	0.76	0.0%	93.5%	0.6	+10.4	-0.16	89.5%	94.6%
2010.1-2016.2	9.6	+11.4	0.12	7.8%	69.3%	5.9	+2.2	0.73	0.0%	79.2%	3.5	+12.4	-0.14	53.6%	76.7%
2010.2-2016.2	7.6	+14.7	-0.01	26.0%	95.0%	6.3	+3	0.7	0.1%	61.6%	1.2	+15.9	-0.19	87.1%	97.2%
2011.1-2016.2	14.4	+19.5	0.13	10.6%	50.6%	5.3	+3.8	0.6	1.0%	98.7%	8.7	+21.3	-0.11	35.8%	55.9%
2011.2-2016.2	10.5	+27	-0.07	37.0%	77.2%	6.4	+5.4	0.58	2.3%	72.8%	3.9	+29.1	-0.23	76.0%	84.9%
2012.1-2016.2	22.6	+42.1	0.05	19.7%	43.4%	7.7	+8	0.53	5.1%	56.9%	13.8	+46.5	-0.18	46.7%	57.2%
2012.2-2016.2	11.4	+61.5	-0.25	63.4%	79.7%	9	+13	0.42	12.7%	54.0%	2.2	+67.9	-0.33	93.4%	92.1%
2013.1-2016.2	36.4	+94.9	-0.01	27.4%	44.2%	4.8	+16.1	0.08	46.8%	90.8%	30.2	+109.5	-0.19	41.6%	52.4%
2013.2-2016.2	54.9	+232.1	-0.15	36.6%	45.5%	13	+28.6	0.23	24.6%	45.9%	37	+269.6	-0.37	57.4%	61.3%
2014.1-2016.2	215.7	+633	0.49	8.5%	11.2%	-4.2	+23.6	-0.35	61.4%	52.4%	229.6	+824.4	0.42	10.5%	13.2%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive
No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	4.7	+3.7	0.21	1.4%	5.4	+1.1	0.84	0.0%	-0.7	+3.9	-0.04	71.8%
2005.2-2016.2	4.5	+4.1	0.17	2.9%	4.9	+0.9	0.86	0.0%	-0.4	+4.3	-0.05	85.4%
2006.1-2016.2	4.8	+4.5	0.17	3.3%	4.8	+1	0.84	0.0%	0	+4.7	-0.05	98.4%
2006.2-2016.2	4.2	+4.8	0.11	8.1%	4.5	+1	0.81	0.0%	-0.3	+5.1	-0.05	89.0%
2007.1-2016.2	4.8	+5.3	0.12	7.0%	4.5	+1.1	0.79	0.0%	0.2	+5.7	-0.06	93.7%
2007.2-2016.2	4.5	+5.9	0.08	12.2%	4.4	+1.3	0.76	0.0%	0	+6.3	-0.06	99.0%
2008.1-2016.2	6.1	+6.4	0.17	5.2%	4.5	+1.4	0.73	0.0%	1.5	+6.9	-0.05	64.1%
2008.2-2016.2	5.8	+7.2	0.12	9.4%	4.9	+1.5	0.75	0.0%	0.9	+7.7	-0.06	80.5%
2009.1-2016.2	7.1	+8.1	0.16	7.0%	4.9	+1.7	0.72	0.0%	2.1	+8.8	-0.05	60.6%
2009.2-2016.2	6.3	+9.2	0.09	14.9%	5.6	+1.8	0.78	0.0%	0.7	+9.8	-0.07	87.9%
2010.1-2016.2	8.9	+10.3	0.18	7.0%	5.8	+2	0.75	0.0%	3	+11.1	-0.05	56.3%
2010.2-2016.2	7.3	+11.7	0.08	17.9%	6	+2.4	0.72	0.0%	1.3	+12.7	-0.09	82.3%
2011.1-2016.2	10.6	+13.5	0.18	9.6%	5.3	+2.7	0.64	0.1%	5	+14.7	-0.04	45.2%
2011.2-2016.2	7.8	+15.6	0.04	26.5%	5.7	+3.2	0.62	0.2%	2	+16.8	-0.1	79.1%
