Saskatchewan Rate Review Panel (SRRP)

2021 Saskatchewan Auto Fund (SAF) Rate Review
Round 2 Information Requests
August 4, 2021

The following questions may require a response that will be deemed confidential by SAF. The Corporation is to identify those questions and file responses in confidence.

SRRP (SAF) 2-1

Application Part and Chapter:	**SRRP (SAF) 1-3 (a)**	**Page No.:**	
Issue:	**General**		
Topic:	**Ratepayer Stakeholder Consultations – Taxicab & TNC**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

a) Please update the table on Collision Damage Urban Taxi vs PPV including 2021.

b) Please provide an updated graph and table of supporting data for Collision, Damage and Medical, including 2021.

RESPONSE:

a) and b) The analysis using an additional year of data has begun, but the adjustments to clean the data, trim out large losses, apply assumptions through loss adjustment factors and develop claims to their ultimate values has not been completed yet. This would be required in order to provide the additional data points and will not be ready until September or October of 2021.

SRRP (SAF) 2-2

Application Part and Chapter:	**SRRP (SAF) 1-3 (c)**	**Page No.:**	
Issue:	**General**		
Topic:	**Ratepayer Stakeholder Consultations – Taxicab & TNC**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

a) Please indicate to what extent SAF verified the number of KM travelled by a taxi in Saskatchewan on an annual basis and whether it compared with that used by the Livery Transportation Advisory Committee.

b) Please explain how SAF determined the Average rate per KM to be charged given the distribution of averages by community. Why no differential rate for rural?

RESPONSE:

a) No data on the number of kms travelled by a Saskatchewan taxi was available for comparison or analysis.

b) Given that this is a new product and that there was no vehicle for hire (VFH) data to rely on for the determination of VFH rates, we chose to implement a simple initial rate as a starting point based on the adequate rates and an estimate of average kilometers for a taxi in Regina and Saskatoon. Analysis and any differentiation of rates based on location or on the different phases of ridesharing will be determined once we have collected enough VFH data.

SRRP (SAF) 2-3

Application Part and Chapter:	**SRRP (SAF) 1-4**	**Page No.:**	
Issue:	**Indicated Rates**		
Topic:	**Motorcycles – Rate Comparison**		
MFR:	**6**		

Preamble to IR (If Any):

The current average premium for motorcycles is $1,747, with a proposed change of +10.1% resulting in a proposed average premium of $1,924. The proposed average premium would be higher if the rate indication, +34% for motorcycles, was adopted without capping.

As is the case with private passenger vehicles, amongst other reasons, it is challenging to "fairly" compare the motorcycle rates in SK to other provinces due to benefit level differences. The closest comparison is to Manitoba with a public auto no-fault system.

Manitoba Public Insurance recently filed its 2022 rate application including a motorcycle rate comparison by individual driver profile. https://www.mpi.mb.ca/pages/rate-application.aspx; See Part III Benchmarking, Appendix 2 (page 226 of 2196). In all cases, the SK motorcycle rates were higher than MB rates, and often substantially higher, in the range of +50% or more.

Question:

Can SAF provide:

a) Additional rate comparisons to supplement work done by the Manitoba Public Insurance to assist in the understanding of how motorcycle rates in SK compare to other provinces.

b) Beyond differences in Loss Transfer rules, can SAF provide additional insight as to why the motorcycle rates in SK are materially higher than those in MB, and given this insight, provide recommendations of changes to more closely align the SK indicated rate level to that of MB.

c) A summary of any discussions around the concept of Loss Transfer (similar to Manitoba) that has been held internally or at any Motorcycle consultations in the past?

d) If a change to Loss Transfer is not doable at this time due to system constraints, could the shifting of costs from motorcycles to other vehicles (that Loss Transfer provides) be achieved by a percentage reduction to the motorcycle claims included in the rate indication model – that are carried over as a percentage load to all other vehicles - as a final step in the rate indication model?

RESPONSE:

a) See attachment IR 2–3 Prorated Premiums for a table that provides a more accurate comparison of premiums paid between SAF customers and other cities in Canada. Note that Regina (Annual) is reported as the price a motorcyclist would pay if they registered for one full year. Currently, around 5% of motorcycles registered through SAF are licensed for the full year, and 40% are licensed for 5 or 6 months. MPI defines their riding season as 5 months, so the Regina (Adjusted) premium was calculated as if the motorcycles were registered for the riding season (five months) and then a policy from SGI CANADA is purchased to provide unlicensed coverage for the remaining non-riding season (seven months). This is a more accurate representation of what a motorcyclist would pay in a year in Saskatchewan and serves as a more consistent comparison with the seasonally rated premiums among the other provinces. As shown in the SK Rank column of the attachment, SGI premiums are among the lowest for many of the profiles. Additionally, within IR 2–8, the ICBC rate comparison conducted by Ernst & Young features two motorcycle profiles 25 and 26 where SAF provided the motorcycle quotes on the prorated basis described above and ranks as the lowest compared to ICBC and MPI. Going forward, SAF's rates will be included on the prorated basis in MPI's motorcycle comparison.

b) As stated in part (a), Saskatchewan rates paid by customers are not materially different than those in Manitoba. The results of the seasonally rated motorcycle analysis in the response to IR 2 – 4 is consistent with the 35% to 45% difference between the annual and prorated SK premiums in part (a). The original MPI comparison was presented based on different rating structures.

c) Internal loss transfer discussions were held in August of 2010 as the system was being updated. The system upgrade offered an opportunity to start allocating injury claims to rating classes by fault. At the time, damage and liability claims were already being allocated by fault, so the change to injury was the final piece in having all coverages handled in a consistent manner. This loss transfer change was included in the 2012 rate program indication and resulted in a $30M reallocation of incurred losses out of the motorcycle class and into the rating classes that were at-fault for those claims. SAF allocates a 100% of the claim to the at-fault rating class whereas the preamble to IR 2-29 below states that MPI claims involving MPI-insured vehicles (one or more) are allocated equally (per vehicle) across the rating categories to which those vehicles belong. The SAF treatment of allocating claims to rating classes based on fault is described in each rate application (excerpt below) and repeated during stakeholder and public hearings.

For the actuarial rate analysis, claims are assigned to vehicle classes based on vehicle collision responsibility (fault). If a vehicle was involved in a collision (single or multi-vehicle) and there is no at-fault vehicle, then all claim costs remain with the vehicle for rating purposes. This includes wildlife collisions.

See the response to 2-29 for further discussion on loss transfer.

d) As mentioned in part c, loss transfer, or claim allocation by fault, has been a part of the rate indications since the 2012 rate program.

SRRP (SAF) 2-4

Application Part and Chapter:	**SRRP (SAF) 1-4** **SRRP (SAF) Pre-Ask - 4**	**Page No.:**	
Issue:	**Claims Incurred**		
Topic:	**Motorcycle Claims**		
MFR:	**6**		

Preamble to IR (If Any):

SGI spoke to trends in motorcycle safety and insurance costs, motorcycle rate analysis and one of the options reviewed with motorcycle stakeholders was for motorcycle insurance related to Seasonal rating:

SAF states in response to SAF Pre-Ask - 4

> "*Seasonal rating for motorcycles, where premium collected would no longer be divided evenly between each month insured, but instead be weighted toward the months motorcycles are actually ridden and at risk of collision, significantly lowering the cost of a full year of motorcycle insurance….*
>
> *The group was made aware that daily rating and seasonal rating options require significant computer system changes and would not be possible to implement until SGI completes replacement of its systems."*

Question:

a) Please provide any analysis or further description of seasonal rating schemes that SAF has reviewed.

b) Please explain the administrative difficulty in SAF providing seasonal rates and why system changes are required to offer such a rate.

RESPONSE:

a) The attachment is a slide that was presented to the motorcycle stakeholder groups to show an example of how seasonal rating compares to the current rating for a 2018

Yamaha XT1200Z Super Tenere ES. May to September seasonal premiums are $16 higher than the current equally prorated monthly premium of $225. April and October are $74 less and no premium would be assessed in the remaining non-riding season months. The annual seasonal premium ends up being 44% less than the current annual premium. This is strictly a conversion from annual to seasonal rates. Indicated rate changes were not factored into this calculation. The seasonal rating structure could be implemented with some minimum premium, like 15% of the annual seasonal if customers are registering for short terms or during the non-riding season months. Details like this will need to be determined while the system transformation work is underway.

The seasonal rates were determined by defining the riding season through a selection of weights for each month that were consistent with the loss experience of motorcycles. These weights were converted to factors (for example, if 16% weight were allocated to May, the factor would be 16%*12 = 1.92) and applied to adjust premiums by month and align the timing of premiums and claims. Based on our proof of concept, if policyholder purchasing behaviour were unchanged, applying this seasonal adjustment with no cap would essentially increase the premium base by 88% and therefore an opposite adjustment is required for the base rate to offset the effect of the seasonal adjustment (1/1.88). However, as this rating scheme is likely to cause additional riding during the off-season months, we also increased the resulting rates by 5% to account for additional claims resulting from this risk.

b) Currently the system stores one annual premium for every possible combination of rating variables. The system stores 180 different rates for motorcycles among the body styles, model years and engine capacities that make up the current rating tables. The proposed motorcycle tables have expanded engine capacity categories and will need to have 720 premiums stored. Short-term registrations in any rating class are calculated by equally prorating these annual premiums in the system by the number of days in the term. For instance, a 2015 motorcycle classified in the cruiser body style with 700cc engine capacity has an annual premium of $1,827. If this motorcycle was registered for five months, the system would calculate a $761 premium ($1,827 * 5/12) for this term length, regardless of which five months of the year the motorcycle is registered. For this example, each month of insurance would cost $1,827/12 = $152. When a registration is

cancelled, refunds are also calculated by equally prorating the premium by the number of days that were left unused in the term, less any administration fees. The system does not have the functionality to weight different days/periods of the term differently. It can currently only weight each day of the year equally. Systems changes would be required to allow for seasonal rating, otherwise short-term registrations and cancellation refunds for seasonally rated vehicles would need to be calculated, billed and entered into the system manually, resulting in a significant administrative burden and a poor customer, issuer and employee experience. Manual work also increases the risk that the rates charged are inaccurate.

When the seasonal rating option was explored following the Motorcycle Review in 2013, estimates were provided to update the current system and add the ability to store or calculate monthly premiums that varied. These estimates ranged from two to four years with additional downstream implications for continuous or AutoPay customers who pay monthly premiums, and the Safe Driver Recognition and Business Recognition programs. Given that the system transformation is occurring, no updates are being made to the current system slated to be replaced.

SRRP (SAF) 2-5

Application Part and Chapter:	**SRRP (SAF) 1-5 SRRP(SAF) 1-77 (c) SRRP(SAF) 1-81 (a) & (b)**	**Page No.:**	
Issue:	**General**		
Topic:	**Non-Controllable Expenses**		
MFR:	**3, 18, 21**		

Preamble to IR (If Any):

SRRP (SAF) 1-5 SAF indicates:

> *"For 2021-22, costs previously coded as contra expenses were moved out of expense and into revenue. For the 21-22 budget, this increased administration expenses by $8.4 million and traffic safety expenses by $9.1 million compared to the previous method."*

Question:

a) Please provide a breakdown of "other claims costs" by category.

b) Please explain the major increase in "other claims costs" in 2020/21.

c) Please update the schedule breaking out loss adjustment expenses.

d) Please explain the underlying reason for the reallocation of contra expense from Traffic Safety expense in the 2021/22 forecast.

e) Please provide the detail of the contra account amounts that were netted against Administrative expenses and Traffic Safety expenses for the years 2016/17 through 2019/20.

f) Please reconcile the autobody expenses for 2021/22 with the detail provided in response to SRRP (SAF) 1-77. Please explain the increase in 2021/22 relative to prior years.

RESPONSE:

a) Claims incurred have been split by damage and injury claims. In the attachment IR 2-5 tab a) there continues to be another section called 'Other' as this is meant to capture anything that was not specifically called out, such as autobody repair shop costs, medical funding, STARS air ambulance funding, etc.

b) Change in actuarial assumptions and coverage changes (CPP and enhancements to long term injury benefits).

c) See 2-56 for split of LAE from remainder of claims.

d) Historically, the Auto Fund has considered revenues that have been collected to offset Auto Fund programs as contra expenses. The reality is, these are revenues and including them as such increases the transparency in the Auto Fund financial statements.

e) See IR 2-5 tab e)

f) The expected increase in 2021-22 can be attributed to the expectation that the number of claims will return to a much more normal pattern as 2020-21 had lower claims due to the pandemic and fewer drivers on the roads. The projected 2021-22 repair costs are closely aligned with the 2018-19 level. See attachment 2-5 (f).

SRRP (SAF) 2-6

Application Part and Chapter:	**SRRP (SAF) 1-5**	**Page No.:**	**259**
Issue:	**Rate Indication**		
Topic:	**Administrative Expense Increase**		
MFR:	**6**		

Preamble to IR (If Any):

As provided in the Application, SAF is increasing the Administrative Expense provision in the rate application from the actual levels for 2019/2020 and 2020/2021 at $70.1 and $69.2 million, respectively to $92 million; more than a $20 million increase. As provided by SAF in its five-year forecast, continued high level of Administrative Expenses are planned through to 2024/25, with a decline to $82 million in 2025/26. These higher Administrative Expenses are attributed to SAF's transformation plans; of which some costs are treated as an expense and some as a capital expenditure for financial reporting purposes.

Question:

a) Explain how SAF differentiates the treatment of the transformation costs for financial reporting purposes in contrast to how expenses should be included in the rate indication model.

b) Explain why it is reasonable for the rate indication model to have these transformation costs borne by the current policyholders over the next few years, for a transformation that will last beyond the next few years.

c) How would the overall rate indication (+1.7%) and capital margin (-1.8%) change if these transformation costs were not included in the Administrative Expenses and instead considered a capital expenditure (i.e., flow through to the MCT)?

RESPONSE:

a) The treatment of the transformation costs for financial reporting purposes is the same as their treatment in the rate indication model. Using a different basis would no longer support the break-even mandate of the Auto Fund, which is a fundamental component of its rate indication work.

b) Accounting standards dictate the types of expenditures that can be capitalized. This is not unique to SGI's transformation expenditures; it extends through to the treatment of all costs. While some expenditures may meet the definition of capitalization and be amortized in the future to better align the benefits with the costs, others must be expensed up front. In determining the appropriate expenses to include in the rate indication, SGI doesn't believe that there is support to overrule accounting principles that define which costs are expensed up front and which are appropriate to be amortized over time. These standards have been set so as to best align costs with anticipated benefits.

