ALBERTA CIVIL TRIAL
LAWYERS ASSOCIATION

SUBMISSION TO THE ALBERTA AUTOMOBILE INSURANCE RATE BOARD ANNUAL REVIEW 2020

July 29, 2020

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Executive summary

The Alberta Civil Trial Lawyers Association (ACTLA) appreciates the opportunity to provide a submission to the Alberta Automobile Insurance Rate Board's (AIRB) 2020 annual review process. ACTLA is made up of 600+ members representing thousands of Albertans and legal professionals. We advocate for a strong civil justice system that protects Albertans' rights, provide continuing legal education and professional development, and promote and uphold the rule of law, administration of justice, and the public good.

ACTLA has retained Mr. Craig A. Allen, an independent consulting actuary familiar with the Canadian insurance industry, to conduct a review of the draft Oliver Wyman report and associated historical data. Our submission is comprised of Mr. Allen's technical analysis and this summarizing foreword which provides additional detail and commentary on Mr. Allen's findings from an ACTLA perspective.

With supporting actuarial data included in Mr. Allen's appended findings, ACTLA wishes to highlight the following for the AIRB's consideration:

1. **The period of growth in bodily injury claims ended in 2016 and payouts per vehicle have stabilized from July 2016 to present.**

The insurance industry has claimed that the Alberta auto insurance market is in crisis, depriving consumers of affordable and available auto insurance. The industry cites rising bodily injury claims costs as the primary reason for the increase in insurance premiums for Albertans. ACTLA has reviewed several recent reports completed for the AIRB and have found that information within directly refutes key assertions of the insurance industry. Our review indicates that bodily injury costs are not the driving factor to premium increases and that the period of growth of bodily injury claim costs ended in 2016. Mr. Allen's actuarial findings do not concur with the assertion that bodily injury claims costs are skyrocketing. To the contrary, Mr. Allen finds that claim costs for bodily injury have stabilized for the last three years. Projections of loss cost in the 2020 Preliminary Annual Review by Oliver Wyman, through December 31, 2019, show that inflation-adjusted BI loss cost continues to remain in a narrow band for the last three accident years, between $420 and $432 (see figures below).

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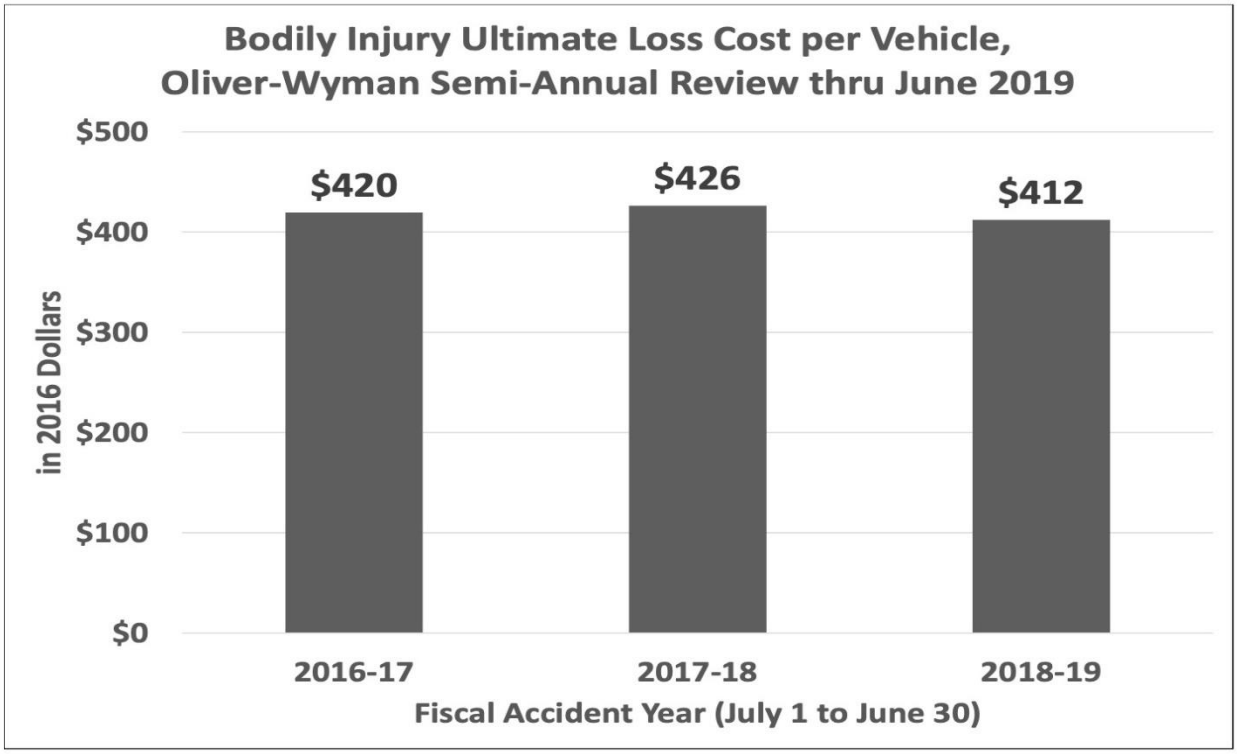

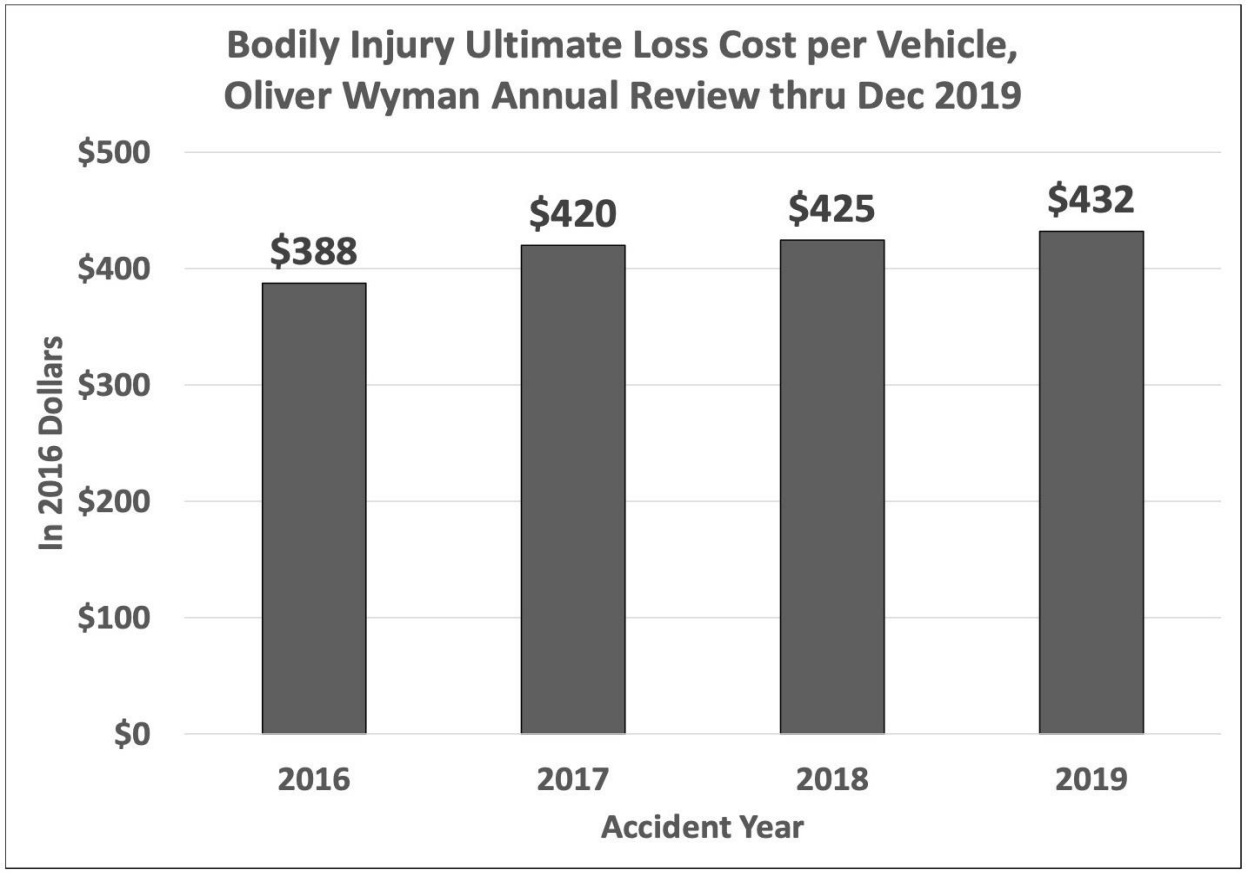

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2. **Insurance industry projections for bodily injury claims payouts and reserves were overly pessimistic and conservative and likely continue to be so based on the statistics and GISA caveats.**

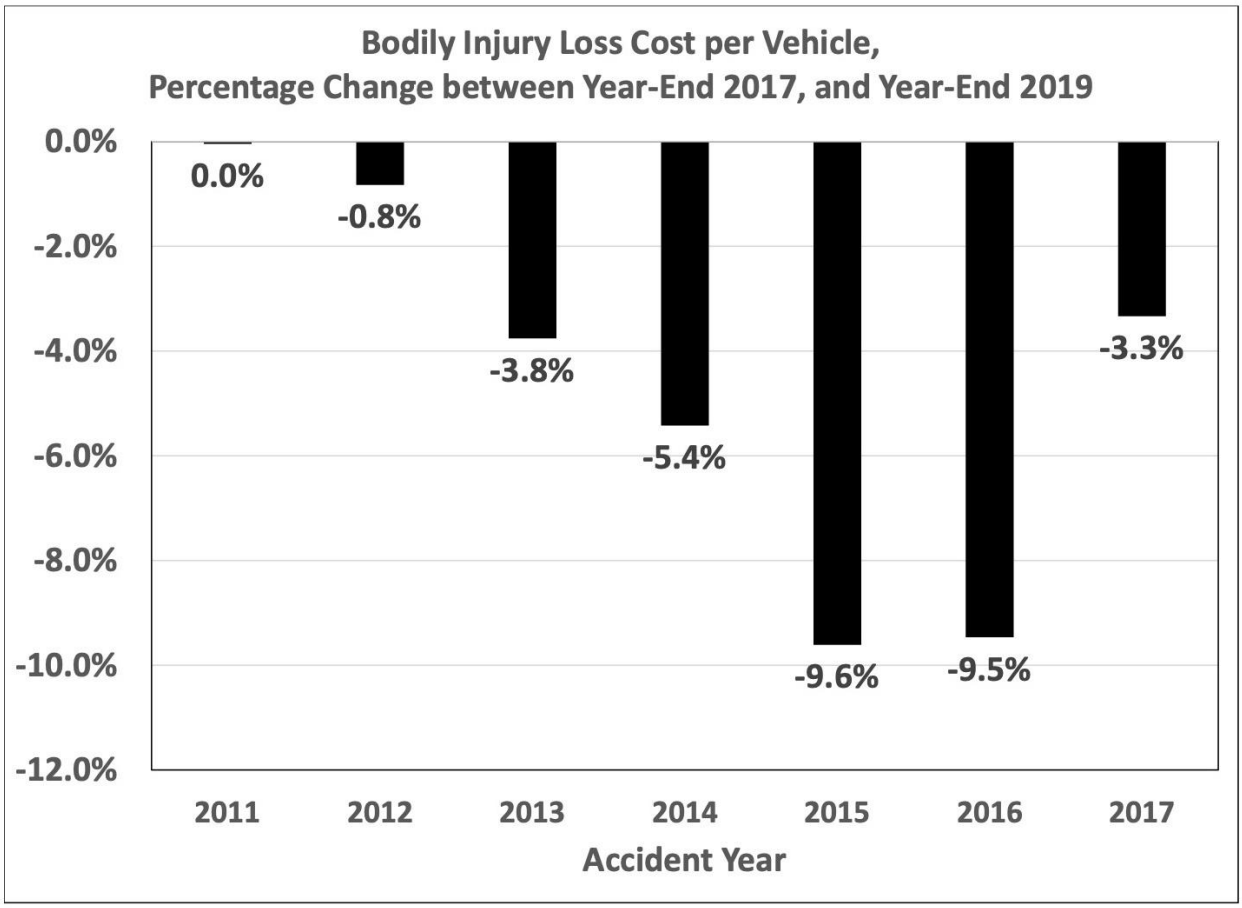
It should be noted that the GISA documentation, upon which Oliver Wyman relies, contains several specific caveats as it relates to bodily injury claims payouts. These are set out below in their entirety (note: each caveat states that "users should exercise caution when using this data):

11.	An unusual significant increase in claim counts for a major writer was noted for Bodily Injury Kind of Loss for Accident Half-Years 2016-1, 2016-2 and 2017-1 at the 6-month development stage. This has been confirmed as a result of a temporary change in its claims handling, which created significant claims backlog. Users should exercise caution when using this data.
12.	A large writer has confirmed its change in claims handling practice for Bodily Injury claims, which results in larger than historical claims closure across the 2017-1 and later diagonals of the Bodily Injury claim count and amount triangles. Users should exercise caution when using this data.
13.	A large writer has strengthened their case reserving practice for Bodily Injury Kind of Loss as of Accident Year 2017-2, resulting in larger than usual case reserve amounts across the 2017-2 and later diagonals of the Bodily Injury amount triangle. Users should exercise caution when using this data.

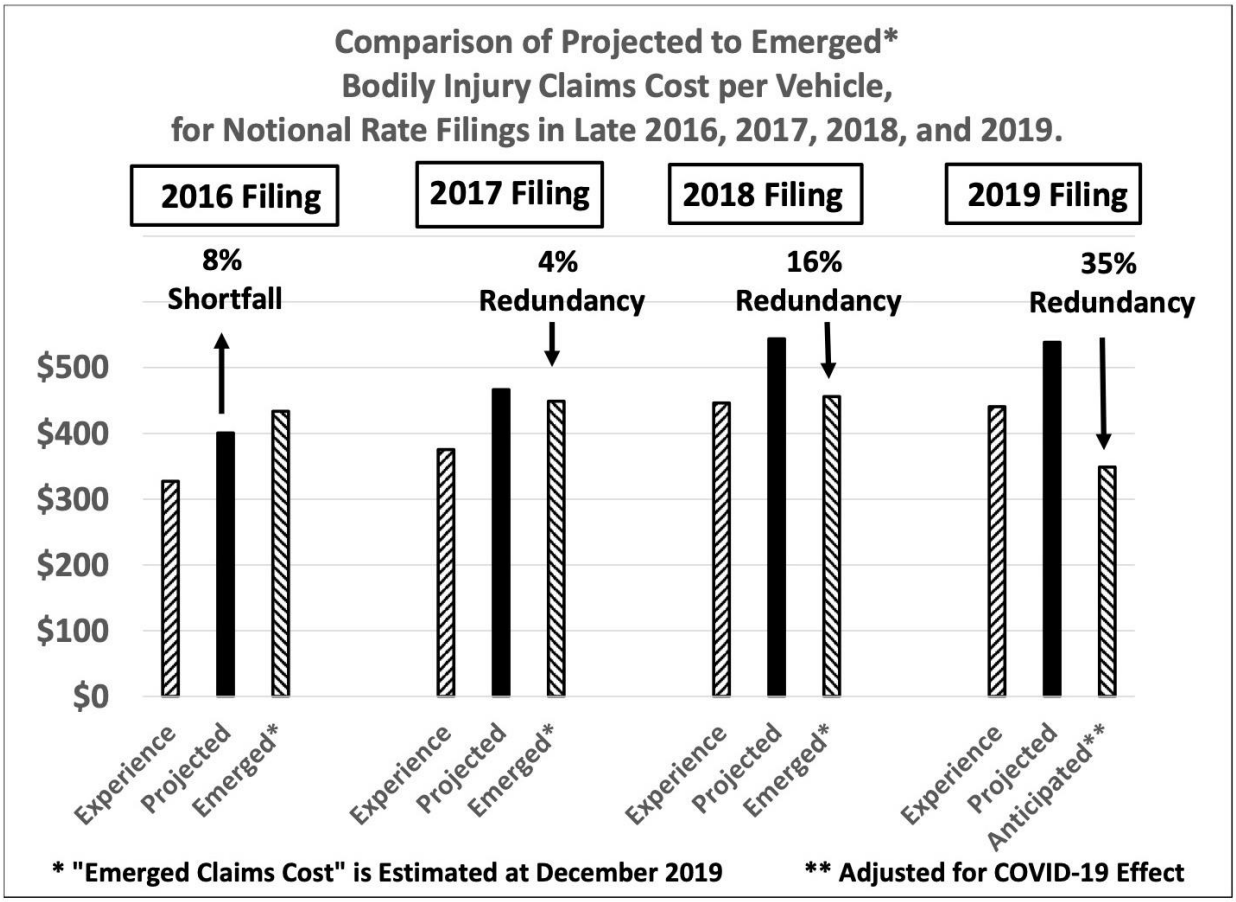
Clearly there appears to be a significant industry move towards strengthening claims reserves beginning in 2017.

It is also worthy to note that despite the GISA suggestion that users exercise caution when using this data, the Oliver Wyman report makes no adjustments to the data for the noted issues.

It is impossible to know the actual impacts of these variations. However, analysis conducted by Mr. Allen in the appended exhibit does show that the conservative reserves shown in previous Annual and Semi-Annual reviews, which continue to date, have not materialized in the manner that was feared. In fact, historical analysis now shows that the results in previous Annual and Semi-Annual reviews were overly pessimistic and took significantly higher reserves than what was ultimately paid out for bodily injury claims dating back to 2015.



This practice is combined with AIRB benchmark trend factors that have overestimated the growth in the value of bodily injury claims since 2016. The trend factors, ranging between 7% and 7.5%, have resulted in a redundancy beginning in 2018 and projected to increase in 2019 and more significantly in 2020. The fact that premium increases have been premised on rising bodily injury claims, which the statistics show have not materialized, can only mean increased profits for insurance companies. In the event future projections continue to accept increases in bodily injury claims as reflected in the overly conservative AIRB benchmark trend factors and reserves, neither of which have materialized, the impact will be corresponding redundancy and increase in insurance company profits.



At rates approved in early 2019, the pre-tax net profit of the private passenger auto segment of Alberta's insurance industry (13%) exceeded the benchmark set by the AIRB (10%). Rate increases granted in late 2019 and early 2020 combined with reduced costs associated with COVID can be expected to increase that level of insurer net income further.

3. **The COVID-19 pandemic has significantly reduced claim costs and the AIRB has a responsibility to accurately reflect this reality in its 2020 annual review.**

The COVID-19 pandemic has dramatically reduced the amount of driving by auto insurance policyholders. And it can be expected to have an even more dramatic impact on the number of insurance claims. Fewer kilometres driven means less time on the road and fewer driver errors. Equally important, fewer vehicles on the road reduces the risk that driver error, when it happens, will lead to collisions, vehicular damage, and bodily injury.

In response to these circumstances, on May 8th the Insurance Bureau of Canada (IBC) published a media release, advising drivers "whose driving habits have changed significantly" to contact their insurance representative for reductions in automobile insurance premiums. The media release further stated premium holders who reduce their coverage "could result in over $100 million in savings for Albertans." There remains scant evidence that insurance companies in Alberta provided $100 million in savings to Alberta consumers.

Many American insurance companies recognized lower claim costs by issuing across-the-board premium reductions. Insurers operating in Alberta fell short of this measure.

The AIRB has a responsibility to accurately reflect this reality in its 2020 annual review.

4. **Alberta's insurers are profitable and remained profitable even during the period of growth in bodily injury claim costs.**

It has been reported by Treasury Board and Finance that the Alberta auto insurance industry sustained an after-tax loss of $667.3 million over the years 2013 through 2018. The Ministry reports that it obtained this amount from the annual Profit and Loss report published by GISA. (On a pre-tax basis, the reported amounts show a pre-tax loss over this period of $870.4 million.)

In contrast, Mr. Allen's analysis, performed using the same method that J.S. Cheng and Partners, Inc. ("Cheng") used in its 2007 analysis of Alberta auto insurance reform, shows a pre-tax profit of $185.5 million over the same period.

Mr. Allen's analysis outlines differences in the two results, and suggests that the calculations using Cheng's method have the advantage of transparency and consistency, both between companies and from year to year.

Looking forward, the results for the industry, combining the accident year 2019 and a forecast for the year 2020, and using Cheng's method, show an anticipated pre-tax profit of greater than $980.6 million for Alberta's insurance industry.

Projected Annual Profit, 2019 and 2020, Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

	2019	Projected 2020	Total
Premium	$3,786,200	$3,894,300	
Less: Claims Costs	$2,926,000	$2,344,000	
Less: Expenses	$1,010,900	$1,039,800	
Plus: Investment Income	$351,200	$269,600	
Total Profit, Pre-Tax	$200,500	$780,100	$980,600

Detailed calculations used to determine the amounts in Table 9 are shown in the Appendix, Tables A 4.1 through A4.6.

The IBC has often made statements that auto insurance providers are leaving the province because of profitability challenges. This is not reflected in available data. Private insurers providing auto insurance in Alberta has remained essentially stable since 2012. The following is

a breakdown of the number of insurance companies operating in Alberta from 2012 – present based on information from the AIRB and the IBC itself.

Insurance Companies Operating in Alberta	
2012	71
2013	70
2014	70
2015	69
2016	68
2017	69
2018	Over 69
2019	Over 70

Available data published by the Alberta Superintendent of Insurance and the Superintendent of Financial Institutions for the Government of Canada, also demonstrates that many insurers are profitable in Alberta and across Canada. For instance, annual filings provided by the Alberta Motor Association Company (AMA) have shown multiple successive quarters of healthy profits with their most recent annual 2019 filing recorded an after-tax profit of $32.6 million in 2019. The Peace Hills General Insurance Company, after experiencing some challenges, also recorded an after-tax profit for 2019 of approximately $4.68 million.

ACTLA's comment on proposed insurance reform

It would appear that the Alberta auto insurance industry is pushing for a modified hybrid no-fault system in Alberta. ACTLA opposes any such move.

Many jurisdictions have attempted to incorporate thresholds or a hybrid system of no-fault. Hybrid no-fault systems suffer many of the same shortfalls as pure no-fault and bring further complications. Many hybrid no-fault systems institute a threshold: no-fault applies to arbitrary minor injuries and more serious injuries receive tort compensation. This type of system, which is in place in Ontario, has created some of the most expensive insurance premiums in the country. There is nothing to suggest that the result will differ here.

The inherent difficulties in any such system are readily apparent. The first is the categorization of what would be considered a minor injury versus a more significant injury. This is always a matter that is left to doctors at first instance and the Courts in the face of conflicting medical evidence. Adopting metrics such as the assessment of impairment ratings under the American Medical Association Guidelines, despite the allure, still lacks objective consistency. Further, any attempt to encompass all soft tissue injuries, post concussion syndrome, and the like disregards medical literature, which concludes that injuries that become chronic do in fact result in a

significant impairment for peoples' lives. This distinction risks being lost through categorization. Furthermore, it will create turmoil for treatment providers, who are tasked with categorizing people's injuries.

There appears to be a push to incorporate injuries such as: chronic pain, post-concussion syndrome, psychological injuries, and TMJ injuries, within the category of minor injury subject to a no-fault system. It should be noted that some of this has recently taken form. The Minor Injury Regulation (MIR) was recently amended to effectively eliminate compensation for less serious instances of post-concussion syndrome, psychological injuries and TMJ injuries. As of June 1, 2018, a physical or psychological condition is no longer considered a separate injury if the condition arises from a sprain, strain or whiplash associated disorder ("WAD"), and if it heals together with the sprain, strain or WAD. The effect of this is that post-concussion syndrome, psychological injuries and TMJ injuries are no longer compensable on their own, if these conditions resolve concurrently with the sprain, strain or WAD that brought them about. Additionally, a TMJ injury that does not result in damage to teeth or damage or displacement of the articular disc, is now considered to be a sprain, strain or WAD and is therefore caught under the MIR - regardless of how long this type of TMJ injury may last. The full impact of these changes to the regulation have yet to be fully recognized in the data.

It is argued that post-concussion syndrome, psychological injuries and TMJ injuries have somehow been created by plaintiff's lawyers; such is not the case. Over the course of the last ten years, there has been an acknowledgement and additional medical understanding of these injuries. This medical literature suggests that post-concussion syndrome and psychological injuries have gone unreported or misdiagnosed in a large majority of instances. There is no doubt as to the significant impact that post-concussion syndrome and psychological injury can have on an individual. There is also substantial medical evidence to show the lifelong impairment associated with certain TMJ injuries that were previously misdiagnosed or not well understood. The Courts are the appropriate forum to decide whether these injuries are minor or not and they have made such determinations not just in Alberta, but throughout the country.

With respect to soft tissue injuries, the bulk, if not all, medical literature confirms that a percentage of injuries will not resolve and will instead become chronic. This, by definition, means a lifetime of pain and suffering for those who are unfortunate enough to fall within this subset. It was the express intention of the MIR, when originally implemented, that it would cover the 80-90% of soft tissue injury cases which would heal within a relatively short period of time of six to twelve months (as identified under prevailing medical literature available at the time). The remaining 10-20% of soft tissue injury cases were understood to fall outside of the Minor Injury Regulation. Over the course of the last fourteen years, since the implementation of the MIR, physicians, lawyers, and the Courts have developed some certainty with respect to which injuries fall under the regulation and which are considered chronic conditions to which the statute does not apply. The Courts did not expand the legislated definition. Rather, they

gave clarity to what was always intended from the outset. Any new method to somehow establish what would be considered chronic pain under the MIR would simply lead to greater uncertainty for injured Albertans, treatment providers, insurance representatives, and lawyers which would ultimately need to be clarified by the Courts through litigation. It is uncertain what further clarity can be provided through further amendments to the definition that has not already been provided by the Courts.