2012.1-2016.2	10.9	+19.3	0.09	20.6%	6	+4	0.57	0.7%	4.6	+21.1	-0.09	61.6%
2012.2-2016.2	5.8	+22.1	-0.08	54.4%	5.9	+5.1	0.47	2.5%	-0.2	+24.6	-0.14	98.8%
2013.1-2016.2	12.6	+28.7	0.04	29.3%	4.1	+5.8	0.23	12.9%	8.2	+32	-0.09	53.2%
2013.2-2016.2	10.7	+40	-0.08	49.3%	5.4	+7.8	0.28	12.6%	5	+43.8	-0.18	77.0%
2014.1-2016.2	19.8	+63.8	-0.01	38.1%	1	+5.8	-0.18	66.0%	18.7	+69.3	-0.06	44.0%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive - Theft
With Seasonality and Unemployment; No Exclusions

Date	Loss Cost						Severity						Frequency					
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	T Pval Unemployment
2005.1-2016.2	4.6	+3.2	0.5	0.6%	5.1%	53.9%	4.1	+1.1	0.85	0.0%	0.4%	94.8%	0.5	+2.9	-0.02	74.0%	29.0%	52.7%
2005.2-2016.2	4.3	+3.4	0.43	1.4%	7.2%	52.4%	3.8	+1	0.84	0.0%	0.6%	80.8%	0.6	+3.1	-0.03	71.4%	29.5%	54.6%
2006.1-2016.2	4	+3.7	0.4	3.1%	6.9%	51.0%	3.5	+1	0.84	0.0%	0.2%	69.9%	0.5	+3.4	-0.04	74.2%	31.8%	55.7%
2006.2-2016.2	4.3	+3.9	0.38	3.1%	6.5%	48.9%	3.3	+1	0.81	0.0%	0.4%	77.5%	0.9	+3.5	0	59.1%	24.7%	50.8%
2007.1-2016.2	4.4	+4.2	0.37	3.9%	8.6%	49.6%	3.2	+1	0.8	0.0%	0.3%	82.8%	1.2	+3.8	0	52.4%	31.6%	49.9%
2007.2-2016.2	4.5	+4.5	0.32	4.5%	9.2%	48.7%	2.9	+1	0.77	0.0%	0.5%	96.9%	1.6	+4	0.04	41.5%	25.5%	44.1%
2008.1-2016.2	5.4	+4.7	0.39	2.3%	15.7%	34.6%	3.1	+1	0.79	0.0%	1.0%	83.4%	2.2	+4.2	0.09	27.1%	38.0%	33.4%
2008.2-2016.2	6.5	+4.5	0.53	0.6%	5.7%	13.5%	3.2	+1.1	0.78	0.0%	0.9%	65.7%	3.2	+4.1	0.27	11.0%	17.7%	13.8%
2009.1-2016.2	8.5	+3.8	0.74	0.0%	7.7%	1.2%	3.3	+1.2	0.76	0.0%	1.6%	63.8%	5.1	+3.3	0.61	0.5%	29.4%	0.9%
2009.2-2016.2	10.1	+3.6	0.82	0.0%	1.9%	0.9%	3.6	+1.3	0.78	0.0%	0.8%	74.8%	6.3	+3.4	0.7	0.1%	13.6%	0.9%
2010.1-2016.2	11.5	+4.1	0.85	0.0%	4.4%	3.0%	3.2	+1.5	0.78	0.1%	0.6%	45.3%	8	+3.5	0.79	0.0%	29.9%	2.8%
2010.2-2016.2	13.5	+4.9	0.87	0.0%	2.3%	16.1%	3.9	+1.7	0.81	0.0%	0.3%	93.1%	9.2	+4.4	0.8	0.1%	22.7%	12.6%
2011.1-2016.2	15.7	+6.5	0.89	0.0%	5.8%	48.0%	3.2	+2.3	0.81	1.0%	0.3%	62.9%	12.1	+5.2	0.86	0.0%	50.6%	52.4%
2011.2-2016.2	18.1	+8.9	0.88	0.1%	5.0%	89.8%	2.3	+2.9	0.75	10.5%	0.5%	34.5%	15.5	+6	0.9	0.0%	25.9%	72.6%
