

# **NOVA SCOTIA COMMERCIAL VEHICLES OLIVER WYMAN SELECTED LOSS TREND RATES**

Based on Insurance Industry Data  
Through December 31, 2021

August 19, 2022

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# 1. Executive Summary

## 1.1. Purpose and Scope

The Nova Scotia Utility and Review Board (the Board) retained Oliver, Wyman Limited (Oliver Wyman) to determine commercial vehicle loss trend rates.

We developed our analysis using insurance industry (industry) Nova Scotia commercial vehicles loss and expense experience as of December 31, 2021 reported to the General Insurance Statistical Agency (GISA).

## 1.2. Actuarial Findings

In this report we present our selected past and future annual loss cost trend rates based on industry data as of December 31, 2021.

In Table 1, we present our annual loss cost trend rates:

**Table 1: Selected Loss Cost Trends**

Coverage	Past Loss Cost (Prior to October 1, 2021)	Future Loss Cost (After October 1, 2021)
Bodily Injury	+5.0%	+5.0%
Property Damage	-7.0%	-7.0%‡
Direct Compensation Property Damage	+6.5%	+6.5%‡
Accident Benefits	+1.0%	+1.0%
Collision	+3.0%	+3.0%‡
Comprehensive	+3.5%	+3.5%‡
Specified Perils	+3.5%	+3.5%‡
All Perils	+3.0%	+3.0%‡

‡ The *future* trend rates for property damage, DCPD, collision, comprehensive, specified perils and all perils to be modified to account for changes in economic conditions. (See Section 4.11)

We discuss and present our methodology and assumptions in selecting our trend rates in this report.

\* \* \* \* \*

We developed the estimates in this report in accordance with the applicable Actuarial Standards of Practice issued by the Actuarial Standards Board (Canada).

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## 2. Legislative Reforms and Government Actions

### 2.1. Minor Injury Regulations

In 2003 the Nova Scotia government introduced Automobile Insurance Tort Recovery Limitation Regulations under Section 113B of the Insurance Act which limited the pain and suffering award to \$2,500 to claimants who met the “minor injury” definition introduced with the Minor Injury Regulations.

The Minor Injury Regulations were subject to a constitutional challenge and these challenges affected the bodily injury data during this period of uncertainty. The Minor Injury Regulations were ultimately upheld.

In *Hartling v. Nova Scotia*, the Decision by Justice Goodfellow of the Supreme Court of Nova Scotia was released on December 15, 2009 to uphold the Minor Injury Regulation.

Subsequently, on May 27, 2010, the Supreme Court of Canada released its Decision to refuse leave to appeal.

### 2.2. Bill 52 - Minor Injury Regulations Update

In 2010, the Nova Scotia government introduced Bill 52 which affected the minor injury cap on pain and suffering awards resulting from automobile accidents. The following reforms were effective April 28, 2010.

- The definition of “minor injury” was changed to be less complex and was restricted to only include strains, sprains, and whiplash-associated disorders.
- The minor injury cap on pain and suffering awards was increased from \$2,500 to \$7,500 and subject to an inflation index.

### 2.3. Fair Insurance Reforms

Based on recommendation from the 2011 independent auto insurance review, Nova Scotia introduced a package of reforms with the goal of better coverage and more choice for Nova Scotians while balancing fairness, stability and affordability.

The first phase of the reform was effective April 1, 2012 and included higher accident benefit limits as presented in Table 2.

**Table 2: Change in Accident Benefit Limits**

<b>Benefit Category</b>	<b>Previous Benefit</b>	<b>New Benefit (as of April 1, 2012)</b>
Medical and Rehabilitation Expenses	\$25,000	\$50,000
Funeral Expenses	\$1,000	\$2,500
<b>Death Benefits</b>		
Head of Household	\$10,000	\$25,000
Spouse of Head of Household	\$10,000	\$25,000
Dependent	\$2,000	\$5,000
Loss of Income	\$140/week	\$250/week
Principal Unpaid Housekeeper	\$70/week	\$100/week

The second, and final, phase of the reform was effective April 1, 2013 and included the introduction of the direct compensation property damage coverage; allowing not-at-fault drivers to recover damages caused by collision from their own insurer.

## 3. Analysis – General discussion

### 3.1. Introduction

In the sections that follow we present:

- an analysis and discussion of industry loss development factors, trend rates and reform factors;
- rationale for the assumptions, factors, provisions, and calculations that we present, as well as information to help the Board evaluate their reasonableness; and
- supporting summary exhibits that present the data we used and analysis we performed.

### 3.2. Data

The source for the exposures (number of vehicles), claim count and claim amount data that we analyze is the 2021-2 AUTO7002 Automobile Industry Exhibit (as of December 31, 2021) provided by GISA. This data includes the experience of all commercial vehicles in Nova Scotia. We refer to this data source as the AIX report.

Consistent with the reports published by GISA (and to increase the volume of data), fleet vehicles are included. However, there has been a change in the reporting of fleet vehicles. GISA states:

*“Effective July 1, 2019, the ASP revised the definition of Type of Business 3 -Fleet rated vehicles. As a result, a number of companies that previously reported Type of Business 4 – Individually rated Fleets (data included in the Exhibit) are now reporting this data as Type of Business 3 (data NOT included in the Exhibit). This has resulted in a DECREASE in Written Exposure and Written Premium starting in Accident Year 2019-2. Users should take note of this shift and exercise caution when using this data.”*

The claim count and claim amount data presented in the AIX report is grouped according to the date of the accident half-year during which the event occurred.

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

- Paid Claim Amounts – claim 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 – an adjuster’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 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 point in time. Over time, the case reserves are revised 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:

- **Insurance companies' determination of 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.
- **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 (i) any overall inadequacies or redundancies in the case reserves that are established on individual claims, and (ii) claims (accidents) that occurred but have not yet been reported to the insurance company as of the time of the financial statement. The approach that insurance companies (their actuaries) use to determine the "actuarial reserve," while subject to the common standards of the Canadian Institute of Actuaries, varies from company to company.

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

We estimate the final (ultimate) number and cost<sup>1</sup> of all claims that arise from events that occur in the first and second half of the year (referred to as "accident half-years"<sup>2</sup>), separately, through to December 31, 2021 and then use those estimates to measure and select loss trend rates.

We estimate the final/ultimate claim cost by accident half-year by applying an 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.<sup>3</sup> 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 "loss development factors" to the aggregated incurred claim amounts that are reported to GISA. We apply loss<sup>4</sup> development factors to estimate the actuarial reserve need, hence the final claim cost, for each accident half-year through December 31, 2021, separately for each of the coverages. We follow a similar approach (using claim count

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<sup>1</sup> By "final" or "ultimate" cost we mean the amount paid by insurance companies at the time that all claims related to events that occur in a particular period have been reported and settled.

<sup>2</sup> 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.

<sup>3</sup> The data reported by the individual companies to GISA is subsequently validated by GISA then aggregated for the industry-wide AIX report.

<sup>4</sup> 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).

development factors) to estimate the final number of claims that will arise from events that have occurred by accident half-year through December 31, 2021, separately for each of the coverages.

We present our selection of loss development factors and claim count development factors and resulting implied ultimate claim frequency, severity and loss cost for each of the coverages in Appendices A through D.

The selection of development factors has an effect on the selected loss trend rates and other key assumptions, factors, and provisions.<sup>5</sup> We discuss the loss trend rates in Section 4.

As a result of the claim experience that has emerged and the development factors we select, our estimates of ultimate loss costs, frequencies,<sup>6</sup> and severities by accident year have changed from those we presented for the prior review.<sup>7</sup> We present these in changes in the tables below.

**Table 3: Change in Estimates - Bodily Injury**

AY	As of December 31, 2020			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$224.61	\$64,290	3.49	\$240.71	\$67,946	3.54
2018	\$215.87	\$63,514	3.40	\$231.50	\$65,945	3.51
2019	\$191.70	\$58,093	3.30	\$222.84	\$63,690	3.50
2020	\$223.44	\$117,159	1.91	\$253.07	\$125,451	2.02
2021				\$195.85	\$68,046	2.88

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have increased by 10.8%.

**Table 4: Change in Estimates- Property Damage**

AY	As of December 31, 2020			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$20.40	\$9,764	2.09	\$19.64	\$9,549	2.06
2018	\$52.17	\$27,829	1.87	\$56.82	\$30,667	1.85
2019	\$17.98	\$11,750	1.53	\$16.29	\$11,281	1.44
2020	\$19.85	\$14,118	1.41	\$14.87	\$11,049	1.35
2021				\$36.15	\$29,039	1.24

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have decreased by 2.5%.

<sup>5</sup> A summary of our selected ultimate loss costs, severity amounts and frequency by accident half-year are presented in Appendix B.

<sup>6</sup> Number of claims per 1,000 insured vehicles.

<sup>7</sup> Some of the differences in estimates are due to changes in the data provided by GISA as prior reporting errors by some individual insurers are corrected and updated by GISA.

**Table 5: Change in Estimates - Direct Compensation Property Damage**

AY	As of December 31, 2020			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$64.38	\$6,627	9.71	\$64.25	\$6,624	9.70
2018	\$80.64	\$7,428	10.86	\$80.50	\$7,405	10.87
2019	\$81.64	\$7,678	10.63	\$82.40	\$7,706	10.69
2020	\$51.83	\$6,625	7.82	\$52.38	\$6,708	7.81
2021				\$67.08	\$7,055	9.51

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have increased by 0.4%.

**Table 5: Change in Estimates - Accident Benefits Total**

AY	As of December 31, 2020			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$28.61	\$17,088	1.67	\$27.65	\$16,363	1.69
2018	\$29.31	\$16,651	1.76	\$34.14	\$19,060	1.79
2019	\$14.55	\$8,308	1.75	\$11.34	\$6,558	1.73
2020	\$15.75	\$12,614	1.25	\$18.46	\$14,932	1.24
2021				\$23.81	\$14,806	1.61

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have increased by 3.8%.

**Table 6: Change in Estimates - Collision**

AY	As of December 30, 2019			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$184.63	\$10,146	18.20	\$185.11	\$10,140	18.26
2018	\$166.84	\$9,818	16.99	\$168.43	\$9,912	16.99
2019	\$157.62	\$9,213	17.11	\$158.87	\$9,253	17.17
2020	\$151.46	\$10,521	14.40	\$156.99	\$10,755	14.60
2021				\$180.12	\$11,403	15.80

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have increased by 1.3%.

**Table 7: Change in Estimates - Comprehensive**

AY	As of June 30, 2020			As of December 31, 2021		
	Loss Cost	Severity	Frequency	Loss Cost	Severity	Frequency
2017	\$114.65	\$3,364	34.08	\$114.65	\$3,364	34.08
2018	\$103.16	\$3,092	33.36	\$103.02	\$3,088	33.36
2019	\$113.14	\$3,372	33.55	\$113.58	\$3,397	33.44
2020	\$120.76	\$3,853	31.35	\$125.07	\$4,045	30.92
2021				\$125.18	\$4,241	29.52

In aggregate, for the four-year period 2017 to 2020, our estimates of ultimate loss costs have increased by 1.0%.

### 3.4. Loss Trend Rates

Loss trend rates are annual rates of change that provide interested parties with an understanding of how claims costs have changed in the past and are used as a predictor of how claim costs may change in the near future. The loss trend rates are integral to calculations to determine rate level change need indications in rate applications submitted to the Board. In rate level indication calculations, loss cost trend rates are applied to the company's recent accident year (referred to as the experience period) ultimate loss amounts to project those loss amounts to the cost levels that are anticipated during the policy period covered under a proposed rate program.

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

Therefore, past trend rates should reflect the cost level changes that occurred during the experience period. Future trend rates should consider those changes as well as the likelihood that those patterns may change.

We select trend rates based on the industry ultimate claim count and claim amount data which is organized by accident half-year.

The claim experience includes allocated loss adjustment expenses, and we include a provision for unallocated loss adjustment expenses (ULAE) based on the accident year ULAE factors published by GISA. In doing so, any distortions in the measured trend rate due to possible shifts over time between ULAE and ALAE is minimized.

We derive indicated annual loss trend rates based on exponential regression models fit to industry historical accident-half year loss and loss adjustment expense data that we project to ultimate cost level (when all claims are reported and settled) using industry-wide claim amount and claim count development factors we select.

## 4. Loss Trend Rate Considerations

The identification of the underlying trend patterns is challenging because factors such as statistical fluctuation in the data points, legislative reforms, changes in the underlying exposure, or abnormal weather conditions, etc., can make the underlying trend patterns difficult to discern.

The initial step of our process is to plot and visually inspect the historical frequency (number of claims per insured vehicles), severity (average claim amounts) and loss cost data for each coverage. We note unusual data points, obvious changes in pattern directions, and sustained shifts; and if these changes are or are not coincident with historical reforms. These observations guide us in our design of each regression model on an individual coverage basis.

We consider the model regression statistics when we perform our regression analysis several different ways. This includes, but is not limited to:

- We test different time periods to identify the underlying trends. Reviewing the data over a longer time period than a typical 3-to-5 year experience period is a means of increasing the stability of results based on data that is estimated and subject to change, as well as the credibility of the data being analyzed.
- We compare models with and without certain data points, including the most recent accident half-year, to improve our understanding of the sensitivity of the calculated loss trend rate to the inclusion or exclusion of those points.

The various trend patterns that we review and associated statistical results are summarized in Appendix E<sup>8</sup> for each of frequency, severity, and loss cost.

### 4.1. Time Period Considered

In this review, we present and consider the claim experience by accident half-year, spanning the twenty-year period from 2002-1 to 2021-2.

While we provide twenty years of experience data, we generally select trend rates considering the claim experience over the more recent years.

In fitting the models, we aggregate half years to increase the stability and credibility of the data point.

### 4.2. Weather Conditions

On occasion, an extreme weather condition, such as the level of rain, snowfall or wind can contribute to a change in the frequency level. As a result, the time period with that associated extreme weather event could result in an exception to an underlying trend pattern. We considered the following weather events noted by GISA in our review:

- GISA notes the July 2014 hurricane (Arthur) impact on comprehensive, all perils and specified perils.
- GISA notes the possible increase in the number of and claim amounts of physical damage claims since 2015-1 due to severe weather.

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<sup>8</sup> Due to the breadth and depth of our review, not all loss trend models we considered are included in Appendix E.

### 4.3. Reform or Level Change Parameter

The purpose of a reform parameter<sup>9</sup> 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. The regression model we use to analyze severity, frequency, and loss cost trend patterns allows the inclusion of a level change parameter(s) to reflect the effect that reforms or other events have had on claim counts and amounts.

Distinct from an unusual data point that might be considered an outlier (where, for example, an upward spike is followed by a decline), or a change in trend rate pattern, the reform parameter identifies a sustained shift up (or down) in loss cost, severity or frequency coincident with the implementation of a reform. We determine the statistical significance of a level change based on the  $p$ -values from  $t$ -tests for parameter significance.<sup>10</sup>

Some reforms result in a sustained level change with the trend rate before and after the reform unchanged. Other reforms could, in addition or instead, cause a change in the trend rate after the reform. As part of our regression model design, we consider the possibility that a reform could cause the trend rate to change in magnitude; or even change direction. We determine the statistical significance of a trend rate change based on the  $p$ -values from  $t$ -tests for parameter significance.

### 4.4. Data Points

We give special consideration to data points that we consider have a material impact on the measured trend rates. Based on visual inspection and the percentage changes from year to year, we identify and then test data points that may be considered:

- an outlier that may distort the measured trends
- the beginning of a sustained shift (up or down), that we refer to as a level change, or
- the beginning of a change in the trend rate.

We test for the influence of such data points by calculating the measured trend rates over various time periods: (i) with and without these data points, (ii) by applying a level change parameter at these data points, and/or (iii) measuring trends before and after these data points.

### 4.5. Variability of Estimates

Due, in part, to the relatively small volume of commercial vehicle claim counts, there is a high degree of variability in the year-to-year percentage changes of the estimated accident year loss costs for most coverages. Additional details are presented in Appendix B which includes the actual year-to-year percentage changes. In addition to the year-to-year variability between accident year data, the changes in the estimated accident year loss cost between this review and our prior review contributes to the change in the measured trend rates between reviews even with the identical trend model (i.e., time period and parameters); the comparison between estimates of ultimate loss amounts from the prior review and this review are presented in Appendix C.

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<sup>9</sup> We use the terms reform or level change interchangeably; but a reform parameter is associated with a known event.

<sup>10</sup> A  $t$ -test with a resulting  $p$ -value of less than 5% is considered significant.

Both sources of variability cause the measured loss cost trend rates to change, and often rather significantly, depending upon the trend measurement period selected.

As the variability is more pronounced with semi-annual data than annual data, we use annual data in this review.

#### **4.6. Statistical Tests**

We test the various trends that we model for statistical significance using *t*-tests, and present the adjusted R-squared values, confidence intervals, and *p*-values in Appendix E.

- Regarding adjusted R-squared, we generally refer to values of 80% or greater to be “high,” values between 40% and 80% to be “moderate,” and values below 40% to be “low.”
- We consider *p*-values less than 5% to indicate “statistical significant.”
- The confidence interval presented corresponds to a 95% probability level range.

#### **4.7. Future Trend Rates**

In selecting future trend rates, we adjust our selected past trend rates if there is evidence of new patterns emerging. If no future trend rate is noted in the discussion below, it should be assumed that our selected future trend rate is equal to our selected past trend rate. Unless noted otherwise, future trends should apply beginning at the mid-point of the latest accident half-year considered in the model.<sup>11</sup>

A discussion of our selected trend rates for each coverage follows in Section 5.

#### **4.8. Summary of Trend Rates**

As presented in Appendix E, we review several different models for each coverage based on different time frames, inclusion or exclusion of reform (i.e., level change) parameters, inclusion or exclusion of a trend rate change parameter, and data exclusions.

The summary of our trend rates based on industry data as of December 31, 2021, as presented in Table 1, are based on our assessment and holistic view of the statistical tests, historical data (changes in patterns and spikes) and parsimony of many regression models.

In Section 5, we discuss the basis for the trend rates we present in Table 1. Due to the many models that we consider, we do not discuss all of the models (as presented in Appendix E).

#### **4.9. Heatmaps**

In Section 5 of this report we present a graphical representation of the regression models under consideration with the use of heatmaps. We present separate heatmaps for the indicated trend rates, adjusted R-squared values, and *p*-values associated with a selected regression model over various experience time periods. The vertical axis of the heatmap corresponds to the beginning of the experience period, and the horizontal axis corresponds to the end of the experience period. For each heatmap, the colors within the column are selected such that larger values are brighter (yellow), and smaller values are darker (blue). This allows for direct comparison of statistical results between models

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<sup>11</sup> Typically, October 1, for the AUTO 7001, and April 1 for the AUTO 7501 data.

over different time periods and improves readability of our report without having to reference Appendix E. However, the information presented in each heatmap is analogous to the information presented in Appendix E and is considered an additional aid to draw attention to the models we select. For example, the information provided in Figure 1 may also be found in Appendix E pages 5 through 7.

#### **4.10. COVID-19**

COVID-19 “stay-at-home” orders and other directives during the pandemic resulted in a dramatic decline in traffic. While vaccine distribution has contributed to an increase in traffic levels since the early days of the pandemic, there remains uncertainty as to the frequency levels associated with “new normal” traffic patterns during the time periods during which rate programs that use these benchmarks may be in effect.

##### **Trend Rates**

The trend rates that we present in this report are intended to measure the rate of change in loss cost experience without influence of the COVID-19 pandemic.

Therefore, we exclude the 2020 and 2021 observations from our selected models for the coverages experiencing a significant change in claim costs as a result of COVID-19 pandemic. We find severity appears unaffected by COVID-19 for all coverages except possibly bodily injury with a spike in 2020. In the case of frequency, we observe a significant decrease for all coverages except property damage-tort.

##### **Application of Trend Rates**

For those rating programs intended to be effective once the COVID-19 pandemic is not expected to have an impact on future claims costs, the historical loss cost data (to which these trend rates will apply to) should be adjusted to remove any impact of the pandemic.<sup>12</sup>

For those rating programs intended to be in effect while the COVID-19 pandemic continues to impact claims costs, the historical loss cost data (to which these trend rates will apply to) should be (i) adjusted to fully remove any impact of the COVID-19 pandemic and (ii) then adjusted to the degree the pandemic is expected to impact claims costs during<sup>13</sup> the proposed rating program.

#### **4.11. Inflation**

Supply chain issues and pent-up consumer demand has resulted in a recent increase in inflation which may lead to increased claim costs during the prospective period. In Figure 1, we present the consumer price index (CPI) and inflation rate<sup>14</sup> over the last 20 years in Nova Scotia, separately, for vehicle maintenance and repair costs and health care.

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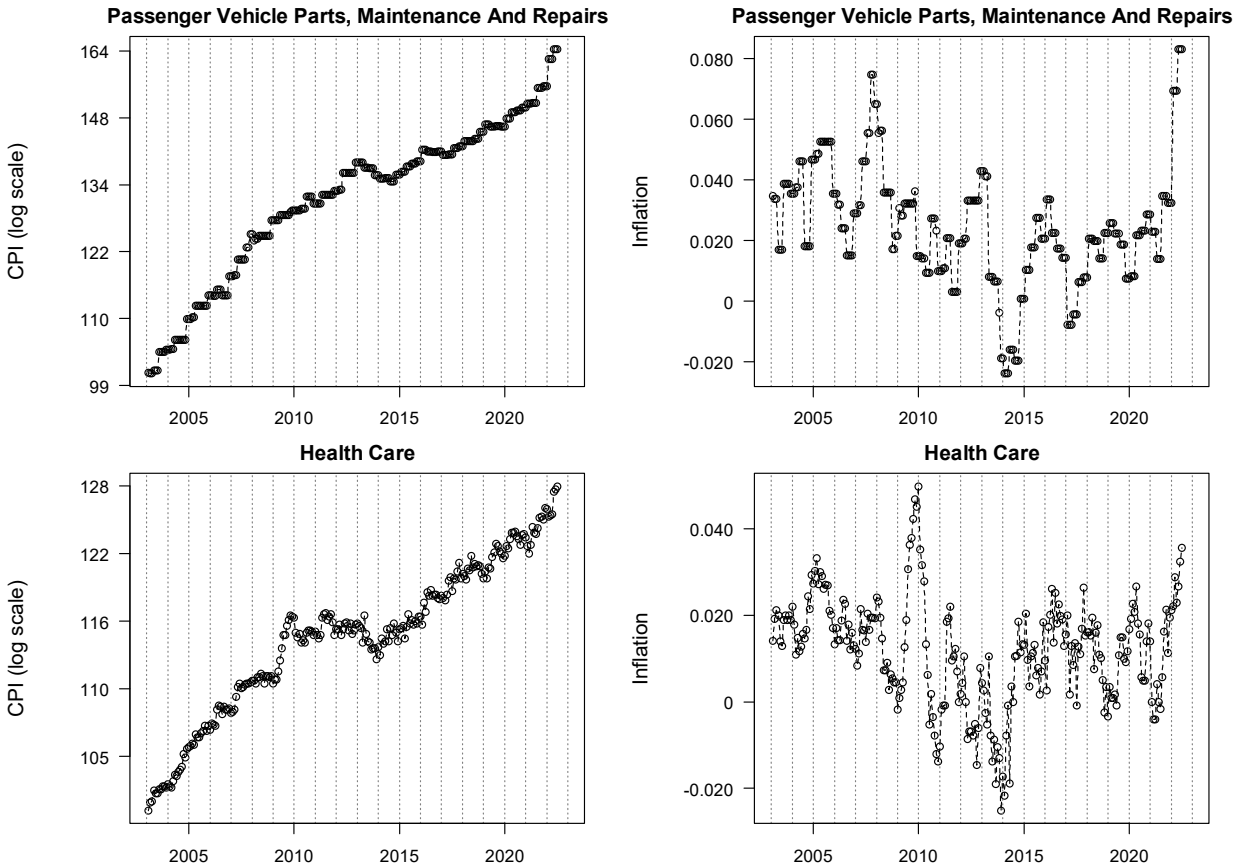
<sup>12</sup> An alternative is to assign zero weight to the accident year/period data distorted by COVID-19.

<sup>13</sup> This adjustment should consider what proportion of the policy year loss experience will be impacted by the COVID-19 pandemic.

<sup>14</sup> As measured by the 12-month change in CPI.



Figure 1: Consumer Price Index

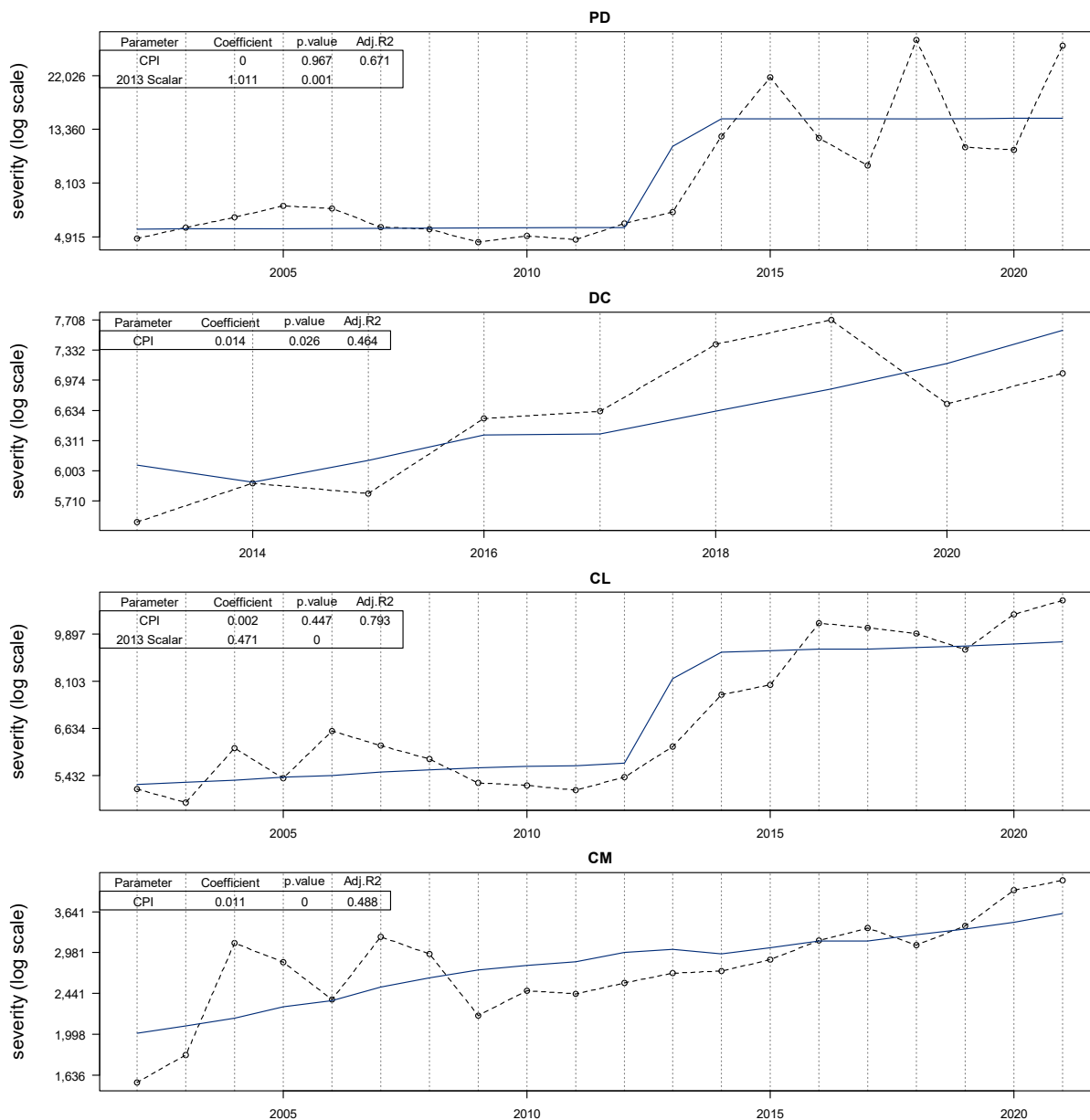


A review of the historical data points (as presented in Figure 1) shows that subject to variability:

- Since 2010, the historical inflation rate for passenger vehicle parts, maintenance and repair costs has generally ranged between +0% to +3%, with the exception of 2014 where inflation was approximately -2.0%. The average inflation rate between 2010 and 2021 is approximately +1.5%.
- The recent increase the CPI for passenger vehicle parts, maintenance and repair costs has resulted in the highest inflation levels since 2007.
- Health care costs appear less affected by the recent inflationary trends.

We expect the recent higher inflation for vehicle parts, maintenance and repair costs to affect claim costs for physical damage coverages since more costly repairs will increase the total amount needed to settle claims. In Figure 2, we examine the historical relationship between claims severity for physical damage coverages and the CPI over the last 20 years. More specifically, we fit regression models to the severity experience using average CPI over the period and seasonality as predictor variables. As expected, we observe significant correlation between the historical physical damage claim costs and CPI, as indicated by the correlation coefficients (the square root of the adjusted  $R^2$ ).

**Figure 2: Physical Damage x CPI Correlation**



Given this correlation, it is reasonable to assume that an increase in inflation will result in an increase in future claim costs. The amount by which claim costs will increase is highly uncertain as the persistence of the higher inflation levels is difficult to predict.

### Additional Economic Factors

Although there is a high degree of correlation between CPI and the physical damage trend rate, other social and economic factors may also affect claim costs and the measured loss cost trend rate. This is why the loss cost trend rate is not equal to the CPI, but instead correlated with it. These other social and economic factors influence the difference between the measured loss cost trend rate and the CPI. In

addition to the impact of rising car parts and repair costs, the following economic factors may affect claims costs:

- Surging gas prices - the surge in gas prices can affect consumer behaviour regarding vehicle usage. A decline in vehicle usage due to surging gas prices may be correlated with a decline in frequency.
- Interest rates /economic downturn – increased interest rate rates or a potential economic downturn may result in a decline in the consumer propensity to buy new vehicles. As new cars typically cost more to repair, this would temper the severity trend.

### Application

As discussed above, our trend selections are based on models that do not directly consider additional economic parameters, such as CPI, due to the difficulty of forecasting future inflation rates. However, we believe explicit recognition of the current economic environment may be warranted in this case.

To recognize the expectation of higher than historical inflation we suggest that insurers use the most recent *CPI data for vehicle maintenance and repair costs* in Nova Scotia to calculate an adjustment to the selected past severity trend for physical damage coverages as a basis for the future trend rate. If we consider claim cost trend to be the combination of inflation and a residual trend amount, then the future *severity* trend rate may be estimated using the following formula:

$$\begin{aligned} &\text{Future Severity Trend Rate} \\ &= (1 + \text{Annual Future Inflation Rate}) \times \left( \frac{1 + \text{Past Severity Trend Rate}}{1 + \text{Historical Inflation Rate}} \right) - 1 \end{aligned}$$

However, insurers apply *loss cost* trend rates in their rate applications, not severity trend rates. Therefore, for practical purposes we consider a CPI adjustment for the *loss cost* trend rate. The future *loss cost* trend rate is approximately equal to the expected average future inflation rate plus the historical difference between inflation and past loss cost trend.

$$\begin{aligned} &\text{Future Loss Cost Trend Rate} \\ &\cong (\text{Annual Future Inflation Rate}) \\ &+ (\text{Past Loss Cost Trend Rate} - \text{Historical Inflation Rate}) \end{aligned}$$

We recommend that at the time of the rate application preparation, the future loss cost trend rate be calculated as above so as to consider the higher inflation than is implicit in the past loss cost trend rate. Specifically:

The future loss cost trend rate would be based on the annual future inflation rate, the residual trend and consideration of other economic factors.

- Each insurer (when submitting their rate application) would select an **annual future inflation rate** that the insurer determines would be in effect between October 1, 2021 and the average accident date of the proposed rate program. This annual future inflation rate would be based on the most recent CPI data for vehicle maintenance and repair costs in Nova Scotia that is available at the time of the filing preparation, and the actuary's expectation of inflation until the average accident date of the proposed rate program.

Government actions to curb rising costs and its impact on expected inflation should be considered in selecting the annual future inflation rate. As the rate of inflation may vary over the forecast period, the actuary should consider this variation.

- The **residual trend** is equal to the selected past loss cost trend (varies by coverage) less the average historical inflation rate of +1.5% that we measure between 2010 and 2021. The residual trend is presented for each of the physical damage coverages in the following subsections.
- As discussed above, if **other social or economic environment changes** are influencing vehicle usage or purchase of vehicles, this too could be considered in the selection of the future loss cost trend rate.

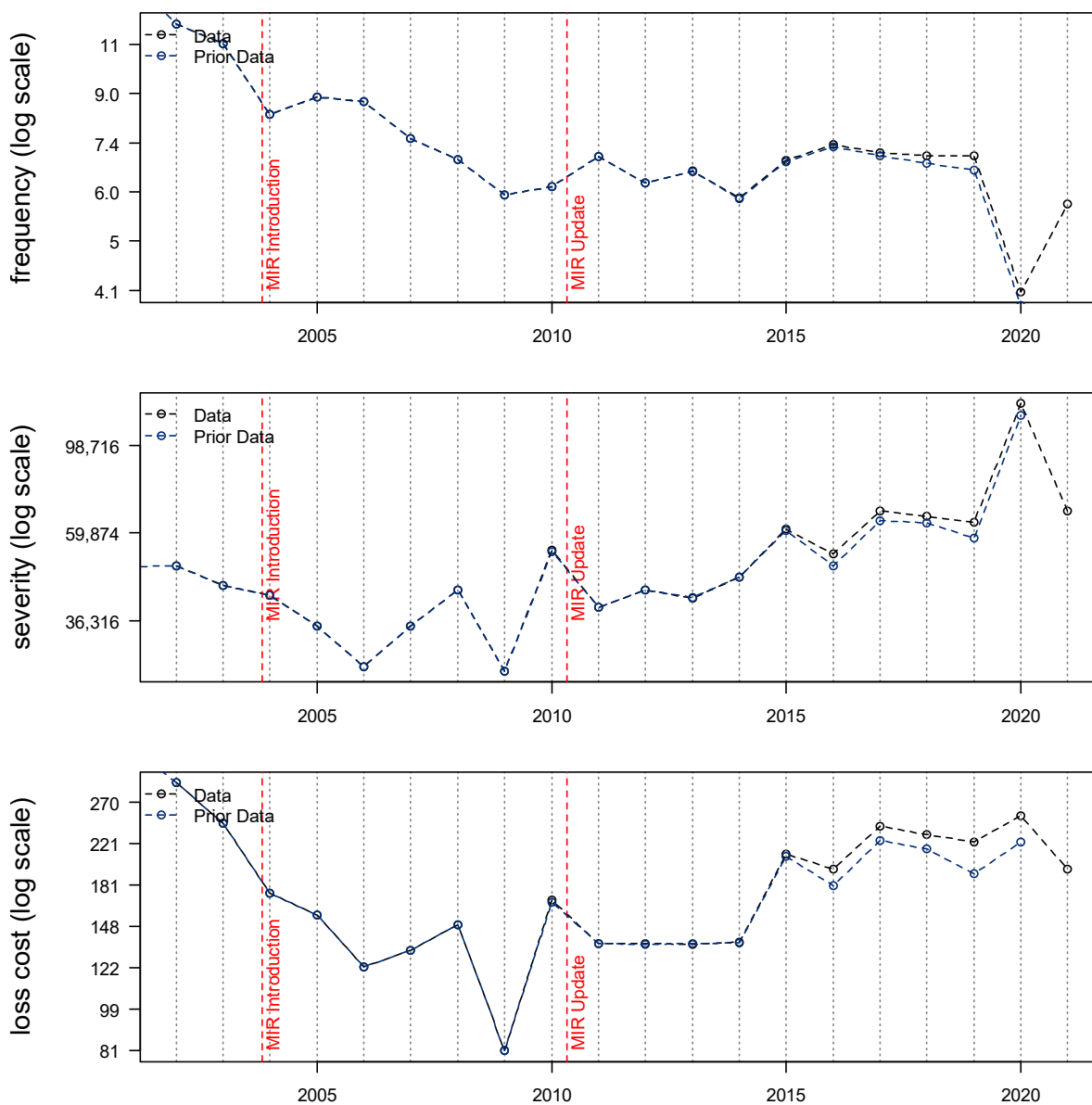
The proposed consideration of recent increase in CPI and other economic changes in selecting a future loss cost trend should be viewed as a temporary solution until inflation stabilizes. It is expected that these adjustments would no longer be necessary once inflation has returned to historical levels and the economic environment has stabilized.

## 5. Oliver Wyman Selected Trend Rates

### 5.1. Bodily Injury

In Figure 3, we present our estimated 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 2021. We include a comparison to the estimated values used in our prior report and observe that the both frequency and severity for 2016 through 2020 estimates have increased.

Figure 3: Bodily Injury – Observed Loss Cost Experience



A review of the historical data points (as depicted in Figure 3) shows that subject to variability:

- Loss cost declined following the 2003 reforms, and other than the downward spike in 2009, appears to have remained relatively flat until 2014, after which an increasing pattern is emerging.
- Severity has generally trended upward since 2006, including sharp spikes and drops in 2008 – 2010. We observe a large increase in 2020.<sup>15</sup>
- Frequency exhibited a declining pattern following the 2003 reforms until 2009. Following 2009, subject to variability, frequency is relatively flat. We observe a large decrease during 2020 and a more moderate decrease during 2021 coincident with the COVID-19 pandemic.

An increase in the minor injury cap (from an unindexed \$2,500 to an indexed \$7,500) took effect on April 28, 2010. Although the introduction of Bill 52 in April 2010 would have affected the loss costs in 2010, we suggest the sharp increase in 2010 is more due to data variability than to Bill 52, as the loss cost declined over each of the next three years (although average severity levels were above pre-reform levels).

Possibly due to the low volume of data (approximately 180 claims per year since 2009) and the variability in the data (which is likely attributed to the low volume), there is no statistical evidence of Bill 52 having an impact on claim costs as is the case for private passenger vehicles. As in our prior report, we make no explicit adjustment for Bill 52. Any change in claims cost for Bill 52 is implicitly included within our measured trend rates. In addition, we consider the trend rates after the 2003 reforms were introduced, due to the apparent change in trend pattern beginning in 2004.

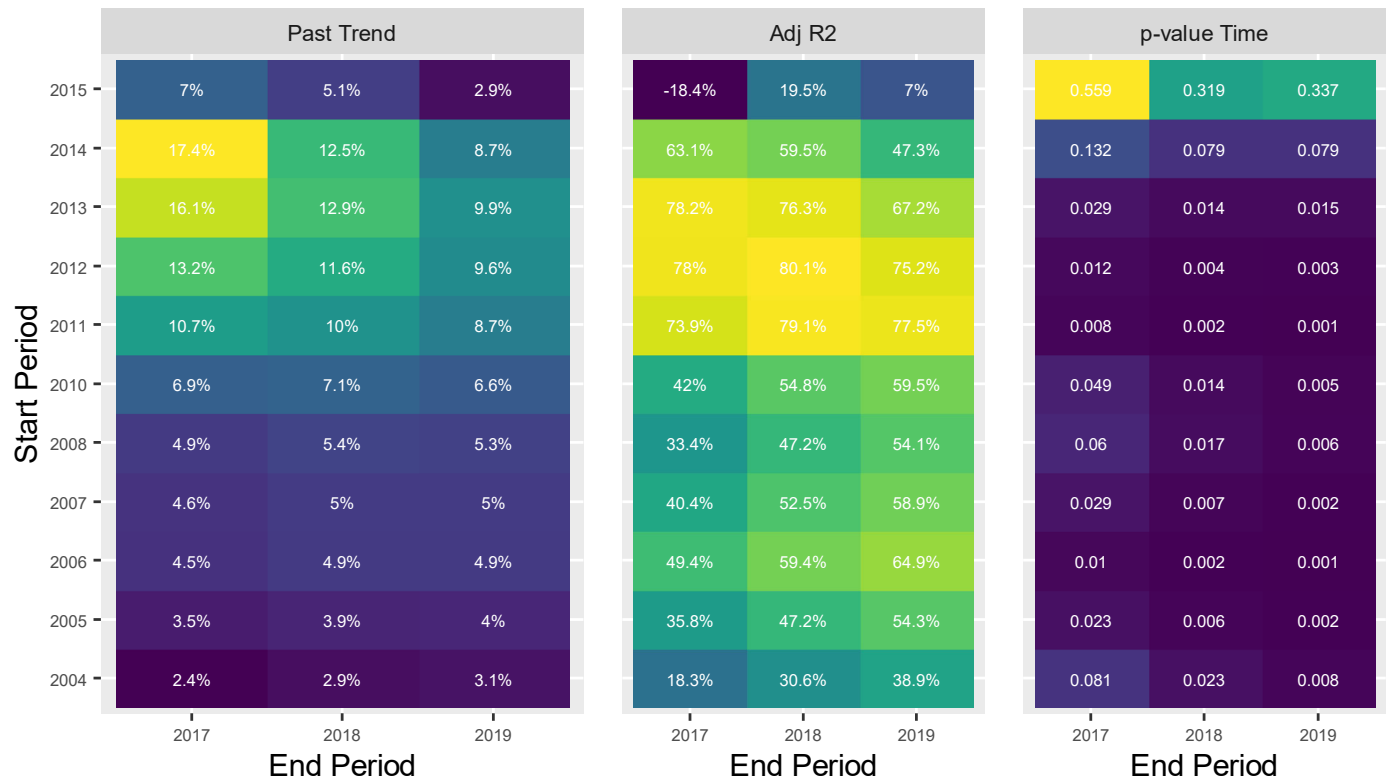
The estimated severity, frequency, and loss cost trends, associated adjusted R-squared values, and *p*-values, and confidence intervals over various trend measurement periods, with and without the 2009 data point, are presented in Appendix E.