A hybrid no-fault system also carries the potential for abuse. It would require medical determinations to be conducted, and treatment determinations which will ultimately be left in the hands of private insurers and medical professionals selected by them. Problems such as are found in our WCB system will be even more pronounced in a system which incorporates restrictive limits on services. Determinations as to the appropriate amount, if any, for income loss and the ability of an injured Albertan to perform the essential elements of their work would be left to private insurers, who would no doubt have an inherent bias. In short, private insurers have an economic incentive to minimize the severity of injuries and to push the injured back to work or cease their treatment, often with little regard for what might be considered best by caregivers who remain at arm's length from the insurer.

Under Alberta legislation, there currently exists a form of no-fault compensation pursuant to Section B benefits. The difficulties experienced by individuals in obtaining Section B benefits are an indication of the issues that would be faced by innocent injured parties in attempting to obtain rehabilitation and benefits from their insurance company. Individuals do not have the resources necessary to counter the medical opinions of "experts", hired by the insurance companies, to review the injuries and corresponding disabilities suffered by individuals. An example of this is present in the case of Jones v Stepanenko, 2016 ABQB 295 where the expert who was retained by the insurance company had assessed numerous individuals over the course of his 15 years of experience as a Certified Medical Examiner and had never even once found someone to have suffered from a "serious impairment." Clearly this type of finding is contrary to medical science and was accordingly chastised by the trial judge. Unfortunately, inherent biases will guide insurance companies to prefer the opinions of those medical professionals who minimize the severity of injuries.

Further, those who reside outside of the urban centres do not have the same treatment options available to them as those in Edmonton or Calgary. A no-fault system which restricts treatment would discriminate against those who are not in the major centres and do not have the same treatment options available to them. In the absence of a total overhaul of the current medical system, a no-fault system that is the same for all residents in Alberta, regardless of location, is simply impractical. The treatment options available to residents in La Crete, High Level, Rocky Mountain House, and numerous remote centres are simply not the same as those available to residents in Edmonton and Calgary. A no-fault system is likely to result, for the purpose of reducing costs to insurers, in the centralization of treatment services as has been seen in the USA and Australia. This results in lower access to treatment for many who have paid the

premiums for it. Reduced access will be compounded by the increased strain on our healthcare system arising from the greater number of claims.

Any type of no-fault system which is administered by a private for-profit company is likely to be abused. Individuals would need to fight for the medical benefits to which they are entitled because volunteering such benefits will reduce the profit of the insurers. Unfortunately, most people do not have the resources or expertise available to counter positions which may be taken by the insurance companies. Injured people are dealing with their injuries, and often do not have the fortitude to be navigating a WCB-style system. Notwithstanding that no-fault systems attempt to remove argument by establishing “defined benefits”, it is naïve to think that defined categories will be applied without dispute. When there is a dispute, there are no sufficient safeguards which could be implemented into a no-fault system that would prevent imbalance from being present.

The implementation of a hybrid no-fault system would also create significant disputes with respect to wage loss, some of which are currently experienced under the Section B no-fault system. The determination of whether an injured individual would be able to return to work would be subject to significant dispute. There would also be dispute about whether benefits would continue during the period that injured individuals are incapable of performing any of the essential elements of their employment. Again, litigation would most certainly ensue in the form of bad faith claims while Courts determined the proper interpretation of the definitions and categories populating the system. Consider the situation where an individual returns to work with the belief that they would be able to perform aspects of their job (and with pressure from their insurer), but finds after a matter of hours, days, or weeks that they are simply unable to perform their duties to the level they were prior to the accident and are required to remain off work. In these circumstances, under the current Section B system, insurers have taken the position that no additional disability payments are necessary as the injured individual returned to work. Again, such situations will be expected to occur in any type of hybrid no-fault system which would lead to uncertainty, litigation and hard-working Albertans having their medical benefits denied.

It cannot be said that private for-profit insurance companies are not motivated to limit or deny claims for medical benefits and income loss. There are simply too many examples of litigation surrounding these issues in no-fault jurisdictions to dismiss the uncertainty and cost which would be created through its implementation. History and common sense dictate that definitions and categorizations will do little to nothing to reduce conflict regarding what injured people are owed.

We also note that a no-fault insurance system carries the likelihood of job losses. Though such losses may be delayed by the resultant litigation and confusion arising from a new system, insurers will inevitably try to reduce costs by having fewer people spending less time on each claim. Rather than the consideration given to claims now, there will be an effort to have them mechanically slotted into categories of injury. Additionally, there will be less innovation and

choice to distinguish between insurers and so the larger will cut prices to force out the lesser. The result for Albertans will be fewer jobs for adjusters, brokers, and lawyers. If efforts to rotely classify claims are successful, we can also anticipate that the remaining jobs will be moved out of province to cheaper labour markets as there will be less need for local workers who are knowledgeable of and involved in each claim.

Hybrid no-fault insurance would not translate to savings for consumers. The removal of the rate cap in 2019 enabled the insurance industry to "rate shock" consumers. The revenues generated by that tactic may be given back to consumers for a short period if a hybrid no-fault scheme is implemented. After that, rates will rise and there will be less consumer choice.

Conclusion

In conclusion, the available data suggests that insurers in Alberta are healthy and competitive leads to questions regarding the authenticity of claims that Alberta's insurance companies are in crisis. Profitability concerns appear to be a weak argument for drastic reforms to Alberta's insurance market.

A hybrid no-fault system is not right for Alberta. These systems would generate uncertainty and litigation. The same would, in turn, lead to substantial costs, which would be borne by the Alberta consumer. Furthermore, the erosion of rights for injured Albertans in any type of no-fault or hybrid no-fault system to the benefit of those who cause the injuries is contrary to civil rights, and principles which Albertans value dearly: personal responsibility, self-determination and above all, fairness.

As is evidenced by the statistics, there is no crisis in the Albertan insurance market. Drastic changes are not warranted. With the advent of the MIR in 2004, subsequent alterations to the protocols and the addition of TMJ injuries to the definition to minor injury, bodily injury claims have stabilized over the past four years. Furthermore, the increase in premiums over the course of the last three years has more than offset the stabilization and recent decrease in claims payouts. Many insurance companies in Alberta are reaping significant profits. Well managed companies have benefitted from the stabilization and reduction of payouts.

It is uncertain why some auto insurers in Alberta are able to derive significant profits, while others claim losses. However, what is evident from all of the evidence is that bodily injury claims are not the driving force for increased premiums over the last four years. The Craig Allen Report confirms this information and suggests that the premium increases allowed by the AIRB in the past have more than adequately compensated for payouts.

Experience has shown that any dramatic changes to insurance regulation, whether expanding the definition of a minor injury, or the creation of the proposed hybrid no-fault systems, creates additional uncertainty which would no doubt result in increased costs. The decisions of the Court of Queen's Bench, which the insurance industry demonize but chose not to appeal, have

clarified those injuries to which the MIR applies. Those decisions are supported by medical literature, which confirms that soft tissue injuries which do not resolve within six months to a year will likely not resolve and instead become chronic. Court cases have rightly acknowledged that it was never the intention of the Alberta legislature to cap chronic conditions which result in a lifetime condition as “minor injuries.”

Review of Experience,
Alberta Private Passenger Automobile Insurance,
as at June 30, 2019 and December 31, 2019

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As Part of their Written Submission to the Alberta Automobile Insurance Rate Board 2020 Annual Review

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I. Executive Summary

The following are the findings of my analysis.

Finding 1:
For accident periods beginning July 1, 2016, inflation-adjusted bodily injury loss and LAE cost per vehicle has been approximately stable. A continuation into the future of the stability seen for the last 3.5 years would be in contrast to the AIRB bodily injury trend rate, which continues to project future growth well in excess of the general inflation rate.

Finding 2:
There are underlying features of the available claims data that provide further support to the stability in bodily injury loss and LAE per vehicle seen since mid-2016. Further, there are facts that suggest that current estimates of the loss and LAE cost per vehicle may be conservative, and that subsequent estimates for recent accident years may decline. Facts in support of this proposition include:

- Very little growth in the inflation-adjusted loss cost estimates between corresponding accident semesters,
- Cumulative payments for recent accident years that are not keeping pace with payments for prior accident years,
- Growth in case reserves for bodily injury claims that is greater than cumulative payments,
- A GISA advisory, supported by the claims statistics, of an increase in the level of adequacy ("strengthening") of case reserves, that has not yet been accompanied by offsetting changes in the actuarial loss development factors, and
- Demonstrated reductions since 2017 in bodily injury loss and LAE cost estimates for accident years prior to 2018.

Finding 3:
According to a consistent and transparent method of profit allocation for the industry, the Alberta private passenger automobile insurance industry earned a pre-tax profit of $185.5 million between 2013 and 2018. My current projection, using this method, is that the industry will earn a total pre-tax profit of more than $980 million during the period 2019 and 2020 combined.

Finding 4:
Since 2017, a notional rate change application for bodily injury coverage, based on AIRB benchmarks and the prior three accident years of industry-wide claims experience, will overestimate the dollars needed to cover the loss and LAE costs that have subsequently emerged. All else being equal, this overestimate would increase the profit for an insurer, having a similar profile, making such a filing.

II. Introduction

I have prepared this report as actuarial consultant to the Alberta Civil Trial Lawyers Association ("ACTLA").

The report is part of ACTLA's written submission to Alberta's Automobile Insurance Rate Board (AIRB) for the 2020 Annual Review.

This report presents the results of my analysis of private passenger automobile insurance ("PPA") experience for Alberta.

III. Data Sources

I have based my analysis on data published by the General Insurance Statistical Agency (GISA) as at June 30, 2019 and as at December 31, 2019. I have also reviewed in depth the analysis and conclusions of Oliver Wyman Limited ("Oliver Wyman"), consulting actuary to AIRB, in its 2020 Semi-Annual Review and its 2020 Preliminary Annual Review.

IV. Identification

I am an independent consulting actuary based in New York, NY. I am a fellow of the Canadian Institute of Actuaries and of the Casualty Actuarial Society, and have provided actuarial services in Canada and the U.S. for 33 years.

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V. Analysis

Below are the analyses that form the basis of this report.

A. The Trend in Bodily Injury Loss and LAE Cost per Vehicle Since 2016

Since 2015, the AIRB Benchmark trend rate for bodily injury (BI) coverage has projected annual increases in *ultimate loss and LAE costs per vehicle* ("loss cost") that are much greater than the Alberta Consumer Price Index (CPI). This analysis of the claims projections and exposure data prepared by Oliver Wyman finds support for a much lower current BI loss cost trend, beginning in mid-2016.

1. Benchmark Trend Rate for Bodily Injury

Beginning in 2015, the AIRB Benchmark trend rate for BI coverage has projected increases in the BI loss cost well in excess of the annual rate of increase in the Alberta CPI.

Table 1: Benchmark Trend Rates for Bodily Injury, Compared to Increase in Consumer Price Index for Alberta

Effective Date	Past Trend Rate	Future Trend Rate	12-Month Increase in CPI[1]
Oct. 1, 2014	+2.5%	+2.5%	1.9%
April 1, 2015	+2.0%	+2.0%	1.7%
Oct. 1, 2015	+4.5%	+4.5%	1.5%
April 1, 2016	+6.0%	+6.0%	1.3%
Oct. 1, 2016	+6.0%	+6.0%	1.0%
April 1, 2017	-1.0%	+7.5%	0.4%
Oct. 1, 2017	+7.5%	+7.5%	2.0%
April 1, 2018	+7.5%	+7.5%	2.8%
Oct. 1, 2018	+8.5%	+7.5%	2.1%
April 1, 2019	+8.5%	+7.5%	1.4%
Oct. 1, 2019	+8.5%	+7.5%	2.3%
April 1, 2020	+8.0%	+7.0%	1.6%

[1] For the twelve months ending 3 months after effective date (e.g. for Effective Date April 1, 2020, the CPI increase over the period July 1, 2019 to June 30, 2020)

2. Semi Annual Review, through June 30, 2019

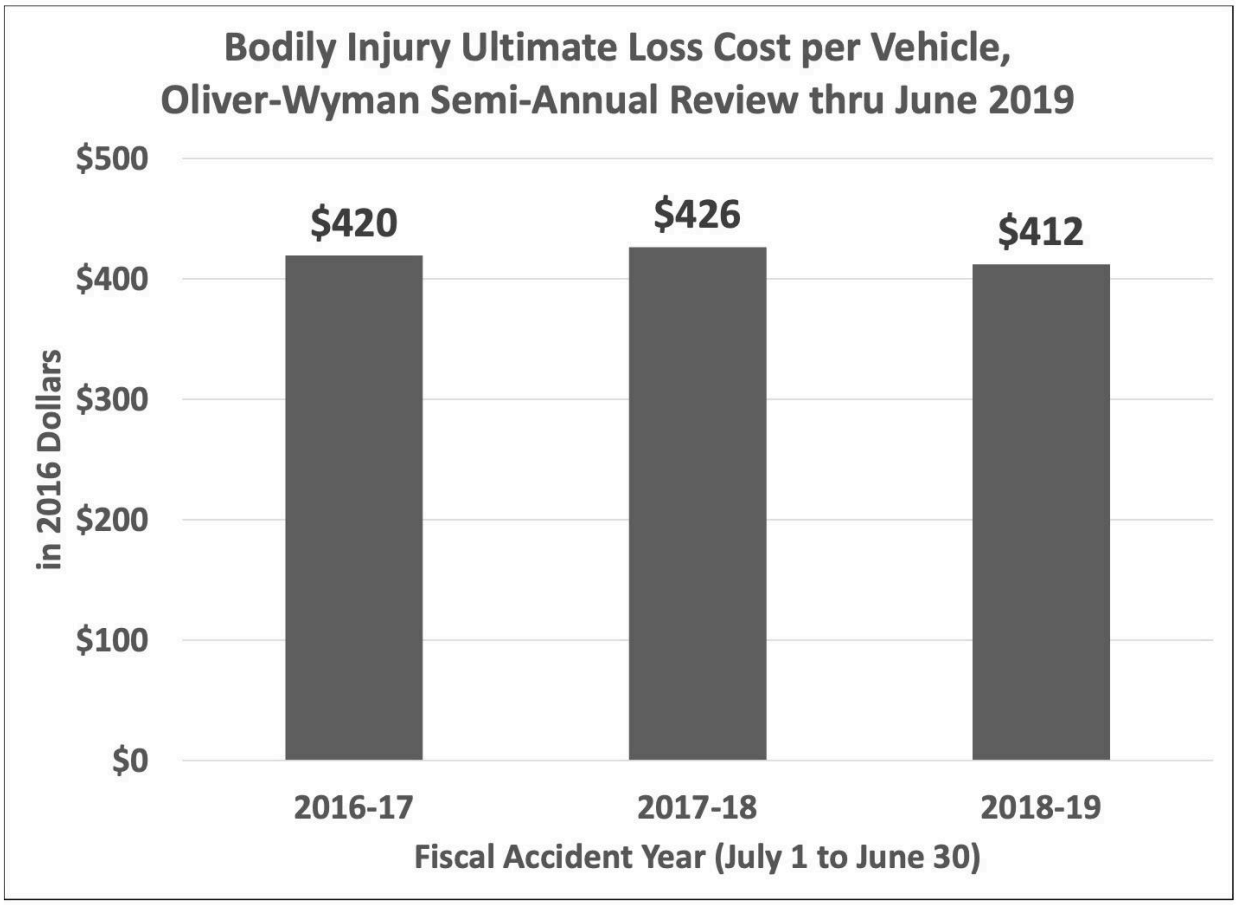
According to projections of loss cost in the 2020 Semi-Annual Review by Oliver Wyman, through June 30, 2019, the rate of increase in BI loss cost slowed dramatically, beginning in mid-2016.

Between the 2010-2011 and the 2015-2016 fiscal accident years (July 1 to June 30), the BI loss cost in 2016 dollars increased from $266 to $420, an average annual rate of increase of 7.9%. (In current dollars, the increase was from $241 to $419, an annual average increase of 9.6%.)

In mid-2016, this rate of increase declined sharply. Figure 1 illustrates that beginning June 30, 2016, the rate of increase in BI loss cost dropped to a level approximately equal to general inflation, as represented by the growth in the CPI.

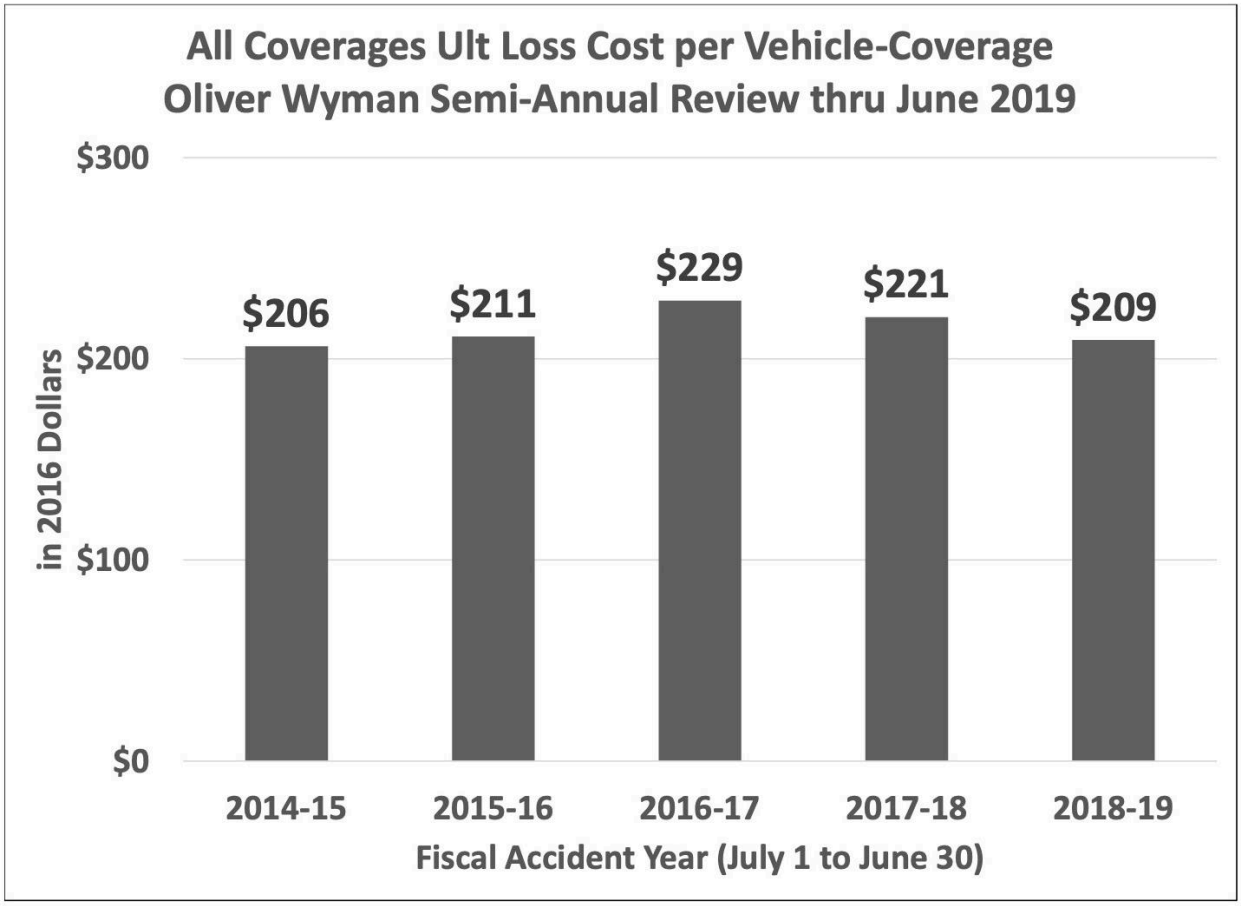
In 2016 dollars, the BI loss cost for the three fiscal accident years between July 1, 2016 and June 30, 2019 remained in a narrow band between $412 and $426.

Figure 1: Bodily Injury Loss Cost, by Fiscal Accident Year, in 2016 Dollars, Valued at June 30, 2019



For the major coverages combined, (BI, property damage, accident benefits, collision, and comprehensive) the loss cost has been stable in inflation-adjusted terms for a longer period i.e. beginning in mid-2014. This is shown below in Figure 2.

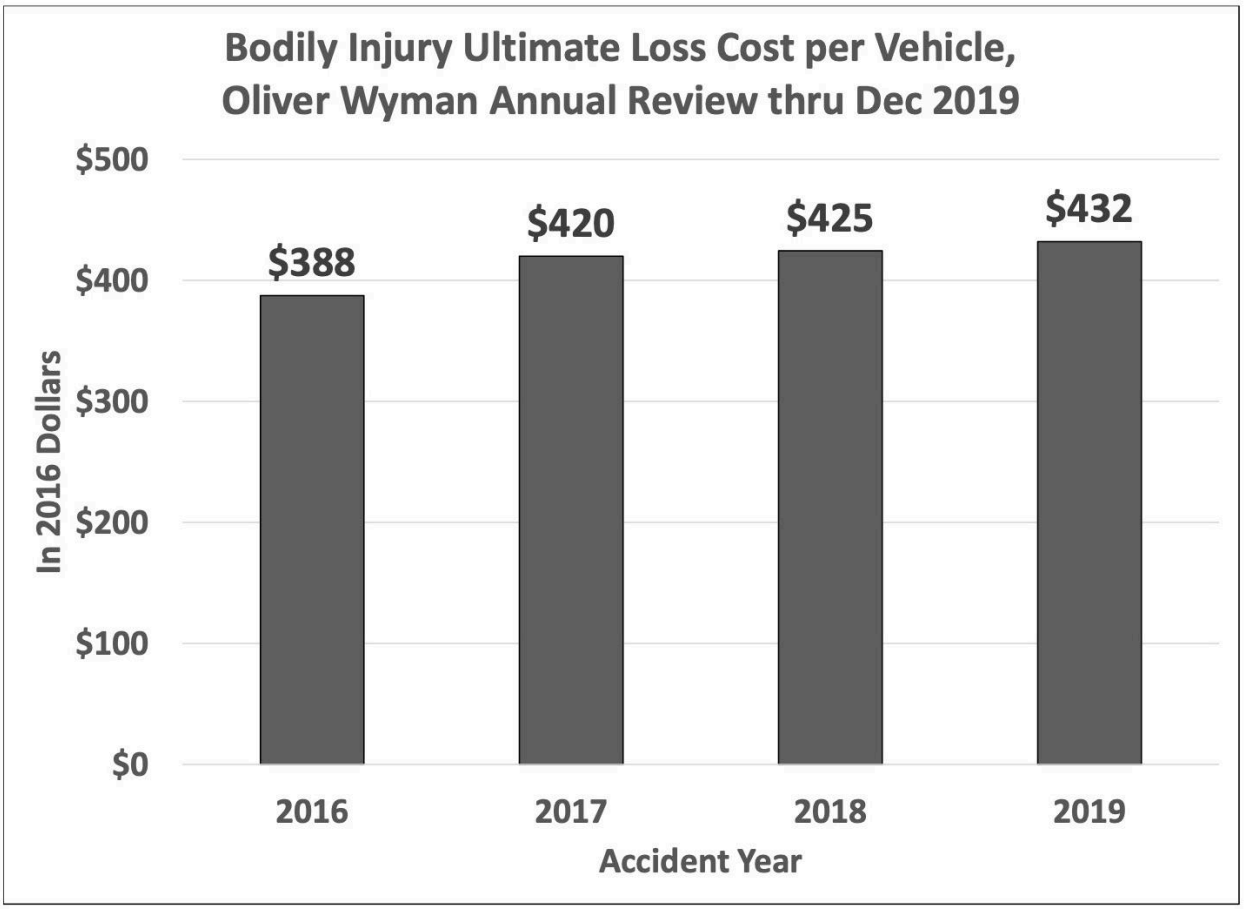
Figure 2: All Coverages Loss Cost, by Fiscal Accident Year, in 2016 Dollars, Valued at June 30, 2019



3. Annual Review, through December 31, 2019

The projections of loss cost in the 2020 Preliminary Annual Review by Oliver Wyman, through December 31, 2019, show that inflation-adjusted BI loss cost continues to remain in a narrow band for the last three accident years, between $420 and $432. (Refer to Figure 3 below).