2012.1-2016.2	20.7	+14.5	0.86	0.8%	12.8%	80.6%	3.9	+4.3	0.8	6.3%	1.9%	94.1%	16.1	+9.8	0.88	0.5%	38.6%	70.3%
2012.2-2016.2	18.3	+22	0.79	6.7%	17.8%	97.9%	4.9	+6.6	0.74	11.2%	2.9%	82.3%	12.8	+14	0.81	5.4%	46.9%	87.7%
2013.1-2016.2	21.4	+37.4	0.74	15.0%	35.3%	87.7%	5.9	+11	0.71	19.9%	9.3%	71.6%	14.6	+23.5	0.76	13.6%	67.6%	96.4%
2013.2-2016.2	31.7	+74.3	0.65	20.2%	38.1%	63.2%	10.5	+18.2	0.71	14.9%	10.0%	38.3%	19.2	+45.6	0.65	23.2%	69.1%	77.2%
2014.1-2016.2	104.3	+405.5	0.75	16.6%	68.6%	25.7%	25.7	+59.2	0.8	16.4%	67.8%	22.2%	62.6	+186.5	0.75	16.7%	45.9%	27.6%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive - Theft
With Seasonality; No Unemployment; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Seasonality
2005.1-2016.2	5.2	+2.4	0.52	0.0%	5.2%	4.1	+0.8	0.86	0.0%	0.4%	1	+2.2	0.01	34.0%	30.8%
2005.2-2016.2	5	+2.6	0.45	0.1%	7.4%	3.8	+0.7	0.85	0.0%	0.5%	1.1	+2.4	0	34.0%	30.7%
2006.1-2016.2	4.7	+2.9	0.42	0.2%	7.2%	3.6	+0.8	0.85	0.0%	0.2%	1.1	+2.6	0	38.2%	33.3%
2006.2-2016.2	5	+3.2	0.4	0.3%	6.9%	3.4	+0.8	0.82	0.0%	0.3%	1.6	+2.9	0.03	26.5%	26.5%
2007.1-2016.2	5.1	+3.5	0.39	0.6%	8.9%	3.2	+0.9	0.81	0.0%	0.2%	1.8	+3.2	0.03	24.3%	33.5%
2007.2-2016.2	5.3	+4	0.34	1.1%	9.8%	2.9	+0.8	0.78	0.0%	0.4%	2.3	+3.5	0.06	18.7%	28.3%
2008.1-2016.2	6.2	+4.3	0.4	0.6%	17.3%	3.2	+0.9	0.81	0.0%	0.8%	3	+3.9	0.09	11.8%	41.5%
2008.2-2016.2	7.5	+4.6	0.47	0.3%	9.5%	3.3	+1	0.79	0.0%	0.8%	4	+4.1	0.19	5.2%	26.6%
2009.1-2016.2	9.2	+4.7	0.58	0.1%	18.8%	3.3	+1.1	0.77	0.0%	1.3%	5.7	+4.2	0.35	1.0%	49.2%
2009.2-2016.2	11	+4.7	0.69	0.0%	6.8%	3.7	+1.2	0.8	0.0%	0.6%	7.1	+4.4	0.47	0.3%	27.7%
2010.1-2016.2	13.1	+4.8	0.78	0.0%	13.8%	3.4	+1.3	0.79	0.0%	0.5%	9.4	+4	0.68	0.0%	56.4%
2010.2-2016.2	15.3	+4.4	0.86	0.0%	2.9%	3.9	+1.4	0.83	0.0%	0.2%	11	+4.1	0.77	0.0%	27.0%
2011.1-2016.2	17.1	+4.7	0.89	0.0%	5.9%	3.5	+1.6	0.83	0.1%	0.2%	13.2	+3.7	0.87	0.0%	56.4%
2011.2-2016.2	18.5	+5.2	0.89	0.0%	3.6%	3.3	+1.8	0.75	0.3%	0.4%	14.8	+3.5	0.92	0.0%	22.1%
2012.1-2016.2	19.4	+6.6	0.88	0.0%	7.6%	4	+2	0.83	0.2%	0.9%	14.8	+4.5	0.89	0.0%	27.6%