In Figure 4 we present a heatmap of indicated loss cost trends beginning 2004 through 2015, ending 2019, 2018 and 2017, excluding the low 2009 observation, with time included in the model. We exclude the 2020 and 2021 observations to limit any potential influence of the COVID-19 pandemic on the indicated loss cost trend rates.

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<sup>15</sup> We note the 2020 spike in severity may be the result of the increased level of volatility associated with the low volume of claims reported. The severity may not necessarily be a direct result of the COVID-19 pandemic, since, as noted, with fewer claims there is likely additional severity volatility. In addition, the immaturity of the 2020 accident year adds significant volatility.

Figure 4: Bodily Injury - Loss Cost Heatmap (Time, excluding 2009)



- We observe the models with experience periods beginning 2004 to 2013 and ending 2019, have indicated loss cost trend rates that range from approximately +3.0 to +10.0%, and have moderate adjusted R-squared values and significant  $p$ -values for time.
- We note the models with the shortest experience periods, those beginning 2014 and 2015, have  $p$ -values that are not significant for time.
- The models with longer experience periods ending 2017 and 2018 have a wider range of trend indications compared to those ending 2019.

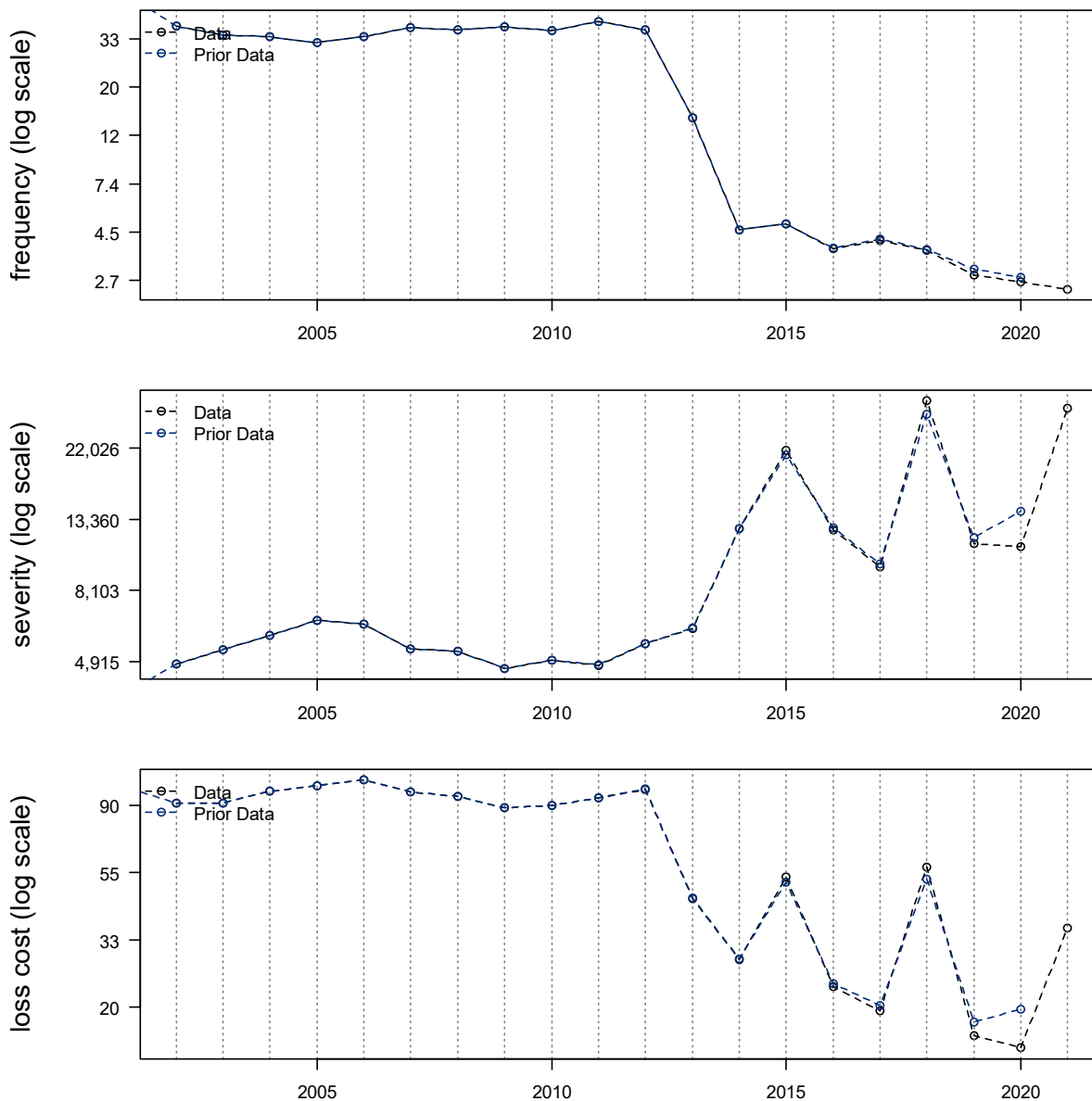
As presented in Appendix E, the noted low claim volume and data variability results in relatively poor statistical fits for each of severity and frequency trend rates.

Therefore, we select the loss cost trend rate directly, +5.0%, based on the longer-term trends rates, one-half percentage point higher than our prior review.

## 5.2. Property Damage

In Figure 5, we present our estimated 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 2021. We include a comparison to the estimated values used in our prior report and observe that the 2020 loss cost estimate has decreased.

Figure 5: Property Damage – Observed Loss Cost Experience



A review of the historical data points (as depicted in Figure 5) shows that subject to variability:

- Since the split between DCPD and property damage, the loss cost decreased significantly followed by a negative but volatile trend. (In Figure 5, data prior to April 2013 includes both DCPD and property damage, and after April 2013, only property damage.)
- Since the split between DCPD and property damage, the property damage severity has a steep upward trend and increased level of volatility.
- Since the split between DCPD and property damage, the property damage frequency has a negative trend. There is no apparent impact of COVID-19.



The estimated severity, frequency, and loss cost trends, associated adjusted R-squared values, and  $p$ -values, and confidence intervals over various trend measurement, with and without the 2015 and 2018 observations, are presented in Appendix E.

Due to the level of severity volatility, we consider the loss cost trends as the statistical support is stronger (higher adjusted R-squared values and lower  $p$ -values).

In Figure 6 we present a heatmap of indicated loss cost trends beginning 2005 through 2016, ending 2021 and 2020, excluding 2015 and 2018, with time and a reform parameter at April, 2013 included in the model.

**Figure 6: Property Damage – Loss Cost Heatmap (Time and 4/2013 Scalar; Excluding 2015 and 2018)**



- We observe the models ending 2021 have insignificant  $p$ -values for time.
- We observe the models with experience periods beginning 2005 through 2012 and ending 2020, have indicated loss cost trend rates that range between approximately -6% to -11% and have high adjusted R-squared values and significant  $p$ -values for time. Models with shorter experience periods generally indicate loss trend rates on the lower (more negative) end of the range.

We note the exclusion of the 2015 and 2018 as outliers (as well as the model ending 2020, which excludes 2021) results in a very good fit (very high adjusted R-square values and significant  $p$ -values). However, these data exclusion may introduce downward bias to the indicated trend rate as they all serve to decrease the trend indication. As shown in Appendix E, if these observations were included in the model, the time parameter is no longer significant and the adjusted R-squared values decrease significantly. The increased level of volatility post reform increases the uncertainty of the indicated trend rates. Despite this we believe a negative trend rate is still warranted for the following reasons:

- The loss cost models we consider most reasonable have a large negative trend indication.

- As shown in Appendix E, there is a strong negative frequency trend since the introduction of the reform, while severity is more flat and is dominated by variance.

We select a loss cost trend of -7.0%, based on the models with the longer experience periods, the same as our prior review.

We estimate *future loss cost* trend will be approximately 8.5<sup>16</sup> percentage points below the insurer's expectation of average inflation between October 1, 2021 and the average accident date of the proposed rate program. The insurer's expectation of inflation should consider the post-October 1, 2021 Vehicle Parts, Maintenance and Repair CPI data available at time of filing. Please refer to Section 4.11 for more details regarding our view on future loss cost trend for physical damage coverages.

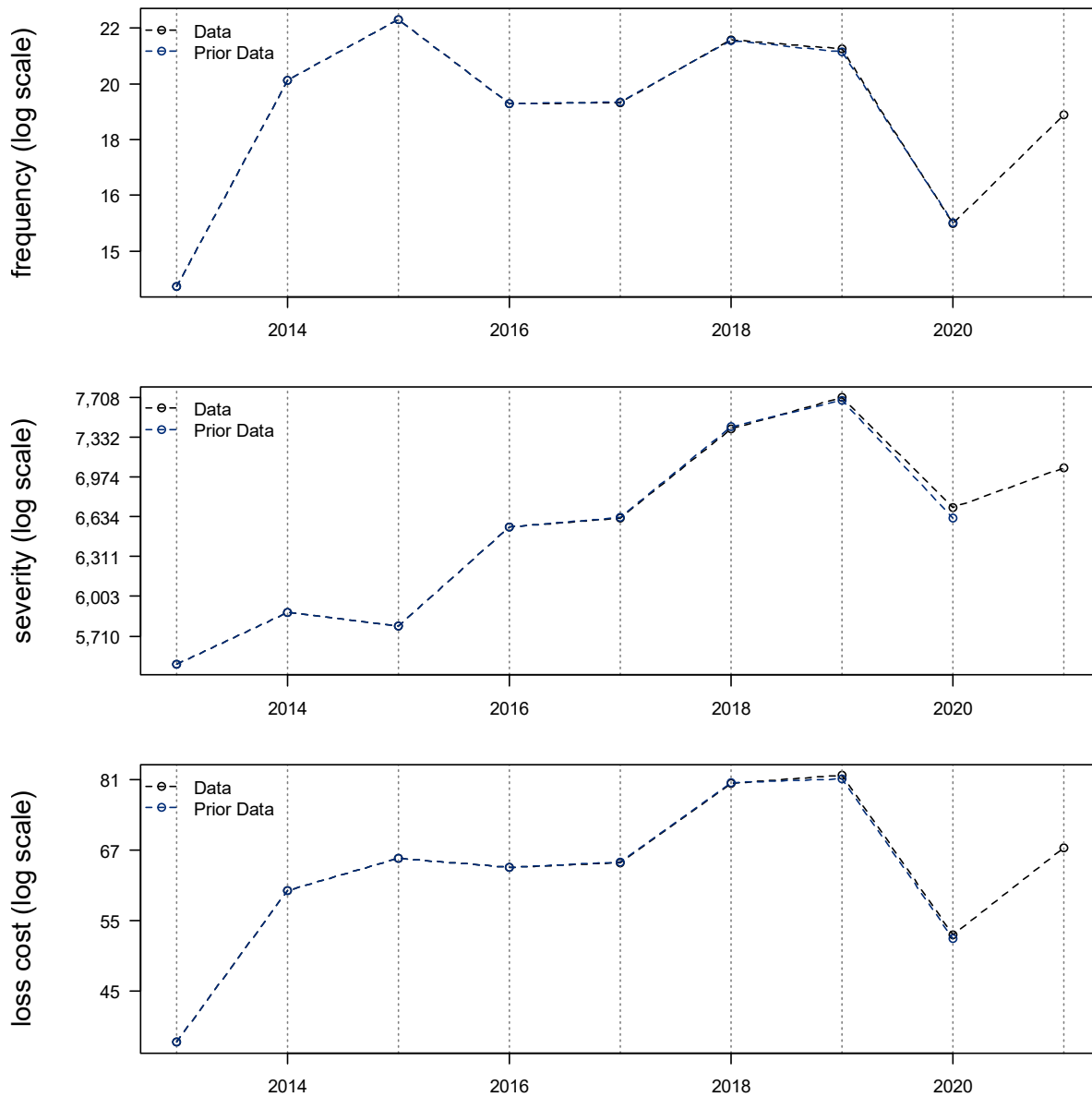
### 5.3. Direct Compensation Property Damage

In Figure 7, we present our estimated loss cost (average claim cost per vehicle), average severity (average claim cost per claim), and frequency rate (average claim incidence rate) over the period 2013 through 2021. We include a comparison to the estimated values used in our prior report and observe that the estimates have not changed significantly.

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<sup>16</sup> -8.5% = -7.0% (past loss cost trend) - 1.5% (historical inflation)

Figure 7: DCPD – Observed Loss Cost Experience



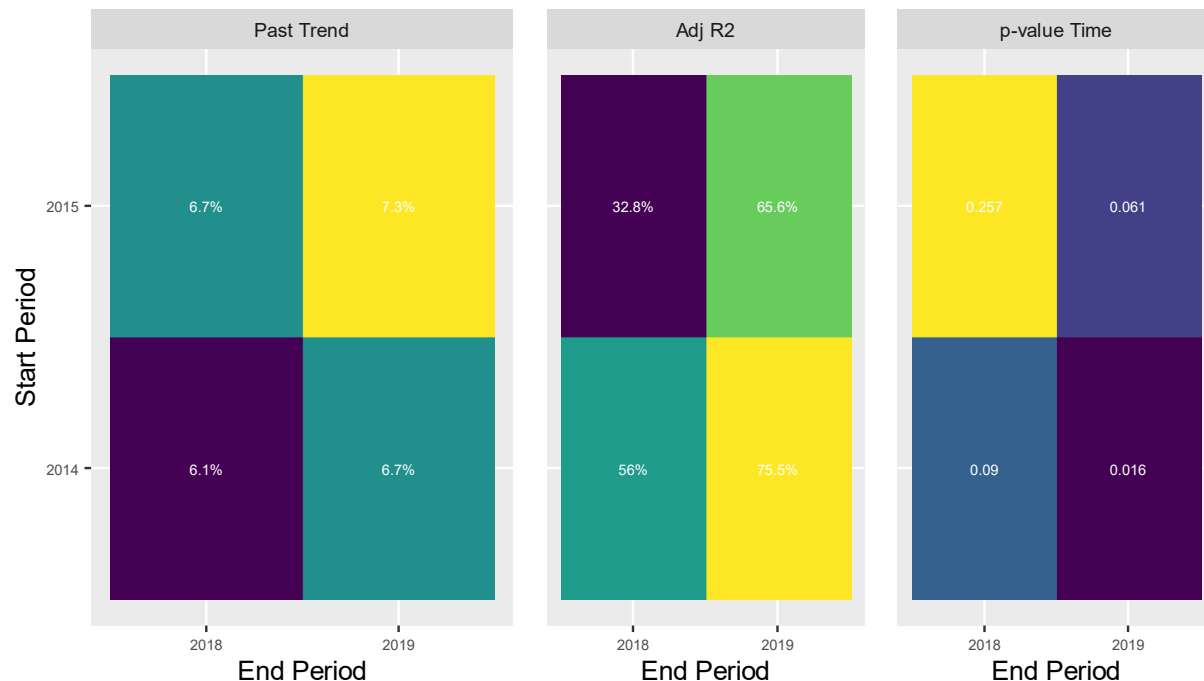
A review of the historical data points (as depicted in Figure 5) shows that subject to variability:

- Loss cost has generally exhibited an upward trend. We observe a large decrease during 2020 and a moderate decrease during 2021 coincident with the COVID-19 pandemic.
- Severity has generally exhibited an upward trend, but is showing some signs of flattening in the most recent years.
- Frequency has exhibited a relatively flat trend. We observe a large decrease during 2020 and a moderate decrease during 2021 coincident with the COVID-19 pandemic.

The estimated severity, frequency, and loss cost trends, associated adjusted R-squared values, and *p*-values, and confidence intervals over various trend measurement are presented in Appendix E.

In Figure 8 we present a heatmap of indicated loss cost trends beginning 2014 through 2015, ending 2019 and 2018, with time included in the model.

**Figure 8: DCPD – Loss Cost Heatmap (Time)**



- We observe the models have indicated loss cost trend rates that range between approximately +6.0% to +7.5% and have moderate adjusted R-squared values and generally insignificant *p*-values for time.
- The models with experience periods ending 2018 have similar results as those ending 2019.

As presented in Appendix E, due to the noted low claim volume and data variability the measured severity and frequency trend rates have poor statistical fits.

Therefore, we directly select the loss cost trend rates with the model beginning 2014 and ending 2019 which has a *p*-value that is significant for time, a past loss cost trend rate of +6.5%, the same as our prior review.

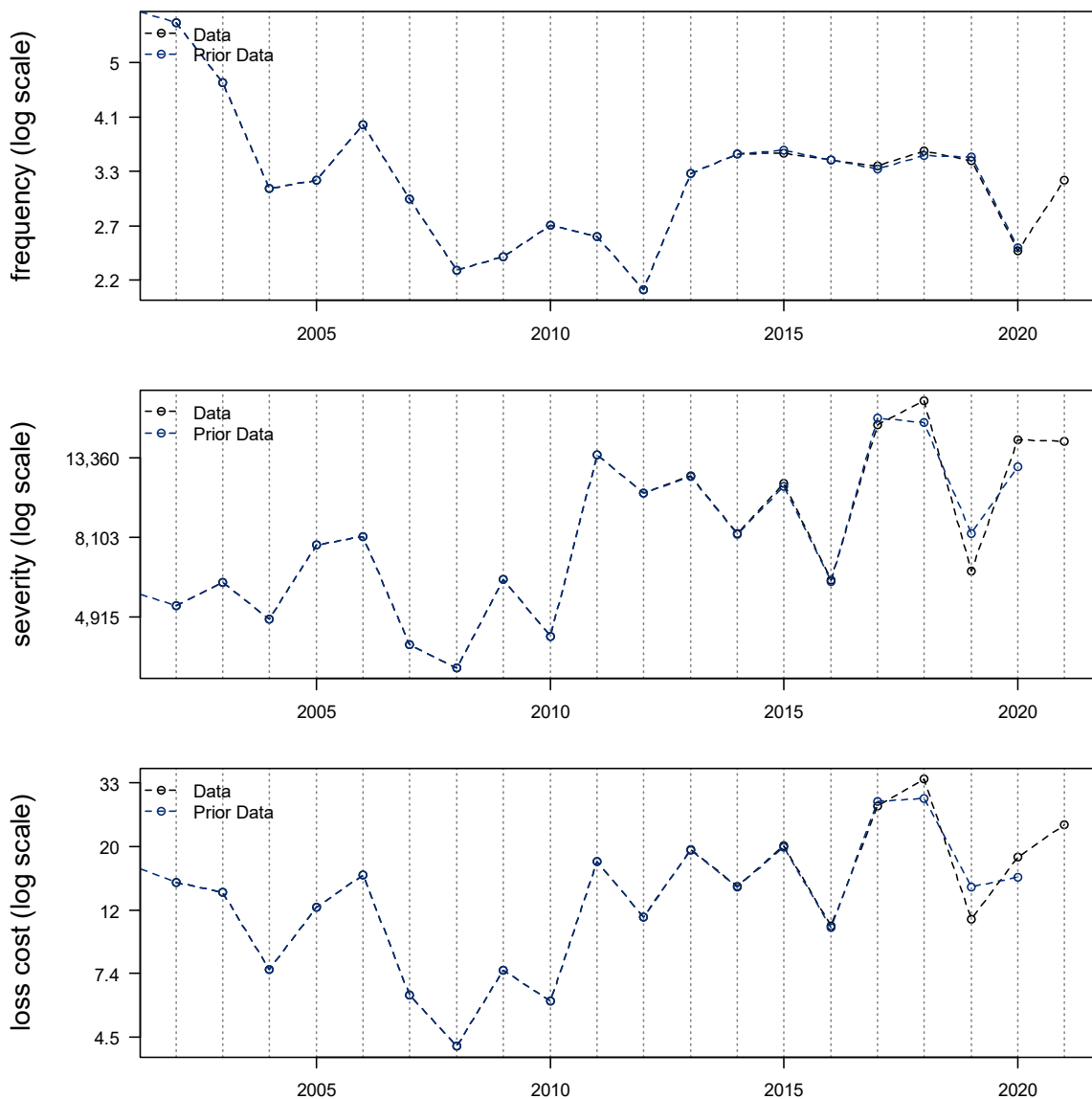
We estimate *future loss cost* trend will be approximately 5.0<sup>17</sup> percentage points below the insurer's expectation of average inflation between October 1, 2021 and the average accident date of the proposed rate program. The insurer's expectation of inflation should consider the post-October 1, 2021 Vehicle Parts, Maintenance and Repair CPI data available at time of filing. Please refer to Section 4.11 for more details regarding our view on future loss cost trend for physical damage coverages.

<sup>17</sup> +5.0% = 6.5% (past loss cost trend) - 1.5% (historical inflation)

## 5.4. Accident Benefits

In Figure 9, we present our estimated 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 2021. We include a comparison to the estimated values used in our prior report and observe that other than the minor severity shifts for the more recent accident half-years, the estimates have not changed significantly.

Figure 9: AB Total – Observed Loss Cost Experience



A review of the historical data points (as depicted in Figure 9) shows that subject to considerable variability:

- Loss cost experienced a large increase following the 2010 reforms and has been relatively flat since.
- Severity experienced a large increase following the 2010 reforms and has been relatively flat since.
- Frequency declined through to the 2012 reforms, then lifted upward following the 2012 reforms and has been relatively flat since. We observe a large decrease during 2020 and a modest decrease in 2021 coincident with the COVID-19 pandemic.

The estimated severity, frequency, and loss cost trends, associated adjusted R-squared values, *p*-values, and confidence intervals over these various trend measurement periods, with and without reform parameter(s), are presented in Appendix E.

Given the variability in experience, as well as the weak statistics for the April 2012 reform parameter, we continue to make no explicit reform adjustment.

In Figure 10 we present a heatmap of indicated loss cost trends beginning 2004 through 2015, ending 2018 and 2019, with a time parameter in the model.

**Figure 10: AB Total – Loss Cost Heatmap (Time)**



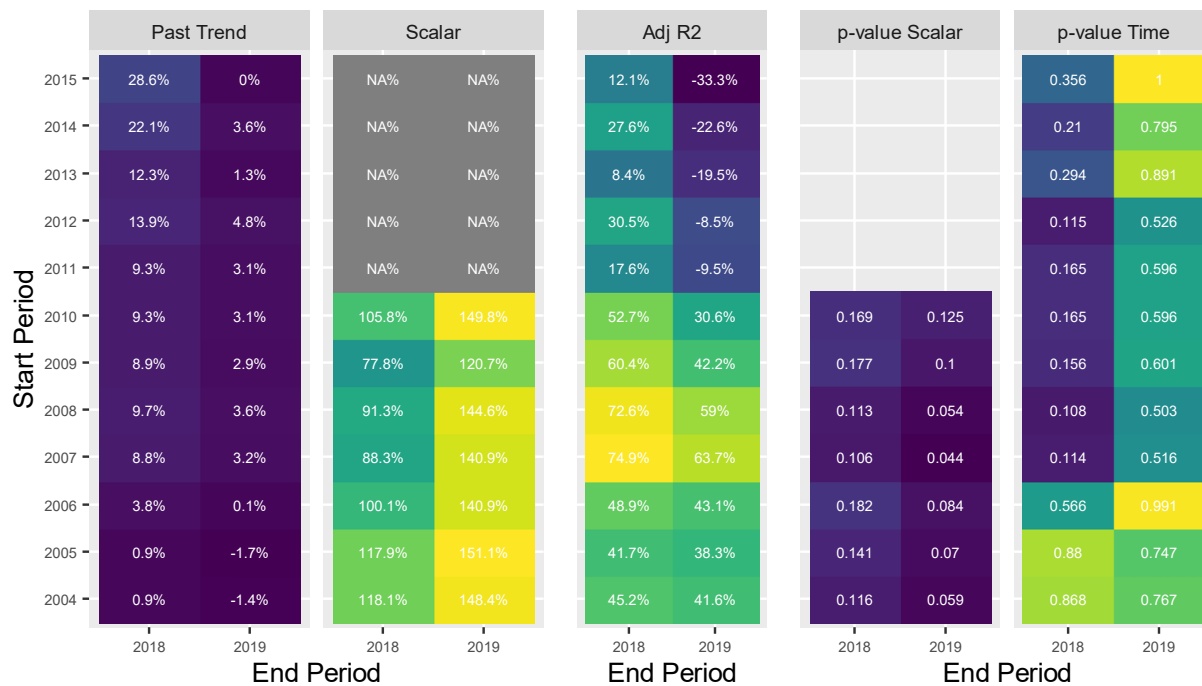
- We observe the models with experience periods beginning 2011 though 2015 (post-Bill 52) ending 2019 have indicated loss cost trend rates that range from 0.0% to +5.0% and have very low adjusted R-squared values and *p*-values that are insignificant for time.
- The models with longer experience periods generally have high trend rates, and significant *p*-values for time. However, it is very likely that these trends are overstated, caused by the lack of a scalar

parameter in the model. We note, selecting a location for this reform factor is problematic, as Bill 52 and the 2012 Fair Insurance reforms both likely had an impact on historic loss costs.

- The models with experience periods ending 2018 have indicated trend rates that are much larger than those ending 2019, due to the leverage of the final observation in each period.

We find the model which best aligns to the historical loss cost experience has a scalar parameter at January 1, 2011. In Figure 11 we present a heatmap of indicated loss cost trends beginning 2004 through 2015, ending 2018 and 2019, with time and a January 2011 scalar parameter in the model.

**Figure 11: AB Total – Loss Cost Heatmap (Time and 1/2011 Scalar)**



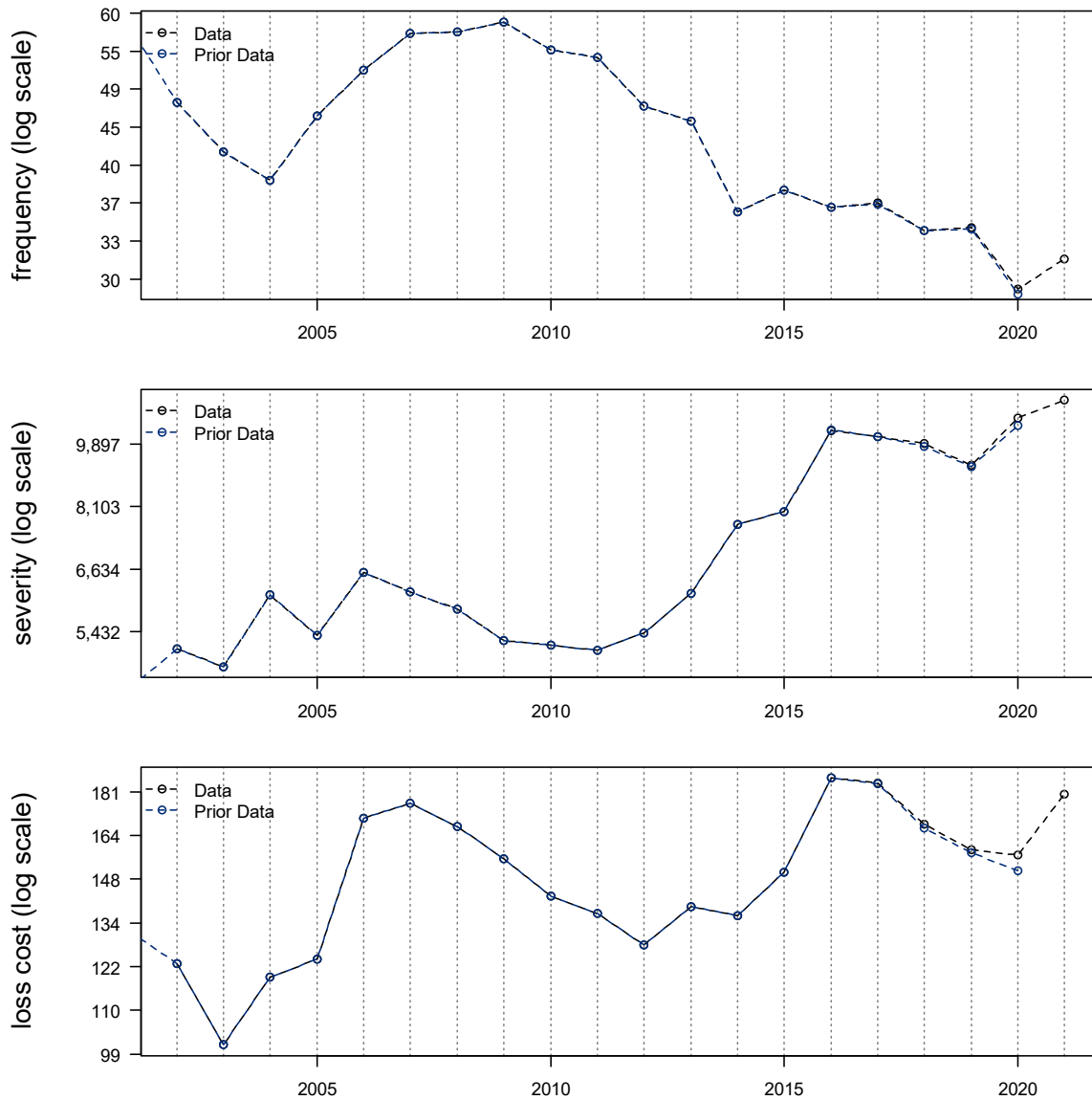
- We observe the models with experience periods beginning 2004 though 2010 ending 2019 have indicated loss cost trend rates that range from -2.0% to +3.5% and have moderate adjusted R-squared values and *p*-values that are mainly insignificant for the scalar parameter, as well as for time. The January 2011 scalar corresponds to an approximate 140% increase in loss costs.
- The models with experience periods ending 2018 have higher indicated trend rates however still insignificant *p*-values for time.

We select a loss cost trend rate of +1.0%, one point higher than our prior selection. We select a small positive trend, despite the insignificant *p*-values, considering the positive trend rate indications and the recent rise in the 2021 loss cost over 2019.

## 5.5. Collision

In Figure 12, we present our estimate of the estimated 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 2021. We include a comparison to the estimated values used in our prior report and observe that the 2020 loss cost value has increased slightly.

Figure 12: Collision – Observed Loss Cost Experience



A review of the historical data points (as depicted in Figure 12) shows that subject to variability:

- Loss cost has exhibited both increasing and decreasing patterns, including two large consecutive increases in 2015 and 2016.
- Severity has been increasing since 2011, including relatively large increases between 2013-2016 following the introduction of DCPD. Since 2016, the increasing pattern has flattened.
- Frequency declined between 2009 and 2014, coinciding with introduction of DCPD, followed by a relatively flat pattern. We observe a large decrease during 2020 and a moderate decrease during 2021 coincident with the COVID-19 pandemic.



The estimated severity, frequency, and loss cost trends, associated Adjusted R-squared values,  $p$ -values, and confidence intervals over various trend measurement periods, with and without a reform parameter at April 2013, as well as excluding the 2016 loss cost spike, are presented in Appendix E. We offer the following observations about these measured trends.

As noted in Section 2, DCPD was introduced April 1, 2013, which appears to have affected the collision claim experience. The effect the reform had on frequency and severity offset one another making it difficult to model loss costs directly. Therefore, we consider the separate frequency and severity models.

In Figure 13 we present a heatmap of indicated severity trends beginning 2008 through 2016, ending 2020 and 2021, with time included in the model.

**Figure 13: Collision – Severity Heatmap (Time)**

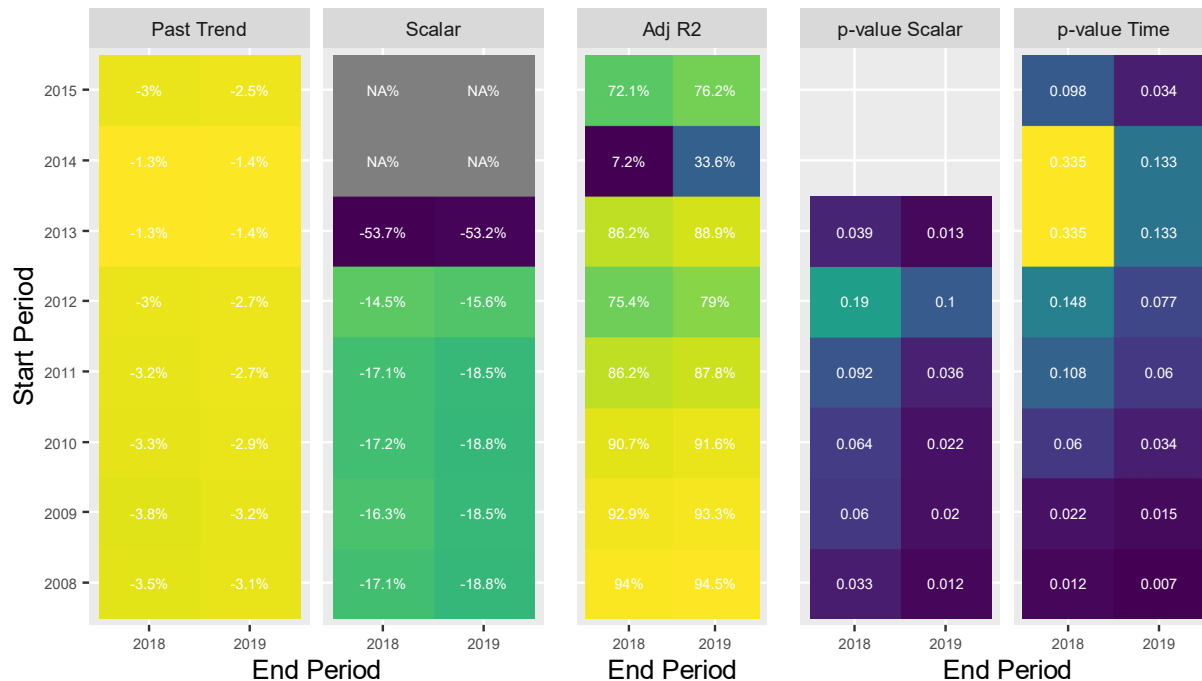


- We observe the models with experience periods beginning 2008 through 2013 have indicated severity trend rates ranging between +6.5% and +8.5% and have moderate to high adjusted R-squared values and  $p$ -values that are significant for time.
- The models with shorter experience periods (after the introduction of the reform) have lower trend rates, ranging from 0.0% to +5.0%, with generally insignificant  $p$ -values for time and low to moderate adjusted R-squared values. The only model with a significant time parameter is the model considering all observations between 2014 and 2021 which has an indicated trend rate of approximately 5.0%.

We select an annual severity trend of +5.0%, based on the model beginning 2014 and ending 2021. This selection is further supported by the models that include an April 2013 reform scalar parameter, as shown in Appendix E.

In Figure 14 we present a heatmap of indicated frequency trends beginning 2008 through 2015, ending 2018 and 2019, with time and an April 2013 reform scalar parameter included in the model.

**Figure 14: Collision – Frequency Heatmap (Time and 4/2013 Scalar)**



- We observe the models with experience periods beginning 2008 and 2010 ending 2019 have indicated frequency trend rates clustering around -3.0% and have high adjusted R-squared values and *p*-values that are significant for both time and scalar parameters. The April 2013 scalar parameter corresponds to a 18.5% decrease in frequency.
- The models with shorter experience periods have *p*-values that are generally insignificant time and lower adjusted R-squared values.
- The models with experience periods ending 2018 have similar, but lower, results as those ending 2019.

We select an annual frequency trend of -2.0%, based on consideration of both the models with the longest experience periods and highest adjusted R-squared values and the more recent shorter models that indicate that there is no discernable trend rate due to the insignificant *p*-values.

Therefore, based on our severity trend rate of +5.0% and frequency trend rate of -2.0%, we select a **past loss cost trend of +3.0% (rounded)**, two percentage points lower than our prior selection.

We estimate *future loss cost* trend will be approximately 1.5<sup>18</sup> percentage points above the insurer's expectation of average inflation between October 1, 2021 and the average accident date of the proposed rate program. The insurer's expectation of inflation should consider the post-October 1, 2021

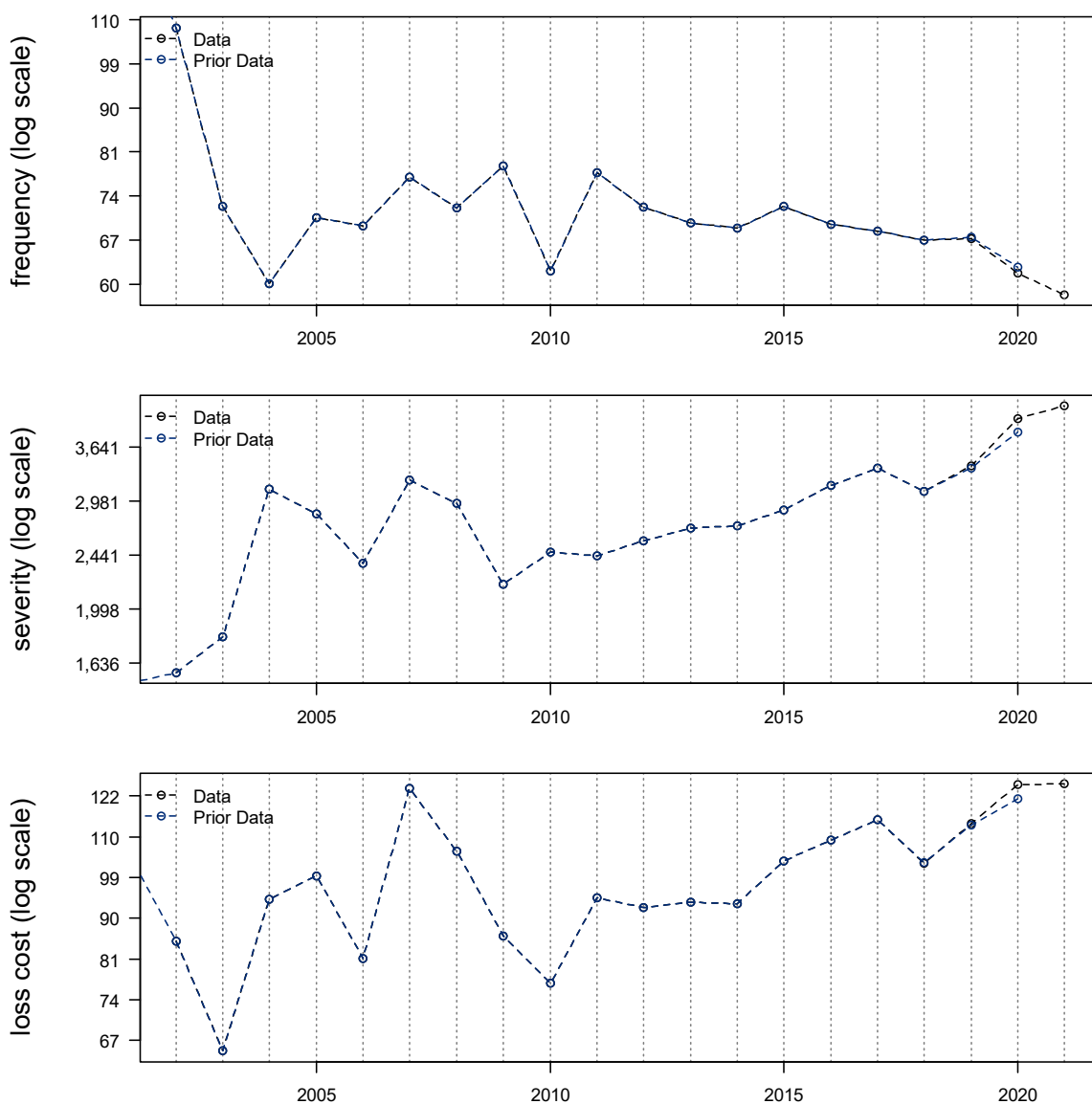
<sup>18</sup> +1.5% = 3.0% (past loss cost trend) - 1.5% (historical inflation)

Vehicle Parts, Maintenance and Repair CPI data available at time of filing. Please refer to Section 4.11 for more details regarding our view on future loss cost trend for physical damage coverages.

## 5.6. Comprehensive

In Figure 15, we present our estimated 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 2021. We include a comparison to the estimated values used in our prior report and observe that the estimates have not changed significantly.