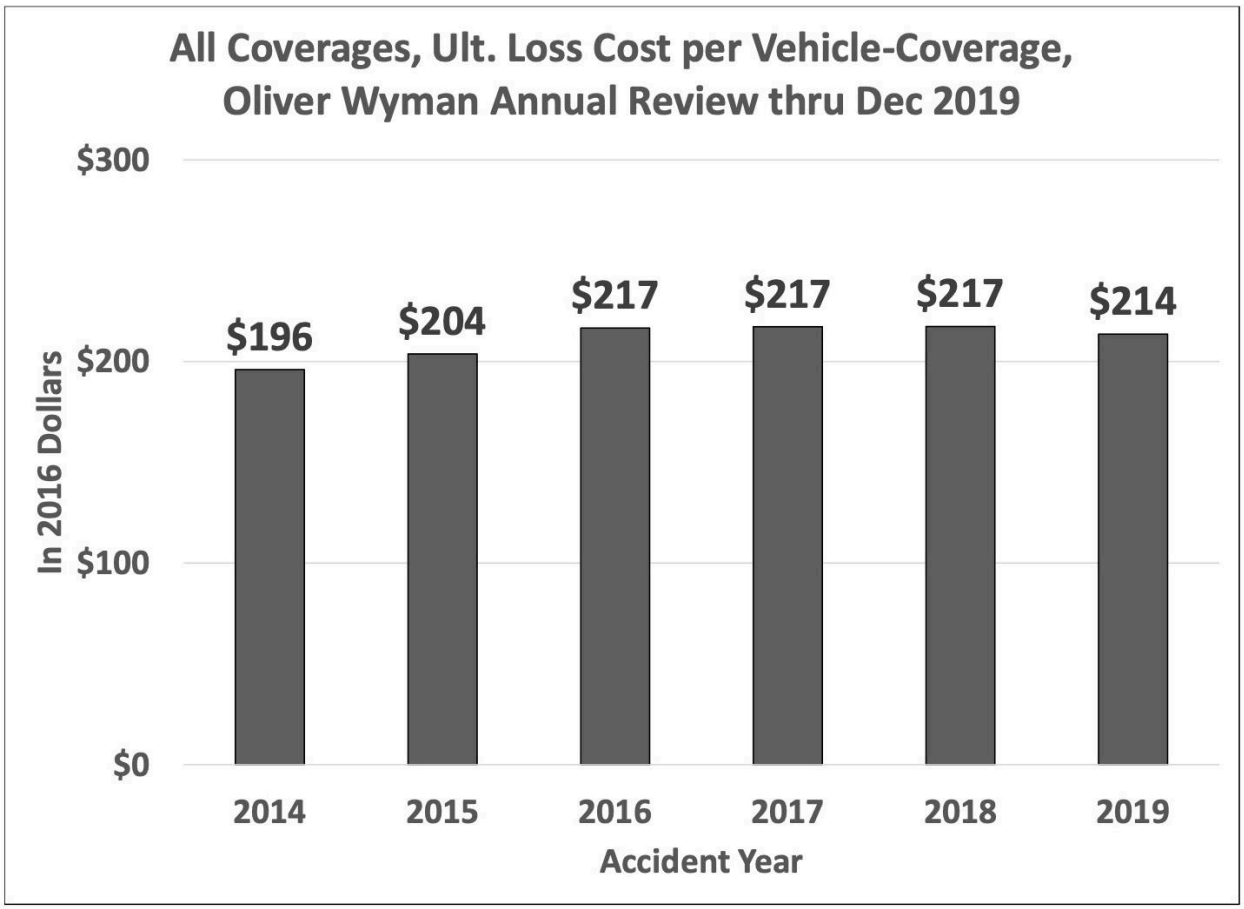
Figure 3: Bodily Injury Loss Cost, by Accident Year, in 2016 Dollars, Valued at December 31, 2019



For the major coverages combined, Oliver Wyman's December 2019 projections find that loss cost has remained stable for a longer period beginning in mid-2014. This is seen below in Figure 4.

While the BI loss cost continues to remain within a narrow range, the value for the 2019 accident year has increased from what it was in the June 2019 analysis. On first impression, this could be taken to suggest a resumption of an upward trend greater than inflation. The in-depth analysis below will provide support for the proposition that the inflation-adjusted BI loss cost has remained stable. It further examines the factors that may have led the BI loss cost estimates for recent accident years to be conservative.

Figure 4: All Coverages Loss Cost, by Accident Year, in 2016 Dollars, Valued at Dec. 31, 2019



B. In-Depth Analysis of the Projections of Bodily Injury Loss Costs

With the small increase in BI loss cost for the 2019 accident year in the most recent Oliver Wyman review, and with the relative immaturity of the 2019 accident year, further analysis is provided below, for additional background and to illustrate continuing uncertainties in the projections. A number of these findings suggest that the current valuation of BI loss cost for the more recent accident years may be conservative, and that these estimates may decrease in subsequent reviews.

1. An Analysis of the Bodily Injury Loss Cost for Corresponding Semesters

Figure 5 below breaks down the transition for the 2019 accident year, between the June 2019 and December 2019 analyses. The cause of the increase in the BI loss cost between the June 2019 and December 2019 reviews is twofold. First, the loss cost for the first semester of accident year

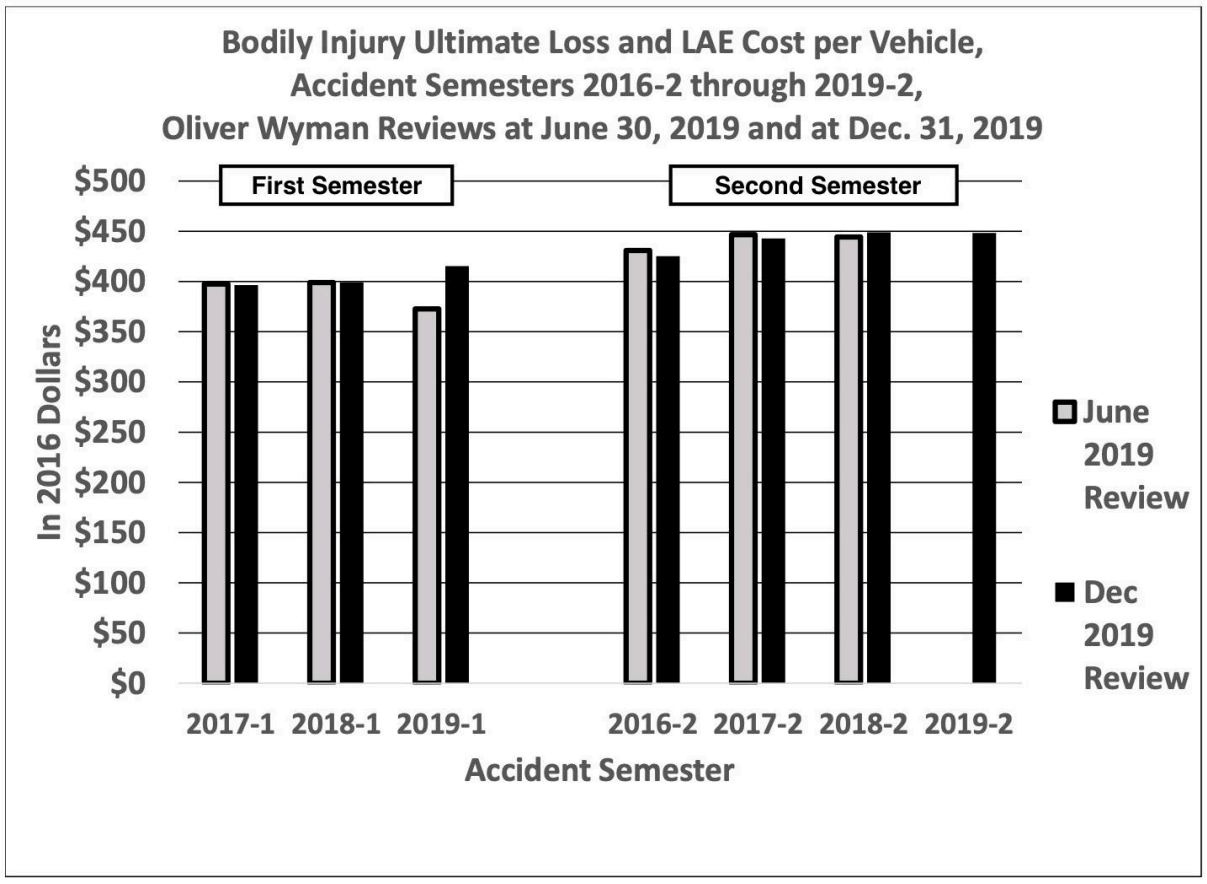
2019 has increased in value slightly, from $373 to $415. Second, the loss cost for the second semester of accident year 2019 has now emerged, at a value of $448, an increase over the loss cost for the first semester of the accident year.

Figure 5 illustrates the seasonal pattern that the loss cost for the second semester of each accident year is greater than that for the first semester of each accident year. Thus, a proper comparison is between first-semester results, and a second proper comparison is between second-semester results.

Even though the loss cost for 2019-1 is greater than was previously estimated, it has moved from being less than that of 2017-1 and 2018-1 to only slightly more than the two prior first-semester loss costs. And even though the loss cost for 2019-2 is greater than that of 2019-1, a comparison to other second-semester loss costs shows that there is almost no change from the corresponding second-semester loss costs for 2017-2 and 2018-2.

This provides support for continued stability to date in the inflation-adjusted BI loss cost.

Figure 5: Bodily Injury Loss Cost per Vehicle, by Accident Semester, in 2016 Dollars, Valued at June 30, 2019 and at December 31, 2019



2. Divergence Between Increasing Case Reserves and Decreasing Payments

The BI loss cost in the two Oliver Wyman analyses was determined using the chain ladder method applied to case incurred loss and LAE.

According to Figure 3, the estimated BI loss cost is at a peak for accident year 2019, at a value of $432 in 2016 dollars. This is slightly above the value of $425 for accident year 2018.

Table 2 provides the rationale for the estimate for the accident year 2019 reaching this slight peak. It shows the total case incurred loss and LAE for BI at age 12 months, for each of the accident years 2016 through 2019, and calculates the average case incurred loss per earned vehicle at age 12 months, in 2016 dollars. Here it is seen that the total case incurred loss and LAE for accident year 2019 is substantially above that for prior accident years. (Although averaged over the number of earned vehicles, and adjusted to 2016 dollars, the value is only slightly above that for accident year 2017).

Table 2: Case Incurred Loss and LAE at Age 12 Months, Accident Years 2016 through 2019

Accident Year	Case Incurred Loss and LAE (000s), Age 12 Months	Count of Earned Vehicles	Case Incurred Loss and LAE per Vehicle, Age 12 Months	Case Incurred Loss and LAE per Vehicle, Age 12 Months, 2016 Dollars
2016	$371,467	2,678,797	$139	$138
2017	$431,911	2,692,885	$160	$158
2018	$442,375	2,748,083	$161	$155
2019	$467,484	2,784,904	$168	$159

Countering this observation, however, is the amount of loss and LAE paid at age 12 months. Table 3 shows that the cumulative amount paid for accident year 2019 BI claims at 12 months is only $24.9 million, well below the $27.8 million and $26.4 million paid for the two prior accident years at the same age. Averaged over the number of earned vehicles, and stated in 2016 dollars, the amount paid for accident year 2019 is less than any of the three prior accident years.

Table 3: Cumulative Paid Loss and LAE at Age 12 Months, Accident Years 2016 through 2019

Accident Year	Cumulative Paid Loss and LAE (000s), Age 12 Months	Count of Earned Vehicles	Cumulative Paid Loss and LAE per Vehicle, Age 12 Months	Cumulative Paid Loss and LAE per Vehicle, Age 12 Months, 2016 Dollars
2016	$24,523	2,678,797	$9.15	$9.08
2017	$27,858	2,692,885	$10.35	$10.22
2018	$26,420	2,748,083	$9.61	$9.24
2019	$24,942	2,784,904	$8.96	$8.49

In the usual course of events, claims payments are expected to track growth in the amount of case reserves. The failure of payments to keep up with reserve changes raises the question of whether the reserves are more generous than those of prior accident years, and whether they will prove to be redundant.

One possible hypothesis for the reduction in the amount paid for accident year 2019 is a slowdown in the rate at which claims are closed.

However, Table 4 below shows that there is no significant decline in the percentage of claims closed, compared to prior accident years.

Table 4 Percentage of Reported Claims Closed, Age 12 Months, Accident Years 2016 through 2019

Accident Year	Count of Claims Closed, Age 12 Months	Count of Claims Reported, Age 12 Months	Percentage of Reported Claims Closed, Age 12 Months
2016	3,762	15,283	24.6%
2017	4,320	15,400	28.1%
2018	4,066	15,194	26.8%
2019	4,039	15,308	26.4%

A similar divergence between case incurred loss and LAE and amount paid is seen for the 2018 accident year, as is summarized below in Table 5.

Table 5: Case Incurred and Cumulative Paid Loss and LAE, Age 24 Months, Accident Years 2016 through 2018

Accident Year	Case Incurred Loss and LAE (000s), Age 24 Months	Cumulative Paid Loss and LAE (000s), Age 24 Months	Case Incurred Loss and LAE per Vehicle, Age 24 Months, 2016 Dollars	Cumulative Paid Loss and LAE per Vehicle, Age 24 Months, 2016 Dollars	Percentage of Reported Claims Closed, Age 24 Months
2016	$575,352	$120,299	$213	$44.55	66.6%
2017	$609,604	$127,852	$224	$46.89	66.2%
2018	$650,772	$117,178	$228	$40.97	62.6%

As with accident year 2019 at 12 months, accident year 2018 at 24 months is showing case incurred losses and LAE per vehicle greater than that for the two prior accident years at the same age. And simultaneously, cumulative paid loss and LAE per vehicle is less than for the two prior accident years. That said, the percentage of claims closed is lower for the 2018 accident year than for the prior accident years.

There may arise a question of whether the reduced cumulative payments are a result of the closing of offices in early 2020, due to the COVID-19 crisis. However, the payment amounts cited are cumulative payments through December 31, 2019, prior to the emergence of the crisis in March 2020. Thus, the reductions in payments are unrelated to the crisis.

In sum, the failure of cumulative payments to date for the 2018 and 2019 accident years to keep pace with payments on earlier accident years raises questions about whether the elevated level of case reserves for the 2018 and 2019 accident years are indicative of an elevated ultimate loss cost.

3. Changes in Claims Handling Practices, per GISA Notes to Users

In publishing private passenger automobile experience for Alberta, GISA issued a bulletin of Notes to Users (see Section 7 of the Appendix). These notes advise users of where to exercise caution in using the GISA exhibits.

- Note 12 advises that a large insurer has changed its claims handling practices for BI claims, increasing the rate at which it closes claims, beginning in the first half of 2017 and continuing in later calendar periods.

- Note 13 advises that a large insurer has strengthened its case reserving practice for BI claims, beginning with accident semester 2017-2, yielding increased case reserve amounts in calendar periods 2017-2 and later.

Evidence of these changes in claims handling practices can be seen in the ratios of case incurred loss and LAE at successive age intervals (i.e. age-to-age ratios in the loss development "triangle.")

Table 6 shows the age-to-age ratios. The 6-12 month ratios are markedly larger for accident semesters 2016-2 and later, increasing from an average of 1.245 for the prior four accident semesters, to 1.366 for the subsequent six accident semesters. This increase coincides with the two changes in Notes 12 and 13, which begin in calendar period 2017-1 and continue in later calendar periods.

The grey shaded boxes track the subsequent age-to-age ratios for the 2016-2 and later accident-semester cohorts. The boxes in perforated outline determine the average age-to-age ratios in the four periods prior to the claims handling changes in 2017-1. Notably, the ratios in the grey shaded boxes remain higher, on average, than the perforated boxes, up to the 36-42 month ratios.

The strengthening of case reserving practice for the large insurer in Note 13 appears to roll out over a period of time – perhaps the strengthening of reserves is implemented only on those claims that have reached a sufficient level of maturity to have moved beyond a standard opening reserve. If the strengthening takes time to gain full effect for a given cohort of claims, this supports the pattern seen in the grey-shaded boxes.

Most importantly, to the extent that this reflects strengthening of reserves, rather than increases in ultimate claim sizes, the age-to-age ratios in the grey boxes should eventually fall below the ratios in the perforated boxes, now that the reserves have been strengthened, and will require a smaller further boost to reach the ultimate claim size.

Such a reversal, at a period beyond age 42 months, is not reflected in the 42-to-ultimate loss development factors selected in the Oliver Wyman analysis. Rather, the Oliver Wyman factors are based on ratios taken from cohorts of claims prior to the 2016-2 accident year, which did not get the benefit of the high age-to-age ratios at the 6-12 stage (or at the subsequent periods like 12-18 months).

It can be expected that the age-to-age ratios chosen for the 2016-2 and later accident semesters, at ages greater than 42 months, will eventually need to fall <u>below</u> the ratios seen in calendar periods prior to 2017-1, i.e. below the averages in the perforated boxes. That hasn't happened yet, which suggests that the current loss development factors used for accident years 2017-1 and greater may be too high for the strengthened reserves.

If this is true, the BI loss cost for accident semesters beginning in 2016.2 is too high, even as the current estimates support the argument that inflation-adjusted loss cost has stopped rising.

Table 6: Bodily Injury Age-to-Age Ratios, through the Period of Changes Claims Handling Practices Identified in Notes 12 and 13

Accident Semester	6 months to 12 months	12 months to 18 months	18 months to 24 months	24 months to 30 months	30 months to 36 months	36 months to 42 months
2011-1	1.065	1.001	1.046	1.093	1.099	1.088
2011-2	1.147	1.047	1.085	1.085	1.088	1.061
2012-1	1.206	1.020	1.077	1.116	1.081	1.056
2012-2	1.206	1.073	1.109	1.079	1.101	1.075
2013-1	1.230	1.076	1.092	1.114	1.103	1.097
2013-2	1.274	1.059	1.109	1.115	1.111	1.084
2014-1	1.222	1.085	1.104	1.135	1.089	1.077
2014-2	1.214	1.104	1.149	1.127	1.096	1.082
2015-1	1.261	1.074	1.139	1.147	1.108	1.078
2015-2	1.249	1.101	1.162	1.162	1.101	1.049
2016-1	1.256	1.208	1.156	1.124	1.085	1.086
2016-2	1.443	1.194	1.138	1.129	1.100	1.073
2017-1	1.351	1.167	1.132	1.148	1.113	
2017-2	1.366	1.108	1.153	1.148		
2018-1	1.230	1.142	1.167			
2018-2	1.393	1.177				
2019-1	1.413					
Average of Perforated Boxed Area	1.245	1.091	1.125	1.123	1.101	1.078
Average of Shaded Area	1.366	1.158	1.147	1.142	1.107	1.073

4. Actual Changes in Estimated Bodily Injury Loss Cost, Since 2017

Successive Annual and Semi-Annual reviews since year-end 2017 have shown decreases in the estimated BI loss cost. The percentage magnitudes of these decreases, between year-end 2017

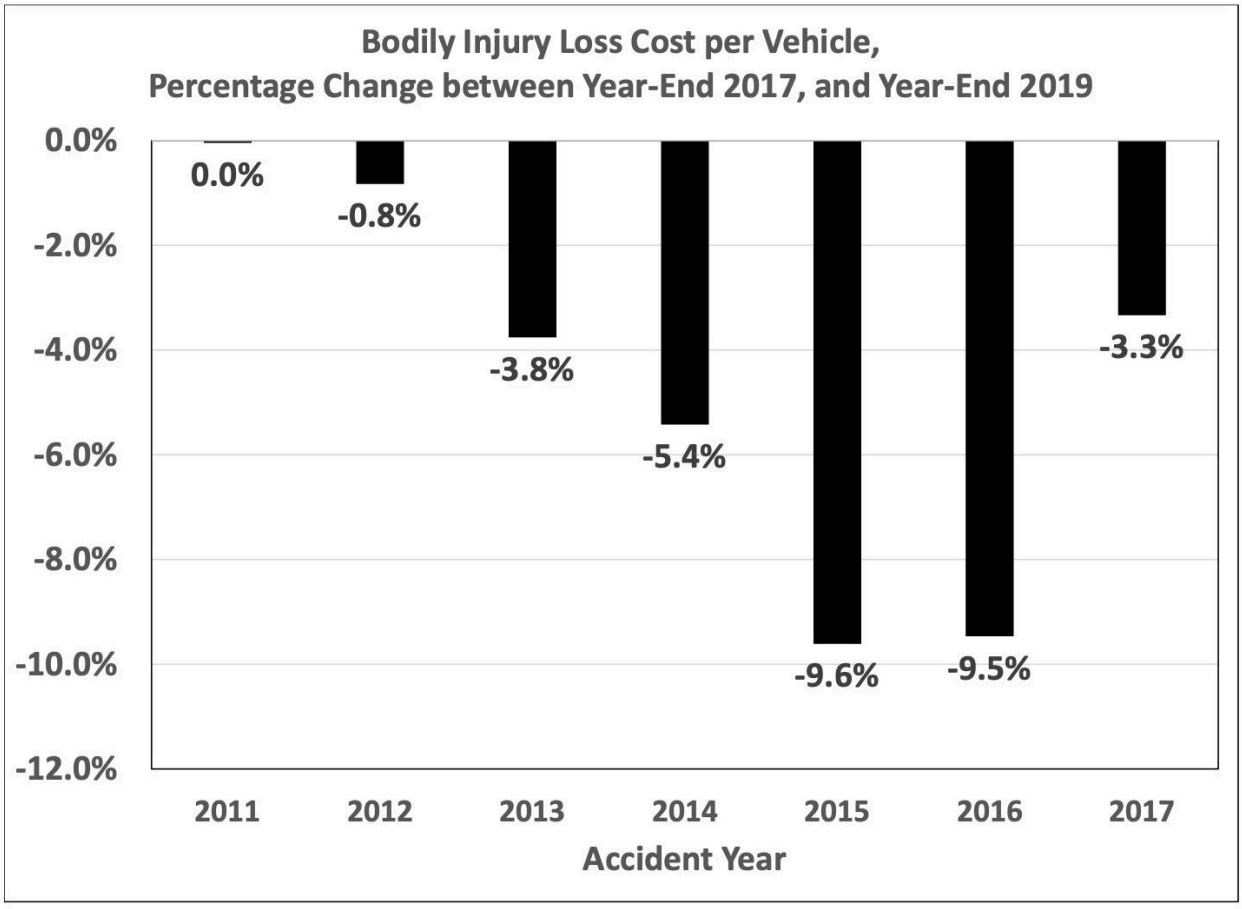
and year-end 2019, are shown in Figure 6. To date, this has had greatest impact for the 2015 and 2016 accident years.

These decreases reversed previous **increases** made between year-end 2016 and year-end 2017. These increases were brought about by the change in age-to-age ratios during calendar year 2017, coinciding with the strengthening of case reserves pointed out in Note 13 in the GISA Notes to Users.

The increases in estimated BI loss cost during the 2017 reviews, later undone by decreases in subsequent reviews, suggest a pattern that may be continuing with the accident years beginning with 2016-2.

This pattern is that the strengthening of reserves, beginning in 2017, leads to a temporary overstatement of BI loss costs. Eventually, this temporary overstatement is undone. This pattern, if re-enacted, could lead to reductions in the BI loss costs of more recent accident years.

Figure 6: Bodily Injury Loss Cost, Percentage Change between Year-End 2017 and Year-End 2019 Estimates



C. Profitability of the Alberta Private Passenger Automobile Insurance Industry

It has been reported by the Alberta Ministry of Treasury Board and Finance that the Alberta private passenger auto (PPA) insurance industry sustained an after-tax loss of $667.3 million over the years 2013 through 2018. The Ministry reports that it obtained this amount from the annual Profit and Loss report published by GISA. (On a pre-tax basis, the reported amounts show a pre-tax loss over this period of $870.4 million.)

In contrast, this analysis, performed using the same method that J.S. Cheng and Partners, Inc. ("Cheng") used in its 2007 analysis of Alberta auto insurance reform[2], shows a pre-tax ***profit*** of $185.5 million over the same period.

The following outlines differences in the two results, and suggests that the calculations using Cheng's method have the advantage of transparency and consistency, both between companies and from year to year.

Looking forward, the results for the industry, combining the accident year 2019 and a forecast for the year 2020, and using Cheng's method, show an anticipated pre-tax profit of greater than $980.6 million.

1. Results by Year, 2013 to 2018

The amounts for Alberta PPA in the GISA annual Profit and Loss report[3], for 2013 through 2018, broken down into the major revenue and expense items, are as in Table 7 below:

Table 7: GISA Profit and Loss Report, Alberta Private Passenger Auto Insurance
(Thousands of Dollars)

	2013	2014	2015	2016	2017	2018	Total
Premium and Other Revenue	$2,685,200	$2,985,000	$3,032,000	$3,097,200	$2,848,700	$3,225,600	
Less: Claims Costs	$2,219,500	$2,442,400	$2,448,800	$2,793,500	$2,432,200	$2,715,000	
Less: Expenses	$708,800	$751,500	$802,100	$866,500	$829,400	$860,500	
Plus: Investment Income	$165,900	$236,600	$192,100	$182,400	$222,500	$126,600	
Total Profit, Pre-Tax	**-$77,200**	**$27,700**	**-$26,800**	**-$380,400**	**-$190,400**	**-$223,300**	**-$870,400**
Less: Income Taxes	-$17,700	$27,700	-$9,800	-$78,500	-$61,200	-$63,600	
Total Profit, After Tax	**-$59,500**	**$0**	**-$17,000**	**-$301,900**	**-$129,200**	**-$159,700**	**-$667,300**

[2] "REPORT ON THE REVIEW of Insurance Reform – Premium and Claim Analysis by Gordon G. Smith and Theresa K. Reichert of Deloitte and Touche LLP," J.S. Cheng and Partners, Inc., March 29, 2007
[3] As reported by Alberta Treasury Board and Finance

The corresponding amounts, pre-tax, prepared using Cheng's method, are as shown below in Table 8.

Table 8: Annual Profit and Loss, Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

	2013	2014	2015	2016	2017	2018	Total
Premium	$2,729,300	$2,923,200	$3,089,400	$3,186,100	$3,308,700	$3,525,100	
Less: Claims Costs	$2,109,100	$2,317,800	$2,523,400	$2,735,000	$2,762,700	$2,894,900	
Less: Expenses	$660,500	$707,400	$784,700	$850,700	$919,800	$937,700	
Plus: Investment Income	$246,000	$321,800	$303,700	$244,900	$307,200	$203,800	
Total Profit, Pre-Tax	**$205,700**	**$219,800**	**$85,000**	**-$154,700**	**-$66,600**	**-$103,700**	**$185,500**

2. Attributes of the GISA Profit and Loss Report

In preparing its annual Profit and Loss Report, GISA's statistical service provider, the Insurance Bureau of Canada (IBC) collects and aggregates financial data submitted by each licensed automobile insurer in nine jurisdictions in Canada, including Alberta.

