

July 27, 2021

Alberta Automobile Insurance Rate Board  
2440 Canadian Western Bank Place  
10303 Jasper Avenue  
Edmonton, AB T5J 3N6

Attention: Ms. Charlene Butler, MBA, BSc, BComm, Chair

RE: FA Written Submission in regards to the AIRB Draft Review of 2020-H2 Industry PPV and CV Experience

Dear Ms. Butler,

Facility Association has reviewed the draft Oliver Wyman (“OW”) reports entitled “*Annual Review of Industry Experience – Preliminary Report as of December 31, 2020 Private Passenger Vehicles*” dated June 9, 2021, and “*Annual Review of Industry Experience – Preliminary Report as of December 31, 2020 Commercial Vehicles*” dated June 10, 2021 (“OW Reports”).

We are pleased to provide our written submission for your consideration. Our comments are focused on the availability of automobile insurance in the voluntary market in Alberta, providing consumers a choice both in terms of insurance provider and the type and amount of coverage available<sup>1</sup>. We believe this dovetails with the Alberta Automobile Insurance Rate Board (AIRB) vision of fostering an efficient and effective automobile insurance market with fair and predictable rates.

We continue to be concerned with the potential availability issues in Alberta at the current time. Except for 2020 (mainly due to the impact of COVID-19), the OW estimates of PPV loss ratios (indemnity, ALAE, and ULAE) have been improving (marginally) from their accident year 2016 peak. However, they remain well above the 65% level we estimate, which would be consistent with the proposed benchmarks as per the OW Reports.

We estimate that the OW future trend selections at the coverage level will translate to an overall loss cost future trend rate of 4.5% for private passenger vehicles and 3.7% for commercial vehicles.

It is challenging to promote both fairness and predictability in automobile insurance rates at a time when the underlying costs of benefits provided by the insurance product are very difficult to predict, as stated

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<sup>1</sup>Consumers in Alberta are required to purchase \$200,000 of third party liability protection. However, it is clear that consumers see value in broader insurance coverage to protect them and their financial wellbeing, as only 0.1% of individually-rated private passenger vehicles were insured for the required minimum third party liability limit, according to 2020 data found in GISA industry data (the AUTO7501). Further, 73% purchased protection for their vehicle against collision/upset, and 86% purchased protection for their vehicle against theft and non-collision damage. We believe these statistics show a clear consumer appetite in the province for automobile insurance across many of the perils to which owning or operating an automobile exposes consumers.

in several passages of the OW Reports.

In light of this, we believe it is important to reiterate our position that the AIRB should use the benchmarking exercises to inform its considerations of rate filings, rather than to set specific targets, caps, or floors with respect to any one particular assumption. This approach opens the opportunity for insurers to reflect their own assessment of future costs in providing their product / service to the consumer, and allows them to set their rates based on their assessment of the competitive market in which they operate. This, we believe, will result in the greatest consumer choice in both providers and products, while maintaining fairness to all parties as well as a healthy competitive market.

In contrast, benchmark assumptions, which set values, floors or caps, may adversely impact availability of voluntary automobile insurance in the province, to the extent that capital providers in the voluntary market take an adverse view of their ability to charge rates that they have assessed relative to the future costs and risk of providing insurance.

More broadly (i.e. beyond just a focus on reform factors and trends), there are areas of uncertainty where we believe the AIRB should allow flexibility for companies when selecting assumptions supporting their rate applications. These include:

- Impact of COVID-19 and the 2020 reforms, including introduction of DCPD;
- Selection of industry ultimate claim counts and amounts supporting their analyses (including trend analyses);
- Selection of trend models (including the underlying methodology and approach) and associated estimates of trends or other changes to claims metrics;
- Large loss and catastrophe loss loadings and methodologies;
- Operational expenses; and
- Profit provisions (both in terms of the metric to use, and the level to target).

As noted in prior submissions, we believe that it is important to begin laying the foundation for a flexible future system, where insurers are able to include their best estimates of future costs based on their own assumptions, judged by the AIRB on their own merit and the basis of reasonableness, considering prediction uncertainty.