**Figure 15: Comprehensive – Observed Loss Cost Experience**



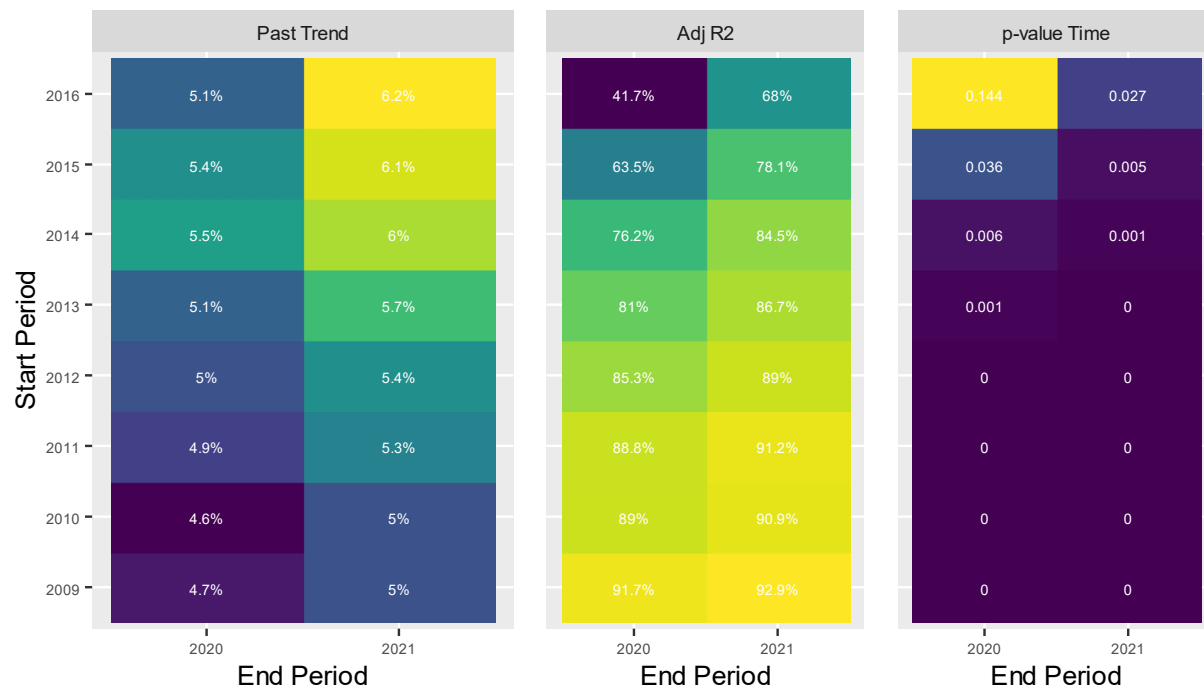
A review of the historical data points (as depicted in Figure 15) shows that subject to variability:

- Loss cost has been generally increasing, including an upward spike in 2007.
- Severity has been increasing since 2009.
- Frequency has been relatively flat (slight downward trend) since 2007, including a downward spike in 2010. There is a modest decline in 2020 and 2021 that may or may not be associated with COVID-19.

The estimated severity, frequency, and loss cost trends, associated Adjusted R-squared values, *p*-values, and confidence intervals over various trend measurement periods, including and excluding the 2007 and 2010 data points, are presented in Appendix E.

In Figure 16 we present a heatmap of indicated severity trends beginning 2009 through 2016, ending 2020 and 2021, with time included in the model.

**Figure 16: Comprehensive – Severity Heatmap (Time)**

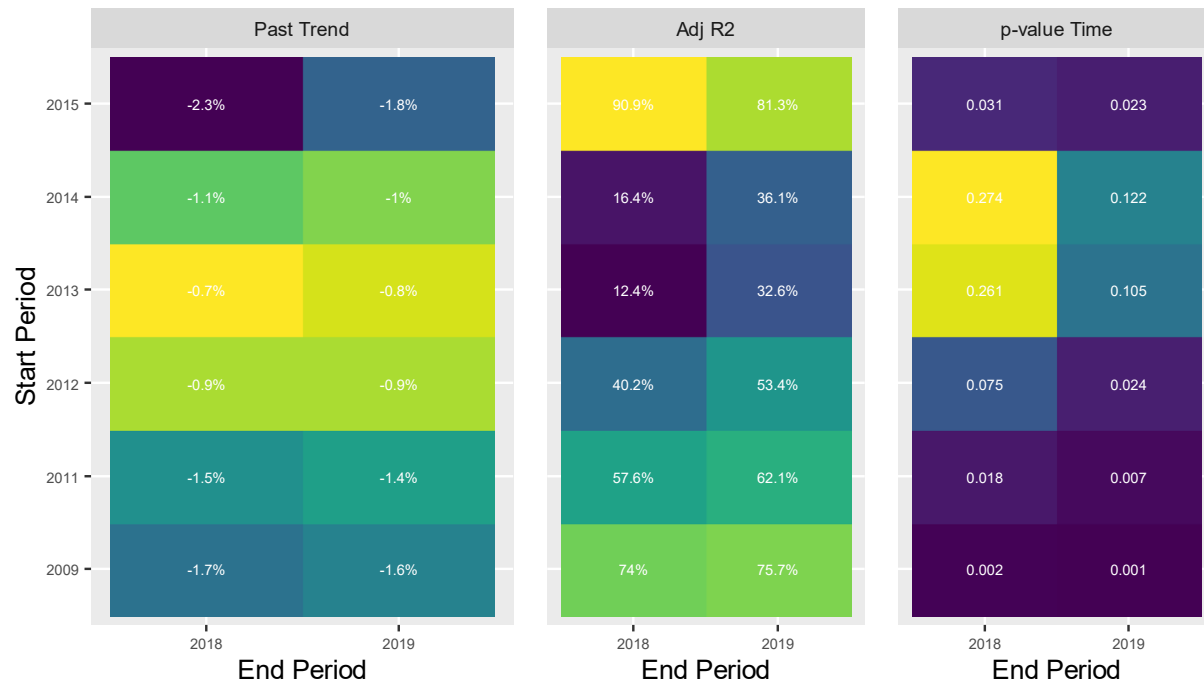


- We observe the models with experience periods ending 2021, have indicated severity trend rates that cluster around +5.0% to +6.0% and have high adjusted R-squared values and significant *p*-values for time.
- The models with experience periods ending 2020 have indicated trend rates that are approximately one-half to one percentage point lower than those ending 2021.

We select a severity trend of +5.0%, one-half percentage point higher than our prior selection.

In Figure 17 we present a heatmap of indicated frequency trends beginning 2009 through 2015, ending 2018 and 2019, excluding the low 2010 observation and time included in the model.

**Figure 17: Comprehensive – Frequency Heatmap (Time, Excluding 2010)**



- We observe the models with experience periods beginning 2009 through 2012 ending 2019 have indicated frequency trend rates that generally range from approximately -1.0% to -1.5% and have moderate adjusted R-squared values and  $p$ -values that are significant for time.
- The models with shorter experience periods generally have  $p$ -values that are insignificant for time and low adjusted R-squared values.
- The models with experience periods ending 2018 have similar results as those ending 2019.

We select a frequency trend of -1.5%, the same as our prior selection.

Therefore, based on our severity trend rate of +5.0% and our frequency trend rate of -1.5%, we select a past loss cost trend of **+3.5% (rounded)**, one-half percentage point higher our prior selection.

We estimate *future loss cost* trend will be approximately 2.0<sup>19</sup> percentage points above the insurer's expectation of average inflation between October 1, 2021 and the average accident date of the proposed rate program. The insurer's expectation of inflation should consider the post-October 1, 2021 Vehicle Parts, Maintenance and Repair CPI data available at time of filing. Please refer to Section 4.11 for more details regarding our view on future loss cost trend for physical damage coverages.

<sup>19</sup> +2.0% = 3.5% (past loss cost trend) - 1.5% (historical inflation)

## 5.7. Specified Perils

For reasons of data volume and the nature of the coverage, we select the same past loss cost trend rate as we do for comprehensive, +3.5%.

We estimate *future loss cost* trend will be approximately 2.0<sup>20</sup> percentage points above the insurer's expectation of average inflation between October 1, 2021 and the average accident date of the proposed rate program. The insurer's expectation of inflation should consider the post-October 1, 2021 Vehicle Parts, Maintenance and Repair CPI data available at time of filing. Please refer to Section 4.11 for more details regarding our view on future loss cost trend for physical damage coverages.

## 5.8. All Perils

For reasons of data volume and the nature of the coverage, we select the past and future loss cost trend rate based on our selected values for collision and comprehensive, **+3.0%** for the past and future (rounded).

## 5.9. Summary- All Coverages

We summarize our current and prior trend analyses in Table 6 and Table 7, respectively.

**Table 6: Selected Loss Cost Trends as of December 31, 2021**

Coverage	Past Loss Cost (Before October 1, 2021)	Future Loss Cost (After October 1, 2021)
Bodily Injury	+5.0%	+5.0%
Property Damage	-7.0%	-7.0%‡
Direct Compensation Property Damage	+6.5%	+6.5%‡
Accident Benefits	+1.0%	+1.0%
Collision	+3.0%	+3.0%‡
Comprehensive	+3.5%	+3.5%‡
Specified Perils	+3.5%	+3.5%‡
All Perils	+3.0%	+3.0%‡

‡ The *future* trend rates for property damage, collision, comprehensive, specified perils and all perils to be modified to account for changes in economic conditions. (See Section 4.11)

<sup>20</sup> +2.0% = 3.5% (past loss cost trend) - 1.5% (historical inflation)

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**Table 7: Selected Loss Cost Trends as of December 31, 2020**

<b>Coverage</b>	<b>Past Loss Cost</b>	<b>Future Loss Cost</b>
Bodily Injury	+4.5%	+4.5%
Property Damage incl DCPD	-7.0%	-7.0%
Direct Compensation Property Damage	+6.5%	+6.5%
Accident Benefits	0.0%	+0.0%
Collision	+5.0%	+3.5%
Comprehensive	+3.0%	+3.0%
Specified Perils	+3.0%	+3.0%
All Perils	+4.5%	+3.5%

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## 7. Considerations and Limitations

- **Data Verification** – For our analysis, we relied on data and information provided by GISA without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.
- **Rounding and Accuracy** – Our models may retain more digits than those displayed. Also, the results of certain calculations may be presented in the exhibits with more or fewer digits than would be considered significant. As a result, there may be rounding differences between the results of calculations presented in the exhibits and replications of those calculations based on displayed underlying amounts. Also, calculation results may not have been adjusted to reflect the precision of the calculation.
- **Unanticipated Changes** – We developed our conclusions based on an analysis of data and on the estimation of the outcome of many contingent events. We developed our estimates from the historical claim experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new types of losses not sufficiently represented in historical databases or which are not yet quantifiable.
- **Internal / External Changes** – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to the client named herein. Internal factors include items such as changes in claim reserving or settlement practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment surrounding the claims process. Uncontrollable factors such as general economic conditions also contribute to the variability.
- **Uncertainty Inherent in Projections** – While this analysis complies with applicable Actuarial Standards of Practice and Statements of Principles, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or severity of claims. For these reasons, we do not guarantee that the emergence of actual losses will correspond to the projections in this analysis.

## 8. Appendices

**Appendix A:** Selected reported claim count and reported incurred claim amount development factors and basis for selection.

**Appendix B:** Estimate of the ultimate loss cost, severity and frequency by accident half-year; and period to period percentage changes.

**Appendix C:** Reported incurred claim amount, reported paid claim amount, and estimated ultimate claim amount by accident half-year.

**Appendix D:** Reported incurred claim count, and estimated ultimate claim count by accident half-year.

**Appendix E:** Summary of loss trend regression analysis which includes modeled trend results for various time periods; with and without a seasonality parameter; with and without certain data points; with and without certain level change parameters.

- Bodily Injury: Pages 1 to 8
- Property Damage: Page 9 to 15
- Direct Compensation Property Damage: 16 to 18
- Accident Benefits – Total: Pages 19 to 26
- Collision: Pages 27 to 35
- Comprehensive: Pages 36 to 44



Province of Nova Scotia  
Commercial Vehicles (including Fleets)

Claim Count Development Selections  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Selected Age-to-Ultimate Development Factors						
Maturity	Third Party Liability - Bodily Injury	Third Party Liability - Property Damage	Third Party Liability - Direct Compensation	Accident Benefits - Total	Collision	Comprehensive - Total
	Wght Avg: Last 6 Semesters ending in 12	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	Wght Avg: 6 Semester	Wght Avg: 10 Semesters
6.0						
12.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	Wght Avg: 6 Semester	Wght Avg: 10 Semesters
18.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	Wght Avg: 6 Semester	Wght Avg: 10 Semesters
24.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	Wght Avg: 10 Semesters
30.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	1
36.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	1
42.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	1
48.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	1
54.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: All Semesters	1	1
60.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
66.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
72.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
78.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
84.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
90.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
96.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
102.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
108.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
114.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
120.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
126.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
132.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
138.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
144.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
150.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
156.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
162.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
168.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
174.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
180.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
186.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
192.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
198.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
204.0	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	1	1	1
210.0	1	1	1	1	1	1
216.0	1	1	1	1	1	1
222.0	1	1	1	1	1	1
228.0	1	1	1	1	1	1
234.0	1	1	1	1	1	1



Province of Nova Scotia  
Commercial Vehicles (including Fleets)

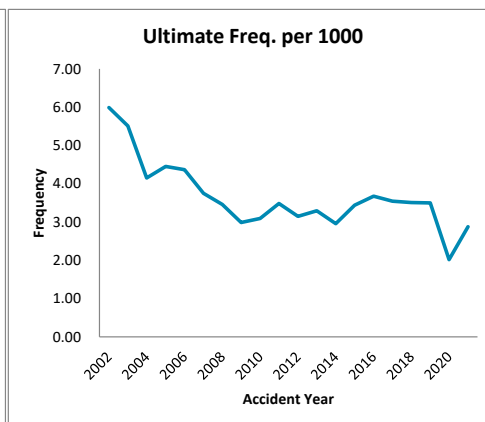
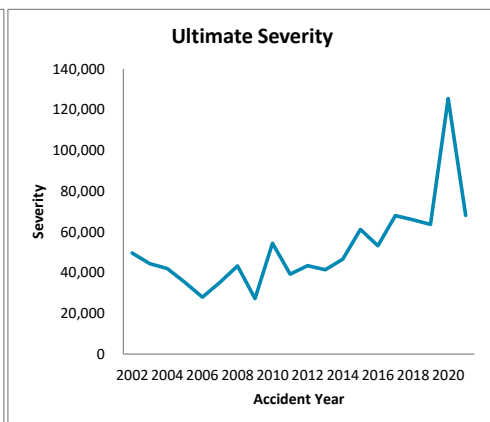
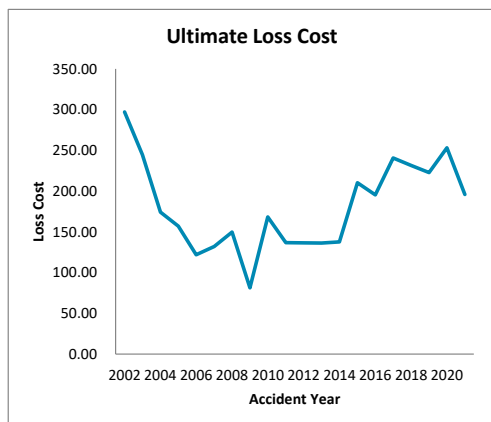
Reported Incurred Claim Amount and ALAE Loss Development Selections  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Selected Age-to-Ultimate Development Factors						
Maturity	Third Party Liability - Bodily Injury	Third Party Liability - Property Damage	Third Party Liability - Direct Compensation	Accident Benefits - Total	Collision	Comprehensive - Total
6.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	Wght Avg: 6 Semester	Wght Avg: 10 Semesters
12.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 10 Semesters	Wght Avg: 10 Semesters
18.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 10 Semesters
24.0	Wght Avg: 10 Semesters	Avg: 6 Semesters ex hi/lo	Wght Avg: 6 Semester	Wght Avg: All Semesters	1	Wght Avg: 10 Semesters
30.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: 6 Semester	1	Wght Avg: 10 Semesters
36.0	Wght Avg: 10 Semesters	Avg: 6 Semesters ex hi/lo	Wght Avg: 6 Semester	Wght Avg: All Semesters	1	1
42.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Avg: All Semester ex hi/lo	1	1
48.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	1	1
54.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	Wght Avg: 6 Semester	Wght Avg: All Semesters	1	1
60.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
66.0	Wght Avg: 10 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
72.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
78.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
84.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
90.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
96.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
102.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
108.0	Wght Avg: 20 Semesters	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
114.0	1	Wght Avg: 6 Semester	1	Wght Avg: All Semesters	1	1
120.0	1	Wght Avg: 6 Semester	1	1	1	1
126.0	1	Wght Avg: 6 Semester	1	1	1	1
132.0	1	Wght Avg: 6 Semester	1	1	1	1
138.0	1	Wght Avg: 6 Semester	1	1	1	1
144.0	1	Wght Avg: 6 Semester	1	1	1	1
150.0	1	Wght Avg: 6 Semester	1	1	1	1
156.0	1	Wght Avg: 6 Semester	1	1	1	1
162.0	1	Wght Avg: 6 Semester	1	1	1	1
168.0	1	Wght Avg: 6 Semester	1	1	1	1
174.0	1	Wght Avg: 6 Semester	1	1	1	1
180.0	1	Wght Avg: 6 Semester	1	1	1	1
186.0	1	Wght Avg: 6 Semester	1	1	1	1
192.0	1	Wght Avg: 6 Semester	1	1	1	1
198.0	1	Wght Avg: 6 Semester	1	1	1	1
204.0	1	Wght Avg: 6 Semester	1	1	1	1
210.0	1	1	1	1	1	1
216.0	1	1	1	1	1	1
222.0	1	1	1	1	1	1
228.0	1	1	1	1	1	1
234.0	1	1	1	1	1	1

Province of Nova Scotia  
Third Party Liability - Bodily Injury  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

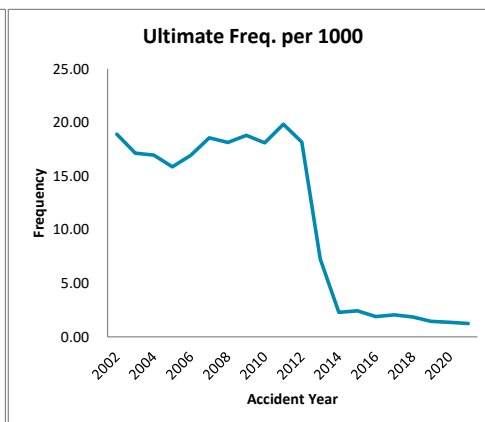
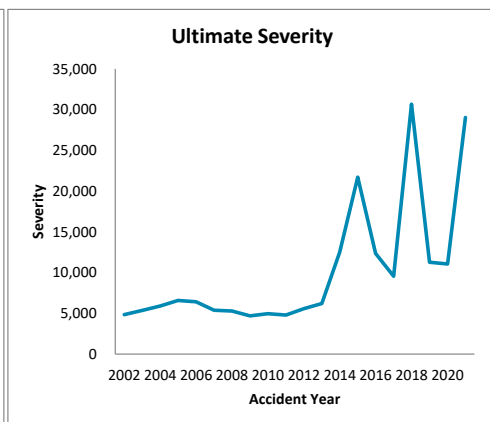
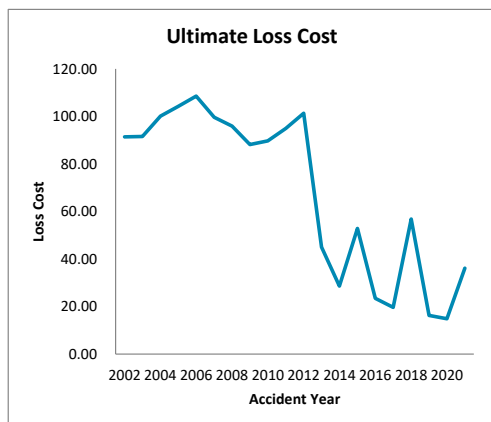
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and LAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	45,745	274	12,622	1.077	13,593	297.16		49,611		5.99	
2003	228.0	45,572	251	10,339	1.078	11,146	244.58	-17.7%	44,405	-10.5%	5.51	-8.0%
2004	216.0	47,458	197	7,254	1.140	8,270	174.25	-28.8%	41,979	-5.5%	4.15	-24.6%
2005	204.0	49,433	220	7,076	1.097	7,760	156.98	-9.9%	35,272	-16.0%	4.45	7.2%
2006	192.0	49,718	217	5,517	1.099	6,061	121.91	-22.3%	27,930	-20.8%	4.36	-1.9%
2007	180.0	50,147	188	5,991	1.105	6,620	132.00	8.3%	35,210	26.1%	3.75	-14.1%
2008	168.0	50,923	176	6,966	1.095	7,625	149.73	13.4%	43,322	23.0%	3.46	-7.8%
2009	156.0	51,253	153	3,769	1.106	4,167	81.30	-45.7%	27,233	-37.1%	2.99	-13.6%
2010	144.0	50,791	157	7,718	1.108	8,549	168.32	107.1%	54,453	100.0%	3.09	3.5%
2011	132.0	51,979	181	6,426	1.105	7,102	136.63	-18.8%	39,236	-27.9%	3.48	12.7%
2012	120.0	54,009	170	6,758	1.090	7,368	136.42	-0.1%	43,342	10.5%	3.15	-9.6%
2013	108.0	54,085	178	6,736	1.094	7,366	136.19	-0.2%	41,381	-4.5%	3.29	4.6%
2014	96.0	54,463	161	6,901	1.086	7,495	137.61	1.0%	46,552	12.5%	2.96	-10.2%
2015	84.0	55,793	192	10,905	1.076	11,731	210.27	52.8%	61,155	31.4%	3.44	16.3%
2016	72.0	56,807	209	10,139	1.095	11,099	195.38	-7.1%	53,203	-13.0%	3.67	6.8%
2017	60.0	57,195	203	12,620	1.091	13,767	240.71	23.2%	67,946	27.7%	3.54	-3.5%
2018	48.0	57,711	203	12,220	1.093	13,360	231.50	-3.8%	65,945	-2.9%	3.51	-0.9%
2019	36.0	56,498	198	11,466	1.098	12,590	222.84	-3.7%	63,690	-3.4%	3.50	-0.3%
2020	24.0	49,172	99	11,163	1.115	12,444	253.07	13.6%	125,451	97.0%	2.02	-42.3%
2021	12.0	49,088	141	8,541	1.126	9,614	195.85	-22.6%	68,046	-45.8%	2.88	42.7%
Total		1,037,840	3,767	171,128		187,726						



Province of Nova Scotia  
Third Party Liability - Property Damage  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and LAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	45,745	865	3,881	1.077	4,179	91.36		4,832		18.91	
2003	228.0	45,572	781	3,872	1.078	4,174	91.59	0.2%	5,344	10.6%	17.14	-9.4%
2004	216.0	47,458	805	4,167	1.140	4,750	100.10	9.3%	5,901	10.4%	16.96	-1.0%
2005	204.0	49,433	784	4,699	1.097	5,153	104.24	4.1%	6,572	11.4%	15.86	-6.5%
2006	192.0	49,718	842	4,913	1.099	5,397	108.55	4.1%	6,409	-2.5%	16.94	6.8%
2007	180.0	50,147	931	4,523	1.105	4,998	99.66	-8.2%	5,368	-16.2%	18.57	9.6%
2008	168.0	50,923	924	4,464	1.095	4,885	95.94	-3.7%	5,287	-1.5%	18.15	-2.3%
2009	156.0	51,253	964	4,089	1.106	4,520	88.20	-8.1%	4,689	-11.3%	18.81	3.7%
2010	144.0	50,791	919	4,114	1.108	4,557	89.72	1.7%	4,959	5.7%	18.09	-3.8%
2011	132.0	51,979	1,031	4,464	1.105	4,934	94.92	5.8%	4,786	-3.5%	19.83	9.6%
2012	120.0	54,009	982	5,021	1.090	5,474	101.36	6.8%	5,575	16.5%	18.18	-8.3%
2013	108.0	54,085	393	2,228	1.094	2,437	45.05	-55.6%	6,200	11.2%	7.27	-60.0%
2014	96.0	54,463	125	1,437	1.086	1,560	28.65	-36.4%	12,489	101.4%	2.29	-68.4%
2015	84.0	55,793	136	2,742	1.076	2,950	52.87	84.5%	21,700	73.8%	2.44	6.2%
2016	72.0	56,807	108	1,216	1.095	1,331	23.44	-55.7%	12,351	-43.1%	1.90	-22.1%
2017	60.0	57,195	118	1,030	1.091	1,123	19.64	-16.2%	9,549	-22.7%	2.06	8.4%
2018	48.0	57,711	107	2,999	1.093	3,279	56.82	189.3%	30,667	221.1%	1.85	-9.9%
2019	36.0	56,498	82	838	1.098	920	16.29	-71.3%	11,281	-63.2%	1.44	-22.1%
2020	24.0	49,172	66	656	1.115	731	14.87	-8.7%	11,049	-2.1%	1.35	-6.8%
2021	12.0	49,088	61	1,576	1.126	1,774	36.15	143.2%	29,039	162.8%	1.24	-7.5%
Total		1,037,840	11,023	62,929		69,128						

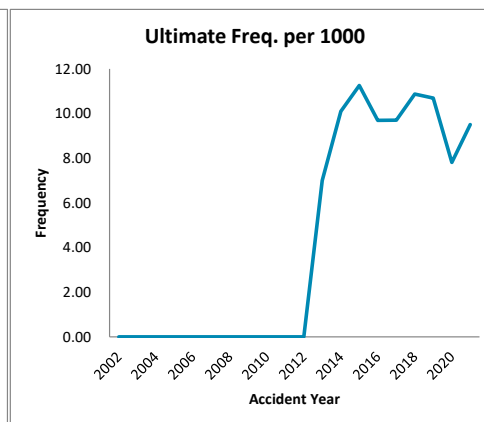
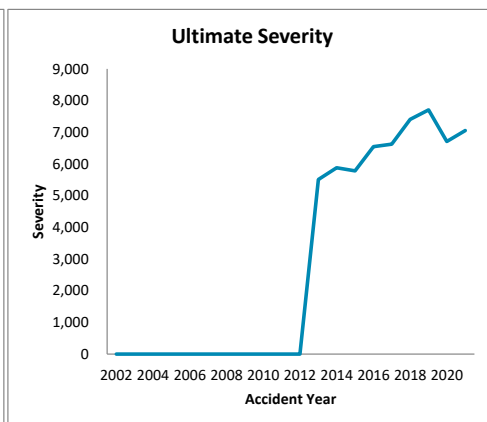
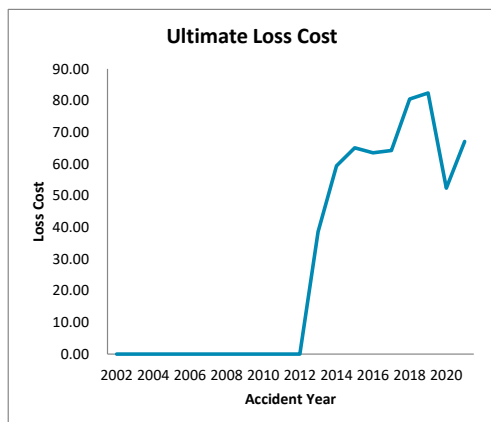




Province of Nova Scotia  
Third Party Liability - Direct Compensation  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

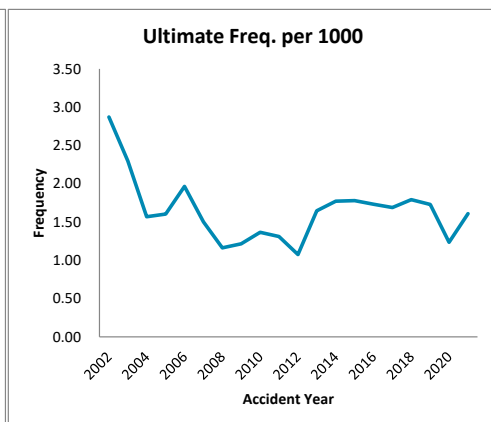
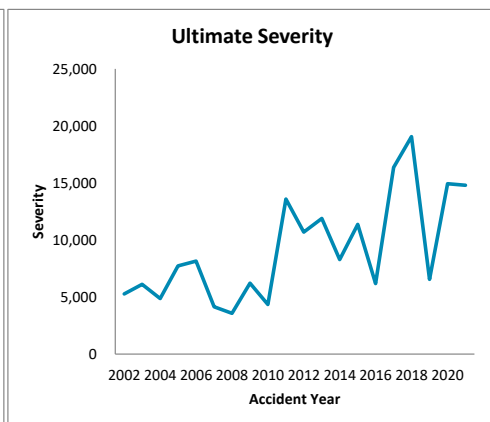
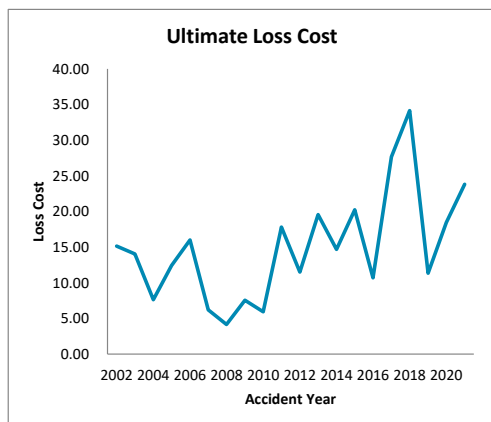
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and ALAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	45,745	0	0	1.077	0	0.00		#DIV/0!		0.00	
2003	228.0	45,572	0	0	1.078	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2004	216.0	47,458	0	0	1.140	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2005	204.0	49,433	0	0	1.097	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2006	192.0	49,718	0	0	1.099	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2007	180.0	50,147	0	0	1.105	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2008	168.0	50,923	0	0	1.095	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2009	156.0	51,253	0	0	1.106	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2010	144.0	50,791	0	0	1.108	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2011	132.0	51,979	0	0	1.105	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2012	120.0	54,009	0	0	1.090	0	0.00	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
2013	108.0	54,085	379	1,911	1.094	2,089	38.63	#DIV/0!	5,512	#DIV/0!	7.01	#DIV/0!
2014	96.0	54,463	550	2,979	1.086	3,235	59.40	53.8%	5,882	6.7%	10.10	44.1%
2015	84.0	55,793	628	3,375	1.076	3,630	65.07	9.5%	5,781	-1.7%	11.26	11.5%
2016	72.0	56,807	551	3,296	1.095	3,608	63.52	-2.4%	6,548	13.3%	9.70	-13.8%
2017	60.0	57,195	555	3,369	1.091	3,675	64.25	1.2%	6,624	1.1%	9.70	0.0%
2018	48.0	57,711	627	4,250	1.093	4,646	80.50	25.3%	7,405	11.8%	10.87	12.1%
2019	36.0	56,498	604	4,240	1.098	4,655	82.40	2.4%	7,706	4.1%	10.69	-1.6%
2020	24.0	49,172	384	2,311	1.115	2,576	52.38	-36.4%	6,708	-13.0%	7.81	-27.0%
2021	12.0	49,088	467	2,925	1.126	3,293	67.08	28.0%	7,055	5.2%	9.51	21.7%
Total		1,037,840	4,745	28,654		31,408						



Province of Nova Scotia  
Accident Benefits - Total  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

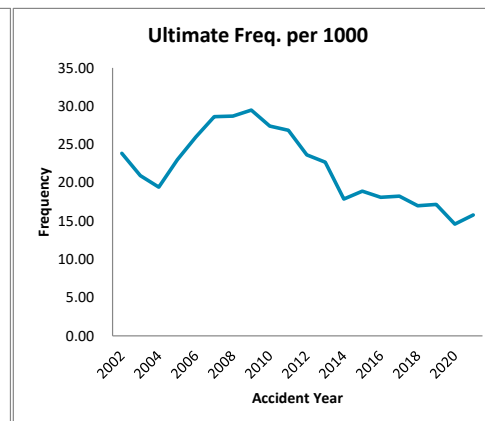
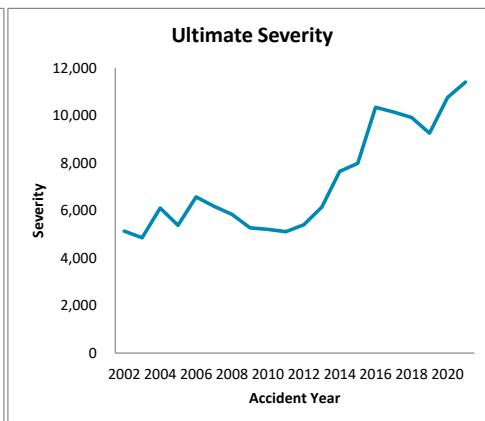
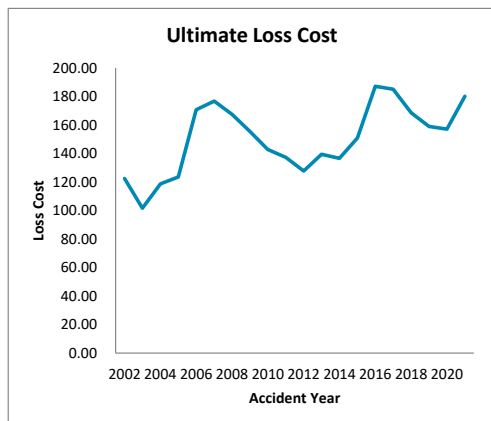
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and LAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	44,926	129	632	1.077	681	15.15		5,278		2.87	
2003	228.0	44,877	103	584	1.078	630	14.04	-7.4%	6,115	15.9%	2.30	-20.1%
2004	216.0	46,522	73	311	1.140	355	7.63	-45.6%	4,862	-20.5%	1.57	-31.6%
2005	204.0	48,596	78	550	1.097	604	12.42	62.8%	7,738	59.2%	1.61	2.3%
2006	192.0	48,838	96	712	1.099	782	16.01	28.9%	8,144	5.2%	1.97	22.5%
2007	180.0	49,311	74	277	1.105	306	6.21	-61.2%	4,139	-49.2%	1.50	-23.7%
2008	168.0	50,730	59	193	1.095	211	4.16	-33.1%	3,573	-13.7%	1.16	-22.5%
2009	156.0	51,040	62	349	1.106	386	7.56	81.9%	6,223	74.2%	1.21	4.4%
2010	144.0	50,541	69	271	1.108	300	5.93	-21.5%	4,346	-30.2%	1.37	12.4%
2011	132.0	51,856	68	836	1.105	924	17.82	200.3%	13,586	212.6%	1.31	-3.9%
2012	120.0	53,949	58	569	1.090	620	11.50	-35.4%	10,698	-21.3%	1.08	-18.0%
2013	108.0	54,042	89	967	1.094	1,057	19.57	70.1%	11,880	11.1%	1.65	53.2%
2014	96.0	54,142	96	732	1.086	795	14.68	-25.0%	8,280	-30.3%	1.77	7.7%
2015	84.0	55,049	98	1,035	1.076	1,114	20.23	37.8%	11,363	37.2%	1.78	0.4%
2016	72.0	56,041	97	548	1.095	600	10.71	-47.0%	6,189	-45.5%	1.73	-2.8%
2017	60.0	56,828	96	1,441	1.091	1,571	27.65	158.2%	16,363	164.4%	1.69	-2.4%
2018	48.0	57,624	103	1,800	1.093	1,968	34.14	23.5%	19,060	16.5%	1.79	6.0%
2019	36.0	56,436	98	583	1.098	640	11.34	-66.8%	6,558	-65.6%	1.73	-3.5%
2020	24.0	49,075	61	813	1.115	906	18.46	62.8%	14,932	127.7%	1.24	-28.5%
2021	12.0	49,012	79	1,037	1.126	1,167	23.81	29.0%	14,806	-0.8%	1.61	30.1%
Total		1,029,435	1,685	14,238		15,615						



Province of Nova Scotia  
Collision  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

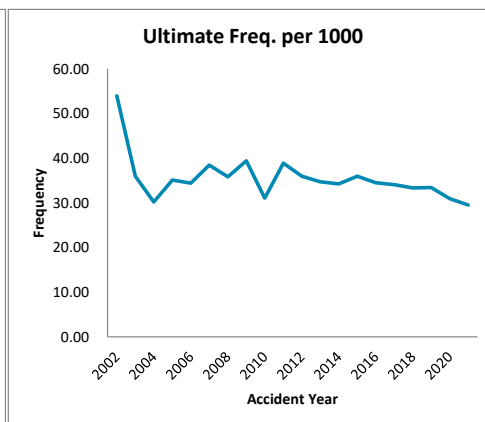
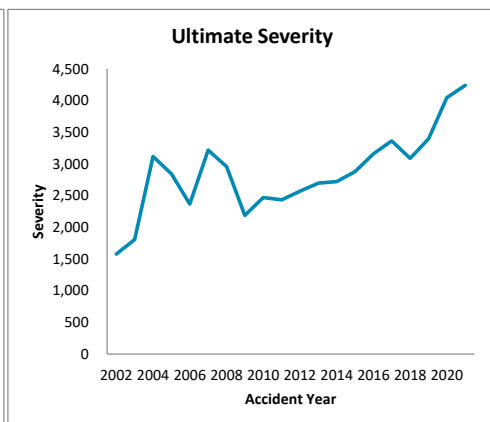
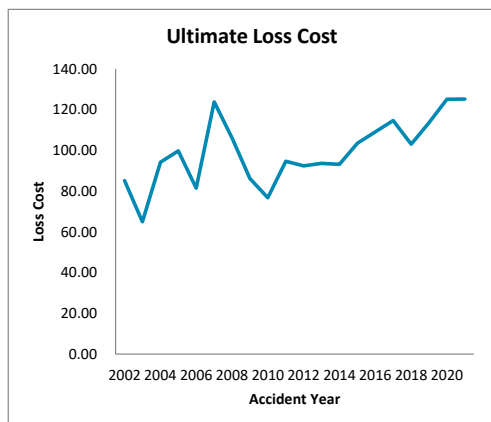
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and ALAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	12,453	297	1,416	1.077	1,525	122.46		5,134		23.85	
2003	228.0	12,034	252	1,134	1.078	1,223	101.61	-17.0%	4,852	-5.5%	20.94	-12.2%
2004	216.0	12,149	236	1,264	1.140	1,441	118.60	16.7%	6,106	25.8%	19.43	-7.2%
2005	204.0	12,521	288	1,411	1.097	1,547	123.56	4.2%	5,372	-12.0%	23.00	18.4%
2006	192.0	12,975	337	2,015	1.099	2,213	170.58	38.1%	6,567	22.3%	25.97	12.9%
2007	180.0	13,663	391	2,185	1.105	2,415	176.74	3.6%	6,176	-6.0%	28.62	10.2%
2008	168.0	13,970	401	2,138	1.095	2,340	167.47	-5.2%	5,834	-5.5%	28.70	0.3%
2009	156.0	14,007	413	1,970	1.106	2,177	155.46	-7.2%	5,272	-9.6%	29.49	2.7%
2010	144.0	14,198	389	1,829	1.108	2,026	142.70	-8.2%	5,208	-1.2%	27.40	-7.1%
2011	132.0	14,457	388	1,795	1.105	1,983	137.20	-3.9%	5,112	-1.9%	26.84	-2.0%
2012	120.0	14,767	349	1,729	1.090	1,885	127.67	-6.9%	5,402	5.7%	23.63	-11.9%
2013	108.0	15,035	341	1,916	1.094	2,095	139.37	9.2%	6,145	13.8%	22.68	-4.0%
2014	96.0	15,393	275	1,937	1.086	2,103	136.64	-2.0%	7,648	24.5%	17.87	-21.2%
2015	84.0	15,874	300	2,226	1.076	2,394	150.84	10.4%	7,981	4.4%	18.90	5.8%
2016	72.0	16,367	296	2,797	1.095	3,062	187.10	24.0%	10,346	29.6%	18.08	-4.3%
2017	60.0	16,926	309	2,872	1.091	3,133	185.11	-1.1%	10,140	-2.0%	18.26	0.9%
2018	48.0	17,420	296	2,684	1.093	2,934	168.43	-9.0%	9,912	-2.2%	16.99	-6.9%
2019	36.0	17,241	296	2,494	1.098	2,739	158.87	-5.7%	9,253	-6.7%	17.17	1.0%
2020	24.0	16,920	247	2,383	1.115	2,656	156.99	-1.2%	10,755	16.2%	14.60	-15.0%
2021	12.0	17,934	283	2,870	1.126	3,230	180.12	14.7%	11,403	6.0%	15.80	8.2%
Total		296,303	6,384	41,064		45,124						



Province of Nova Scotia  
Comprehensive - Total  
Commercial Vehicles (including Fleets)