2012.2-2016.2	18.5	+8.3	0.82	0.1%	13.3%	4.3	+2.5	0.78	0.5%	1.4%	13.6	+5.3	0.84	0.0%	43.4%
2013.1-2016.2	19.4	+11.6	0.79	0.5%	23.3%	4.5	+3.5	0.76	2.0%	3.7%	14.3	+7.4	0.81	0.3%	59.1%
2013.2-2016.2	21	+16.5	0.71	1.8%	25.2%	5.1	+4.8	0.71	4.0%	5.3%	15.1	+10.6	0.73	1.3%	57.0%
2014.1-2016.2	22.1	+29.2	0.63	7.5%	40.8%	4.7	+8.4	0.66	16.3%	11.3%	16.5	+18.4	0.65	5.3%	77.3%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive - Theft
With Unemployment; No Seasonality; No Exclusions

Date	Loss Cost					Severity					Frequency				
	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent	Trend	Conf. Int.	Adj. R2	T Pval Time	T Pval Unemploym ent
2005.1-2016.2	5	+3.4	0.42	0.5%	69.1%	4.3	+1.3	0.78	0.0%	85.0%	0.6	+2.9	-0.03	64.9%	59.2%
2005.2-2016.2	4.5	+3.6	0.36	1.6%	64.1%	3.8	+1.2	0.78	0.0%	99.6%	0.6	+3.1	-0.04	67.7%	60.2%
2006.1-2016.2	4.4	+3.9	0.32	2.6%	64.7%	3.7	+1.2	0.75	0.0%	96.1%	0.7	+3.4	-0.04	65.2%	61.9%
2006.2-2016.2	4.5	+4.2	0.28	3.3%	65.0%	3.4	+1.2	0.71	0.0%	95.8%	1	+3.6	-0.02	54.6%	59.3%
2007.1-2016.2	4.8	+4.5	0.28	3.2%	62.3%	3.4	+1.3	0.67	0.0%	94.2%	1.4	+3.8	0	44.6%	55.7%
2007.2-2016.2	4.8	+4.8	0.23	4.8%	64.4%	3	+1.2	0.63	0.0%	74.0%	1.7	+4	0.01	38.5%	52.6%
2008.1-2016.2	5.8	+4.8	0.34	1.9%	41.6%	3.3	+1.2	0.69	0.0%	99.9%	2.4	+4.1	0.1	22.5%	36.0%
2008.2-2016.2	6.7	+5	0.41	1.0%	25.6%	3.3	+1.3	0.64	0.0%	98.1%	3.3	+4.2	0.22	11.0%	19.9%
2009.1-2016.2	8.9	+4.1	0.68	0.0%	2.3%	3.5	+1.5	0.63	0.0%	80.6%	5.3	+3.3	0.6	0.4%	1.0%
2009.2-2016.2	10.2	+4.5	0.72	0.0%	2.9%	3.7	+1.7	0.61	0.0%	86.9%	6.3	+3.6	0.66	0.2%	1.3%
2010.1-2016.2	12.2	+4.8	0.79	0.0%	8.6%	3.6	+2	0.55	0.2%	85.0%	8.3	+3.4	0.79	0.0%	3.4%
2010.2-2016.2	13.6	+6.2	0.79	0.0%	27.5%	3.9	+2.7	0.52	0.8%	92.5%	9.3	+4.5	0.79	0.1%	13.8%
2011.1-2016.2	17.2	+7.6	0.84	0.0%	79.0%	4.2	+3.7	0.45	2.8%	86.0%	12.5	+4.8	0.87	0.0%	58.9%
2011.2-2016.2	18.6	+11	0.81	0.3%	99.4%	2.5	+4.9	0.3	26.1%	66.0%	15.6	+6.1	0.9	0.0%	68.1%
2012.1-2016.2	24.4	+15.4	0.82	0.4%	48.9%	5.9	+6	0.53	5.0%	55.6%	17.4	+8.9	0.88	0.2%	49.2%