We would also like to acknowledge the introduction of DCPD, and the filing guidelines for insurers to split TPL and introducing DCPD<sup>2</sup>. The introduction of DCPD coverage ensures physical damage costs will vary with the vehicle rate groups, and to that end will allow for more responsive pricing/segmentation while making the claim process more efficient for all stakeholders. We realize that the introduction of DCPD in itself combined with its unique interaction with the Grid structure, will result in initial dislocation at the individual vehicle level, but we believe this will allow the voluntary market in Alberta to be as competitive as it can be.

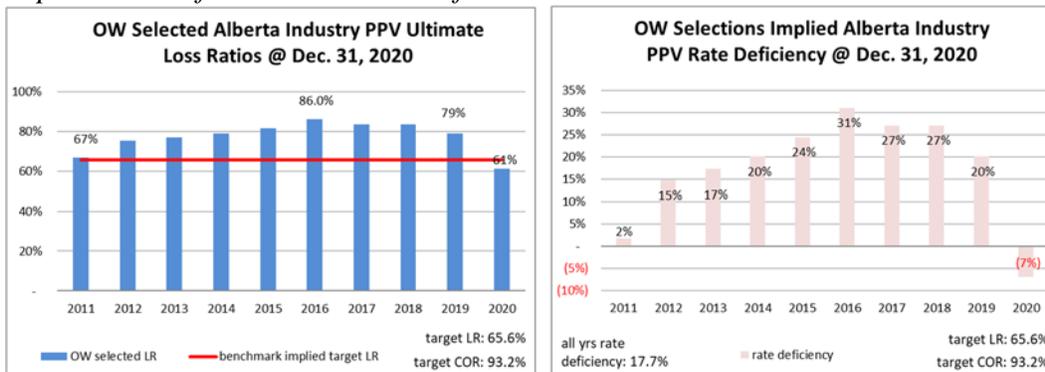
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<sup>2</sup> Filing Guideline for DCPD Filings Change in Rates and Rating Programs effective April 1, 2021, and PPV DCPD rate is not subject to grid rate cap.

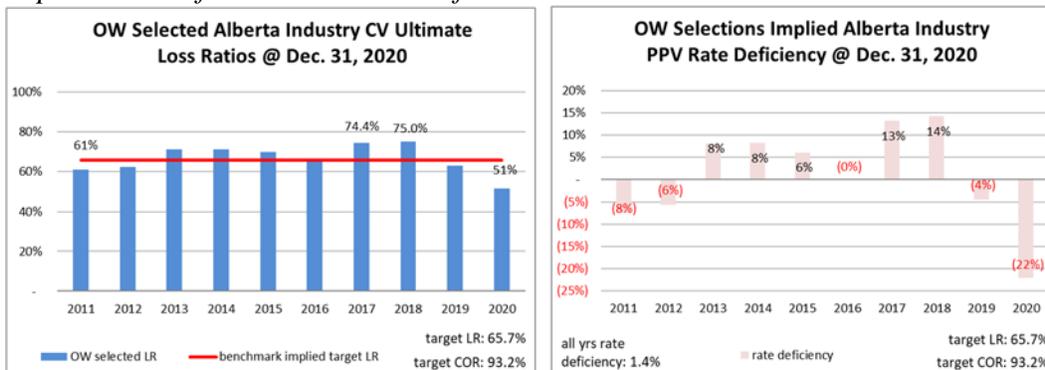
In considering these areas of potential flexibility, it is important to recognize the extent of the current estimated rate deficiency in the province. Based on our interpretation, the proposed benchmark assumptions would indicate target indemnity and claims expense ratios of approximately 66% for PPV and CV. The charts below summarize estimated rate deficiencies, by accident year, relative to this target level. For PPV, this ranges from 2% (2011) to 31% (2016) deficient, except in 2020 due to COVID-19 impact, with a weighted average rate deficiency of 18% or **greater than \$5.6 billion in PPV premium shortfall over that 10-year period.**

It is important to note that these are not estimates of actual hindsight rate deficiencies, but rather estimated rate deficiency when applying the OW benchmark assumptions per the current preliminary benchmark report. We have not attempted to put claims or premium amounts “on-level” (i.e. adjusted claims for trends/reforms over time; adjusted premium levels for premium trend and rate changes).