Some of this data is taken directly from the insurer's Property and Casualty (P&C) return filed with its regulator (usually OSFI). However, other data is not reported in the P&C at the Alberta and PPA level of detail. Thus, these data items must be allocated to Alberta and PPA based on other individual company information.

In the Notes to Users and in the General Disclaimers published with the report (provided in Section 7 in the Appendix), GISA advises users to be aware of the following issues. These issues bear on the consistency and reliability of the report, depending on the user's purpose.

- The reporting insurers have used their own company-specific allocation methodology, which thus may vary from insurer to insurer, and from year to year.

- The quality of the report is dependent on the accuracy of the data filed by insurers. For amounts taken directly from the P&C Return, GISA relies on the work of the insurer's internal and external auditors. However, for the data items allocated to finer levels of detail, GISA advises that no independent audit has been performed.

- Since the report was first published for 2012, GISA has advised that "the reliability of the information is expected to improve over time, as GISA fine-tunes the processes and requirements for the collection and reporting of the financial information in subsequent years." This suggests that the processes used in the earlier years (i.e. back to 2013) may be of poorer quality, and may produce less consistent and reliable results.

- The report is based on insurers' fiscal year. Thus, the claims costs reported in a given year will combine current-year accidents and changes to prior-year accidents, combining results for accidents of several years. GISA advises that such data may also be subject to abnormal accounting activity in a particular year.

- The report is primarily on a net basis. Thus it does not report amounts ceded by the insurers to reinsurers, limiting the report's transparency regarding these amounts. GISA advises that a major insurance group was identified to have reported its reinsurance contrary to instructions. While this issue has been identified as specific to Ontario, it illustrates that issues can arise in the consistency of data reporting. Further, it is seen in Table 1 that the net earned premium reported for 2017 show a marked decrease compared to that of 2016. This was followed by a rebound in the net earned premium in 2018. In Table 2, this pattern is not seen in the gross earned premiums for 2016 through 2018, thus suggesting a significant yet unknown variation in reinsurance reported.

It is noted that GISA advises that its Profit and Loss Report should not be used to assess whether current rates are adequate to cover future costs.

3. Comparison of the Cheng Method to the GISA Profit and Loss Report

By contrast, Cheng's method of allocating insurer operating results to Alberta and to PPA has the following attributes:

- It uses claims and premium data specific to Alberta PPA for individual accident years.
- Allocations to Alberta and PPA of equity, expenses and investment income are based on ratios drawn from industry-wide financial statistics, that aggregate financial amounts taken directly from insurers' P&C returns. These financial statistics have thus been subject to insurers' internal and external audit processes.

- Allocations based on these industry-wide statistics are consistent and transparent, using the same allocation method for all insurers and from year to year.

These attributes can be expected to provide a more consistent and better-understood measure of industry-wide profitability than a measure based on allocation processes that are not subject to audit, that vary between insurers and from one year to the next year.

4. Industry Profit in 2019 and Projected for 2020

Table 9 below presents projected pre-tax profit for the industry for 2019 and 2020, using Cheng's method. The projection for 2020, is largely based on a continuation forward of the individual components for the 2019 year, with the following adjustments:

- The projected earned premium for 2020 partially captures the premium rate increases taken through late 2019. This done by adjusting the 2019 earned premium upward to the level of written premium in the second half of 2019. This is a conservative estimate of 2020 premium for the industry, as it does not fully recognize rate increases taken by a number of company groups in late 2019 and early 2020.

- As has been noted, the magnitude of inflation-adjusted claims costs has been approximately stable between 2016 and 2019. Thus, as a starting point, 2020 claims costs are set at the 2019 claims costs, plus 2% for projected general inflation.

- The COVID-19 crisis in 2020 has led to dramatically reduced traffic volumes and to corresponding decreases in claims costs. Consequently, the 2020 claims costs are reduced, for the "moving" coverages by 50%, for a three-month period, until the start of Alberta's Stage 2 reopening June 12, and by 25% for a further six months.

- The COVID-19 crisis has led to premium decreases, granted by insurers in response to reduced amounts of driving. In a May 8, 2020 announcement, the IBC estimated "reductions that could result in over $100 million in savings for Albertans who have changed their driving habits as a result of the pandemic."[4] This analysis uses the $100 million amount named by the IBC as the estimated reduction in premium.

- Volatility in the financial markets in the wake of the COVID-19 crisis is reflected by reducing investment returns from the 3.4% seen in 2019 (and 3.1% averaged between 2013 and 2019) to 2.5% for 2020.

Since the rate increases taken by several insurer groups in late 2019 and early 2020 are not fully reflected in the projection for 2020, the projected total profit for the two years can be expected to exceed the $980.6 million shown in Table 9.

In addition, if the BI loss cost for the more recent accident years does prove conservative, as discussed in Section B, the industry profit will increase further.

[4] http://www.ibc.ca/ab/resources/media-centre/media-releases/alberta-auto-insurers-focused-on-affordability

Table 9: Projected Annual Profit, 2019 and 2020, Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

	2019	Projected 2020	Total
Premium	$3,786,200	$3,894,300	
Less: Claims Costs	$2,926,000	$2,344,000	
Less: Expenses	$1,010,900	$1,039,800	
Plus: Investment Income	$351,200	$269,600	
Total Profit, Pre-Tax	$200,500	$780,100	$980,600

Detailed calculations used to determine the amounts in Table 9 are shown in the Appendix, Tables A 4.1 through A4.6.

D. Shortfalls and Redundancies, in the Provision for Bodily Injury Loss Cost, Underlying 2016 through 2019 Notional Rate Filings

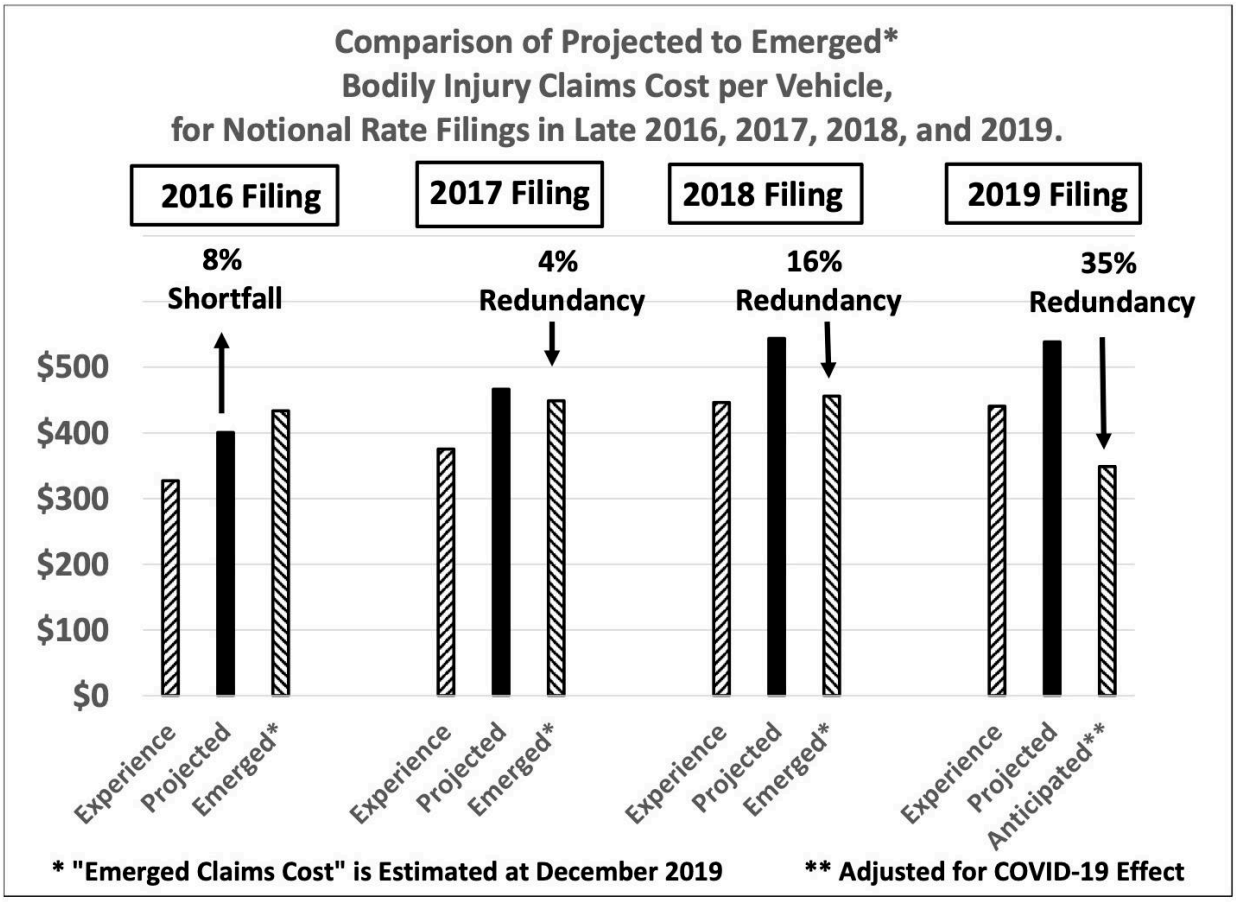
Figure 7 below shows the average projected underlying BI loss cost associated with four notional rate change filings, submitted in late 2016, late 2017, late 2018, and late 2019. It shows that rate changes for BI made in late 2017 and later, using the benchmark parameters promulgated by AIRB, would provide for more than the amount of BI loss cost that actually emerged. All other factors being equal, this would increase the profit of an insurer fitting this profile to an amount greater than the amount granted by the filing.

The notional filings are built upon BI loss cost data from the most recent three accident years prior to the filing date (bars with upward sloping stripes). Factors provided by the AIRB benchmarks, current at the time of the notional filing, are then applied to the claims data. The AIRB benchmarks include factors for loss development, an annual trend of between 7% and 8.5%, and internal insurance company loss adjustment expenses (unallocated LAE) of between 8.5% and 10.3%.

The claims data, with the benchmark factors applied, then forms a projection of the BI loss cost (dark solid bars), which provides the basis for the rate change.

Figure 7 then compares the projected BI loss cost for the filing to the value of the actual emerged BI loss cost provided for by the filing (bars with downward sloping stripes). If the emerged BI loss cost is greater than the projection, there is a shortfall. And if the emerged BI loss cost is less than the projection, there is a redundancy.

Figure 7: Comparison of Projected to Emerged Bodily Injury Loss and LAE Cost per Vehicle, Notional Rate Filings



It can be seen that for filings notionally submitted in late 2016, the emerged BI loss cost for the policy year after the filing is 8% higher than the projected amount, with the result that the rate change submitted would not provide fully for the actual loss cost. All else being equal, such a shortfall would cause an underwriting loss for an insurer fitting the profile of the filing.

This situation turned around from shortfall to redundancy by late 2017. In this notional filing, the estimated BI loss cost for the three prior accident years is higher than for the 2016 filing. This increase supports a higher projected BI loss cost than for the 2016 filing.

However, the BI loss cost that actually emerged is almost unchanged from that of the 2016 filing. The result is that the emerged BI loss cost is 4% below the amount requested in the filing. All else being equal, such a redundancy would produce greater profit for an insurer fitting the profile of the filing.

For the 2018 notional filing, the redundancy grows from 4% to 16%.

It is a logical consequence that the benchmark trend factor, by projecting annual increases in excess of general inflation in the BI loss cost that don't actually emerge, will create the redundancies that have been seen.

The Particular Case of the 2019 Notional Filing

The notable feature of the 2019 notional filing is that the projected BI loss cost is almost identical to that for the 2018 filing. This implies that insurers with BI loss cost equal to the industry average, with adequate rates in 2018, will not require a further rate change in 2019 for the BI coverage (all else being equal).

For the 2019 notional filing, the shortfall or redundancy cannot yet be known, since actual emerged claims experience for 2020 has not yet been reported by GISA. To work around this lack of information, an alternative is to use the BI loss cost underlying the claims projection for 2020 in Table 9. Doing so, the redundancy increases to 35%.

Note that part of the reason for this increased redundancy for the 2019 notional filing is the reduced claims volume arising from the COVID-19 crisis. Further, note that the BI loss cost does not account for the estimated $100 million of premium reductions announced by the IBC on May 8, 2020. Thus, the redundancy in BI loss cost for the 2019 filing may not be sustained when the COVID-19 crisis passes, and the redundancy will not fully pass through to profit.

VI. Conclusions

The following are the findings of my analysis.

Finding 1:
For accident periods beginning July 1, 2016, inflation-adjusted bodily injury loss and LAE cost per vehicle has been approximately stable. A continuation into the future of the stability seen for the last 3.5 years would be in contrast to the AIRB bodily injury trend rate, which continues to project future growth well in excess of the general inflation rate.

Finding 2:
There are underlying features of the available claims data that provide further support to the stability in bodily injury loss and LAE per vehicle seen since mid-2016. Further, there are facts that suggest that current estimates of the loss and LAE cost per vehicle may be conservative, and that subsequent estimates for recent accident years may decline. Facts in support of this proposition include:

- Very little growth in the inflation-adjusted loss cost estimates between corresponding accident semesters,
- Cumulative payments for recent accident years that are not keeping pace with payments for prior accident years,
- Growth in case reserves for bodily injury claims that is greater than cumulative payments,
- A GISA advisory, supported by the claims statistics, of an increase in the level of adequacy ("strengthening") of case reserves, that has not yet been accompanied by offsetting changes in the actuarial loss development factors, and
- Demonstrated reductions since 2017 in bodily injury loss and LAE cost estimates for accident years prior to 2018.

Finding 3:
According to a consistent and transparent method of profit allocation for the industry, the Alberta private passenger automobile insurance industry earned a pre-tax profit of $185.5 million between 2013 and 2018. My current projection, using this method, is that the industry will earn a total pre-tax profit of more than $980 million during the period 2019 and 2020 combined.

Finding 4:
Since 2017, a notional rate change application for bodily injury coverage, based on AIRB benchmarks and the prior three accident years of industry-wide claims experience, will overestimate the dollars needed to cover the loss and LAE costs that have subsequently emerged. All else being equal, this overestimate would increase the profit for an insurer, having a similar profile, making such a filing.

Appendix

1. Consumer Price Index for Alberta

Table A 1.1 Consumer Price Index for Alberta, and 12-Month Change in CPI

Date	Consumer Price Index, All Items, Alberta	12-Month Change in CPI
December 2013	129.1	
June 2014	132.3	
December 2014	131.5	1.9%
June 2015	134.5	1.7%
December 2015	133.5	1.5%
June 2016	136.3	1.3%
December 2016	134.9	1.0%
June 2017	136.9	0.4%
December 2017	137.6	2.0%
June 2018	140.7	2.8%
December 2018	140.5	2.1%
June 2019	142.7	1.4%
December 2019	143.7	2.3%
June 2020	145.0	1.6%

Source: Statistics Canada

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000402

2. Calculation of Loss and LAE Cost per Vehicle-Coverage, from Oliver Wyman Report as of June 2019

Table A 2.1 Ultimate Loss and LAE by Coverage, by Accident Semester

Accident Semester	[1] All Coverages Loss and LAE (000s)	[2] Bodily Injury Loss and LAE (000s)	[3] Property Damage Loss and LAE (000s)	[4] Accident Benefits Loss and LAE (000s)	[5] Collision Loss and LAE (000s)	[6] Compre-hensive Loss and LAE (000s)
2010.2	$1,051,336	$303,226	$179,543	$48,487	$194,268	$325,812
2011.1	$746,071	$246,252	$179,014	$39,419	$201,683	$79,703
2011.2	$887,056	$322,581	$175,585	$49,291	$186,630	$152,969
2012.1	$771,073	$301,523	$163,961	$43,845	$177,203	$84,541
2012.2	$1,151,273	$364,615	$207,625	$56,598	$225,618	$296,817
2013.1	$896,473	$326,345	$184,687	$46,312	$200,896	$138,233
2013.2	$1,187,072	$413,952	$225,987	$58,183	$250,520	$238,430
2014.1	$917,076	$356,294	$201,331	$46,084	$222,484	$90,883
2014.2	$1,381,952	$485,391	$231,391	$61,498	$259,790	$343,882
2015.1	$1,060,170	$428,547	$216,052	$57,269	$239,578	$118,724
2015.2	$1,445,794	$543,475	$234,397	$78,160	$256,434	$333,328
2016.1	$1,134,155	$471,195	$195,708	$59,747	$218,551	$188,954
2016.2	$1,582,488	$588,368	$228,592	$79,235	$272,436	$413,857
2017.1	$1,241,961	$532,278	$224,558	$76,888	$259,527	$148,710
2017.2	$1,493,760	$618,292	$242,310	$86,610	$283,619	$262,929
2018.1	$1,321,562	$559,101	$245,307	$92,358	$282,954	$141,842
2018.2	$1,525,309	$645,856	$227,831	$90,315	$281,493	$279,814
2019.1	$1,248,518	$539,074	$233,626	$92,336	$250,125	$133,357

Source: Semi-Annual Review of Industry Experience – Final Report as of June 30, 2019, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, March 27, 2020; Appendix B, Column (7)

Table A 2.2: Ultimate Loss and LAE by Coverage, by Fiscal Accident Year,

Fiscal Accident Year	[1] All Coverages Loss and LAE (000s)	[2] Bodily Injury Loss and LAE (000s)
2010-11	$1,797,407	$549,478
2011-12	$1,658,129	$624,104
2012-13	$2,047,746	$690,960
2013-14	$2,104,148	$770,246
2014-15	$2,442,122	$913,938
2015-16	$2,579,949	$1,014,670
2016-17	$2,824,449	$1,120,646
2017-18	$2,815,322	$1,177,393
2018-19	$2,773,827	$1,184,930

Table A 2.3: Earned Vehicle-Coverage, by Coverage, and by Accident Semester

Accident Semester	[1] All Coverages Earned Vehicle-Coverage	[2] Bodily Injury Earned Vehicle-Coverage	[3] Property Damage Earned Vehicle-Coverage	[4] Accident Benefits Earned Vehicle-Coverage	[5] Collision Earned Vehicle-Coverage	[6] Compre-hensive Earned Vehicle-Coverage
2010.2	5,343,857	1,147,135	1,147,135	1,147,366	854,565	1,047,656
2011.1	5,267,053	1,128,681	1,128,681	1,128,484	841,047	1,040,160
2011.2	5,479,780	1,178,562	1,178,562	1,178,586	872,429	1,071,641
2012.1	5,455,526	1,171,072	1,171,072	1,171,426	868,930	1,073,026
2012.2	5,672,988	1,220,939	1,220,939	1,221,823	903,591	1,105,696
2013.1	5,637,741	1,210,618	1,210,618	1,211,528	900,199	1,104,778
2013.2	5,897,275	1,269,842	1,269,842	1,270,777	942,655	1,144,159
2014.1	5,852,373	1,257,098	1,257,098	1,257,886	937,674	1,142,617
2014.2	6,121,709	1,319,793	1,319,793	1,319,430	981,095	1,181,598
2015.1	6,051,417	1,302,902	1,302,902	1,301,691	970,732	1,173,190
2015.2	6,244,941	1,349,443	1,349,443	1,347,555	1,000,576	1,197,924
2016.1	6,129,194	1,324,245	1,324,245	1,322,778	981,097	1,176,829
2016.2	6,250,924	1,354,437	1,354,437	1,354,589	999,646	1,187,815
2017.1	6,116,228	1,322,385	1,322,385	1,323,373	978,688	1,169,397
2017.2	6,308,821	1,367,345	1,367,345	1,368,677	1,009,073	1,196,381
2018.1	6,224,078	1,346,345	1,346,345	1,347,794	996,607	1,186,987
2018.2	6,434,287	1,396,675	1,396,675	1,397,844	1,029,680	1,213,413
2019.1	6,314,401	1,369,934	1,369,934	1,369,798	1,012,500	1,192,235

Source: Semi-Annual Review of Industry Experience – Final Report as of June 30, 2019, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, March 27, 2020; Appendix B, Column (3)

Table A 2.4: Earned Vehicle-Coverage, and by Fiscal Accident Year

Fiscal Accident Year	[1] All Coverages Earned Vehicle-Coverage	[2] Bodily Injury Earned Vehicle-Coverage
2010-11	10,610,910	2,275,816
2011-12	10,935,306	2,349,634
2012-13	11,310,729	2,431,557
2013-14	11,749,648	2,526,940
2014-15	12,173,126	2,622,695
2015-16	12,374,135	2,673,688
2016-17	12,367,152	2,676,822
2017-18	12,532,899	2,713,690
2018-19	12,748,688	2,766,609

Table A 2.5: Ultimate Loss and LAE Cost per Earned Vehicle-Coverage, by Coverage and by Fiscal Accident Year

Fiscal Accident Year	[1] All Coverages Loss and LAE Cost per Earned Vehicle-Coverage	[2] Bodily Injury Loss and LAE Cost per Earned Vehicle-Coverage	[3] Alberta CPI (December)	[4] Alberta CPI 2016	[5] All Coverages Loss and LAE Cost per Earned Vehicle-Coverage, in 2016 Dollars	[6] Bodily Injury Loss and LAE Cost per Earned Vehicle-Coverage, in 2016 Dollars
2010-11	$169	$241	122.9	135.2	$186	$266
2011-12	$152	$266	126.5	135.2	$162	$284
2012-13	$181	$284	126.5	135.2	$193	$304
2013-14	$179	$305	129.1	135.2	$188	$319
2014-15	$201	$348	131.5	135.2	$206	$358
2015-16	$208	$380	133.5	135.2	$211	$384
2016-17	$228	$419	134.9	135.2	$229	$420
2017-18	$225	$434	137.6	135.2	$221	$426
2018-19	$218	$428	140.5	135.2	$209	$412

3. Calculation of Loss and LAE Cost per Vehicle-Coverage, from Oliver Wyman Report as of December 2019

Table A 3.1: Ultimate Loss and LAE by Coverage, by Accident Semester

Accident Semester	[1] All Coverages Loss and LAE (000s)	[2] Bodily Injury Loss and LAE (000s)	[3] Property Damage Loss and LAE (000s)	[4] Accident Benefits Loss and LAE (000s)	[5] Collision Loss and LAE (000s)	[6] Compre-hensive Loss and LAE (000s)
2011.1	$747,305	$247,515	$179,035	$39,377	$201,665	$79,713
2011.2	$889,857	$325,398	$175,587	$49,227	$186,665	$152,980
2012.1	$770,838	$301,096	$163,961	$44,003	$177,238	$84,540
2012.2	$1,154,820	$368,164	$207,599	$56,578	$225,641	$296,838
2013.1	$900,150	$329,394	$185,109	$46,449	$200,929	$138,269
2013.2	$1,189,901	$416,922	$225,831	$58,149	$250,546	$238,453
2014.1	$916,818	$356,218	$201,169	$46,014	$222,532	$90,885
2014.2	$1,379,460	$481,946	$231,321	$62,413	$259,862	$343,918
2015.1	$1,059,330	$427,884	$215,965	$57,302	$239,572	$118,607
2015.2	$1,433,720	$531,266	$234,228	$78,313	$256,540	$333,373
2016.1	$1,128,446	$465,889	$195,485	$59,312	$218,811	$188,949
2016.2	$1,575,045	$580,595	$228,458	$79,767	$272,457	$413,768
2017.1	$1,242,214	$531,264	$224,475	$77,605	$260,107	$148,763
2017.2	$1,493,729	$613,991	$242,506	$87,663	$286,235	$263,334
2018.1	$1,328,565	$560,390	$246,784	$92,746	$287,146	$141,499
2018.2	$1,539,617	$653,641	$231,754	$89,786	$285,305	$279,131
2019.1	$1,348,664	$601,773	$237,001	$94,865	$272,195	$142,830
2019.2	$1,538,464	$668,166	$246,993	$102,982	$259,955	$260,368

Source: Annual Review of Industry Experience – Preliminary Report as of December 31, 2019, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, June 26, 2020; Appendix B, Column (7)

Table A 3.2: Ultimate Loss and LAE by Coverage, by Accident Year,

Accident Year	[1] All Coverages Loss and LAE (000s)	[2] Bodily Injury Loss and LAE (000s)
2011	$1,637,162	$572,913
2012	$1,925,658	$669,260
2013	$2,090,051	$746,316
2014	$2,296,278	$838,164
2015	$2,493,050	$959,150
2016	$2,703,491	$1,046,484
2017	$2,735,943	$1,145,255
2018	$2,868,182	$1,214,031
2019	$2,887,128	$1,269,939