Loss Cost Summary  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Maturity (in Months)	Earned Car Years	Ultimate Claim Counts	Ultimate Claims and ALAE (000)	ULAE Adjustment	Ultimate Losses & LAE (000)	Ultimate Loss Cost	% Change Accident Years	Ultimate Severity	% Change Accident Years	Ultimate Freq. per 1000	% Change Accident Years
2002	240.0	17,479	943	1,381	1.077	1,488	85.12		1,578		53.95	
2003	228.0	16,845	606	1,015	1.078	1,094	64.95	-23.7%	1,805	14.4%	35.97	-33.3%
2004	216.0	16,618	502	1,374	1.140	1,566	94.23	45.1%	3,119	72.8%	30.21	-16.0%
2005	204.0	16,664	585	1,516	1.097	1,663	99.77	5.9%	2,842	-8.9%	35.11	16.2%
2006	192.0	17,083	588	1,267	1.099	1,392	81.49	-18.3%	2,368	-16.7%	34.42	-2.0%
2007	180.0	17,627	678	1,975	1.105	2,182	123.80	51.9%	3,219	35.9%	38.46	11.7%
2008	168.0	18,020	646	1,746	1.095	1,911	106.03	-14.3%	2,958	-8.1%	35.85	-6.8%
2009	156.0	18,192	717	1,419	1.106	1,568	86.21	-18.7%	2,187	-26.1%	39.41	9.9%
2010	144.0	18,531	576	1,285	1.108	1,423	76.79	-10.9%	2,470	12.9%	31.08	-21.1%
2011	132.0	18,857	733	1,614	1.105	1,784	94.61	23.2%	2,434	-1.5%	38.87	25.1%
2012	120.0	19,235	692	1,631	1.090	1,778	92.42	-2.3%	2,569	5.5%	35.98	-7.4%
2013	108.0	19,451	675	1,665	1.094	1,820	93.59	1.3%	2,697	5.0%	34.70	-3.5%
2014	96.0	19,827	679	1,701	1.086	1,848	93.20	-0.4%	2,721	0.9%	34.25	-1.3%
2015	84.0	20,358	732	1,959	1.076	2,108	103.54	11.1%	2,880	5.8%	35.96	5.0%
2016	72.0	21,021	725	2,094	1.095	2,292	109.05	5.3%	3,162	9.8%	34.49	-4.1%
2017	60.0	21,568	735	2,267	1.091	2,473	114.65	5.1%	3,364	6.4%	34.08	-1.2%
2018	48.0	21,971	733	2,070	1.093	2,263	103.02	-10.1%	3,088	-8.2%	33.36	-2.1%
2019	36.0	21,501	719	2,224	1.098	2,442	113.58	10.3%	3,397	10.0%	33.44	0.2%
2020	24.0	20,830	644	2,337	1.115	2,605	125.07	10.1%	4,045	19.1%	30.92	-7.5%
2021	12.0	21,656	639	2,408	1.126	2,711	125.18	0.1%	4,241	4.9%	29.52	-4.5%
Total		383,332	13,547	34,948		38,411						



Province of Nova Scotia  
Third Party Liability - Bodily Injury  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(4) * (5)	Prior	(6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	5,427	5,427	1.000	5,427	5,427	0
2002.2	234.0	7,194	7,194	1.000	7,194	7,194	0
2003.1	228.0	4,487	4,487	1.000	4,487	4,487	0
2003.2	222.0	5,852	5,852	1.000	5,852	5,852	0
2004.1	216.0	3,646	3,646	1.000	3,646	3,646	0
2004.2	210.0	3,608	3,608	1.000	3,608	3,608	0
2005.1	204.0	2,221	2,221	1.000	2,221	2,221	0
2005.2	198.0	4,855	4,855	1.000	4,855	4,855	0
2006.1	192.0	3,196	3,196	1.000	3,196	3,196	0
2006.2	186.0	2,291	2,322	1.000	2,322	2,321	1
2007.1	180.0	2,830	2,830	1.000	2,830	2,830	0
2007.2	174.0	3,161	3,161	1.000	3,161	3,161	0
2008.1	168.0	3,912	3,912	1.000	3,912	3,912	0
2008.2	162.0	3,054	3,054	1.000	3,054	3,054	0
2009.1	156.0	2,766	2,766	1.000	2,766	2,766	0
2009.2	150.0	1,003	1,003	1.000	1,003	1,003	0
2010.1	144.0	2,860	3,374	1.000	3,374	3,293	81
2010.2	138.0	4,344	4,344	1.000	4,344	4,344	0
2011.1	132.0	3,370	3,370	1.000	3,370	3,362	8
2011.2	126.0	3,055	3,055	1.000	3,055	3,055	0
2012.1	120.0	2,117	2,137	1.000	2,137	2,130	6
2012.2	114.0	3,883	4,621	1.000	4,621	4,614	7
2013.1	108.0	2,120	2,120	0.997	2,113	2,098	15
2013.2	102.0	2,883	4,652	0.994	4,623	4,660	(38)
2014.1	96.0	1,565	1,854	0.991	1,839	1,785	54
2014.2	90.0	4,652	5,066	0.999	5,062	5,088	(25)
2015.1	84.0	4,060	4,375	1.013	4,432	4,381	51
2015.2	78.0	5,432	6,333	1.022	6,473	6,407	66
2016.1	72.0	3,125	3,700	1.034	3,828	3,497	331
2016.2	66.0	4,688	6,095	1.035	6,311	5,868	443
2017.1	60.0	4,497	6,289	1.071	6,737	6,220	518
2017.2	54.0	3,638	5,466	1.076	5,883	5,562	321
2018.1	48.0	2,638	5,558	1.108	6,155	6,063	92
2018.2	42.0	2,909	5,233	1.159	6,065	5,342	723
2019.1	36.0	1,696	4,433	1.199	5,316	4,351	965
2019.2	30.0	2,129	4,487	1.371	6,150	5,525	625
2020.1	24.0	480	2,869	1.511	4,335	4,396	(61)
2020.2	18.0	206	4,028	1.695	6,829	5,527	1,301
2021.1	12.0	107	1,535	1.872	2,873		
2021.2	6.0	32	2,105	2.692	5,668		
Total		125,992	156,634		171,128	157,103	5,484

Province of Nova Scotia  
Third Party Liability - Property Damage  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(4) * (5)	Prior	(6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	1,790	1,790	1.000	1,790	1,790	0
2002.2	234.0	2,091	2,091	1.000	2,091	2,091	0
2003.1	228.0	2,117	2,117	1.000	2,117	2,117	0
2003.2	222.0	1,754	1,754	1.000	1,754	1,754	0
2004.1	216.0	1,457	1,457	1.000	1,457	1,457	0
2004.2	210.0	2,710	2,710	1.000	2,710	2,710	0
2005.1	204.0	2,910	2,910	1.000	2,910	2,910	0
2005.2	198.0	1,789	1,789	1.000	1,789	1,789	0
2006.1	192.0	3,059	3,059	1.000	3,059	3,059	0
2006.2	186.0	1,854	1,854	1.000	1,854	1,854	0
2007.1	180.0	2,091	2,091	1.000	2,091	2,091	0
2007.2	174.0	2,432	2,432	1.000	2,432	2,432	0
2008.1	168.0	2,295	2,295	1.000	2,295	2,295	0
2008.2	162.0	2,168	2,168	1.000	2,168	2,168	0
2009.1	156.0	2,056	2,056	1.000	2,056	2,056	0
2009.2	150.0	2,033	2,033	1.000	2,033	2,033	0
2010.1	144.0	1,709	1,709	1.000	1,709	1,709	0
2010.2	138.0	2,405	2,405	1.000	2,405	2,405	0
2011.1	132.0	2,206	2,218	1.000	2,218	2,226	(8)
2011.2	126.0	2,247	2,247	1.000	2,247	2,255	(8)
2012.1	120.0	2,045	2,045	1.000	2,045	2,053	(8)
2012.2	114.0	2,976	2,976	1.000	2,976	2,987	(11)
2013.1	108.0	1,776	1,776	1.000	1,776	1,783	(7)
2013.2	102.0	452	452	1.000	452	454	(2)
2014.1	96.0	849	849	1.000	849	852	(3)
2014.2	90.0	588	588	1.000	588	590	(2)
2015.1	84.0	1,930	1,930	1.000	1,929	1,860	68
2015.2	78.0	814	814	1.000	813	782	31
2016.1	72.0	454	454	0.947	430	437	(6)
2016.2	66.0	834	834	0.943	786	805	(19)
2017.1	60.0	500	500	0.943	471	481	(10)
2017.2	54.0	592	592	0.943	559	588	(30)
2018.1	48.0	1,912	2,004	0.939	1,881	1,760	121
2018.2	42.0	1,084	1,189	0.940	1,118	996	122
2019.1	36.0	633	633	0.936	593	627	(34)
2019.2	30.0	255	260	0.940	245	299	(55)
2020.1	24.0	413	448	0.927	415	564	(149)
2020.2	18.0	188	246	0.979	241	317	(77)
2021.1	12.0	482	768	0.983	755		
2021.2	6.0	125	726	1.132	822		
<b>Total</b>		<b>62,075</b>	<b>63,269</b>		<b>62,929</b>	<b>61,438</b>	<b>(86)</b>

Province of Nova Scotia  
Third Party Liability - Direct Compensation  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(4) * (5)	Prior	(6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	0	0	1.000	0	0	0
2002.2	234.0	0	0	1.000	0	0	0
2003.1	228.0	0	0	1.000	0	0	0
2003.2	222.0	0	0	1.000	0	0	0
2004.1	216.0	0	0	1.000	0	0	0
2004.2	210.0	0	0	1.000	0	0	0
2005.1	204.0	0	0	1.000	0	0	0
2005.2	198.0	0	0	1.000	0	0	0
2006.1	192.0	0	0	1.000	0	0	0
2006.2	186.0	0	0	1.000	0	0	0
2007.1	180.0	0	0	1.000	0	0	0
2007.2	174.0	0	0	1.000	0	0	0
2008.1	168.0	0	0	1.000	0	0	0
2008.2	162.0	0	0	1.000	0	0	0
2009.1	156.0	0	0	1.000	0	0	0
2009.2	150.0	0	0	1.000	0	0	0
2010.1	144.0	0	0	1.000	0	0	0
2010.2	138.0	0	0	1.000	0	0	0
2011.1	132.0	0	0	1.000	0	0	0
2011.2	126.0	0	0	1.000	0	0	0
2012.1	120.0	0	0	1.000	0	0	0
2012.2	114.0	0	0	1.000	0	0	0
2013.1	108.0	433	433	1.000	433	433	0
2013.2	102.0	1,477	1,477	1.000	1,477	1,477	0
2014.1	96.0	1,473	1,473	1.000	1,473	1,473	0
2014.2	90.0	1,506	1,506	1.000	1,506	1,506	0
2015.1	84.0	1,647	1,647	1.000	1,647	1,650	(3)
2015.2	78.0	1,727	1,727	1.000	1,727	1,727	0
2016.1	72.0	1,504	1,504	1.000	1,504	1,504	0
2016.2	66.0	1,792	1,792	1.000	1,792	1,792	0
2017.1	60.0	1,706	1,707	1.000	1,707	1,714	(8)
2017.2	54.0	1,654	1,663	0.999	1,662	1,662	(0)
2018.1	48.0	2,314	2,314	0.999	2,312	2,310	2
2018.2	42.0	1,940	1,940	0.999	1,937	1,950	(13)
2019.1	36.0	2,019	2,019	1.002	2,024	2,043	(20)
2019.2	30.0	2,106	2,202	1.007	2,216	2,163	53
2020.1	24.0	1,049	1,049	1.009	1,059	1,081	(22)
2020.2	18.0	1,227	1,244	1.006	1,252	1,221	31
2021.1	12.0	1,153	1,169	0.996	1,165		
2021.2	6.0	1,131	1,729	1.018	1,760		
Total		27,858	28,596		28,654	25,708	21

Province of Nova Scotia  
Accident Benefits - Total  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6) (4) * (5)	(7) Prior	(8) (6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	350	350	1.000	350	350	0
2002.2	234.0	282	282	1.000	282	282	0
2003.1	228.0	331	331	1.000	331	331	0
2003.2	222.0	253	253	1.000	253	253	0
2004.1	216.0	69	69	1.000	69	69	0
2004.2	210.0	242	242	1.000	242	242	0
2005.1	204.0	233	233	1.000	233	233	0
2005.2	198.0	317	317	1.000	317	317	0
2006.1	192.0	397	397	1.000	397	397	0
2006.2	186.0	314	314	1.000	314	314	0
2007.1	180.0	123	123	1.000	123	123	0
2007.2	174.0	154	154	1.000	154	154	0
2008.1	168.0	56	56	1.000	56	56	0
2008.2	162.0	136	136	1.000	136	136	0
2009.1	156.0	174	174	1.000	174	174	0
2009.2	150.0	175	175	1.000	175	175	0
2010.1	144.0	97	97	1.000	97	97	0
2010.2	138.0	173	173	1.000	173	173	0
2011.1	132.0	422	422	1.000	422	422	0
2011.2	126.0	414	414	1.000	414	414	0
2012.1	120.0	421	421	1.000	421	422	(1)
2012.2	114.0	148	148	1.000	148	148	1
2013.1	108.0	579	579	1.001	580	576	3
2013.2	102.0	390	390	0.993	387	389	(2)
2014.1	96.0	160	160	0.993	159	161	(2)
2014.2	90.0	570	570	1.005	573	568	5
2015.1	84.0	397	397	1.006	400	392	8
2015.2	78.0	596	638	0.996	635	632	3
2016.1	72.0	253	253	1.001	253	252	1
2016.2	66.0	294	294	1.005	295	291	4
2017.1	60.0	572	778	0.997	776	781	(6)
2017.2	54.0	418	671	0.991	665	709	(45)
2018.1	48.0	408	621	1.006	625	498	127
2018.2	42.0	499	1,110	1.058	1,175	1,048	127
2019.1	36.0	184	198	1.109	220	274	(54)
2019.2	30.0	245	321	1.132	363	475	(112)
2020.1	24.0	127	160	1.386	222	239	(17)
2020.2	18.0	238	418	1.415	591	459	132
2021.1	12.0	131	353	1.478	522		
2021.2	6.0	49	358	1.440	515		
<b>Total</b>		<b>11,395</b>	<b>13,552</b>		<b>14,238</b>	<b>13,032</b>	<b>170</b>



Province of Nova Scotia  
Collision  
Commercial Vehicles (including Fleets)  
Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(4) * (5)	Prior	(6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	723	723	1.000	723	723	0
2002.2	234.0	693	693	1.000	693	693	0
2003.1	228.0	493	493	1.000	493	493	0
2003.2	222.0	642	642	1.000	642	642	0
2004.1	216.0	603	603	1.000	603	603	0
2004.2	210.0	661	661	1.000	661	661	0
2005.1	204.0	695	695	1.000	695	695	0
2005.2	198.0	715	715	1.000	715	715	0
2006.1	192.0	987	987	1.000	987	987	0
2006.2	186.0	1,028	1,028	1.000	1,028	1,028	0
2007.1	180.0	1,208	1,208	1.000	1,208	1,208	0
2007.2	174.0	978	978	1.000	978	978	0
2008.1	168.0	1,091	1,091	1.000	1,091	1,091	0
2008.2	162.0	1,046	1,046	1.000	1,046	1,046	0
2009.1	156.0	974	974	1.000	974	974	0
2009.2	150.0	995	995	1.000	995	995	0
2010.1	144.0	759	759	1.000	759	759	0
2010.2	138.0	1,070	1,070	1.000	1,070	1,070	0
2011.1	132.0	935	935	1.000	935	935	0
2011.2	126.0	859	859	1.000	859	859	0
2012.1	120.0	924	924	1.000	924	924	0
2012.2	114.0	805	805	1.000	805	805	0
2013.1	108.0	946	946	1.000	946	946	0
2013.2	102.0	971	971	1.000	971	971	0
2014.1	96.0	1,021	1,021	1.000	1,021	1,021	0
2014.2	90.0	915	915	1.000	915	915	(0)
2015.1	84.0	1,140	1,140	1.000	1,140	1,140	0
2015.2	78.0	1,086	1,086	1.000	1,086	1,086	0
2016.1	72.0	1,264	1,264	1.000	1,264	1,265	(1)
2016.2	66.0	1,534	1,534	1.000	1,534	1,534	0
2017.1	60.0	1,410	1,411	1.000	1,411	1,403	7
2017.2	54.0	1,453	1,462	1.000	1,462	1,462	0
2018.1	48.0	1,536	1,545	1.000	1,545	1,530	15
2018.2	42.0	1,138	1,139	1.000	1,139	1,128	10
2019.1	36.0	1,353	1,353	1.000	1,353	1,348	6
2019.2	30.0	1,141	1,141	1.000	1,141	1,128	13
2020.1	24.0	1,248	1,255	1.000	1,255	1,250	6
2020.2	18.0	1,128	1,134	0.995	1,128	1,065	63
2021.1	12.0	1,016	1,063	0.987	1,049		
2021.2	6.0	1,154	1,988	0.916	1,820		
Total		40,340	41,252		41,064	38,076	119

Province of Nova Scotia  
Comprehensive - Total  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Amount and ALAE Estimate  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(4) * (5)	Prior	(6) - (7)
<b>Reported Incurred Claim Amount and ALAE: Development Method</b>							
Accident Semester	Maturity (in Months)	Paid Claim Amount and ALAE (000)	Reported Incurred Claim Amount and ALAE (000)	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Amount and ALAE Estimate	Prior	Difference
2002.1	240.0	676	676	1.000	676	676	0
2002.2	234.0	705	705	1.000	705	705	0
2003.1	228.0	541	541	1.000	541	541	0
2003.2	222.0	474	474	1.000	474	474	0
2004.1	216.0	512	512	1.000	512	512	0
2004.2	210.0	862	862	1.000	862	862	0
2005.1	204.0	677	677	1.000	677	677	0
2005.2	198.0	839	839	1.000	839	839	0
2006.1	192.0	613	613	1.000	613	613	0
2006.2	186.0	654	654	1.000	654	654	0
2007.1	180.0	741	741	1.000	741	741	0
2007.2	174.0	1,234	1,234	1.000	1,234	1,234	0
2008.1	168.0	853	853	1.000	853	853	0
2008.2	162.0	892	892	1.000	892	892	0
2009.1	156.0	735	735	1.000	735	735	0
2009.2	150.0	684	684	1.000	684	684	0
2010.1	144.0	466	466	1.000	466	466	0
2010.2	138.0	818	818	1.000	818	818	0
2011.1	132.0	726	726	1.000	726	726	0
2011.2	126.0	888	888	1.000	888	888	0
2012.1	120.0	638	638	1.000	638	638	0
2012.2	114.0	992	992	1.000	992	992	0
2013.1	108.0	555	555	1.000	555	555	0
2013.2	102.0	1,109	1,109	1.000	1,109	1,109	1
2014.1	96.0	748	748	1.000	748	748	0
2014.2	90.0	954	954	1.000	954	954	0
2015.1	84.0	966	966	1.000	966	966	0
2015.2	78.0	994	994	1.000	994	994	0
2016.1	72.0	1,001	1,001	1.000	1,001	1,001	0
2016.2	66.0	1,093	1,093	1.000	1,093	1,093	0
2017.1	60.0	982	982	1.000	982	982	0
2017.2	54.0	1,285	1,285	1.000	1,285	1,285	0
2018.1	48.0	868	868	1.000	868	868	0
2018.2	42.0	1,202	1,202	1.000	1,202	1,205	(3)
2019.1	36.0	1,064	1,064	1.000	1,064	1,067	(3)
2019.2	30.0	1,161	1,161	0.999	1,160	1,149	11
2020.1	24.0	1,028	1,071	0.994	1,064	1,051	13
2020.2	18.0	1,280	1,282	0.993	1,273	1,220	53
2021.1	12.0	1,064	1,080	0.991	1,070		
2021.2	6.0	764	1,276	1.049	1,339		
<b>Total</b>		<b>34,340</b>	<b>34,912</b>		<b>34,948</b>	<b>32,468</b>	<b>72</b>

Province of Nova Scotia  
Third Party Liability - Bodily Injury  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Counts  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate		Prior	Difference
			Development Factors	Selected Ultimate Claim Counts		
2002.1	240.0	126	1.000	126	126	0
2002.2	234.0	148	1.000	148	148	0
2003.1	228.0	134	1.000	134	134	0
2003.2	222.0	117	1.000	117	117	0
2004.1	216.0	86	1.000	86	86	0
2004.2	210.0	111	1.000	111	111	0
2005.1	204.0	94	1.000	94	94	0
2005.2	198.0	126	1.000	126	126	0
2006.1	192.0	100	1.000	100	100	0
2006.2	186.0	117	1.000	117	117	0
2007.1	180.0	105	1.000	105	105	0
2007.2	174.0	83	1.000	83	83	0
2008.1	168.0	76	1.000	76	76	0
2008.2	162.0	100	1.000	100	100	0
2009.1	156.0	83	1.000	83	83	0
2009.2	150.0	70	1.000	70	70	0
2010.1	144.0	74	1.000	74	74	0
2010.2	138.0	83	1.000	83	83	0
2011.1	132.0	102	1.000	102	102	0
2011.2	126.0	79	1.000	79	79	0
2012.1	120.0	76	1.000	76	76	0
2012.2	114.0	94	1.000	94	94	0
2013.1	108.0	93	1.000	93	93	0
2013.2	102.0	85	1.000	85	85	0
2014.1	96.0	68	1.000	68	68	0
2014.2	90.0	93	1.000	93	93	0
2015.1	84.0	102	1.000	102	101	1
2015.2	78.0	90	0.998	90	89	1
2016.1	72.0	87	0.998	87	86	1
2016.2	66.0	122	0.998	122	120	1
2017.1	60.0	112	0.998	112	110	2
2017.2	54.0	91	0.998	91	90	1
2018.1	48.0	93	1.005	93	91	3
2018.2	42.0	109	1.001	109	106	4
2019.1	36.0	90	1.001	90	86	4
2019.2	30.0	106	1.015	108	100	7
2020.1	24.0	50	1.034	52	51	1
2020.2	18.0	45	1.055	47	43	4
2021.1	12.0	60	1.076	65		
2021.2	6.0	59	1.300	77		
Total		3,739		3,767	3,597	28

Province of Nova Scotia  
Third Party Liability - Property Damage  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Counts  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate		Prior	Difference
			Development Factors	Selected Ultimate Claim Counts		
2002.1	240.0	451	1.000	451	451	0
2002.2	234.0	414	1.000	414	414	0
2003.1	228.0	436	1.000	436	436	0
2003.2	222.0	345	1.000	345	345	0
2004.1	216.0	371	1.000	371	371	0
2004.2	210.0	434	1.000	434	434	0
2005.1	204.0	384	1.000	384	384	0
2005.2	198.0	400	1.000	400	400	0
2006.1	192.0	418	1.000	418	418	0
2006.2	186.0	424	1.000	424	424	0
2007.1	180.0	432	1.000	432	432	0
2007.2	174.0	499	1.000	499	499	0
2008.1	168.0	455	1.000	455	455	0
2008.2	162.0	469	1.000	469	469	0
2009.1	156.0	467	1.000	467	467	0
2009.2	150.0	497	1.000	497	497	0
2010.1	144.0	414	1.000	414	414	0
2010.2	138.0	505	1.000	505	505	0
2011.1	132.0	520	1.000	520	520	0
2011.2	126.0	511	1.000	511	511	0
2012.1	120.0	448	1.000	448	448	0
2012.2	114.0	534	1.000	534	534	0
2013.1	108.0	339	1.000	339	339	0
2013.2	102.0	54	1.000	54	54	0
2014.1	96.0	66	1.000	66	66	(0)
2014.2	90.0	59	1.000	59	59	(0)
2015.1	84.0	76	1.000	76	76	(0)
2015.2	78.0	60	1.000	60	60	0
2016.1	72.0	48	1.000	48	48	0
2016.2	66.0	60	0.997	60	60	(0)
2017.1	60.0	65	0.997	65	65	0
2017.2	54.0	53	0.997	53	55	(2)
2018.1	48.0	61	0.991	60	62	(1)
2018.2	42.0	47	0.989	46	47	(0)
2019.1	36.0	43	0.983	42	46	(4)
2019.2	30.0	40	0.983	39	40	(1)
2020.1	24.0	41	0.980	40	43	(3)
2020.2	18.0	27	0.963	26	26	(1)
2021.1	12.0	29	0.882	26		
2021.2	6.0	43	0.826	36		
Total		11,039		11,023	10,974	(12)

Province of Nova Scotia  
Third Party Liability - Direct Compensation  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Counts  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate		Prior	Difference
			Development Factors	Selected Ultimate Claim Counts		
2002.1	240.0	0	1.000	0	0	0
2002.2	234.0	0	1.000	0	0	0
2003.1	228.0	0	1.000	0	0	0
2003.2	222.0	0	1.000	0	0	0
2004.1	216.0	0	1.000	0	0	0
2004.2	210.0	0	1.000	0	0	0
2005.1	204.0	0	1.000	0	0	0
2005.2	198.0	0	1.000	0	0	0
2006.1	192.0	0	1.000	0	0	0
2006.2	186.0	0	1.000	0	0	0
2007.1	180.0	0	1.000	0	0	0
2007.2	174.0	0	1.000	0	0	0
2008.1	168.0	0	1.000	0	0	0
2008.2	162.0	0	1.000	0	0	0
2009.1	156.0	0	1.000	0	0	0
2009.2	150.0	0	1.000	0	0	0
2010.1	144.0	0	1.000	0	0	0
2010.2	138.0	0	1.000	0	0	0
2011.1	132.0	0	1.000	0	0	0
2011.2	126.0	0	1.000	0	0	0
2012.1	120.0	0	1.000	0	0	0
2012.2	114.0	0	1.000	0	0	0
2013.1	108.0	81	1.000	81	81	0
2013.2	102.0	298	1.000	298	298	0
2014.1	96.0	288	1.000	288	288	0
2014.2	90.0	262	1.000	262	262	0
2015.1	84.0	347	1.000	347	347	0
2015.2	78.0	281	1.000	281	281	0
2016.1	72.0	270	1.000	270	270	0
2016.2	66.0	281	1.000	281	281	0
2017.1	60.0	284	1.000	284	285	(1)
2017.2	54.0	271	0.999	271	271	(0)
2018.1	48.0	295	0.999	295	295	0
2018.2	42.0	333	0.999	333	332	0
2019.1	36.0	300	0.999	300	299	0
2019.2	30.0	305	0.998	304	302	2
2020.1	24.0	185	0.998	185	189	(5)
2020.2	18.0	200	0.997	199	198	2
2021.1	12.0	210	0.991	208		
2021.2	6.0	254	1.018	259		
Total		4,745		4,745	4,280	(1)

Province of Nova Scotia  
Accident Benefits - Total  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Counts  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate		Prior	Difference
			Development Factors	Selected Ultimate Claim Counts		
2002.1	240.0	60	1.000	60	60	0
2002.2	234.0	69	1.000	69	69	0
2003.1	228.0	57	1.000	57	57	0
2003.2	222.0	46	1.000	46	46	0
2004.1	216.0	24	1.000	24	24	0
2004.2	210.0	49	1.000	49	49	0
2005.1	204.0	41	1.000	41	41	0
2005.2	198.0	37	1.000	37	37	0
2006.1	192.0	53	1.000	53	53	0
2006.2	186.0	43	1.000	43	43	0
2007.1	180.0	34	1.000	34	34	0
2007.2	174.0	40	1.000	40	40	0
2008.1	168.0	21	1.000	21	21	0
2008.2	162.0	38	1.000	38	38	0
2009.1	156.0	24	1.000	24	24	0
2009.2	150.0	38	1.000	38	38	0
2010.1	144.0	27	1.000	27	27	0
2010.2	138.0	42	1.000	42	42	0
2011.1	132.0	30	1.000	30	30	0
2011.2	126.0	38	1.000	38	38	0
2012.1	120.0	29	1.000	29	29	0
2012.2	114.0	29	1.000	29	29	0
2013.1	108.0	44	1.000	44	44	0
2013.2	102.0	45	1.000	45	45	0
2014.1	96.0	40	1.000	40	40	0
2014.2	90.0	56	1.000	56	56	0
2015.1	84.0	41	1.000	41	42	(1)
2015.2	78.0	57	1.000	57	57	0
2016.1	72.0	46	1.000	46	46	0
2016.2	66.0	51	1.000	51	51	(0)
2017.1	60.0	49	1.000	49	49	(0)
2017.2	54.0	47	1.001	47	46	1
2018.1	48.0	45	1.003	45	45	0
2018.2	42.0	58	1.002	58	57	1
2019.1	36.0	49	0.998	49	49	(1)
2019.2	30.0	49	0.993	49	50	(1)
2020.1	24.0	27	0.989	27	24	3
2020.2	18.0	35	0.970	34	38	(4)
2021.1	12.0	44	0.924	41		
2021.2	6.0	45	0.848	38		
Total		1,697		1,685	1,607	(1)

Province of Nova Scotia  
Collision  
Commercial Vehicles (including Fleets)

**Selected Ultimate Claim Counts**  
**Data as of 12/31/21**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Counts	Prior	Difference
2002.1	240.0	153	1.000	153	153	0
2002.2	234.0	144	1.000	144	144	0
2003.1	228.0	131	1.000	131	131	0
2003.2	222.0	121	1.000	121	121	0
2004.1	216.0	120	1.000	120	120	0
2004.2	210.0	116	1.000	116	116	0
2005.1	204.0	145	1.000	145	145	0
2005.2	198.0	143	1.000	143	143	0
2006.1	192.0	159	1.000	159	159	0
2006.2	186.0	178	1.000	178	178	0
2007.1	180.0	188	1.000	188	188	0
2007.2	174.0	203	1.000	203	203	0
2008.1	168.0	202	1.000	202	202	0
2008.2	162.0	199	1.000	199	199	0
2009.1	156.0	205	1.000	205	205	0
2009.2	150.0	208	1.000	208	208	0
2010.1	144.0	178	1.000	178	178	0
2010.2	138.0	211	1.000	211	211	0
2011.1	132.0	198	1.000	198	198	0
2011.2	126.0	190	1.000	190	190	0
2012.1	120.0	178	1.000	178	178	0
2012.2	114.0	171	1.000	171	171	0
2013.1	108.0	187	1.000	187	187	0
2013.2	102.0	154	1.000	154	154	0
2014.1	96.0	147	1.000	147	147	0
2014.2	90.0	128	1.000	128	128	0
2015.1	84.0	171	1.000	171	171	0
2015.2	78.0	129	1.000	129	129	0
2016.1	72.0	148	1.000	148	148	0
2016.2	66.0	148	1.000	148	148	0
2017.1	60.0	168	1.000	168	167	1
2017.2	54.0	141	1.000	141	141	0
2018.1	48.0	168	1.000	168	168	0
2018.2	42.0	128	1.000	128	128	0
2019.1	36.0	153	1.000	153	154	(1)
2019.2	30.0	143	1.000	143	141	2
2020.1	24.0	129	1.000	129	129	(0)
2020.2	18.0	118	1.000	118	116	2
2021.1	12.0	139	0.988	137		
2021.2	6.0	161	0.906	146		
Total		6,401		6,384	6,097	4

Province of Nova Scotia  
Comprehensive - Total  
Commercial Vehicles (including Fleets)

Selected Ultimate Claim Counts  
Data as of 12/31/21

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(3) * (4)	Prior	(5) - (6)
Reported Claim Counts: Development Method						
Accident Semester	Maturity (in Months)	Reported Claim Counts	Selected Age-to-Ultimate Development Factors	Selected Ultimate Claim Counts	Prior	Difference
2002.1	240.0	510	1.000	510	510	0
2002.2	234.0	433	1.000	433	433	0
2003.1	228.0	343	1.000	343	343	0
2003.2	222.0	263	1.000	263	263	0
2004.1	216.0	259	1.000	259	259	0
2004.2	210.0	243	1.000	243	243	0
2005.1	204.0	289	1.000	289	289	0
2005.2	198.0	296	1.000	296	296	0
2006.1	192.0	287	1.000	287	287	0
2006.2	186.0	301	1.000	301	301	0
2007.1	180.0	319	1.000	319	319	0
2007.2	174.0	359	1.000	359	359	0
2008.1	168.0	334	1.000	334	334	0
2008.2	162.0	312	1.000	312	312	0
2009.1	156.0	367	1.000	367	367	0
2009.2	150.0	350	1.000	350	350	0
2010.1	144.0	285	1.000	285	285	0
2010.2	138.0	291	1.000	291	291	0
2011.1	132.0	342	1.000	342	342	0
2011.2	126.0	391	1.000	391	391	0
2012.1	120.0	322	1.000	322	322	0
2012.2	114.0	370	1.000	370	370	0
2013.1	108.0	314	1.000	314	314	0
2013.2	102.0	361	1.000	361	361	0
2014.1	96.0	347	1.000	347	347	0
2014.2	90.0	332	1.000	332	332	0
2015.1	84.0	395	1.000	395	395	0
2015.2	78.0	337	1.000	337	337	0
2016.1	72.0	379	1.000	379	379	0
2016.2	66.0	346	1.000	346	346	0
2017.1	60.0	344	1.000	344	344	0
2017.2	54.0	391	1.000	391	391	0
2018.1	48.0	362	1.000	362	362	0
2018.2	42.0	371	1.000	371	371	0
2019.1	36.0	334	1.000	334	337	(3)
2019.2	30.0	385	1.000	385	385	(0)
2020.1	24.0	310	1.001	310	309	1
2020.2	18.0	333	1.003	334	348	(14)
2021.1	12.0	282	1.009	284		
2021.2	6.0	306	1.159	355		
Total		13,495		13,547	12,924	(16)



# Bodily Injury

Coverage = BI

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.044 (CI = +/-0.022; p = 0.001)	0.511	+4.48%
Loss Cost	2006	0.051 (CI = +/-0.023; p = 0.000)	0.597	+5.28%
Loss Cost	2007	0.054 (CI = +/-0.026; p = 0.001)	0.573	+5.53%
Loss Cost	2008	0.058 (CI = +/-0.030; p = 0.001)	0.571	+6.01%
Loss Cost	2009	0.068 (CI = +/-0.032; p = 0.001)	0.632	+7.02%
Loss Cost	2010	0.052 (CI = +/-0.030; p = 0.003)	0.558	+5.35%
Loss Cost	2011	0.063 (CI = +/-0.033; p = 0.002)	0.645	+6.50%
Loss Cost	2012	0.064 (CI = +/-0.041; p = 0.007)	0.572	+6.57%
Loss Cost	2013	0.059 (CI = +/-0.052; p = 0.030)	0.444	+6.12%
Loss Cost	2014	0.045 (CI = +/-0.064; p = 0.137)	0.218	+4.57%
Loss Cost	2015	0.008 (CI = +/-0.052; p = 0.707)	-0.163	+0.81%
Loss Cost	2016	0.004 (CI = +/-0.079; p = 0.907)	-0.245	+0.36%
Severity	2005	0.064 (CI = +/-0.022; p = 0.000)	0.697	+6.57%
Severity	2006	0.068 (CI = +/-0.024; p = 0.000)	0.698	+7.05%
Severity	2007	0.066 (CI = +/-0.028; p = 0.000)	0.640	+6.81%
Severity	2008	0.068 (CI = +/-0.032; p = 0.001)	0.606	+7.05%
Severity	2009	0.077 (CI = +/-0.036; p = 0.001)	0.638	+7.99%
Severity	2010	0.066 (CI = +/-0.040; p = 0.004)	0.535	+6.84%
Severity	2011	0.083 (CI = +/-0.041; p = 0.001)	0.663	+8.62%
Severity	2012	0.084 (CI = +/-0.051; p = 0.005)	0.595	+8.76%
Severity	2013	0.088 (CI = +/-0.066; p = 0.016)	0.528	+9.16%
Severity	2014	0.080 (CI = +/-0.087; p = 0.064)	0.372	+8.38%
Severity	2015	0.070 (CI = +/-0.121; p = 0.194)	0.172	+7.29%
Severity	2016	0.087 (CI = +/-0.181; p = 0.254)	0.134	+9.06%
Frequency	2005	-0.020 (CI = +/-0.016; p = 0.018)	0.276	-1.97%
Frequency	2006	-0.017 (CI = +/-0.018; p = 0.061)	0.173	-1.65%
Frequency	2007	-0.012 (CI = +/-0.019; p = 0.197)	0.057	-1.20%
Frequency	2008	-0.010 (CI = +/-0.022; p = 0.353)	-0.005	-0.97%
Frequency	2009	-0.009 (CI = +/-0.026; p = 0.461)	-0.036	-0.90%
Frequency	2010	-0.014 (CI = +/-0.030; p = 0.323)	0.007	-1.40%
Frequency	2011	-0.020 (CI = +/-0.036; p = 0.242)	0.054	-1.96%
Frequency	2012	-0.020 (CI = +/-0.045; p = 0.322)	0.012	-2.02%
Frequency	2013	-0.028 (CI = +/-0.056; p = 0.270)	0.052	-2.78%
Frequency	2014	-0.036 (CI = +/-0.073; p = 0.276)	0.059	-3.52%
Frequency	2015	-0.062 (CI = +/-0.088; p = 0.130)	0.275	-6.04%
Frequency	2016	-0.083 (CI = +/-0.127; p = 0.142)	0.318	-7.98%

# Bodily Injury

Coverage = BI

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.046 (CI = +/-0.028; p = 0.004)	0.449	+4.68%
Loss Cost	2006	0.056 (CI = +/-0.029; p = 0.001)	0.565	+5.78%
Loss Cost	2007	0.060 (CI = +/-0.034; p = 0.002)	0.549	+6.22%
Loss Cost	2008	0.068 (CI = +/-0.039; p = 0.003)	0.566	+7.02%
Loss Cost	2009	0.083 (CI = +/-0.040; p = 0.001)	0.677	+8.69%
Loss Cost	2010	0.064 (CI = +/-0.039; p = 0.005)	0.595	+6.61%
Loss Cost	2011	0.084 (CI = +/-0.037; p = 0.001)	0.775	+8.75%
Loss Cost	2012	0.092 (CI = +/-0.048; p = 0.003)	0.752	+9.59%
Loss Cost	2013	0.095 (CI = +/-0.067; p = 0.015)	0.672	+9.94%
Loss Cost	2014	0.083 (CI = +/-0.098; p = 0.079)	0.473	+8.66%
Loss Cost	2015	0.029 (CI = +/-0.080; p = 0.337)	0.070	+2.90%
Loss Cost	2016	0.036 (CI = +/-0.184; p = 0.493)	-0.115	+3.62%
Severity	2005	0.056 (CI = +/-0.021; p = 0.000)	0.685	+5.72%
Severity	2006	0.060 (CI = +/-0.024; p = 0.000)	0.689	+6.21%
Severity	2007	0.056 (CI = +/-0.028; p = 0.001)	0.611	+5.77%
Severity	2008	0.057 (CI = +/-0.033; p = 0.003)	0.559	+5.91%
Severity	2009	0.068 (CI = +/-0.037; p = 0.002)	0.620	+7.02%
Severity	2010	0.050 (CI = +/-0.036; p = 0.013)	0.507	+5.17%
Severity	2011	0.072 (CI = +/-0.028; p = 0.001)	0.814	+7.47%
Severity	2012	0.072 (CI = +/-0.038; p = 0.004)	0.744	+7.43%
Severity	2013	0.075 (CI = +/-0.053; p = 0.015)	0.669	+7.77%
Severity	2014	0.058 (CI = +/-0.072; p = 0.088)	0.448	+6.00%
Severity	2015	0.030 (CI = +/-0.097; p = 0.402)	-0.013	+3.00%
Severity	2016	0.051 (CI = +/-0.207; p = 0.400)	0.039	+5.23%
Frequency	2005	-0.010 (CI = +/-0.015; p = 0.175)	0.070	-0.98%
Frequency	2006	-0.004 (CI = +/-0.015; p = 0.569)	-0.053	-0.40%
Frequency	2007	0.004 (CI = +/-0.013; p = 0.478)	-0.040	+0.43%
Frequency	2008	0.010 (CI = +/-0.012; p = 0.086)	0.193	+1.04%
Frequency	2009	0.016 (CI = +/-0.012; p = 0.020)	0.409	+1.56%
Frequency	2010	0.014 (CI = +/-0.015; p = 0.074)	0.264	+1.37%
Frequency	2011	0.012 (CI = +/-0.019; p = 0.191)	0.120	+1.19%
Frequency	2012	0.020 (CI = +/-0.021; p = 0.062)	0.377	+2.01%
Frequency	2013	0.020 (CI = +/-0.030; p = 0.149)	0.241	+2.01%
Frequency	2014	0.025 (CI = +/-0.044; p = 0.196)	0.219	+2.51%
Frequency	2015	-0.001 (CI = +/-0.028; p = 0.916)	-0.328	-0.10%
Frequency	2016	-0.015 (CI = +/-0.023; p = 0.103)	0.708	-1.53%

