



**ACTLA**

Alberta Civil Trial Lawyers Association

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Submission to the Alberta Automobile Insurance Rate Board  
**2022 Semi-Annual Review**  
**February 18, 2022**



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## Executive summary

The Alberta Civil Trial Lawyers Association (ACTLA) appreciates the opportunity to participate in the Alberta Automobile Insurance Rate Board's (AIRB) 2022 semi-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 with extensive experience in 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.

ACTLA regularly participates in the AIRB's review processes. Our previously submitted analyses, and our predictions of future trends, have been proven correct by our review of the latest data from Oliver Wyman. We have advised in previous submissions that the effect of increased premiums in the face of leveling bodily injury claims costs, and significantly reduced total claim costs due to COVID-19 would either lead to decreased premiums for consumers, or skyrocketing profits for insurance companies. Clearly, it has been the latter with the insurance industry reaping significant profits in the Alberta auto insurance market.

With supporting actuarial data included in Mr. Allen's appended findings, ACTLA wishes to highlight that the following trends continue in the AIRB's reviews:

- **Projected bodily injury claim costs continue to be overestimated by Oliver Wyman which has not adjusted its methodology to account for changes in reserve practices**

Mr. Allen's analysis shows that the reserves and projections of the insurance industry, as considered and applied by Oliver Wyman, experience downward variation resulting in consistently lower payouts than anticipated. This trend is continuing in the 2022 semi-annual review for private passenger vehicles.

- **Bodily injury claim costs stabilized and are now declining**

Inflation-adjusted bodily injury claims costs have been stable for the period of 2015-2019 and are now declining markedly associated with the COVID-19 pandemic. Contrary to key assertions made by the insurance industry, bodily injury claim costs are not the driving factor to premium increases. The period of growth of bodily injury claim costs ended in 2015 and has since stabilized.

- **The insurance industry is experiencing significant profits**

In July 2021, ACTLA submitted projections of the pre-tax profits of the private passenger auto insurance industry in Alberta. This projection has since been revised as the emerged claims experience for bodily injury coverage for accidents in the first half of 2021 remains significantly down from the pre-pandemic level at 35% lower than the level of accidents in the first half of 2019. Mr. Allen's analysis now shows an estimated \$2.1 billion pre-tax profit projection for the insurance industry for the 2020 and 2021 years.

- **There is growing divergence between declining claim costs and increasing premiums**

Albertans have seen dramatic increases to their premiums since 2018. Bill 41, associated regulatory changes, and reductions to the rate of pre-judgement interest enacted in 2020 resulted in significant one-time and enduring claim cost reductions for industry. The COVID-19 pandemic further caused a sharp decrease in claims costs beginning in 2020. There is now a significant and growing disconnect between premiums and insurer costs.

In summary, the most recent statistics show that claim costs are stable and that combined with increases in premiums paid by consumers, the ongoing impact of COVID-19 on driving patterns, industry savings associated with Bill 41, the insurance industry is experiencing significant windfall profits for 2020 and 2021.

ACTLA believes the above-described trends are further evidence that the AIRB should not consider rate increases to premiums for basic and additional coverage for private passenger vehicles. At minimum, private passenger premiums should be frozen until the long-term impacts of COVID-19 can be observed in the industry and until the relationship between insurer costs and consumer premiums is brought back into some semblance of equilibrium.

# **Review of Experience, Alberta Private Passenger Automobile Insurance, as at June 30, 2021**

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As Part of their Written Submission to the Alberta Automobile Insurance Rate Board 2022 Semi-Annual Review

# **I. Executive Summary**

The following are the findings of my analysis.

## **Finding 1:**

Oliver Wyman has reduced its estimated loss and LAE costs per vehicle for all accident years between 2012 and 2020, compared to their previous analysis as at Dec. 2020. These reductions are in addition to previous reductions made by Oliver Wyman between Dec. 2017 and Dec. 2020 for accident years 2011 through 2017. With these reductions, the profitability of the Alberta private passenger auto insurance industry for those accident years is higher than was previously estimated.

## **Finding 2:**

My analysis indicates that the loss and LAE cost per vehicle for third party liability bodily injury coverage has been approximately stable, when adjusted for general inflation, for the 2015 through 2019 accident years. Beginning in 2020, the loss and LAE cost for the “moving” coverages has declined sharply in response to the reduction in vehicle traffic caused by the COVID-19 pandemic. Further, Bill 41 reduced the rate of prejudgment interest when it took effect in late 2020, applying to claims from prior accident years that remain open at the time the bill took effect. The effect is to reduce further any rate of increase in bodily injury claims costs.

## **Finding 3:**

I estimate that pre-tax profit for the 2021 accident year for the Alberta private passenger auto insurance industry has increased by approximately \$400 million, to more than \$1.1 billion. This result is due to a continuation into the first half of 2021 of the reduced level of claims activity that began with the COVID-19 pandemic.

## **Finding 4:**

I find that since 2018, growth in premium income for the Alberta private passenger auto insurance industry has exceeded the rate of general inflation, while claims and other expenses have declined, in keeping with the reduced claims activity that began with the COVID-19 pandemic.

## **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 2022 Semi-Annual Review.

This report presents the results of my analysis of private passenger automobile insurance 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, 2021. I have also reviewed in depth the analysis and conclusions of Oliver Wyman Limited (“Oliver Wyman”), consulting actuary to AIRB, in its 2022 Semi-Annual Review.

This report makes reference to my report to AIRB dated July 28, 2021 that was included with ACTLA’s submission to the AIRB 2021 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 34 years.

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February 18, 2022

## V. Analysis

### 1. Favorable Development in Oliver Wyman's Projected Bodily Injury Loss and LAE Costs

Between Oliver Wyman's analysis as at Dec 2020 (the 2021 Annual Review) and their analysis at June 2021 (the 2022 Semi-Annual Review) development for the bodily injury coverage has been favorable on all accident years since 2012.

Chart 1 below illustrates the magnitude of favorable development between the two reviews.

Chart 2 below illustrates the cumulative magnitude of favorable development since Dec. 2017.

The development seen in these charts demonstrates the uncertainty that continues in the projected values of bodily injury coverages for these accident years. It also indicates that the coverage has been more profitable than was indicated by Oliver Wyman's previous analyses.

Chart 1 – Development on Ultimate Loss and LAE Projections between Dec 2020 and June 2021