Table A 3.3: Earned Vehicle-Coverage, by Coverage, and by Accident Semester

Accident Semester	[1] All Coverages Earned Vehicle-Coverage	[2] Bodily Injury Earned Vehicle-Coverage	[3] Property Damage Earned Vehicle-Coverage	[4] Accident Benefits Earned Vehicle-Coverage	[5] Collision Earned Vehicle-Coverage	[6] Compre-hensive Earned Vehicle-Coverage
2011.1	5,267,053	1,128,681	1,128,681	1,128,484	841,047	1,040,160
2011.2	5,479,779	1,178,562	1,178,562	1,178,586	872,429	1,071,640
2012.1	5,455,524	1,171,072	1,171,072	1,171,426	868,930	1,073,026
2012.2	5,672,988	1,220,939	1,220,939	1,221,823	903,592	1,105,695
2013.1	5,637,740	1,210,617	1,210,617	1,211,528	900,199	1,104,778
2013.2	5,897,273	1,269,842	1,269,842	1,270,777	942,655	1,144,158
2014.1	5,852,374	1,257,098	1,257,098	1,257,886	937,674	1,142,616
2014.2	6,121,705	1,319,792	1,319,792	1,319,430	981,095	1,181,597
2015.1	6,051,405	1,302,898	1,302,898	1,301,690	970,731	1,173,187
2015.2	6,244,923	1,349,438	1,349,438	1,347,553	1,000,574	1,197,920
2016.1	6,129,169	1,324,238	1,324,238	1,322,775	981,094	1,176,823
2016.2	6,251,477	1,354,559	1,354,559	1,354,715	999,733	1,187,911
2017.1	6,120,614	1,323,362	1,323,362	1,324,354	979,370	1,170,165
2017.2	6,318,489	1,369,522	1,369,522	1,370,854	1,010,553	1,198,038
2018.1	6,234,737	1,348,733	1,348,733	1,350,185	998,239	1,188,847
2018.2	6,446,074	1,399,350	1,399,350	1,400,500	1,031,438	1,215,437
2019.1	6,323,337	1,372,496	1,372,496	1,372,402	1,011,777	1,194,166
2019.2	6,480,942	1,412,408	1,412,408	1,412,655	1,035,744	1,207,726

Source: Annual Review of Industry Experience – Preliminary Report as of December 31, 2019, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, June 26, 2020; Appendix B, Column (3)

Table A 3.4: Earned Vehicle-Coverage, and by Accident Year

Accident Year	[1] All Coverages Earned Vehicle-Coverage	[2] Bodily Injury Earned Vehicle-Coverage
2011	10,746,832	2,307,243
2012	11,128,512	2,392,011
2013	11,535,013	2,480,459
2014	11,974,079	2,576,890
2015	12,296,327	2,652,336
2016	12,380,645	2,678,797
2017	12,439,103	2,692,885
2018	12,680,811	2,748,083
2019	12,804,279	2,784,904

Table A 3.5: Ultimate Loss and LAE Cost per Earned Vehicle-Coverage, by Coverage and by Accident Year

Accident Year	[1] All Coverages Loss and LAE Cost per Earned Vehicle-Coverage	[2] Bodily Injury Loss and LAE Cost per Earned Vehicle-Coverage	[3] Alberta CPI (June)	[4] Alberta CPI 2016	[5] All Coverages Loss and LAE Cost per Earned Vehicle-Coverage, in 2016 Dollars	[6] Bodily Injury Loss and LAE Cost per Earned Vehicle-Coverage, in 2016 Dollars
2011	$152	$248	122.9	135.2	$164	$268
2012	$173	$280	126.5	135.2	$184	$298
2013	$181	$301	126.5	135.2	$189	$313
2014	$192	$325	129.1	135.2	$196	$332
2015	$203	$362	131.5	135.2	$204	$364
2016	$218	$391	133.5	135.2	$217	$388
2017	$220	$425	134.9	135.2	$217	$420
2018	$226	$442	137.6	135.2	$217	$425
2019	$225	$456	140.5	135.2	$214	$432

4. Profit and Loss Calculations, by Method of J.S. Cheng and Partners

Table A 4.1: Estimated Profit and Loss, 2013 through 2018, by the Method of J.S. Cheng and Partners

(Dollar Amounts in Thousands)

	2013	2014	2015	2016	2017	2018	Total
[1] Premium Earned, Current Year[(1)]	$2,729,270	$2,923,231	$3,089,375	$3,186,128	$3,308,728	$3,525,107	
[2] Premium Earned, Prior Year[(1)]	$2,645,852	$2,729,270	$2,923,231	$3,089,375	$3,186,128	$3,308,728	
[3] Claims[(2)]	$2,109,083	$2,317,750	$2,523,365	$2,735,029	$2,762,703	$2,894,912	
[4] Expense Ratio[(3)]	24.2%	24.2%	25.4%	26.7%	27.8%	26.6%	
[5] Expenses = [1] * [4]	$660,483	$707,422	$784,701	$850,696	$919,826	$937,678	
[6] U/W Profit = [1] – [3] – [5]	-$40,296	-$101,941	-$218,691	-$399,597	-$373,801	-$307,483	
[7] Premium Leverage[(4)]	0.94	0.92	0.93	0.93	0.93	1.02	
[8] Allocated Equity, Current Year = [1] / [7]	$2,892,925	$3,163,016	$3,320,017	$3,422,831	$3,546,237	$3,472,341	
[9] Allocated Equity, Prior Year = [2] / [7]	$2,804,505	$2,953,144	$3,141,469	$3,318,890	$3,414,836	$3,259,201	
[10] Average Allocated Equity = ([8] + [9])/2	$2,848,715	$3,058,080	$3,230,743	$3,370,861	$3,480,537	$3,365,771	
[11] Reserves as Ratio to Equity[(5)]	1.87	1.69	1.82	1.81	1.81	1.83	
[12] Investment Yield Rates[(6)]	3.0%	3.9%	3.3%	2.6%	3.1%	2.1%	
[13] Investment Income = [12]*[10] * (1 + [11])	$245,988	$321,838	$303,692	$244,860	$307,159	$203,837	
[14] Total Profit, Pre-Tax = [6] + [13]	$205,691	$219,897	$85,000	-$154,737	-$66,642	-$103,647	$185,562

Sources:

(1): Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)
(2): Table A4.4
(3): Benchmark Expense Ratio, April of subsequent year, Alberta Auto Insurance Rate Board (AIRB)
(4): Table A4.6, Column [3]
(5): Table A4.6, Column [12]
(6): Table A4.6, Column [6]

Table A 4.2: Estimated Profit and Loss, 2019 and Projection for 2020, by the Method of J.S. Cheng and Partners

(Dollar Amounts in Thousands)

	2019	Projected 2020	Total
[1] Premium Earned, Current Year[(1)]	$3,786,151	$3,894,333	
[2] Premium Earned, Prior Year[(1)]	$3,525,107	$3,786,151	
[3] Claims[(2)]	$2,926,000	$2,343,990	
[4] Expense Ratio[(3)]	26.7%	26.7%	
[5] Expenses = [1] * [4]	$1,010,902	$1,039,787	
[6] U/W Profit = [1] – [3] – [5]	-$150,757	$510,556	
[7] Premium Leverage[(4)]	1.01	1.01	
[8] Allocated Equity, Current Year = [1] / [7]	$3,756,077	$3,863,400	
[9] Allocated Equity, Prior Year = [2] / [7]	$3,497,106	$3,756,077	
[10] Average Allocated Equity = ([8] + [9])/2	$3,626,592	$3,809,738	
[11] Reserves as Ratio to Equity[(5)]	1.83	1.83	
[12] Investment Yield Rates[(6)]	3.4%	2.5%	
[13] Investment Income = [12]*[10] *(1 + [11])	$351,178	$269,639	
[14] Total Profit, Pre-Tax = [6] + [13]	$200,500	$780,195	$980,615

Sources:

(1): For 2019, Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)
For 2020, Table A4.3 Total, Less $100 million, per announcement by IBC
http://www.ibc.ca/ab/resources/media-centre/media-releases/alberta-auto-insurers-focused-on-affordability

(2): For 2019, Table A4.4
For 2020, Table A4.5

(3): Benchmark Expense Ratio, April 2020, Alberta Auto Insurance Rate Board (AIRB)

(4): Table A4.6, Column [3], 2019

(5): Table A4.6, Column [12], 2019

(6): For 2019, Table A4.6, Column [6], 2019
For 2020, Reduced by judgment to 2.5% to recognize volatility in 2020 financial markets

Table A 4.3: Calculation of 2019 Earned Premium at the Level of Written Premium in Second Half of 2019

Coverage	[1] Accident Semester	[2] Earned Premium (000s)	[3] Earned Vehicles (000s)	[4] Average Earned Premium per Vehicle = [2] / [3]	[5] Written Premium (000s)	[6] Written Vehicles (000s)	[7] Average Written Premium per Vehicle = [5] / [6]	[8] On-Level Factor = $[7]_{2019.2}$ / [4]	[9] Earned Premium at Level of Written Premium, 2019-2 (000s) = [2] * [8]
Third Party Liability	2019.1	$998,645	1,372	$728				1.096	$1,094,344
	2019.2	$1,079,024	1,412	$764	$1,126,168	1,412	$797	1.044	$1,126,168
Accident Benefits	2019.1	$85,237	1,372	$62				1.115	$95,035
	2019.2	$92,549	1,413	$66	$97,823	1,413	$69	1.057	$97,823
Un/Underinsured Motorists	2019.1	$40,222	1,342	$30				1.016	$40,847
	2019.2	$41,823	1,378	$30	$41,947	1,378	$30	1.003	$41,947
Collision	2019.1	$399,357	1,012	$395				1.014	$404,806
	2019.2	$409,110	1,036	$395	$414,395	1,036	$400	1.013	$414,395
Comprehensive	2019.1	$301,786	1,194	$253				1.088	$328,243
	2019.2	$319,390	1,208	$264	$331,970	1,208	$275	1.039	$331,970
All Perils	2019.1	$8,217	11	$726				0.977	$8,027
	2019.2	$8,598	12	$726	$8,393	12	$709	0.976	$8,393
Specified Perils	2019.1	$1,087	11	$100				1.070	$1,164
	2019.2	$1,106	11	$101	$1,171	$11	$107	1.059	$1,171
Total		$3,786,151							$3,994,333

Source: Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)

Table A 4.4: Summation of Claims Costs by Accident Year across Coverages
(in Thousands)

Accident Semester	[1] Major Coverages Loss and LAE (000s)	[2] UM Loss and LAE (000s)	[3] All Perils Loss and LAE (000s)	[4] Specified Perils Loss and LAE (000s)	[5] All Coverages Loss and LAE (000s)	[6] All Coverages Loss and LAE (000s)
2011.1	$747,305	$2,573	$3,760	$211	$753,849	
2011.2	$889,857	$7,767	$5,003	$384	$903,011	$1,656,860
2012.1	$770,838	$4,062	$2,907	$201	$778,008	
2012.2	$1,154,820	$9,580	$5,892	$741	$1,171,033	$1,949,041
2013.1	$900,150	$2,942	$5,102	$351	$908,545	
2013.2	$1,189,901	$5,144	$5,132	$361	$1,200,538	$2,109,083
2014.1	$916,818	$2,644	$3,624	$288	$923,374	
2014.2	$1,379,460	$7,444	$6,821	$651	$1,394,376	$2,317,750
2015.1	$1,059,330	$10,472	$4,188	$282	$1,074,272	
2015.2	$1,433,720	$8,590	$6,193	$590	$1,449,093	$2,523,365
2016.1	$1,128,446	$8,064	$4,194	$480	$1,141,184	
2016.2	$1,575,045	$11,088	$7,035	$677	$1,593,845	$2,735,029
2017.1	$1,242,214	$5,014	$4,791	$403	$1,252,422	
2017.2	$1,493,729	$10,602	$5,212	$738	$1,510,281	$2,762,703
2018.1	$1,328,565	$7,510	$5,456	$563	$1,342,094	
2018.2	$1,539,617	$6,355	$6,195	$651	$1,552,818	$2,894,912
2019.1	$1,348,664	$5,449	$4,287	$462	$1,358,862	
2019.2	$1,538,464	$22,527	$5,542	$611	$1,567,144	$2,926,006

Sources:
Column [1] from Table A.3.1 Column [1]

Columns [2], [3], [4] from Annual Review of Industry Experience – Preliminary Report as of December 31, 2019, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, June 26, 2020; Appendix B, Column (7)

Table A 4.5: 2020 Claims Costs, Reduced for Reduced Driving Due to COVID-19

	Bodily Injury	Property Damage	Accident Benefits	Un/Under Insured Motorist	Collision	Compre-hensive	All Perils	Spec-ified Perils	All Coverages
Base Line [(1)]	$1,269,939	$483,994	$197,847	$27,976	$532,150	$403,198	$9,829	$1,073	$2,926,006
Projected General Inflation for 2020	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Reduc-tion[(2)]	25%	25%	25%	25%	25%	0	0	0	
Reduced	$971,503	$370,255	$151,353	$21,402	$407,095	$411,262	$10,026	$1,094	$2,343,990

(1): 2019 Incurred Loss and LAE, Source, Tables A 3.1 and A 4.4

(2): Reduction for moving coverages: 50% * 3 months / 12 months + 25% * 6 months/12 months = 25%

Table A 4.6: Ratios for the Insurance Industry Operating in Canada, from P&C Returns Filed with OSFI
(Dollar Amounts in Millions)

		[1] Net Written Premium		[2] Total Equity	[3] Premium Leverage = [1]/[2]	[4] Net Investmt Income	[5] Total Investmts	[6] Investmt Yield Rate = [4] / [5]
2013	Canadian	$31,089		$28,087		$2,164	$67,162	
	Foreign	$7,735		$13,065		$755	$29,974	
	Cdn Mortgage	$0		$0		$0	$0	
	Total	$38,824		$41,152	0.94	$2,919	$97,136	3.0%
2014	Canadian	$32,585		$29,595		$3,016	$73,246	
	Foreign	$7,865		$14,173		$859	$25,815	
	Cdn Mortgage	$0		$0		$0	$0	
	Total	$40,450		$43,768	0.92	$3,875	$99,061	3.9%
2015	Canadian	$34,109		$31,295		$2,543	$80,005	
	Foreign	$6,718		$12,580		$958	$25,119	
	Cdn Mortgage	$0		$0		$0	$0	
	Total	$40,827		$43,875	0.93	$3,501	$105,124	3.3%
2016	Canadian	$35,128		$32,088		$2,184	$73,650	
	Foreign	$6,909		$13,072		$422	$27,093	
	Cdn Mortgage	$0		$0		$0	$0	
	Total	$42,037		$45,160	0.93	$2,606	$100,743	2.6%
2017	Canadian	$34,620		$31,119		$2,601	$69,101	
	Foreign	$6,964		$13,450		$425	$27,202	
	Cdn Mortgage	$0		$0		$0	$0	
	Total	$41,584		$44,569	0.93	$3,026	$96,303	3.1%
2018	Canadian	$37,140		$25,054		$1,339	$59,282	
	Foreign	$8,249		$15,208		$526	$30,231	
	Cdn Mortgage	$975		$5,408		$229	$8,213	
	Total	$46,364		$45,670	1.02	$2,094	$97,726	2.1%
2019	Canadian	$37,172		$26,140		$2,454	$62,492	
	Foreign	$9,014		$15,543		$797	$31,879	
	Cdn Mortgage	$1,150		$5,277		$265	$8,423	
	Total	$47,336		$46,960	1.01	$3,516	$102,794	3.4%

Source: OSFI, Financial Data for Property and Casualty Companies

https://www.osfi-bsif.gc.ca/Eng/wt-ow/Pages/FINDAT-pc.aspx

Note that amounts for "Canadian" insurers prior to 2018 include "Canadian Mortgage Insurers." For consistency, the amounts for Canadian Mortgage Insurers are added to the industry total for 2018 and 2019.

Table A 4.6 (cont'd): Ratios for the Insurance Industry Operating in Canada, from P&C Returns Filed with OSFI

(Dollar Amounts in Millions)

		[7] Gross Unpaid Claims & LAE	[8] Gross Unearned Premium Reserve	[9] Ceded Unpaid Claims & LAE	[10] Ceded Unearned Premium Reserve	[11] Net Reserves = [7] + [8] – [9] – [10]	[12] Reserves/ Equity = [11]/[2]
2013	Canadian	$47,586	$20,624	$9,263	$2,384		
	Foreign	$20,024	$4,478	$3,026	$941		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$67,610	$25,102	$12,289	$3,325	$77,098	1.87
2014	Canadian	$49,939	$21,876	$10,610	$2,690		
	Foreign	$15,539	$4,180	$3,226	$1,022		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$65,478	$26,056	$13,836	$3,712	$73,986	1.69
2015	Canadian	$55,298	$23,848	$11,579	$3,684		
	Foreign	$15,770	$4,443	$3,023	$1,109		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$71,068	$28,291	$14,602	$4,793	$79,964	1.82
2016	Canadian	$58,090	$24,574	$15,077	$3,590		
	Foreign	$17,878	$4,573	$3,645	$1,148		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$75,968	$29,147	$18,722	$4,738	$81,655	1.81
2017	Canadian	$58,646	$25,688	$17,103	$4,101		
	Foreign	$17,766	$4,599	$3,734	$1,154		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$76,412	$30,287	$20,837	$5,255	$80,607	1.81
2018	Canadian	$56,273	$23,361	$14,779	$3,782		
	Foreign	$19,125	$5,171	$4,082	$1,130		
	Cdn Mortgage	$152	$3,102	$0	$0		
	Total	$75,550	$31,634	$18,861	$4,912	$83,411	1.83
2019	Canadian	$57,733	$25,220	$16,057	$4,679		
	Foreign	$20,060	$5,998	$4,285	$1,471		
	Cdn Mortgage	$172	$3,295	$0	$0		
	Total	$77,965	$34,513	$20,342	$6,150	$85,986	1.83

Source: OSFI, Financial Data for Property and Casualty Companies

https://www.osfi-bsif.gc.ca/Eng/wt-ow/Pages/FINDAT-pc.aspx

Note that amounts for "Canadian" insurers prior to 2018 include "Canadian Mortgage Insurers." For consistency, the amounts for Canadian Mortgage Insurers are added to the industry total for 2018 and 2019.

5. Shortfalls and Redundancies, in the Provision for Bodily Injury Loss Cost, Underlying 2016 through 2019 Notional Rate Filings

Notional Filing 1
Filing Date: Late 2016
Loss Experience: Based on Case Incurred Claims for Fiscal Accident Years 2013-2014 through 2015-2016 as at June 2016,
LDF and ULAE Benchmarks Effective Oct 2016,
Emerged Claims in Policy Year 2017 (Loss Cost Represented by Accident Years 2017 and 2018)

Table A 5.1: Experience, Projected, and Emerged Loss and LAE Cost, 2016 Notional Filing

[1] Experience Period	Fiscal Acc Yr 2013-2014	Fiscal Acc Yr 2014-2015	Fiscal Acc Yr 2015-2016	Average
[2] Experience BI Loss and LAE Cost, at June 2016 Using Oct 2016 Benchmarks	$309.11	$335.86	$336.51	$327.16
[3] Past Trend Begins (midpoint of [1])	Dec-13	Dec-14	Dec-15	
[4] Past Trend Ends-Future Trend Begins	Dec-16	Dec-16	Dec-16	
[5] Future Trend Ends (midpoint of [11])	Dec-17	Dec-17	Dec-17	
[6] Past Trend Period in Years	3	2	1	
[7] Past Trend Rate	7.0%	7.0%	7.0%	
[8] Future Trend Period in Years	1	1	1	
[9] Future Trend Rate	7.0%	7.0%	7.0%	
[10] Projected Loss and LAE Cost	$405.18	$411.44	$385.27	$400.63
[11] Emerged, AYs Jan 2017-Dec 2018				$433.62
[12] Redundancy/(Shortfall)				8%

Table A 5.2: Compilation of Experience Period Loss and LAE Cost, 2016 Filing

Accident Semester	(1) Earned Vehicles	(2) Case Incurred BI Loss and ALAE Jun 2016	(3) BI LDF from Oct 2016 Benchmark	(4) BI Ult Loss and ALAE	(5) ULAE Factor from Oct 2016 Benchmark	(6) BI Ult Loss and LAE	(7) BI Ult Loss and LAE Cost	(8) BI Ult Loss and LAE by AY
2013.2	1,274,801	$293,126	1.301	$381,357	1.103	$420,637	$329.96	
2014.1	1,261,799	$231,565	1.423	$329,517	1.103	$363,457	$288.05	$309.11
2014.2	1,324,345	$279,095	1.552	$433,155	1.103	$477,770	$360.76	
2015.1	1,305,566	$213,997	1.718	$367,647	1.103	$405,514	$310.60	$335.86
2015.2	1,350,106	$242,120	1.874	$453,733	1.103	$500,467	$370.69	
2016.1	1,323,482	$156,953	2.306	$361,934	1.103	$399,213	$301.64	$336.51

Notional Filing 2

Filing Date: Late 2017

Loss Experience: Based on Case Incurred Claims for Fiscal Accident Years 2014-2015 through 2016-2017 as at June 2017,

LDF and ULAE Benchmarks Effective Oct 2017,

Emerged Claims in Policy Year 2018 (Loss Cost Represented by Accident Years 2018 and 2019)

Table A 5.3: Experience, Projected, and Emerged Loss and LAE Cost, 2017 Notional Filing

[1] Experience Period	Fiscal Acc Yr 2014-2015	Fiscal Acc Yr 2015-2016	Fiscal Acc Yr 2016-2017	Average
[2] Experience Loss and LAE Cost, at June 2017 Using Oct 2017 Benchmarks	$359.89	$386.26	$380.02	$375.39
[3] Past Trend Begins (midpoint of [1])	Dec-14	Dec-15	Dec-16	
[4] Past Trend Ends-Future Trend Begins	Dec-17	Dec-17	Dec-17	
[5] Future Trend Ends (midpoint of [11])	Dec-18	Dec-18	Dec-18	
[6] Past Trend Period in Years	3	2	1	
[7] Past Trend Rate	7.5%	7.5%	7.5%	
[8] Future Trend Period in Years	1	1	1	
[9] Future Trend Rate	7.5%	7.5%	7.5%	
[10] Projected Loss and LAE Cost	$480.62	$479.84	$439.16	$466.54
[11] Emerged, AYs Jan 2018-Dec 2019				$448.94
[12] Redundancy/(Shortfall)				-4%

Table A 5.4: Compilation of Experience Period Loss and LAE Cost, 2017 Filing

Accident Semester	(1) Earned Vehicles	(2) Case Incurred BI Loss and ALAE Jun 2017	(3) BI LDF from Oct 2017 Benchmark	(4) BI Ult Loss and ALAE	(5) ULAE Factor from Oct 2017 Benchmark	(6) BI Ult Loss and LAE	(7) BI Ult Loss and LAE Cost	(8) BI Ult Loss and LAE by AY
2014.2	1,319,942	$345,024	1.333	$459,917	1.085	$499,010	$378.05	
2015.1	1,303,078	$279,566	1.467	$410,123	1.085	$444,984	$341.49	$359.89
2015.2	1,349,655	$309,784	1.647	$510,214	1.085	$553,582	$410.17	
2016.1	1,324,488	$238,022	1.856	$441,769	1.085	$479,319	$361.89	$386.26
2016.2	1,354,511	$251,440	2.027	$509,669	1.085	$552,991	$408.26	
2017.1	1,321,738	$169,580	2.522	$427,681	1.085	$464,034	$351.08	$380.02

Notional Filing 3
Filing Date: Late 2018
Loss Experience: Based on Case Incurred Claims for Fiscal Accident Years 2015-2016 through 2017-2018 as at June 2018,
LDF and ULAE Benchmarks Effective Oct 2018,
Emerged Claims in Policy Year 2019 (Loss Cost Represented by Accident Year 2019)

Table A 5.5: Experience, Projected, and Emerged Loss and LAE Cost, 2018 Notional Filing

[1] Experience Period	Fiscal Acc Yr 2015-2016	Fiscal Acc Yr 2016-2017	Fiscal Acc Yr 2017-2018	Average
[2] Experience Loss and LAE Cost, at June 2018 Using Oct 2018 Benchmarks	$410.25	$454.68	$473.94	$446.29
[3] Past Trend Begins (midpoint of [1])	Dec-15	Dec-16	Dec-17	
[4] Past Trend Ends-Future Trend Begins	Dec-18	Dec-18	Dec-18	
[5] Future Trend Ends (midpoint of [11])	Jun-19	Jun-19	Jun-19	
[6] Past Trend Period in Years	3	2	1	
[7] Past Trend Rate	8.5%	8.5%	8.5%	
[8] Future Trend Period in Years	0.5	0.5	0.5	
[9] Future Trend Rate	7.5%	7.5%	7.5%	
[10] Projected Loss and LAE Cost	$543.31	$554.98	$533.16	$543.81
[11] Emerged, AYs Jan 2019-Dec 2019				$456.01
[12] Redundancy/(Shortfall)				-16%

Table A 5.6: Compilation of Experience Period Loss and LAE Cost, 2018 Filing

Accident Semester	(1) Earned Vehicles	(2) Case Incurred BI Loss and ALAE Jun 2018	(3) BI LDF from Oct 2018 Benchmark	(4) BI Ult Loss and ALAE	(5) ULAE Factor from Oct 2018 Benchmark	(6) BI Ult Loss and LAE	(7) BI Ult Loss and LAE Cost	(8) BI Ult Loss and LAE by AY
2015.2	1,349,572	$396,524	1.363	$540,462	1.092	$590,185	$437.31	
2016.1	1,324,378	$309,202	1.501	$464,112	1.092	$506,811	$382.68	$410.25
2016.2	1,354,591	$341,647	1.716	$586,266	1.092	$640,203	$472.62	
2017.1	1,322,566	$267,295	1.977	$528,442	1.092	$577,059	$436.32	$454.68
2017.2	1,367,582	$276,700	2.263	$626,172	1.092	$683,780	$499.99	
2018.1	1,345,903	$197,252	2.796	$551,517	1.092	$602,256	$447.47	$473.94

Notional Filing 4

Filing Date: Late 2019

Loss Experience: Based on Case Incurred Claims for Fiscal Accident Years 2016-2017 through 2018-2019 as at June 2019,

LDF and ULAE Benchmarks Effective Oct 2019,

Emerged Claims, Projection of Policy Year 2020 (Loss Cost Represented by Projection of Accident Year 2020)

Table A 5.7: Experience, Projected, and Emerged Loss and LAE Cost, 2019 Notional Filing