## Bodily Injury

Coverage = BI

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.045 (CI = +/-0.033; p = 0.011)	0.381	+4.59%
Loss Cost	2006	0.057 (CI = +/-0.034; p = 0.004)	0.510	+5.86%
Loss Cost	2007	0.062 (CI = +/-0.040; p = 0.006)	0.496	+6.39%
Loss Cost	2008	0.071 (CI = +/-0.047; p = 0.007)	0.521	+7.39%
Loss Cost	2009	0.091 (CI = +/-0.049; p = 0.003)	0.661	+9.53%
Loss Cost	2010	0.069 (CI = +/-0.050; p = 0.014)	0.548	+7.12%
Loss Cost	2011	0.096 (CI = +/-0.045; p = 0.002)	0.791	+10.04%
Loss Cost	2012	0.110 (CI = +/-0.056; p = 0.004)	0.801	+11.61%
Loss Cost	2013	0.122 (CI = +/-0.082; p = 0.014)	0.763	+12.93%
Loss Cost	2014	0.118 (CI = +/-0.143; p = 0.079)	0.595	+12.47%
Loss Cost	2015	0.050 (CI = +/-0.163; p = 0.319)	0.195	+5.10%
Loss Cost	2016	0.085 (CI = +/-0.908; p = 0.446)	0.169	+8.85%
Severity	2005	0.057 (CI = +/-0.025; p = 0.000)	0.649	+5.88%
Severity	2006	0.063 (CI = +/-0.028; p = 0.000)	0.659	+6.48%
Severity	2007	0.058 (CI = +/-0.033; p = 0.003)	0.570	+6.01%
Severity	2008	0.060 (CI = +/-0.040; p = 0.008)	0.515	+6.23%
Severity	2009	0.074 (CI = +/-0.045; p = 0.005)	0.596	+7.66%
Severity	2010	0.054 (CI = +/-0.046; p = 0.029)	0.447	+5.50%
Severity	2011	0.082 (CI = +/-0.033; p = 0.001)	0.838	+8.57%
Severity	2012	0.085 (CI = +/-0.046; p = 0.005)	0.781	+8.89%
Severity	2013	0.095 (CI = +/-0.067; p = 0.017)	0.744	+9.97%
Severity	2014	0.080 (CI = +/-0.110; p = 0.102)	0.525	+8.35%
Severity	2015	0.047 (CI = +/-0.214; p = 0.443)	-0.035	+4.82%
Severity	2016	0.107 (CI = +/-1.007; p = 0.405)	0.295	+11.33%
Frequency	2005	-0.012 (CI = +/-0.017; p = 0.141)	0.103	-1.22%
Frequency	2006	-0.006 (CI = +/-0.018; p = 0.477)	-0.040	-0.59%
Frequency	2007	0.004 (CI = +/-0.015; p = 0.609)	-0.070	+0.36%
Frequency	2008	0.011 (CI = +/-0.015; p = 0.133)	0.148	+1.09%
Frequency	2009	0.017 (CI = +/-0.015; p = 0.032)	0.387	+1.73%
Frequency	2010	0.015 (CI = +/-0.019; p = 0.106)	0.233	+1.53%
Frequency	2011	0.013 (CI = +/-0.026; p = 0.249)	0.083	+1.35%
Frequency	2012	0.025 (CI = +/-0.028; p = 0.076)	0.399	+2.50%
Frequency	2013	0.027 (CI = +/-0.043; p = 0.163)	0.277	+2.70%
Frequency	2014	0.037 (CI = +/-0.069; p = 0.185)	0.326	+3.81%
Frequency	2015	0.003 (CI = +/-0.064; p = 0.876)	-0.477	+0.26%
Frequency	2016	-0.023 (CI = +/-0.098; p = 0.211)	0.789	-2.23%

# Bodily Injury

Coverage = BI

End Trend Period = 2021

Excluded Points = 2009

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.038 (CI = +/-0.017; p = 0.000)	0.589	+3.88%
Loss Cost	2006	0.044 (CI = +/-0.018; p = 0.000)	0.662	+4.53%
Loss Cost	2007	0.044 (CI = +/-0.021; p = 0.001)	0.603	+4.52%
Loss Cost	2008	0.046 (CI = +/-0.025; p = 0.002)	0.549	+4.66%
Loss Cost	2010	0.052 (CI = +/-0.030; p = 0.003)	0.558	+5.35%
Loss Cost	2011	0.063 (CI = +/-0.033; p = 0.002)	0.645	+6.50%
Loss Cost	2012	0.064 (CI = +/-0.041; p = 0.007)	0.572	+6.57%
Loss Cost	2013	0.059 (CI = +/-0.052; p = 0.030)	0.444	+6.12%
Loss Cost	2014	0.045 (CI = +/-0.064; p = 0.137)	0.218	+4.57%
Loss Cost	2015	0.008 (CI = +/-0.052; p = 0.707)	-0.163	+0.81%
Loss Cost	2016	0.004 (CI = +/-0.079; p = 0.907)	-0.245	+0.36%
Severity	2005	0.060 (CI = +/-0.021; p = 0.000)	0.706	+6.18%
Severity	2006	0.063 (CI = +/-0.024; p = 0.000)	0.693	+6.55%
Severity	2007	0.059 (CI = +/-0.028; p = 0.001)	0.615	+6.09%
Severity	2008	0.059 (CI = +/-0.033; p = 0.002)	0.543	+6.06%
Severity	2010	0.066 (CI = +/-0.040; p = 0.004)	0.535	+6.84%
Severity	2011	0.083 (CI = +/-0.041; p = 0.001)	0.663	+8.62%
Severity	2012	0.084 (CI = +/-0.051; p = 0.005)	0.595	+8.76%
Severity	2013	0.088 (CI = +/-0.066; p = 0.016)	0.528	+9.16%
Severity	2014	0.080 (CI = +/-0.087; p = 0.064)	0.372	+8.38%
Severity	2015	0.070 (CI = +/-0.121; p = 0.194)	0.172	+7.29%
Severity	2016	0.087 (CI = +/-0.181; p = 0.254)	0.134	+9.06%
Frequency	2005	-0.022 (CI = +/-0.016; p = 0.010)	0.342	-2.17%
Frequency	2006	-0.019 (CI = +/-0.018; p = 0.038)	0.236	-1.90%
Frequency	2007	-0.015 (CI = +/-0.020; p = 0.136)	0.107	-1.48%
Frequency	2008	-0.013 (CI = +/-0.024; p = 0.253)	0.037	-1.32%
Frequency	2010	-0.014 (CI = +/-0.030; p = 0.323)	0.007	-1.40%
Frequency	2011	-0.020 (CI = +/-0.036; p = 0.242)	0.054	-1.96%
Frequency	2012	-0.020 (CI = +/-0.045; p = 0.322)	0.012	-2.02%
Frequency	2013	-0.028 (CI = +/-0.056; p = 0.270)	0.052	-2.78%
Frequency	2014	-0.036 (CI = +/-0.073; p = 0.276)	0.059	-3.52%
Frequency	2015	-0.062 (CI = +/-0.088; p = 0.130)	0.275	-6.04%
Frequency	2016	-0.083 (CI = +/-0.127; p = 0.142)	0.318	-7.98%

# Bodily Injury

Coverage = BI

End Trend Period = 2019

Excluded Points = 2009

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.040 (CI = +/-0.021; p = 0.002)	0.543	+4.03%
Loss Cost	2006	0.048 (CI = +/-0.022; p = 0.001)	0.649	+4.92%
Loss Cost	2007	0.049 (CI = +/-0.027; p = 0.002)	0.589	+4.99%
Loss Cost	2008	0.052 (CI = +/-0.033; p = 0.006)	0.541	+5.32%
Loss Cost	2010	0.064 (CI = +/-0.039; p = 0.005)	0.595	+6.61%
Loss Cost	2011	0.084 (CI = +/-0.037; p = 0.001)	0.775	+8.75%
Loss Cost	2012	0.092 (CI = +/-0.048; p = 0.003)	0.752	+9.59%
Loss Cost	2013	0.095 (CI = +/-0.067; p = 0.015)	0.672	+9.94%
Loss Cost	2014	0.083 (CI = +/-0.098; p = 0.079)	0.473	+8.66%
Loss Cost	2015	0.029 (CI = +/-0.080; p = 0.337)	0.070	+2.90%
Loss Cost	2016	0.036 (CI = +/-0.184; p = 0.493)	-0.115	+3.62%
Severity	2005	0.052 (CI = +/-0.018; p = 0.000)	0.738	+5.29%
Severity	2006	0.055 (CI = +/-0.021; p = 0.000)	0.722	+5.62%
Severity	2007	0.047 (CI = +/-0.023; p = 0.001)	0.639	+4.83%
Severity	2008	0.044 (CI = +/-0.029; p = 0.007)	0.526	+4.50%
Severity	2010	0.050 (CI = +/-0.036; p = 0.013)	0.507	+5.17%
Severity	2011	0.072 (CI = +/-0.028; p = 0.001)	0.814	+7.47%
Severity	2012	0.072 (CI = +/-0.038; p = 0.004)	0.744	+7.43%
Severity	2013	0.075 (CI = +/-0.053; p = 0.015)	0.669	+7.77%
Severity	2014	0.058 (CI = +/-0.072; p = 0.088)	0.448	+6.00%
Severity	2015	0.030 (CI = +/-0.097; p = 0.402)	-0.013	+3.00%
Severity	2016	0.051 (CI = +/-0.207; p = 0.400)	0.039	+5.23%
Frequency	2005	-0.012 (CI = +/-0.014; p = 0.085)	0.162	-1.20%
Frequency	2006	-0.007 (CI = +/-0.015; p = 0.334)	0.002	-0.67%
Frequency	2007	0.002 (CI = +/-0.013; p = 0.789)	-0.092	+0.16%
Frequency	2008	0.008 (CI = +/-0.013; p = 0.215)	0.072	+0.79%
Frequency	2010	0.014 (CI = +/-0.015; p = 0.074)	0.264	+1.37%
Frequency	2011	0.012 (CI = +/-0.019; p = 0.191)	0.120	+1.19%
Frequency	2012	0.020 (CI = +/-0.021; p = 0.062)	0.377	+2.01%
Frequency	2013	0.020 (CI = +/-0.030; p = 0.149)	0.241	+2.01%
Frequency	2014	0.025 (CI = +/-0.044; p = 0.196)	0.219	+2.51%
Frequency	2015	-0.001 (CI = +/-0.028; p = 0.916)	-0.328	-0.10%
Frequency	2016	-0.015 (CI = +/-0.023; p = 0.103)	0.708	-1.53%

# Bodily Injury

Coverage = BI

End Trend Period = 2018

Excluded Points = 2009

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.039 (CI = +/-0.025; p = 0.006)	0.472	+3.93%
Loss Cost	2006	0.048 (CI = +/-0.026; p = 0.002)	0.594	+4.93%
Loss Cost	2007	0.049 (CI = +/-0.032; p = 0.007)	0.525	+5.03%
Loss Cost	2008	0.053 (CI = +/-0.041; p = 0.017)	0.472	+5.43%
Loss Cost	2010	0.069 (CI = +/-0.050; p = 0.014)	0.548	+7.12%
Loss Cost	2011	0.096 (CI = +/-0.045; p = 0.002)	0.791	+10.04%
Loss Cost	2012	0.110 (CI = +/-0.056; p = 0.004)	0.801	+11.61%
Loss Cost	2013	0.122 (CI = +/-0.082; p = 0.014)	0.763	+12.93%
Loss Cost	2014	0.118 (CI = +/-0.143; p = 0.079)	0.595	+12.47%
Loss Cost	2015	0.050 (CI = +/-0.163; p = 0.319)	0.195	+5.10%
Loss Cost	2016	0.085 (CI = +/-0.908; p = 0.446)	0.169	+8.85%
Severity	2005	0.053 (CI = +/-0.021; p = 0.000)	0.708	+5.44%
Severity	2006	0.057 (CI = +/-0.025; p = 0.000)	0.694	+5.86%
Severity	2007	0.048 (CI = +/-0.028; p = 0.003)	0.591	+4.97%
Severity	2008	0.045 (CI = +/-0.035; p = 0.019)	0.459	+4.60%
Severity	2010	0.054 (CI = +/-0.046; p = 0.029)	0.447	+5.50%
Severity	2011	0.082 (CI = +/-0.033; p = 0.001)	0.838	+8.57%
Severity	2012	0.085 (CI = +/-0.046; p = 0.005)	0.781	+8.89%
Severity	2013	0.095 (CI = +/-0.067; p = 0.017)	0.744	+9.97%
Severity	2014	0.080 (CI = +/-0.110; p = 0.102)	0.525	+8.35%
Severity	2015	0.047 (CI = +/-0.214; p = 0.443)	-0.035	+4.82%
Severity	2016	0.107 (CI = +/-1.007; p = 0.405)	0.295	+11.33%
Frequency	2005	-0.014 (CI = +/-0.016; p = 0.070)	0.202	-1.44%
Frequency	2006	-0.009 (CI = +/-0.017; p = 0.278)	0.028	-0.87%
Frequency	2007	0.001 (CI = +/-0.015; p = 0.933)	-0.110	+0.06%
Frequency	2008	0.008 (CI = +/-0.016; p = 0.300)	0.024	+0.79%
Frequency	2010	0.015 (CI = +/-0.019; p = 0.106)	0.233	+1.53%
Frequency	2011	0.013 (CI = +/-0.026; p = 0.249)	0.083	+1.35%
Frequency	2012	0.025 (CI = +/-0.028; p = 0.076)	0.399	+2.50%
Frequency	2013	0.027 (CI = +/-0.043; p = 0.163)	0.277	+2.70%
Frequency	2014	0.037 (CI = +/-0.069; p = 0.185)	0.326	+3.81%
Frequency	2015	0.003 (CI = +/-0.064; p = 0.876)	-0.477	+0.26%
Frequency	2016	-0.023 (CI = +/-0.098; p = 0.211)	0.789	-2.23%

# Bodily Injury

Coverage = BI

End Trend Period = 2017

Excluded Points = 2009

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.034 (CI = +/-0.028; p = 0.023)	0.358	+3.46%
Loss Cost	2006	0.044 (CI = +/-0.031; p = 0.010)	0.494	+4.54%
Loss Cost	2007	0.045 (CI = +/-0.039; p = 0.029)	0.404	+4.57%
Loss Cost	2008	0.048 (CI = +/-0.051; p = 0.060)	0.334	+4.92%
Loss Cost	2010	0.067 (CI = +/-0.066; p = 0.049)	0.420	+6.89%
Loss Cost	2011	0.102 (CI = +/-0.062; p = 0.008)	0.739	+10.72%
Loss Cost	2012	0.124 (CI = +/-0.080; p = 0.012)	0.780	+13.22%
Loss Cost	2013	0.149 (CI = +/-0.121; p = 0.029)	0.782	+16.06%
Loss Cost	2014	0.160 (CI = +/-0.279; p = 0.132)	0.631	+17.40%
Loss Cost	2015	0.068 (CI = +/-1.035; p = 0.559)	-0.184	+6.99%
Loss Cost	2016	0.209 (CI = +/-NaN; p = NaN)	NaN	+23.20%
Severity	2005	0.052 (CI = +/-0.025; p = 0.001)	0.647	+5.32%
Severity	2006	0.056 (CI = +/-0.030; p = 0.002)	0.630	+5.78%
Severity	2007	0.046 (CI = +/-0.034; p = 0.014)	0.491	+4.70%
Severity	2008	0.041 (CI = +/-0.044; p = 0.065)	0.320	+4.18%
Severity	2010	0.050 (CI = +/-0.062; p = 0.093)	0.299	+5.16%
Severity	2011	0.087 (CI = +/-0.045; p = 0.004)	0.796	+9.14%
Severity	2012	0.094 (CI = +/-0.068; p = 0.019)	0.731	+9.81%
Severity	2013	0.113 (CI = +/-0.106; p = 0.044)	0.721	+11.91%
Severity	2014	0.100 (CI = +/-0.243; p = 0.220)	0.412	+10.46%
Severity	2015	0.053 (CI = +/-1.408; p = 0.718)	-0.632	+5.41%
Severity	2016	0.245 (CI = +/-NaN; p = NaN)	NaN	+27.71%
Frequency	2005	-0.018 (CI = +/-0.018; p = 0.052)	0.260	-1.77%
Frequency	2006	-0.012 (CI = +/-0.020; p = 0.213)	0.074	-1.17%
Frequency	2007	-0.001 (CI = +/-0.019; p = 0.878)	-0.121	-0.13%
Frequency	2008	0.007 (CI = +/-0.021; p = 0.444)	-0.045	+0.72%
Frequency	2010	0.016 (CI = +/-0.026; p = 0.171)	0.168	+1.65%
Frequency	2011	0.014 (CI = +/-0.036; p = 0.353)	0.008	+1.45%
Frequency	2012	0.031 (CI = +/-0.041; p = 0.109)	0.392	+3.11%
Frequency	2013	0.036 (CI = +/-0.071; p = 0.199)	0.298	+3.71%
Frequency	2014	0.061 (CI = +/-0.127; p = 0.176)	0.519	+6.28%
Frequency	2015	0.015 (CI = +/-0.373; p = 0.700)	-0.589	+1.51%
Frequency	2016	-0.036 (CI = +/-NaN; p = NaN)	NaN	-3.53%

## Bodily Injury

Coverage = BI

End Trend Period = 2019

Excluded Points = 2009

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2010-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.069 (CI = +/-0.037; p = 0.002)	-0.335 (CI = +/-0.364; p = 0.067)	0.637	+7.09%
Loss Cost	2006	0.074 (CI = +/-0.034; p = 0.001)	-0.307 (CI = +/-0.332; p = 0.066)	0.730	+7.66%
Loss Cost	2007	0.073 (CI = +/-0.036; p = 0.001)	-0.322 (CI = +/-0.364; p = 0.077)	0.684	+7.59%
Loss Cost	2008	0.073 (CI = +/-0.039; p = 0.002)	-0.371 (CI = +/-0.443; p = 0.089)	0.648	+7.57%
Loss Cost	2010	0.084 (CI = +/-0.037; p = 0.001)	-1.473 (CI = +/-1.438; p = 0.046)	0.748	+8.75%
Loss Cost	2011	0.084 (CI = +/-0.037; p = 0.001)	NA (CI = +/-NA; p = NA)	0.775	+8.75%
Loss Cost	2012	0.092 (CI = +/-0.048; p = 0.003)	NA (CI = +/-NA; p = NA)	0.752	+9.59%
Loss Cost	2013	0.095 (CI = +/-0.067; p = 0.015)	NA (CI = +/-NA; p = NA)	0.672	+9.94%
Loss Cost	2014	0.083 (CI = +/-0.098; p = 0.079)	NA (CI = +/-NA; p = NA)	0.473	+8.66%
Loss Cost	2015	0.029 (CI = +/-0.080; p = 0.337)	NA (CI = +/-NA; p = NA)	0.070	+2.90%
Loss Cost	2016	0.036 (CI = +/-0.184; p = 0.493)	NA (CI = +/-NA; p = NA)	-0.115	+3.62%
Severity	2005	0.060 (CI = +/-0.037; p = 0.004)	-0.100 (CI = +/-0.362; p = 0.557)	0.723	+6.20%
Severity	2006	0.062 (CI = +/-0.039; p = 0.005)	-0.089 (CI = +/-0.379; p = 0.612)	0.702	+6.41%
Severity	2007	0.059 (CI = +/-0.036; p = 0.005)	-0.158 (CI = +/-0.364; p = 0.352)	0.638	+6.09%
Severity	2008	0.059 (CI = +/-0.036; p = 0.006)	-0.258 (CI = +/-0.418; p = 0.192)	0.575	+6.04%
Severity	2010	0.072 (CI = +/-0.028; p = 0.001)	-1.603 (CI = +/-1.100; p = 0.011)	0.791	+7.47%
Severity	2011	0.072 (CI = +/-0.028; p = 0.001)	NA (CI = +/-NA; p = NA)	0.814	+7.47%
Severity	2012	0.072 (CI = +/-0.038; p = 0.004)	NA (CI = +/-NA; p = NA)	0.744	+7.43%
Severity	2013	0.075 (CI = +/-0.053; p = 0.015)	NA (CI = +/-NA; p = NA)	0.669	+7.77%
Severity	2014	0.058 (CI = +/-0.072; p = 0.088)	NA (CI = +/-NA; p = NA)	0.448	+6.00%
Severity	2015	0.030 (CI = +/-0.097; p = 0.402)	NA (CI = +/-NA; p = NA)	-0.013	+3.00%
Severity	2016	0.051 (CI = +/-0.207; p = 0.400)	NA (CI = +/-NA; p = NA)	0.039	+5.23%
Frequency	2005	0.008 (CI = +/-0.024; p = 0.452)	-0.235 (CI = +/-0.233; p = 0.048)	0.370	+0.84%
Frequency	2006	0.012 (CI = +/-0.022; p = 0.268)	-0.218 (CI = +/-0.215; p = 0.047)	0.273	+1.17%
Frequency	2007	0.014 (CI = +/-0.017; p = 0.100)	-0.164 (CI = +/-0.173; p = 0.061)	0.196	+1.41%
Frequency	2008	0.014 (CI = +/-0.017; p = 0.092)	-0.113 (CI = +/-0.197; p = 0.222)	0.144	+1.44%
Frequency	2010	0.012 (CI = +/-0.019; p = 0.191)	0.130 (CI = +/-0.750; p = 0.695)	0.178	+1.19%
Frequency	2011	0.012 (CI = +/-0.019; p = 0.191)	NA (CI = +/-NA; p = NA)	0.120	+1.19%
Frequency	2012	0.020 (CI = +/-0.021; p = 0.062)	NA (CI = +/-NA; p = NA)	0.377	+2.01%
Frequency	2013	0.020 (CI = +/-0.030; p = 0.149)	NA (CI = +/-NA; p = NA)	0.241	+2.01%
Frequency	2014	0.025 (CI = +/-0.044; p = 0.196)	NA (CI = +/-NA; p = NA)	0.219	+2.51%
Frequency	2015	-0.001 (CI = +/-0.028; p = 0.916)	NA (CI = +/-NA; p = NA)	-0.328	-0.10%
Frequency	2016	-0.015 (CI = +/-0.023; p = 0.103)	NA (CI = +/-NA; p = NA)	0.708	-1.53%



## Property Damage

Coverage = PD

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	-0.118 (CI = +/-0.043; p = 0.000)	0.677	-11.17%
Loss Cost	2006	-0.125 (CI = +/-0.048; p = 0.000)	0.663	-11.71%
Loss Cost	2007	-0.129 (CI = +/-0.055; p = 0.000)	0.634	-12.08%
Loss Cost	2008	-0.134 (CI = +/-0.064; p = 0.001)	0.602	-12.50%
Loss Cost	2009	-0.137 (CI = +/-0.075; p = 0.002)	0.557	-12.83%
Loss Cost	2010	-0.141 (CI = +/-0.090; p = 0.006)	0.503	-13.13%
Loss Cost	2011	-0.138 (CI = +/-0.110; p = 0.019)	0.414	-12.89%
Loss Cost	2012	-0.120 (CI = +/-0.134; p = 0.073)	0.266	-11.32%
Loss Cost	2013	-0.072 (CI = +/-0.151; p = 0.298)	0.032	-6.95%
Loss Cost	2014	-0.057 (CI = +/-0.200; p = 0.516)	-0.081	-5.49%
Loss Cost	2015	-0.080 (CI = +/-0.278; p = 0.493)	-0.082	-7.68%
Loss Cost	2016	0.002 (CI = +/-0.382; p = 0.987)	-0.250	+0.23%
Severity	2005	0.094 (CI = +/-0.044; p = 0.000)	0.547	+9.86%
Severity	2006	0.105 (CI = +/-0.048; p = 0.000)	0.580	+11.07%
Severity	2007	0.117 (CI = +/-0.053; p = 0.000)	0.611	+12.44%
Severity	2008	0.126 (CI = +/-0.060; p = 0.001)	0.603	+13.42%
Severity	2009	0.134 (CI = +/-0.070; p = 0.001)	0.581	+14.31%
Severity	2010	0.135 (CI = +/-0.084; p = 0.005)	0.518	+14.42%
Severity	2011	0.132 (CI = +/-0.102; p = 0.017)	0.429	+14.11%
Severity	2012	0.116 (CI = +/-0.125; p = 0.065)	0.285	+12.32%
Severity	2013	0.090 (CI = +/-0.154; p = 0.210)	0.102	+9.44%
Severity	2014	0.041 (CI = +/-0.186; p = 0.610)	-0.113	+4.16%
Severity	2015	0.029 (CI = +/-0.261; p = 0.785)	-0.180	+2.96%
Severity	2016	0.106 (CI = +/-0.358; p = 0.457)	-0.069	+11.19%
Frequency	2005	-0.213 (CI = +/-0.052; p = 0.000)	0.825	-19.14%
Frequency	2006	-0.230 (CI = +/-0.054; p = 0.000)	0.846	-20.51%
Frequency	2007	-0.246 (CI = +/-0.058; p = 0.000)	0.857	-21.81%
Frequency	2008	-0.259 (CI = +/-0.064; p = 0.000)	0.855	-22.85%
Frequency	2009	-0.271 (CI = +/-0.074; p = 0.000)	0.843	-23.74%
Frequency	2010	-0.276 (CI = +/-0.088; p = 0.000)	0.813	-24.08%
Frequency	2011	-0.270 (CI = +/-0.107; p = 0.000)	0.759	-23.66%
Frequency	2012	-0.236 (CI = +/-0.122; p = 0.002)	0.679	-21.05%
Frequency	2013	-0.162 (CI = +/-0.092; p = 0.004)	0.674	-14.97%
Frequency	2014	-0.097 (CI = +/-0.032; p = 0.000)	0.889	-9.27%
Frequency	2015	-0.109 (CI = +/-0.038; p = 0.001)	0.901	-10.34%
Frequency	2016	-0.104 (CI = +/-0.056; p = 0.007)	0.835	-9.85%

# Property Damage

Coverage = PD

End Trend Period = 2021

Excluded Points = 2015,2018

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	-0.130 (CI = +/-0.042; p = 0.000)	0.759	-12.21%
Loss Cost	2006	-0.137 (CI = +/-0.047; p = 0.000)	0.754	-12.82%
Loss Cost	2007	-0.142 (CI = +/-0.054; p = 0.000)	0.733	-13.24%
Loss Cost	2008	-0.147 (CI = +/-0.062; p = 0.000)	0.708	-13.70%
Loss Cost	2009	-0.151 (CI = +/-0.074; p = 0.001)	0.671	-14.04%
Loss Cost	2010	-0.155 (CI = +/-0.090; p = 0.004)	0.621	-14.33%
Loss Cost	2011	-0.151 (CI = +/-0.112; p = 0.016)	0.532	-13.97%
Loss Cost	2012	-0.128 (CI = +/-0.138; p = 0.064)	0.373	-12.06%
Loss Cost	2013	-0.066 (CI = +/-0.137; p = 0.270)	0.083	-6.38%
Loss Cost	2014	-0.019 (CI = +/-0.177; p = 0.780)	-0.223	-1.88%
Loss Cost	2016	0.031 (CI = +/-0.306; p = 0.766)	-0.288	+3.19%
Severity	2005	0.078 (CI = +/-0.036; p = 0.000)	0.599	+8.16%
Severity	2006	0.089 (CI = +/-0.038; p = 0.000)	0.659	+9.33%
Severity	2007	0.101 (CI = +/-0.039; p = 0.000)	0.722	+10.68%
Severity	2008	0.110 (CI = +/-0.044; p = 0.000)	0.735	+11.67%
Severity	2009	0.119 (CI = +/-0.050; p = 0.000)	0.739	+12.68%
Severity	2010	0.123 (CI = +/-0.060; p = 0.002)	0.699	+13.04%
Severity	2011	0.124 (CI = +/-0.075; p = 0.006)	0.640	+13.24%
Severity	2012	0.116 (CI = +/-0.096; p = 0.026)	0.524	+12.33%
Severity	2013	0.103 (CI = +/-0.129; p = 0.095)	0.348	+10.88%
Severity	2014	0.073 (CI = +/-0.183; p = 0.332)	0.041	+7.54%
Severity	2016	0.132 (CI = +/-0.309; p = 0.267)	0.175	+14.12%
Frequency	2005	-0.209 (CI = +/-0.057; p = 0.000)	0.815	-18.84%
Frequency	2006	-0.226 (CI = +/-0.059; p = 0.000)	0.840	-20.25%
Frequency	2007	-0.243 (CI = +/-0.063; p = 0.000)	0.856	-21.61%
Frequency	2008	-0.258 (CI = +/-0.070; p = 0.000)	0.858	-22.72%
Frequency	2009	-0.271 (CI = +/-0.080; p = 0.000)	0.851	-23.71%
Frequency	2010	-0.277 (CI = +/-0.097; p = 0.000)	0.825	-24.21%
Frequency	2011	-0.275 (CI = +/-0.121; p = 0.001)	0.777	-24.03%
Frequency	2012	-0.245 (CI = +/-0.145; p = 0.006)	0.696	-21.71%
Frequency	2013	-0.169 (CI = +/-0.120; p = 0.015)	0.670	-15.57%
Frequency	2014	-0.092 (CI = +/-0.035; p = 0.002)	0.913	-8.76%
Frequency	2016	-0.101 (CI = +/-0.061; p = 0.014)	0.867	-9.58%

# Property Damage

Coverage = PD

End Trend Period = 2019

Excluded Points = 2015,2018

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	-0.152 (CI = +/-0.045; p = 0.000)	0.817	-14.13%
Loss Cost	2006	-0.166 (CI = +/-0.049; p = 0.000)	0.838	-15.29%
Loss Cost	2007	-0.178 (CI = +/-0.054; p = 0.000)	0.844	-16.33%
Loss Cost	2008	-0.193 (CI = +/-0.061; p = 0.000)	0.855	-17.58%
Loss Cost	2009	-0.209 (CI = +/-0.069; p = 0.000)	0.861	-18.88%
Loss Cost	2010	-0.228 (CI = +/-0.081; p = 0.000)	0.868	-20.38%
Loss Cost	2011	-0.240 (CI = +/-0.106; p = 0.002)	0.847	-21.36%
Loss Cost	2012	-0.230 (CI = +/-0.150; p = 0.013)	0.773	-20.54%
Loss Cost	2013	-0.157 (CI = +/-0.089; p = 0.011)	0.884	-14.49%
Loss Cost	2014	-0.115 (CI = +/-0.038; p = 0.006)	0.983	-10.90%
Loss Cost	2016	-0.117 (CI = +/-0.261; p = 0.110)	0.940	-11.07%
Severity	2005	0.060 (CI = +/-0.039; p = 0.006)	0.461	+6.18%
Severity	2006	0.072 (CI = +/-0.042; p = 0.003)	0.556	+7.50%
Severity	2007	0.087 (CI = +/-0.043; p = 0.001)	0.663	+9.11%
Severity	2008	0.098 (CI = +/-0.049; p = 0.002)	0.688	+10.28%
Severity	2009	0.109 (CI = +/-0.058; p = 0.003)	0.698	+11.48%
Severity	2010	0.111 (CI = +/-0.075; p = 0.011)	0.635	+11.74%
Severity	2011	0.110 (CI = +/-0.101; p = 0.037)	0.536	+11.66%
Severity	2012	0.091 (CI = +/-0.137; p = 0.138)	0.327	+9.56%
Severity	2013	0.057 (CI = +/-0.198; p = 0.423)	-0.037	+5.92%
Severity	2014	-0.029 (CI = +/-0.158; p = 0.506)	-0.133	-2.90%
Severity	2016	-0.014 (CI = +/-1.071; p = 0.895)	-0.946	-1.39%
Frequency	2005	-0.212 (CI = +/-0.081; p = 0.000)	0.731	-19.13%
Frequency	2006	-0.238 (CI = +/-0.085; p = 0.000)	0.774	-21.20%
Frequency	2007	-0.265 (CI = +/-0.091; p = 0.000)	0.809	-23.31%
Frequency	2008	-0.291 (CI = +/-0.101; p = 0.000)	0.827	-25.26%
Frequency	2009	-0.318 (CI = +/-0.116; p = 0.000)	0.837	-27.24%
Frequency	2010	-0.339 (CI = +/-0.143; p = 0.001)	0.823	-28.75%
Frequency	2011	-0.351 (CI = +/-0.191; p = 0.005)	0.780	-29.57%
Frequency	2012	-0.321 (CI = +/-0.266; p = 0.028)	0.673	-27.47%
Frequency	2013	-0.214 (CI = +/-0.277; p = 0.091)	0.559	-19.27%
Frequency	2014	-0.086 (CI = +/-0.123; p = 0.095)	0.730	-8.24%
Frequency	2016	-0.103 (CI = +/-0.809; p = 0.352)	0.450	-9.82%

## Property Damage

Coverage = PD

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.038 (CI = +/-0.081; p = 0.329)	-0.912 (CI = +/-0.808; p = 0.030)	0.756	-3.73%
Loss Cost	2006	-0.042 (CI = +/-0.091; p = 0.343)	-0.892 (CI = +/-0.867; p = 0.045)	0.737	-4.08%
Loss Cost	2007	-0.042 (CI = +/-0.103; p = 0.389)	-0.889 (CI = +/-0.926; p = 0.058)	0.710	-4.14%
Loss Cost	2008	-0.045 (CI = +/-0.115; p = 0.405)	-0.879 (CI = +/-0.983; p = 0.075)	0.679	-4.42%
Loss Cost	2009	-0.048 (CI = +/-0.126; p = 0.415)	-0.876 (CI = +/-1.043; p = 0.091)	0.639	-4.71%
Loss Cost	2010	-0.053 (CI = +/-0.137; p = 0.407)	-0.891 (CI = +/-1.112; p = 0.103)	0.595	-5.15%
Loss Cost	2011	-0.055 (CI = +/-0.149; p = 0.415)	-0.932 (CI = +/-1.235; p = 0.120)	0.522	-5.40%
Loss Cost	2012	-0.056 (CI = +/-0.163; p = 0.444)	-0.989 (CI = +/-1.556; p = 0.177)	0.366	-5.43%
Loss Cost	2013	-0.057 (CI = +/-0.200; p = 0.516)	-0.938 (CI = +/-6.654; p = 0.742)	-0.107	-5.49%
Loss Cost	2014	-0.057 (CI = +/-0.200; p = 0.516)	NA (CI = +/-NA; p = NA)	-0.081	-5.49%
Loss Cost	2015	-0.080 (CI = +/-0.278; p = 0.493)	NA (CI = +/-NA; p = NA)	-0.082	-7.68%
Loss Cost	2016	0.002 (CI = +/-0.382; p = 0.987)	NA (CI = +/-NA; p = NA)	-0.250	+0.23%
Severity	2005	0.018 (CI = +/-0.086; p = 0.656)	0.858 (CI = +/-0.864; p = 0.051)	0.634	+1.85%
Severity	2006	0.033 (CI = +/-0.095; p = 0.473)	0.778 (CI = +/-0.904; p = 0.086)	0.643	+3.32%
Severity	2007	0.049 (CI = +/-0.104; p = 0.324)	0.703 (CI = +/-0.933; p = 0.127)	0.656	+5.01%
Severity	2008	0.058 (CI = +/-0.114; p = 0.284)	0.671 (CI = +/-0.978; p = 0.159)	0.642	+6.01%
Severity	2009	0.066 (CI = +/-0.124; p = 0.261)	0.662 (CI = +/-1.025; p = 0.180)	0.619	+6.87%
Severity	2010	0.069 (CI = +/-0.136; p = 0.282)	0.669 (CI = +/-1.099; p = 0.201)	0.557	+7.10%
Severity	2011	0.070 (CI = +/-0.148; p = 0.304)	0.696 (CI = +/-1.224; p = 0.226)	0.472	+7.29%
Severity	2012	0.070 (CI = +/-0.162; p = 0.338)	0.704 (CI = +/-1.546; p = 0.317)	0.299	+7.29%
Severity	2013	0.041 (CI = +/-0.186; p = 0.610)	2.995 (CI = +/-6.170; p = 0.280)	0.151	+4.16%
Severity	2014	0.041 (CI = +/-0.186; p = 0.610)	NA (CI = +/-NA; p = NA)	-0.113	+4.16%
Severity	2015	0.029 (CI = +/-0.261; p = 0.785)	NA (CI = +/-NA; p = NA)	-0.180	+2.96%
Severity	2016	0.106 (CI = +/-0.358; p = 0.457)	NA (CI = +/-NA; p = NA)	-0.069	+11.19%
Frequency	2005	-0.056 (CI = +/-0.056; p = 0.048)	-1.770 (CI = +/-0.559; p = 0.000)	0.956	-5.48%
Frequency	2006	-0.074 (CI = +/-0.057; p = 0.015)	-1.670 (CI = +/-0.540; p = 0.000)	0.963	-7.16%
Frequency	2007	-0.091 (CI = +/-0.057; p = 0.005)	-1.592 (CI = +/-0.514; p = 0.000)	0.968	-8.71%
Frequency	2008	-0.104 (CI = +/-0.058; p = 0.002)	-1.551 (CI = +/-0.501; p = 0.000)	0.970	-9.84%
Frequency	2009	-0.115 (CI = +/-0.058; p = 0.001)	-1.538 (CI = +/-0.477; p = 0.000)	0.972	-10.84%
Frequency	2010	-0.121 (CI = +/-0.058; p = 0.001)	-1.560 (CI = +/-0.473; p = 0.000)	0.971	-11.44%
Frequency	2011	-0.126 (CI = +/-0.058; p = 0.001)	-1.628 (CI = +/-0.480; p = 0.000)	0.969	-11.82%
Frequency	2012	-0.126 (CI = +/-0.062; p = 0.002)	-1.693 (CI = +/-0.595; p = 0.000)	0.951	-11.86%
Frequency	2013	-0.097 (CI = +/-0.032; p = 0.000)	-3.934 (CI = +/-1.048; p = 0.000)	0.975	-9.27%
Frequency	2014	-0.097 (CI = +/-0.032; p = 0.000)	NA (CI = +/-NA; p = NA)	0.889	-9.27%
Frequency	2015	-0.109 (CI = +/-0.038; p = 0.001)	NA (CI = +/-NA; p = NA)	0.901	-10.34%
Frequency	2016	-0.104 (CI = +/-0.056; p = 0.007)	NA (CI = +/-NA; p = NA)	0.835	-9.85%

## Property Damage

Coverage = PD

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.036 (CI = +/-0.092; p = 0.413)	-0.907 (CI = +/-0.819; p = 0.033)	0.760	-3.52%
Loss Cost	2006	-0.041 (CI = +/-0.110; p = 0.429)	-0.879 (CI = +/-0.909; p = 0.057)	0.742	-4.01%
Loss Cost	2007	-0.042 (CI = +/-0.131; p = 0.495)	-0.875 (CI = +/-1.011; p = 0.083)	0.714	-4.08%
Loss Cost	2008	-0.047 (CI = +/-0.155; p = 0.510)	-0.852 (CI = +/-1.117; p = 0.119)	0.684	-4.60%
Loss Cost	2009	-0.054 (CI = +/-0.181; p = 0.512)	-0.830 (CI = +/-1.223; p = 0.156)	0.645	-5.25%
Loss Cost	2010	-0.065 (CI = +/-0.207; p = 0.483)	-0.818 (CI = +/-1.328; p = 0.188)	0.604	-6.29%
Loss Cost	2011	-0.072 (CI = +/-0.235; p = 0.482)	-0.846 (CI = +/-1.483; p = 0.212)	0.531	-6.93%
Loss Cost	2012	-0.073 (CI = +/-0.270; p = 0.516)	-0.903 (CI = +/-1.878; p = 0.271)	0.362	-7.06%
Loss Cost	2013	-0.080 (CI = +/-0.368; p = 0.581)	-0.600 (CI = +/-8.513; p = 0.854)	-0.233	-7.65%
Loss Cost	2014	-0.080 (CI = +/-0.368; p = 0.581)	NA (CI = +/-NA; p = NA)	-0.147	-7.65%
Loss Cost	2015	-0.147 (CI = +/-0.616; p = 0.503)	NA (CI = +/-NA; p = NA)	-0.119	-13.67%
Loss Cost	2016	-0.003 (CI = +/-1.304; p = 0.993)	NA (CI = +/-NA; p = NA)	-0.500	-0.30%
Severity	2005	-0.008 (CI = +/-0.097; p = 0.863)	1.021 (CI = +/-0.866; p = 0.025)	0.637	-0.78%
Severity	2006	0.007 (CI = +/-0.114; p = 0.891)	0.937 (CI = +/-0.947; p = 0.052)	0.641	+0.73%
Severity	2007	0.029 (CI = +/-0.132; p = 0.638)	0.829 (CI = +/-1.022; p = 0.101)	0.651	+2.92%
Severity	2008	0.042 (CI = +/-0.155; p = 0.552)	0.771 (CI = +/-1.117; p = 0.153)	0.634	+4.34%
Severity	2009	0.057 (CI = +/-0.180; p = 0.488)	0.727 (CI = +/-1.211; p = 0.203)	0.611	+5.83%
Severity	2010	0.061 (CI = +/-0.207; p = 0.512)	0.723 (CI = +/-1.328; p = 0.239)	0.544	+6.24%
Severity	2011	0.064 (CI = +/-0.236; p = 0.529)	0.739 (CI = +/-1.493; p = 0.272)	0.447	+6.65%
Severity	2012	0.065 (CI = +/-0.272; p = 0.569)	0.745 (CI = +/-1.896; p = 0.359)	0.237	+6.67%
Severity	2013	0.008 (CI = +/-0.332; p = 0.951)	3.443 (CI = +/-7.683; p = 0.281)	0.097	+0.78%
Severity	2014	0.008 (CI = +/-0.332; p = 0.951)	NA (CI = +/-NA; p = NA)	-0.249	+0.78%
Severity	2015	-0.040 (CI = +/-0.566; p = 0.837)	NA (CI = +/-NA; p = NA)	-0.311	-3.91%
Severity	2016	0.089 (CI = +/-1.204; p = 0.779)	NA (CI = +/-NA; p = NA)	-0.427	+9.36%
Frequency	2005	-0.028 (CI = +/-0.066; p = 0.374)	-1.928 (CI = +/-0.588; p = 0.000)	0.954	-2.76%
Frequency	2006	-0.048 (CI = +/-0.074; p = 0.177)	-1.815 (CI = +/-0.610; p = 0.000)	0.957	-4.70%
Frequency	2007	-0.071 (CI = +/-0.081; p = 0.081)	-1.704 (CI = +/-0.625; p = 0.000)	0.961	-6.81%
Frequency	2008	-0.090 (CI = +/-0.090; p = 0.051)	-1.623 (CI = +/-0.649; p = 0.000)	0.962	-8.57%
Frequency	2009	-0.111 (CI = +/-0.096; p = 0.029)	-1.558 (CI = +/-0.647; p = 0.001)	0.964	-10.47%
Frequency	2010	-0.125 (CI = +/-0.102; p = 0.023)	-1.542 (CI = +/-0.656; p = 0.001)	0.962	-11.79%
Frequency	2011	-0.136 (CI = +/-0.105; p = 0.020)	-1.585 (CI = +/-0.667; p = 0.001)	0.960	-12.73%
Frequency	2012	-0.138 (CI = +/-0.119; p = 0.031)	-1.648 (CI = +/-0.829; p = 0.004)	0.936	-12.87%
Frequency	2013	-0.087 (CI = +/-0.065; p = 0.020)	-4.044 (CI = +/-1.506; p = 0.002)	0.965	-8.36%
Frequency	2014	-0.087 (CI = +/-0.065; p = 0.020)	NA (CI = +/-NA; p = NA)	0.720	-8.36%
Frequency	2015	-0.107 (CI = +/-0.100; p = 0.042)	NA (CI = +/-NA; p = NA)	0.727	-10.15%
Frequency	2016	-0.092 (CI = +/-0.225; p = 0.219)	NA (CI = +/-NA; p = NA)	0.415	-8.83%