   While some external transformation expenses may be one-time, some or all of the expected internal transformation expenses may not disappear after transformation is complete. Delaying or defraying these costs to future rating years would result in additional rate volatility in the form of a rate reduction now below the break-even level and a rate increase above the break-even level later. See response to 2-59 for details on the difference between internal and external transformation expenses.

c) Please see response to 2-59 for impact on 1.7% basic rate indication. There would be no impact to the capital margin as intangible assets are removed from capital available in the MCT calculation.

SRRP (SAF) 2-7

Application Part and Chapter:	**SRRP (SAF) 1-6 (a)**	**Page No.:**	
Issue:	**Claims Incurred Liabilities**		
Topic:	**IFRS – 17 Accounting Policies**		
MFR:	**6**		

Preamble to IR (If Any):

SGI is in the process of finalizing the accounting policy for discounting claims liabilities consistent with IFRS-17. SGI has options for determining the discount rate under the Standard.

SAF has developed a position paper on Accounting Policy for IFRS-17.

Question:

a) Please provide any commentary or analysis provided by your external auditor or other accounting professional firm on the implications of IFRS 9 and IFRS -17 on SAF.

b) Please indicate the accounting approach the Corporation has determined it will use; top-down or bottom-up combination approach.

c) Please file any analysis or position paper supporting the SAF's expectation as to the method to be used for estimation of the Risk Adjustment.

d) Please indicate whether the Corporation is contemplating any changes in investment strategy or the composition of the investment portfolio to balance the movement of the value of the investment portfolio and claims portfolio should the new standard be implemented. Please file any commentary or analysis done by SAF or AON that addresses this issue.

RESPONSE:

a) No official commentary or opinions available from external auditor at this time. All discussions and feedback have so far been informal.

b) SGI has not finalized its approach at this time. All work so far is draft and is expected to change as guidance is released or changed ahead of the 2023 implementation.

c) The position paper for Risk Adjustment is still in the drafting process.

d) SAF currently holds all investments as fair value through profit and loss. With the adoption of IFRS 9, SAF is expected to continue to have investment result flow through fair value through profit and loss. SAF currently has an investment strategy designed to reduce volatility (liability matching portfolio and return seeking portfolio) and as such no changes in the investment portfolio are being contemplated at this time.

SRRP (SAF) 2-8

Application Part and Chapter:	**SRRP (SAF) 1-9**	**Page No.:**	**128**
Issue:	**Strategic Plan and Performance Measures**		
Topic:	**Cross-Jurisdictional Comparison**		
MFR:	**5**		

Preamble to IR (If Any):

The private passenger vehicle rate comparison provided by SAF is based on specific rates for 34 vehicle and driver profiles in 18 cities within Canada.

Conceptually, this provides an "apples to apples" comparison. However, due to the many differences in geography, traffic density, traffic patterns, vehicle mix, and weather amongst the provinces, in addition to the insurance benefit level differences and mix of broker versus direct writer insurers, as noted by SAF, a comparison is challenging.

As provided by SAF, the average premium in the comparison for SK is $1,231; and this is very close to the current average premium for private passenger vehicles for SAF at $1,257 (Appendix A). Hence, $1,231 is a good representation of the average premium in SK for private passenger vehicles.

And, $1,231 is closely aligned with the public auto system in MB at $1,285 as presented by SAF in the rate comparison. However, in the case of Ontario, the average premium stated by SAF is $3,659 – implying that Ontario's costs are three times higher than SK. In contrast, as provided by GISA,[1] the average written premium for private passenger vehicles in the province is $1,635.

Hence, on average, drivers in Ontario do not pay nearly three times than drivers in SK.

Question:

Can SAF provide a broader perspective by presenting an additional comparison using the average premium paid by drivers in each of Ontario, Alberta, Nova Scotia and New Brunswick in comparison to the average paid in SK for private passenger vehicles - using the publicly available data on GISA's website?

[1] https://www.gisa.ca/StatisticalInformation

RESPONSE:

The GISA rates and claim costs vary by jurisdiction due to differences in coverage requirements, benefit levels, the mix of vehicles, weather and traffic conditions. The average written premium data provided on the GISA website represents the insurance policies that were purchased in provinces with competitive markets. There are more complex rating algorithms among the competitive companies compared to the Saskatchewan Auto Fund (SAF). Competitive companies could use rating variables such as age, gender, marital status, occupation and credit score to produce a wider range of rates. Whether or not a policy is purchased and included within GISA's average premiums could be matter of affordability. The 34 profiles provided in IR 1-9 represent a variety of drivers. As an example, profile #20 is an 18-year-old female student with a clean driving record. The quotes returned for this profile in Ontario ranged from $5,000 to $30,000. So, in reality, this person would likely find another means of transportation rather than purchasing insurance for her 2018 Hyundai Elantra. Similar profiles with younger drivers or drivers with claims and convictions likely do not appear within GISA's average written premium data because it would be too expensive to buy an insurance policy in some provinces.

The $1,231 average premium for Saskatchewan in the comparison includes optional coverage to match the same deductibles and limits available in other regions. The SAF private passenger vehicle average earned premium for the 2019 calendar year was $1,071. So, there is a difference in the average premium among the specific profiles in our comparison and the actual average premium of basic coverage that was purchased in Saskatchewan, though not to the same degree as in the case of Ontario. The intent of our comparison is to control for differences wherever possible and for these specific profiles, Ontario's costs would be three times higher than in Saskatchewan, even if, in reality, these profiles do not represent the demographics of a specific province.

The GISA reporting of average written premium in each province is not adjusted for differences in the mix of vehicles like Alberta having a higher proportion of trucks than Ontario. No adjustments were made for the different coverage requirements, benefit levels or demographics, so it should not be interpreted as an apples-to-apples premium comparison. The total written premium that was used to calculate the average $1,634 premium for private passenger vehicles in Ontario included a variety of deductible levels for all perils, collision, comprehensive and

specified perils coverages. Some customers have opted out of damage coverage altogether and their reduced premium contributes to the provincial average. The written exposures in 2019 for third party liability is 7.9M which matches the written exposures used in the calculation of the total Ontario average written premium of $1,634. Based on the written exposures of the optional damage coverages at all codes/deductible levels that were included in the total written premium, 7.4M have comprehensive coverage (1.7M through all perils which is made up of collision and comprehensive, and 5.7M who bought comprehensive) and 7M have collision among the total 7.9M policies. Those customers choosing to self-insure damage coverage in those provinces reduce the statistic of “written premium” in those provinces, but not the true costs of their insurance decisions.

The average earned premium in each province for 2019 from the Key Measures page of the GISA website (https://www.gisa.ca/KeyMeasures) represents the average premium paid by drivers with differences in benefit levels, combinations of coverages, vehicle mix, deductibles, limits, geography, traffic density and patterns, weather and demographics. A comparable value for the SAF would be the $1,071 mentioned above, but a broader perspective that includes more provinces than the SAF comparison would be the ICBC Canadian Motor Vehicle Insurance Rate Comparisons conducted by Ernst & Young LLP. It has been provided as an attachment (IR 2-8) and will be available on the ICBC website starting September 2021. It has a similar approach to the SAF comparison by quoting specific profiles and drivers at $500 deductible levels for collision and comprehensive coverages, and $2M limit for Third Party Liability, though differences in benefit levels still exist. Additionally, the Manitoba Public Insurance motorcycle survey that was cited in IR 2-3 above uses the same method of producing a rate comparison through individual profiles.

SRRP (SAF) 2-9

Application Part and Chapter:	**SRRP (SAF) 1-10, 5, App. 6**	**Page No.:**	**111 (MFR 5, Pg. 55)**
Issue:	**Capital Improvement Spending Plans**		
Topic:	**2021/22 to 2025/26 Capital Plans**		
MFR:	**5, 24**		

Preamble to IR (If Any):

Question:

a) Please indicate what the policy is for SAF related to preparation of business cases for capital projects.

b) If available, please provide the business case and net present value analysis for the Saskatoon facility.

c) Please elaborate on how SGI's Remote work Policy will result in a smaller head office and the number of staff expected to be housed in the new head office configuration.

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-10

Application Part and Chapter:	**SRRP (SAF) 1-14 (a)** **SRRP (SAF) 1-25 (a) & (b)**	**Page No.:**	**145 (MFR 6, Pg. 24)**
Issue:	**Break-Even Margin**		
Topic:	**COVID-19 Impact on Claims Incurred**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

a) Please supplement the information of reduced financial claims count and provide a comparison of the budgeted financial claims incurred by coverage by month relative to the budget SAF had for 2020/21 and provide a summary table of the overall financial impact on claims incurred for the year.

b) Please provide a similar analysis in (a) for the actual claims experience in the first quarter of 2021/22 and a forecast by month for the remainder of the fiscal year.

c) Please discuss how this reduction in claims experienced in 2021/22 to date and expected for the remainder of the year impacts the MCT and could further affect the 0.56% capital management plan provision proposed and rate indication by SAF.

RESPONSE:

a. See attached.
b. See attached.
c. See response to 2-50 for results on 2021/22 to date and discussion on future considerations in the current rate application.

SRRP (SAF) 2-11

Application Part and Chapter:	**SRRP (SAF) 1-17**	**Page No.:**	**250 (MFR 6.2, Pg. 23)**
Issue:	**Claims Incurred**		
Topic:	**Wildlife Claims**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

Please supplement the information provided by adding wildlife claims severity and comment on the differences in severity.

RESPONSE:

The incurred claims stated in the attachment have not been adjusted or trended to the rating year, exclude all other rating requirements such as expenses and discounting, and are subject to change as claims develop upward over time (excludes loss development). The data is as at March 31, 2021. Differences in severity from one year to the next could be due to differences in the maturity of these unadjusted claims. The relatively higher severity of the cruiser/touring motorcycles is consistent with the higher average injury claim costs among motorcycles from the lack of occupant protection in any collision or single vehicle accident, and would become greater still if loss development were considered.

SRRP (SAF) 2-12

Application Part and Chapter:	**SRRP (SAF) 1-20**	**Page No.:**	**262-272; 740+**
Issue:	**Indicated Rates**		
Topic:	**Loss Development**		
MFR:	**6**		

Preamble to IR (If Any):

In response to SRRP (SAF) 1-20, SAF explained that:

> *"Vehicle class definitions used for pricing exist only in the information technology system at a summarized/reporting level in a data warehouse that does not have the full history of claims experience required for loss development factor selection."*

Question:

Based on pricing analyses that may have been completed in previous years, is it practical for SAF to present hindsight testing of prior estimates of ultimate loss at the vehicle class level (or the coverage/vehicle class level)? If yes, please present the results of this analysis.

If not practical at this time, is this a change that would be part of the pending technology system transformation?

RESPONSE:

Performing hindsight testing of prior estimates of ultimate losses at the vehicle class level is possible with current systems but has not been performed. A thorough hindsight review that considers effects such as valuation redundancy/deficiencies, coverage changes, and other extraneous variables could be worthwhile.

Developing this kind of analysis would take time and would need to be prioritized against other ongoing and planned projects.

SRRP (SAF) 2-13

Application Part and Chapter:	**SRRP (SAF) 1-20**	**Page No.:**	**262-272; 740+**
Issue:	**Indicated Rates**		
Topic:	**Loss Development**		
MFR:	**6**		

Preamble to IR (If Any):

In response to SRRP (SAF) 1-20, SAF explained that:

> *"Another limiting factor to getting data for each vehicle class is that a significant percentage of claims are not associated with any vehicle, and require allocation across all classes."*

Question:

Please elaborate on this statement. How significant is this percentage, and what is the reason that these claims are not associated with any vehicle?

Is this a change that would be included with the pending technology system transformation?

RESPONSE:

The percentage of incurred claims dollars required to be allocated across all classes by category is:

- Damage: 1.3%
- Injury: 12.7%
- Liability: 15.1%

In other words, 1.3% of incurred damage claims, 12.7% of incurred injury claims, and 15.1% of incurred liability claims are allocated across all classes.

Note that the percentages above exclude medical funding as it is handled directly as an expense.

These claims lack data on the underlying vehicles for a variety of reasons:

- Hit and run
- Impaired driving claims where insufficient information is entered on the vehicle claim due to denied physical damage coverage
- Vehicle licensed outside of Saskatchewan
- Uninsured vehicle (no plate)
- Errors in data input

Corporate and system transformation changes will not address the lacking information on these claims, as data on the vehicles does not exist.

SRRP (SAF) 2-14

Application Part and Chapter:	**SRRP (SAF) 1-20**	**Page No.:**	**262-272; 740+**
Issue:	**Indicated Rates**		
Topic:	**Loss Development**		
MFR:	**6**		

Preamble to IR (If Any):

In response to SRRP (SAF) 1-20, SAF explained that:

> *"Limitations of the current system prevent data to be pulled on the basis that would be needed to determine development at a vehicle class level. Even with that data, there are many considerations that would limit the usefulness of that data. The benefits of incorporating the insights and analysis from the valuation assumptions, keeping the data as timely as possible, and keeping larger groups of the high severity no fault injury claims experience outweighs the benefits of more granular development assumptions."*

Question:

a) After the system transformation is complete, will granular data be available on a timely basis?

b) Notwithstanding the concerns regarding long-tailed coverages, please discuss whether SAF considers that there may be certain segments for which the benefits of more granular development assumptions may outweigh the drawbacks cited in the preamble to this question.

c) After the system transformation, does SAF intend to explore whether additional segmentation in loss development analysis (where practical and credible) may improve the accuracy of rate indications by vehicle class?

RESPONSE:

a) As the system transformation project has not yet begun, details of specific functionality or features, such as this level of data, have not yet been defined.

b) There may be certain segments for which the granular development assumptions outweigh the drawbacks. This is more likely for damage coverages than for injury coverages.

c) SGI is always looking to improve analysis and explore different approaches to pricing. After the system transformation is complete, if the system allows for the more granular level of data extraction required, SGI would explore additional segmentation in loss development analysis.