*Industry Alberta PPV @ December 31, 2020 - OW selected indemnity, ALAE, ULAE LRs and implied rate deficiencies on basis of OW selected current benchmarks*



*Industry Alberta CV @ December 31, 2020 - OW selected indemnity, ALAE, ULAE LRs and implied rate deficiencies on basis of OW selected current benchmarks*



The Alberta industry CV average premium deficiency over the past 10 years is not as significant (1.4%), however, the FARM CV market share has increased from 1.2% in 2017 to 2.0% in 2019 (2020 industry AIX data is not available at this time). With the continued decrease of the industry CV exposures since 2015 and increasing FARM CV market share, we would recommend the Board also take future CV coverage availability into consideration when reviewing the CV benchmark loss cost trends.

As mentioned in our last written submission (*AIRB Semi-Annual Review of Industry Experience as at June 30, 2020*), we would recommend, to help users of the OW Reports, that a formal Actual vs. Expected (AvE) emergence column be added to the exhibits in Appendices C and D. We appreciate OW's response '*our view providing actual versus expected information in Appendices C and D does not add significant value to the report*' but still believe that it would be useful. This would help users of the OW Reports in assessing changes in ultimate from prior analysis against actual emergence. In addition, we recommend that Actual vs Estimated frequency, severity and loss cost<sup>3</sup> be added to Table 2 through Table 6 to help users of the OW Reports in assessing changes in frequency, severity and loss cost from prior estimates against actual values.

The OW Reports discuss the reforms including Bill 41, but we would recommend that the impact of the 2020 reform (Bill 41) on the loss and loss cost be included in the loss trend models, similar to the OW annual review for Ontario PPV<sup>4</sup>, to aid users in assessing changes of loss cost, and more importantly, changes to the future loss cost. Bulletin 08-2020 shared OW reports related to the reforms, but again we believe that it would be useful for readers to have further input in the Annual Review, as this extensive report could then be used as a standalone report.

Finally, more specific to the trends outlined in the OW Report, we discuss the following issues and our views more broadly over the following pages:

- Selection of ultimates and valuation methodologies;
- Use of indemnity + ALAE + ULAE vs use of indemnity alone;
- Selection of loss trend rates (reforms and COVID-19); and
- DCPD introduction

Any questions related to this submission may be directed to Philippe Gosselin by email at [pgosselin@facilityassociation.com](mailto:pgosselin@facilityassociation.com) or by phone at 416-644-4968.

Best regards,



Philippe Gosselin, FCAS, FCIA  
VP Actuarial & CRO

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<sup>3</sup> OW Report Tables 2 to 6 compare the current and prior estimated loss frequency, severity and loss cost, but do not include a comparison between the actual vs estimated frequency, severity and loss cost.

<sup>4</sup> Preliminary Ontario Private Passenger Vehicles Annual Review - Secured (12 July 2020).

## General Comments

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This document represents the Facility Association (“FA”) written submission to the Alberta Automobile Insurance Rate Board (“AIRB”) with respect to the Oliver Wyman reports entitled “*Annual Review of Industry Experience – Preliminary Report as of December 31, 2020 Private Passenger Vehicles*” dated June 9, 2021, and “*Annual Review of Industry Experience – Preliminary Report as of December 31, 2020 Commercial Vehicles*” dated June 10, 2021 (“OW Reports”).

### *Summary of Selection*

There are many possible models for frequency, severity, and loss costs for each coverage that are valid and reasonable, and the ultimate selection of models by insurers in developing their rates is a matter of judgment and interpretation that can differ among actuaries even when modeling the same data. We put forward that differences like this in general should be viewed as both “okay” and healthy in a competitive environment. We can even say that they should be encouraged and welcomed.

Specifically, we feel it is important for the Board to consider that valid differences in actuarial judgment and opinion can lead to differing selections of ultimates, and differing trend results. Indeed, differing models can fit actual results equally well, and yet, due to their structure (i.e. the selected parameters included in each), result in divergent forecasts.