## Property Damage

Coverage = PD

End Trend Period = 2021

Excluded Points = 2015,2018

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.025 (CI = +/-0.057; p = 0.350)	-1.227 (CI = +/-0.584; p = 0.001)	0.905	-2.50%
Loss Cost	2006	-0.027 (CI = +/-0.065; p = 0.381)	-1.216 (CI = +/-0.636; p = 0.001)	0.897	-2.66%
Loss Cost	2007	-0.026 (CI = +/-0.075; p = 0.464)	-1.224 (CI = +/-0.690; p = 0.003)	0.885	-2.52%
Loss Cost	2008	-0.027 (CI = +/-0.085; p = 0.492)	-1.219 (CI = +/-0.747; p = 0.005)	0.871	-2.65%
Loss Cost	2009	-0.029 (CI = +/-0.096; p = 0.504)	-1.214 (CI = +/-0.808; p = 0.008)	0.852	-2.86%
Loss Cost	2010	-0.034 (CI = +/-0.106; p = 0.479)	-1.223 (CI = +/-0.874; p = 0.013)	0.831	-3.30%
Loss Cost	2011	-0.036 (CI = +/-0.118; p = 0.479)	-1.261 (CI = +/-0.987; p = 0.020)	0.792	-3.57%
Loss Cost	2012	-0.037 (CI = +/-0.135; p = 0.513)	-1.332 (CI = +/-1.278; p = 0.044)	0.691	-3.62%
Loss Cost	2013	-0.019 (CI = +/-0.177; p = 0.780)	-2.516 (CI = +/-5.719; p = 0.289)	0.165	-1.88%
Loss Cost	2014	-0.019 (CI = +/-0.177; p = 0.780)	NA (CI = +/-NA; p = NA)	-0.223	-1.88%
Loss Cost	2016	0.031 (CI = +/-0.306; p = 0.766)	NA (CI = +/-NA; p = NA)	-0.288	+3.19%
Severity	2005	0.028 (CI = +/-0.073; p = 0.424)	0.595 (CI = +/-0.749; p = 0.109)	0.652	+2.79%
Severity	2006	0.045 (CI = +/-0.079; p = 0.238)	0.491 (CI = +/-0.768; p = 0.187)	0.685	+4.57%
Severity	2007	0.064 (CI = +/-0.083; p = 0.113)	0.390 (CI = +/-0.763; p = 0.281)	0.729	+6.64%
Severity	2008	0.077 (CI = +/-0.090; p = 0.086)	0.342 (CI = +/-0.791; p = 0.354)	0.734	+7.96%
Severity	2009	0.087 (CI = +/-0.097; p = 0.073)	0.322 (CI = +/-0.821; p = 0.392)	0.733	+9.08%
Severity	2010	0.090 (CI = +/-0.109; p = 0.091)	0.328 (CI = +/-0.895; p = 0.415)	0.689	+9.43%
Severity	2011	0.092 (CI = +/-0.122; p = 0.113)	0.355 (CI = +/-1.018; p = 0.426)	0.625	+9.66%
Severity	2012	0.092 (CI = +/-0.140; p = 0.152)	0.350 (CI = +/-1.330; p = 0.529)	0.477	+9.65%
Severity	2013	0.073 (CI = +/-0.183; p = 0.332)	1.640 (CI = +/-5.925; p = 0.485)	0.290	+7.54%
Severity	2014	0.073 (CI = +/-0.183; p = 0.332)	NA (CI = +/-NA; p = NA)	0.041	+7.54%
Severity	2016	0.132 (CI = +/-0.309; p = 0.267)	NA (CI = +/-NA; p = NA)	0.175	+14.12%
Frequency	2005	-0.053 (CI = +/-0.063; p = 0.092)	-1.822 (CI = +/-0.648; p = 0.000)	0.951	-5.14%
Frequency	2006	-0.072 (CI = +/-0.065; p = 0.034)	-1.708 (CI = +/-0.638; p = 0.000)	0.958	-6.92%
Frequency	2007	-0.090 (CI = +/-0.067; p = 0.014)	-1.614 (CI = +/-0.618; p = 0.000)	0.964	-8.59%
Frequency	2008	-0.104 (CI = +/-0.070; p = 0.009)	-1.560 (CI = +/-0.614; p = 0.000)	0.966	-9.83%
Frequency	2009	-0.116 (CI = +/-0.071; p = 0.005)	-1.536 (CI = +/-0.595; p = 0.000)	0.969	-10.95%
Frequency	2010	-0.124 (CI = +/-0.073; p = 0.005)	-1.551 (CI = +/-0.602; p = 0.000)	0.968	-11.63%
Frequency	2011	-0.129 (CI = +/-0.075; p = 0.006)	-1.616 (CI = +/-0.624; p = 0.001)	0.966	-12.06%
Frequency	2012	-0.129 (CI = +/-0.084; p = 0.011)	-1.682 (CI = +/-0.799; p = 0.003)	0.947	-12.10%
Frequency	2013	-0.092 (CI = +/-0.035; p = 0.002)	-4.156 (CI = +/-1.128; p = 0.001)	0.985	-8.76%
Frequency	2014	-0.092 (CI = +/-0.035; p = 0.002)	NA (CI = +/-NA; p = NA)	0.913	-8.76%
Frequency	2016	-0.101 (CI = +/-0.061; p = 0.014)	NA (CI = +/-NA; p = NA)	0.867	-9.58%

## Property Damage

Coverage = PD

End Trend Period = 2019

Excluded Points = 2015,2018

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.046 (CI = +/-0.042; p = 0.037)	-1.104 (CI = +/-0.382; p = 0.000)	0.961	-4.49%
Loss Cost	2006	-0.055 (CI = +/-0.050; p = 0.034)	-1.051 (CI = +/-0.416; p = 0.000)	0.961	-5.38%
Loss Cost	2007	-0.061 (CI = +/-0.061; p = 0.049)	-1.020 (CI = +/-0.469; p = 0.001)	0.958	-5.95%
Loss Cost	2008	-0.074 (CI = +/-0.071; p = 0.044)	-0.964 (CI = +/-0.508; p = 0.003)	0.957	-7.13%
Loss Cost	2009	-0.089 (CI = +/-0.080; p = 0.034)	-0.911 (CI = +/-0.530; p = 0.006)	0.959	-8.53%
Loss Cost	2010	-0.109 (CI = +/-0.073; p = 0.012)	-0.876 (CI = +/-0.457; p = 0.004)	0.973	-10.31%
Loss Cost	2011	-0.121 (CI = +/-0.054; p = 0.003)	-0.905 (CI = +/-0.327; p = 0.002)	0.988	-11.43%
Loss Cost	2012	-0.124 (CI = +/-0.033; p = 0.001)	-0.993 (CI = +/-0.221; p = 0.001)	0.996	-11.69%
Loss Cost	2013	-0.115 (CI = +/-0.038; p = 0.006)	-1.353 (CI = +/-0.815; p = 0.019)	0.993	-10.90%
Loss Cost	2014	-0.115 (CI = +/-0.038; p = 0.006)	NA (CI = +/-NA; p = NA)	0.983	-10.90%
Loss Cost	2016	-0.117 (CI = +/-0.261; p = 0.110)	NA (CI = +/-NA; p = NA)	0.940	-11.07%
Severity	2005	-0.023 (CI = +/-0.050; p = 0.326)	0.861 (CI = +/-0.446; p = 0.002)	0.792	-2.27%
Severity	2006	-0.012 (CI = +/-0.058; p = 0.664)	0.797 (CI = +/-0.484; p = 0.005)	0.806	-1.15%
Severity	2007	0.006 (CI = +/-0.065; p = 0.824)	0.704 (CI = +/-0.501; p = 0.012)	0.836	+0.65%
Severity	2008	0.016 (CI = +/-0.079; p = 0.654)	0.664 (CI = +/-0.560; p = 0.026)	0.832	+1.57%
Severity	2009	0.026 (CI = +/-0.094; p = 0.523)	0.628 (CI = +/-0.620; p = 0.048)	0.826	+2.63%
Severity	2010	0.026 (CI = +/-0.115; p = 0.593)	0.629 (CI = +/-0.717; p = 0.074)	0.783	+2.59%
Severity	2011	0.027 (CI = +/-0.142; p = 0.624)	0.633 (CI = +/-0.868; p = 0.113)	0.714	+2.75%
Severity	2012	0.026 (CI = +/-0.189; p = 0.686)	0.610 (CI = +/-1.243; p = 0.216)	0.505	+2.68%
Severity	2013	-0.029 (CI = +/-0.158; p = 0.506)	2.864 (CI = +/-3.403; p = 0.069)	0.794	-2.90%
Severity	2014	-0.029 (CI = +/-0.158; p = 0.506)	NA (CI = +/-NA; p = NA)	-0.133	-2.90%
Severity	2016	-0.014 (CI = +/-1.071; p = 0.895)	NA (CI = +/-NA; p = NA)	-0.946	-1.39%
Frequency	2005	-0.023 (CI = +/-0.076; p = 0.515)	-1.965 (CI = +/-0.681; p = 0.000)	0.942	-2.27%
Frequency	2006	-0.044 (CI = +/-0.087; p = 0.286)	-1.848 (CI = +/-0.725; p = 0.000)	0.947	-4.28%
Frequency	2007	-0.068 (CI = +/-0.100; p = 0.156)	-1.724 (CI = +/-0.767; p = 0.001)	0.951	-6.56%
Frequency	2008	-0.090 (CI = +/-0.116; p = 0.111)	-1.628 (CI = +/-0.826; p = 0.002)	0.952	-8.57%
Frequency	2009	-0.115 (CI = +/-0.129; p = 0.072)	-1.539 (CI = +/-0.855; p = 0.005)	0.955	-10.88%
Frequency	2010	-0.134 (CI = +/-0.145; p = 0.063)	-1.504 (CI = +/-0.905; p = 0.008)	0.954	-12.57%
Frequency	2011	-0.149 (CI = +/-0.160; p = 0.061)	-1.537 (CI = +/-0.974; p = 0.012)	0.952	-13.81%
Frequency	2012	-0.151 (CI = +/-0.207; p = 0.103)	-1.603 (CI = +/-1.366; p = 0.033)	0.923	-14.00%
Frequency	2013	-0.086 (CI = +/-0.123; p = 0.095)	-4.216 (CI = +/-2.649; p = 0.021)	0.973	-8.24%
Frequency	2014	-0.086 (CI = +/-0.123; p = 0.095)	NA (CI = +/-NA; p = NA)	0.730	-8.24%
Frequency	2016	-0.103 (CI = +/-0.809; p = 0.352)	NA (CI = +/-NA; p = NA)	0.450	-9.82%

## Direct Compensation Property Damage

Coverage = DC

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

<b>Fit</b>	<b>Start Date</b>	<b>Time</b>	<b>Adjusted R<sup>2</sup></b>	<b>Implied Trend Rate</b>
Loss Cost	2014	0.009 (CI = +/-0.060; p = 0.721)	-0.140	+0.92%
Loss Cost	2015	-0.002 (CI = +/-0.082; p = 0.961)	-0.199	-0.16%
Loss Cost	2016	-0.009 (CI = +/-0.124; p = 0.849)	-0.237	-0.90%
Severity	2014	0.031 (CI = +/-0.027; p = 0.031)	0.497	+3.16%
Severity	2015	0.028 (CI = +/-0.038; p = 0.110)	0.315	+2.89%
Severity	2016	0.013 (CI = +/-0.046; p = 0.477)	-0.084	+1.29%
Frequency	2014	-0.022 (CI = +/-0.041; p = 0.236)	0.095	-2.17%
Frequency	2015	-0.030 (CI = +/-0.055; p = 0.220)	0.139	-2.96%
Frequency	2016	-0.022 (CI = +/-0.082; p = 0.500)	-0.099	-2.17%



## Direct Compensation Property Damage

Coverage = DC

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time

<b>Fit</b>	<b>Start Date</b>	<b>Time</b>	<b>Adjusted R<sup>2</sup></b>	<b>Implied Trend Rate</b>
Loss Cost	2014	0.065 (CI = +/-0.045; p = 0.016)	0.755	+6.75%
Loss Cost	2015	0.071 (CI = +/-0.077; p = 0.061)	0.656	+7.35%
Loss Cost	2016	0.101 (CI = +/-0.127; p = 0.076)	0.780	+10.59%
Severity	2014	0.060 (CI = +/-0.023; p = 0.002)	0.912	+6.20%
Severity	2015	0.070 (CI = +/-0.030; p = 0.005)	0.931	+7.23%
Severity	2016	0.060 (CI = +/-0.056; p = 0.044)	0.872	+6.18%
Frequency	2014	0.005 (CI = +/-0.046; p = 0.768)	-0.220	+0.52%
Frequency	2015	0.001 (CI = +/-0.079; p = 0.966)	-0.332	+0.11%
Frequency	2016	0.041 (CI = +/-0.075; p = 0.146)	0.595	+4.15%

## Direct Compensation Property Damage

Coverage = DC

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time

<b>Fit</b>	<b>Start Date</b>	<b>Time</b>	<b>Adjusted R<sup>2</sup></b>	<b>Implied Trend Rate</b>
Loss Cost	2014	0.060 (CI = +/-0.077; p = 0.090)	0.560	+6.13%
Loss Cost	2015	0.065 (CI = +/-0.178; p = 0.257)	0.328	+6.72%
Loss Cost	2016	0.119 (CI = +/-0.785; p = 0.306)	0.573	+12.58%
Severity	2014	0.060 (CI = +/-0.040; p = 0.018)	0.841	+6.15%
Severity	2015	0.075 (CI = +/-0.066; p = 0.038)	0.887	+7.83%
Severity	2016	0.061 (CI = +/-0.367; p = 0.280)	0.638	+6.34%
Frequency	2014	0.000 (CI = +/-0.079; p = 0.997)	-0.333	-0.01%
Frequency	2015	-0.010 (CI = +/-0.179; p = 0.826)	-0.455	-1.03%
Frequency	2016	0.057 (CI = +/-0.418; p = 0.333)	0.502	+5.87%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.068 (CI = +/-0.050; p = 0.012)	0.313	+7.05%
Loss Cost	2006	0.080 (CI = +/-0.055; p = 0.008)	0.366	+8.32%
Loss Cost	2007	0.102 (CI = +/-0.055; p = 0.002)	0.517	+10.75%
Loss Cost	2008	0.101 (CI = +/-0.064; p = 0.005)	0.451	+10.59%
Loss Cost	2009	0.079 (CI = +/-0.069; p = 0.028)	0.312	+8.23%
Loss Cost	2010	0.068 (CI = +/-0.081; p = 0.088)	0.190	+7.07%
Loss Cost	2011	0.034 (CI = +/-0.082; p = 0.376)	-0.013	+3.43%
Loss Cost	2012	0.045 (CI = +/-0.101; p = 0.336)	0.005	+4.56%
Loss Cost	2013	0.025 (CI = +/-0.125; p = 0.655)	-0.108	+2.48%
Loss Cost	2014	0.039 (CI = +/-0.164; p = 0.579)	-0.103	+4.01%
Loss Cost	2015	0.024 (CI = +/-0.230; p = 0.795)	-0.182	+2.48%
Loss Cost	2016	0.048 (CI = +/-0.347; p = 0.720)	-0.206	+4.91%
Severity	2005	0.061 (CI = +/-0.044; p = 0.010)	0.323	+6.29%
Severity	2006	0.070 (CI = +/-0.049; p = 0.008)	0.360	+7.25%
Severity	2007	0.082 (CI = +/-0.053; p = 0.005)	0.421	+8.60%
Severity	2008	0.076 (CI = +/-0.061; p = 0.019)	0.326	+7.92%
Severity	2009	0.058 (CI = +/-0.067; p = 0.084)	0.178	+5.96%
Severity	2010	0.051 (CI = +/-0.080; p = 0.182)	0.088	+5.28%
Severity	2011	0.018 (CI = +/-0.082; p = 0.628)	-0.081	+1.85%
Severity	2012	0.036 (CI = +/-0.099; p = 0.430)	-0.036	+3.63%
Severity	2013	0.045 (CI = +/-0.126; p = 0.432)	-0.039	+4.56%
Severity	2014	0.069 (CI = +/-0.163; p = 0.343)	0.008	+7.10%
Severity	2015	0.059 (CI = +/-0.229; p = 0.540)	-0.104	+6.04%
Severity	2016	0.086 (CI = +/-0.344; p = 0.525)	-0.115	+9.01%
Frequency	2005	0.007 (CI = +/-0.019; p = 0.439)	-0.024	+0.72%
Frequency	2006	0.010 (CI = +/-0.022; p = 0.337)	-0.001	+1.00%
Frequency	2007	0.020 (CI = +/-0.021; p = 0.061)	0.186	+1.98%
Frequency	2008	0.024 (CI = +/-0.023; p = 0.039)	0.251	+2.47%
Frequency	2009	0.021 (CI = +/-0.027; p = 0.109)	0.145	+2.14%
Frequency	2010	0.017 (CI = +/-0.031; p = 0.256)	0.039	+1.71%
Frequency	2011	0.015 (CI = +/-0.038; p = 0.386)	-0.017	+1.55%
Frequency	2012	0.009 (CI = +/-0.046; p = 0.668)	-0.098	+0.90%
Frequency	2013	-0.020 (CI = +/-0.033; p = 0.196)	0.115	-1.98%
Frequency	2014	-0.029 (CI = +/-0.041; p = 0.132)	0.225	-2.88%
Frequency	2015	-0.034 (CI = +/-0.057; p = 0.184)	0.186	-3.36%
Frequency	2016	-0.038 (CI = +/-0.087; p = 0.286)	0.093	-3.76%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.071 (CI = +/-0.066; p = 0.036)	0.242	+7.41%
Loss Cost	2006	0.088 (CI = +/-0.073; p = 0.023)	0.308	+9.15%
Loss Cost	2007	0.119 (CI = +/-0.073; p = 0.004)	0.495	+12.60%
Loss Cost	2008	0.120 (CI = +/-0.088; p = 0.012)	0.430	+12.72%
Loss Cost	2009	0.093 (CI = +/-0.098; p = 0.061)	0.264	+9.75%
Loss Cost	2010	0.080 (CI = +/-0.121; p = 0.164)	0.131	+8.38%
Loss Cost	2011	0.031 (CI = +/-0.130; p = 0.596)	-0.095	+3.10%
Loss Cost	2012	0.047 (CI = +/-0.171; p = 0.526)	-0.085	+4.81%
Loss Cost	2013	0.013 (CI = +/-0.231; p = 0.891)	-0.195	+1.31%
Loss Cost	2014	0.035 (CI = +/-0.350; p = 0.795)	-0.226	+3.56%
Loss Cost	2015	0.000 (CI = +/-0.605; p = 1.000)	-0.333	+0.01%
Loss Cost	2016	0.038 (CI = +/-1.406; p = 0.918)	-0.490	+3.88%
Severity	2005	0.057 (CI = +/-0.058; p = 0.053)	0.201	+5.87%
Severity	2006	0.068 (CI = +/-0.065; p = 0.042)	0.243	+7.07%
Severity	2007	0.085 (CI = +/-0.073; p = 0.027)	0.315	+8.86%
Severity	2008	0.077 (CI = +/-0.087; p = 0.077)	0.207	+7.97%
Severity	2009	0.051 (CI = +/-0.098; p = 0.270)	0.037	+5.22%
Severity	2010	0.040 (CI = +/-0.121; p = 0.470)	-0.049	+4.06%
Severity	2011	-0.014 (CI = +/-0.125; p = 0.801)	-0.132	-1.38%
Severity	2012	0.004 (CI = +/-0.164; p = 0.949)	-0.166	+0.45%
Severity	2013	0.009 (CI = +/-0.231; p = 0.925)	-0.198	+0.90%
Severity	2014	0.039 (CI = +/-0.346; p = 0.771)	-0.220	+3.96%
Severity	2015	0.003 (CI = +/-0.597; p = 0.990)	-0.333	+0.26%
Severity	2016	0.033 (CI = +/-1.393; p = 0.929)	-0.492	+3.32%
Frequency	2005	0.014 (CI = +/-0.023; p = 0.198)	0.057	+1.45%
Frequency	2006	0.019 (CI = +/-0.026; p = 0.129)	0.113	+1.95%
Frequency	2007	0.034 (CI = +/-0.022; p = 0.005)	0.477	+3.44%
Frequency	2008	0.043 (CI = +/-0.022; p = 0.001)	0.631	+4.40%
Frequency	2009	0.042 (CI = +/-0.026; p = 0.005)	0.550	+4.31%
Frequency	2010	0.041 (CI = +/-0.033; p = 0.021)	0.446	+4.16%
Frequency	2011	0.044 (CI = +/-0.042; p = 0.040)	0.402	+4.54%
Frequency	2012	0.043 (CI = +/-0.055; p = 0.110)	0.265	+4.35%
Frequency	2013	0.004 (CI = +/-0.016; p = 0.531)	-0.101	+0.41%
Frequency	2014	-0.004 (CI = +/-0.016; p = 0.541)	-0.125	-0.38%
Frequency	2015	-0.002 (CI = +/-0.027; p = 0.794)	-0.298	-0.24%
Frequency	2016	0.005 (CI = +/-0.054; p = 0.708)	-0.372	+0.55%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.091 (CI = +/-0.071; p = 0.016)	0.344	+9.58%
Loss Cost	2006	0.114 (CI = +/-0.077; p = 0.008)	0.439	+12.02%
Loss Cost	2007	0.155 (CI = +/-0.068; p = 0.000)	0.693	+16.77%
Loss Cost	2008	0.164 (CI = +/-0.082; p = 0.001)	0.660	+17.77%
Loss Cost	2009	0.141 (CI = +/-0.095; p = 0.009)	0.542	+15.10%
Loss Cost	2010	0.137 (CI = +/-0.122; p = 0.033)	0.430	+14.67%
Loss Cost	2011	0.089 (CI = +/-0.137; p = 0.165)	0.176	+9.28%
Loss Cost	2012	0.130 (CI = +/-0.175; p = 0.115)	0.305	+13.89%
Loss Cost	2013	0.116 (CI = +/-0.266; p = 0.294)	0.084	+12.26%
Loss Cost	2014	0.200 (CI = +/-0.401; p = 0.210)	0.276	+22.15%
Loss Cost	2015	0.252 (CI = +/-0.911; p = 0.356)	0.121	+28.65%
Loss Cost	2016	0.580 (CI = +/-2.705; p = 0.224)	0.762	+78.54%
Severity	2005	0.078 (CI = +/-0.060; p = 0.016)	0.344	+8.07%
Severity	2006	0.094 (CI = +/-0.067; p = 0.010)	0.417	+9.87%
Severity	2007	0.118 (CI = +/-0.071; p = 0.004)	0.537	+12.58%
Severity	2008	0.115 (CI = +/-0.087; p = 0.015)	0.446	+12.22%
Severity	2009	0.092 (CI = +/-0.102; p = 0.069)	0.274	+9.68%
Severity	2010	0.089 (CI = +/-0.130; p = 0.151)	0.166	+9.29%
Severity	2011	0.034 (CI = +/-0.143; p = 0.581)	-0.104	+3.46%
Severity	2012	0.074 (CI = +/-0.184; p = 0.347)	0.012	+7.72%
Severity	2013	0.109 (CI = +/-0.271; p = 0.328)	0.046	+11.47%
Severity	2014	0.203 (CI = +/-0.393; p = 0.198)	0.300	+22.53%
Severity	2015	0.252 (CI = +/-0.895; p = 0.349)	0.136	+28.71%
Severity	2016	0.562 (CI = +/-3.007; p = 0.254)	0.699	+75.50%
Frequency	2005	0.014 (CI = +/-0.027; p = 0.282)	0.020	+1.39%
Frequency	2006	0.019 (CI = +/-0.030; p = 0.189)	0.074	+1.96%
Frequency	2007	0.037 (CI = +/-0.025; p = 0.010)	0.456	+3.72%
Frequency	2008	0.048 (CI = +/-0.025; p = 0.002)	0.642	+4.94%
Frequency	2009	0.048 (CI = +/-0.031; p = 0.007)	0.564	+4.95%
Frequency	2010	0.048 (CI = +/-0.040; p = 0.026)	0.465	+4.91%
Frequency	2011	0.055 (CI = +/-0.052; p = 0.043)	0.443	+5.63%
Frequency	2012	0.056 (CI = +/-0.074; p = 0.110)	0.317	+5.73%
Frequency	2013	0.007 (CI = +/-0.023; p = 0.435)	-0.052	+0.71%
Frequency	2014	-0.003 (CI = +/-0.028; p = 0.739)	-0.277	-0.32%
Frequency	2015	-0.001 (CI = +/-0.063; p = 0.975)	-0.499	-0.05%
Frequency	2016	0.017 (CI = +/-0.302; p = 0.601)	-0.313	+1.73%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2011-01-01

Fit	Start Date	Time	Scalar_shift	Adjusted R^2	Implied Trend
					Rate
Loss Cost	2005	0.004 (CI = +/-0.083; p = 0.916)	0.791 (CI = +/-0.851; p = 0.066)	0.426	+0.42%
Loss Cost	2006	0.016 (CI = +/-0.085; p = 0.690)	0.791 (CI = +/-0.841; p = 0.063)	0.482	+1.61%
Loss Cost	2007	0.034 (CI = +/-0.071; p = 0.315)	0.864 (CI = +/-0.695; p = 0.019)	0.676	+3.48%
Loss Cost	2008	0.036 (CI = +/-0.076; p = 0.314)	0.888 (CI = +/-0.742; p = 0.023)	0.633	+3.69%
Loss Cost	2009	0.032 (CI = +/-0.077; p = 0.372)	0.772 (CI = +/-0.802; p = 0.058)	0.481	+3.30%
Loss Cost	2010	0.034 (CI = +/-0.082; p = 0.376)	0.902 (CI = +/-1.021; p = 0.077)	0.376	+3.43%
Loss Cost	2011	0.034 (CI = +/-0.082; p = 0.376)	NA (CI = +/-NA; p = NA)	-0.013	+3.43%
Loss Cost	2012	0.045 (CI = +/-0.101; p = 0.336)	NA (CI = +/-NA; p = NA)	0.005	+4.56%
Loss Cost	2013	0.025 (CI = +/-0.125; p = 0.655)	NA (CI = +/-NA; p = NA)	-0.108	+2.48%
Loss Cost	2014	0.039 (CI = +/-0.164; p = 0.579)	NA (CI = +/-NA; p = NA)	-0.103	+4.01%
Loss Cost	2015	0.024 (CI = +/-0.230; p = 0.795)	NA (CI = +/-NA; p = NA)	-0.182	+2.48%
Loss Cost	2016	0.048 (CI = +/-0.347; p = 0.720)	NA (CI = +/-NA; p = NA)	-0.206	+4.91%
Severity	2005	0.001 (CI = +/-0.071; p = 0.983)	0.745 (CI = +/-0.729; p = 0.046)	0.460	+0.07%
Severity	2006	0.010 (CI = +/-0.073; p = 0.779)	0.745 (CI = +/-0.729; p = 0.046)	0.499	+0.98%
Severity	2007	0.021 (CI = +/-0.071; p = 0.541)	0.788 (CI = +/-0.695; p = 0.029)	0.584	+2.08%
Severity	2008	0.020 (CI = +/-0.076; p = 0.579)	0.779 (CI = +/-0.746; p = 0.042)	0.503	+1.99%
Severity	2009	0.017 (CI = +/-0.079; p = 0.649)	0.684 (CI = +/-0.819; p = 0.092)	0.328	+1.67%
Severity	2010	0.018 (CI = +/-0.082; p = 0.628)	0.861 (CI = +/-1.030; p = 0.091)	0.275	+1.85%
Severity	2011	0.018 (CI = +/-0.082; p = 0.628)	NA (CI = +/-NA; p = NA)	-0.081	+1.85%
Severity	2012	0.036 (CI = +/-0.099; p = 0.430)	NA (CI = +/-NA; p = NA)	-0.036	+3.63%
Severity	2013	0.045 (CI = +/-0.126; p = 0.432)	NA (CI = +/-NA; p = NA)	-0.039	+4.56%
Severity	2014	0.069 (CI = +/-0.163; p = 0.343)	NA (CI = +/-NA; p = NA)	0.008	+7.10%
Severity	2015	0.059 (CI = +/-0.229; p = 0.540)	NA (CI = +/-NA; p = NA)	-0.104	+6.04%
Severity	2016	0.086 (CI = +/-0.344; p = 0.525)	NA (CI = +/-NA; p = NA)	-0.115	+9.01%
Frequency	2005	0.003 (CI = +/-0.036; p = 0.840)	0.046 (CI = +/-0.366; p = 0.791)	-0.091	+0.34%
Frequency	2006	0.006 (CI = +/-0.038; p = 0.726)	0.046 (CI = +/-0.376; p = 0.795)	-0.072	+0.63%
Frequency	2007	0.014 (CI = +/-0.033; p = 0.392)	0.076 (CI = +/-0.327; p = 0.623)	0.137	+1.38%
Frequency	2008	0.017 (CI = +/-0.034; p = 0.305)	0.109 (CI = +/-0.332; p = 0.484)	0.220	+1.67%
Frequency	2009	0.016 (CI = +/-0.036; p = 0.349)	0.088 (CI = +/-0.372; p = 0.610)	0.085	+1.60%
Frequency	2010	0.015 (CI = +/-0.038; p = 0.386)	0.040 (CI = +/-0.476; p = 0.853)	-0.063	+1.55%
Frequency	2011	0.015 (CI = +/-0.038; p = 0.386)	NA (CI = +/-NA; p = NA)	-0.017	+1.55%
Frequency	2012	0.009 (CI = +/-0.046; p = 0.668)	NA (CI = +/-NA; p = NA)	-0.098	+0.90%
Frequency	2013	-0.020 (CI = +/-0.033; p = 0.196)	NA (CI = +/-NA; p = NA)	0.115	-1.98%
Frequency	2014	-0.029 (CI = +/-0.041; p = 0.132)	NA (CI = +/-NA; p = NA)	0.225	-2.88%
Frequency	2015	-0.034 (CI = +/-0.057; p = 0.184)	NA (CI = +/-NA; p = NA)	0.186	-3.36%
Frequency	2016	-0.038 (CI = +/-0.087; p = 0.286)	NA (CI = +/-NA; p = NA)	0.093	-3.76%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2011-01-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.017 (CI = +/-0.114; p = 0.747)	0.921 (CI = +/-1.008; p = 0.070)	0.383	-1.72%
Loss Cost	2006	0.001 (CI = +/-0.121; p = 0.991)	0.879 (CI = +/-1.018; p = 0.084)	0.431	+0.06%
Loss Cost	2007	0.032 (CI = +/-0.105; p = 0.516)	0.879 (CI = +/-0.852; p = 0.044)	0.637	+3.23%
Loss Cost	2008	0.035 (CI = +/-0.114; p = 0.503)	0.894 (CI = +/-0.913; p = 0.054)	0.590	+3.59%
Loss Cost	2009	0.028 (CI = +/-0.120; p = 0.601)	0.792 (CI = +/-0.982; p = 0.100)	0.422	+2.87%
Loss Cost	2010	0.031 (CI = +/-0.130; p = 0.596)	0.916 (CI = +/-1.244; p = 0.125)	0.306	+3.10%
Loss Cost	2011	0.031 (CI = +/-0.130; p = 0.596)	NA (CI = +/-NA; p = NA)	-0.095	+3.10%
Loss Cost	2012	0.047 (CI = +/-0.171; p = 0.526)	NA (CI = +/-NA; p = NA)	-0.085	+4.81%
Loss Cost	2013	0.013 (CI = +/-0.231; p = 0.891)	NA (CI = +/-NA; p = NA)	-0.195	+1.31%
Loss Cost	2014	0.035 (CI = +/-0.350; p = 0.795)	NA (CI = +/-NA; p = NA)	-0.226	+3.56%
Loss Cost	2015	0.000 (CI = +/-0.605; p = 1.000)	NA (CI = +/-NA; p = NA)	-0.333	+0.01%
Loss Cost	2016	0.038 (CI = +/-1.406; p = 0.918)	NA (CI = +/-NA; p = NA)	-0.490	+3.88%
Severity	2005	-0.035 (CI = +/-0.093; p = 0.422)	0.960 (CI = +/-0.821; p = 0.026)	0.438	-3.49%
Severity	2006	-0.024 (CI = +/-0.100; p = 0.609)	0.933 (CI = +/-0.845; p = 0.033)	0.463	-2.37%
Severity	2007	-0.007 (CI = +/-0.102; p = 0.874)	0.933 (CI = +/-0.824; p = 0.030)	0.540	-0.74%
Severity	2008	-0.010 (CI = +/-0.111; p = 0.839)	0.921 (CI = +/-0.884; p = 0.043)	0.455	-1.02%
Severity	2009	-0.017 (CI = +/-0.117; p = 0.749)	0.826 (CI = +/-0.956; p = 0.081)	0.276	-1.66%
Severity	2010	-0.014 (CI = +/-0.125; p = 0.801)	0.983 (CI = +/-1.199; p = 0.094)	0.220	-1.38%
Severity	2011	-0.014 (CI = +/-0.125; p = 0.801)	NA (CI = +/-NA; p = NA)	-0.132	-1.38%
Severity	2012	0.004 (CI = +/-0.164; p = 0.949)	NA (CI = +/-NA; p = NA)	-0.166	+0.45%
Severity	2013	0.009 (CI = +/-0.231; p = 0.925)	NA (CI = +/-NA; p = NA)	-0.198	+0.90%
Severity	2014	0.039 (CI = +/-0.346; p = 0.771)	NA (CI = +/-NA; p = NA)	-0.220	+3.96%
Severity	2015	0.003 (CI = +/-0.597; p = 0.990)	NA (CI = +/-NA; p = NA)	-0.333	+0.26%
Severity	2016	0.033 (CI = +/-1.393; p = 0.929)	NA (CI = +/-NA; p = NA)	-0.492	+3.32%
Frequency	2005	0.018 (CI = +/-0.046; p = 0.403)	-0.039 (CI = +/-0.404; p = 0.837)	-0.018	+1.84%
Frequency	2006	0.025 (CI = +/-0.049; p = 0.291)	-0.054 (CI = +/-0.412; p = 0.778)	0.039	+2.49%
Frequency	2007	0.039 (CI = +/-0.038; p = 0.044)	-0.054 (CI = +/-0.308; p = 0.704)	0.433	+3.99%
Frequency	2008	0.046 (CI = +/-0.035; p = 0.016)	-0.026 (CI = +/-0.279; p = 0.837)	0.592	+4.66%
Frequency	2009	0.045 (CI = +/-0.038; p = 0.026)	-0.034 (CI = +/-0.313; p = 0.807)	0.497	+4.60%
Frequency	2010	0.044 (CI = +/-0.042; p = 0.040)	-0.067 (CI = +/-0.398; p = 0.702)	0.381	+4.54%
Frequency	2011	0.044 (CI = +/-0.042; p = 0.040)	NA (CI = +/-NA; p = NA)	0.402	+4.54%
Frequency	2012	0.043 (CI = +/-0.055; p = 0.110)	NA (CI = +/-NA; p = NA)	0.265	+4.35%
Frequency	2013	0.004 (CI = +/-0.016; p = 0.531)	NA (CI = +/-NA; p = NA)	-0.101	+0.41%
Frequency	2014	-0.004 (CI = +/-0.016; p = 0.541)	NA (CI = +/-NA; p = NA)	-0.125	-0.38%
Frequency	2015	-0.002 (CI = +/-0.027; p = 0.794)	NA (CI = +/-NA; p = NA)	-0.298	-0.24%
Frequency	2016	0.005 (CI = +/-0.054; p = 0.708)	NA (CI = +/-NA; p = NA)	-0.372	+0.55%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2011-01-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.009 (CI = +/-0.133; p = 0.880)	0.779 (CI = +/-1.081; p = 0.141)	0.417	+0.93%
Loss Cost	2006	0.037 (CI = +/-0.140; p = 0.566)	0.694 (CI = +/-1.077; p = 0.182)	0.489	+3.80%
Loss Cost	2007	0.084 (CI = +/-0.109; p = 0.114)	0.633 (CI = +/-0.797; p = 0.106)	0.749	+8.78%
Loss Cost	2008	0.093 (CI = +/-0.118; p = 0.108)	0.649 (CI = +/-0.841; p = 0.113)	0.726	+9.72%
Loss Cost	2009	0.085 (CI = +/-0.126; p = 0.156)	0.576 (CI = +/-0.907; p = 0.177)	0.604	+8.85%
Loss Cost	2010	0.089 (CI = +/-0.137; p = 0.165)	0.722 (CI = +/-1.129; p = 0.169)	0.527	+9.28%
Loss Cost	2011	0.089 (CI = +/-0.137; p = 0.165)	NA (CI = +/-NA; p = NA)	0.176	+9.28%
Loss Cost	2012	0.130 (CI = +/-0.175; p = 0.115)	NA (CI = +/-NA; p = NA)	0.305	+13.89%
Loss Cost	2013	0.116 (CI = +/-0.266; p = 0.294)	NA (CI = +/-NA; p = NA)	0.084	+12.26%
Loss Cost	2014	0.200 (CI = +/-0.401; p = 0.210)	NA (CI = +/-NA; p = NA)	0.276	+22.15%
Loss Cost	2015	0.252 (CI = +/-0.911; p = 0.356)	NA (CI = +/-NA; p = NA)	0.121	+28.65%
Loss Cost	2016	0.580 (CI = +/-2.705; p = 0.224)	NA (CI = +/-NA; p = NA)	0.762	+78.54%
Severity	2005	-0.008 (CI = +/-0.106; p = 0.866)	0.814 (CI = +/-0.861; p = 0.061)	0.487	-0.82%
Severity	2006	0.011 (CI = +/-0.114; p = 0.832)	0.755 (CI = +/-0.874; p = 0.083)	0.532	+1.12%
Severity	2007	0.038 (CI = +/-0.110; p = 0.458)	0.721 (CI = +/-0.807; p = 0.074)	0.646	+3.86%
Severity	2008	0.037 (CI = +/-0.123; p = 0.509)	0.719 (CI = +/-0.875; p = 0.095)	0.570	+3.76%
Severity	2009	0.029 (CI = +/-0.132; p = 0.616)	0.650 (CI = +/-0.951; p = 0.150)	0.396	+2.98%
Severity	2010	0.034 (CI = +/-0.143; p = 0.581)	0.823 (CI = +/-1.172; p = 0.137)	0.348	+3.46%
Severity	2011	0.034 (CI = +/-0.143; p = 0.581)	NA (CI = +/-NA; p = NA)	-0.104	+3.46%
Severity	2012	0.074 (CI = +/-0.184; p = 0.347)	NA (CI = +/-NA; p = NA)	0.012	+7.72%
Severity	2013	0.109 (CI = +/-0.271; p = 0.328)	NA (CI = +/-NA; p = NA)	0.046	+11.47%
Severity	2014	0.203 (CI = +/-0.393; p = 0.198)	NA (CI = +/-NA; p = NA)	0.300	+22.53%
Severity	2015	0.252 (CI = +/-0.895; p = 0.349)	NA (CI = +/-NA; p = NA)	0.136	+28.71%
Severity	2016	0.562 (CI = +/-3.007; p = 0.254)	NA (CI = +/-NA; p = NA)	0.699	+75.50%
Frequency	2005	0.018 (CI = +/-0.055; p = 0.497)	-0.036 (CI = +/-0.449; p = 0.865)	-0.066	+1.77%
Frequency	2006	0.026 (CI = +/-0.060; p = 0.356)	-0.062 (CI = +/-0.463; p = 0.773)	-0.010	+2.65%
Frequency	2007	0.046 (CI = +/-0.047; p = 0.051)	-0.088 (CI = +/-0.341; p = 0.575)	0.418	+4.75%
Frequency	2008	0.056 (CI = +/-0.042; p = 0.015)	-0.070 (CI = +/-0.299; p = 0.602)	0.612	+5.75%
Frequency	2009	0.055 (CI = +/-0.047; p = 0.027)	-0.074 (CI = +/-0.337; p = 0.618)	0.521	+5.70%
Frequency	2010	0.055 (CI = +/-0.052; p = 0.043)	-0.102 (CI = +/-0.429; p = 0.584)	0.409	+5.63%
Frequency	2011	0.055 (CI = +/-0.052; p = 0.043)	NA (CI = +/-NA; p = NA)	0.443	+5.63%
Frequency	2012	0.056 (CI = +/-0.074; p = 0.110)	NA (CI = +/-NA; p = NA)	0.317	+5.73%
Frequency	2013	0.007 (CI = +/-0.023; p = 0.435)	NA (CI = +/-NA; p = NA)	-0.052	+0.71%
Frequency	2014	-0.003 (CI = +/-0.028; p = 0.739)	NA (CI = +/-NA; p = NA)	-0.277	-0.32%
Frequency	2015	-0.001 (CI = +/-0.063; p = 0.975)	NA (CI = +/-NA; p = NA)	-0.499	-0.05%
Frequency	2016	0.017 (CI = +/-0.302; p = 0.601)	NA (CI = +/-NA; p = NA)	-0.313	+1.73%