SRRP (SAF) 2-15

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**320-720**
Issue:	**Loss Trend**		
Topic:	**Loss Trend Rates - General**		
MFR:	**6**		

Preamble to IR (If Any):

In our review of SAF's selected frequency and severity trend rates, we observe several supporting models have insignificant p-values[2] for the time covariate. That is, the model fails to reject the null hypothesis that the coefficient (and implied trend rate) is statically different from zero.

The following coverages/classes have models with insignificant p-values for time and non-zero trend rate selections.

Table 1:

Vehicle Class	Coverage	SAF Frequency Trend Selection	SAF Severity Trend Selection
Light Vehicles	Damage to Others Automobiles	-2.29% (p = 0.077)	
All Vehicles ex Motorcycles	Income Replacement		+0.6% (p = 0.061)
All Vehicles ex Motorcycles	Injury - Medical Excluding Funding		+0.2% (p = 0.670)
All Vehicles	Damage Catastrophes	+4.3% (p= 0.523; 0.845)	
All Vehicles	Death Benefits		+1.4% (p = 0.129; 0.424; 0.184)
Light Vehicles	Theft Coverage		-0.7 past (p = 0.765)
Heavy Vehicles	Damage to Own Vehicle	-0.5% (p = 0.521)	

[2] Actuarily a commonly used threshold of 5% is used in determining parameter significance.

Question:

a) For each of the frequency and severity models listed in Table 1, explain why the trend rate was selected even though the time covariate is not significant.

b) As a sensitivity test, provide an updated rate level indication, if a 0% trend rate were selected instead of those in Table 1.

RESPONSE:

a)

SGI's trend selection is not solely a statistical exercise, in combination with statistics the loss trend committee's members have expertise in emerging trends that underlie the historical claims. The goal is to also consider and factor in changes that would not be captured in the data or misinterpreted by statistical approaches (paradigm shifts, changes in regulation, changes in different industries, etc). Making decisions purely based on statistical considerations would ignore or mis-treat these considerations.

i) Light Vehicles, Damage to Others Automobiles, Frequency:
Light vehicles have a long history of declining frequency in Damage to Others Auto. It is also sensitive to the severity of the Saskatchewan winter, as described in the response to 2-17. The flattening seen in 2016/17 and 2017/18 coincide with the more severe winters, while the declines seen in 2018/19 and 2019/20 coincide with the lighter winters. The loss trend committee's selection recognizes the long term negative trend seen, while also factoring in the flattening of the overall trend seen in recent years. The listed p-value for the 5-year still shows evidence toward the selection, even if it's not strictly under a 0.05 threshold. On top of that, the p-values for potentially even more negative trends are significant at the 0.05 threshold (6-year has a p-value of .012). Defaulting to a null hypothesis of 0% is inappropriate given the evidence of a historical negative trend.

ii) All Vehicles ex Motorcycles, IRB, Severity:
A p-value of .061 remains strong evidence toward the trend, even if it is above the .05 threshold. The p-value will also generally be higher for this as the observed trend is so close to the 0% null hypothesis. A review of the historical severities included in the final trend selected (which excludes 2014/15 and 2018/19) by year show that the severities for each of the newest years (2015/16 through 2019/20) are higher than each of the severities of the oldest years (2010/11 through 2013/14), providing an expectation of a small, but consistent positive trend underlying the severities.

iii) All Vehicles ex Motorcycles, Injury – Medical Excluding Funding, Severity:
The p-value here will generally be found higher given that the observed trend is close to the 0% null hypothesis. In prior rate indication work internal at SGI, this trend had been selected based on the 10-year fit and was kept the same in this rate indication. It is noted that the 10-year fit has declined from prior selections given the newest points, and the trend has declined down toward the 0% level. However, the actual trend observed over the long-term past has been a slight growth and this is what was selected. We note that a 0% trend, while not the actual trend observed over that time period, could also be viewed as a reasonable selection.

iv) All Vehicles, Damage Catastrophes, Frequency:
The number of catastrophe claims will vary dramatically from one year to the next depending on how many weather events occur above the catastrophe threshold in the region, their coverage, as well as the severity of the storm. It is expected that this line will experience spikes in its historical claims frequency. Underlying the historical and future trends, however, are the effects of climate change. These effects are very difficult to quantify, however upon excluding the largest outliers in 2009/10, 2011/12 and 2019/20 there is an upward trend to both the highs and lows seen in the history. The highs and lows of 2017/18 and 2018/19 are above the highs and lows of 2013/14 and 2014/15 respectively. While the volatility inherent in this kind of catastrophe coverage will serve to increase effective p-values, the observed trend and higher highs and lows (potentially driven by climate change's effects) are reflected into the committee's selection.

v) All Vehicles, Death Benefits, Severity:
Note that unlike the Care and IRB coverages, death benefits incurred losses are not adjusted for historical CPI levels, and so there is intuitive support for the severity to be increasing over time. As this coverage summarizes amounts paid out to spouses or dependants of deceased claimants based on the deceased's income (or based on annually indexed benefit levels), the main driver affecting severity on this line is wage inflation.

The severity of death benefits in a given year is very sensitive to high-income earners as well as the age of the deceased in that year. Younger spouses will collect for longer periods of time. This will drive volatility into the line, causing the observed ups and downs to the line and driving up the p-value despite the observed long-term trend. The committee's 1.4% selection considers the intuitive long-term increase to the severity of this line as well as the fact that trends drawn from any historical point in time all point to an increasing trend underlying the data.

vi) Light Vehicles, Theft Coverage, Severity:
Please refer to the response to IR 2-21 for full discussion regarding this selection.

vii) Heavy Vehicles, Damage to Own Vehicle, Frequency:
The p-value here will generally be found higher given that the observed trend is close to the 0% null hypothesis. In years prior to 2014/15, this trend had been observed as more negative and become noticeably more negative. The actual trend observed over the recent past has continued to be negative, and this is what was selected to continue. We note that a 0% trend, while not the actual trend observed over that time period, could also be viewed as a reasonable selection.

b) When setting the trends in Table 1 to 0% the overall indication of 1.7% increases to 2.1%.

SRRP (SAF) 2-16

Application Part and Chapter:	**6**	**Page No.:**	
Issue:	**Sensitivity Testing – All Vehicles**		
Topic:	**Rate Indications**		
MFR:	**27**		

Preamble to IR (If Any):

Question:

a) As sensitivity test for the all vehicles rate indication of +1.7%, provide the rate indications based on the following assumptions:

   i. Increase in estimate of ultimate loss amounts by +10% for the Injury and Liability sub coverage categories; no change to estimated ultimate amounts for Damage.

   ii. Increase in the loss trend rate across all subcoverages by +1.0%.

   iii. Decrease the average investment income rate by 1 percentage point – for both cash flow and capital.

   iv. The combination of the above 3 items.

b) As sensitivity test for all vehicles rate indication of +1.7%, provide the rate indications based on the following assumptions:

   i. Decrease in estimate of ultimate loss amounts by -10% for the Injury and Liability sub overage categories; no change to estimated ultimate amounts for Damage.

   ii. Decrease in the loss trend rate across all subcoverages by -1.0%.

iii. Increase in the average investment income rate by 1 percentage point – for both cash flow and capital.

iv. The combination of the above 3 items.

RESPONSE:

a)

i. Increasing the ultimate injury and non-damage liability losses by 10% increases the overall indication from 1.7% to 3.3%.

ii. Increasing past and future pure premium loss trends by 1% increases the overall indication from 1.7% to 6.0%.

iii. Decreasing the average investment income rate by 1% increases the overall indication from 1.7% to 4.4%.

iv. The combination of a) i. - iii. Increases the overall indication from 1.7% to 10.6%.

b)

i. Decreasing the ultimate injury and non-damage liability losses by 10% decreases the overall indication from 1.7% to 0.1%.

ii. Decreasing past and future pure premium loss trends by 1% decreases the overall indication from 1.7% to –2.4%.

iii. Increasing the average investment income rate by 1% decreases the overall indication from 1.7% to –0.8%.

iv. The combination of b) i. - iii. decreases the overall indication from 1.7% to –6.2%.

SRRP (SAF) 2-17

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**423-429**
Issue:	**Loss Trend**		
Topic:	**Loss Trend Rates – Light Vehicles excluding Motorcycles - Damage to Own Vehicle – Frequency**		
MFR:	**6**		

Preamble to IR (If Any):

SAF selects past and future frequency trend rates of 0% and -2%, respectively, for all light vehicles excluding motorcycles, damage to own vehicle (coverage 31). SAF includes the following commentary regarding these selected trends.

"Past: Including all years shows a decreasing trend but two newest years seems to drop this down a bit. Select 0% trend for past, similar to 5-year trend including and excluding the peak in 2017-18 due to a long winter.

Future: Selected -2% trend for future to offset the flat selection for past. It was noted that this line may follow closely to Cov 21."

Question:

a) Confirm the above frequency trend rates are primarily based on judgment rather than a specific model indication.

b) Explain why SAF selects a past trend rate of 0%, even though they observe a decreasing trend across all years.

c) We observe the only models presented with a 0% trend indication are the 5-year and 6-year models, however, they both have lowest R squared value of those considered. Does SAF consider these models adequate support for a 0% trend selection? If, yes, provide a more fulsome explanation.

d) As a sensitivity test, provide an updated rate level indication, if the indicated 10-year trend rate of -1.58% were selected rather than different past and future trends as indicated above.

RESPONSE:

a), b) and c)

The quoted commentary is from the prior rate indication (performed in 2019), and, as such, may be inconsistent with the graphs based on the 2021 rate indication work.

Note that a significant element of the loss trend selection process is incorporating the claims experience of the loss trend committee members. These members bring experience specific to the coverage groupings to understand the underlying trends behind the numbers, going beyond the statistical analysis. The group includes members from actuarial services, traffic safety, claims and Auto Fund programs and considers insights listed in the response to 1-28. Both statistical considerations and expert judgment are important and form part of many of the trend selections.

A decreasing trend had been observed from 2010 through 2016, at which point the trend has flattened out. Since that time, the Auto Fund observed a severe Saskatchewan winter in 2017/18 followed by more light winters in 2018/19 and 2019/20. The length and severity of the Saskatchewan winter has a direct effect on the frequency of collision claims. While SGI has not factored the length of winter into its selections as a variable, it is considered by the loss trend committee members in the final selection.

This effect will cause volatility in the observed frequency, skewing the R squared measure (i.e., it is inappropriate to focus solely on it in this case). Accounting for the impact in the three years indicated would flatten the recent years in the line. Considering the above effects, the various fitted lines, what had been seen on cover code 21, as well as the decreasing trend seen prior to 2016, the committee selected 0% as the trend underlying the past five years (as this is the period from which pure premiums are averaged for the projection) and a -2% trend for the future.

d) Provided as a sensitivity test, the rate level indication would change from 1.7% to 1.0% using -1.58% as past and future trends. SGI does not recommend this given the logic above. A statistical line fit fails to consider the elements that were incorporated by the loss trend committee into its final selections.

SRRP (SAF) 2-18

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**423-429**
Issue:	**Loss Trend**		
Topic:	**Loss Trend – Light Vehicles excluding Motorcycles - Damage to Own Vehicle – Severity**		
MFR:	**6**		

Preamble to IR (If Any):

SAF selects a past and future severity trend rates of +3.6%, for all light vehicles excluding motorcycles, damage to own vehicle (coverage 31), based on the 4-year model.

Question:

a) We observe the historical observations have been increasing at a constant rate, excluding a large increase between 2015/16 and 2016/17. Is SAF able to provide insight as to what may be causing this large increase?

b) Did SAF consider adding an additional scalar parameter[3] in their trend models to quantify this increase, rather than relying on a short-term trend rate?

[3] This covariate is equal to 0 for all accident periods 2015/16 and prior and equal to 1 for all accident periods 2016/17 and subsequent.

RESPONSE:

a) The cause of the noted increase, can generally be attributed to the following:

i. Administration of total loss negotiations by claims adjusters resulted in an increase in the average total loss settlement over previous years. Starting in this period, adjusters were provided the autonomy to settle within a creation margin above actual cash value to expedite settlement as a customer initiative.

ii. In 2016-2017, a new process to determine whether a vehicle was repairable or a total loss was launched. In the past, SGI paid collision repair shops to complete a "guaranteed estimate" to determine repairability where the estimated initial repair costs were close to 75% of vehicles actual cash value. The new process allows SGI to determine repairability earlier in the claims process and helps control administrative costs. In situations where the initial damage estimate plus the average industry supplement percent is equal to 75% of the actual cash value, SGI will deem the vehicle a total-loss. The new process went through a period of fine-tuning/adjustment where the initial estimate percent was adjusted from 60%-63%.

b) SAF did not consider adding an additional scalar parameter. The four-year model still incorporates more than 200,000 claims into its estimate, avoids the jump described above, and is very consistent over the time period. SGI views it as a very reliable estimate of the true trend underlying the most recent past years as well as the expectation for the future.

SRRP (SAF) 2-19

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**322-323**
Issue:	**Loss Trend**		
Topic:	**Loss Trend – All Vehicles – Damage Catastrophes – Severity**		
MFR:	**6**		

Preamble to IR (If Any):

SAF states the following regarding their selected severity trend rate of 4.04% for damage catastrophes.

> *"Severity: Setting trend equal to the Cover 32 trend, which is expected to reflect the real trend incurred by storm-related costs. Ignores the volatility that is inherent in catastrophic claim experience year to year."*

Question:

We observe the selected severity trend rate for Cover 32 (Comprehensive) on page 322 of the filing is +3.54%. Please explain why these values differ.

RESPONSE:

The +3.54% on page 322 of the filing is the selected Cover 32 severity trend for the subset of light vehicles listed at the top of page 321. The 4.04% selected as the catastrophe severity trend was set equal to the Cover 32 severity trend that was selected based on data that included all rating classes and is shown on page 476 of the filing.

SRRP (SAF) 2-20

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**574-580**
Issue:	**Loss Trend**		
Topic:	**Loss Trend – Light Vehicles – Theft Coverage – Frequency**		
MFR:	**6**		

Preamble to IR (If Any):

SAF selects past and future frequency trend rates of +7.2% and +5.7%, respectively, for light vehicles – theft.