We also believe the Board should allow the filing insurer to set their prices and market share on their views of ultimates and their selections of models describing frequency/severity/loss costs over time and as projected into the future. The rate review process should focus on whether the filing insurer’s process to arrive at their forecast was reasonable (and consistent with the insurer’s previous views / process / approach unless an explanation is provided as to what has changed and why). If so satisfied, we believe the Board should accept the filing insurer’s view, even if it differs from the view of the Board’s actuary. Forcing all participants in the insurance market place to adopt a single view introduces systemic risk and potentially detracts from the competitive marketplace should certain participants reduce their risk appetite where they do not agree with the imposed view. This can lead to an overly prescriptive regulatory environment, which we believe is not the intention of the Board.

We appreciate the opportunity to provide feedback, but regret that we lack resources to provide a detailed assessment of all aspects of the OW Report and their modeling approach. We have focused our comments on the following areas as a result:

### **1. Selection of ultimates and valuation methodologies**

For all coverages, the OW selection of ultimates (counts / amounts) is based on the selection of loss development factors (chain ladder method) using industry data through December 31, 2020.

We believe it is uncommon practice in Canada for a valuation actuary to rely on a **single valuation methodology in completing a valuation** as this introduces significant model risk (the risk that the model employed is not appropriate or has significant shortcomings for the experience being projected). To minimize model risk it is common to employ different models.

The strengths and weakness of the chain ladder method are well documented in actuarial literature. Some of the limitations (weaknesses/constraints) of the chain ladder method include:

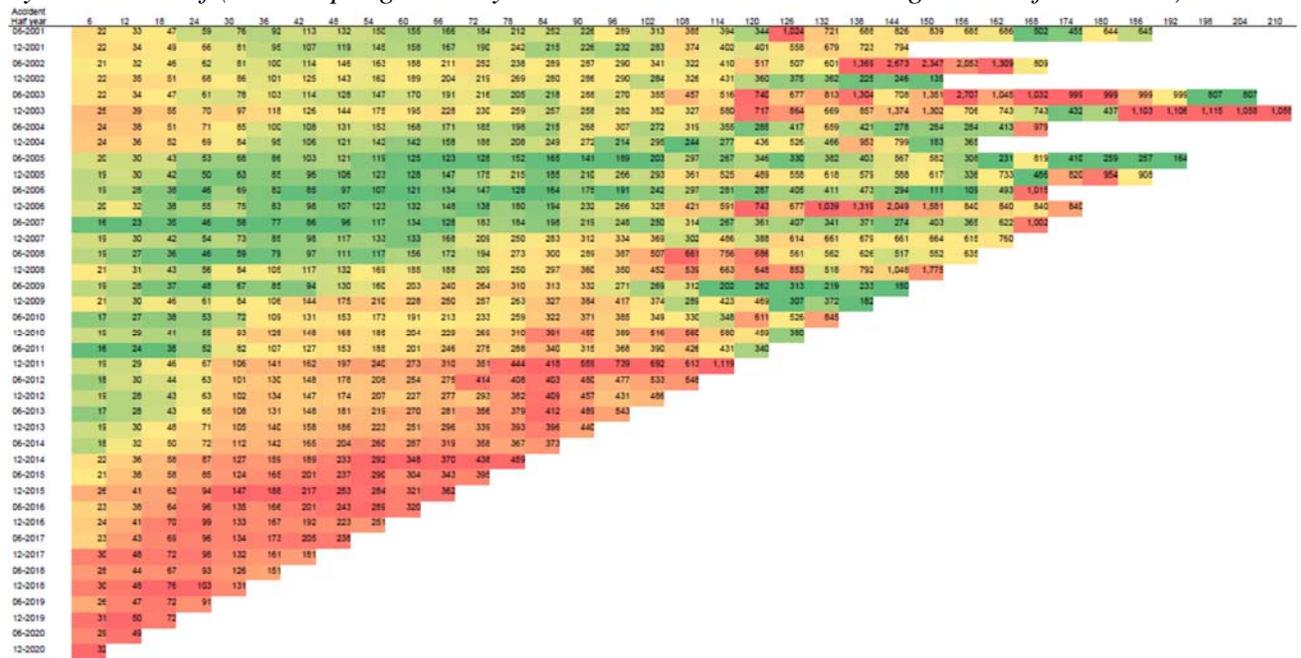
- dependency on the experience, requiring the past to be perfectly predictive of the future – for Alberta experience in particular, there is evidence that claims reporting and development (link ratios) may be changing for some coverages, particularly in the face of increased catastrophic event activity, changes in economic activity, regulatory and potential product reforms, system changes, recent changes in company reserving patterns (changes in case reserve adequacy) and acknowledged data reporting quality concerns;
- highly-leveraged nature – for coverages with long settlement periods (for example, bodily injury), link ratios tend to have significant levels of volatility, particularly at earlier development ages; and
- calendar period (or “settlement period”) trends – we believe there is evidence<sup>5</sup> of inflation on a settlement year basis, where all claims settled one year are inflated relative to similar claims settled in the previous year, and the standard link ratio methodology does **not** properly account for such trends