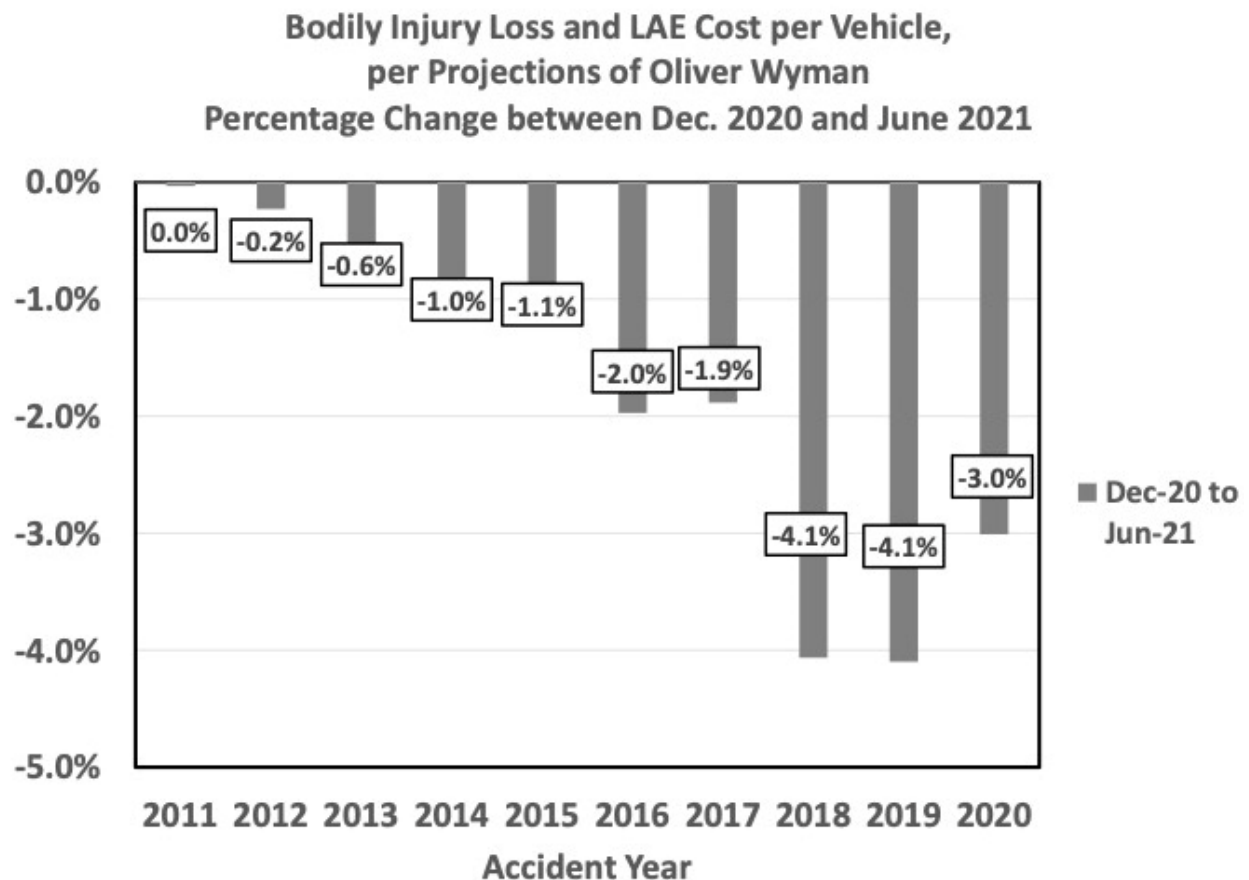
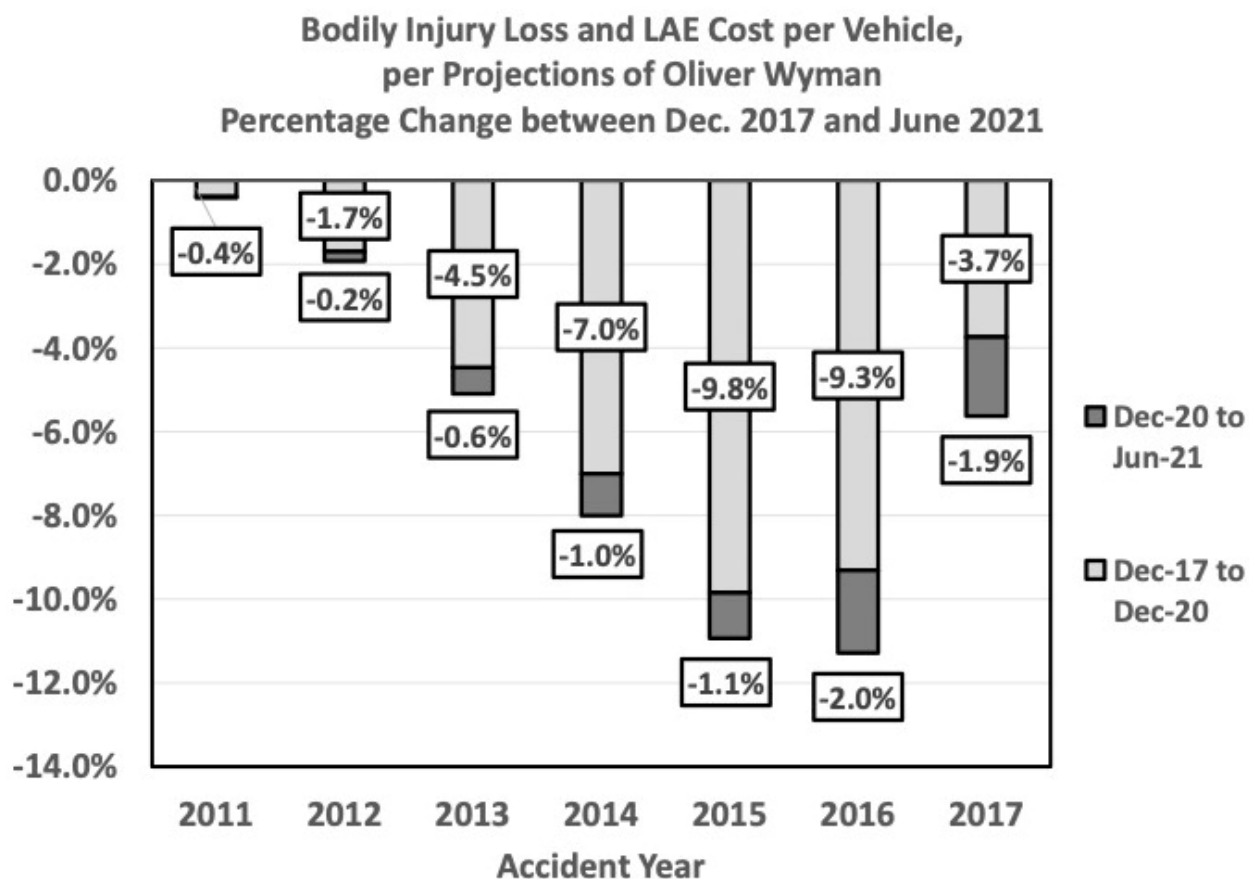




Chart 2 – Development on Ultimate Loss and LAE Projections between Dec 2017 and June 2021



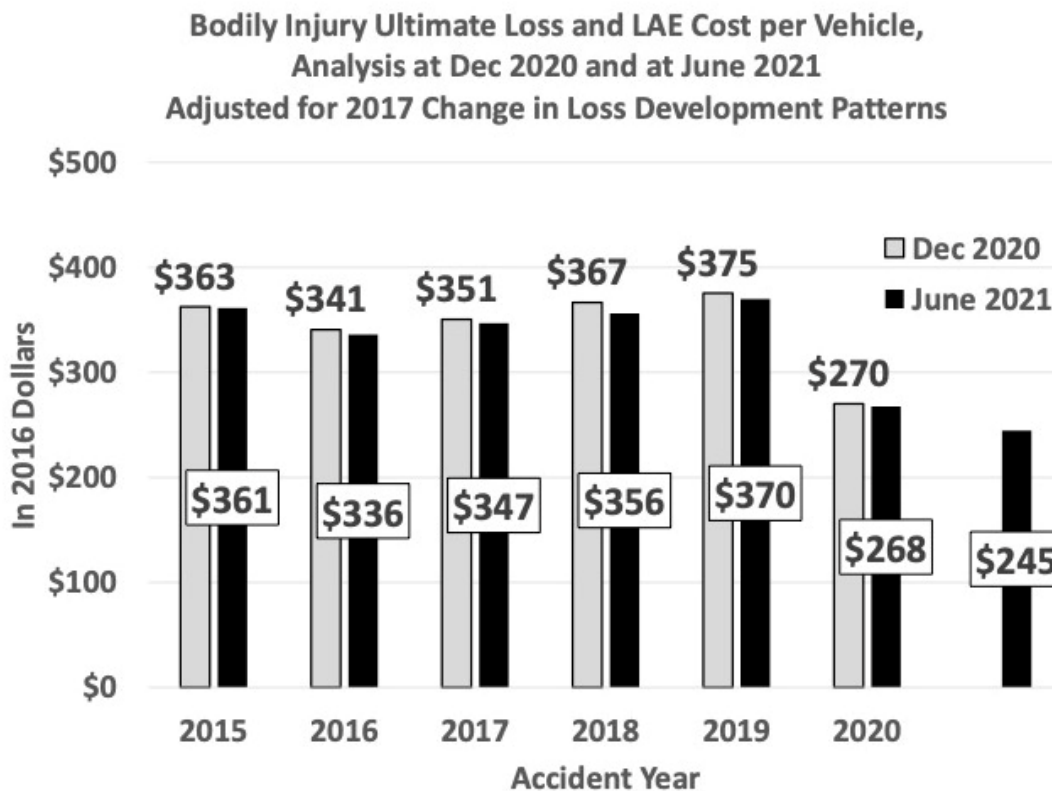
## 2. Stability in Loss and LAE Cost per Vehicle Since Accident Year 2015, in 2016 Dollars

Chart 3 below shows stability by accident year in the inflation-adjusted loss and LAE costs per vehicle, for accident years 2015 through 2019. The subsequent accident years show a significant and notable reduction in these costs, occurring at the same time as the reduction in traffic volumes caused by the COVID-19 pandemic.