Question:

a) Explain why SAF selects a past trend rate of +7.2% based on the 5-year model rather than a +9.5% based on an 8-year model. We note the R squared value is significantly larger for the 8-year model as compared to the 5-year model.

b) Given little data is available to support the flattening of the frequency trend in recent years, does SAF have any concerns that tempering the future trend rate is an optimistic assumption?

c) As a sensitivity test, provide an updated rate level indication if +9.5% and +7.2% were selected as the past and future frequency trends, rather than those selected (as noted above).

RESPONSE:

a) Trend selections are not purely based on the statistical metrics like the R squared values. In this case, the loss trend committee noted that the recent loss experience could be reflective of heightened awareness from traffic safety, police and media regarding thefts due to keys being left in vehicles. Given that it is a damage coverage, a shorter period is generally considered to be responsive to emerging trends compared to longer tailed injury lines.

b) This is a fully credible coverage, but there is always some expected margin of error surrounding loss trend selections. The lower future trend selection may turn out to be optimistic, but the loss trend committee agreed that it was a reasonable selection given the experience we observed in the most recent years.

c) Using the 9.5% past and 7.2% future frequency trends for theft within the CLEAR-rated indication changes the current required rate change of -0.7% to -0.4% for CLEAR-rated vehicles, and the overall rate indication of 1.7% would increase to 1.96%.

SRRP (SAF) 2-21

Application Part and Chapter:	**6.2 Actuarial Support Documents**	**Page No.:**	**574-580**
Issue:	**Loss Trend**		
Topic:	**Loss Trend – Light Vehicles – Theft Coverage – Severity**		
MFR:	**6**		

Preamble to IR (If Any):

We observe light vehicles - theft severity increased significantly between 2010 and 2016, followed by a flat period. SAF selects a past trend rate of -0.73% based on a 5-year model, and judgmentally selects a future trend rate of +0.72%.

Question:

a) Is SAF able to provide any insight into what may have caused the change in trend rate beginning in 2016?

b) Fully explain why SAF believes different past and future trend rates are warranted.

c) As a sensitivity test, provide an updated rate level indication if 0.0% were selected as the past and future frequency trends, rather than those indicated above.

RESPONSE:

a) Theft claims have among the highest proportions of total losses among the coverages, the 5-year average is 76%. As noted on page 577 of the rate application, there were changes to the way we managed total loss vehicles around 2016 and 2017. A new process to determine whether a vehicle was repairable or a total loss was launched. In the past, SGI paid collision repair shops to complete a “guaranteed estimate” to determine repairability where the estimated initial repair costs were close to 75% of vehicles actual cash value. The new process allows SGI to determine repairability earlier in the claims process and helps control administrative costs. In situations where the

initial damage estimate plus the average industry supplement percent is equal to 75% of the actual cash value, SGI will deem the vehicle a total-loss. The new process went through a period of fine-tuning/adjustment where the initial estimate percent was adjusted from 60%-63%. The initial 60% occurred January 1, 2016 and the adjustment to 63% occurred a year later which stabilized the percentage of vehicles being written off. Given the higher proportion of total loss among theft claims, the increase starting with 2016 and the reversal at the peak in 2017 could be due to the changes in the estimate and supplement. Note that within the response for IR 2-18 regarding collision severity, this change in total loss threshold could be a possible explanation. However, due to the lower proportion of total losses among collision claims, the reversal upon the 2nd calibration to the threshold was not observed as it was with theft.

Around that same time, there were changes to the way claims adjusters administered total loss negotiations which increased severity over previous years. Adjusters were provided the autonomy to settle within a creation margin above actual cash value to expedite settlement as a customer initiative.

Additionally, there are increasing costs to repair vehicles as seen in other damage lines.

b) Since the peak in 2016-17, the severity has reverted back to nearly the same level as in 2015-16. Severity among theft claims is generally higher compared to collision due to the higher proportion of total loss claims. The average actual cash value (ACV) of the light vehicle fleet could be represented in the theft severity, though it could be skewed towards certain types that are more susceptible to theft. Contrast this with the collision severity trend which is steeper because of the higher proportion of repairable claims and the rising repair costs. So, while the increasing repair costs could have had an influence in writing off more vehicles until the 2nd adjustment to the total loss estimate threshold stabilized the repairables vs total loss ratios, we are trusting that the underlying average fleet ACV is the reason for the trend we are seeing over the past 5 years. It was also noted within the application that there was a higher proportion of high-cost vehicles being stolen in the 2016-17 fiscal year which contributed to the peak which hasn't been seen since, so the reversion in recent years appears credible. The 5-year trend was selected to reflect the experience among light vehicles.

For the future trend, the loss trend committee considered the experience excluding the 2016-17 and 2017-18 points (page 578 of the app) and the 5 and 6-year trends were slightly positive. The mid-point between these two was close to the 6-year trend that was selected without excluding those points. The changes in total loss threshold are not anticipated to occur in the future, and with a slightly positive selection, this supports the potential for another spike that was seen between 2015-16 and 2016-17.

c) Using past and future trend selections of 0%, the overall indication remains at +1.7%.

SRRP (SAF) 2-22

Application Part and Chapter:		**Page No.:**	**122, 735**
Issue:	**Indicated Rate**		
Topic:	**Delayed Implementation Effective Date**		
MFR:	**6**		

Preamble to IR (If Any):

Due to timing and procedural issues, the rate application effective date has been delayed to January 21, 2022, although the rate application indication model is premised on an effective date of August 17, 2021 for the rating year.

Question:

Please provide an updated rate indication (+1.7%) using the new effective date of January 21, 2022 for the Application of the loss trend rates and no change to other assumptions.

RESPONSE:

The attachment shows the overall rate indication increases from +1.7% to +2.2% as a result of adjusting the loss and premium trend periods for a rating year that begins January 21, 2022.

SRRP (SAF) 2-23

Application Part and Chapter:	**SRRP (SAF) 1-22 (a) (c), 6.2**	**Page No.:**	**Pdf. 283**
Issue:	**Indicated Rates**		
Topic:	**Economic & Interest Rate Forecast**		
MFR:	**6, 18**		

Preamble to IR (If Any):

SAF indicates on page 132 of the Application that the overall rate used to discount the expected losses in the rate application is 2.98%. On page 286 of the Application SAF provides a discount rate projection. It is not clear how the 2.98% discount rate is derived.

Question:

a) Please indicate the vintage of the interest rate forecast underpinning the Application.

b) Please provide the supporting calculations with a narrative explaining the determination of the overall 2.98% discount rate and the related 1.7% rate indication.

c) Please provide a similar calculation in (b) utilizing the information from the June 2021 update and the related rate indication. Please file a copy of the forecast if possible.

d) Please provide the determination of the new money yield utilized in this Application and compare it with the June 2021 interest rate update.

e) Please file the indicated rate and financial forecast including MCT based on the June 30, 2021 interest rate forecast. Please separately indicate the interest rate impact on claims incurred and investment income.

RESPONSE:

a) The interest rate forecast underpinning the Application comes from the Conference Board of Canada's spot yield curve forecast published September 2020.

b) A discount rate curve is determined from the CBOC's spot yield curve and considerations of all matching portfolio asset classes. This discount rate curve is then used to determine the discount factors that are applied by coverage in the rate indication. Full details provided in the attachment. The 2.98% is measured as the constant discount rate equivalent to the curve used that produces the same total discounted cash flows in the rate indication (Internal Rate of Return) and is for illustration purposes only – it is not used to determine original indicated rate changes. Please note that the 2.98% in the application was misstated and should be 3.01%.

c) Details provided in the attachment. Note that applying this update did not affect the indication in a material way – the overall indicated rate change remained at 1.7%. Differences existed only in further decimal places.

d) See part b and its attachment for the explanation of how the discount rates are determined and used in the rate application in the original application. This same logic was used for the June 2021 interest rate update.

e) An investment forecast using updated interest rates forms part of the Auto Fund's annual budget process, which is currently underway. It is expected that this process will have a draft forecast available late September or early October. See attachment for summary of indicated and proposed rates using the June 2021 interest rate update (remains overall 1.7% basic rate indication).

SRRP (SAF) 2-24

Application Part and Chapter:	**SRRP (SAF) 1-22 (a) (c), 6.2 SRRP (SAF) 1-68 Note 1**	**Page No.:**	**Pdf. 283**
Issue:	**Indicated Rates**		
Topic:	**Economic & Interest Rate Forecast**		
MFR:	**6, 18**		

Preamble to IR (If Any):

In describing the variance between actual and forecast returns on the fixed income portfolio SAF has stated:

"Fixed income forecasts are based on the Conference Board of Canada (CBC) yield curve. Prior year CBC forecasts have historically predicted increases in interest rates, which have proven incorrect as interest rates have continued to decrease. However, gains and losses on fixed income investments are offset by the change in claims liabilities due to discounting and have a direct offsetting effect on the Auto Fund as a whole."

Question:

a) Please file a consensus forecast from the Major Banks for the interest rates at June 30, 2021 and compare it with that provided by the CBC.

b) Please provide a graph indicating the historical 10-year and 30 Year interest rates relative to the forecast from the Conference Board of Canada from 2016/17 through 2020/21 and comment on the accuracy of forecasts for rate-setting purposes.

c) Please explain how SAF determines that the CBC interest rate forecast is appropriate for forecasting purposes and comment on the comparison of a consensus forecast from the Major Banks.

d) Please provide a comparison of the interest rate impact on claims incurred, investment income and RSR for the last five fiscal years actual and forecast for 2021/22 through 2025/26 to demonstrate the hedged net impact of changes in interest rates on RSR.

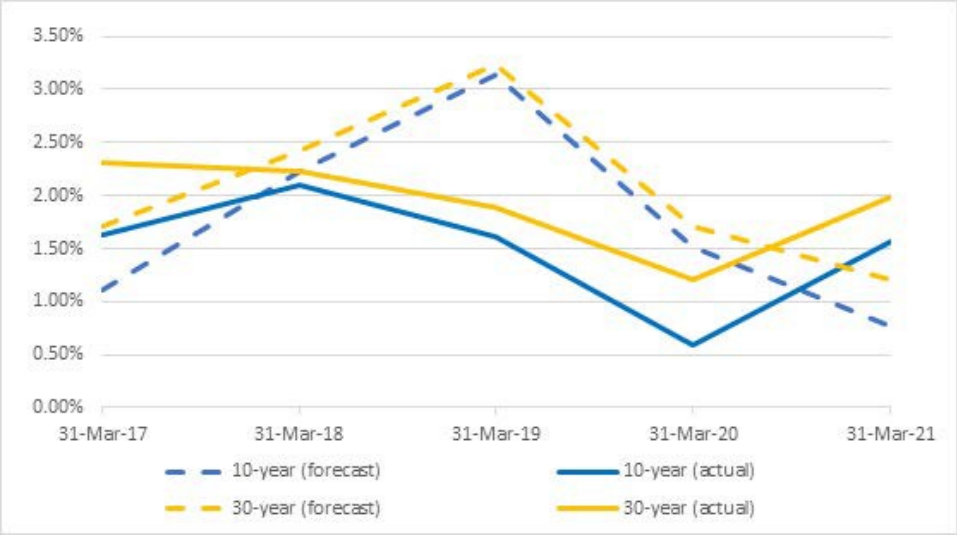
e) As a sensitivity test, please provide the impact on the overall rate level indication of +1.7% for a (i) 100 basis point increase in the investment rate and (ii) 100 basis point decrease in the investment rate. In the response, include the total change in the amount of investment income split between the discounted net unpaid claims versus the RSR.

f) If the change to the investment rate (in e) impacts the Capital Margin provision of -1.8%, provide the updated provision.

RESPONSE:

a) SGI has been unable to find or access a consensus forecast from the Major Banks. Information gleaned from their websites generally only provides interest rates for selected yield curve dates for two years or less and does not provide a level of granularity for the entire yield curve required to assemble reasonable estimates. The CBC, on the other hand, generates a quarterly interest rate forecast (for a fee) for selected yield curve dates for up to five years going forward and provides a reasonable independent estimate of expectations.

b) The historical 10-year and 30-year Government of Canada interest rates relative to the forecast from the Conference Board of Canada from 2016/17 through 2020/21 budget periods are as follows:



Interest rates used in the budget forecasts were initially lower than market interest rates before being adjusted upwards for the March 31, 2019 budget cycle. This was based on increasing interest rates by the Bank of Canada in the latter half of 2017 and through 2018. Interest rates were expected to continue the upward trend, however, flatlined through 2019 before decreasing in 2020 due to the effects of the pandemic. Forecast interest rates generally followed these trends and were adjusted as more information became available. Due to the timeframes required to analyze, assemble and approve a complete budget forecast, dramatic changes in interest rate forecasts are, at times, not able to adjust quickly enough to provide reliable updates to the budget cycle.

Forecasting interest rates is highly sensitive to prevailing economic conditions and changes in monetary policy by central banks. The 12 years following the great financial crisis have witnessed significant levels of monetary policy intervention, both through the use of setting interest rates and outright bond purchases, to affect the outcome of employment, inflation and general economic conditions.

The most recent period, through a pandemic induced exogenous shock, created another environment for significant intervention that caused a more dramatic and faster response from central banks that dramatically changed interest rates globally. Interest rate forecasts have since adjusted as the nature and scope of the recovery takes form, however, remain subject to significant adjustments based on global factors.

It is worth noting that the above variances and causes are not unique to the CBC expectations of interest rates. They have similarly affected interest rate forecasts from other sources as well.

c) The CBC analyzes and publishes on a wide range of economic and fiscal data using their econometric models and extensive monitoring of major economies to gain an understanding of the trends and developments around the world. They advertise having Canada's largest economic analysis and forecasting unit, which uses market and industry-specific data to perform evidence-based research and analysis.

The CBC forecast is provided on a quarterly release schedule and offers more granular detail of interest rates over longer time horizons, as compared to forecasts readily available through Major Banks. SAF requires a consistent, independent forecasting service with measurements available across a wider range of the yield curve to produce more detailed estimates for both budgeting and discounting purposes.

d) Please see the response to 2-51.

e) Please see the response to 1-31.

f) While there may be a minor impact on some balance sheet accounts, the impact to the Capital Margin provision of -1.8% would be insignificant due to the asset-liability matching strategy and assumed offset of impacts on discounted unpaid claims and investment gain/loss in the forecast years.