As an illustration, we have included a “heat map” for the PPV Bodily Injury (BI) indemnity average case reserves on the top of the next page. One would notice that the most recent 8-10 diagonals for accident halves are **showing an increase in the average case reserves**, which would have an impact on valuation estimates based solely on the chain ladder method, and should be taken into consideration.

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<sup>5</sup> FA had been investigating the use of a valuation methodology that incorporates calendar period trends (akin to a GLM methodology). Our review of Alberta PPV data at Dec. 31, 2019 suggested a relatively large statistically significant calendar period trend, for at least some coverages (e.g. our bodily injury models indicate a calendar trend in excess of 6% annualized).

**Industry Alberta PPV Bodily Injury at December 31, 2020**  
**Average Case Reserve Indemnity Only per open claim (Amounts in \$'000s)**  
*by accident half (heat map – green to yellow to red indicates increasing amount for column)*



OW provided a response on the issue of “Consideration of Multiple Methods to estimate ultimate loss and ALAE” for FA’s prior submission (FA AIRB written submission PPV 2020-H1): “any benefits related to the consideration of additional methods would be marginal”<sup>6</sup>.

However, as the selection of ultimates is a critical and foundational input of the loss trend analysis, we believe there are a number of factors contributing to the uncertainty in estimating Alberta Industry ultimates and that the “range of reasonable” valuation estimates is wide which subsequently leads to a wide range of reasonable trend estimates.

We appreciate that the current OW Reports include prior estimates of ultimates as it is beneficial to understand how the historical estimates of ultimates are changing over time (that is, over a longer period of selections, beyond a comparison with the prior semi-annual report). As the AIRB’s vision is for fair and predictable rates, the accuracy of the predictions used for setting benchmarks should be assessed as part of the annual process. It is relatively easy to provide historical actual vs. predicted levels and we suggest that this be done by focusing on loss costs, showing variances in both dollar terms and percentage terms and suggest that a “triangle” format might be a strong visualization tool to aid in the assessment. It might also be possible to estimate the variances that can be attributed to process variance (that is, randomness inherent in the underlying process), and parameter variance (that is, due to either having a sub-optimal model, or having the optimal model, but having selected a sub-optimal parameterization of the model).

<sup>6</sup> 2021 SAR Response Letter to FA dated March 26, 2021.

## 2. Use of indemnity + ALAE + ULAE vs use of indemnity alone

OW uses indemnity plus allocated loss adjustment expense (ALAE) plus unallocated loss adjustment expense (ULAE) as the basis<sup>7</sup> for loss amounts in their trend analysis.

We appreciate OW's response to the prior FA submission: *"Given combined indemnity and expense data is the norm, relevant benchmark trend factors should also be on an indemnity and expense basis"*. We agree that the combined indemnity and expense data is the norm in the industry, but we would like to emphasize that the indemnity and expense data, as well as the underlying development and trend may be significantly different. Consequently, we should consider this if the analysis is based on the combination of both.

We see two primary ways that ULAE/ALAE shifts over **time might impact or distort trend estimates**: differences in development patterns for indemnity and ALAE, and use of a calendar year ULAE factor applied to accident half coverage data.