The chart compares the projections of inflation-adjusted loss and LAE made at June 2021 to those made at Dec. 2020. It can be seen that developments over that period have brought about greater stability for the pre-pandemic accident years 2015 through 2019.



Chart 3 – Projected Inflation-Adjusted Bodily Injury Loss and LAE Cost per Vehicle



The amounts in this chart are adjusted from the projections made by Oliver Wyman. I have made those adjustments in response to a distinct and continuing change in the actuarial development pattern, beginning in 2017. Charts A1 and A2 in the Appendix illustrate the change in pattern.

This change occurred at the same time as an advisory by GISA that large insurers had changed their claims handling and reserving practices. My adjustment assumes that the change in pattern reflects a change in the timing of recognition of claims costs that will not affect the claims' ultimate settlement values.

Oliver Wyman does not adjust for this change in the actuarial development pattern.

In the first half of 2021, there was a favorable shift in the development pattern, across almost all accident years (contributing to the favorable change in Oliver Wyman's claims estimates, seen on Chart 1 above. Having made the adjustment for the conservative change in actuarial development that began in 2017, I have been consistent in also adjusting for the partly-countervailing change in actuarial development pattern seen in the first half of 2021. The specific adjustment I made for the 2021 pattern change is to use development factors calculated in 2020 that do not capture the favorable development seen in 2021.

### 3. Pre-Tax Profit for the Industry, Alberta Private Passenger Automobile Insurance

In July 2021, ACTLA submitted my projections of the pre-tax profits of the private passenger auto insurance industry in Alberta, using the same method developed by actuary J.S. Cheng in his testimony in the 2008 case *Morrow v. Zhang*. The claims amounts for these projections used the adjustment for the change in the actuarial development pattern described in the previous section.

Table 1 below shows the amounts of pre-tax profit submitted at that time, and makes adjustments to reflect the claims, policy and premium data that emerged between Dec. 2020 and June 2021.

The profit level for the 2021 accident year has been increased by approximately \$400 million, in light of the emerged experience in the first half of 2021.

**Table 1 – Pre-Tax Profit of the Alberta Private Passenger Auto Insurance Industry (in \$000s)**

	Accident Years 2011-2019	Accident Year 2020	Accident Year 2021	Total Accident Years 2020-2021
<b>Pre-Tax Profit Projected at Dec. 2020<sup>1</sup></b>	<b>\$1,055,000</b>	<b>\$959,000</b>	<b>\$774,000</b>	<b>\$1,733,000</b>
Plus: Reduction in Claims Projection	\$77,000 <sup>2</sup>	-\$31,000 <sup>3</sup>	\$413,000 <sup>4</sup>	
Plus: Increase in Premium Projection	\$0	\$0	-\$46,000 <sup>5</sup>	
Plus: Reduction in Expense Projection	\$0	\$0	\$12,000 <sup>6</sup>	
<b>Pre-Tax Profit Projected at June 2021</b>	<b>\$1,132,000</b>	<b>\$928,000</b>	<b>\$1,153,000</b>	<b>\$2,081,000</b>

The previous pre-tax profit estimate for the 2021 accident year used a conservative projection of the 2021 accident year claims – assuming only a 5% reduction for the “moving” coverages from the level of the pre-pandemic accident year 2019 (adjusted for growth in the number of policies and for increases due to general inflation). The reduction of 5% was used by J.S. Cheng in the May 27, 2020 report “Actuarial Modelling for the Automobile Insurance Advisory Committee.”

The actual emerged claims experience for bodily injury coverage for accidents in the first half of 2021 remains significantly down from the pre-pandemic level, at 35% lower than the level of accidents in the first half of 2019. The profit calculation recognizes the favorable emerged claims level for the first half of 2021, while maintaining the conservative assumption of a 5% COVID-19 reduction for the second half of 2021.

<sup>1</sup> Tables A9.2, A9.4; Review of Experience, Alberta Private Passenger Automobile Insurance, as at December 31, 2020; Craig A. Allen, FCIA, FCAS (*hereafter “Allen Dec. 2020”*)

<sup>2</sup> Table A6

<sup>3</sup> Table A6

<sup>4</sup> Table A3, Row [12]

<sup>5</sup> Table A4, Row [13]

<sup>6</sup> Table A4, Row [15]

In addition to being on a pre-tax basis, the profit calculations assume that reinsurance costs are neutral, i.e. that reinsurance recoveries are equal to reinsurance premiums, less reinsurance commissions. This assumption is made because data is not available for reinsurance transactions across the industry. While the assumption of neutrality is unlikely to be realized, the burden of the benchmark catastrophe loading of 58% is assumed to be borne entirely by primary insurers, which is a conservative assumption.

#### **4. Premium Increases and Claims Cost Reductions**

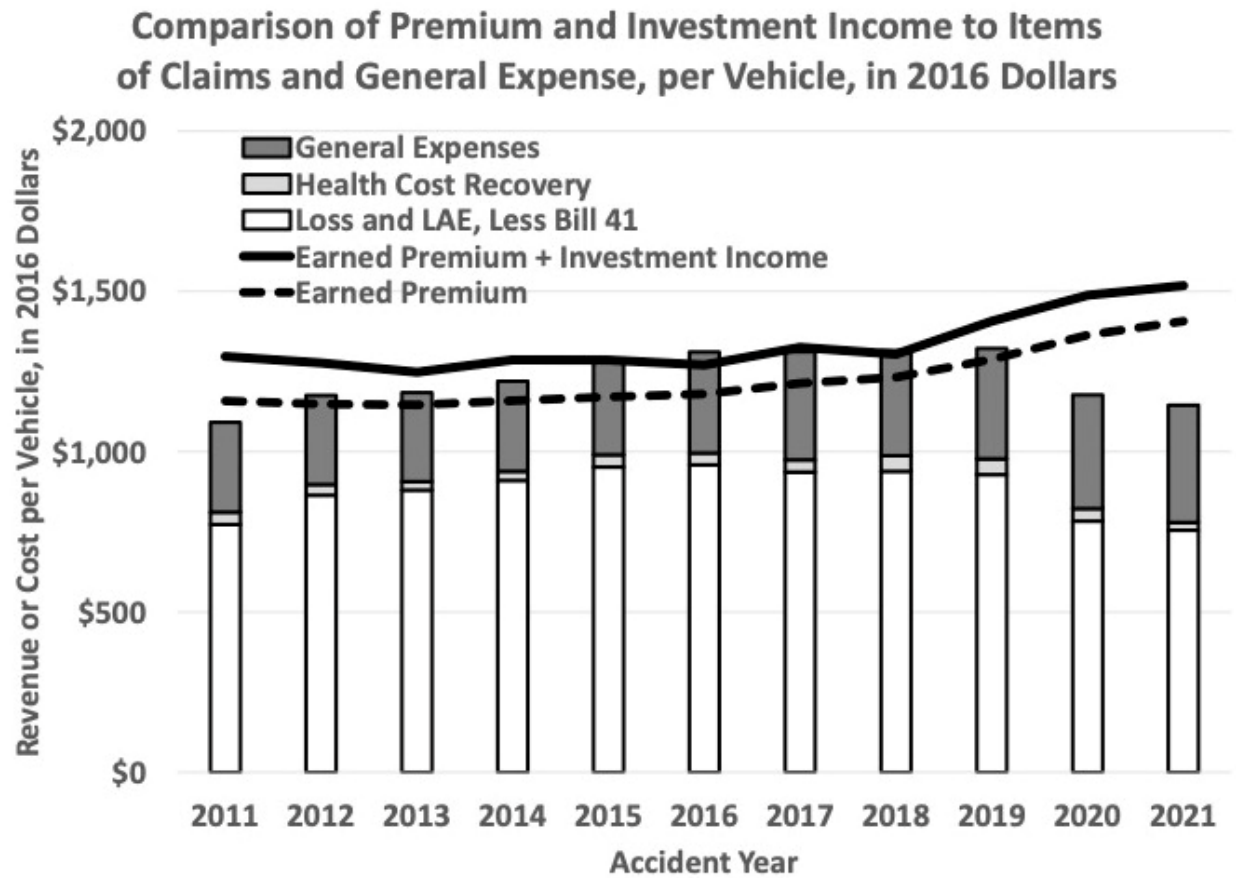
Since 2018, insurers have taken rate increases at greater than the rate of general inflation for the Alberta private passenger auto insurance line. In addition, Bill 41 in late 2020 reduced the costs of bodily injury coverage by strengthening the Minor Injuries Regulation and reducing the rate of prejudgment interest on general damages. Further, the reduction in the PJI rate applies to claims that have remained open from pre-2021 accident years.