[1] Experience Period	Fiscal Acc Yr 2016-2017	Fiscal Acc Yr 2017-2018	Fiscal Acc Yr 2018-2019	Average
[2] Experience Loss and LAE Cost, at June 2019 Using Oct 2019 Benchmarks	$432.29	$444.29	$445.31	$440.63
[3] Past Trend Begins (midpoint of [1])	Dec-16	Dec-17	Dec-18	
[4] Past Trend Ends-Future Trend Begins	Dec-19	Dec-19	Dec-19	
[5] Future Trend Ends (midpoint of [11])	Jun-20	Jun-20	Jun-20	
[6] Past Trend Period in Years	3	2	1	
[7] Past Trend Rate	8.5%	8.5%	8.5%	
[8] Future Trend Period in Years	0.5	0.5	0.5	
[9] Future Trend Rate	7.5%	7.5%	7.5%	
[10] Projected Loss and LAE Cost	$572.49	$542.29	$500.96	$538.58
[11] Emerged, Proj. AYs Jan 2020-Dec 2020				$348.85
[12] Redundancy/(Shortfall)				-35%

Table A 5.8: Compilation of Experience Period Loss and LAE Cost, 2019 Filing

Accident Semester	(1) Earned Vehicles	(2) Case Incurred BI Loss and ALAE Jun 2019	(3) BI LDF from Oct 2019 Benchmark	(4) BI Ult Loss and ALAE	(5) ULAE Factor from Oct 2019 Benchmark	(6) BI Ult Loss and LAE	(7) BI Ult Loss and LAE Cost	(8) BI Ult Loss and LAE by AY
2016.2	1,354,437	$424,271	1.305	$553,674	1.101	$609,595	$450.07	
2017.1	1,322,385	$347,297	1.432	$497,329	1.101	$547,560	$414.07	$432.29
2017.2	1,367,345	$353,587	1.633	$577,408	1.101	$635,726	$464.93	
2018.1	1,346,345	$276,526	1.872	$517,657	1.101	$569,940	$423.32	$444.29
2018.2	1,396,675	$277,629	2.136	$593,016	1.101	$652,910	$467.47	
2019.1	1,369,934	$182,124	2.888	$525,974	1.101	$579,097	$422.72	$445.31

Table A 5.9: Loss Cost, for Emerging Period, Filings 1 through 4

Accident Semester	(1) Earned Vehicles	(2) Ultimate Loss and LAE, at Dec 2019	(3) Accident Semesters Included in Emerging Period	(4) Total Loss Cost, Accident Year, at Dec 2019
2017.1	1,323,362	$531,264		
2017.2	1,369,522	$613,991	2017.1 thru 2018.2	$433.62
2018.1	1,348,733	$560,390		
2018.2	1,399,350	$653,641	2018.1 thru 2019.2	$448.94
2019.1	1,372,496	$601,773		
2019.2	1,412,418	$668,166	2019.1 thru 2019.2	$456.01
2020.1	1,372,496	$971,503		
2020.2	1,412,418		2020.1 thru 2020.2 (proj.)	$348.85

Notes:

[2]: For Table A 5.1, From Column (8), Table A 5.2; For Table A.5.3, from Column (8), Table A 5.4

For Table A 5.5, From Column (8), Table A 5.6; For Table A 5.7, From Column (8), Table A 5.8

[10] = [2] * (1 + [7])^[6] * (1 + [9])^[8]

[11]: From Column (4), Table A 5.9

[12] = [11]/[10] – 1

Sources:

Table A 5.2: Earned Vehicles and Case Incurred Loss from Oliver Wyman, Semi-Annual Review Report 2017

Table A 5.4: Earned Vehicles and Case Incurred Loss from Oliver Wyman, Semi-Annual Review Report 2018

Table A 5.6: Earned Vehicles and Case Incurred Loss from Oliver Wyman, Semi-Annual Review Report 2019

Table A 5.8: Earned Vehicles and Case Incurred Loss from Oliver Wyman, Semi-Annual Review Report 2020

Table A 5.9: Earned Vehicles and Ultimate Incurred Loss from Oliver Wyman, Preliminary Annual Review Report 2020

6. Loss and ALAE Dollar and Count Triangles

Table A 6.1: Loss and ALAE Incurred, Bodily Injury

(in thousands)

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	$116,441	$126,394	$123,675	$129,667	$139,349	$151,022	$161,833	$170,909	$177,150	$180,508
201002	$155,703	$172,780	$172,365	$182,698	$195,603	$216,373	$233,266	$244,784	$246,283	$252,485
201101	$125,730	$133,891	$133,993	$140,110	$153,119	$168,234	$183,071	$191,723	$203,468	$206,782
201102	$149,121	$171,113	$179,144	$194,363	$210,816	$229,263	$243,350	$257,564	$268,776	$273,774
201201	$133,650	$161,246	$164,395	$177,049	$197,651	$213,666	$225,539	$233,536	$246,873	$254,609
201202	$147,335	$177,626	$190,638	$211,508	$228,276	$251,222	$270,044	$281,383	$296,732	$306,201
201301	$122,754	$150,964	$162,433	$177,339	$197,480	$217,747	$238,976	$253,470	$266,653	$281,920
201302	$158,085	$201,330	$213,249	$236,592	$263,728	$292,902	$317,538	$335,729	$348,764	$355,478
201401	$139,295	$170,205	$184,617	$203,851	$231,400	$251,932	$271,379	$286,887	$301,751	$305,972
201402	$181,499	$220,251	$243,195	$279,311	$314,681	$345,024	$373,204	$397,499	$408,096	$414,908
201501	$157,887	$199,168	$213,997	$243,680	$279,567	$309,808	$333,893	$346,601	$354,238	$363,291
201502	$193,905	$242,166	$266,694	$309,810	$360,044	$396,524	$416,011	$434,570	$442,669	
201601	$156,971	$197,097	$238,040	$275,068	$309,202	$335,497	$364,451	$383,846		
201602	$174,369	$251,531	$300,285	$341,647	$385,835	$424,328	$455,404			
201701	$169,629	$229,155	$267,360	$302,718	$347,424	$386,855				
201702	$202,756	$277,061	$306,885	$353,893	$406,332					
201801	$197,315	$242,620	$277,037	$323,219						
201802	$199,756	$278,187	$327,553							
201901	$182,157	$257,440								
201902	$210,044									

Table A 6.2: Loss and ALAE Incurred, Age-to-Age Ratios, Bodily Injury

	Age-to-Age Interval in Months								
Accident Semester	6-12	12-18	18-24	24-30	30-36	36-42	42-48	48-54	54-60
201001	1.085	0.978	1.048	1.075	1.084	1.072	1.056	1.037	1.019
201002	1.110	0.998	1.060	1.071	1.106	1.078	1.049	1.006	1.025
201101	1.065	1.001	1.046	1.093	1.099	1.088	1.047	1.061	1.016
201102	1.147	1.047	1.085	1.085	1.088	1.061	1.058	1.044	1.019
201201	1.206	1.020	1.077	1.116	1.081	1.056	1.035	1.057	1.031
201202	1.206	1.073	1.109	1.079	1.101	1.075	1.042	1.055	1.032
201301	1.230	1.076	1.092	1.114	1.103	1.097	1.061	1.052	1.057
201302	1.274	1.059	1.109	1.115	1.111	1.084	1.057	1.039	1.019
201401	1.222	1.085	1.104	1.135	1.089	1.077	1.057	1.052	1.014
201402	1.214	1.104	1.149	1.127	1.096	1.082	1.065	1.027	1.017
201501	1.261	1.074	1.139	1.147	1.108	1.078	1.038	1.022	1.026
201502	1.249	1.101	1.162	1.162	1.101	1.049	1.045	1.019	
201601	1.256	1.208	1.156	1.124	1.085	1.086	1.053		
201602	1.443	1.194	1.138	1.129	1.100	1.073			
201701	1.351	1.167	1.132	1.148	1.113				
201702	1.366	1.108	1.153	1.148					
201801	1.230	1.142	1.167						
201802	1.393	1.177							
201901	1.413								

Table A 6.3: Loss and ALAE Paid, Bodily Injury

(in thousands)

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	$4,242	$17,835	$28,460	$36,814	$49,224	$67,078	$79,945	$97,500	$112,586	$126,926
201002	$3,995	$21,394	$35,513	$49,714	$69,279	$87,367	$115,360	$138,804	$161,267	$177,588
201101	$4,815	$18,420	$29,100	$40,439	$58,682	$73,122	$88,723	$109,153	$125,976	$148,278
201102	$3,956	$19,625	$36,521	$54,210	$78,880	$99,981	$128,166	$147,217	$175,215	$194,083
201201	$4,521	$20,719	$33,978	$50,200	$73,623	$95,994	$120,300	$140,535	$161,607	$182,760
201202	$4,041	$21,608	$37,385	$57,967	$87,599	$107,131	$140,287	$164,366	$194,258	$213,454
201301	$3,561	$16,614	$31,480	$49,525	$73,054	$96,866	$124,527	$145,224	$168,186	$196,896
201302	$4,194	$20,590	$42,311	$67,868	$97,700	$123,372	$156,936	$188,466	$222,484	$248,983
201401	$4,387	$23,201	$37,775	$57,968	$85,333	$110,742	$140,083	$167,569	$194,866	$221,806
201402	$4,230	$25,696	$47,548	$70,276	$105,928	$139,507	$183,824	$222,560	$264,545	$295,616
201501	$4,925	$20,324	$36,057	$56,329	$87,847	$126,353	$157,895	$194,459	$223,879	$256,679
201502	$4,375	$22,299	$41,841	$68,507	$123,366	$170,872	$215,852	$255,484	$294,336	
201601	$5,487	$20,786	$39,307	$69,858	$109,595	$147,901	$182,330	$226,766		
201602	$3,736	$23,564	$50,441	$85,079	$137,566	$179,466	$237,496			
201701	$5,029	$23,121	$42,799	$76,059	$116,628	$165,343				
201702	$4,737	$22,251	$51,793	$84,009	$135,369					
201801	$4,677	$21,897	$40,317	$71,482						
201802	$4,524	$20,935	$45,695							
201901	$4,815	$21,002								
201902	$3,941									

Table A 6.4: Loss and ALAE Paid, Age-to-Age Ratios, Bodily Injury

	Age-to-Age Interval in Months								
Accident Semester	6-12	12-18	18-24	24-30	30-36	36-42	42-48	48-54	54-60
201001	4.205	1.596	1.294	1.337	1.363	1.192	1.220	1.155	1.127
201002	5.356	1.660	1.400	1.394	1.261	1.320	1.203	1.162	1.101
201101	3.826	1.580	1.390	1.451	1.246	1.213	1.230	1.154	1.177
201102	4.960	1.861	1.484	1.455	1.268	1.282	1.149	1.190	1.108
201201	4.583	1.640	1.477	1.467	1.304	1.253	1.168	1.150	1.131
201202	5.347	1.730	1.551	1.511	1.223	1.309	1.172	1.182	1.099
201301	4.666	1.895	1.573	1.475	1.326	1.286	1.166	1.158	1.171
201302	4.909	2.055	1.604	1.440	1.263	1.272	1.201	1.180	1.119
201401	5.288	1.628	1.535	1.472	1.298	1.265	1.196	1.163	1.138
201402	6.075	1.850	1.478	1.507	1.317	1.318	1.211	1.189	1.117
201501	4.127	1.774	1.562	1.560	1.438	1.250	1.232	1.151	1.147
201502	5.096	1.876	1.637	1.801	1.385	1.263	1.184	1.152	
201601	3.788	1.891	1.777	1.569	1.350	1.233	1.244		
201602	6.307	2.141	1.687	1.617	1.305	1.323			
201701	4.598	1.851	1.777	1.533	1.418				
201702	4.697	2.328	1.622	1.611					
201801	4.681	1.841	1.773						
201802	4.628	2.183							
201901	4.362								

Table A 6.5: Loss and ALAE Incurred, by Accident Year, Bodily Injury

(in thousands)

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	$116,441	$282,098	$296,455	$302,031	$322,047	$346,625	$378,207	$404,175	$421,935	$426,792
2011	$125,730	$283,013	$305,106	$319,254	$347,483	$379,050	$412,334	$435,073	$461,032	$475,558
2012	$133,650	$308,581	$342,020	$367,686	$409,159	$441,941	$476,761	$503,580	$528,256	$551,341
2013	$122,754	$309,049	$363,763	$390,588	$434,072	$481,475	$531,878	$571,007	$602,382	$630,684
2014	$139,295	$351,704	$404,868	$447,046	$510,710	$566,612	$616,402	$660,091	$699,249	$714,069
2015	$157,887	$393,074	$456,163	$510,374	$589,377	$669,852	$730,417	$762,613	$788,808	$805,960
2016	$156,971	$371,467	$489,570	$575,352	$650,849	$721,333	$788,779	$839,250		
2017	$169,629	$431,911	$544,421	$609,604	$701,318	$793,186				
2018	$197,315	$442,375	$555,224	$650,772						
2019	$182,157	$467,484								

Table A 6.6: Loss and ALAE Paid, by Accident Year, Bodily Injury

(in thousands)

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	$4,242	$21,830	$49,854	$72,327	$98,939	$136,357	$167,312	$212,860	$251,390	$288,193
2011	$4,815	$22,376	$48,725	$76,960	$112,892	$152,002	$188,704	$237,319	$273,194	$323,493
2012	$4,521	$24,760	$55,585	$87,585	$131,590	$183,594	$227,431	$280,822	$325,973	$377,018
2013	$3,561	$20,809	$52,071	$91,836	$140,922	$194,565	$247,899	$302,160	$356,653	$419,380
2014	$4,387	$27,431	$63,471	$105,516	$155,609	$216,670	$279,590	$351,393	$417,426	$486,351
2015	$4,925	$24,699	$58,356	$98,170	$156,354	$249,720	$328,767	$410,312	$479,363	$551,015
2016	$5,487	$24,523	$62,871	$120,299	$194,674	$285,467	$361,796	$464,262		
2017	$5,029	$27,858	$65,050	$127,852	$200,637	$300,712				
2018	$4,677	$26,420	$61,252	$117,178						
2019	$4,815	$24,942								

Table A 6.7: Count of Earned Vehicles, Third Party Liability Coverage

Accident Semester	Earned Vehicles, TPL Coverage
201001	1,100,174
201002	1,147,134
201101	1,128,681
201102	1,178,562
201201	1,171,072
201202	1,220,939
201301	1,210,617
201302	1,269,842
201401	1,257,098
201402	1,319,792
201501	1,302,898
201502	1,349,438
201601	1,324,238
201602	1,354,559
201701	1,323,362
201702	1,369,522
201801	1,348,733
201802	1,399,350
201901	1,372,496
201902	1,412,408

Table A 6.8: Loss and ALAE Incurred per Earned Vehicle, Bodily Injury

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	$106	$115	$112	$118	$127	$137	$147	$155	$161	$164
201002	$136	$151	$150	$159	$171	$189	$203	$213	$215	$220
201101	$111	$119	$119	$124	$136	$149	$162	$170	$180	$183
201102	$127	$145	$152	$165	$179	$195	$206	$219	$228	$232
201201	$114	$138	$140	$151	$169	$182	$193	$199	$211	$217
201202	$121	$145	$156	$173	$187	$206	$221	$230	$243	$251
201301	$101	$125	$134	$146	$163	$180	$197	$209	$220	$233
201302	$124	$159	$168	$186	$208	$231	$250	$264	$275	$280
201401	$111	$135	$147	$162	$184	$200	$216	$228	$240	$243
201402	$138	$167	$184	$212	$238	$261	$283	$301	$309	$314
201501	$121	$153	$164	$187	$215	$238	$256	$266	$272	$279
201502	$144	$179	$198	$230	$267	$294	$308	$322	$328	
201601	$119	$149	$180	$208	$233	$253	$275	$290		
201602	$129	$186	$222	$252	$285	$313	$336			
201701	$128	$173	$202	$229	$263	$292				
201702	$148	$202	$224	$258	$297					
201801	$146	$180	$205	$240						
201802	$143	$199	$234							
201901	$133	$188								
201902	$149									

Table A 6.9: Loss and ALAE Paid per Earned Vehicle, Bodily Injury

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	$3.86	$16.21	$25.87	$33.46	$44.74	$60.97	$72.67	$88.62	$102.33	$115.37
201002	$3.48	$18.65	$30.96	$43.34	$60.39	$76.16	$100.56	$121.00	$140.58	$154.81
201101	$4.27	$16.32	$25.78	$35.83	$51.99	$64.79	$78.61	$96.71	$111.61	$131.37
201102	$3.36	$16.65	$30.99	$46.00	$66.93	$84.83	$108.75	$124.91	$148.67	$164.68
201201	$3.86	$17.69	$29.01	$42.87	$62.87	$81.97	$102.73	$120.01	$138.00	$156.06
201202	$3.31	$17.70	$30.62	$47.48	$71.75	$87.74	$114.90	$134.62	$159.11	$174.83
201301	$2.94	$13.72	$26.00	$40.91	$60.34	$80.01	$102.86	$119.96	$138.93	$162.64
201302	$3.30	$16.21	$33.32	$53.45	$76.94	$97.16	$123.59	$148.42	$175.21	$196.07
201401	$3.49	$18.46	$30.05	$46.11	$67.88	$88.09	$111.43	$133.30	$155.01	$176.44
201402	$3.21	$19.47	$36.03	$53.25	$80.26	$105.70	$139.28	$168.63	$200.44	$223.99
201501	$3.78	$15.60	$27.67	$43.23	$67.42	$96.98	$121.19	$149.25	$171.83	$197.01
201502	$3.24	$16.52	$31.01	$50.77	$91.42	$126.62	$159.96	$189.33	$218.12	
201601	$4.14	$15.70	$29.68	$52.75	$82.76	$111.69	$137.69	$171.24		
201602	$2.76	$17.40	$37.24	$62.81	$101.56	$132.49	$175.33			
201701	$3.80	$17.47	$32.34	$57.47	$88.13	$124.94				
201702	$3.46	$16.25	$37.82	$61.34	$98.84					
201801	$3.47	$16.24	$29.89	$53.00						
201802	$3.23	$14.96	$32.65							
201901	$3.51	$15.30								
201902	$2.79									

Table A 6.10: Loss and ALAE Incurred per Earned Vehicle, by Accident Year, Bodily Injury

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	$52	$126	$132	$134	$143	$154	$168	$180	$188	$190
2011	$54	$123	$132	$138	$151	$164	$179	$189	$200	$206
2012	$56	$129	$143	$154	$171	$185	$199	$211	$221	$230
2013	$49	$125	$147	$157	$175	$194	$214	$230	$243	$254
2014	$54	$136	$157	$173	$198	$220	$239	$256	$271	$277
2015	$60	$148	$172	$192	$222	$253	$275	$288	$297	$304
2016	$59	$139	$183	$215	$243	$269	$294	$313		
2017	$63	$160	$202	$226	$260	$295				
2018	$72	$161	$202	$237						
2019	$65	$168								

Table A 6.11: Loss and ALAE Paid per Earned Vehicle, by Accident Year, Bodily Injury

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	$1.89	$9.71	$22.18	$32.18	$44.03	$60.68	$74.45	$94.72	$111.86	$128.24
2011	$2.09	$9.70	$21.12	$33.36	$48.93	$65.88	$81.79	$102.86	$118.41	$140.21
2012	$1.89	$10.35	$23.24	$36.62	$55.01	$76.75	$95.08	$117.40	$136.28	$157.62
2013	$1.44	$8.39	$20.99	$37.02	$56.81	$78.44	$99.94	$121.82	$143.78	$169.07
2014	$1.70	$10.64	$24.63	$40.95	$60.39	$84.08	$108.50	$136.36	$161.99	$188.74
2015	$1.86	$9.31	$22.00	$37.01	$58.95	$94.15	$123.95	$154.70	$180.73	$207.75
2016	$2.05	$9.15	$23.47	$44.91	$72.67	$106.57	$135.06	$173.31		
2017	$1.87	$10.35	$24.16	$47.48	$74.51	$111.67				
2018	$1.70	$9.61	$22.29	$42.64						
2019	$1.73	$8.96								

Table A 6.12: Reported Claim Count, Bodily Injury

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	7,331	7,056	6,678	6,553	6,642	6,401	6,371	6,326	6,302	6,274
201002	8,507	8,633	8,127	8,119	7,844	7,686	7,662	7,622	7,563	7,543
201101	8,415	8,009	7,645	7,322	7,245	7,176	7,172	7,127	7,095	7,063
201102	8,069	8,287	7,615	7,464	7,303	7,190	7,162	7,119	7,076	7,050
201201	7,868	7,635	7,209	7,049	6,926	6,806	6,783	6,749	6,721	6,686
201202	7,970	8,650	8,249	8,119	7,958	7,884	7,884	7,842	7,793	7,795
201301	7,398	7,562	7,304	7,266	7,237	7,239	7,274	7,253	7,233	7,213
201302	8,448	9,139	8,718	8,702	8,764	8,729	8,757	8,715	8,695	8,688
201401	7,867	7,843	7,617	7,627	7,690	7,646	7,661	7,650	7,632	7,612
201402	8,605	8,989	8,714	8,801	8,940	8,930	8,941	8,909	8,878	8,862
201501	8,058	8,125	7,984	8,068	8,213	8,170	8,179	8,152	8,144	8,133
201502	7,891	8,778	8,647	8,785	8,887	8,894	8,919	8,908	8,892	
201601	7,327	7,548	7,586	7,632	7,813	7,828	7,866	7,830		
201602	7,735	8,826	8,744	8,889	9,113	9,134	9,172			
201701	7,831	8,156	8,185	8,402	8,669	8,672				
201702	7,244	8,524	8,516	8,815	9,123					
201801	7,683	8,141	8,175	8,408						
201802	7,053	8,262	8,240							
201901	7,476	8,173								
201902	7,135									

Table A 6.13: Closed Claim Count, Bodily Injury

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	1,036	3,140	4,273	4,853	5,448	5,666	5,775	5,868	5,945	6,007
201002	930	3,562	4,905	5,767	6,543	6,721	6,900	7,021	7,124	7,193
201101	1,020	3,333	4,704	5,475	6,130	6,324	6,464	6,614	6,698	6,788
201102	810	3,310	4,613	5,431	6,098	6,311	6,481	6,583	6,703	6,772
201201	855	3,046	4,316	5,087	5,739	5,935	6,103	6,250	6,331	6,416
201202	758	3,291	4,782	5,775	6,630	6,854	7,043	7,203	7,322	7,410
201301	732	2,921	4,371	5,364	6,125	6,357	6,539	6,682	6,811	6,916
201302	733	3,383	5,234	6,388	7,246	7,568	7,790	7,969	8,160	8,286
201401	806	3,366	4,772	5,673	6,441	6,693	6,912	7,094	7,242	7,333
201402	764	3,756	5,431	6,475	7,358	7,706	7,991	8,195	8,410	8,535
201501	964	3,557	5,029	5,928	6,750	7,110	7,342	7,540	7,716	7,800
201502	819	3,581	5,122	6,328	7,343	7,746	8,033	8,230	8,393	
201601	896	3,060	4,599	5,582	6,391	6,744	7,000	7,215		
201602	702	3,501	5,324	6,400	7,326	7,727	8,089			
201701	995	3,524	5,058	6,130	7,017	7,448				
201702	796	3,397	5,073	6,155	7,138					
201801	960	3,295	4,736	5,783						
201802	771	3,127	4,638							
201901	985	3,289								
201902	750									

Table A 6.14: Reported Claim Count, by Accident Year, Bodily Injury

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	7,331	15,563	15,311	14,680	14,761	14,245	14,057	13,988	13,924	13,837
2011	8,415	16,078	15,932	14,937	14,709	14,479	14,362	14,289	14,214	14,139
2012	7,868	15,605	15,859	15,298	15,045	14,764	14,667	14,633	14,563	14,479
2013	7,398	16,010	16,443	15,984	15,939	16,003	16,003	16,010	15,948	15,908
2014	7,867	16,448	16,606	16,341	16,491	16,586	16,591	16,591	16,541	16,490
2015	8,058	16,016	16,762	16,715	16,998	17,057	17,073	17,071	17,052	17,025
2016	7,327	15,283	16,412	16,376	16,702	16,941	17,000	17,002		
2017	7,831	15,400	16,709	16,918	17,484	17,795				
2018	7,683	15,194	16,437	16,648						
2019	7,476	15,308								

Table A 6.15: Closed Claim Count, by Accident Year, Bodily Injury

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	1,036	4,070	7,835	9,758	11,215	12,209	12,496	12,768	12,966	13,131
2011	1,020	4,143	8,014	10,088	11,561	12,422	12,775	13,095	13,281	13,491
2012	855	3,804	7,607	9,869	11,514	12,565	12,957	13,293	13,534	13,738
2013	732	3,654	7,754	10,598	12,513	13,603	14,107	14,472	14,780	15,076
2014	806	4,130	8,528	11,104	12,916	14,051	14,618	15,085	15,437	15,743
2015	964	4,376	8,610	11,050	13,078	14,453	15,088	15,573	15,946	16,193
2016	896	3,762	8,100	10,906	12,791	14,070	14,727	15,304		
2017	995	4,320	8,455	11,203	13,172	14,586				
2018	960	4,066	7,863	10,421						
2019	985	4,039								

Table A 6.16: Ratio of Closed Claim Count to Reported Claim Count, Bodily Injury

	Age in Months									
Accident Semester	6	12	18	24	30	36	42	48	54	60
201001	14.1%	44.5%	64.0%	74.1%	82.0%	88.5%	90.6%	92.8%	94.3%	95.7%
201002	10.9%	41.3%	60.4%	71.0%	83.4%	87.4%	90.1%	92.1%	94.2%	95.4%
201101	12.1%	41.6%	61.5%	74.8%	84.6%	88.1%	90.1%	92.8%	94.4%	96.1%
201102	10.0%	39.9%	60.6%	72.8%	83.5%	87.8%	90.5%	92.5%	94.7%	96.1%
201201	10.9%	39.9%	59.9%	72.2%	82.9%	87.2%	90.0%	92.6%	94.2%	96.0%
201202	9.5%	38.0%	58.0%	71.1%	83.3%	86.9%	89.3%	91.9%	94.0%	95.1%
201301	9.9%	38.6%	59.8%	73.8%	84.6%	87.8%	89.9%	92.1%	94.2%	95.9%
201302	8.7%	37.0%	60.0%	73.4%	82.7%	86.7%	89.0%	91.4%	93.8%	95.4%
201401	10.2%	42.9%	62.6%	74.4%	83.8%	87.5%	90.2%	92.7%	94.9%	96.3%
201402	8.9%	41.8%	62.3%	73.6%	82.3%	86.3%	89.4%	92.0%	94.7%	96.3%
201501	12.0%	43.8%	63.0%	73.5%	82.2%	87.0%	89.8%	92.5%	94.7%	95.9%
201502	10.4%	40.8%	59.2%	72.0%	82.6%	87.1%	90.1%	92.4%	94.4%	
201601	12.2%	40.5%	60.6%	73.1%	81.8%	86.2%	89.0%	92.1%		
201602	9.1%	39.7%	60.9%	72.0%	80.4%	84.6%	88.2%			
201701	12.7%	43.2%	61.8%	73.0%	80.9%	85.9%				
201702	11.0%	39.9%	59.6%	69.8%	78.2%					
201801	12.5%	40.5%	57.9%	68.8%						
201802	10.9%	37.8%	56.3%							
201901	13.2%	40.2%								
201902	10.5%									

Table A 6.17: Ratio of Closed Claim Count to Reported Claim Count, by Accident Year, Bodily Injury

	Age in Months									
Accident Year	6	12	18	24	30	36	42	48	54	60
2010	14.1%	26.2%	51.2%	66.5%	76.0%	85.7%	88.9%	91.3%	93.1%	94.9%
2011	12.1%	25.8%	50.3%	67.5%	78.6%	85.8%	89.0%	91.6%	93.4%	95.4%
2012	10.9%	24.4%	48.0%	64.5%	76.5%	85.1%	88.3%	90.8%	92.9%	94.9%
2013	9.9%	22.8%	47.2%	66.3%	78.5%	85.0%	88.2%	90.4%	92.7%	94.8%
2014	10.2%	25.1%	51.4%	68.0%	78.3%	84.7%	88.1%	90.9%	93.3%	95.5%
2015	12.0%	27.3%	51.4%	66.1%	76.9%	84.7%	88.4%	91.2%	93.5%	95.1%
2016	12.2%	24.6%	49.4%	66.6%	76.6%	83.1%	86.6%	90.0%		
2017	12.7%	28.1%	50.6%	66.2%	75.3%	82.0%				
2018	12.5%	26.8%	47.8%	62.6%						
2019	13.2%	26.4%								

Source: Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)

7. Notes to Users, and General Disclaimers, GISA Exhibits

The following provides the Notes to Users provided by GISA for the following exhibits:

- GISA Exhibits AUTO-7001-AB-2019, with claims and exposure data, and
- GISA Exhibit AUTO-9501-AB-2018, reporting industry profit and loss.