SRRP (SAF) 2-25

Application Part and Chapter:	**SRRP (SAF) 1-25**	**Page No.:**	
Issue:	**Indicated Rates**		
Topic:	**Updated Rate Indications**		
MFR:	**6**		

Preamble to IR (If Any):

As provided in SRRP (SAF) 1-25, SAF calculates that the updated overall rate level indication would change from +0.0% to -1.8% if the most recent MCT was used rather than that in the filing (at 157.6%) as a result of COVID-19. And as noted, SAF finds this amount to be material.

In addition, as noted in SRRP(SAF) 2-22, the delayed implementation versus that assumed in the rate application will affect the rate indication.

Question:

a) Does SAF find the impact of COVID on the rate indications and MCT to be a material event, such that the SRRP should be provided with an updated rate indication (i.e., -1.8%) for its consideration?

b) Can SAF provide the updated rate indication combining both the MCT change (see SRRP (SAF) 1-25 with change from +0.0% to -1.8%) and the effective date change?

c) Can SAF provide the rate level indication by combining both (b) above with the alternative (current) investment rate provided in SRRP (SAF) 2-23(e).

RESPONSE:

a) Due to the nature of insurance, there will always be volatility in both the claims and investment results from one quarter to the next. We have observed significant instability in the MCT over time due to volatile claims emergence experience, adjustments to valuation assumptions such as tail factors on long-tailed injury lines, and unstable investment returns. The rate application needs to draw a line at a point in time for its forecasts to avoid spending excess resources on continuous updates to the forecast. Effects of changes beyond that point should be handled by the following rate program, as it will incorporate actual results beyond the consideration of this rate program. Also, it is worth noting that the underlying basic rate indication is not affected by these changes – only the capital margin's calculation and selection.

b) Based on the projection updated with actual 2020/21 operating results and the new effective date, the required capital margin provision is -1.11% (rather than 0.56%). This is a decrease of 3.3% from the current capital margin of 2.23%. The overall rate change would be a decrease of 1.2%.

c) Based on the projection updated with actual 2020/21 operating results, the new effective date, and the June 2021 interest rate update (alternative investment rate from 2-23(e)), the required capital margin provision is -1.09% (rather than 0.56%). This is a decrease of 3.3% from the current capital margin of 2.23%. The overall rate level indication would be a decrease of 1.2%.

SRRP (SAF) 2-26

Application Part and Chapter:	**SRRP (SAF) 1-25 & 1-71, 6.2**	**Page No.:**	**301**
Issue:	**Indicated Rates**		
Topic:	**Management Capital Plan Calculation**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

a) Please provide an update to Appendix A reflecting the higher capital release indicated in SRRP (SAF) 1-25.

b) Please file an update to Appendix A reflecting any forecast changes for 2021/22 as a result of the reported Q1 results.

RESPONSE:

a) See attachment IR 2-26 (a)

b) Please see response to SRRP (SAF) 1-50.

SRRP (SAF) 2-27

Application Part and Chapter:	**SRRP (SAF) 1-26**	**Page No.:**	**270**
Issue:	**Reconciliation of Loss Developments**		
Topic:	**Motorcycle Loss Development Factors**		
MFR:	**6**		

Preamble to IR (If Any):

In response to SRRP 1-26(b), the reported incurred and ultimate amounts for motorcycle claims with the incurred loss amount is in excess of $1 million are provided. We note the ratio of ultimate to incurred (the implied loss development factors) appear to be different than those selected. For example, in the case of Permanent Impairment, for the year 2010, the incurred amount is $242,661 and the ultimate amount is $445,364; for an implied factor of 1.835. However, the stated loss development factor for the 2010 year for Permanent Impairment is 1.0333 (page 270 of 6340). Similar differences exist for other years and sub-coverages.

Question:

a) Explain why the selected loss development factors presented in the Application do not align with those implied in the summary charts in response to SRRP 1-26 (b).

b) Explain why it is intuitively reasonable for the Permanent Impairment subcoverage to have an implied development factor of 1.835 for the year 2010 – roughly ten years later in 2020/2021 – for incurred claims in excess of $1 million.

RESPONSE:

a) The ultimate claims basis provided is consistent with the large loss policy. The ultimate claims on this basis have had loss development factors applied to them as well as incurred loss adjustments and loss trends.

In the case of Permanent Impairment, for the year of 2010, the loss development factor applied to the incurred claims is indeed 1.0333 but the incurred loss adjustment of 1.0904 and the loss trend of $(1.05)^{10}$ are also applied resulting in the cumulative adjustment mentioned above, 1.835. In other words, that adjustment is not only loss development but other adjustments and trending too.

b) As mentioned in a), the ultimate claims stated were on a consistent basis with the large loss policy which applies the loss development factor, incurred loss adjustment, and loss trending to bring incurred losses to an ultimate value appropriate for all differences between the historical year and the rating year. The loss development factor applied to Permanent Impairment for 2010 was 1.0333 which is consistent with the Application.

SRRP (SAF) 2-28

Application Part and Chapter:	**SRRP (SAF) 1-26 (a) & (b)**	**Page No.:**	**315**
Issue:	**Claims Incurred**		
Topic:	**Motorcycle Claims/ Capping of large losses**		
MFR:	**6**		

Preamble to IR (If Any):

Question:

a) Please provide separate tables in (b) for claims under $1 million and for all claims in total.

b) Please provide a table of supporting data for the graph of motorcycle losses on page 315 of the Application and relate back to the total incurred and total ultimate amounts on losses.

RESPONSE:

a) Note that these values are on the same basis as the indication's large loss smoothing and therefore include injury coverages and are assessed on an occurrence basis. Occurrences include all injured claimants within a single collision rather than assessing claims on a per claimant basis.

The table below represents the total incurred losses by year and coverage for which the incurred loss is less than $1 million:

Incurred Amounts ($)								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	-	235,493	1,447,483	4,145,398	1,065,105	1,231,856	2,922	8,128,257
2011	16,617	317,692	1,287,866	4,567,280	1,836,218	1,501,370	-	9,527,042
2012	8,764	410,487	498,355	3,397,062	1,542,981	1,567,060	67,661	7,492,370
2013	2,494	208,748	836,413	1,639,577	1,198,924	1,449,694	-	5,335,849
2014	4,863	291,313	2,185,518	2,634,747	1,361,645	1,608,317	-	8,086,403
2015	8,572	124,113	1,499,710	1,962,664	1,156,226	721,464	1,422	5,474,172
2016	8,029	217,713	270,391	2,244,929	754,988	868,218	557	4,364,824
2017	75	104,917	42,229	1,503,524	920,224	1,052,644	144,688	3,768,300
2018	16,676	53,138	1,071,864	1,218,387	1,398,896	894,990	202,085	4,856,036
2019	5,250	273,765	1,453,341	1,195,595	1,159,686	1,112,773	198,028	5,398,437
2020	-	410,499	391,616	1,452,869	1,228,376	1,097,746	263,635	4,844,739

The table below represents the total ultimate losses by year and coverage for which the incurred loss is less than $1 million:

Ultimate Amounts ($)								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	-	673,348	1,731,236	8,549,514	2,232,504	2,258,580	4,754	15,449,936
2011	59,995	1,166,753	1,546,140	9,517,697	3,909,493	2,619,283	-	18,819,361
2012	34,470	1,425,784	581,148	6,614,249	3,314,881	2,644,980	103,036	14,718,547
2013	11,305	762,714	970,908	3,732,367	2,430,580	2,364,977	-	10,272,850
2014	28,509	993,536	2,551,875	5,562,211	2,505,217	2,557,265	-	14,198,615
2015	48,812	555,255	1,710,073	5,122,296	2,371,931	1,093,787	1,846	10,904,001
2016	41,375	882,325	312,935	5,457,970	1,303,778	1,289,170	692	9,288,245
2017	554	442,510	48,124	4,209,276	1,731,438	1,578,658	175,633	8,186,193
2018	192,585	275,088	1,229,341	3,893,568	2,433,076	1,171,853	229,682	9,425,192
2019	138,148	1,332,136	1,606,189	4,169,645	1,857,693	1,457,890	219,678	10,781,379
2020	-	1,037,013	488,621	7,274,674	1,854,741	1,630,308	328,641	12,613,998

The table below represents the total claim count by year and coverage for which the incurred loss is less than $1 million. The total column represents the number of occurrences in each year:

Claim Count								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	0	44	4	55	126	67	1	126
2011	8	67	6	68	133	72	0	133
2012	5	58	3	72	130	75	1	130
2013	2	68	4	72	129	76	0	129
2014	1	49	6	56	103	64	0	103
2015	5	29	2	42	70	37	2	72
2016	3	26	3	30	79	39	1	80
2017	1	36	2	35	68	39	12	76
2018	2	23	4	27	54	30	10	62
2019	2	25	5	25	55	32	11	65
2020	0	35	2	32	61	39	13	73

The table below represents the total incurred losses by year and coverage:

Incurred Amounts ($)								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	-	515,463	1,447,483	6,342,186	2,255,061	1,474,517	2,922	12,037,631
2011	16,617	317,692	1,287,866	4,567,280	1,836,218	1,501,370	-	9,527,042
2012	8,764	476,503	498,355	4,265,264	1,597,575	1,597,210	67,661	8,511,332
2013	2,494	514,837	836,413	2,295,606	1,232,897	1,578,862	-	6,461,109
2014	14,128	471,259	3,084,983	5,862,867	3,081,070	1,847,103	-	14,361,410
2015	8,572	942,618	1,499,710	2,902,327	3,126,448	947,741	1,422	9,428,839
2016	8,029	268,576	270,391	3,261,529	828,623	900,718	557	5,538,422
2017	75	104,917	42,229	1,503,524	920,224	1,052,644	144,688	3,768,300
2018	16,676	53,138	1,071,864	1,218,387	1,398,896	894,990	202,085	4,856,036
2019	5,250	273,765	1,453,341	1,195,595	1,159,686	1,112,773	198,028	5,398,437
2020	-	410,499	391,616	1,452,869	1,228,376	1,097,746	263,635	4,844,739

The table below represents the total ultimate losses by year and coverage:

Ultimate Amounts ($)								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	-	1,473,868	1,731,236	13,080,193	4,727,594	2,703,944	4,754	23,721,590
2011	59,995	1,166,753	1,546,140	9,517,697	3,909,493	2,619,283	-	18,819,361
2012	34,470	1,658,938	581,148	8,305,278	3,432,829	2,695,886	103,036	16,811,585
2013	11,305	1,881,092	970,908	5,225,766	2,499,483	2,575,697	-	13,164,251
2014	82,828	1,608,545	3,602,117	12,381,702	5,689,910	2,937,907	-	26,303,008
2015	48,812	4,217,080	1,710,073	7,574,692	6,413,726	1,436,838	1,846	21,403,068
2016	41,375	1,088,456	312,935	7,929,573	1,430,938	1,337,427	692	12,141,396
2017	554	442,510	48,124	4,209,276	1,731,438	1,578,658	175,633	8,186,193
2018	192,585	275,088	1,229,341	3,893,568	2,433,076	1,171,853	229,682	9,425,192
2019	138,148	1,332,136	1,606,189	4,169,645	1,857,693	1,457,890	219,678	10,781,379
2020	-	1,037,013	488,621	7,274,674	1,854,741	1,630,308	328,641	12,613,998

The table below represents the total claim count by year and coverage. The total column represents the number of occurrences in each year:

Claim Count								
Motorcycles	Appeal	Care	Death	IRB	Medical	Perm Imp	Tort-Injury	Total
2010	0	47	4	58	129	70	1	129
2011	8	67	6	68	133	72	0	133
2012	5	59	3	73	131	76	1	131
2013	2	69	4	73	130	77	0	130
2014	2	52	7	59	106	66	0	106
2015	5	31	2	44	72	38	2	74
2016	3	27	3	31	80	40	1	81
2017	1	36	2	35	68	39	12	76
2018	2	23	4	27	54	30	10	62
2019	2	25	5	25	55	32	11	65
2020	0	35	2	32	61	39	13	73

b) The following is the table of supporting data for the graph of motorcycle losses on page 315 of the Application:

Motorcycles			
Fiscal Year	Ultimate	Excess	Total
2006	$ 17,375,857	$ 1,169,100	$ 18,544,957
2007	$ 17,187,014	$ 420,200	$ 17,607,214
2008	$ 19,177,136	$ 3,838,247	$ 23,015,383
2009	$ 20,711,382	$ 2,724,967	$ 23,436,349
2010	$ 22,706,822	$ 1,014,768	$ 23,721,590
2011	$ 18,819,361	$ -	$ 18,819,361
2012	$ 16,811,585	$ -	$ 16,811,585
2013	$ 13,164,251	$ -	$ 13,164,251
2014	$ 23,728,382	$ 2,574,627	$ 26,303,008
2015	$ 18,633,891	$ 2,769,177	$ 21,403,068
2016	$ 11,670,769	$ 470,627	$ 12,141,396
2017	$ 8,186,193	$ -	$ 8,186,193
2018	$ 9,339,031	$ 86,162	$ 9,425,192
2019	$ 10,781,379	$ -	$ 10,781,379
2020	$ 12,613,998	$ -	$ 12,613,998

SRRP (SAF) 2-29

Application Part and Chapter:	**SRRP (SAF) 1-26 (a) & (b)** **SRRP (SAF) 1-17**	**Page No.:**	
Issue:	**Claims Incurred**		
Topic:	**Motorcycle Claims/ Capping of large losses**		
MFR:	**6**		

Preamble to IR (If Any):

Manitoba Public Insurance Corporation (MPI) has implemented the following rules in the allocation of claims incurred.

"a) In any accident involving only MPI-insured vehicles (one or more) and no other injured party, total PIPP costs are to be allocated equally (per vehicle) across the rating categories to which those vehicles belong;

and

(b) In any accident involving one or more MPI-insured vehicles and (i) one or more unidentified hit-and-run offenders, or (ii) another injured party or parties (including cyclists, pedestrians, and occupant (of out-of-province vehicles), 50% of total PIPP costs are to be allocated equally (per MPI-insured vehicle) across the rating categories to which the MPI- insured vehicles belong, and the remaining 50% of total PIPP costs are to be effectively allocated across all vehicle rating categories. "

[Order 97/05 pg. 56]

In the Manitoba Public Utilities Board (PUB) Order 122/10, the PUB approved a modification of the above rule.

"The loss attribution rules provided in Board Order 97/05 for single vehicle accidents involving pedestrians and cyclists are hereby amended to include wildlife/livestock related Accidents".