These measures were taken at a time where the costs of claims and general expenses had been stable, when adjusted for general inflation. While these measures may have been required to remedy the industry's unprofitability between 2015 and 2018, claims costs stability after 2015 was followed by the COVID-19 pandemic, which caused a sharp decrease in claims costs beginning in 2020. Further, the average rate of premium per vehicle, adjusted for general inflation, has continued to increase through 2020 and 2021.

Chart 4 below illustrates the divergence between the increase in premium and the decrease in industry costs.

Note that the Bill 41 reduction in prejudgment interest has the effect of causing inflation-adjusted claims costs to decline, beginning with accident year 2017.

Chart 4 – Inflation-Adjusted Premium, Investment Income, Claims Costs and General Expenses per Vehicle



## VI. Appendix

### A1. Favorable Development, Oliver Wyman Ultimate Loss Cost and LAE, Dec. 2017 through June 2021

Table A1 – Percentage Change in Oliver Wyman Ultimate Loss Cost and LAE

Accident Semester	[1]  Earned Vehicles as at June 2021	[2]  Oliver Wyman Ultimate Loss and LAE, by Accident Semester, as at June 2021 (000s)	[3]  Oliver Wyman Annual Ultimate Loss Cost and LAE, by Accident Year, as at Dec 2017	[4]  Oliver Wyman Annual Ultimate Loss Cost and LAE, by Accident Year, as at Dec 2020	[5]  Oliver Wyman Annual Ultimate Loss Cost and LAE, by Accident Year, as at June 2021	[6]  Percentage Change by Accident Year, Dec. 2017 to Dec. 2020	[7]  Percentage Change by Accident Year, Dec. 2020 to June 2021
2011.1	1,128,676	\$247,579					
2011.2	1,178,555	\$323,214	\$248.42	\$247.47	\$247.39	-0.4%	0.0%
2012.1	1,171,059	\$298,957					
2012.2	1,220,908	\$362,914	\$282.13	\$277.34	\$276.71	-1.7%	-0.2%
2013.1	1,210,580	\$324,764					
2013.2	1,269,813	\$411,387	\$312.63	\$298.66	\$296.79	-4.5%	-0.6%
2014.1	1,257,071	\$348,403					
2014.2	1,319,765	\$467,582	\$343.92	\$319.85	\$316.66	-7.0%	-1.0%
2015.1	1,302,867	\$422,724					
2015.2	1,349,404	\$523,644	\$400.07	\$360.72	\$356.81	-9.8%	-1.1%
2016.1	1,324,208	\$462,747					
2016.2	1,354,536	\$564,925	\$431.49	\$391.35	\$383.64	-9.3%	-2.0%
2017.1	1,323,343	\$516,013					
2017.2	1,369,498	\$602,524	\$439.97	\$423.35	\$415.37	-3.7%	-1.9%
2018.1	1,348,682	\$567,873					
2018.2	1,399,229	\$631,747		\$455.05	\$436.56		-4.1%
2019.1	1,372,217	\$588,018					
2019.2	1,410,876	\$674,226		\$472.92	\$453.54		-4.1%
2020.1	1,371,667	\$441,951					
2020.2	1,409,265	\$489,934		\$345.49	\$335.10		-3.0%

Sources:

[1], [2]: Semi-Annual Review of Industry Experience – Preliminary Report as of June 30, 2021, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, January 24, 2022; (*hereafter “**Oliver Wyman June 2021**”*); Appendix B, Page 1, Columns (3), (7)

[3]: Annual Review of Industry Experience – Final Report as of December 31, 2017, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, September 19, 2018; (*hereafter “**Oliver Wyman Dec 2017**”*); Appendix B, Page 1, Column (14)

[4]: Annual Review of Industry Experience – Final Report as of December 31, 2020, Private Passenger Vehicles, Alberta Automobile Insurance Rate Board; Prepared by Oliver Wyman, September 8, 2021; (*hereafter “**Oliver Wyman Dec. 2020**”*); Appendix B, Page 1, Column (14)

[5]: [2]/[1]

[6]: [4] / [3] - 1

[7]: [5] / [4] - 1

## A2. Stability in Loss and LAE Cost per Vehicle Since Accident Year 2015, in 2016 Dollars

### *The Change in the Actuarial Loss Development Pattern, beginning in 2017*

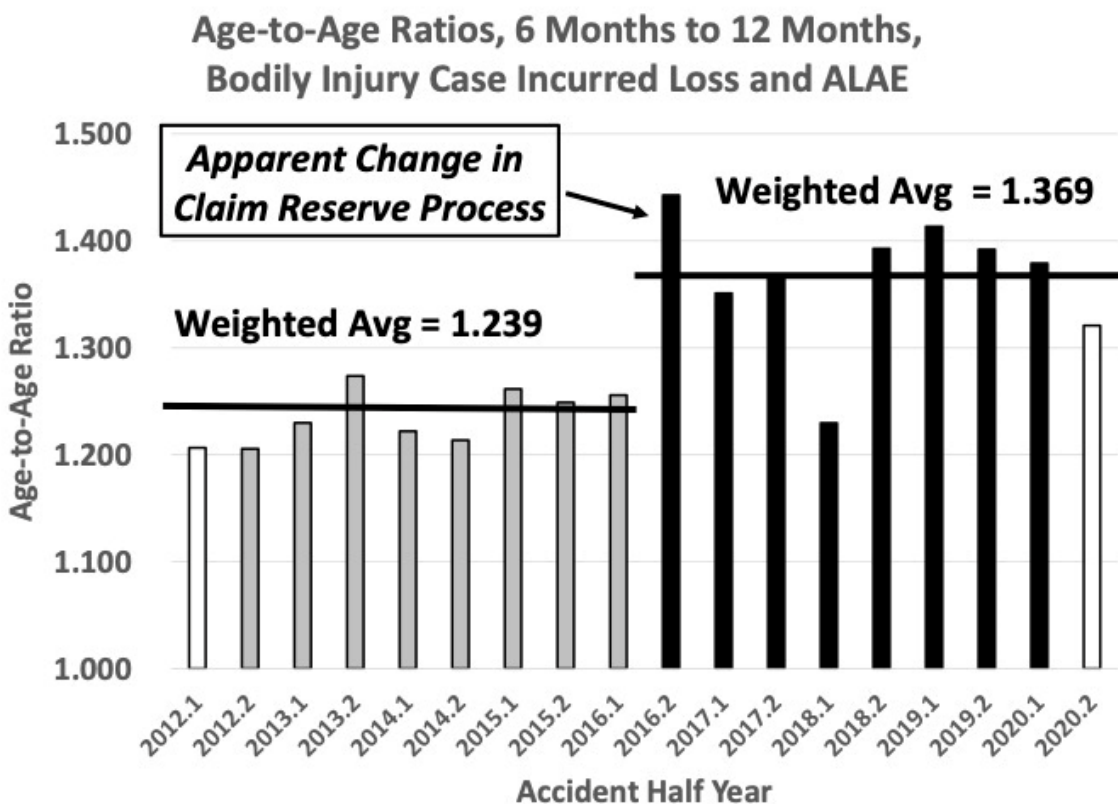
Charts A1 and A2 below illustrate the distinct and continuing increase in the age-to-age patterns between ages 6-to-12 months and 12-to-18 months. It is assumed that this change in pattern is due to more rapid increases in the reserve estimates for individual claims for the bodily injury coverage,, starting in calendar year 2017. Such a pattern is consistent with the advisory provided by GISA regarding changes in claim handling practices, beginning in 2017.