AUTOMOBILE INSURANCE EXPERIENCE

LOSS DEVELOPMENT EXHIBIT

PRIVATE PASSENGER AUTOMOBILE EXCLUDING FARMERS

ALBERTA

2019/12

RÉSULTATS TECHNIQUES EN ASSURANCE AUTOMOBILE

MATÉRIALISATION DES SINISTRES

VOITURES DE TOURISME SAUF EXPLOITANTS AGRICOLES

PRODUCT // PRODUIT
AUTO7001-AB

Notes to Users

The 2019 Automobile Insurance Exhibit Introduction should be used in conjunction with this exhibit. The module provides a brief explanation and outline of the contents included in this exhibit, as well as the other Automobile Insurance Exhibits and the various factors applied to the data in the other exhibits.

For ease of reference, these notes are grouped under the following headings:

- **General Notes;**
- **Notes for Recent Reporting/Accident Years (2014 and After);**
- **Notes for Older Reporting/Accident Years (2013 and Prior).**

Changes and additions made this year are highlighted in bold.

General Notes

1. A description of the accident year approach is provided in the Automobile Introduction module.

2. The experience for Third Party Liability includes all limits of liability and the Physical Damage coverages combine all deductibles.

3. Unallocated loss adjustment expenses are not included in claim amounts and the amounts exhibited do not contain any adjustments to reflect the Alberta Health Levy or other expenses incurred by insurance companies, such as commissions, premium taxes (if any) and general operating expenses. It is recommended that proper analysis with appropriate adjustments be made to the data for ratemaking or loss reserving purposes.

4 All claim (loss) and allocated claim (loss) adjustment expense amounts are included in the amounts reported under the Automobile Statistical Plan (ASP). No attempt has been made to adjust these values for the time value of money to discount them from their actual date paid or payable to an earlier average date of receipt of premium within the accident year. Differences between the displayed undiscounted amounts and corresponding discounted amounts which might be appropriate for some other purposes such as gauging relative profitability may be significant for coverages with long tail pay out periods such as Third Party Liability.

   Note that Disability Income Loss Reserve amounts under Accident Benefits coverage may commonly be reported on an already discounted basis and that some Bodily Injury and Disability Income Losses may ultimately be settled by means of a structured settlement, at which point reserves will usually be reported on a discounted basis.

5. Some edit validation and verification, consistency and reasonability checks have been performed which led to some data exclusions.

6. Except for data exclusions, every effort has been made to ensure the accuracy and completeness of the data. However, the responsibility for any errors or omissions in the data submitted under the ASP and presented in these exhibits remains with the reporting companies.

   An independent data audit is not currently mandated or performed by GISA.

Notes for Recent Reporting/Accident Years (2014 and After)

7. A large writer has changed its case reserving protocol for Bodily Injury Kind of Loss as of Accident Year 2015-1 and is now reporting lower incurred claim counts and lower incurred claim amounts at earlier age of development . Another large writer has strengthened their reserving practice for Accident Year 2013 and onwards, starting during the second half of calendar year 2015. Users should exercise caution when using this data.

8. Within the Comprehensive Coverage, Kind-of-Loss Theft shows a significant increase in Claim Frequency, Claim Severity and Loss Cost per car since Accident Half-Year 2015-2. This is partly attributed, presumably, to the downturn in the economy. Users should exercise caution when using this data.

9. Within the Comprehensive Coverage, Kind-of-Loss Other shows very high Claim Frequency, Claim Severity and Loss Cost per car for the July to December period since Accident Half-Year 2007-2, presumably as the result of severe weather occurrences.

10. Within the Comprehensive Coverage, Kind-of-Loss Fire shows a significant increase in Claim Frequency and Loss Cost per car for 2016-1. This is attributed to the catastrophic wild fires in Fort McMurray from May 3-19, 2016.

11. An unusual significant increase in claim counts for a major writer was noted for Bodily Injury Kind of Loss for Accident Half-Years 2016-1, 2016-2 and 2017-1 at the 6-month development stage. This has been confirmed as a result of a temporary change in its claims handling, which created significant claims backlog. Users should exercise caution when using this data.

12. A large writer has confirmed its change in claims handling practice for Bodily Injury claims, which results in larger than historical claims closure across the 2017-1 and later diagonals of the Bodily Injury claim count and amount triangles. Users should exercise caution when using this data.

13. A large writer has strengthened their case reserving practice for Bodily Injury Kind of Loss as of Accident Year 2017-2, resulting in larger than usual case reserve amounts across the 2017-2 and later diagonals of the Bodily Injury amount triangle. Users should exercise caution when using this data.

14. **A number of writers have corrected their historically UNDERSTATED/OVERSTATED Incurred and Paid Claim counts for VARIOUS COVERAGES for Accident Half-Years 2015-1 to 2019-1. Users should take note of these corrections and exercise caution when using this data.**

15. **A comparison of the data in this exhibit with the corresponding data for the overlapping data points in the prior loss development exhibit reveals modest changes to the written and earned exposure and premium for the last several calendar/accident half years, and to the incurred claim counts and amounts in the triangles for the last several calendar half year diagonals. Some such change is to be routinely expected here in the normal course of events, as some insurers re-file past data, and some missing reporting data was not processed until the next period.**

Notes for Older Reporting/Accident Years (2013 and Prior)

16. The Alberta government replaced the case-by-case subrogation of health insurance costs related to automobile accidents by a new scheme in 1996. For accidents occurring on or after August 1, 1996 and for accidents occurring prior to August 1, 1996, but for which subrogation by Alberta Health had not yet occurred as of that time, case-by-case subrogation was discontinued and replaced by the Health Levy, which is applied as a percentage loading on Third Party Liability Premiums, and is on-going for new claims. Losses reported prior to the implementation of the levy include amounts recovered by subrogation by Alberta Health.

17. In late 2003, the government enacted a 'rate freeze' which had the effect of rolling back premiums on all non-fleet and non-garage policies renewed on or after 30/10/2003 to those derived from rates in effect at the prior renewal, unless the insured had been convicted of certain offences or had an at-fault claim. In this latter case, and for additional vehicles and other amendments and for new business issued on or after 30/10/2003, rates were frozen at levels in force on 30/10/2003, until 29/04/2005. As part of this process, the government mandated insurers to provide rebates to insureds for any excess premiums on any renewal policies effective on or after 30/10/2003, which may have been initially issued at rates which were too high. As of 31/12/2004, it appears that this rebate process was complete. Under the ASP, insurers were required to file these premium rebates by means of two premium transactions, one offsetting the old premium amounts for the unexpired term of the policy, and the other on-setting the new premium amounts for the unexpired term of the policy. Written (both debit and credit) premium transactions are assigned for both exposure and premium amount to calendar/accident period based on the transaction effective date. For these rebates, the transaction effective date would be the same as the policy effective date, and would be on or after 30/10/2003. The effect of this rebate process was to depress average written premiums in the 2003-2 and 2004-1 periods below levels reflective of 'frozen' rates, but to produce average earned premiums which fully reflect earning at 'frozen' rates from 30/10/2003.

18. For claims occurring on or after 01/10/2004 (and in the case of some minor reforms to Tort Liability – Bodily Injury, on or after 26/01/2004), the government implemented certain product reforms under Bill 53 which changed the Tort Liability – Bodily Injury and Accident Benefits – Medical/Rehabilitation automobile insurance coverages. These reforms included a cap of $4,000 per person on non-economic damages for minor injuries as defined, and certain other minor changes including a reduction of damages for loss of income from a gross to a net basis, and the offset of some collateral source amounts, both of which actually became effective somewhat earlier, for claims occurring on or after 24/01/2004, for tort liability claims. They also included an increase in the Accident Benefits Medical/Rehabilitation per person limit from $10,000 to $50,000, and the introduction of treatment protocols for certain minor injuries. It should be expected that these reforms may result in a shock change to level of ultimate claim frequency and/or severity for 2004-2 and subsequent accident half years for the Third Party Liability - Bodily Injury, Uninsured Motorist, Underinsured Motorist, and Accident Benefits - Medical/Rehabilitation sub-coverages, and that loss development patterns for these sub-coverages might also change. The ultimate claim frequency and/or severity for these sub-coverages for recent prior accident half years still having open claims as of the product reform implementation date may possibly also be affected, but to a lesser degree. The Accident Benefits - Disability Income sub-coverage might possibly experience similar effects as a sort of ripple effect from the other changes. These reforms accompanied the introduction by the government of a Grid system of maximum premium rates applicable to all insurers regardless of their filed approved rates, for Private Passenger vehicles for the total of Third Party Liability and Accident Benefits coverages. The Grid rates vary by Third Party Liability limit and territory, by years of experience, at-fault claim history, and conviction record of each of the relevant driver and the occasional driver, if any. These changes were also accompanied by a 'rate rollback' which had the effect of rolling back premiums for Third Party Liability plus Accident Benefits coverages on Private Passenger vehicles by 5%, and then applying the Grid cap, if it results in a lower premium. As part of this process, the government mandated insurers to provide rebates to insureds for the unexpired term on policies in force at 01/10/2004, and for any excess premiums on any policies

effective on or after 01/10/2004, which may have been initially issued at rates which were too high. It appears that this rebate process was substantially complete as of 31/12/2004, and complete as of 30/06/2005. Under the ASP, insurers were required to file these premium rebates by means of two premium transactions, one offsetting the old premium amounts for the unexpired term of the policy, and the other on-setting the new premium amounts for the unexpired term of the policy. Written (both debit or credit) premium transactions are assigned for both exposure and premium amount to calendar/accident period based on the transaction effective date. For these rebates, the transaction effective date would be 01/10/2004, or such later effective date of the policy for policies subsequently and initially issued at too high rates. The effect of this rebate process was to depress average written premiums in the 2004-2 period, and to a much lesser degree, perhaps also for the 2005-1 period, for these coverages below levels reflective of the new lower rates, but to produce average earned premiums which fully reflect earning at the new lower rates from 01/10/2004.

19. A major writer which had been misreporting its claim counts for the Underinsured Motorist coverage for the 2003-1 and subsequent accident periods fixed the problem for the 2008-1 and subsequent accident periods. This company's data continues to be excluded from this exhibit for the 2003-1 through 2007-2 accident periods.

20. An apparent problem in the written exposure amounts for the 2003-2 through 2004-2 accident half years has been detected for a significant writer. This is related to possibly improper reporting of exposure in connection with rebates from 30/10/2003 and 01/10/2004. This problem may mean that all-industry written exposure for these periods may be understated by up to about 1%. There would also be a corresponding derived impact on earned exposure in these periods and the 2005-1 and 2005-2 periods as the written exposure is earned.

21. A major writer, which had previously been reporting outstanding claim counts incorrectly by failing to report a zero count when an indemnity payment had already been made, has corrected its reporting of such counts starting with the counts on the 2005-2 diagonal. Because of this issue, the incurred claim count development factors here on the 2005-2 diagonal are somewhat too low and those along prior diagonals somewhat too high. This latter issue is mainly a problem for the long-tailed sub-coverages such as Third Party Liability – Bodily Injury and Accident Benefits, where there may be up to about a 4% difference in these prior development factors for the earliest factor, declining ultimately to zero as one moves to the later factors.

22. Alberta Regulation A.R. 259/2006 increased some amounts payable under Accident Benefits coverage as follows effective for claims occurring on or after 01/03/2007: maximum funeral benefit from $2,000 to $5,000; maximum weekly indemnity for loss of income, from $300 to $400; weekly disability income amount for the unemployed, from $100 to $135.

23. Within Third Party Liability coverage, Kind-of-Loss Bodily Injury shows significant drops in claim frequency for 2009-1 compared to 2008-1, 2008-2 compared to 2007-2, 2008-1 compared to 2007-1, 2007-2 compared to 2006-2, and 2007-1 compared to 2006-1 when compared at the same and latest available development level. The corresponding claim severities show a mixture of increases and decreases for the analogous comparisons. For accident periods post reform (i.e. 2004-2 and subsequent), incurred claim amount development factors along the 2008-1 and two subsequent diagonals are generally higher than their analogues on recent prior diagonals (or, in the case of the first factor, the second prior diagonal). For the 2009-2 diagonal, these factors are generally lower than their analogues on the previous three diagonals (or, in the case of the first factor, the second prior diagonal), and for the more recent diagonals, some are higher and some are lower. These phenomena may be the result of the influence of the recent Charter Challenge, where the lower court released its decision on February 8, 2008, after the 31/12/2007 valuation date of the data in year end 2007 exhibit, but before the 30/06/2008 valuation date of the mid year 2008 exhibit, striking down as unconstitutional the Minor Injury Regulation, with its $4,000 (indexed) cap on non-

pecuniary damages for minor injuries. An appeal of this decision was heard by the Court of Appeal on September 12, 2008, and this court released its decision reversing that of the lower court on June 12, 2009, shortly before the 30/06/2009 valuation date of the mid year 2009 exhibit. Leave was sought to appeal this latter court's decision to the Supreme Court of Canada, which dismissed the application with costs on December 17, 2009, shortly before the 31/12/2009 valuation date of the year end 2009 exhibit. Claim count and claim amount development patterns on the 2008-1 through 2009-1 and the differing pattern on the 2009-2 diagonal may prove to be different from their future analogues, especially for the most recent accident periods. Consideration should be given to this situation when projecting ultimate claim counts and amounts.

24. For recent cycles, the companion electronic file supporting this exhibit began to show the split of the data by the Grid Flag (No vs Yes vs Blank) for accident periods 2005-1 and subsequent. In this connection it should be noted that, although the claim data and written exposure and premium data are appropriate for these accident periods, the earned exposure and premium data are not – they are very much too low in 2005-1 and somewhat too low in 2005-2 for both Grid Flag = No and Grid Flag = Yes, and correspondingly high for Grid Flag = Blank, because coding of claims did not follow coding of premiums when the change to the Automobile Statistical Plan was implemented. As a result, statistics which depend on either earned exposure or earned premium derived from the data in this companion file will be distorted for these two accident periods, more so for 2005-1.

25. The ASP implemented a revision to kind-of-loss codes for Physical Damage coverages other than Collision (i.e. All Perils, Comprehensive, and Specified Perils) for claims occurring on or after January 1, 2008. In particular, old Code 22 (Theft) was discontinued and replaced by new Codes 23 (Theft of Entire Vehicle) and 24 (Theft of Contents), and new Codes 25 (Malicious Mischief and Vandalism), 26 (Glass/Windshield damage not caused by Windstorm or Hail), 28 (Windstorm), and 29 (Hail) were split out of old Code 27 (All Other), which nevertheless is continued, now including mainly claims for the peril of Flood/Water.

    Some reporting issues have been detected in connection with this change in coding – in particular, it appears that some writers were reporting Malicious Mischief and Vandalism claims under the old Code 22 (Theft) for 2007-2 and prior, rather than under the Code 27 (All Other).

    In the printed exhibit, the new codes for 2008-1 and subsequent are mapped back to the old codes and sub-exhibits are shown only for Fire, Theft and Other. However, in the companion electronic file, all codes here, both new and old are shown, but users should exercise extreme caution when using this data.

26. Within the Comprehensive Coverage, Kind-of-Loss Other shows very high Claim Frequency, Claim Severity and Loss Cost per car for the July to December period since Accident Half-Year 2007-2, presumably as the result of severe weather occurrences.

27. Within the Comprehensive Coverage, Kind-of-Loss Fire shows very high Claim Frequency and Loss Cost per car for 2011-1, presumably as the result of the catastrophic wild fires in Slave Lake during May 2011.

28. The high Claim Frequency, Claim Severity and Loss Cost per car for All Perils, Comprehensive and Specified Perils, Kind- of- Loss Other, for 2013-1 is attributed to the Flooding in Southern Alberta from June 19-24, 2013.

DATA EXCLUSION REPORT

In addition to the data missing at close-off (see the 2019 Automobile Insurance Introduction, AUTO1003-AB and the Notes to Users for this exhibit), various exclusions were made from this Exhibit to eliminate severe distortions. The amounts of Earned Premium, Earned Vehicles, (unfactored) Incurred Losses and Number of Claims that were excluded are as tabulated:

All Sections/toutes les Sections

All Regions/toutes les Régions

Class	Coverage	Accident Year	Earned Premium ($000s)	Earned Premium Percentage	Number of Earned Vehicles	Number of Earned Vehicles Percentage	Incurred Losses incl. Expenses ($000s)	Incurred Losses incl. Expenses Percentage	Number of Claims	Number of Claims Percentage
PPV-IR excluding Farmers/Voitures de tourisme-tarifées indiv. sauf exploitation agricole										
	All/Tous									
		2005	7,481	0.39%	232,057	2.73%	3,145	0.30%	371	0.17%
		2006	7,982	0.40%	263,335	2.91%	1,730	0.14%	2,436	1.00%
		2007	7,574	0.36%	257,074	2.68%	946	0.07%	8,345	3.09%
		2008	689	0.03%	4,321	0.04%	122	0.01%	1,198	0.49%
		2009	767	0.03%	3,509	0.03%	1,171	0.08%	97	0.04%
		2010	1,027	0.04%	33,116	0.31%	(1,520)	-0.10%	5,956	2.16%
		2011	293	0.01%	7,528	0.07%	1,078	0.07%	142	0.06%
		2012	240	0.01%	2,828	0.03%	716	0.04%	188	0.07%
		2013	578	0.02%	5,132	0.04%	342	0.02%	51	0.02%
		2014	2,434	0.08%	25,236	0.21%	604	0.03%	30	0.01%
		2015	1,541	0.05%	18,104	0.15%	512	0.02%	123	0.04%
		2016	2	0.00%	3,187	0.03%	106	0.00%	118	0.04%
		2017	3	0.00%	3,498	0.03%	145	0.01%	67	0.02%
		2018	3	0.00%	4,026	0.03%	(538)	-0.02%	109	0.04%
		2019	1	0.00%	4,612	0.04%	(10,202)	-0.50%	1,375	0.47%

Classe	Garantie	Annee de l'Accident	Primes Acquises ($000)	Primes Acquises Pourcentage	Nombre de Véhicules Acquis	Nombre de Véhicules Acquis Pourcentage	Sinistres encourus, y compris les frais ($000)	Sinistres encourus, y compris les frais Pourcentage	Nombre de Sinistres	Nombre de Sinistres Pourcentage

En plus des données manquantes à la date limite (veuillez voir le 2019 sur l'assurance automobile introduction, AUTO1003-AB et remarques à l'intention des utilisateurs pour le tableau), il a été pratiqué diverses exclusions des grandes catégories du Rapport effectif des sinistres aux primes afin d'éliminer des distorsions graves. Voici les montants exclus de primes acquises, véhicules acquis, (sans coefficients) sinistres encourus et nombre de sinistres sont en tableaux.

DONNEES EXCLUES

AUTOMOBILE INSURANCE FINANCIAL INFORMATION
INDUSTRY PROFIT AND LOSS REPORT
PRIVATE PASSENGER AUTOMOBILE

WITH OVERVIEW AND NOTES TO USERS

ALBERTA

2018

RAPPORT FINANCIER – ASSURANCE AUTOMOBILE
RAPPORT DES BÉNÉFICES ET PERTES DE L'INDUSTRIE
VOITURES DE TOURISME

AVEC VUE D'ENSEMBLE ET NOTES À L'INTENTION DES UTILISATEURS

ALBERTA

PRODUCT // PRODUIT
AUTO9501-AB

BACKGROUND

General

On April 1, 2006, the General Insurance Statistical Agency (GISA) was appointed as the statistical agent by participating insurance regulatory authorities[1] to provide governance, accountability and oversight of the mandated statistical plans[2].

As the statistical agent, GISA:

- promotes the timeliness of statistical and financial data collection, analysis and reporting mechanisms;
- acts on behalf of the participating insurance regulators to coordinate and harmonize the statistical and financial data filing requirements for insurers regarding the experience of their business in such jurisdictions; and
- promotes the quality and value of statistical and financial data generated by licensed insurers.

GISA has entered into a service agreement with Insurance Bureau of Canada (IBC) to provide statistical services. In the role of GISA's Statistical Service Provider, IBC provides services which include data reporting, collection, compilation, and quality assurance.

Need for Statistical and Financial Information

Automobile experience data is collected to provide premium and claim information, which is used to develop and support fair automobile insurance rates. As a result, the statistical and financial data collected support the following public policy objectives:

- monitoring the adequacy of rates to ensure that they are not excessive or unfairly discriminatory;
- monitoring the adequacy of market structure and performance, and taking steps, if necessary, to restore competition or remedy the problems caused by market instability; and
- ensuring informed pricing decisions based on aggregate industry experience.

[1] Alberta, New Brunswick, Newfoundland & Labrador, Nova Scotia, Ontario, Prince Edward Island, Northwest Territories, Nunavut and Yukon

[2] Automobile Statistical Plan (ASP), Ontario Commercial Liability Statistical Plan (CLSP) and the former Ontario Statutory Accident Benefits Statistical Plan (OSABSP) which was discontinued at the end of 2012

BACKGROUND

Annual Statistical Exhibits and Financial Reports

Automobile insurance experience is published in a series of exhibits and reports which are compiled from data that has been collected from all licensed automobile insurers by GISA and contains experience from all participating jurisdictions[3].

The Statistical Service Provider uses the statistical and financial data reported and prepares the exhibits and reports on behalf of GISA. The exhibits and reports are reviewed by GISA's Consulting Actuary before they are published.

All users of this report are advised to review this document in detail to obtain a full understanding of the contents of the report. The 'Notes to Users' section of this document outlines the differences between the Financial Information Report and the Annual Statistical Exhibits[4].

Collection and Reporting of Financial Information

In March 2007, GISA's Strategic Plan identified Data Rationalization as one of its strategic initiatives. The scope of the Data Rationalization initiative included the capture of insurance data that would enable regulators to carry out their legislated functions.

Following an independent assessment, various industry consultations, and work completed by a Regulator/Industry Working Group to consider options and the related cost/benefit analysis, regulators decided that GISA would collect Automobile Insurance Financial Information (Financial Information) from participating insurers. The Financial Information assists regulators to better understand and monitor the automobile insurance industry's financial performance.

In September 2011, regulators approved the collection of financial information from automobile insurance companies effective 2012 calendar year. The initial Financial Information Report was released to the industry in October 2013.