Question:

a) Please provide SAF's understanding of the treatment of claims costs in Manitoba and comment on the appropriateness of such an approach for SAF.

b) Please provide an indication of the impact of applying similar loss transfer rules in the allocation of claims incurred to the motorcycle class and directionally indicate the Application of such a rule on the indicated rates for private passenger and motorcycles.

RESPONSE:

a) SAF is satisfied that the approach used in Saskatchewan is fair to all classes of vehicles. As described in the rate proposal:

For the actuarial rate analysis, claims are assigned to vehicle classes based on vehicle collision responsibility (fault). If a vehicle was involved in a collision (single or multi-vehicle) and there is no at-fault vehicle, then all claim costs remain with the vehicle for rating purposes. This includes wildlife collisions.

This differs from the MPI approach in the following ways:

- In any accident involving only SGI-insured vehicles (one or more), all damage and injury costs are allocated equally among all vehicles that are found 50% or more at fault. If no vehicles are found 50% or more at fault, the costs remain with the vehicle for rating purposes

- In any accident that involves hit-and-run, injured third parties, or wildlife, all costs are allocated among all SGI-insured vehicles (one or more) involved in the accident according to the logic in the first point above.

b) Using SGI's logic provided in part a), motorcycles are not charged for any damage or injury costs for an accident in which a private passenger vehicle is at fault for the collision with a motorcycle. The damage to both vehicles and injuries to anyone involved

in this example would all be charged to the private passenger vehicle class for rate indication purposes.

Given that private passenger vehicles are generally found to be at fault more often than motorcycles in crashes that involve both vehicle types, SGI's current logic is more favorable to the motorcycle class and unfavorable to the private passenger vehicle class. If MPI's logic were used, the motorcycle rate indication would likely worsen and the PPV indication would improve. SGI does not recommend using MPI's logic as the approach in part a) better aligns the price of insurance with a class's actual history of causing a crash.

SRRP (SAF) 2-30

Application Part and Chapter:	**SRRP (SAF) 1-27**	**Page No.:**	**315**
Issue:	**Rate Indications**		
Topic:	**Large Loss Adjustment**		
MFR:	**6**		

Preamble to IR (If Any):

SAF states, *"The excess amounts are incorporated back into the analysis through a selected loading factor to increase the projected claims in the rating period and spread the risk across classes."*

SAF continues, and states, *"Despite these adjustments to bring the claims to their ultimate values, we saw that among CLEAR rated classes, the only claims that were above the thresholds were in the older loss periods."*

As described in SRRP 1-27, SAF sums the excess losses over the time horizon to select its large loss adjustment factor, rather than assigning equal weight to the large loss ratio of each accident year. As a result, in this circumstance, the calculated loading factor is higher than if equal weight was assigned. SAF selects a large loss loading factor based on its judgment of the various averages.

Question:

a) To what does SAF attribute the fact that there are no large losses in the most recent five-year time period, in contrast to multiple large losses in older years? Please discuss the possibility that the current estimates of ultimate loss amounts (and large claims) may be understated; and discuss any alternative loss estimation methods that may have been explored in light of this concern.

b) Is it SAF's intent to "load back" in the prior excess losses into the current rate program as a means of recouping prior losses? And if so, how does this approach align with traditional prospective rate making that is not intended to carry-forward prior losses to the proposed rate program?

RESPONSE:

a) There are large losses that were trimmed in the most recent five-year time period among the CLEAR Medical Expenses, Permanent Impairment and Death Benefit coverages;

however, it is true that compared to older periods, the amount is relatively lower. As the application mentions, this is largely due to how claims develop over time for the most severely injured people as well as the points in time where the injury reserve is updated to reflect the changing probability of recovery. At the earliest stages of a loss year, it is not always clear which injury claims will be the most extreme. After a couple of years, with more information collected on treatments, recoveries, level of income replaced, and additional assessments, it becomes more clear which claims will collect for decades (higher reserve) and which will not (lower reserve). After that initial stage, randomness determines which accident years have the largest claims and which do not.

It is possible that ultimate loss amounts are understated or overstated as any estimate could be. The ultimate claims are only as accurate as the factors used to develop them including the incurred loss adjustment, loss trend, and loss development factors. To the extent that these factors that are based on credible data and determined on a best estimate basis could be inaccurate so could the ultimate claims be. However, since the factors chosen are on a best estimate basis it is not expected that ultimate claims are understated or overstated and therefore no alternative loss estimation method has been explored.

b) It is not SAF's intent to "load back" prior excess losses into the current rate program as a means of recouping prior losses and nor is it the consequence of implementing the policy. The intent of the policy is to identify excess losses that need to be adjusted in the original years in which they occur and to apply a factor to smooth the large loss experience expected for the rating year. In this case a single factor is applied to the final pure premium which has the same effect as applying the same factor to each historical year that is included/weighted in the final pure premium calculation. Large losses occur in the SAF history of claims and will occur in the future. The large loss policy would imply that the adjusted large losses are overstated if they were simply trimmed without the application of a corresponding factor to load back the trimmed amounts. A longer time frame is required to determine the large loss factors because, by definition, catastrophic claims should be low frequency. This approach aligns with traditional prospective ratemaking in that we are using more historic data to add credibility to an estimate of a projected amount.

SRRP (SAF) 2-31

Application Part and Chapter:	**SRRP (SAF) 1-31**	**Page No.:**	
Issue:	**Sensitivity Testing - CLEAR Vehicles**		
Topic:	**Rate Indication**		
MFR:	**27**		

Preamble to IR (If Any):

Question:

Further to SRRP 1-31, provide the rate indication by combining the three alternate assumptions for part a and similarly, by combining the 3 alternate assumptions for part b.

RESPONSE:

a) When combining all three assumptions, the CLEAR indication increased from –0.7% to 8.2%.

b) When combining all three alternate assumptions, the CLEAR indication decreased from –0.7% to –8.5%.

SRRP (SAF) 2-32

Application Part and Chapter:	**SRRP (SAF) 1-32**	**Page No.:**	
Issue:	**Indicated Rates**		
Topic:	**Accident Year Weights**		
MFR:			

Preamble to IR (If Any):

In SRRP 1-32, SAF provides the change to the overall rate level indication of +1.7% if more weight was assigned to the most recent two accident years – for coverages that are fully credible (CLEAR, Damage to Others, Loss of Use, Damage to own Vehicle, Comprehensive, Glass and Theft)- rather than 20% to each of the last five accident years:

i) +0.66% if 50/50 weight is applied to 2019 and 2020

ii) + 0.45% if 40/60 weight is applied 2019 and 2020.

Question:

Given the full percentage point decrease to the overall rate level indication based on this alternate assumption, does SAF find assigning more weight to the two most recent years – for those coverages that exhibit full credibility – a reasonable approach? Explain why or why not.

RESPONSE:

As noted in the response to IR 1-32, we aim to prudently capture emerging trends and to remove any anomalies among the loss years to improve the accuracy of the rate indication. While the two most recent years may have enough claims for standard credibility measures, these measures only consider unsystematic risk. Conclusions based on credibility theory will only hold if the claims are drawn from distributions that are identically distributed and are representative of the rating year. The length and severity of the Saskatchewan winter has a direct effect on the frequency of collision claims, which affects Damage to Others, Loss of Use, and Damage to own vehicle. As described in the response to 2-18, the Auto Fund observed a severe Saskatchewan winter in 2017/18 followed by more light winters in 2018/19 and 2019/20. Capturing the claims expense from only 2018/19 and 2019/20 would over-weight the low claims experience seen in those periods and ignore the possibility of the recurrence of a severe winter entirely, resulting in an overly optimistic projection. Comprehensive is similarly affected by frequency of storm events in a given year (below the catastrophe thresholds), and theft is affected by socioeconomic factors from one year to the next. Only incorporating two past years of experience into the forecast ignores all sources of systematic risk to which all vehicles in Saskatchewan are subject.

SGI's weightings incorporate a few more years of past year experiences into the forecast, trended and adjusted to the rating year's level, resulting in a more unbiased estimate that considers both systematic and unsystematic risk.

SRRP (SAF) 2-33

Application Part and Chapter:	**SRRP (SAF) 1-36**	**Page No.:**	
Issue:	**Indicated Rates**		
Topic:	**Complement of Credibility**		
MFR:	**6**		

Preamble to IR (If Any):

Further to SRRP 1-36 (d), it is unclear what the alternate method complement of credibility is, instead of the $874.74 used in the rate application. In addition, it is unclear what the ambulance indicated rate change would be with the alternative basis for the complement of credibility.

Question:

a) Provide the complement of credibility derived using the methodology outlined in SRRP 1-36, that would replace the $874.84. And in addition, the resulting rate level indication (i.e., how would the +18.29% change). Include supporting excel file.

b) The calculations presented in the excel response indicate that the projected value of the 2014 pure premium would be lower than without the Application of the trend factors. As provided by SAF in the response, this is mainly attributed to the negative trend rate for Coverage 31 (collision or damage to own vehicle) – with a severity trend rate of -5.29% for the past and -3.13% for the future. However, the R-squared value for the selected trend rate is low. Provide the p-value for the selected severity trend rate to support that it is statistically significant.

c) Provide an update to A above by using a severity trend rate of 0.0% for damage to own vehicle, and no other changes in assumptions. Include supporting excel file.

RESPONSE:

a) Upon review, SAF has decided to alter the methodology to be more in line with the original IR (SRRP 1-36) and apply the adjustments to the current on-level premium instead of the required premium. With this revision, the complement of credibility derived using the methodology outlined in SRRP 1-36 is $924.90. This can be derived from the excel file, IR 33a – Proof of Concept, it is the sum of the current on-level premium (cell C41) and the changes to premium from each of the considerations (cells D43 to F43). The resulting rate level indication would be +22.16% instead of +18.29%. Please see the attached exhibit (IR 33a – Exhibit 1 – Ambulance).

b) Trend selection is not solely a statistical exercise, in combination with statistics there is a level of expert judgement that must be combined to consider changes that would not be captured in the data (paradigm shifts, changes in regulation, changes in different industries, etc). The ambulance trend is based on a class group that includes ambulances and buses. The past trend was selected to reflect recent experience while also considering that the group's mix had been updated in 2014 and the future trend was selected to reflect the loss trend committee's view that that severity may continue to decrease but not at the same level as the past when the fleet was updated. Please see the table below for the p-values.

SEV A&B Cov 31

Year	Trend	Pval
7	-0.0313	0.0970
6	-0.0529	0.0113

c) The complement of credibility with a 0% severity trend for damage to own vehicle would be $1076.18 with an indication of +33.83%. Please see the attached exhibit (IR 33c – Exhibit 1 – Ambulance) and IR 33c – Proof of Concept where the 0% severity trend rate

was applied to coverage 31. Note that the frequency trend was still applied but was flat (0%) and the future labour rate factor of 1.0132 was also applied. SGI does not recommend selecting 0% given the negative trend observed in the Ambulance & Bus group's recent years in the loss trend committee exhibits.

SRRP (SAF) 2-34

Application Part and Chapter:	**SRRP (SAF) 1-37 (f)**	**Page No.:**	
Issue:	**Indicated Rates**		
Topic:	**Rate Rebalancing & Capping**		
MFR:	**6**		

Preamble to IR (If Any):

As provided by SAF, it chose to apply a uniform cap across all coverages.

> *"Alternative capping options were discussed, but a consistent approach for all classes was selected. With regular, annual rate programs, classes would not require large increases or decreases. A consistent application of rate caps avoids rate shock along with the intent of making regular rate changes going forward to achieve adequacy among all classes over time."*

Question:

Since the prior rate application was 2014, SAF has not had annual regular updates.

a) Given some classes require large increases, would SAF find it appropriate to have larger cap thresholds that vary by the level of the indicated rate increases? Would this create a more equitable rate system amongst classes that would better support the goal of rate fairness?

b) Does SAF currently have the system capability to provide such a varying cap program? And if so, could SAF suggest a varying cap program that would reduce the gap between the indicated and proposed rates sooner than the current filing proposal of a uniform 15% across all coverages?

RESPONSE:

a) The application of rate caps is intended to strike the balance between achieving rate fairness and reducing rate shock for customers. Applying a consistent rate cap among all classes achieves both these measures. Even in the classes where the indicated increases are larger, it does not change the impact of rate changes on those customers. SAF is confident that with more regular rate programs, larger indicated rate increases would not be required, and most vehicles would be closer to paying their adequate rate over time.

b) Currently the rate capping is handled by the actuarial department before the over 80,000 final premiums are loaded into the system. So, there is no system limitation in offering a varying cap program. Any level higher than 15% would reduce the gap between the indicated and proposed rates sooner than the 15%, but SAF does not recommend this approach. The classes that have the largest indicated increases are motorcycles, motorhomes, taxis, personal trailers and class A power units, or semi-trucks. The SAF recommends a consistent application of the 15% rate cap to all classes.

SRRP (SAF) 2-35

Application Part and Chapter:	**SRRP (SAF) 1-41**	**Page No.:**	**6,190**
Issue:	**Traffic Safety**		
Topic:	**Traffic Safety Programs**		
MFR:	**14**		

Preamble to IR (If Any):

SAF has provided a table indicating the success of its traffic safety programs relative to collision outcomes targeting Alcohol-Drug impaired driving.

Question:

Please provide any related estimate of claims cost savings related to Alcohol and Drug usage focused traffic safety programs.

RESPONSE:

Table 2-35. Estimated Cost Savings from Alcohol and Drugs Initiatives

Collision and Victims	Numbers Prevented	Average Cost per Claim ($)	Cost Savings ($)
Collision Damage	252	8,430	2,124,360
Fatalities	8	160,795	1,286,360
Injuries	226	51,857	11,719,682

Estimated cost savings related to Alcohol and Drugs amounts to $15,130,402

SRRP (SAF) 2-36

Application Part and Chapter:	**SRRP (SAF) 1-43**	**Page No.:**	**Pdf. 6,197 (MFR 14, Pg. 9)**
Issue:	**Traffic Safety**		
Topic:	**Traffic Safety Programs**		
MFR:	**14**		

Preamble to IR (If Any):

SAF has provided a table indicating the success of its traffic safety programs relative to collision outcomes. It has not provided information specific to programs targeting specific areas of focus.