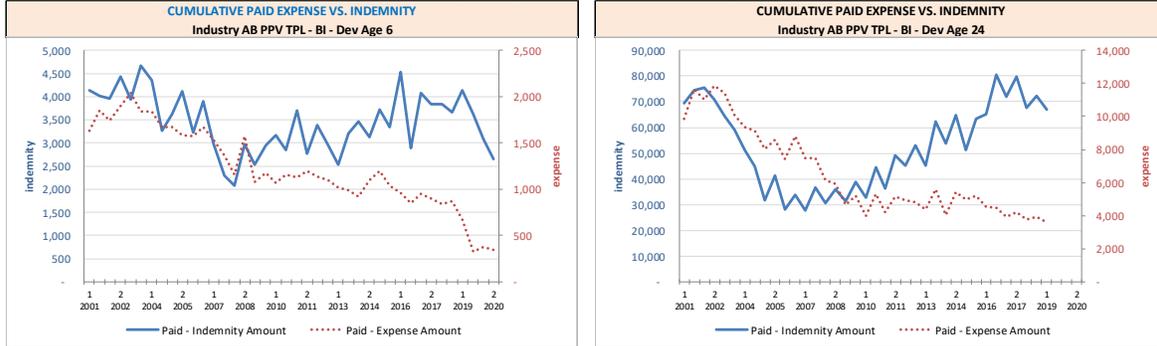
- ALAE develops differently than indemnity:** If the proportion of ALAE to indemnity is reasonably constant, using aggregate indemnity & ALAE triangles to determine ultimate levels is not problematic. However, if the relation changes (particularly in Alberta PPV, where we've seen impacts related to technology and claims system changes and, in particular, a legal expense shift from ALAE to ULAE), for any reason, including the situation where ALAE is shifting to or from ULAE, then the aggregate development factors may no longer be appropriate.
- Calendar year ULAE factors applied to accident half data:** As a calendar year factor, ULAE is made up of the sum of ULAE payments made by insurers during the course of a calendar year (and the change in the estimated unpaid ULAE level). In a steady state, it may be reasonable to assume that this would be stable over time. However, as per the OW report, the calendar year ULAE ratios are not stable and in recent years, we have seen a range from 8.5% for calendar year 2016 to 10.8% for calendar year 2019 and 10.3% for calendar year 2020. Furthermore, applying these calendar year factors to accident half data at a coverage level will inappropriately apply the factor equally to first and second accident halves for a given accident year, as well as equally across all coverages.

We also note a continuation of the previous pattern we identified and discussed in prior submissions related to the change in relationship between paid indemnity and paid ALAE for bodily injury. Specifically, we have noted that for PPV by 24 months, the total dollar amount of paid ALAE has remained relatively flat at around \$4 million per accident half, while paid indemnity has increased annually over the same period (close to 4% annually) (see the charts on the next page).

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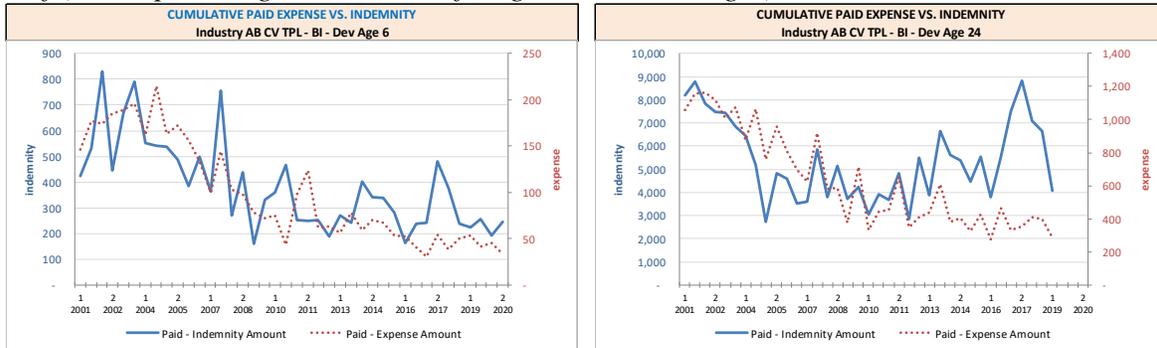
<sup>7</sup> *"Our severity and loss cost estimates include allocated loss adjustment expenses and a provision for the unallocated loss adjustment expenses (ULAE) based on ULAE factors provided by GISA."* [footnote 19 on page 16, OW Report]