In this analysis, it is assumed that the change in pattern is a change only in the claims estimates, not in their settlement values.

To normalize for this change in pattern, adjustment factors are calculated and applied to accident years that were at the 6-month, 12-month, and 18-month stages subsequent to calendar year 2017.

The adjustment factor for 6-to-12 months is  $1.239/1.369 = 0.905$ .<sup>7</sup>

Chart A1 – Discontinuous and Persistent Change in the Age-to-Age Ratios from 6 Months to 12 Months

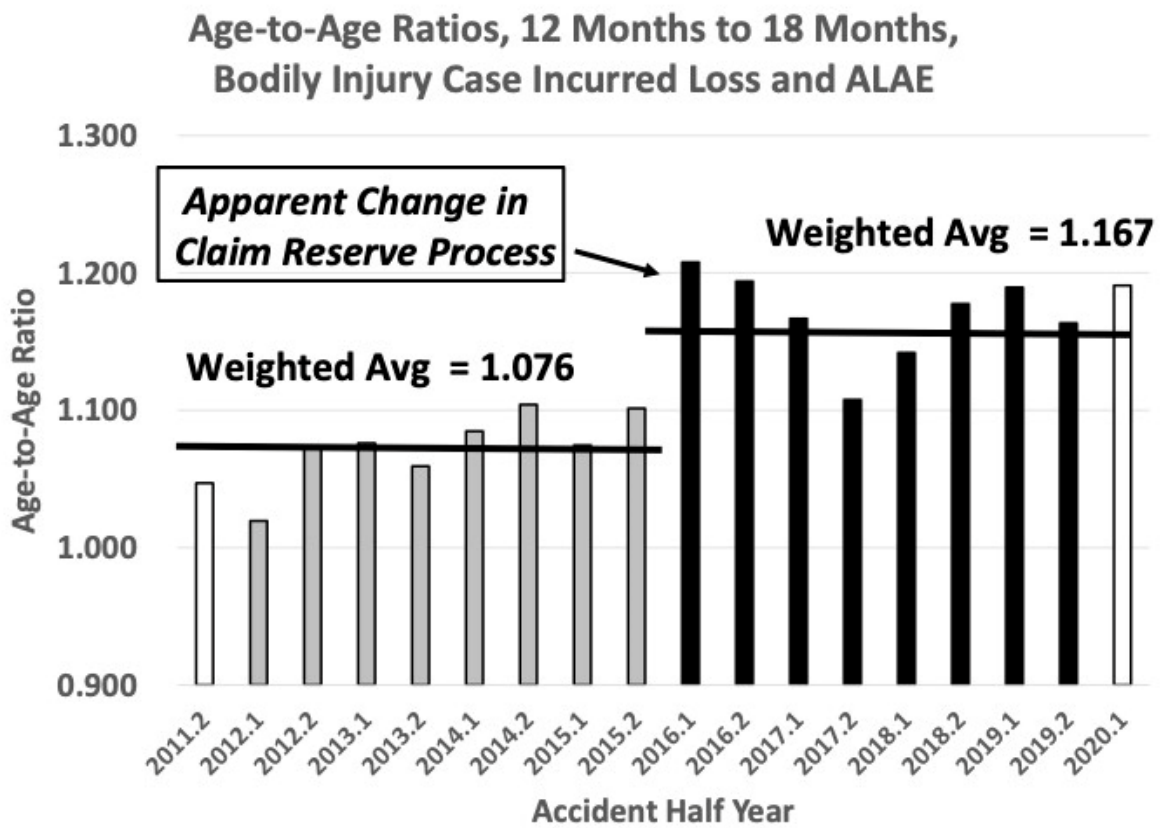


<sup>7</sup> Table A7.3; Allen Dec. 2020



The adjustment factor for 12-to-18 months is  $1.076/1.167 = 0.922$ .<sup>8</sup>

Chart A2 – Discontinuous and Persistent Change in the Age-to-Age Ratios from 12 Months to 18 Months



<sup>8</sup> Table A7.4; Allen Dec. 2020

*Calculation of Ultimate Loss and LAE per Vehicle, Bodily Injury*

Table A2 – Calculation of Ultimate Incurred Loss and LAE by Accident Semester, Bodily Injury

Accident Semester	[1]  No of Earned Vehicles	[2]  Case Incurred Loss and ALAE (000s)	[3]  Loss Development Factor	[4]  Adjustmt Factor 6-12 Months	[5]  Adjustmt Factor 12-18 Months	[6]  ULAE Factor	[7]  Ultimate Incurred Loss and LAE (000s)
2011.1	1,128,676	\$224,702	1.007	1.000	1.000	1.095	\$247,771
2011.2	1,178,555	\$293,069	1.007	1.000	1.000	1.095	\$323,157
2012.1	1,171,059	\$271,983	1.007	1.000	1.000	1.091	\$298,810
2012.2	1,220,908	\$329,109	1.010	1.000	1.000	1.091	\$362,648
2013.1	1,210,580	\$292,013	1.013	1.000	1.000	1.099	\$325,095
2013.2	1,269,813	\$369,340	1.016	1.000	1.000	1.099	\$412,399
2014.1	1,257,071	\$314,466	1.019	1.000	1.000	1.093	\$350,241
2014.2	1,319,765	\$419,778	1.023	1.000	1.000	1.093	\$469,370
2015.1	1,302,867	\$376,722	1.026	1.000	1.000	1.103	\$426,328
2015.2	1,349,404	\$463,367	1.032	1.000	1.000	1.103	\$527,449
2016.1	1,324,208	\$413,046	1.042	1.000	0.922	1.085	\$430,553
2016.2	1,354,536	\$498,423	1.057	0.905	0.922	1.085	\$476,960
2017.1	1,323,343	\$442,703	1.081	0.905	0.922	1.092	\$436,054
2017.2	1,369,498	\$503,519	1.111	0.905	0.922	1.092	\$509,721
2018.1	1,348,682	\$450,453	1.162	0.905	0.922	1.101	\$480,864
2018.2	1,399,229	\$467,253	1.252	0.905	0.922	1.101	\$537,431
2019.1	1,372,217	\$393,880	1.385	0.905	0.922	1.108	\$504,352
2019.2	1,410,876	\$394,012	1.599	0.905	0.922	1.108	\$582,474
2020.1	1,371,667	\$224,196	1.844	0.905	0.922	1.103	\$380,490
2020.2	1,409,265	\$212,780	2.133	0.905	0.922	1.103	\$417,711
2021.1	1,381,202	\$135,089	2.952	0.905	0.922	1.103	\$367,021

Sources:

[1], [2]: GISA AUTO7501-AB-2021-06

[3]: Appendix C, Page 1, Column (5), Oliver Wyman Dec. 2020. **AS NOTED IN SECTION V.2 ABOVE, DECEMBER 2020 FACTORS WERE USED HERE. THESE DO NOT CAPTURE THE FAVORABLE DEVELOPMENT SEEN TO DATE FOR 2021. THIS CONSERVATIVE ASSUMPTION IS CONSISTENT WITH THE ADJUSTMENTS MADE IN COLUMNS [4] AND [5].**

[4]: Chart A1

[5]: Chart A2

[6]: Appendix B, Page 1, Column (6), Oliver Wyman June 2021

Table A3 – Calculation of Loss and LAE per Vehicle, in 2016 Dollars, by Accident Year, Bodily Injury

Accident Year	[8]  No of Earned Vehicles	[9]  Ultimate Incurred Loss and LAE (000s)	[10]  Loss and LAE per Vehicle	[11]  Alberta CPI (June, March for 2021.1)	[12]  Alberta CPI (Avg for 2016)	[13]  Loss and LAE per Vehicle in 2016 Dollars
2011	2,307,231	\$570,929	\$247	125.3	135.2	\$267
2012	2,391,967	\$661,458	\$277	126.9	135.2	\$295
2013	2,480,393	\$737,493	\$297	129.8	135.2	\$310
2014	2,576,836	\$819,612	\$318	132.3	135.2	\$325
2015	2,652,270	\$953,776	\$360	134.5	135.2	\$361
2016	2,678,744	\$907,514	\$339	136.3	135.2	\$336
2017	2,692,841	\$945,775	\$351	136.9	135.2	\$347
2018	2,747,911	\$1,018,295	\$371	140.7	135.2	\$356
2019	2,783,093	\$1,086,826	\$391	142.7	135.2	\$370
2020	2,780,932	\$798,201	\$287	145.0	135.2	\$268
2021.1	1,381,202	\$367,021	\$266	146.9	135.2	\$245