Question:

a) Please file the full report prepare on the wildlife project.

b) Please provide the results of any pilot projects focused on wildlife claims.

c) Please comment on the status of each of the solutions under consideration.

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-37

Application Part and Chapter:	**SRRP (SAF) 1-44, SRRP (SAF) 1-45, 14**	**Page No.:**	**6,189 (MFR 14, Pg. 1)**
Issue:	**Traffic Safety**		
Topic:	**Traffic Safety- 2014 New Initiative Evaluation Report 2020**		
MFR:	**14**		

Preamble to IR (If Any):

SAF has provided a table indicating the success of its traffic safety programs relative to collision outcomes. It has not provided information specific to programs targeting specific areas of focus.

Question:

a) Please provide statistics of cell phone usage to demonstrate the effectiveness of the traffic safety program targeting issue.

b) Please provide the detail of the traffic safety program targeting cell phone usage/distracted driving and result of improvement over time.

c) Please provide any related information for Saskatchewan seatbelt use and claims cost relationship.

d) Please describe any programs that are targeting seatbelt usage. Please provide statistics of the program related to seatbelt usage.

e) Please provide the supporting data for the auto fund injury/collision ratio with a narrative description. [May 20, 2021, Auto Fund update slide section Saskatchewan Auto Fund Financial Highlights page 9]

RESPONSE:

a) The most recent observation study was conducted by Transport Canada/CCMTA. The data indicates that 7.7% of Saskatchewan drivers were using their cellphones while driving. This serves as a baseline to the most recent changes and will be compared to the results of the next study.

b) SGI's traffic safety program targeting cellphone usage/distracted driving is primarily comprised of a mixture of legislation, education, and enforcement. As of February 2020, the consequences of distracted driving were changed as follows:

- First offence – ticket more than doubled to $580, plus four demerits.
- Second offence within a year of being convicted of the first - $1,400 ticket, plus an additional four demerits, plus an immediate, seven-day vehicle seizure. Vehicle owners are now responsible for the towing and impound fees (cost varies according to mileage but expect to pay approximately $400 at least).
- Third offence within a year of conviction of the first - $2,100 ticket, plus four more demerits and another seven-day vehicle seizure.

With respect to education, SGI actively advertises on social media with news releases and videos. The most recent video directed at cell phone user was posted in July 2020 entitled: "what to do with your phone before driving."

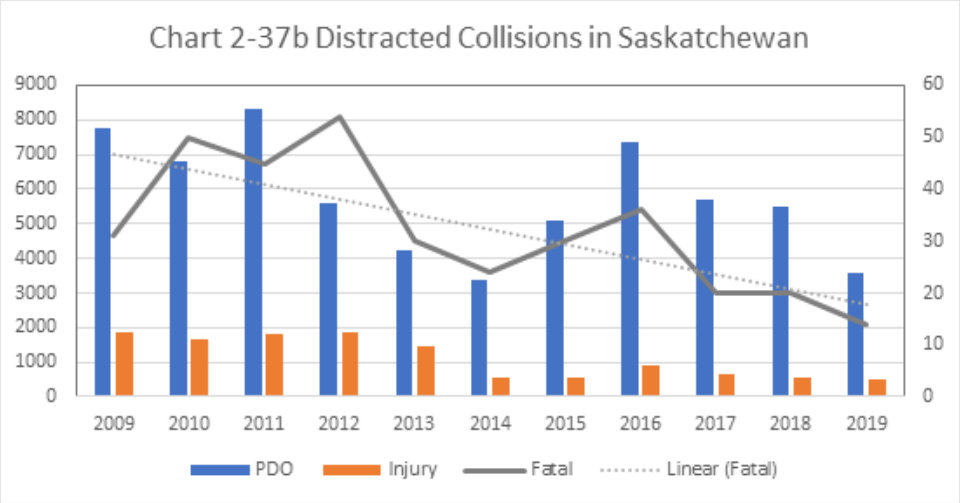
Recent tv campaign: https://www.sgi.sk.ca/news?title=everything-else-can-wait

Education is also carried out through our Traffic Safety Community Outreach area in partnership with many outside organizations.

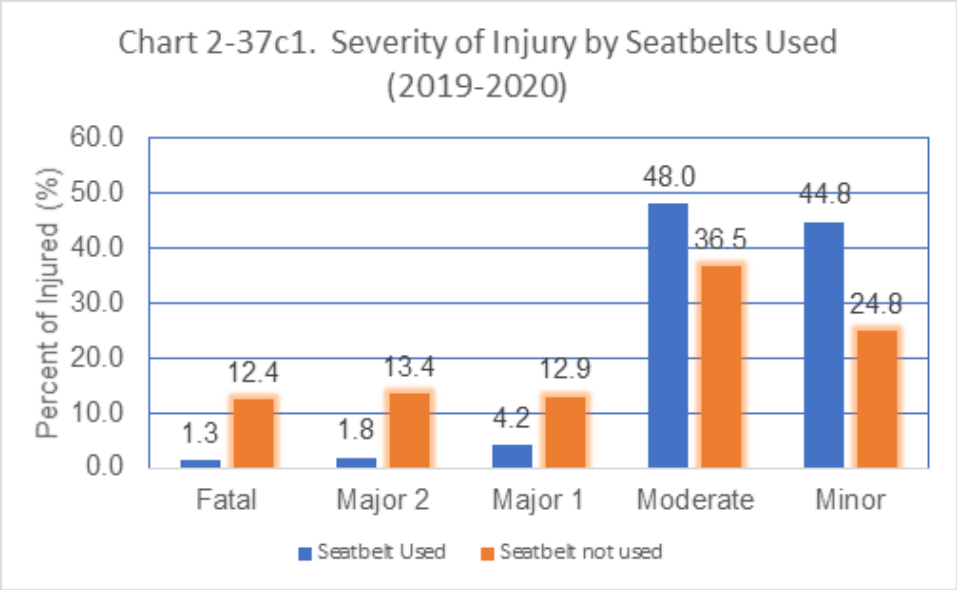
With respect to enforcement, SGI collaborates with law enforcement in enforcing the cellphone legislation with a special focus in the months of February and October. On average police issue about 700 tickets to distracted drivers each month.

Outcomes:

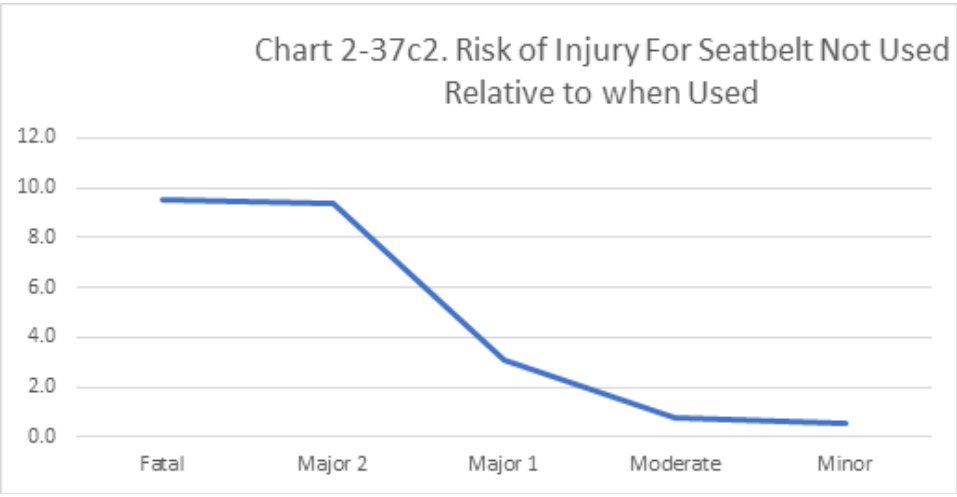
Chart 2-37b indicates there have been steady decreases in distracted driving collisions in all collision severity types.



c) Figure 2-37c1 shows the relationship between the severity of injury to vehicle occupants and seatbelt use. The severity of injury is much lower for victims using seatbelts. About 92% of those using safety restraints sustained minor or moderate injuries. Occupants not using safety restraints were severely or fatally injured 39.7% of the time, compared to 7.3% of the time for those using restraints.



The data in Chart 2-37c1 is used to develop the relative risk of sustaining an injury if seatbelt is not used versus when seat belt is used for the period 2015 – 2019 (Chart 2-37c2). The effect of seatbelt, when used is to shift the risk of sustaining severe injuries towards minor injuries. For example, an occupant of a vehicle who does not use a seatbelt is about 9.5 times more likely to die in a collision when not wearing a seatbelt. The shift from more severe injury from seatbelt use towards minor injuries results in lower claims costs.



d) Our child Passenger seat program, which is administered through network of trained technicians and coordinated by a funded position with the Saskatchewan Prevention Institute is geared at getting parents to have their children in appropriate restraints.

Seat belt use is a focus of all our monthly enforcement programs and CTSS has that as one of their areas of priority as well all year round. Any media that we put out on traffic safety focuses of the month emphasizes seat belt use.

We currently have two rollover simulators that visually and clearly demonstrates the implications of driving unbuckled. These simulators are managed/used by the RCMP and are also available for public booking for educational purposes.at public events, festivals, etc.

In 2004, Transport Canada began conducting observational surveys of seatbelt use, alternating annually between rural and urban communities across Canada. Seatbelt use in urban areas has been observed since 2000 and most recently in 2017. Table 2-37a presents the trends of seatbelt use in Saskatchewan compared to Canada conducted by CCMTA. The Saskatchewan urban seatbelt use rate by front-seat occupants increased from 93.5% in 2007 to 95.7% in 2017. Comparatively, the national average increased from 92.5% to 96.9% over the same period.

Table 1-37a. Seatbelt Use in Saskatchewan and Canada
(% of All Occupants Wearing Seatbelts in Light-Duty Vehicles)

Year	Saskatchewan	Canada
2000	90	90.1
2001	91.7	89.9
2002	85.7	85
2003	85.9	87.4
2004/2005	93.7	90.5
2005/2006	92.9	90.8
2005/2007	93.5	92.5
2009/2010	96.8	95.3
2016	96.1	97.5
2017	95.7	96.9

In the 2017 seatbelt survey, it was determined that belt use is higher among women and lower among young people in Saskatchewan. This is the same across Canada.

Table 2-37 Seat Belt Usage by Drivers by Gender and Age -- 2017

Jurisdiction		Male	Female	Under 25	25-49	50+
Saskatchewan		95.10%	97.0%	87.4%	94.9%	98.6%
Canada		96.10%	97.7%	95.1%	96.9%	96.7%

e) See attachment IR 37(e). The ultimate injury claim counts in relation to ultimate collision claim counts were shown in the slide at the SRRP and SGI meeting in May of 2021. The supporting data provided in the attachment shows the injury counts generally decreasing over time with some fluctuations. The injury to collision ratio hovers around 7.5% from 2013 to 2020.

SRRP (SAF) 2-38

Application Part and Chapter:	**SRRP (SAF) 1-44**	**Page No.:**	
Issue:	**Traffic Safety**		
Topic:	**Traffic Safety Programs**		
MFR:	**14**		

Preamble to IR (If Any):

Question:

Please provide an update to tables in SRRP(SAF) 1-44, including columns for the total collisions, fatalities, and injuries by year through 2021 and average for those years.

RESPONSE:

The data requested are presented below:

Year	Collisions	Injuries	Fatalities
2009	30615	6886	153
2010	29004	6542	167
2011	29675	6882	150
2012	30231	7333	183
2013	31755	7036	139
2014	27632	5817	130
2015	27876	5574	121
2016	29011	5768	125
2017	29035	4616	100
2018	29208	4220	129
2019	28886	4231	71
2020	24226	3599	87

Updated Table 1-44. Impact of SGI Initiatives on Collision Outcomes

Collisions and Victims	Baseline Average (2009-2013)	Average Following Implementation (2018-2020)	Change	Percent Change
Total Collisions	30,256	27,440	-2,816	-9%
Fatalities	158	96	-62	-39%
Injuries	6,936	4,017	-2,919	-42%

SRRP (SAF) 2-39

Application Part and Chapter:	**SRRP (SAF) 1-47, SRRP (SAF) 1-71 (a), 15**	**Page No.:**	**6,201**
Issue:	**MCT Ratios and Capital Management Policy**		
Topic:	**RSR Balance and MCT Forecast**		
MFR:	**15**		

Preamble to IR (If Any):

Question:

a) Please provide the indicated rate required and capital provision that what would be necessary in 2022 including the RSR release (dollar and percentage), and MCT would be on an annual basis for the four years beyond 2021/22, all else being equal to achieve a 140% MCT at the end of 2025/26 based on SRRP (SAF) 1-71 (a).

b) Please comment to what extent the release in 2022 would have to deviate from the current 1/5th plan to achieve the 140% level in 2025/26.

c) Please file a financial forecast reflecting (a).

RESPONSE:

a)

	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026
Assumed Base Rate Change	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%
Capital Margin	2.2%	-8.8%	-6.6%	-4.8%	-3.4%	-2.3%
Capital Margin Change	0.0%	-10.8%	2.4%	1.9%	1.5%	1.2%
Total Rate Change	0.0%	-9.3%	2.4%	1.9%	1.5%	1.2%
Approx Annual Release ($000s)	N/A	-120,878	-99,914	-77,583	-67,192	-58,462
MCT	168%	164%	158%	146%	143%	140%

b) The capital margin change for 2021/22 of -10.8% is significantly higher than the original capital margin adjustment of 1.6%. It is important to note the many negatives of this approach:

- It confuses the effect of future basic rate need into the current rate program, violating the principle that the rate charged for premiums in a rating year should align to the claims and expenses on policies from that year. The five-year forecast does not include any future basic rate change assumptions and forcing this year's five-year forecast to converge on 140% brings the effect of those future shortfalls or excesses into the current capital margin amount.
- It creates a large amount of rate shock for the Auto Fund's customers, not only in the current rating year but in future rating years when the removal of the significant capital margin reduction combines with potential future basic rate changes.
- When future actual results inevitably vary from this expected forecast, this approach will dramatically pull rates in a new direction, causing further rate shock.
- It is an irreparable deviation from the SGI & CIC Board approved Capital Management Policy.

While SGI does not agree with the 2014 SRRP recommendation that the capital margin should only vary by one percentage point in a year, SGI does agree that it should be adjusted in a way to avoid contributing to (or in this case, outright causing) rate shock for customers. SGI strongly recommends remaining consistent with its own approved Capital Management Policy to determine capital margin changes that move the Fund toward its target MCT level while limiting rate shock for customers.

c) See attachment IR 2-39.