*Industry Alberta **PPV BI Paid Indemnity** and **Paid ALAE** at December 31, 2020 by accident half (development age 6 chart on left; age 24 chart on right)*



As per the charts above, for PPV BI at 6 months, indemnity paid started increasing at around 2009 whereas ALAE paid has continued to decrease (both may be leveling out recently (decreasing in 2020 due to COVID-19). At 24 months, while ALAE paid may be leveling out at around 2009, indemnity paid continues to increase until 2016.

*Industry Alberta **CV BI Paid Indemnity** and **Paid ALAE** at December 31, 2020 by accident half (development age 6 chart on left; age 24 chart on right)*



The same patterns don't appear in CV to the same extent. As per the charts above, for CV BI at 6 months, both indemnity paid and ALAE started leveling out at around 2009. At 24 months, while ALAE paid may be leveling out at around 2009, indemnity paid started to increase until around 2015.

If the objective is to minimize any impacts or distortions in the data that may arise from insurers changing their mix of ULAE and ALAE over time, this can be achieved by **modeling indemnity only data and recognizing that individual insurers are in a much better position to make direct adjustments** for any shifts in their usage of ULAE vs ALAE over time, as they deem appropriate.

FA is analyzing the Alberta Industry PPV and CV trends on an indemnity basis only and as explained above, this could result in different selections than those made by OW.

### 3. Selection of loss trend rates (reforms and COVID-19)

OW Reports described reforms, especially 2020 reforms. However, the OW Reports do not include assessments of reforms' impacts, especially the 2020 reforms impacts in bodily injury and accident benefit claims costs<sup>8</sup>. Considering that the impacts of 2020 reforms are important in the context of predicting future claims costs, we believe users of the OW Reports would benefit from having OW comment on how they consider these reforms.

In addition, we believe that including scalar level changes and trend level changes to reflect the reforms' impacts in the trend models, which would be similar to the trend models in the OW Report "Preliminary Ontario Private Passenger Vehicles Annual Review - Secured (12 July 2020)", would be beneficial to the users of the Reports. Inclusion of the reform impacts (scalar level changes and trend level changes if they are statistically significant) in the trend models will help users to understand how the reforms would impact loss, especially future loss, with consideration of the interaction between trend and scalar changes, rather than on an isolated basis, to avoid overstating or understating the overall impacts on the loss of the reform.

The OW Reports loss trend analysis excluded the 2020-1 and 2020-2 data points for the coverages that have seen a significant change in claim costs as a result of COVID-19, this is consistent with FA's trend analysis and it is our position until such time that there is sufficient data to properly adjust or include 2020 in the analysis.

The difficulty with COVID-19 is to foresee the exact end of the pandemic and therefore identify if a rating program will be effective when COVID-19 continues to have impact on claims costs or not.

The impact of COVID-19 is difficult to predict, as various factors could affect the future exposures and losses and there is still a lot of uncertainty around those. Will the frequency be back to normal? Will the exposure be the same (e.g. km driven)? Will severity increase for physical damage coverage considering supply chain issues (e.g. electronic chips)? Even though we might believe or hope that it will be different, we believe, at this point in time, that pre-pandemic experience is the best representation of post-pandemic experience.

### 4. Introduction of DCPD

OW Reports briefly discussed the introduction of DCPD and the Grid Rate system changes, but we would recommend the inclusion of a more detailed discussion on the implementation of DCPD and its impact on consumers. We believe implementing DCPD and using the DCPD market premium rather than capped in the Grid Rate system will increase voluntary market participation and rate accuracy for the insureds.

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<sup>8</sup> FA has applied AIRB bulletin 08-2020 reform impact factors in our bodily injury and accident benefit trend models as a scalar adjustment to estimate the future loss cost under the new automobile insurance system.