Sources:

[8]: From Column [1], Table A2

[9]: From Column [7], Table A2

[10]: [9] / [8]

[11]: Statistics Canada

[12]: Statistics Canada

[13]: [10] x [12] / [11]

### A3. Pre-Tax Profit for the Industry, Alberta Private Passenger Automobile Insurance

Table A4 – Projection of Losses and LAE, Accident Year 2021, as at June 2021 (000s)

	Bodily Injury	Property Damage	Accident Benefits	UM	Collision	Comp	All Perils	Specified Perils	Total
[1] 2021.1 Incurred Loss and LAE @Jun-21	\$367,021	\$165,819	\$81,707	\$1,639	\$163,665	\$129,617	\$3,925	\$490	\$913,883
[2] 2019.2 Incurred Loss and LAE @Jun-21	\$582,474	\$238,921	\$112,012	\$6,285	\$275,368	\$266,217	\$6,080	\$606	\$1,487,963
[3] 2019.1 Earned Vehicles @Jun-21	1,372,217	1,372,217	1,372,120	1,341,255	1,011,594	1,193,875	11,314	10,874	
[4] 2021.1 Earned Vehicles @Jun-21	1,381,202	1,381,202	1,381,689	1,343,619	1,002,765	1,171,762	11,960	12,094	
[5] Alberta CPI @Sep-19	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	
[6] Alberta CPI @Sep-21	150.8	150.8	150.8	150.8	150.8	150.8	150.8	150.8	
[7] COVID-19 Impact	-5%	-5%	-5%	-5%	-5%	0%	0%	0%	
[8] Cat. Loading @Jun-21	0%	0%	0%	0%	0%	+58%	+58%	+58%	
[9] Projected 2021.2 @Jun-21	\$587,765	\$241,091	\$113,077	\$6,312	\$273,652	\$435,655	\$10,716	\$1,124	\$1,669,392
[10] Projected 2021 @Jun-21	\$954,786	\$406,910	\$194,784	\$7,951	\$437,317	\$565,272	\$14,641	\$1,614	\$2,583,275
[11] Projected 2021 @Dec-20									\$2,996,171
[12] Reduction in Projected Claims									\$412,895

Sources:

[1]: Table A2 for Bodily Injury; Oliver Wyman, June 2021, Appendix B, Col (7) for all other coverages

[2]: Table A2 for Bodily Injury; Oliver Wyman, June 2021, Appendix B Col (7) for all other coverages

[3], [4]: Oliver Wyman, June 2021, Appendix B Col (3) for all coverages

[5], [6]: Statistics Canada

[7]: J.S. Cheng & Partners, Inc.; "Actuarial Modelling for the Automobile Insurance Advisory Committee;" May 27, 2020; Appendix 5.8, p. 156.

[8]: Bulletin 09-2021; Private Passenger Vehicle Benchmarks Schedule, Oct. 2021, AIRB

[9]:  $[2] \times [4] / [3] \times [6] / [5] \times (1 + [7]) \times (1 + [8])$

[10]:  $[1] + [9]$

[12]:  $[11] - [10]$

**NOTE: THE PROJECTION FOR ACCIDENT SEMESTER 2021.2 IS LIKELY CONSERVATIVE IN ITS RESULT THAT THE PROJECTED CLAIM VALUES FOR MOVING COVERAGES FOR 2021.2 (ROW [9]) ARE HIGHER THAN THOSE FOR THE PRE-PANDEMIC ACCIDENT SEMESTER 2019.2 (ROW [2]). THE RECOGNITION OF THE COVID-19 PANDEMIC HAS PRIMARILY BEEN LIMITED TO THE REALIZED EXPERIENCE TO DATE IN ACCIDENT SEMESTER 2021.1 (ROW [1]).**

Table A5 – Projection of Earned Premium, 2021, as at June 2021

	Third Party Liability	Accident Benefits	UM	Collision	Comp	All Perils	Specified Perils	Total
[1] 2021.1 Earned Premium (000s)	\$1,226,158	\$116,996	\$41,021	\$390,584	\$344,382	\$9,694	\$1,252	\$2,130,088
[2] 2020.2 Earned Vehicles	1,409,265	1,409,330	1,371,938	1,024,296	1,195,344	11,241	11,654	
[3] 2020.1 Earned Vehicles	1,371,667	1,371,846	1,336,859	1,005,055	1,183,758	10,906	11,653	
[4] 2021.1 Earned Vehicles	1,381,202	1,381,689	1,343,619	1,002,765	1,171,762	11,960	12,094	
[5] Growth from 2020 to 2021 in Earned Vehicles	0.7%	0.7%	0.5%	-0.2%	-1.0%	9.7%	3.8%	
[6] Projected 2021.2 Earned Vehicles	1,419,061	1,419,442	1,378,875	1,021,962	1,183,231	12,327	12,095	
[7] 2021.1 Written Premium (000s)	\$1,262,086	\$123,436	\$41,869	\$388,080	\$348,534	\$10,683	\$1,287	
[8] 2021.1 Written Vehicles	1,399,347	1,400,452	1,359,874	1,007,498	1,154,747	12,793	11,540	
[9] 2021.1 Average Written Premium	\$901.91	\$88.14	\$30.79	\$385.19	\$301.83	\$835.06	\$111.55	
[10] Projected 2021.2 Earned Premium @Jun-21 (000s)	\$1,279,867	\$125,110	\$42,454	\$393,651	\$357,131	\$10,294	\$1,349	\$2,209,856
[11] Projected 2021 Earned Premium @Jun-21 (000s)	\$2,506,025	\$242,106	\$83,475	\$784,235	\$701,513	\$19,988	\$2,601	\$4,339,944
[12] Projected 2021 Earned Premium @Dec-20 (000s)								\$4,386,089
[13] Increase in Projected Premium (000s)								(\$46,145)
[14] General Expense Ratio								26.0%
[15] Reduction in General Expenses (000s)								\$11,998
[16] Projected 2021 Earned Vehicles	2,800,263							

Sources:

[1], [2], [3], [4], [7], [8]: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[5]:  $[4]/[3] - 1$

[6]:  $[2] \times (1 + [5])$

[9]:  $[7]/[8]$

[10]:  $[6] \times [9]$

[11]:  $[1] + [10]$

[13]:  $[11] - [12]$

[14]: Bulletin 09-2021; Benchmark Administrative Expense Ratio, October 2021 (most recent published benchmark), Alberta Auto Insurance Rate Board (AIRB)

[15]:  $-1 \times [13] \times [14]$

[16]:  $[4] + [6]$



Table A6 – Calculation of Ultimate Incurred Loss and LAE by Accident Semester, All Coverages (000s)