## Accident Benefits

Coverage = AB Total

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2010-04-28

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.018 (CI = +/-0.128; p = 0.761)	0.582 (CI = +/-1.191; p = 0.308)	0.249	+1.84%
Loss Cost	2006	0.034 (CI = +/-0.131; p = 0.580)	0.585 (CI = +/-1.191; p = 0.303)	0.317	+3.47%
Loss Cost	2007	0.056 (CI = +/-0.113; p = 0.297)	0.717 (CI = +/-1.014; p = 0.146)	0.555	+5.74%
Loss Cost	2008	0.059 (CI = +/-0.120; p = 0.297)	0.786 (CI = +/-1.114; p = 0.145)	0.506	+6.04%
Loss Cost	2009	0.058 (CI = +/-0.127; p = 0.321)	0.610 (CI = +/-1.370; p = 0.335)	0.268	+5.99%
Loss Cost	2010	0.031 (CI = +/-0.130; p = 0.596)	2.849 (CI = +/-3.871; p = 0.125)	0.306	+3.10%
Loss Cost	2011	0.031 (CI = +/-0.130; p = 0.596)	NA (CI = +/-NA; p = NA)	-0.095	+3.10%
Loss Cost	2012	0.047 (CI = +/-0.171; p = 0.526)	NA (CI = +/-NA; p = NA)	-0.085	+4.81%
Loss Cost	2013	0.013 (CI = +/-0.231; p = 0.891)	NA (CI = +/-NA; p = NA)	-0.195	+1.31%
Loss Cost	2014	0.035 (CI = +/-0.350; p = 0.795)	NA (CI = +/-NA; p = NA)	-0.226	+3.56%
Loss Cost	2015	0.000 (CI = +/-0.605; p = 1.000)	NA (CI = +/-NA; p = NA)	-0.333	+0.01%
Loss Cost	2016	0.038 (CI = +/-1.406; p = 0.918)	NA (CI = +/-NA; p = NA)	-0.490	+3.88%
Severity	2005	-0.007 (CI = +/-0.107; p = 0.896)	0.695 (CI = +/-1.001; p = 0.157)	0.273	-0.65%
Severity	2006	0.005 (CI = +/-0.112; p = 0.930)	0.697 (CI = +/-1.019; p = 0.160)	0.315	+0.46%
Severity	2007	0.017 (CI = +/-0.111; p = 0.738)	0.773 (CI = +/-0.995; p = 0.114)	0.420	+1.72%
Severity	2008	0.017 (CI = +/-0.119; p = 0.756)	0.768 (CI = +/-1.108; p = 0.151)	0.308	+1.70%
Severity	2009	0.016 (CI = +/-0.126; p = 0.771)	0.601 (CI = +/-1.364; p = 0.339)	0.041	+1.66%
Severity	2010	-0.014 (CI = +/-0.125; p = 0.801)	3.058 (CI = +/-3.730; p = 0.094)	0.220	-1.38%
Severity	2011	-0.014 (CI = +/-0.125; p = 0.801)	NA (CI = +/-NA; p = NA)	-0.132	-1.38%
Severity	2012	0.004 (CI = +/-0.164; p = 0.949)	NA (CI = +/-NA; p = NA)	-0.166	+0.45%
Severity	2013	0.009 (CI = +/-0.231; p = 0.925)	NA (CI = +/-NA; p = NA)	-0.198	+0.90%
Severity	2014	0.039 (CI = +/-0.346; p = 0.771)	NA (CI = +/-NA; p = NA)	-0.220	+3.96%
Severity	2015	0.003 (CI = +/-0.597; p = 0.990)	NA (CI = +/-NA; p = NA)	-0.333	+0.26%
Severity	2016	0.033 (CI = +/-1.393; p = 0.929)	NA (CI = +/-NA; p = NA)	-0.492	+3.32%
Frequency	2005	0.025 (CI = +/-0.046; p = 0.262)	-0.113 (CI = +/-0.428; p = 0.576)	0.006	+2.51%
Frequency	2006	0.030 (CI = +/-0.048; p = 0.203)	-0.112 (CI = +/-0.435; p = 0.583)	0.059	+3.00%
Frequency	2007	0.039 (CI = +/-0.037; p = 0.041)	-0.056 (CI = +/-0.331; p = 0.715)	0.433	+3.95%
Frequency	2008	0.042 (CI = +/-0.033; p = 0.020)	0.017 (CI = +/-0.310; p = 0.902)	0.591	+4.26%
Frequency	2009	0.042 (CI = +/-0.036; p = 0.029)	0.008 (CI = +/-0.389; p = 0.962)	0.493	+4.26%
Frequency	2010	0.044 (CI = +/-0.042; p = 0.040)	-0.209 (CI = +/-1.239; p = 0.702)	0.381	+4.54%
Frequency	2011	0.044 (CI = +/-0.042; p = 0.040)	NA (CI = +/-NA; p = NA)	0.402	+4.54%
Frequency	2012	0.043 (CI = +/-0.055; p = 0.110)	NA (CI = +/-NA; p = NA)	0.265	+4.35%
Frequency	2013	0.004 (CI = +/-0.016; p = 0.531)	NA (CI = +/-NA; p = NA)	-0.101	+0.41%
Frequency	2014	-0.004 (CI = +/-0.016; p = 0.541)	NA (CI = +/-NA; p = NA)	-0.125	-0.38%
Frequency	2015	-0.002 (CI = +/-0.027; p = 0.794)	NA (CI = +/-NA; p = NA)	-0.298	-0.24%
Frequency	2016	0.005 (CI = +/-0.054; p = 0.708)	NA (CI = +/-NA; p = NA)	-0.372	+0.55%

## Accident Benefits

Coverage = AB Total

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2012-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.003 (CI = +/-0.142; p = 0.966)	0.687 (CI = +/-1.260; p = 0.258)	0.265	+0.28%
Loss Cost	2006	0.028 (CI = +/-0.159; p = 0.709)	0.564 (CI = +/-1.329; p = 0.370)	0.300	+2.81%
Loss Cost	2007	0.077 (CI = +/-0.157; p = 0.297)	0.370 (CI = +/-1.234; p = 0.519)	0.468	+8.06%
Loss Cost	2008	0.077 (CI = +/-0.178; p = 0.350)	0.371 (CI = +/-1.327; p = 0.543)	0.393	+8.04%
Loss Cost	2009	0.053 (CI = +/-0.182; p = 0.523)	0.354 (CI = +/-1.318; p = 0.552)	0.210	+5.42%
Loss Cost	2010	0.048 (CI = +/-0.201; p = 0.590)	0.312 (CI = +/-1.463; p = 0.630)	0.041	+4.91%
Loss Cost	2011	0.042 (CI = +/-0.190; p = 0.608)	-0.146 (CI = +/-1.564; p = 0.827)	-0.266	+4.30%
Loss Cost	2012	0.013 (CI = +/-0.231; p = 0.891)	1.637 (CI = +/-6.428; p = 0.542)	-0.199	+1.31%
Loss Cost	2013	0.013 (CI = +/-0.231; p = 0.891)	NA (CI = +/-NA; p = NA)	-0.195	+1.31%
Loss Cost	2014	0.035 (CI = +/-0.350; p = 0.795)	NA (CI = +/-NA; p = NA)	-0.226	+3.56%
Loss Cost	2015	0.000 (CI = +/-0.605; p = 1.000)	NA (CI = +/-NA; p = NA)	-0.333	+0.01%
Loss Cost	2016	0.038 (CI = +/-1.406; p = 0.918)	NA (CI = +/-NA; p = NA)	-0.490	+3.88%
Severity	2005	0.014 (CI = +/-0.128; p = 0.821)	0.434 (CI = +/-1.136; p = 0.421)	0.182	+1.37%
Severity	2006	0.032 (CI = +/-0.145; p = 0.642)	0.346 (CI = +/-1.211; p = 0.542)	0.203	+3.21%
Severity	2007	0.058 (CI = +/-0.159; p = 0.438)	0.244 (CI = +/-1.250; p = 0.672)	0.260	+5.94%
Severity	2008	0.045 (CI = +/-0.178; p = 0.577)	0.273 (CI = +/-1.328; p = 0.653)	0.140	+4.65%
Severity	2009	0.022 (CI = +/-0.183; p = 0.792)	0.257 (CI = +/-1.326; p = 0.667)	-0.057	+2.19%
Severity	2010	0.017 (CI = +/-0.202; p = 0.848)	0.217 (CI = +/-1.473; p = 0.738)	-0.179	+1.72%
Severity	2011	0.010 (CI = +/-0.180; p = 0.892)	-0.307 (CI = +/-1.482; p = 0.631)	-0.266	+1.05%
Severity	2012	0.009 (CI = +/-0.231; p = 0.925)	-0.215 (CI = +/-6.415; p = 0.935)	-0.397	+0.90%
Severity	2013	0.009 (CI = +/-0.231; p = 0.925)	NA (CI = +/-NA; p = NA)	-0.198	+0.90%
Severity	2014	0.039 (CI = +/-0.346; p = 0.771)	NA (CI = +/-NA; p = NA)	-0.220	+3.96%
Severity	2015	0.003 (CI = +/-0.597; p = 0.990)	NA (CI = +/-NA; p = NA)	-0.333	+0.26%
Severity	2016	0.033 (CI = +/-1.393; p = 0.929)	NA (CI = +/-NA; p = NA)	-0.492	+3.32%
Frequency	2005	-0.011 (CI = +/-0.049; p = 0.641)	0.252 (CI = +/-0.435; p = 0.231)	0.098	-1.07%
Frequency	2006	-0.004 (CI = +/-0.056; p = 0.882)	0.218 (CI = +/-0.464; p = 0.323)	0.118	-0.38%
Frequency	2007	0.020 (CI = +/-0.046; p = 0.359)	0.126 (CI = +/-0.361; p = 0.455)	0.458	+2.00%
Frequency	2008	0.032 (CI = +/-0.044; p = 0.132)	0.098 (CI = +/-0.326; p = 0.514)	0.610	+3.24%
Frequency	2009	0.031 (CI = +/-0.049; p = 0.178)	0.097 (CI = +/-0.352; p = 0.542)	0.518	+3.16%
Frequency	2010	0.031 (CI = +/-0.054; p = 0.219)	0.095 (CI = +/-0.394; p = 0.587)	0.395	+3.13%
Frequency	2011	0.032 (CI = +/-0.058; p = 0.230)	0.161 (CI = +/-0.476; p = 0.441)	0.373	+3.22%
Frequency	2012	0.004 (CI = +/-0.016; p = 0.531)	1.852 (CI = +/-0.432; p = 0.000)	0.965	+0.41%
Frequency	2013	0.004 (CI = +/-0.016; p = 0.531)	NA (CI = +/-NA; p = NA)	-0.101	+0.41%
Frequency	2014	-0.004 (CI = +/-0.016; p = 0.541)	NA (CI = +/-NA; p = NA)	-0.125	-0.38%
Frequency	2015	-0.002 (CI = +/-0.027; p = 0.794)	NA (CI = +/-NA; p = NA)	-0.298	-0.24%
Frequency	2016	0.005 (CI = +/-0.054; p = 0.708)	NA (CI = +/-NA; p = NA)	-0.372	+0.55%

# Collision

Coverage = CL

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.009 (CI = +/-0.013; p = 0.177)	0.059	+0.88%
Loss Cost	2006	0.005 (CI = +/-0.014; p = 0.474)	-0.032	+0.48%
Loss Cost	2007	0.008 (CI = +/-0.015; p = 0.281)	0.019	+0.81%
Loss Cost	2008	0.014 (CI = +/-0.016; p = 0.083)	0.165	+1.39%
Loss Cost	2009	0.020 (CI = +/-0.016; p = 0.021)	0.345	+2.03%
Loss Cost	2010	0.026 (CI = +/-0.018; p = 0.008)	0.468	+2.61%
Loss Cost	2011	0.029 (CI = +/-0.021; p = 0.012)	0.474	+2.96%
Loss Cost	2012	0.030 (CI = +/-0.026; p = 0.027)	0.411	+3.08%
Loss Cost	2013	0.024 (CI = +/-0.032; p = 0.115)	0.219	+2.43%
Loss Cost	2014	0.018 (CI = +/-0.041; p = 0.312)	0.030	+1.86%
Loss Cost	2015	0.001 (CI = +/-0.046; p = 0.957)	-0.199	+0.10%
Loss Cost	2016	-0.021 (CI = +/-0.049; p = 0.295)	0.082	-2.10%
Severity	2005	0.050 (CI = +/-0.016; p = 0.000)	0.722	+5.14%
Severity	2006	0.053 (CI = +/-0.018; p = 0.000)	0.711	+5.41%
Severity	2007	0.061 (CI = +/-0.018; p = 0.000)	0.789	+6.25%
Severity	2008	0.068 (CI = +/-0.017; p = 0.000)	0.846	+7.08%
Severity	2009	0.076 (CI = +/-0.018; p = 0.000)	0.879	+7.85%
Severity	2010	0.079 (CI = +/-0.021; p = 0.000)	0.868	+8.21%
Severity	2011	0.080 (CI = +/-0.025; p = 0.000)	0.835	+8.28%
Severity	2012	0.074 (CI = +/-0.030; p = 0.000)	0.778	+7.69%
Severity	2013	0.062 (CI = +/-0.033; p = 0.003)	0.704	+6.45%
Severity	2014	0.047 (CI = +/-0.034; p = 0.014)	0.603	+4.79%
Severity	2015	0.038 (CI = +/-0.044; p = 0.077)	0.396	+3.85%
Severity	2016	0.017 (CI = +/-0.047; p = 0.376)	-0.002	+1.71%
Frequency	2005	-0.041 (CI = +/-0.012; p = 0.000)	0.776	-4.05%
Frequency	2006	-0.048 (CI = +/-0.010; p = 0.000)	0.879	-4.67%
Frequency	2007	-0.053 (CI = +/-0.009; p = 0.000)	0.917	-5.12%
Frequency	2008	-0.055 (CI = +/-0.010; p = 0.000)	0.912	-5.31%
Frequency	2009	-0.055 (CI = +/-0.012; p = 0.000)	0.896	-5.39%
Frequency	2010	-0.053 (CI = +/-0.014; p = 0.000)	0.867	-5.18%
Frequency	2011	-0.050 (CI = +/-0.016; p = 0.000)	0.826	-4.92%
Frequency	2012	-0.044 (CI = +/-0.017; p = 0.000)	0.785	-4.28%
Frequency	2013	-0.038 (CI = +/-0.020; p = 0.003)	0.703	-3.77%
Frequency	2014	-0.028 (CI = +/-0.020; p = 0.013)	0.611	-2.79%
Frequency	2015	-0.037 (CI = +/-0.023; p = 0.009)	0.729	-3.60%
Frequency	2016	-0.038 (CI = +/-0.035; p = 0.038)	0.626	-3.75%

# Collision

Coverage = CL

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.008 (CI = +/-0.017; p = 0.339)	-0.001	+0.79%
Loss Cost	2006	0.002 (CI = +/-0.018; p = 0.778)	-0.076	+0.24%
Loss Cost	2007	0.006 (CI = +/-0.021; p = 0.513)	-0.047	+0.64%
Loss Cost	2008	0.014 (CI = +/-0.022; p = 0.187)	0.084	+1.41%
Loss Cost	2009	0.023 (CI = +/-0.023; p = 0.050)	0.291	+2.31%
Loss Cost	2010	0.032 (CI = +/-0.025; p = 0.018)	0.467	+3.23%
Loss Cost	2011	0.038 (CI = +/-0.030; p = 0.018)	0.512	+3.91%
Loss Cost	2012	0.043 (CI = +/-0.039; p = 0.035)	0.478	+4.38%
Loss Cost	2013	0.036 (CI = +/-0.053; p = 0.137)	0.261	+3.69%
Loss Cost	2014	0.031 (CI = +/-0.080; p = 0.345)	0.028	+3.12%
Loss Cost	2015	0.000 (CI = +/-0.109; p = 0.997)	-0.333	-0.01%
Loss Cost	2016	-0.059 (CI = +/-0.049; p = 0.036)	0.895	-5.68%
Severity	2005	0.047 (CI = +/-0.021; p = 0.000)	0.611	+4.84%
Severity	2006	0.050 (CI = +/-0.024; p = 0.001)	0.593	+5.14%
Severity	2007	0.060 (CI = +/-0.025; p = 0.000)	0.702	+6.22%
Severity	2008	0.071 (CI = +/-0.025; p = 0.000)	0.787	+7.37%
Severity	2009	0.082 (CI = +/-0.025; p = 0.000)	0.846	+8.53%
Severity	2010	0.088 (CI = +/-0.029; p = 0.000)	0.842	+9.23%
Severity	2011	0.092 (CI = +/-0.037; p = 0.001)	0.807	+9.60%
Severity	2012	0.086 (CI = +/-0.048; p = 0.005)	0.722	+9.03%
Severity	2013	0.071 (CI = +/-0.061; p = 0.030)	0.572	+7.35%
Severity	2014	0.045 (CI = +/-0.072; p = 0.157)	0.289	+4.63%
Severity	2015	0.025 (CI = +/-0.113; p = 0.528)	-0.141	+2.56%
Severity	2016	-0.036 (CI = +/-0.036; p = 0.050)	0.854	-3.51%
Frequency	2005	-0.039 (CI = +/-0.015; p = 0.000)	0.692	-3.87%
Frequency	2006	-0.048 (CI = +/-0.013; p = 0.000)	0.838	-4.66%
Frequency	2007	-0.054 (CI = +/-0.012; p = 0.000)	0.897	-5.26%
Frequency	2008	-0.057 (CI = +/-0.013; p = 0.000)	0.896	-5.55%
Frequency	2009	-0.059 (CI = +/-0.016; p = 0.000)	0.878	-5.73%
Frequency	2010	-0.056 (CI = +/-0.019; p = 0.000)	0.835	-5.49%
Frequency	2011	-0.053 (CI = +/-0.024; p = 0.001)	0.770	-5.19%
Frequency	2012	-0.044 (CI = +/-0.027; p = 0.007)	0.683	-4.26%
Frequency	2013	-0.035 (CI = +/-0.033; p = 0.043)	0.512	-3.40%
Frequency	2014	-0.015 (CI = +/-0.021; p = 0.133)	0.336	-1.44%
Frequency	2015	-0.025 (CI = +/-0.022; p = 0.034)	0.762	-2.51%
Frequency	2016	-0.023 (CI = +/-0.050; p = 0.187)	0.491	-2.25%

# Collision

Coverage = CL

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.009 (CI = +/-0.020; p = 0.363)	-0.008	+0.87%
Loss Cost	2006	0.002 (CI = +/-0.022; p = 0.811)	-0.085	+0.24%
Loss Cost	2007	0.007 (CI = +/-0.025; p = 0.540)	-0.057	+0.71%
Loss Cost	2008	0.016 (CI = +/-0.027; p = 0.197)	0.086	+1.65%
Loss Cost	2009	0.028 (CI = +/-0.027; p = 0.048)	0.330	+2.81%
Loss Cost	2010	0.040 (CI = +/-0.028; p = 0.012)	0.562	+4.09%
Loss Cost	2011	0.051 (CI = +/-0.032; p = 0.008)	0.667	+5.22%
Loss Cost	2012	0.061 (CI = +/-0.040; p = 0.011)	0.702	+6.31%
Loss Cost	2013	0.059 (CI = +/-0.062; p = 0.056)	0.551	+6.10%
Loss Cost	2014	0.062 (CI = +/-0.107; p = 0.162)	0.376	+6.43%
Loss Cost	2015	0.032 (CI = +/-0.215; p = 0.587)	-0.245	+3.26%
Loss Cost	2016	-0.053 (CI = +/-0.307; p = 0.275)	0.650	-5.12%
Severity	2005	0.048 (CI = +/-0.025; p = 0.001)	0.567	+4.95%
Severity	2006	0.052 (CI = +/-0.029; p = 0.002)	0.551	+5.32%
Severity	2007	0.064 (CI = +/-0.029; p = 0.001)	0.682	+6.63%
Severity	2008	0.078 (CI = +/-0.028; p = 0.000)	0.794	+8.10%
Severity	2009	0.092 (CI = +/-0.026; p = 0.000)	0.884	+9.69%
Severity	2010	0.103 (CI = +/-0.027; p = 0.000)	0.908	+10.87%
Severity	2011	0.112 (CI = +/-0.033; p = 0.000)	0.907	+11.83%
Severity	2012	0.112 (CI = +/-0.046; p = 0.002)	0.862	+11.81%
Severity	2013	0.100 (CI = +/-0.065; p = 0.013)	0.772	+10.50%
Severity	2014	0.076 (CI = +/-0.093; p = 0.080)	0.592	+7.87%
Severity	2015	0.063 (CI = +/-0.210; p = 0.325)	0.183	+6.50%
Severity	2016	-0.021 (CI = +/-0.010; p = 0.022)	0.998	-2.12%
Frequency	2005	-0.040 (CI = +/-0.017; p = 0.000)	0.645	-3.89%
Frequency	2006	-0.049 (CI = +/-0.015; p = 0.000)	0.819	-4.82%
Frequency	2007	-0.057 (CI = +/-0.013; p = 0.000)	0.896	-5.56%
Frequency	2008	-0.062 (CI = +/-0.014; p = 0.000)	0.903	-5.97%
Frequency	2009	-0.065 (CI = +/-0.017; p = 0.000)	0.893	-6.27%
Frequency	2010	-0.063 (CI = +/-0.022; p = 0.000)	0.851	-6.11%
Frequency	2011	-0.061 (CI = +/-0.029; p = 0.002)	0.786	-5.91%
Frequency	2012	-0.050 (CI = +/-0.035; p = 0.014)	0.680	-4.92%
Frequency	2013	-0.041 (CI = +/-0.049; p = 0.081)	0.469	-3.98%
Frequency	2014	-0.013 (CI = +/-0.037; p = 0.335)	0.072	-1.34%
Frequency	2015	-0.031 (CI = +/-0.045; p = 0.098)	0.721	-3.05%
Frequency	2016	-0.031 (CI = +/-0.298; p = 0.410)	0.278	-3.07%

# Collision

Coverage = CL

End Trend Period = 2021

Excluded Points = 2016

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.008 (CI = +/-0.013; p = 0.239)	0.033	+0.76%
Loss Cost	2006	0.004 (CI = +/-0.014; p = 0.588)	-0.052	+0.36%
Loss Cost	2007	0.007 (CI = +/-0.015; p = 0.345)	-0.002	+0.69%
Loss Cost	2008	0.013 (CI = +/-0.015; p = 0.093)	0.165	+1.27%
Loss Cost	2009	0.019 (CI = +/-0.015; p = 0.016)	0.399	+1.93%
Loss Cost	2010	0.025 (CI = +/-0.015; p = 0.004)	0.579	+2.54%
Loss Cost	2011	0.029 (CI = +/-0.017; p = 0.004)	0.622	+2.96%
Loss Cost	2012	0.032 (CI = +/-0.021; p = 0.009)	0.593	+3.21%
Loss Cost	2013	0.027 (CI = +/-0.027; p = 0.045)	0.433	+2.76%
Loss Cost	2014	0.025 (CI = +/-0.037; p = 0.141)	0.255	+2.55%
Loss Cost	2015	0.011 (CI = +/-0.050; p = 0.561)	-0.136	+1.14%
Severity	2005	0.049 (CI = +/-0.016; p = 0.000)	0.730	+4.97%
Severity	2006	0.051 (CI = +/-0.018; p = 0.000)	0.721	+5.24%
Severity	2007	0.059 (CI = +/-0.017; p = 0.000)	0.811	+6.08%
Severity	2008	0.067 (CI = +/-0.016; p = 0.000)	0.878	+6.91%
Severity	2009	0.074 (CI = +/-0.015; p = 0.000)	0.921	+7.71%
Severity	2010	0.078 (CI = +/-0.016; p = 0.000)	0.921	+8.12%
Severity	2011	0.080 (CI = +/-0.020; p = 0.000)	0.903	+8.28%
Severity	2012	0.076 (CI = +/-0.024; p = 0.000)	0.870	+7.85%
Severity	2013	0.066 (CI = +/-0.027; p = 0.001)	0.837	+6.83%
Severity	2014	0.053 (CI = +/-0.027; p = 0.004)	0.804	+5.45%
Severity	2015	0.050 (CI = +/-0.042; p = 0.030)	0.665	+5.08%
Frequency	2005	-0.041 (CI = +/-0.012; p = 0.000)	0.769	-4.02%
Frequency	2006	-0.047 (CI = +/-0.010; p = 0.000)	0.877	-4.64%
Frequency	2007	-0.052 (CI = +/-0.009; p = 0.000)	0.917	-5.08%
Frequency	2008	-0.054 (CI = +/-0.011; p = 0.000)	0.913	-5.28%
Frequency	2009	-0.055 (CI = +/-0.012; p = 0.000)	0.898	-5.37%
Frequency	2010	-0.053 (CI = +/-0.015; p = 0.000)	0.870	-5.16%
Frequency	2011	-0.050 (CI = +/-0.017; p = 0.000)	0.829	-4.92%
Frequency	2012	-0.044 (CI = +/-0.019; p = 0.001)	0.787	-4.30%
Frequency	2013	-0.039 (CI = +/-0.023; p = 0.006)	0.698	-3.80%
Frequency	2014	-0.028 (CI = +/-0.024; p = 0.029)	0.576	-2.75%
Frequency	2015	-0.038 (CI = +/-0.030; p = 0.023)	0.701	-3.75%

# Collision

Coverage = CL

End Trend Period = 2019

Excluded Points = 2016

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.005 (CI = +/-0.017; p = 0.525)	-0.046	+0.52%
Loss Cost	2006	-0.001 (CI = +/-0.018; p = 0.943)	-0.090	-0.06%
Loss Cost	2007	0.003 (CI = +/-0.020; p = 0.734)	-0.087	+0.32%
Loss Cost	2008	0.011 (CI = +/-0.021; p = 0.285)	0.029	+1.08%
Loss Cost	2009	0.020 (CI = +/-0.021; p = 0.068)	0.278	+1.97%
Loss Cost	2010	0.028 (CI = +/-0.021; p = 0.016)	0.525	+2.89%
Loss Cost	2011	0.035 (CI = +/-0.025; p = 0.013)	0.617	+3.59%
Loss Cost	2012	0.041 (CI = +/-0.032; p = 0.021)	0.623	+4.15%
Loss Cost	2013	0.036 (CI = +/-0.045; p = 0.091)	0.439	+3.69%
Loss Cost	2014	0.036 (CI = +/-0.077; p = 0.233)	0.234	+3.66%
Loss Cost	2015	0.014 (CI = +/-0.151; p = 0.728)	-0.389	+1.41%
Severity	2005	0.044 (CI = +/-0.021; p = 0.001)	0.596	+4.46%
Severity	2006	0.046 (CI = +/-0.024; p = 0.002)	0.578	+4.74%
Severity	2007	0.056 (CI = +/-0.024; p = 0.000)	0.706	+5.81%
Severity	2008	0.067 (CI = +/-0.023; p = 0.000)	0.809	+6.94%
Severity	2009	0.078 (CI = +/-0.022; p = 0.000)	0.884	+8.08%
Severity	2010	0.084 (CI = +/-0.024; p = 0.000)	0.891	+8.78%
Severity	2011	0.088 (CI = +/-0.031; p = 0.000)	0.870	+9.18%
Severity	2012	0.084 (CI = +/-0.042; p = 0.004)	0.812	+8.74%
Severity	2013	0.071 (CI = +/-0.053; p = 0.020)	0.721	+7.35%
Severity	2014	0.050 (CI = +/-0.065; p = 0.090)	0.560	+5.16%
Severity	2015	0.041 (CI = +/-0.145; p = 0.346)	0.141	+4.22%
Frequency	2005	-0.038 (CI = +/-0.016; p = 0.000)	0.670	-3.78%
Frequency	2006	-0.047 (CI = +/-0.013; p = 0.000)	0.828	-4.58%
Frequency	2007	-0.053 (CI = +/-0.012; p = 0.000)	0.891	-5.19%
Frequency	2008	-0.056 (CI = +/-0.014; p = 0.000)	0.891	-5.48%
Frequency	2009	-0.058 (CI = +/-0.017; p = 0.000)	0.873	-5.65%
Frequency	2010	-0.056 (CI = +/-0.021; p = 0.000)	0.829	-5.42%
Frequency	2011	-0.053 (CI = +/-0.027; p = 0.003)	0.763	-5.12%
Frequency	2012	-0.043 (CI = +/-0.030; p = 0.014)	0.676	-4.22%
Frequency	2013	-0.035 (CI = +/-0.039; p = 0.071)	0.499	-3.40%
Frequency	2014	-0.014 (CI = +/-0.029; p = 0.208)	0.281	-1.43%
Frequency	2015	-0.027 (CI = +/-0.035; p = 0.078)	0.775	-2.70%

# Collision

Coverage = CL

End Trend Period = 2018

Excluded Points = 2016

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.005 (CI = +/-0.021; p = 0.611)	-0.064	+0.49%
Loss Cost	2006	-0.002 (CI = +/-0.022; p = 0.834)	-0.095	-0.21%
Loss Cost	2007	0.002 (CI = +/-0.025; p = 0.844)	-0.106	+0.23%
Loss Cost	2008	0.011 (CI = +/-0.027; p = 0.358)	-0.005	+1.14%
Loss Cost	2009	0.023 (CI = +/-0.027; p = 0.090)	0.264	+2.29%
Loss Cost	2010	0.035 (CI = +/-0.026; p = 0.018)	0.572	+3.54%
Loss Cost	2011	0.045 (CI = +/-0.028; p = 0.009)	0.729	+4.64%
Loss Cost	2012	0.056 (CI = +/-0.033; p = 0.009)	0.812	+5.72%
Loss Cost	2013	0.055 (CI = +/-0.054; p = 0.048)	0.705	+5.63%
Loss Cost	2014	0.062 (CI = +/-0.111; p = 0.137)	0.616	+6.43%
Loss Cost	2015	0.046 (CI = +/-0.619; p = 0.517)	-0.054	+4.72%
Severity	2005	0.043 (CI = +/-0.025; p = 0.003)	0.524	+4.42%
Severity	2006	0.046 (CI = +/-0.030; p = 0.006)	0.505	+4.75%
Severity	2007	0.059 (CI = +/-0.029; p = 0.001)	0.659	+6.05%
Severity	2008	0.072 (CI = +/-0.028; p = 0.000)	0.795	+7.49%
Severity	2009	0.087 (CI = +/-0.023; p = 0.000)	0.905	+9.07%
Severity	2010	0.097 (CI = +/-0.023; p = 0.000)	0.938	+10.20%
Severity	2011	0.105 (CI = +/-0.026; p = 0.000)	0.948	+11.12%
Severity	2012	0.105 (CI = +/-0.038; p = 0.001)	0.922	+11.10%
Severity	2013	0.095 (CI = +/-0.054; p = 0.011)	0.885	+9.96%
Severity	2014	0.076 (CI = +/-0.074; p = 0.048)	0.861	+7.87%
Severity	2015	0.079 (CI = +/-0.448; p = 0.267)	0.668	+8.22%
Frequency	2005	-0.038 (CI = +/-0.019; p = 0.001)	0.607	-3.77%
Frequency	2006	-0.048 (CI = +/-0.016; p = 0.000)	0.798	-4.73%
Frequency	2007	-0.056 (CI = +/-0.015; p = 0.000)	0.884	-5.49%
Frequency	2008	-0.061 (CI = +/-0.016; p = 0.000)	0.892	-5.91%
Frequency	2009	-0.064 (CI = +/-0.020; p = 0.000)	0.881	-6.22%
Frequency	2010	-0.062 (CI = +/-0.025; p = 0.001)	0.836	-6.05%
Frequency	2011	-0.060 (CI = +/-0.034; p = 0.006)	0.765	-5.84%
Frequency	2012	-0.050 (CI = +/-0.043; p = 0.032)	0.653	-4.85%
Frequency	2013	-0.040 (CI = +/-0.064; p = 0.141)	0.423	-3.94%
Frequency	2014	-0.013 (CI = +/-0.062; p = 0.447)	-0.042	-1.34%
Frequency	2015	-0.033 (CI = +/-0.171; p = 0.248)	0.712	-3.23%



# Collision

Coverage = CL

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.003 (CI = +/-0.029; p = 0.817)	0.063 (CI = +/-0.294; p = 0.652)	0.007	+0.32%
Loss Cost	2006	-0.006 (CI = +/-0.030; p = 0.690)	0.113 (CI = +/-0.288; p = 0.411)	-0.052	-0.57%
Loss Cost	2007	-0.001 (CI = +/-0.033; p = 0.965)	0.090 (CI = +/-0.297; p = 0.523)	-0.026	-0.07%
Loss Cost	2008	0.008 (CI = +/-0.033; p = 0.625)	0.063 (CI = +/-0.282; p = 0.633)	0.108	+0.75%
Loss Cost	2009	0.015 (CI = +/-0.032; p = 0.330)	0.055 (CI = +/-0.260; p = 0.647)	0.295	+1.46%
Loss Cost	2010	0.019 (CI = +/-0.031; p = 0.196)	0.070 (CI = +/-0.248; p = 0.542)	0.434	+1.91%
Loss Cost	2011	0.021 (CI = +/-0.032; p = 0.173)	0.096 (CI = +/-0.263; p = 0.425)	0.456	+2.08%
Loss Cost	2012	0.021 (CI = +/-0.034; p = 0.184)	0.144 (CI = +/-0.321; p = 0.323)	0.420	+2.12%
Loss Cost	2013	0.018 (CI = +/-0.041; p = 0.312)	0.339 (CI = +/-1.359; p = 0.564)	0.142	+1.86%
Loss Cost	2014	0.018 (CI = +/-0.041; p = 0.312)	NA (CI = +/-NA; p = NA)	0.030	+1.86%
Loss Cost	2015	0.001 (CI = +/-0.046; p = 0.957)	NA (CI = +/-NA; p = NA)	-0.199	+0.10%
Loss Cost	2016	-0.021 (CI = +/-0.049; p = 0.295)	NA (CI = +/-NA; p = NA)	0.082	-2.10%
Severity	2005	0.019 (CI = +/-0.031; p = 0.199)	0.350 (CI = +/-0.307; p = 0.028)	0.791	+1.95%
Severity	2006	0.021 (CI = +/-0.035; p = 0.212)	0.340 (CI = +/-0.329; p = 0.044)	0.775	+2.13%
Severity	2007	0.033 (CI = +/-0.033; p = 0.053)	0.286 (CI = +/-0.300; p = 0.060)	0.832	+3.33%
Severity	2008	0.043 (CI = +/-0.031; p = 0.010)	0.252 (CI = +/-0.264; p = 0.059)	0.880	+4.40%
Severity	2009	0.051 (CI = +/-0.027; p = 0.002)	0.243 (CI = +/-0.227; p = 0.038)	0.916	+5.22%
Severity	2010	0.054 (CI = +/-0.028; p = 0.002)	0.253 (CI = +/-0.226; p = 0.032)	0.914	+5.54%
Severity	2011	0.055 (CI = +/-0.029; p = 0.002)	0.274 (CI = +/-0.243; p = 0.032)	0.899	+5.68%
Severity	2012	0.055 (CI = +/-0.032; p = 0.005)	0.288 (CI = +/-0.306; p = 0.062)	0.851	+5.69%
Severity	2013	0.047 (CI = +/-0.034; p = 0.014)	0.952 (CI = +/-1.114; p = 0.082)	0.800	+4.79%
Severity	2014	0.047 (CI = +/-0.034; p = 0.014)	NA (CI = +/-NA; p = NA)	0.603	+4.79%
Severity	2015	0.038 (CI = +/-0.044; p = 0.077)	NA (CI = +/-NA; p = NA)	0.396	+3.85%
Severity	2016	0.017 (CI = +/-0.047; p = 0.376)	NA (CI = +/-NA; p = NA)	-0.002	+1.71%
Frequency	2005	-0.016 (CI = +/-0.020; p = 0.115)	-0.287 (CI = +/-0.205; p = 0.010)	0.854	-1.59%
Frequency	2006	-0.027 (CI = +/-0.016; p = 0.004)	-0.227 (CI = +/-0.155; p = 0.008)	0.926	-2.64%
Frequency	2007	-0.033 (CI = +/-0.014; p = 0.000)	-0.196 (CI = +/-0.129; p = 0.006)	0.953	-3.29%
Frequency	2008	-0.036 (CI = +/-0.015; p = 0.000)	-0.189 (CI = +/-0.132; p = 0.009)	0.949	-3.49%
Frequency	2009	-0.036 (CI = +/-0.017; p = 0.001)	-0.188 (CI = +/-0.139; p = 0.013)	0.940	-3.57%
Frequency	2010	-0.035 (CI = +/-0.018; p = 0.002)	-0.184 (CI = +/-0.145; p = 0.018)	0.923	-3.44%
Frequency	2011	-0.035 (CI = +/-0.019; p = 0.003)	-0.178 (CI = +/-0.160; p = 0.034)	0.892	-3.41%
Frequency	2012	-0.034 (CI = +/-0.020; p = 0.005)	-0.144 (CI = +/-0.193; p = 0.122)	0.829	-3.38%
Frequency	2013	-0.028 (CI = +/-0.020; p = 0.013)	-0.614 (CI = +/-0.666; p = 0.065)	0.812	-2.79%
Frequency	2014	-0.028 (CI = +/-0.020; p = 0.013)	NA (CI = +/-NA; p = NA)	0.611	-2.79%
Frequency	2015	-0.037 (CI = +/-0.023; p = 0.009)	NA (CI = +/-NA; p = NA)	0.729	-3.60%
Frequency	2016	-0.038 (CI = +/-0.035; p = 0.038)	NA (CI = +/-NA; p = NA)	0.626	-3.75%