2012.2-2016.2	20.4	+23.5	0.73	5.8%	83.4%	6.1	+9.8	0.38	16.7%	63.5%	13.5	+12.8	0.83	3.4%	97.7%
2013.1-2016.2	27.8	+32.8	0.73	5.6%	55.5%	9.8	+12.5	0.5	8.8%	34.5%	16.3	+18.1	0.8	5.3%	79.7%
2013.2-2016.2	37.6	+65	0.65	12.4%	45.2%	13.9	+23.2	0.38	14.8%	30.6%	20.8	+34.5	0.72	13.6%	64.0%
2014.1-2016.2	80.5	+105.7	0.82	4.3%	11.4%	30.8	+23.3	0.85	1.7%	3.0%	37.9	+61	0.76	9.7%	29.4%

Province of Alberta
Commercial Automobile (excl. Farmers)

Comprehensive - Theft
No Seasonality; No Unemployment; No Exclusions

Date	Loss Cost				Severity				Frequency			
	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time	Trend	Conf. Int.	Adj. R2	T Pval Time
2005.1-2016.2	5.4	+2.6	0.44	0.0%	4.2	+1	0.79	0.0%	1.1	+2.2	0	30.4%
2005.2-2016.2	5	+2.8	0.38	0.1%	3.8	+0.9	0.79	0.0%	1.1	+2.4	0	34.0%
2006.1-2016.2	5	+3.1	0.34	0.2%	3.7	+1	0.76	0.0%	1.2	+2.6	0	34.0%
2006.2-2016.2	5	+3.4	0.31	0.5%	3.4	+1	0.73	0.0%	1.6	+2.9	0.01	26.9%
2007.1-2016.2	5.4	+3.7	0.31	0.6%	3.4	+1.1	0.69	0.0%	1.9	+3.2	0.04	21.0%
2007.2-2016.2	5.3	+4.2	0.26	1.4%	2.9	+1.1	0.65	0.0%	2.3	+3.5	0.05	18.9%
2008.1-2016.2	6.5	+4.4	0.36	0.5%	3.3	+1.1	0.71	0.0%	3.1	+3.8	0.11	9.7%
2008.2-2016.2	7.5	+4.9	0.4	0.4%	3.3	+1.2	0.67	0.0%	4	+4.2	0.18	5.3%
2009.1-2016.2	9.6	+4.8	0.56	0.0%	3.5	+1.4	0.66	0.0%	5.9	+4.1	0.38	0.7%
2009.2-2016.2	11	+5.2	0.62	0.0%	3.7	+1.6	0.64	0.0%	7.1	+4.4	0.46	0.3%
2010.1-2016.2	13.5	+5	0.75	0.0%	3.7	+1.8	0.58	0.1%	9.5	+3.9	0.7	0.0%
2010.2-2016.2	15.3	+5.4	0.79	0.0%	3.9	+2.2	0.56	0.2%	11	+4.1	0.76	0.0%
2011.1-2016.2	17.8	+5.3	0.85	0.0%	4	+2.6	0.51	0.6%	13.3	+3.5	0.88	0.0%
2011.2-2016.2	18.5	+6.5	0.83	0.0%	3.3	+2.9	0.36	3.0%	14.8	+3.6	0.91	0.0%
2012.1-2016.2	20.4	+7.6	0.83	0.0%	4.6	+3	0.57	0.7%	15.2	+4.5	0.89	0.0%
2012.2-2016.2	18.5	+9.1	0.77	0.1%	4.3	+3.8	0.44	3.0%	13.6	+5	0.85	0.0%
2013.1-2016.2	20.7	+11.6	0.76	0.3%	5.3	+4.8	0.49	3.2%	14.6	+6.5	0.83	0.1%
2013.2-2016.2	21	+16.4	0.67	1.5%	5.1	+6.8	0.33	10.3%	15.1	+9.2	0.76	0.6%
2014.1-2016.2	24.6	+24.5	0.64	3.5%	6.5	+10	0.33	13.8%	17.1	+13.5	0.73	1.9%



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