Accident Semester	Bodily Injury	Property Damage	Accident Benefits	UM	Collision	Comp	All Perils	Specified Perils	Total
2011.1	\$247,771	\$179,038	\$39,630	\$2,480	\$201,624	\$79,720	\$3,760	\$211	\$754,234
2011.2	\$323,157	\$175,584	\$49,459	\$7,108	\$186,673	\$153,000	\$5,003	\$384	\$900,368
2012.1	\$298,810	\$163,969	\$44,197	\$3,778	\$177,222	\$84,559	\$2,907	\$201	\$775,643
2012.2	\$362,648	\$207,615	\$56,770	\$9,086	\$225,641	\$296,913	\$5,893	\$740	\$1,165,306
2013.1	\$325,095	\$185,132	\$45,933	\$2,638	\$200,879	\$138,302	\$5,102	\$350	\$903,431
2013.2	\$412,399	\$226,038	\$57,572	\$4,237	\$250,583	\$238,519	\$5,148	\$360	\$1,194,856
2014.1	\$350,241	\$201,169	\$46,132	\$2,458	\$222,590	\$90,883	\$3,636	\$288	\$917,397
2014.2	\$469,370	\$231,195	\$62,511	\$6,785	\$259,942	\$343,992	\$6,824	\$649	\$1,381,268
2015.1	\$426,328	\$215,482	\$57,999	\$10,704	\$239,579	\$118,586	\$4,191	\$282	\$1,073,151
2015.2	\$527,449	\$234,137	\$78,674	\$9,506	\$256,371	\$333,454	\$6,196	\$590	\$1,446,377
2016.1	\$430,553	\$195,636	\$58,993	\$7,283	\$218,860	\$188,982	\$4,197	\$483	\$1,104,987
2016.2	\$476,960	\$228,553	\$80,862	\$12,566	\$272,621	\$413,808	\$7,001	\$677	\$1,493,048
2017.1	\$436,054	\$224,612	\$78,754	\$6,340	\$259,955	\$148,755	\$4,785	\$403	\$1,159,658
2017.2	\$509,721	\$242,414	\$89,622	\$10,251	\$286,303	\$263,273	\$5,237	\$740	\$1,407,561
2018.1	\$480,864	\$246,854	\$94,127	\$9,047	\$288,021	\$141,425	\$5,382	\$564	\$1,266,284
2018.2	\$537,431	\$235,204	\$89,345	\$8,533	\$286,241	\$279,218	\$6,152	\$656	\$1,442,780
2019.1	\$504,352	\$234,948	\$93,662	\$7,957	\$282,866	\$142,644	\$4,204	\$446	\$1,271,079
2019.2	\$582,474	\$238,921	\$112,012	\$6,285	\$275,368	\$266,217	\$6,080	\$606	\$1,487,963
2020.1	\$380,490	\$166,369	\$76,567	\$6,603	\$191,406	\$400,353	\$4,674	\$886	\$1,227,348
2020.2	\$417,711	\$179,147	\$94,684	\$8,074	\$195,179	\$236,287	\$3,917	\$665	\$1,135,664
2021.1	\$367,021	\$165,819	\$81,707	\$1,639	\$163,665	\$129,617	\$3,925	\$490	\$913,883
2021.2	\$587,765	\$241,091	\$113,077	\$6,312	\$273,652	\$435,655	\$10,716	\$1,124	\$1,669,392
Subtotal 2011-2019									\$21,145,392
Subtotal 2020									\$2,363,012
Subtotal 2011-2019 @Dec-20 <sup>9</sup>									\$21,222,401
Subtotal 2020 @Dec-20 <sup>10</sup>									\$2,332,476
Reduction in Proj Claims 2011-2019									\$77,009
Reduction in Proj Claims 2020									(\$30,536)

<sup>9</sup> Table A9.2, Row [3]; Allen Dec. 2020

<sup>10</sup> Table A9.4, Row [3]; Allen Dec. 2020

Sources:

Bodily Injury 2011.1 to 2021.1, from Table A2, Column [7]

All Other Coverages, 2011.1 to 2021.1, from Oliver Wyman June 2021, Appendix B, Column (7)

2021.2 from Table A4, Row [9]

#### A4. Premium Increases and Claims Cost Reductions

Table A7 – Calculation of Premium and Total Revenue per Earned Vehicle in 2016 Dollars

Acc Yr	[1] No of Earned Vehicles, Third Party Liability	[2] Earned Premium (000s)	[3] Investment Income (000s)	[4] Total Revenue (000s)	[5] Earned Premium per Vehicle	[6] Total Revenue per Vehicle	[7] Alberta CPI June	[8] Alberta CPI (Avg for 2016)	[9] Earned Premium per Vehicle in 2016 Dollars	[10] Total Revenue per Vehicle in 2016 Dollars
2011	2,307,231	\$2,476,448	\$297,481	\$2,773,929	\$1,073	\$1,202	125.3	135.2	\$1,158	\$1,297
2012	2,391,967	\$2,579,377	\$288,176	\$2,867,553	\$1,078	\$1,199	126.9	135.2	\$1,149	\$1,277
2013	2,480,393	\$2,729,253	\$242,945	\$2,972,198	\$1,100	\$1,198	129.8	135.2	\$1,146	\$1,248
2014	2,576,836	\$2,923,219	\$321,836	\$3,245,055	\$1,134	\$1,259	132.3	135.2	\$1,159	\$1,287
2015	2,652,270	\$3,089,346	\$303,690	\$3,393,036	\$1,165	\$1,279	134.5	135.2	\$1,171	\$1,286
2016	2,678,744	\$3,186,095	\$244,858	\$3,430,953	\$1,189	\$1,281	136.3	135.2	\$1,180	\$1,270
2017	2,692,841	\$3,308,650	\$307,155	\$3,615,805	\$1,229	\$1,343	136.9	135.2	\$1,213	\$1,326
2018	2,747,911	\$3,524,796	\$203,827	\$3,728,623	\$1,283	\$1,357	140.7	135.2	\$1,233	\$1,304
2019	2,783,093	\$3,783,278	\$351,045	\$4,134,323	\$1,359	\$1,486	142.7	135.2	\$1,288	\$1,407
2020	2,780,932	\$4,069,377	\$368,278	\$4,437,655	\$1,463	\$1,596	145.0	135.2	\$1,364	\$1,488
2021	2,800,263	\$4,339,943	\$344,039	\$4,683,982	\$1,550	\$1,673	148.9	135.2	\$1,407	\$1,519

Sources:

[1], [2] for 2011 to 2020: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[1] for 2021: Table A5, Row [16]

[2] for 2021: Table A5, Row [11]

[3] for 2011-2019: Table A9.2, Row [16]; Allen Dec. 2020

[3] for 2020-2021: Table A9.4, Row [16]; Allen Dec. 2020

[4]: [2] + [3]

[5]: [2] / [1]

[6]: [4] / [1]

[7], [8]: Statistics Canada

[9]: [5] x [8] / [7]

[10]: [6] x [8] / [7]

Table A8 – Calculation of Loss and LAE per Earned Vehicle in 2016 Dollars

Acc Yr	[1] No of Earned Vehicles, Third Party Liability	[2] Incurred Loss and LAE (000s)	[3] Bill 41 PJI Reduction (000s)	[4] Bill 41 MIR Reduction (000s)	[5] Incurred Loss and LAE, Less Bill 41 (000s)	[6] Loss and LAE per Vehicle	[7] Alberta CPI June	[8] Alberta CPI (Avg for 2016)	[9] Loss and LAE per Earned Vehicle In 2016 Dollars
2011	2,307,231	\$1,654,603	\$1,557		\$1,653,046	\$716	125.3	135.2	\$773
2012	2,391,967	\$1,940,949	\$1,162		\$1,939,787	\$811	126.9	135.2	\$864
2013	2,480,393	\$2,098,286	\$2,181		\$2,096,105	\$845	129.8	135.2	\$880
2014	2,576,836	\$2,298,666	\$3,605		\$2,295,061	\$891	132.3	135.2	\$910
2015	2,652,270	\$2,519,527	\$7,519		\$2,512,008	\$947	134.5	135.2	\$952
2016	2,678,744	\$2,598,036	\$8,555		\$2,589,481	\$967	136.3	135.2	\$959
2017	2,692,841	\$2,567,219	\$13,656		\$2,553,563	\$948	136.9	135.2	\$937
2018	2,747,911	\$2,709,064	\$23,878		\$2,685,186	\$977	140.7	135.2	\$939
2019	2,783,093	\$2,759,042	\$32,324		\$2,726,718	\$980	142.7	135.2	\$928
2020	2,780,932	\$2,363,012	\$26,209		\$2,336,803	\$840	145.0	135.2	\$784
2021	2,800,263	\$2,583,275	\$42,004	\$212,820	\$2,328,451	\$832	148.9	135.2	\$755

Sources:

[1] for 2011 to 2020: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[1] for 2021: Table A5, Row [16]

[2] for 2021: Table A6, "Total" Column

[3] for 2011 to 2019: Table A9.2, Row [18], Allen Dec 2020

[3] for 2020: Table A9.4, Row [19], Allen Dec 2020

[3] for 2021: [1] x \$15 / 1,000 (Estimate of Savings from "Driving Change: Auto Insurance that Works" issued by the Insurance Bureau of Canada on March 6, 2020)