# Collision

Coverage = CL

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	-0.001 (CI = +/-0.038; p = 0.954)	0.089 (CI = +/-0.336; p = 0.573)	-0.055	-0.10%
Loss Cost	2006	-0.016 (CI = +/-0.040; p = 0.382)	0.175 (CI = +/-0.328; p = 0.264)	-0.043	-1.62%
Loss Cost	2007	-0.010 (CI = +/-0.046; p = 0.626)	0.146 (CI = +/-0.358; p = 0.385)	-0.065	-1.04%
Loss Cost	2008	0.003 (CI = +/-0.050; p = 0.894)	0.089 (CI = +/-0.358; p = 0.589)	0.016	+0.30%
Loss Cost	2009	0.017 (CI = +/-0.050; p = 0.460)	0.046 (CI = +/-0.340; p = 0.765)	0.212	+1.71%
Loss Cost	2010	0.027 (CI = +/-0.050; p = 0.240)	0.034 (CI = +/-0.322; p = 0.809)	0.396	+2.76%
Loss Cost	2011	0.032 (CI = +/-0.053; p = 0.194)	0.052 (CI = +/-0.337; p = 0.717)	0.444	+3.23%
Loss Cost	2012	0.033 (CI = +/-0.058; p = 0.206)	0.101 (CI = +/-0.407; p = 0.552)	0.420	+3.36%
Loss Cost	2013	0.031 (CI = +/-0.080; p = 0.345)	0.211 (CI = +/-1.840; p = 0.766)	0.100	+3.12%
Loss Cost	2014	0.031 (CI = +/-0.080; p = 0.345)	NA (CI = +/-NA; p = NA)	0.028	+3.12%
Loss Cost	2015	0.000 (CI = +/-0.109; p = 0.997)	NA (CI = +/-NA; p = NA)	-0.333	-0.01%
Loss Cost	2016	-0.059 (CI = +/-0.049; p = 0.036)	NA (CI = +/-NA; p = NA)	0.895	-5.68%
Severity	2005	0.004 (CI = +/-0.037; p = 0.805)	0.435 (CI = +/-0.326; p = 0.013)	0.752	+0.42%
Severity	2006	0.003 (CI = +/-0.044; p = 0.895)	0.443 (CI = +/-0.362; p = 0.021)	0.732	+0.27%
Severity	2007	0.018 (CI = +/-0.046; p = 0.404)	0.366 (CI = +/-0.359; p = 0.046)	0.784	+1.83%
Severity	2008	0.035 (CI = +/-0.047; p = 0.133)	0.297 (CI = +/-0.340; p = 0.080)	0.835	+3.51%
Severity	2009	0.049 (CI = +/-0.046; p = 0.037)	0.251 (CI = +/-0.308; p = 0.097)	0.880	+5.06%
Severity	2010	0.056 (CI = +/-0.049; p = 0.030)	0.243 (CI = +/-0.314; p = 0.110)	0.878	+5.78%
Severity	2011	0.060 (CI = +/-0.054; p = 0.035)	0.257 (CI = +/-0.339; p = 0.114)	0.857	+6.14%
Severity	2012	0.060 (CI = +/-0.062; p = 0.054)	0.271 (CI = +/-0.429; p = 0.166)	0.781	+6.18%
Severity	2013	0.045 (CI = +/-0.072; p = 0.157)	0.971 (CI = +/-1.667; p = 0.181)	0.677	+4.63%
Severity	2014	0.045 (CI = +/-0.072; p = 0.157)	NA (CI = +/-NA; p = NA)	0.289	+4.63%
Severity	2015	0.025 (CI = +/-0.113; p = 0.528)	NA (CI = +/-NA; p = NA)	-0.141	+2.56%
Severity	2016	-0.036 (CI = +/-0.036; p = 0.050)	NA (CI = +/-NA; p = NA)	0.854	-3.51%
Frequency	2005	-0.005 (CI = +/-0.023; p = 0.629)	-0.345 (CI = +/-0.205; p = 0.003)	0.843	-0.52%
Frequency	2006	-0.019 (CI = +/-0.019; p = 0.054)	-0.268 (CI = +/-0.161; p = 0.004)	0.920	-1.89%
Frequency	2007	-0.029 (CI = +/-0.018; p = 0.005)	-0.220 (CI = +/-0.139; p = 0.005)	0.950	-2.82%
Frequency	2008	-0.032 (CI = +/-0.021; p = 0.007)	-0.208 (CI = +/-0.149; p = 0.012)	0.945	-3.10%
Frequency	2009	-0.032 (CI = +/-0.024; p = 0.015)	-0.205 (CI = +/-0.163; p = 0.020)	0.933	-3.19%
Frequency	2010	-0.029 (CI = +/-0.026; p = 0.034)	-0.209 (CI = +/-0.168; p = 0.022)	0.916	-2.85%
Frequency	2011	-0.028 (CI = +/-0.029; p = 0.060)	-0.204 (CI = +/-0.186; p = 0.036)	0.878	-2.74%
Frequency	2012	-0.027 (CI = +/-0.031; p = 0.077)	-0.170 (CI = +/-0.217; p = 0.100)	0.790	-2.66%
Frequency	2013	-0.015 (CI = +/-0.021; p = 0.133)	-0.759 (CI = +/-0.496; p = 0.013)	0.889	-1.44%
Frequency	2014	-0.015 (CI = +/-0.021; p = 0.133)	NA (CI = +/-NA; p = NA)	0.336	-1.44%
Frequency	2015	-0.025 (CI = +/-0.022; p = 0.034)	NA (CI = +/-NA; p = NA)	0.762	-2.51%
Frequency	2016	-0.023 (CI = +/-0.050; p = 0.187)	NA (CI = +/-NA; p = NA)	0.491	-2.25%

# Collision

Coverage = CL

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time, scalar\_level\_change

Scalar Level Change Start Date = 2013-04-01

Fit	Start Date	Time	Scalar_shift	Adjusted R <sup>2</sup>	Implied Trend
					Rate
Loss Cost	2005	0.000 (CI = +/-0.043; p = 0.984)	0.087 (CI = +/-0.361; p = 0.607)	-0.073	-0.04%
Loss Cost	2006	-0.019 (CI = +/-0.046; p = 0.382)	0.187 (CI = +/-0.358; p = 0.272)	-0.051	-1.87%
Loss Cost	2007	-0.012 (CI = +/-0.056; p = 0.639)	0.154 (CI = +/-0.403; p = 0.411)	-0.085	-1.20%
Loss Cost	2008	0.006 (CI = +/-0.063; p = 0.826)	0.074 (CI = +/-0.416; p = 0.692)	-0.007	+0.63%
Loss Cost	2009	0.028 (CI = +/-0.066; p = 0.341)	-0.004 (CI = +/-0.396; p = 0.982)	0.234	+2.87%
Loss Cost	2010	0.047 (CI = +/-0.063; p = 0.117)	-0.046 (CI = +/-0.356; p = 0.763)	0.498	+4.83%
Loss Cost	2011	0.057 (CI = +/-0.064; p = 0.073)	-0.038 (CI = +/-0.349; p = 0.791)	0.607	+5.83%
Loss Cost	2012	0.059 (CI = +/-0.070; p = 0.079)	0.014 (CI = +/-0.406; p = 0.929)	0.629	+6.13%
Loss Cost	2013	0.062 (CI = +/-0.107; p = 0.162)	-0.087 (CI = +/-1.991; p = 0.898)	0.405	+6.43%
Loss Cost	2014	0.062 (CI = +/-0.107; p = 0.162)	NA (CI = +/-NA; p = NA)	0.376	+6.43%
Loss Cost	2015	0.032 (CI = +/-0.215; p = 0.587)	NA (CI = +/-NA; p = NA)	-0.245	+3.26%
Loss Cost	2016	-0.053 (CI = +/-0.307; p = 0.275)	NA (CI = +/-NA; p = NA)	0.650	-5.12%
Severity	2005	0.002 (CI = +/-0.041; p = 0.902)	0.442 (CI = +/-0.349; p = 0.018)	0.724	+0.24%
Severity	2006	0.000 (CI = +/-0.051; p = 0.994)	0.456 (CI = +/-0.395; p = 0.028)	0.703	-0.02%
Severity	2007	0.019 (CI = +/-0.057; p = 0.468)	0.362 (CI = +/-0.404; p = 0.073)	0.758	+1.91%
Severity	2008	0.042 (CI = +/-0.059; p = 0.139)	0.262 (CI = +/-0.388; p = 0.159)	0.822	+4.31%
Severity	2009	0.067 (CI = +/-0.055; p = 0.024)	0.175 (CI = +/-0.334; p = 0.256)	0.892	+6.91%
Severity	2010	0.081 (CI = +/-0.056; p = 0.012)	0.143 (CI = +/-0.315; p = 0.311)	0.911	+8.46%
Severity	2011	0.089 (CI = +/-0.058; p = 0.011)	0.149 (CI = +/-0.316; p = 0.279)	0.914	+9.32%
Severity	2012	0.090 (CI = +/-0.069; p = 0.022)	0.171 (CI = +/-0.401; p = 0.303)	0.872	+9.45%
Severity	2013	0.076 (CI = +/-0.093; p = 0.080)	0.682 (CI = +/-1.715; p = 0.295)	0.802	+7.87%
Severity	2014	0.076 (CI = +/-0.093; p = 0.080)	NA (CI = +/-NA; p = NA)	0.592	+7.87%
Severity	2015	0.063 (CI = +/-0.210; p = 0.325)	NA (CI = +/-NA; p = NA)	0.183	+6.50%
Severity	2016	-0.021 (CI = +/-0.010; p = 0.022)	NA (CI = +/-NA; p = NA)	0.998	-2.12%
Frequency	2005	-0.003 (CI = +/-0.026; p = 0.818)	-0.356 (CI = +/-0.217; p = 0.004)	0.823	-0.28%
Frequency	2006	-0.019 (CI = +/-0.023; p = 0.096)	-0.269 (CI = +/-0.176; p = 0.007)	0.908	-1.86%
Frequency	2007	-0.031 (CI = +/-0.022; p = 0.010)	-0.209 (CI = +/-0.154; p = 0.013)	0.944	-3.06%
Frequency	2008	-0.036 (CI = +/-0.026; p = 0.012)	-0.188 (CI = +/-0.168; p = 0.033)	0.940	-3.53%
Frequency	2009	-0.039 (CI = +/-0.031; p = 0.022)	-0.178 (CI = +/-0.189; p = 0.060)	0.929	-3.78%
Frequency	2010	-0.034 (CI = +/-0.036; p = 0.060)	-0.189 (CI = +/-0.203; p = 0.064)	0.907	-3.35%
Frequency	2011	-0.032 (CI = +/-0.043; p = 0.108)	-0.187 (CI = +/-0.231; p = 0.092)	0.862	-3.20%
Frequency	2012	-0.031 (CI = +/-0.048; p = 0.148)	-0.157 (CI = +/-0.276; p = 0.190)	0.754	-3.04%
Frequency	2013	-0.013 (CI = +/-0.037; p = 0.335)	-0.769 (CI = +/-0.694; p = 0.039)	0.862	-1.34%
Frequency	2014	-0.013 (CI = +/-0.037; p = 0.335)	NA (CI = +/-NA; p = NA)	0.072	-1.34%
Frequency	2015	-0.031 (CI = +/-0.045; p = 0.098)	NA (CI = +/-NA; p = NA)	0.721	-3.05%
Frequency	2016	-0.031 (CI = +/-0.298; p = 0.410)	NA (CI = +/-NA; p = NA)	0.278	-3.07%

# Comprehensive

Coverage = CM

End Trend Period = 2021

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.016 (CI = +/-0.013; p = 0.021)	0.259	+1.61%
Loss Cost	2006	0.019 (CI = +/-0.015; p = 0.016)	0.305	+1.90%
Loss Cost	2007	0.017 (CI = +/-0.017; p = 0.050)	0.207	+1.67%
Loss Cost	2008	0.026 (CI = +/-0.013; p = 0.001)	0.591	+2.68%
Loss Cost	2009	0.035 (CI = +/-0.009; p = 0.000)	0.849	+3.52%
Loss Cost	2010	0.037 (CI = +/-0.011; p = 0.000)	0.842	+3.73%
Loss Cost	2011	0.032 (CI = +/-0.010; p = 0.000)	0.825	+3.23%
Loss Cost	2012	0.035 (CI = +/-0.012; p = 0.000)	0.837	+3.57%
Loss Cost	2013	0.036 (CI = +/-0.015; p = 0.001)	0.798	+3.69%
Loss Cost	2014	0.036 (CI = +/-0.020; p = 0.005)	0.724	+3.67%
Loss Cost	2015	0.030 (CI = +/-0.025; p = 0.029)	0.575	+3.02%
Loss Cost	2016	0.030 (CI = +/-0.039; p = 0.098)	0.419	+3.04%
Severity	2005	0.025 (CI = +/-0.014; p = 0.001)	0.467	+2.57%
Severity	2006	0.030 (CI = +/-0.015; p = 0.001)	0.540	+3.01%
Severity	2007	0.030 (CI = +/-0.017; p = 0.002)	0.490	+3.03%
Severity	2008	0.039 (CI = +/-0.014; p = 0.000)	0.729	+4.00%
Severity	2009	0.049 (CI = +/-0.009; p = 0.000)	0.929	+5.02%
Severity	2010	0.049 (CI = +/-0.010; p = 0.000)	0.909	+4.97%
Severity	2011	0.052 (CI = +/-0.011; p = 0.000)	0.912	+5.31%
Severity	2012	0.053 (CI = +/-0.014; p = 0.000)	0.890	+5.43%
Severity	2013	0.055 (CI = +/-0.018; p = 0.000)	0.867	+5.66%
Severity	2014	0.059 (CI = +/-0.023; p = 0.001)	0.845	+6.05%
Severity	2015	0.059 (CI = +/-0.032; p = 0.005)	0.781	+6.12%
Severity	2016	0.060 (CI = +/-0.049; p = 0.027)	0.680	+6.23%
Frequency	2005	-0.009 (CI = +/-0.007; p = 0.011)	0.319	-0.93%
Frequency	2006	-0.011 (CI = +/-0.008; p = 0.008)	0.365	-1.08%
Frequency	2007	-0.013 (CI = +/-0.008; p = 0.003)	0.466	-1.32%
Frequency	2008	-0.013 (CI = +/-0.009; p = 0.010)	0.390	-1.28%
Frequency	2009	-0.014 (CI = +/-0.011; p = 0.012)	0.398	-1.43%
Frequency	2010	-0.012 (CI = +/-0.012; p = 0.054)	0.256	-1.18%
Frequency	2011	-0.020 (CI = +/-0.007; p = 0.000)	0.785	-1.98%
Frequency	2012	-0.018 (CI = +/-0.009; p = 0.001)	0.712	-1.77%
Frequency	2013	-0.019 (CI = +/-0.011; p = 0.004)	0.666	-1.87%
Frequency	2014	-0.023 (CI = +/-0.013; p = 0.005)	0.724	-2.25%
Frequency	2015	-0.030 (CI = +/-0.011; p = 0.001)	0.880	-2.92%
Frequency	2016	-0.031 (CI = +/-0.017; p = 0.008)	0.822	-3.00%

# Comprehensive

Coverage = CM

End Trend Period = 2019

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.011 (CI = +/-0.016; p = 0.188)	0.063	+1.07%
Loss Cost	2006	0.013 (CI = +/-0.019; p = 0.145)	0.099	+1.35%
Loss Cost	2007	0.009 (CI = +/-0.021; p = 0.350)	-0.004	+0.95%
Loss Cost	2008	0.022 (CI = +/-0.017; p = 0.019)	0.380	+2.20%
Loss Cost	2009	0.032 (CI = +/-0.013; p = 0.000)	0.753	+3.29%
Loss Cost	2010	0.035 (CI = +/-0.016; p = 0.001)	0.735	+3.55%
Loss Cost	2011	0.027 (CI = +/-0.015; p = 0.004)	0.678	+2.74%
Loss Cost	2012	0.031 (CI = +/-0.019; p = 0.007)	0.683	+3.14%
Loss Cost	2013	0.032 (CI = +/-0.027; p = 0.028)	0.581	+3.20%
Loss Cost	2014	0.029 (CI = +/-0.040; p = 0.113)	0.381	+2.97%
Loss Cost	2015	0.013 (CI = +/-0.053; p = 0.499)	-0.115	+1.29%
Loss Cost	2016	0.002 (CI = +/-0.115; p = 0.960)	-0.498	+0.15%
Severity	2005	0.016 (CI = +/-0.015; p = 0.043)	0.224	+1.60%
Severity	2006	0.020 (CI = +/-0.017; p = 0.023)	0.309	+2.03%
Severity	2007	0.019 (CI = +/-0.020; p = 0.061)	0.219	+1.88%
Severity	2008	0.030 (CI = +/-0.017; p = 0.003)	0.569	+3.00%
Severity	2009	0.041 (CI = +/-0.009; p = 0.000)	0.922	+4.22%
Severity	2010	0.039 (CI = +/-0.010; p = 0.000)	0.900	+3.96%
Severity	2011	0.041 (CI = +/-0.012; p = 0.000)	0.890	+4.22%
Severity	2012	0.040 (CI = +/-0.016; p = 0.001)	0.840	+4.08%
Severity	2013	0.039 (CI = +/-0.022; p = 0.006)	0.763	+4.01%
Severity	2014	0.039 (CI = +/-0.034; p = 0.033)	0.649	+4.02%
Severity	2015	0.031 (CI = +/-0.055; p = 0.172)	0.354	+3.11%
Severity	2016	0.013 (CI = +/-0.103; p = 0.643)	-0.308	+1.30%
Frequency	2005	-0.005 (CI = +/-0.008; p = 0.168)	0.075	-0.53%
Frequency	2006	-0.007 (CI = +/-0.009; p = 0.131)	0.112	-0.66%
Frequency	2007	-0.009 (CI = +/-0.010; p = 0.063)	0.214	-0.92%
Frequency	2008	-0.008 (CI = +/-0.012; p = 0.162)	0.104	-0.78%
Frequency	2009	-0.009 (CI = +/-0.014; p = 0.182)	0.098	-0.89%
Frequency	2010	-0.004 (CI = +/-0.015; p = 0.571)	-0.078	-0.39%
Frequency	2011	-0.014 (CI = +/-0.009; p = 0.007)	0.621	-1.42%
Frequency	2012	-0.009 (CI = +/-0.007; p = 0.024)	0.534	-0.91%
Frequency	2013	-0.008 (CI = +/-0.010; p = 0.105)	0.326	-0.77%
Frequency	2014	-0.010 (CI = +/-0.014; p = 0.122)	0.361	-1.01%
Frequency	2015	-0.018 (CI = +/-0.013; p = 0.023)	0.813	-1.77%
Frequency	2016	-0.011 (CI = +/-0.014; p = 0.072)	0.791	-1.13%

# Comprehensive

Coverage = CM

End Trend Period = 2018

Excluded Points = NA

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend Rate
Loss Cost	2005	0.008 (CI = +/-0.019; p = 0.352)	-0.005	+0.84%
Loss Cost	2006	0.011 (CI = +/-0.022; p = 0.279)	0.024	+1.14%
Loss Cost	2007	0.006 (CI = +/-0.025; p = 0.590)	-0.067	+0.63%
Loss Cost	2008	0.020 (CI = +/-0.021; p = 0.057)	0.272	+2.05%
Loss Cost	2009	0.033 (CI = +/-0.016; p = 0.002)	0.700	+3.36%
Loss Cost	2010	0.036 (CI = +/-0.020; p = 0.004)	0.684	+3.71%
Loss Cost	2011	0.027 (CI = +/-0.020; p = 0.018)	0.575	+2.70%
Loss Cost	2012	0.032 (CI = +/-0.027; p = 0.028)	0.585	+3.22%
Loss Cost	2013	0.033 (CI = +/-0.040; p = 0.086)	0.452	+3.35%
Loss Cost	2014	0.030 (CI = +/-0.070; p = 0.265)	0.179	+3.07%
Loss Cost	2015	0.004 (CI = +/-0.118; p = 0.910)	-0.488	+0.35%
Loss Cost	2016	-0.028 (CI = +/-0.576; p = 0.643)	-0.435	-2.80%
Severity	2005	0.013 (CI = +/-0.017; p = 0.123)	0.118	+1.33%
Severity	2006	0.018 (CI = +/-0.019; p = 0.071)	0.199	+1.78%
Severity	2007	0.016 (CI = +/-0.023; p = 0.165)	0.102	+1.56%
Severity	2008	0.028 (CI = +/-0.020; p = 0.012)	0.467	+2.83%
Severity	2009	0.042 (CI = +/-0.011; p = 0.000)	0.901	+4.29%
Severity	2010	0.039 (CI = +/-0.013; p = 0.000)	0.866	+3.98%
Severity	2011	0.042 (CI = +/-0.016; p = 0.001)	0.853	+4.31%
Severity	2012	0.041 (CI = +/-0.022; p = 0.005)	0.778	+4.17%
Severity	2013	0.040 (CI = +/-0.034; p = 0.031)	0.659	+4.10%
Severity	2014	0.041 (CI = +/-0.060; p = 0.118)	0.482	+4.17%
Severity	2015	0.027 (CI = +/-0.127; p = 0.455)	-0.054	+2.75%
Severity	2016	-0.012 (CI = +/-0.542; p = 0.828)	-0.857	-1.18%
Frequency	2005	-0.005 (CI = +/-0.009; p = 0.273)	0.024	-0.48%
Frequency	2006	-0.006 (CI = +/-0.010; p = 0.215)	0.058	-0.63%
Frequency	2007	-0.009 (CI = +/-0.012; p = 0.110)	0.159	-0.92%
Frequency	2008	-0.008 (CI = +/-0.014; p = 0.254)	0.046	-0.76%
Frequency	2009	-0.009 (CI = +/-0.017; p = 0.273)	0.041	-0.89%
Frequency	2010	-0.003 (CI = +/-0.020; p = 0.757)	-0.126	-0.27%
Frequency	2011	-0.016 (CI = +/-0.012; p = 0.018)	0.576	-1.55%
Frequency	2012	-0.009 (CI = +/-0.010; p = 0.075)	0.402	-0.91%
Frequency	2013	-0.007 (CI = +/-0.015; p = 0.261)	0.124	-0.72%
Frequency	2014	-0.011 (CI = +/-0.025; p = 0.274)	0.164	-1.05%
Frequency	2015	-0.024 (CI = +/-0.018; p = 0.031)	0.909	-2.34%
Frequency	2016	-0.017 (CI = +/-0.034; p = 0.101)	0.950	-1.65%

# Comprehensive

Coverage = CM

End Trend Period = 2021

Excluded Points = 2007

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.021 (CI = +/-0.011; p = 0.001)	0.515	+2.13%
Loss Cost	2006	0.026 (CI = +/-0.011; p = 0.000)	0.655	+2.67%
Loss Cost	2008	0.026 (CI = +/-0.013; p = 0.001)	0.591	+2.68%
Loss Cost	2009	0.035 (CI = +/-0.009; p = 0.000)	0.849	+3.52%
Loss Cost	2010	0.037 (CI = +/-0.011; p = 0.000)	0.842	+3.73%
Loss Cost	2011	0.032 (CI = +/-0.010; p = 0.000)	0.825	+3.23%
Loss Cost	2012	0.035 (CI = +/-0.012; p = 0.000)	0.837	+3.57%
Loss Cost	2013	0.036 (CI = +/-0.015; p = 0.001)	0.798	+3.69%
Loss Cost	2014	0.036 (CI = +/-0.020; p = 0.005)	0.724	+3.67%
Loss Cost	2015	0.030 (CI = +/-0.025; p = 0.029)	0.575	+3.02%
Loss Cost	2016	0.030 (CI = +/-0.039; p = 0.098)	0.419	+3.04%
Severity	2005	0.030 (CI = +/-0.013; p = 0.000)	0.602	+3.00%
Severity	2006	0.036 (CI = +/-0.012; p = 0.000)	0.738	+3.70%
Severity	2008	0.039 (CI = +/-0.014; p = 0.000)	0.729	+4.00%
Severity	2009	0.049 (CI = +/-0.009; p = 0.000)	0.929	+5.02%
Severity	2010	0.049 (CI = +/-0.010; p = 0.000)	0.909	+4.97%
Severity	2011	0.052 (CI = +/-0.011; p = 0.000)	0.912	+5.31%
Severity	2012	0.053 (CI = +/-0.014; p = 0.000)	0.890	+5.43%
Severity	2013	0.055 (CI = +/-0.018; p = 0.000)	0.867	+5.66%
Severity	2014	0.059 (CI = +/-0.023; p = 0.001)	0.845	+6.05%
Severity	2015	0.059 (CI = +/-0.032; p = 0.005)	0.781	+6.12%
Severity	2016	0.060 (CI = +/-0.049; p = 0.027)	0.680	+6.23%
Frequency	2005	-0.008 (CI = +/-0.007; p = 0.026)	0.258	-0.84%
Frequency	2006	-0.010 (CI = +/-0.008; p = 0.022)	0.292	-0.99%
Frequency	2008	-0.013 (CI = +/-0.009; p = 0.010)	0.390	-1.28%
Frequency	2009	-0.014 (CI = +/-0.011; p = 0.012)	0.398	-1.43%
Frequency	2010	-0.012 (CI = +/-0.012; p = 0.054)	0.256	-1.18%
Frequency	2011	-0.020 (CI = +/-0.007; p = 0.000)	0.785	-1.98%
Frequency	2012	-0.018 (CI = +/-0.009; p = 0.001)	0.712	-1.77%
Frequency	2013	-0.019 (CI = +/-0.011; p = 0.004)	0.666	-1.87%
Frequency	2014	-0.023 (CI = +/-0.013; p = 0.005)	0.724	-2.25%
Frequency	2015	-0.030 (CI = +/-0.011; p = 0.001)	0.880	-2.92%
Frequency	2016	-0.031 (CI = +/-0.017; p = 0.008)	0.822	-3.00%

# Comprehensive

Coverage = CM

End Trend Period = 2019

Excluded Points = 2007

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.017 (CI = +/-0.014; p = 0.021)	0.315	+1.67%
Loss Cost	2006	0.023 (CI = +/-0.014; p = 0.005)	0.489	+2.28%
Loss Cost	2008	0.022 (CI = +/-0.017; p = 0.019)	0.380	+2.20%
Loss Cost	2009	0.032 (CI = +/-0.013; p = 0.000)	0.753	+3.29%
Loss Cost	2010	0.035 (CI = +/-0.016; p = 0.001)	0.735	+3.55%
Loss Cost	2011	0.027 (CI = +/-0.015; p = 0.004)	0.678	+2.74%
Loss Cost	2012	0.031 (CI = +/-0.019; p = 0.007)	0.683	+3.14%
Loss Cost	2013	0.032 (CI = +/-0.027; p = 0.028)	0.581	+3.20%
Loss Cost	2014	0.029 (CI = +/-0.040; p = 0.113)	0.381	+2.97%
Loss Cost	2015	0.013 (CI = +/-0.053; p = 0.499)	-0.115	+1.29%
Loss Cost	2016	0.002 (CI = +/-0.115; p = 0.960)	-0.498	+0.15%
Severity	2005	0.021 (CI = +/-0.014; p = 0.008)	0.415	+2.07%
Severity	2006	0.028 (CI = +/-0.014; p = 0.001)	0.612	+2.81%
Severity	2008	0.030 (CI = +/-0.017; p = 0.003)	0.569	+3.00%
Severity	2009	0.041 (CI = +/-0.009; p = 0.000)	0.922	+4.22%
Severity	2010	0.039 (CI = +/-0.010; p = 0.000)	0.900	+3.96%
Severity	2011	0.041 (CI = +/-0.012; p = 0.000)	0.890	+4.22%
Severity	2012	0.040 (CI = +/-0.016; p = 0.001)	0.840	+4.08%
Severity	2013	0.039 (CI = +/-0.022; p = 0.006)	0.763	+4.01%
Severity	2014	0.039 (CI = +/-0.034; p = 0.033)	0.649	+4.02%
Severity	2015	0.031 (CI = +/-0.055; p = 0.172)	0.354	+3.11%
Severity	2016	0.013 (CI = +/-0.103; p = 0.643)	-0.308	+1.30%
Frequency	2005	-0.004 (CI = +/-0.008; p = 0.311)	0.009	-0.40%
Frequency	2006	-0.005 (CI = +/-0.010; p = 0.277)	0.025	-0.51%
Frequency	2008	-0.008 (CI = +/-0.012; p = 0.162)	0.104	-0.78%
Frequency	2009	-0.009 (CI = +/-0.014; p = 0.182)	0.098	-0.89%
Frequency	2010	-0.004 (CI = +/-0.015; p = 0.571)	-0.078	-0.39%
Frequency	2011	-0.014 (CI = +/-0.009; p = 0.007)	0.621	-1.42%
Frequency	2012	-0.009 (CI = +/-0.007; p = 0.024)	0.534	-0.91%
Frequency	2013	-0.008 (CI = +/-0.010; p = 0.105)	0.326	-0.77%
Frequency	2014	-0.010 (CI = +/-0.014; p = 0.122)	0.361	-1.01%
Frequency	2015	-0.018 (CI = +/-0.013; p = 0.023)	0.813	-1.77%
Frequency	2016	-0.011 (CI = +/-0.014; p = 0.072)	0.791	-1.13%



# Comprehensive

Coverage = CM

End Trend Period = 2018

Excluded Points = 2007

Parameters Included: time

Fit	Start Date	Time	Implied Trend	
			Adjusted R <sup>2</sup>	Rate
Loss Cost	2005	0.015 (CI = +/-0.016; p = 0.062)	0.217	+1.50%
Loss Cost	2006	0.022 (CI = +/-0.017; p = 0.016)	0.401	+2.19%
Loss Cost	2008	0.020 (CI = +/-0.021; p = 0.057)	0.272	+2.05%
Loss Cost	2009	0.033 (CI = +/-0.016; p = 0.002)	0.700	+3.36%
Loss Cost	2010	0.036 (CI = +/-0.020; p = 0.004)	0.684	+3.71%
Loss Cost	2011	0.027 (CI = +/-0.020; p = 0.018)	0.575	+2.70%
Loss Cost	2012	0.032 (CI = +/-0.027; p = 0.028)	0.585	+3.22%
Loss Cost	2013	0.033 (CI = +/-0.040; p = 0.086)	0.452	+3.35%
Loss Cost	2014	0.030 (CI = +/-0.070; p = 0.265)	0.179	+3.07%
Loss Cost	2015	0.004 (CI = +/-0.118; p = 0.910)	-0.488	+0.35%
Loss Cost	2016	-0.028 (CI = +/-0.576; p = 0.643)	-0.435	-2.80%
Severity	2005	0.018 (CI = +/-0.016; p = 0.029)	0.305	+1.84%
Severity	2006	0.026 (CI = +/-0.016; p = 0.005)	0.525	+2.64%
Severity	2008	0.028 (CI = +/-0.020; p = 0.012)	0.467	+2.83%
Severity	2009	0.042 (CI = +/-0.011; p = 0.000)	0.901	+4.29%
Severity	2010	0.039 (CI = +/-0.013; p = 0.000)	0.866	+3.98%
Severity	2011	0.042 (CI = +/-0.016; p = 0.001)	0.853	+4.31%
Severity	2012	0.041 (CI = +/-0.022; p = 0.005)	0.778	+4.17%
Severity	2013	0.040 (CI = +/-0.034; p = 0.031)	0.659	+4.10%
Severity	2014	0.041 (CI = +/-0.060; p = 0.118)	0.482	+4.17%
Severity	2015	0.027 (CI = +/-0.127; p = 0.455)	-0.054	+2.75%
Severity	2016	-0.012 (CI = +/-0.542; p = 0.828)	-0.857	-1.18%
Frequency	2005	-0.003 (CI = +/-0.010; p = 0.461)	-0.036	-0.33%
Frequency	2006	-0.004 (CI = +/-0.012; p = 0.413)	-0.025	-0.44%
Frequency	2008	-0.008 (CI = +/-0.014; p = 0.254)	0.046	-0.76%
Frequency	2009	-0.009 (CI = +/-0.017; p = 0.273)	0.041	-0.89%
Frequency	2010	-0.003 (CI = +/-0.020; p = 0.757)	-0.126	-0.27%
Frequency	2011	-0.016 (CI = +/-0.012; p = 0.018)	0.576	-1.55%
Frequency	2012	-0.009 (CI = +/-0.010; p = 0.075)	0.402	-0.91%
Frequency	2013	-0.007 (CI = +/-0.015; p = 0.261)	0.124	-0.72%
Frequency	2014	-0.011 (CI = +/-0.025; p = 0.274)	0.164	-1.05%
Frequency	2015	-0.024 (CI = +/-0.018; p = 0.031)	0.909	-2.34%
Frequency	2016	-0.017 (CI = +/-0.034; p = 0.101)	0.950	-1.65%

# Comprehensive

Coverage = CM

End Trend Period = 2021

Excluded Points = 2010

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.014 (CI = +/-0.012; p = 0.026)	0.258	+1.43%
Loss Cost	2006	0.016 (CI = +/-0.014; p = 0.023)	0.287	+1.65%
Loss Cost	2007	0.013 (CI = +/-0.015; p = 0.092)	0.153	+1.29%
Loss Cost	2008	0.023 (CI = +/-0.012; p = 0.001)	0.583	+2.28%
Loss Cost	2009	0.031 (CI = +/-0.008; p = 0.000)	0.863	+3.14%
Loss Cost	2011	0.032 (CI = +/-0.010; p = 0.000)	0.825	+3.23%
Loss Cost	2012	0.035 (CI = +/-0.012; p = 0.000)	0.837	+3.57%
Loss Cost	2013	0.036 (CI = +/-0.015; p = 0.001)	0.798	+3.69%
Loss Cost	2014	0.036 (CI = +/-0.020; p = 0.005)	0.724	+3.67%
Loss Cost	2015	0.030 (CI = +/-0.025; p = 0.029)	0.575	+3.02%
Loss Cost	2016	0.030 (CI = +/-0.039; p = 0.098)	0.419	+3.04%
Severity	2005	0.025 (CI = +/-0.014; p = 0.003)	0.452	+2.49%
Severity	2006	0.029 (CI = +/-0.016; p = 0.001)	0.520	+2.93%
Severity	2007	0.029 (CI = +/-0.018; p = 0.005)	0.456	+2.91%
Severity	2008	0.039 (CI = +/-0.016; p = 0.000)	0.705	+3.99%
Severity	2009	0.051 (CI = +/-0.009; p = 0.000)	0.935	+5.25%
Severity	2011	0.052 (CI = +/-0.011; p = 0.000)	0.912	+5.31%
Severity	2012	0.053 (CI = +/-0.014; p = 0.000)	0.890	+5.43%
Severity	2013	0.055 (CI = +/-0.018; p = 0.000)	0.867	+5.66%
Severity	2014	0.059 (CI = +/-0.023; p = 0.001)	0.845	+6.05%
Severity	2015	0.059 (CI = +/-0.032; p = 0.005)	0.781	+6.12%
Severity	2016	0.060 (CI = +/-0.049; p = 0.027)	0.680	+6.23%
Frequency	2005	-0.010 (CI = +/-0.006; p = 0.002)	0.467	-1.04%
Frequency	2006	-0.012 (CI = +/-0.006; p = 0.001)	0.561	-1.24%
Frequency	2007	-0.016 (CI = +/-0.005; p = 0.000)	0.754	-1.58%
Frequency	2008	-0.017 (CI = +/-0.006; p = 0.000)	0.723	-1.64%
Frequency	2009	-0.020 (CI = +/-0.006; p = 0.000)	0.843	-2.00%
Frequency	2011	-0.020 (CI = +/-0.007; p = 0.000)	0.785	-1.98%
Frequency	2012	-0.018 (CI = +/-0.009; p = 0.001)	0.712	-1.77%
Frequency	2013	-0.019 (CI = +/-0.011; p = 0.004)	0.666	-1.87%
Frequency	2014	-0.023 (CI = +/-0.013; p = 0.005)	0.724	-2.25%
Frequency	2015	-0.030 (CI = +/-0.011; p = 0.001)	0.880	-2.92%
Frequency	2016	-0.031 (CI = +/-0.017; p = 0.008)	0.822	-3.00%

# Comprehensive

Coverage = CM

End Trend Period = 2019

Excluded Points = 2010

Parameters Included: time

Fit	Start Date	Time	Adjusted R <sup>2</sup>	Implied Trend
				Rate
Loss Cost	2005	0.009 (CI = +/-0.015; p = 0.221)	0.049	+0.89%
Loss Cost	2006	0.011 (CI = +/-0.017; p = 0.198)	0.068	+1.08%
Loss Cost	2007	0.005 (CI = +/-0.019; p = 0.569)	-0.063	+0.50%
Loss Cost	2008	0.017 (CI = +/-0.015; p = 0.034)	0.343	+1.68%
Loss Cost	2009	0.027 (CI = +/-0.011; p = 0.000)	0.774	+2.75%
Loss Cost	2011	0.027 (CI = +/-0.015; p = 0.004)	0.678	+2.74%
Loss Cost	2012	0.031 (CI = +/-0.019; p = 0.007)	0.683	+3.14%
Loss Cost	2013	0.032 (CI = +/-0.027; p = 0.028)	0.581	+3.20%
Loss Cost	2014	0.029 (CI = +/-0.040; p = 0.113)	0.381	+2.97%
Loss Cost	2015	0.013 (CI = +/-0.053; p = 0.499)	-0.115	+1.29%
Loss Cost	2016	0.002 (CI = +/-0.115; p = 0.960)	-0.498	+0.15%
Severity	2005	0.015 (CI = +/-0.016; p = 0.058)	0.208	+1.53%
Severity	2006	0.019 (CI = +/-0.018; p = 0.035)	0.283	+1.93%
Severity	2007	0.017 (CI = +/-0.021; p = 0.098)	0.175	+1.73%
Severity	2008	0.029 (CI = +/-0.019; p = 0.007)	0.528	+2.93%
Severity	2009	0.043 (CI = +/-0.009; p = 0.000)	0.929	+4.44%
Severity	2011	0.041 (CI = +/-0.012; p = 0.000)	0.890	+4.22%
Severity	2012	0.040 (CI = +/-0.016; p = 0.001)	0.840	+4.08%
Severity	2013	0.039 (CI = +/-0.022; p = 0.006)	0.763	+4.01%
Severity	2014	0.039 (CI = +/-0.034; p = 0.033)	0.649	+4.02%
Severity	2015	0.031 (CI = +/-0.055; p = 0.172)	0.354	+3.11%
Severity	2016	0.013 (CI = +/-0.103; p = 0.643)	-0.308	+1.30%
Frequency	2005	-0.006 (CI = +/-0.006; p = 0.049)	0.227	-0.63%
Frequency	2006	-0.008 (CI = +/-0.007; p = 0.020)	0.345	-0.83%
Frequency	2007	-0.012 (CI = +/-0.006; p = 0.001)	0.643	-1.20%
Frequency	2008	-0.012 (CI = +/-0.007; p = 0.004)	0.569	-1.21%
Frequency	2009	-0.016 (CI = +/-0.007; p = 0.001)	0.757	-1.61%
Frequency	2011	-0.014 (CI = +/-0.009; p = 0.007)	0.621	-1.42%
Frequency	2012	-0.009 (CI = +/-0.007; p = 0.024)	0.534	-0.91%
Frequency	2013	-0.008 (CI = +/-0.010; p = 0.105)	0.326	-0.77%
Frequency	2014	-0.010 (CI = +/-0.014; p = 0.122)	0.361	-1.01%
Frequency	2015	-0.018 (CI = +/-0.013; p = 0.023)	0.813	-1.77%
Frequency	2016	-0.011 (CI = +/-0.014; p = 0.072)	0.791	-1.13%

# Comprehensive

Coverage = CM

End Trend Period = 2018

Excluded Points = 2010

Parameters Included: time

Fit	Start Date	Time	Implied Trend	
			Adjusted R <sup>2</sup>	Rate
Loss Cost	2005	0.007 (CI = +/-0.017; p = 0.402)	-0.020	+0.68%
Loss Cost	2006	0.009 (CI = +/-0.020; p = 0.361)	-0.008	+0.87%
Loss Cost	2007	0.001 (CI = +/-0.022; p = 0.882)	-0.108	+0.15%
Loss Cost	2008	0.015 (CI = +/-0.018; p = 0.102)	0.212	+1.48%
Loss Cost	2009	0.027 (CI = +/-0.014; p = 0.003)	0.708	+2.73%
Loss Cost	2011	0.027 (CI = +/-0.020; p = 0.018)	0.575	+2.70%
Loss Cost	2012	0.032 (CI = +/-0.027; p = 0.028)	0.585	+3.22%
Loss Cost	2013	0.033 (CI = +/-0.040; p = 0.086)	0.452	+3.35%
Loss Cost	2014	0.030 (CI = +/-0.070; p = 0.265)	0.179	+3.07%
Loss Cost	2015	0.004 (CI = +/-0.118; p = 0.910)	-0.488	+0.35%
Loss Cost	2016	-0.028 (CI = +/-0.576; p = 0.643)	-0.435	-2.80%
Severity	2005	0.013 (CI = +/-0.018; p = 0.152)	0.103	+1.26%
Severity	2006	0.017 (CI = +/-0.020; p = 0.099)	0.174	+1.68%
Severity	2007	0.014 (CI = +/-0.025; p = 0.235)	0.058	+1.39%
Severity	2008	0.027 (CI = +/-0.023; p = 0.025)	0.420	+2.75%
Severity	2009	0.045 (CI = +/-0.011; p = 0.000)	0.912	+4.55%
Severity	2011	0.042 (CI = +/-0.016; p = 0.001)	0.853	+4.31%
Severity	2012	0.041 (CI = +/-0.022; p = 0.005)	0.778	+4.17%
Severity	2013	0.040 (CI = +/-0.034; p = 0.031)	0.659	+4.10%
Severity	2014	0.041 (CI = +/-0.060; p = 0.118)	0.482	+4.17%
Severity	2015	0.027 (CI = +/-0.127; p = 0.455)	-0.054	+2.75%
Severity	2016	-0.012 (CI = +/-0.542; p = 0.828)	-0.857	-1.18%
Frequency	2005	-0.006 (CI = +/-0.007; p = 0.110)	0.144	-0.58%
Frequency	2006	-0.008 (CI = +/-0.008; p = 0.051)	0.264	-0.80%
Frequency	2007	-0.012 (CI = +/-0.007; p = 0.003)	0.590	-1.23%
Frequency	2008	-0.012 (CI = +/-0.009; p = 0.013)	0.506	-1.24%
Frequency	2009	-0.018 (CI = +/-0.009; p = 0.002)	0.740	-1.74%
Frequency	2011	-0.016 (CI = +/-0.012; p = 0.018)	0.576	-1.55%
Frequency	2012	-0.009 (CI = +/-0.010; p = 0.075)	0.402	-0.91%
Frequency	2013	-0.007 (CI = +/-0.015; p = 0.261)	0.124	-0.72%
Frequency	2014	-0.011 (CI = +/-0.025; p = 0.274)	0.164	-1.05%
Frequency	2015	-0.024 (CI = +/-0.018; p = 0.031)	0.909	-2.34%
Frequency	2016	-0.017 (CI = +/-0.034; p = 0.101)	0.950	-1.65%



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