As a result of the first year collection, and based on stakeholder feedback, GISA implemented several changes to the 2013 Financial Information Requirements in order to improve the collection, analysis and reporting processes as outlined under Reporting Templates section.

[3] Alberta, New Brunswick, Newfoundland & Labrador, Nova Scotia, Ontario, Prince Edward Island, Northwest Territories, Nunavut and Yukon

[4] Refer to the Automobile Introduction Module (AUTO1003) found in the GISA Exhibit eLibrary for further details

SUBMISSION REQUIREMENTS

It is mandatory for all insurers that currently submit data under the GISA Automobile Statistical Plan to report Financial Information to GISA.

Bulletins and Documentation

The Automobile Financial Information Submission Requirements documents and reporting templates were previously released and can be found on the GISA website at www.gisa.ca.

The Reporting Templates have different due dates, and GISA collects the P&C Returns and the ULAE data ahead of the Financial Information - Main collection. This is done to ensure the data availability will coincide with the publication of Automobile Statistical Plan (ASP) deliverables that require them.

Reporting Templates

The 2018 Reporting Templates have been modified to include the following changes:

- improvements to allow the user to easily navigate and complete the template; and
- minor formatting changes.

EXPERIENCE COLLECTED AND EXHIBITED

The GISA Financial Information reporting requirements are based primarily on the Property and Casualty (P&C) Return instructions, and the reporting instructions refer to the relevant P&C pages, whenever applicable. Some of the required data elements can be directly transferred from the relevant pages of the P&C Return, while others have to be collected separately or allocated based on other individual company information. The P&C Returns filed by each insurer are used as the primary reference to balance, review and assess the GISA Financial Information that has been submitted.

Classes

Private Passenger Automobile (PPA) for which the reports are being published is defined using the Automobile Statistical Plan (ASP) definitions, i.e. Type of Business (0, 1, 4, 5, 8, and 9) and Type of Use (01-03, 05-13, and 18-19). Please refer to the ASP on the GISA website (www.gisa.ca) for more information.

Coverages

GISA collects automobile coverage data using the three (3) sub-class definitions required to be reported in the P&C Returns:

1. Liability (TPL)
2. Personal Accident (PA)
3. Other (OT)

Reporting Period

The GISA Financial Information and P&C Returns are reported based on the insurers' fiscal year, which is generally the calendar year (January to December). The GISA Financial Information reports are produced on this basis. Some GISA Financial Information reports may not be directly comparable to the ASP Exhibits that are published primarily on an Accident Year basis. Additional details are provided in the 'Notes to Users' section.

GENERAL DISCLAIMERS

1. The collection of Financial Information (FI) started in 2012 and this report contains the financial years available since that point in time. It is expected that, like the standard statistical exhibits, longer term trends may become apparent when using this series of reports in assessing the cyclical nature of the industry.

2. Some of the GISA Financial Information data elements were taken directly from the P&C Returns submitted. Other data elements were required at a level of detail that was not required for the purposes of completing P&C Returns and therefore allocation of some data elements was required. Where allocation of a data element was required (e.g. the allocation of income tax by line of business and coverage), it is understood that reporting companies have used their own company-specific allocation methodology, if available, or have developed an allocation method based on the company's business. Users should be aware that such methodologies may vary from company to company, and from year to year.

3. The quality of the GISA Financial Information Report is dependent on the accuracy of the data filed by insurers. GISA has relied on the work of the insurer's internal and external auditor with respect to the P&C Return submission. GISA's Statistical Service Provider has reviewed the data submission in the GISA reporting template. An independent data audit of the data submission in the GISA reporting template has not been performed.

4. Financial performance of insurance companies may be quantified in different ways. 'Net Income', 'Net Income as a ratio of Net Earned Premium', and 'Return on Equity' are measures used in assessing financial performance. GISA does not endorse any particular approach to calculating financial performance.

DESCRIPTION OF THE FINANCIAL INFORMATION REPORT

The GISA Financial Information Industry Profit and Loss Report for Private Passenger Automobile (PPA) displays the aggregation of the income/equity data elements derived from the reported information under GISA Financial Information Main reporting template Tabs 2-4.

A Financial Information Report is available for each of the nine (9) GISA jurisdictions, as well as for the Territories Combined and the Total for all nine (9) jurisdictions. The report shows the experience of the three (3) sub-classes of coverages, as well as an individual comparison of each of the PPA coverages. Graphs are provided showing both a multiple year and a by coverage comparison of the ratios of relevant Net Profit and Loss data elements.

Registered industry users and representatives from participating reporting companies can access the electronic versions of the Financial Information Report through the online GISA eLibrary via the GISA portal. For non-registered users, please refer to the GISA website at www.gisa.ca.

NOTES TO USERS

1. The information presented is at the industry aggregate level and should not be attributed to any single automobile insurer.

2. The GISA Financial Information requires companies to appropriately report some of the financial data elements across the automobile class, sub-classes of coverage and province/territory dimensions. Companies are required to determine how to appropriately 'allocate' the following data elements which cannot be taken directly from the P&C Returns:

    - Acquisition Expenses
    - General Expenses
    - Premium Deficiency Adjustments
    - Net Investment Income
    - Other Revenue and Expenses
    - Total Income Taxes
    - Allocated Equity

    In addition to the 'allocation' of some of these items, they may be subject to abnormal accounting activity in a particular year and hence display unusual variation.

3. Edit validation and verification, as well as consistency and reasonability checks have been implemented to ensure the integrity of the data in the Financial Information Report.

4. The Financial Information Report should not be used to assess whether current rates are adequate to cover future costs. This Report is considered historical financial information, and may provide some indication of whether premiums have been sufficient to cover current and past costs. Users are advised that a detailed actuarial analysis that uses additional data sources should be completed to make these assessments.

5. The financial information is collected on both direct and net basis. However, the GISA Financial Information Profit and Loss Report is primarily on a Net basis. Therefore, the report does not display the following:
    - Business ceded to reinsurers

6. The GISA Financial Information reporting requirements and P&C Return for Facility Association Residual Market (FARM) data do not require the separate reporting of PPA experience. Consequently, the Industry PPA Financial Information Report does not include the FARM PPA data.

NOTES TO USERS

7. GISA currently publishes automobile premiums and claims statistical exhibits based on the data collected under the ASP. The GISA Financial Information on automobile insurance provides a transparent overview of the automobile insurance industry.

   However, there are inherent differences between the ASP exhibits and the GISA Financial Information reports. These differences have been documented in the ASP Exhibit Introduction Module (AUTO 1003), as follows:

   "The ASP exhibits are published on an Accident Year basis. In Accident Year statistics, the experience of all policies which are in-force (or exposed) at some time during the period is grouped together. The accident years are defined as the calendar period January to December for each of the stated years. Only the portion of the experience related to the overlap of the given period and the policy term is included.

   Earned premium and exposure are taken as the portion of written premium and exposure on these policies which relates only to that part of the policy term which falls within the given period. All claims having a date-of-loss within the given period are included in the loss experience, regardless of whether the policy effective date of the policy is within the given period or a prior one. Of course, for such a claim to have been incurred, there must have been a policy which was in-force at the date-of-loss, and so there is a proper matching of premium and losses.

   The loss ratios and ultimate losses displayed in these ASP exhibits are not directly comparable to the loss ratios or incurred losses that are reported in the financial statements of the insurance companies who write automobile insurance either individually or in aggregate. There are many reasons for this including the following:

   - The results in these ASP exhibits flow from the application of one loss development method for automobile insurance business only whereas the results in insurance company financial statements may flow from a combination of a variety of loss reserving methods for automobile insurance business;

   - The results in these ASP exhibits are produced on an accident year basis whereas the results in insurance company financial statements are presented on a calendar year basis;

   - The ultimate loss estimates in these ASP exhibits are presented on an undiscounted basis whereas the unpaid claims amounts in insurance company financial statements are discounted to reflect the time value of money and include a Provision for Adverse Deviation.

   Users should take all of the foregoing into consideration when analyzing this data."

Supplemental Report to the Review of Experience, Alberta Private Passenger Automobile Insurance, as at June 30, 2019 and December 31, 2019

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August 20, 2020

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As Part of their Written Submission to the Alberta Automobile Insurance Rate Board 2020 Annual Review

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I. Summary of Results

In my report of July 29, 2020,[1] I calculated and reported estimates of pre-tax profit and loss for the Alberta private passenger auto line of insurance over the period 2013 through 2018 and then separately for 2019 and a projection of 2020.

Those estimates are ***gross*** of amounts incurred for Alberta's Health Cost Recovery.

To assist the Board in its deliberations, this supplemental report provides corresponding amounts, ***net*** of estimated amounts levied for the Health Cost Recovery.

The following are the findings of this analysis:

Years	Pre-Tax Profit/Loss, ***Net*** of Health Cost Recovery
2013-2018	Loss of $372.8 million
2011-2018	Profit of $463.1 million
2019-2020	Profit of $736.1 million

II. Introduction

I have prepared this supplemental report as actuarial consultant to the Alberta Civil Trial Lawyers Association ("ACTLA").

The report is part of ACTLA's written submission to Alberta's Automobile Insurance Rate Board (AIRB) for the 2020 Annual Review.

This report presents the results of my analysis of private passenger automobile insurance ("PPA") profits, net of the Health Cost Recovery, for Alberta.

[1] Review of Experience, Alberta Private Passenger Automobile Insurance, as at June 30, 2019 and December 31, 2019, Craig A. Allen, FCIA FCAS, July 29, 2020

III. Data Sources

I have based my analysis on data published by the General Insurance Statistical Agency (GISA) as at December 31, 2019, and on aggregate insurer financial data compiled and published by the Office of the Superintendent of Financial Institutions, Canada (OSFI).

IV. Identification

I am an independent consulting actuary based in New York, NY. I am a fellow of the Canadian Institute of Actuaries and of the Casualty Actuarial Society, and have provided actuarial services in Canada and the U.S. for 33 years.

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August 20, 2020

V. Analysis

Below are the analyses that form the basis of this supplemental report.

A. Profitability of the Alberta Private Passenger Automobile Insurance Industry

In my July 29, 2020 report, I note that the Alberta Ministry of Treasury Board and Finance reports that the Alberta private passenger auto (PPA) insurance industry sustained an after-tax loss of $667.3 million over the years 2013 through 2018. The Ministry reports that it obtained this amount from the annual Profit and Loss report published by GISA. (On a pre-tax basis, the reported amounts show a pre-tax loss over this period of $870.4 million.)

This analysis, as with the prior one, estimates profit for the Alberta PPA line using an alternative measure. This measure uses the same method that J.S. Cheng and Partners, Inc. ("Cheng") used in its 2007 analysis of Alberta auto insurance reform.[2]

The result, ***net*** of the Health Cost Recovery, for the PPA line over the 2013-2018 period is a pre-tax loss of $372.8 million. (Compared to a pre-tax profit of $185.5 million ***gross*** of the Health Cost Recovery).

Profits and losses for the industry vary in a cyclical pattern. As a result, cumulative income can differ significantly, depending on the starting and ending points chosen. In particular, the cumulative result for the period 2011 through 2018 is a pre-tax ***profit*** of $463.1 million – which provides a significantly different picture of the industry's financial performance in the last decade.

Looking forward, the results for the industry, combining the year 2019 and the same projection for 2020 of premium, claims costs, expenses, and investment as in my July 29, 2020 report, are as follows. The result, ***net*** of the Health Cost Recovery, and using Cheng's method, is an anticipated pre-tax profit of greater than $736.1 million (compared to $980.6 million on a ***gross*** of Health Cost Recovery basis).

[2] "REPORT ON THE REVIEW of Insurance Reform – Premium and Claim Analysis by Gordon G. Smith and Theresa K. Reichert of Deloitte and Touche LLP," J.S. Cheng and Partners, Inc., March 29, 2007

1. Results by Year, 2011 to 2018

The pre-tax profit and loss amounts for the Alberta PPA line for the industry, by year, ***net*** of Health Cost Recovery, and prepared using Cheng's method, are as shown below in Table 1.

Table 1: Annual Pre-Tax Profit and Loss, 2011-2018, Net of Health Cost Recovery, for Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

	2011	2012	2013	2014	2015	2016	2017	2018
Premium	$2,579,400	$2,645,900	$2,729,300	$2,923,200	$3,089,400	$3,186,100	$3,308,700	$3,525,100
Less: Claims Costs	$1,656,900	$1,949,000	$2,109,100	$2,317,800	$2,523,400	$2,735,000	$2,762,700	$2,894,900
Less: Expenses	$624,200	$640,300	$660,500	$707,400	$784,700	$850,700	$919,800	$937,700
Less: Health Cost Recovery	$60,300	$62,000	$64,200	$69,500	$96,700	$95,800	$98,800	$133,300
Plus: Investment Income	$305,500	$297,800	$246,000	$321,800	$303,700	$244,900	$307,200	$203,800
Total Profit, Pre-Tax	**$543,500**	**$292,400**	**$141,500**	**$150,300**	**-$11,700**	**-$250,500**	**-$165,400**	**-$237,000**

Table 2 below provides totals for these pre-tax profit and loss amounts, over the 2013-2018 and 2011-2018 periods respectively.

Table 2: Totals of Pre-Tax Profit and Loss, 2011-2018, Net of Health Cost Recovery, for Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

Years	Total Pre-Tax Profit/Loss
2013-2018	Loss of $372,800
2011-2018	Profit of $463,100

2. Results in 2019 and Projected for 2020

Table 3 below presents projected pre-tax profit for the industry for 2019 and 2020, ***net*** of Health Cost Recovery, using the same amounts for premium, claims, expenses and investment income as in my July 29, 2020 report, and using Cheng's method.

Table 3: Projected Annual Pre-Tax Profit, 2019 and 2020, Net of Health Cost Recovery, Alberta Private Passenger Auto Insurance, Using Method of J.S. Cheng and Partners

(Thousands of Dollars)

	2019	Projected 2020	Total
Premium	$3,786,200	$3,894,300	
Less: Claims Costs	$2,926,000	$2,344,000	
Less: Expenses	$1,010,900	$1,039,800	
Less: Health Cost Recovery	$139,200	$105,300	
Plus: Investment Income	$351,200	$269,600	
Total Profit, Pre-Tax	**$61,300**	**$674,800**	**$736,100**

Detailed calculations used to determine the amounts in Tables 1 through 3 are shown in the Appendix, Tables A1, A2, and A3.

Appendix

Table A 1: Estimated Profit and Loss, 2011 through 2018, by the Method of J.S. Cheng and Partners

(Dollar Amounts in Thousands)

	2011	2012	2013	2014	2015	2016	2017	2018	Total
[1] Premium Earned, Current Year[1]	$2,579,387	$2,645,852	$2,729,270	$2,923,231	$3,089,375	$3,186,128	$3,308,728	$3,525,107	
[2] Premium Earned, Prior Year[1]	$2,476,452	$2,579,387	$2,645,852	$2,729,270	$2,923,231	$3,089,375	$3,186,128	$3,308,728	
[3] Claims[2]	$1,656,860	$1,949,041	$2,109,083	$2,317,750	$2,523,365	$2,735,029	$2,762,703	$2,894,912	
[4] Expense Ratio[3]	24.2%	24.2%	24.2%	24.2%	25.4%	26.7%	27.8%	26.6%	
[5] Expenses = [1] * [4]	$624,212	$624,212	$660,483	$707,422	$784,701	$850,696	$919,826	$937,678	
[6] TPL Premium Earned[1]	$1,206,645	$1,240,384	$1,283,965	$1,390,910	$1,502,227	$1,624,311	$1,741,984	$1,892,881	
[7] Health Cost Recovery Pct	5.00%	5.00%	5.00%	5.00%	6.44%	5.90%	5.67%	7.04%	
[8] Health Cost Recovery $ = [6] * [7]	$60,332	$62,019	$64,198	$69,545	$96,743	$95,834	$98,771	$133,259	
[9] U/W Profit = [1] – [3] – [5] - [8]	$237,983	-$5,504	-$104,495	-$171,486	-$315,435	-$495,431	-$472,572	-$440,742	
[10] Premium Leverage[4]	0.94	0.96	0.94	0.92	0.93	0.93	0.93	1.02	
[11] Allocated Equity, Current Year = [1] / [10]	$2,744,054	$2,753,829	$2,892,925	$3,163,016	$3,320,017	$3,422,831	$3,546,237	$3,472,341	
[12] Allocated Equity, Prior Year = [2] / [10]	$2,634,547	$2,684,652	$2,804,505	$2,953,144	$3,141,469	$3,318,890	$3,414,836	$3,259,201	
[13] Average Allocated Equity = ([11] + [12])/2	$2,689,300	$2,719,240	$2,848,715	$3,058,080	$3,230,743	$3,370,861	$3,480,537	$3,365,771	
[14] Reserves as Ratio to Equity[5]	1.81	1.89	1.87	1.69	1.82	1.81	1.81	1.83	
[15] Investment Yield Rates[6]	4.0%	3.8%	3.0%	3.9%	3.3%	2.6%	3.1%	2.1%	
[16] Investment Income = [15]*[13] * (1 + [14])	$305,497	$297,832	$245,988	$321,838	$303,692	$244,860	$307,159	$203,837	
[17] Total Profit, Pre-Tax = [9] + [16]	$543,481	$292,328	$141,493	$150,351	-$11,743	-$250,572	-$165,413	-$236,906	$463,020

Sources:

(1): Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)
(2): Table A4.4, Allen, July 29, 2020 Report
(3): Benchmark Expense Ratio, April of subsequent year, Alberta Auto Insurance Rate Board (AIRB)
(4): Table A3, Column [3]
(5): Table A3, Column [12]
(6): Table A3, Column [6]

Table A 2: Estimated Profit and Loss, 2019 and Projection for 2020, by the Method of J.S. Cheng and Partners

(Dollar Amounts in Thousands)

	2019	Projected 2020	Total
[1] Premium Earned, Current Year[1]	$3,786,151	$3,894,333	
[2] Premium Earned, Prior Year[1]	$3,525,107	$3,786,151	
[3] Claims[2]	$2,926,000	$2,343,990	
[4] Expense Ratio[3]	26.7%	26.7%	
[5] Expenses = [1] * [4]	$1,010,902	$1,039,787	
[6] TPL Premium Earned[1]	$2,077,669	$2,220,513	
[7] Health Cost Recovery Pct	6.70%	4.74%	
[8] Health Cost Recovery $ = [6] * [7]	$139,204	$105,252	
[9] U/W Profit = [1] – [3] – [5] - [8]	-$289,961	$405,304	
[10] Premium Leverage[4]	1.01	1.01	
[11] Allocated Equity, Current Year = [1] / [10]	$3,756,077	$3,863,400	
[12] Allocated Equity, Prior Year = [2] / [10]	$3,497,106	$3,756,077	
[13] Average Allocated Equity = ([11] + [12])/2	$3,626,592	$3,809,738	
[14] Reserves as Ratio to Equity[5]	1.83	1.83	
[15] Investment Yield Rates[6]	3.4%	2.5%	
[16] Investment Income = [15]*[13] *(1 + [14])	$351,178	$269,639	
[17] Total Profit, Pre-Tax = [9] + [16]	$61,217	$674,943	$736,159

Sources:

(1): For 2019, Exhibit AUTO7001-AB-2019, General Insurance Statistical Agency (GISA)
For 2020, Table A4.3, Total, Allen, July 29, 2020 Report, Less $100 million, per IBC announcement
http://www.ibc.ca/ab/resources/media-centre/media-releases/alberta-auto-insurers-focused-on-affordability

(2): For 2019, Table A4.4, Allen, July 29, 2020 Report
For 2020, Table A4.5, Allen, July 29, 2020 Report

(3): Benchmark Expense Ratio, April 2020, Alberta Auto Insurance Rate Board (AIRB)

(4): Table A3, Column [3], 2019

(5): Table A3, Column [12], 2019

(6): For 2019, Table A3, Column [6], 2019
For 2020, Reduced by judgment to 2.5% to recognize volatility in 2020 financial markets

Table A 3: Ratios for the Insurance Industry Operating in Canada, from P&C Returns Filed with OSFI

(Dollar Amounts in Millions)

		[1] Net Written Premium	[2] Total Equity	[3] Premium Leverage = [1]/[2]	[4] Net Investmt Income	[5] Total Investmts	[6] Investmt Yield Rate = [4] / [5]
2011	Canadian	$27,808	$26,028		$2,667	$61,412	
	Foreign	$7,844	$11,900		$888	$26,524	
	Cdn Mortgage						
	Total	$35,652	$37,928	0.94	$3,555	$87,936	4.0%
2012	Canadian	$30,178	$27,098		$2,820	$66,767	
	Foreign	$7,656	$12,280		$811	$28,898	
	Cdn Mortgage						
	Total	$37,834	$39,378	0.96	$3,631	$95,665	3.8%
2013	Canadian	$31,089	$28,087		$2,164	$67,162	
	Foreign	$7,735	$13,065		$755	$29,974	
	Cdn Mortgage	$0	$0		$0	$0	
	Total	$38,824	$41,152	0.94	$2,919	$97,136	3.0%
2014	Canadian	$32,585	$29,595		$3,016	$73,246	
	Foreign	$7,865	$14,173		$859	$25,815	
	Cdn Mortgage	$0	$0		$0	$0	
	Total	$40,450	$43,768	0.92	$3,875	$99,061	3.9%
2015	Canadian	$34,109	$31,295		$2,543	$80,005	
	Foreign	$6,718	$12,580		$958	$25,119	
	Cdn Mortgage	$0	$0		$0	$0	
	Total	$40,827	$43,875	0.93	$3,501	$105,124	3.3%
2016	Canadian	$35,128	$32,088		$2,184	$73,650	
	Foreign	$6,909	$13,072		$422	$27,093	
	Cdn Mortgage	$0	$0		$0	$0	
	Total	$42,037	$45,160	0.93	$2,606	$100,743	2.6%
2017	Canadian	$34,620	$31,119		$2,601	$69,101	
	Foreign	$6,964	$13,450		$425	$27,202	
	Cdn Mortgage	$0	$0		$0	$0	
	Total	$41,584	$44,569	0.93	$3,026	$96,303	3.1%
2018	Canadian	$37,140	$25,054		$1,339	$59,282	
	Foreign	$8,249	$15,208		$526	$30,231	
	Cdn Mortgage	$975	$5,408		$229	$8,213	
	Total	$46,364	$45,670	1.02	$2,094	$97,726	2.1%
2019	Canadian	$37,172	$26,140		$2,454	$62,492	
	Foreign	$9,014	$15,543		$797	$31,879	
	Cdn Mortgage	$1,150	$5,277		$265	$8,423	
	Total	$47,336	$46,960	1.01	$3,516	$102,794	3.4%

Table A 3 (cont'd): Ratios for the Insurance Industry Operating in Canada, from P&C Returns Filed with OSFI

(Dollar Amounts in Millions)

		[7] Gross Unpaid Claims & LAE	[8] Gross Unearned Premium Reserve	[9] Ceded Unpaid Claims & LAE	[10] Ceded Unearned Premium Reserve	[11] Net Reserves = [7] + [8] – [9] – [10]	[12] Reserves/ Equity = [11]/[2]
2011	Canadian	$41,294	$17,529	$7,592	$1,208		
	Foreign	$18,547	$3,508	$2,631	$800		
	Cdn Mortgage	$0					
	Total	$59,841	$21,037	$10,223	$2,008	$68,647	1.81
2012	Canadian	$44,612	$19,237	$8,069	$1,732		
	Foreign	$19,383	$4,528	$2,757	$947		
	Cdn Mortgage	$0					
	Total	$63,995	$23,765	$10,826	$2,679	$74,255	1.89
2013	Canadian	$47,586	$20,624	$9,263	$2,384		
	Foreign	$20,024	$4,478	$3,026	$941		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$67,610	$25,102	$12,289	$3,325	$77,098	1.87
2014	Canadian	$49,939	$21,876	$10,610	$2,690		
	Foreign	$15,539	$4,180	$3,226	$1,022		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$65,478	$26,056	$13,836	$3,712	$73,986	1.69
2015	Canadian	$55,298	$23,848	$11,579	$3,684		
	Foreign	$15,770	$4,443	$3,023	$1,109		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$71,068	$28,291	$14,602	$4,793	$79,964	1.82
2016	Canadian	$58,090	$24,574	$15,077	$3,590		
	Foreign	$17,878	$4,573	$3,645	$1,148		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$75,968	$29,147	$18,722	$4,738	$81,655	1.81
2017	Canadian	$58,646	$25,688	$17,103	$4,101		
	Foreign	$17,766	$4,599	$3,734	$1,154		
	Cdn Mortgage	$0	$0	$0	$0		
	Total	$76,412	$30,287	$20,837	$5,255	$80,607	1.81
2018	Canadian	$56,273	$23,361	$14,779	$3,782		
	Foreign	$19,125	$5,171	$4,082	$1,130		
	Cdn Mortgage	$152	$3,102	$0	$0		
	Total	$75,550	$31,634	$18,861	$4,912	$83,411	1.83
2019	Canadian	$57,733	$25,220	$16,057	$4,679		
	Foreign	$20,060	$5,998	$4,285	$1,471		
	Cdn Mortgage	$172	$3,295	$0	$0		
	Total	$77,965	$34,513	$20,342	$6,150	$85,986	1.83

Source: OSFI, Financial Data for Property and Casualty Companies

https://www.osfi-bsif.gc.ca/Eng/wt-ow/Pages/FINDAT-pc.aspx

Note that amounts for “Canadian” insurers prior to 2018 include “Canadian Mortgage Insurers.” For consistency, the amounts for Canadian Mortgage Insurers are added to the industry total for 2018 and 2019.

- GISA Exhibit AUTO-9501-AB-2018, reporting industry profit and loss.