[4] for 2021: [1] x \$76 / 1,000 (Estimate of Savings from "Driving Change: Auto Insurance that Works" issued by the Insurance Bureau of Canada on March 6, 2020)

[5]: [2] – [3] – [4]

[6]: [5] / [1]

[7], [8]: Statistics Canada

[9]: [6] x [8] / [7]

Table A9 – Projection of Written Third Party Liability Premium, 2021, as at June 2021 (for Projection of 2021 Health Cost Recovery)

	Third Party Liability
[1] 2021.1 Written Premium (000s)	\$1,262,086
[2] 2020.2 Written Vehicles	1,414,815
[3] 2020.1 Written Vehicles	1,367,654
[4] 2021.1 Written Vehicles	1,399,347
[5] Growth from 2020 to 2021 in Written Vehicles	2.3%
[6] Projected 2021.2 Written Vehicles	1,447,601
[7] 2021.1 Written Premium (000s)	\$1,262,086
[8] 2021.1 Written Vehicles	1,399,347
[9] 2021.1 Average Written Premium	\$901.91
[10] Projected 2021.2 Written Premium @Jun-21 (000s)	\$1,305,607
[11] Projected 2021 Written Premium @Jun-21 (000s)	\$2,567,693

Sources:

[1], [2], [3], [4], [7], [8]: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[5]:  $[4]/[3] - 1$

[6]:  $[2] \times (1 + [5])$

[9]:  $[7]/[8]$

[10]:  $[6] \times [9]$

[11]:  $[1] + [10]$

Table A10 – Calculation of Health Cost Recovery per Earned Vehicle in 2016 Dollars

Acc Yr	[1] No of Earned Vehicles, Third Party Liability	[2] Written Premium, Third Party Liability (000s)	[3] Health Cost Recovery Assessment Factor	[4] Health Cost Recovery (000s)	[5] Health Cost Recovery per Earned Vehicle	[6] Alberta CPI June	[7] Alberta CPI (Avg for 2016)	[8] Health Cost Recovery per Earned Vehicle in 2016 Dollars
2011	2,307,231	\$1,174,169	6.99%	\$82,074	\$36	125.3	135.2	\$38
2012	2,391,967	\$1,240,429	6.10%	\$75,666	\$32	126.9	135.2	\$34
2013	2,480,393	\$1,329,372	4.80%	\$63,810	\$26	129.8	135.2	\$27
2014	2,576,836	\$1,454,758	5.00%	\$72,738	\$28	132.3	135.2	\$29
2015	2,652,270	\$1,574,993	6.44%	\$101,430	\$38	134.5	135.2	\$38
2016	2,678,744	\$1,696,698	5.90%	\$100,105	\$37	136.3	135.2	\$37
2017	2,692,841	\$1,815,270	5.67%	\$102,926	\$38	136.9	135.2	\$38
2018	2,747,911	\$1,977,498	7.04%	\$139,216	\$51	140.7	135.2	\$49
2019	2,783,093	\$2,185,870	6.70%	\$146,453	\$53	142.7	135.2	\$50
2020	2,780,932	\$2,439,634	4.74%	\$115,639	\$42	145.0	135.2	\$39
2021	2,800,263	\$2,567,693	2.94%	\$75,490	\$27	148.9	135.2	\$24

Sources:

[1], [2] for 2011 to 2020: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[1] for 2021: Table A5, Row [16]

[2] for 2021: Table A9, Row [11]

[3]: Tax and Revenue Administration (TRA), Alberta; Health Cost Recovery Special Notice Vol. 6 No. 25

[4]: [2] x [3]

[5]: [4] / [1]

[6], [7]: Statistics Canada

[8]: [5] x [7] / [6]

Table A11 – Calculation of General Expenses per Earned Vehicle in 2016 Dollars

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Acc Yr	No of Earned Vehicles, Third Party Liability	Earned Premium (000s)	Benchmark Administrative Expense Ratio	General Expenses (000s)	General Expenses per Earned Vehicle	Alberta CPI June	Alberta CPI (Avg for 2016)	General Expenses per Earned Vehicle in 2016 Dollars
2011	2,307,231	\$2,476,448	24.2%	\$599,301	\$260	125.3	135.2	\$280
2012	2,391,967	\$2,579,377	24.2%	\$624,209	\$261	126.9	135.2	\$278
2013	2,480,393	\$2,729,253	24.2%	\$660,479	\$266	129.8	135.2	\$277
2014	2,576,836	\$2,923,219	24.2%	\$707,419	\$275	132.3	135.2	\$281
2015	2,652,270	\$3,089,346	25.4%	\$784,694	\$296	134.5	135.2	\$297
2016	2,678,744	\$3,186,095	26.7%	\$850,687	\$318	136.3	135.2	\$315
2017	2,692,841	\$3,308,650	27.8%	\$919,805	\$342	136.9	135.2	\$337
2018	2,747,911	\$3,524,796	26.6%	\$937,596	\$341	140.7	135.2	\$328
2019	2,783,093	\$3,783,278	26.7%	\$1,010,135	\$363	142.7	135.2	\$344
2020	2,780,932	\$4,069,377	26.0%	\$1,058,038	\$380	145.0	135.2	\$355
2021	2,800,263	\$4,339,943	26.0%	\$1,128,385	\$403	148.9	135.2	\$366

Sources:

[1], [2] for 2011 to 2020: Exhibit AUTO7501-AB-2021, General Insurance Statistical Agency (GISA)

[1] for 2021: Table A5, Row [16]

[2] for 2021: Table A5, Row [11]

[3] for 2011 to 2014: Benchmark Administrative Expense Ratio, October 2014 (earliest available benchmark currently available at the AIRB website), Alberta Auto Insurance Rate Board (AIRB)

[3] for 2015 to 2020: Benchmark Expense Ratio, April of subsequent year, Alberta Auto Insurance Rate Board (AIRB)

[3] for 2021: Benchmark Administrative Expense Ratio, October 2021 (most recent published benchmark), Alberta Auto Insurance Rate Board (AIRB)

[4]: [2] x [3]

[5]: [4] / [1]

[6], [7]: Statistics Canada

[8]: [5] x [7] / [6]



Table A12 – Comparison of Total Revenues per Vehicle to Expenses per Vehicle, in 2016 Dollars

Acc Yr	[1]  Earned Premium per Earned Vehicle in 2016 Dollars	[2]  Total Revenues per Earned Vehicle in 2016 Dollars	[3]  Loss and LAE per Earned Vehicle In 2016 Dollars	[4]  Health Cost Recovery per Earned Vehicle in 2016 Dollars	[5]  General Expenses per Earned Vehicle in 2016 Dollars	[6]  Total Expenses per Earned Vehicle in 2016 Dollars	[7]  Excess of Total Revenues Over Expenses in 2016 Dollars
2011	\$1,158	\$1,297	\$773	\$38	\$280	\$1,092	\$206
2012	\$1,149	\$1,277	\$864	\$34	\$278	\$1,176	\$102
2013	\$1,146	\$1,248	\$880	\$27	\$277	\$1,184	\$64
2014	\$1,159	\$1,287	\$910	\$29	\$281	\$1,220	\$67
2015	\$1,171	\$1,286	\$952	\$38	\$297	\$1,288	(\$2)
2016	\$1,180	\$1,270	\$959	\$37	\$315	\$1,311	(\$40)
2017	\$1,213	\$1,326	\$937	\$38	\$337	\$1,312	\$14
2018	\$1,233	\$1,304	\$939	\$49	\$328	\$1,316	(\$12)
2019	\$1,288	\$1,407	\$928	\$50	\$344	\$1,322	\$85
2020	\$1,364	\$1,488	\$784	\$39	\$355	\$1,177	\$311
2021	\$1,407	\$1,519	\$755	\$24	\$366	\$1,145	\$373

Sources:

[1]: Table A7, Column [9]

[2]: Table A7, Column [10]

[3]: Table A8, Column [9]

[4]: Table A10, Column [8]

[5]: Table A11, Column [8]

[6]: [3] + [4] + [5]

[7]: [2] – [6]