SRRP (SAF) 2-40

Application Part and Chapter:	**SRRP (SAF) 1-47 & 1-48, 15**	**Page No.:**	**6,201**
Issue:	**MCT Ratios and Capital Management Policy**		
Topic:	**RSR Balance and MCT Forecast, MCT Target Scenario**		
MFR:	**15**		

Preamble to IR (If Any):

Question:

a) Please provide the necessary RSR release (dollar and percentage), and MCT would be on an annual basis for the four years beyond 2021/22, all else being equal.

b) Please discuss what would be the necessary RSR release (dollar and percentage), and MCT would be on an annual basis for the four years beyond 2021/22, all else being equal to achieve a 125% MCT at the end of 2025/26.

c) Please file a financial forecast reflecting (b).

RESPONSE:

a) See response to SRRP (SAF) 1-47(a).

b)

	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026
Assumed Base Rate Change	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%
Capital Margin	2.2%	-13.1%	-10.0%	-7.6%	-5.6%	-4.1%
Capital Margin Change	0.0%	-15.0%	3.5%	2.7%	2.1%	1.7%
Total Rate Change	0.0%	-13.6%	3.5%	2.7%	2.1%	1.7%
Approx Annual Release ($000s)	N/A	-159,676	-129,662	-95,713	-82,000	-70,092
MCT	168%	165%	153%	137%	131%	125%

Please see response to 2-39 for SAF's explanation of all issues with this approach. SAF strongly recommends against using this approach.

c) See attachment IR 2-40.

SRRP (SAF) 2-41

Application Part and Chapter:	**SRRP (SAF) 1-49, 15**	**Page No.:**	**6,201**
Issue:	**MCT Ratios and Capital Management Policy**		
Topic:	**Financial Condition Testing**		
MFR:	**15**		

Preamble to IR (If Any):

The MCT under the range of outcomes in the FCT does not fall below 128%.

Question:

a) Please indicate whether the base scenario reflects a forecast with a capital release to reach the 140% MCT target.

b) Please discuss what level of MCT is supported given the FCT results.

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-42

Application Part and Chapter:	**SRRP (SAF) 1-61, 14, 18 App. A**	**Page No.:**	**6,252**
Issue:	**Traffic Safety**		
Topic:	**Traffic Safety Expenditures**		
MFR:	**14, 18**		

Preamble to IR (If Any):

SAF provided areas of focus in Traffic Safety expenditure in its May 20, 2021 Auto Fund update section Traffic Safety Update page 12.

- Impaired driving – alcohol/drugs
- Distracted driving
- Occupant restraints
- Commercial vehicles
- Speed
- Wildlife
- Intersections
- Road conditions

Question:

a) Please provide a Traffic Safety Expenditures table for the period of 2017-2021 actual, 2022 budget and forecast through 2025/26 by area of focus and comment on forecast changes including traffic enforcement.

b) Please provide a description of the funding arrangements for police enforcement targeting traffic safety included in (a) and how it has changed over the last five years and is expected to be over the forecast period.

c) Please provide any measurements of the success of the traffic safety by areas of focus, including a summary of reported outcomes of the monthly traffic enforcement in 2019/20, 2020/21 and year-to-date.

RESPONSE:

a) Confidential response was provided to the SRRP and consultants.

b) Confidential response was provided to the SRRP and consultants.

c) Please see attachments IR 2-42 (c).pdf and IR 2-42 (c) Copy of all Types of Collisions Stats – 2008 - 2020_updated.xlsx

SRRP (SAF) 2-43

Application Part and Chapter:	**SRRP (SAF) 1-61**	**Page No.:**	**6,192**
Issue:	**Traffic Safety Programs**		
Topic:	**Traffic Safety Expenditures**		
MFR:	**14**		

Preamble to IR (If Any):

Question:

a) Please update the schedule provide in 14 to include the detail of major safety initiatives for 2020/21 actual vs budget and explain the changes.

b) Please provide a summary comparison for the years 2019/20 and 2020/21 actual versus budget in a similar level of detail to SRRP (SAF) 1-61 and explain the variances.

c) Please explain the major forecast increases in 2021/22 and 2022/23 in Program Evaluation and Driver Development.

d) Please explain the factors that resulted in the increase in Other Direct Administrative Expenses in 2020/21 and 2021/22.

e) Please explain how the allocation of corporate overhead is determined and the variability in the amounts allocated to SAF for traffic safety in 2019/20 through 2022/23.

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-44

Application Part and Chapter:	**SRRP (SAF) 1-65, 18 Sec. 1.4 18.1, App. A & B**	**Page No.:**	
Issue:	**Investment Strategy and Income**		
Topic:	**Investment Income**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

Please provide 1-65 table with the following detail for salvage operations for the period of 2017 – 2020 actual and 2021 forecast:

- Total sales, including whole vehicles sales, part sales, and other sales
- Total costs including whole vehicles cost, part cost, others cost, and indirect cost
- Admin expenses
- Net income

RESPONSE:

Please see attachment 2-44.

SRRP (SAF) 2-45

Application Part and Chapter:	**SRRP (SAF) 1-66 (a) & (d), SRRP (SAF) 1-67 (a) SRRP (SAF) 1-71 18 Sec. 1.4 18.1, App. A & B**	**Page No.:**	
Issue:	**Investment Strategy and Income**		
Topic:	**Investment Income**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

Please provide an update to the forecast of investment income in 2022 through 2026 in SRRP (SAF) 1-66 and forecast returns in SRRP (SAF) 1-67 (a) reflecting the results of the Q1 2022 and the June 2021 interest rate forecast and comment on the changes in returns and assumptions.

RESPONSE:

An updated investment budget forecast is not currently available. The annual budget cycle begins in September and is expected to be finalized by December 2021 and still requires additional data prior to being finalized.

The June 2021 interest rate forecast does indicate yields are expected to differ than indicated in the original rate panel submission. However, the structure of the Matching portfolio and claims liabilities are aligned to protect from material changes in discount rates whereby any interest rate changes are relatively neutral for the Auto Fund as a whole. For the Return Seeking Portfolio, the expected return forecasts remain consistent year-over-year due to 10-year expected return horizon and will not vary materially in a revised budget.

SRRP (SAF) 2-46

Application Part and Chapter:	**SRRP (SAF) 1-66, 18 Sec. 1.4 18.1, App. A & B**	**Page No.:**	**6,244**
Issue:	**Investment Strategy and Income**		
Topic:	**Investment Income**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

a) If available, please provide the comparison of 2019/20 and 2020/21 actual vs forecast detail of overall net investment income by component including the detail of investment expenses.

b) Please provide a breakdown of the net investment earnings for Q1 2022 by component and compare with that budgeted for the Quarter and comment on the variance.

c) Please file the forecast of net investment income by component (in the same level of detail as (a) for 2021/22 and compare with actual for 2020/21 and explain the change in the forecast.

d) Please file a forecast of net investment income by component for the last five historical years and forecast for the years 2021/22 through 2025/26.

RESPONSE

Please reference attachment 2-46.

SRRP (SAF) 2-47

Application Part and Chapter:	**SRRP (SAF) 1-69, 18 App. A, 21**	**Page No.:**	**6,252**
Issue:	**Capital, Operating and Administrative Expenses**		
Topic:	**Expense Trends**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

a) Please provide an updated analysis indicating the growth in administrative expenses excluding one-time initiative expenditures and comment on the trend relative to inflation on this basis.

b) Please provide a linear graph of the growth in administrative expenses, administrative expenses excluding initiative expenditures and CPI and comment on the trends.

c) Please updated the response SRRP(SAF) I-69 and the response to part (a), including the following information for SAF for the years 2015/16 to 2025/26, for administrative expense i the compounded growth for the five-year historical and three-year outlook.

RESPONSE:

a) See IR 2-47 Attachment

b) See IR 2-47 Attachment with commentary.

c) See IR 2-47 Attachment, last two columns for compound annual growth rate (CAGR)

SRRP (SAF) 2-48

Application Part and Chapter:	**SRRP (SAF) 1-70**	**Page No.:**	**Pdf. 6,249** **Pdf. 6,252**
Issue:	**Capital, Operating and Administrative Expenses**		
Topic:	**Issuer Fees**		
MFR:	**18**		

Preamble to IR (If Any):

The issuer fees show a large increase in online transactions in the forecast period and no discernable change in in-office transactions. SGI is currently undertaking a significant digital transformation strategy.

SGI has stated:

"*SGI's current infrastructure lacks the necessary capabilities, so SGI needs to modernize its technology, both tools and platform. It also needs to enhance SGI CANADA's real-time sharing of data with brokers and its ability to integrate with broker management systems to help brokers deliver a digital experience to customers who would prefer to do business online. This investment will lead to an improved customer experience by providing more customization that tailors the experience for each customer and better meets their needs*."

Question:

a) Please indicate the actual and assumed number of online versus in-office transactions in each year of the table provided in SRRP (SAF) 1-70 and the relative mix of transactions and explain the trend.

b) Please discuss how SAF's digital transformation is expected to influence the mix in the number of online versus in-office transactions. Please indicate whether the forecast in (a) reflects the post-CT project environment trend.

c) Please summarize the terms of the Issuer Accord.

d) Is there an expectation at some point that the Broker costs will be reduced or expected to decline because of the full implementation of the Digital Strategy?

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-49

Application Part and Chapter:	**SRRP (SAF) 1-71 (a)**	**Page No.:**	
Issue:	**18. Detailed Financial Information**		
Topic:	**Financial Forecast RSR**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

a) Please provide a table in the format of Appendix A that illustrates the projected evolution of the RSR and MCT ratio from 2021/22 to 2025/26, without the capital build currently included in rates.

b) Please provide a table in the format of Appendix A that illustrated the project evolution of the RSR and MCT from 2021/22 to 2025/26 continuing with the current capital build amount in rates.

RESPONSE:

a) At the time of the 2014 Rate Program, the proposed RSR surcharge differed from the one recommended by the SRRP and implemented. Thus, the split between capital build and release is not available for the margin currently in place. The attached table shows the forecast assuming the following, effective January 1, 2022:
   - no change to basic rates; and,
   - a 2.2% decrease to remove the current capital margin.

b) The attachment shows the forecast assuming the following, effective January 1, 2022:
   - no change to basic rates; and,
   - no change to the capital margin.

SRRP (SAF) 2-50

Application Part and Chapter:	**SRRP (SAF) 1-71 (a)** **Pre-Ask 5**	**Page No.:**	
Issue:	**MCT Ratios and Capital Management Policy**		
Topic:	**RSR Balance and MCT Forecast**		
MFR:	**18. Financial Information**		

Preamble to IR (If Any):

Question:

Please indicate the MCT ratio at the end of Q1.

In light of the results of Q1's operating results, please provide an updated forecast for 2021/22 reflecting the first-quarter results and the forecast for the remainder of the year. Please include the RSR and MCT.

RESPONSE:

The MCT at the end of Q1 was 184%. The increase in the MCT was driven by an increase to the RSR resulting from high returns in the return seeking portfolio in Q1.

Due to the nature of insurance, there will always be volatility in both the claims and investment results from one quarter to the next. We have observed significant instability in the MCT over time due to volatile claims emergence experience, adjustments to valuation assumptions such as tail factors on long-tailed injury lines, and unstable investment returns. The rate application needs to draw a line at a point in time for its forecasts to avoid spending excess resources on continuous updates to the forecast. Effects of changes beyond that point should be handled by the following rate program, as it will incorporate actual results beyond the consideration of this rate program. Also, it is worth noting that the underlying basic rate indication is not affected by these changes– only the capital margin's calculation and selection.

We will be updating the forecast to reflect Q1's operating results when the full budget process is completed over the coming months. The updated forecast is expected to be available by early October 2021.

The following table summarizes the financial results as of June 30, 2021.

Premiums Earned	$248,846,837
Claims Incurred	185,533,862
Issuer Fees	12,661,328
Premium Taxes	12,566,417
Administrative Expenses	19,314,099
AF, Traffic Safety	10,326,636
Underwriting Profit (Loss)	8,444,495
Investment Earnings	114,589,433
Salvage Profit	5,569,568
Other Revenue	25,235,496
Increase (decrease) to Rate Stabilization Reserve	153,838,992
Rate Stabilization Reserve (deficit), beginning of year	1,090,138,458
Rate Stabilization Reserve (deficit), year-to-date	1,243,977,450
MCT	184%

SRRP (SAF) 2-51

Application Part and Chapter:	**SRRP (SAF) 1-71 (a)** **18.1 Appendix A & B**	**Page No.:**	**132, 283** **6,252**
Issue:	**Capital, Operating and Administrative Expenses**		
Topic:	**SAF Operating Expenses**		
MFR:	**18. Financial Information**		

Preamble to IR (If Any):

SAF has indicated that it has adjusted the claims incurred and investment income in 2021/22 to reflect a smaller change in yields from 2020/21 actual than what was forecast.

Question:

a) Please update the proforma forecast provided including additional lines indicating the annual impact of interest rate changes on discounted incurred claims and investment income.

b) Please explain why the discount rate table in SRRP (SAF) 1-71(a) does not agree with the information provide on page 283 of the Application.

c) Please provide an update to the analysis on page 283 based on the June 2021 interest rate update and comment on the difference from the original forecast. Provide a comparative table of the range in discount rates and the overall discount rate on that basis and provide an update on the indicated rate.

d) Please update the proforma forecast based on (c), including additional lines indicating the annual impact of interest rate changes on claims incurred and investment income separately disclosed. Please indicate the MCT on that basis and how the Capital release may change based on the update in (c).

RESPONSE:

a) See attachment.

b) The discount rate table shown in SRRP (SAF) 1-71(a) is:

	2020/2021 Projected Discount Rate (Original)	2020/2021 Actual Discount Rate (New version)	2021/2022 Projected Discount Rate (Both versions)
0-24	0.85%	0.69%	1.25%
25-60	1.15%	1.60%	1.70%
61-120	1.51%	2.00%	2.12%
121-180	1.43%	2.12%	2.38%
181-240	1.63%	2.32%	2.56%
240+	6.23%	6.23%	6.23%

On page **286** of the rate application package, it shows the following discount rate projections:

Forecasted Discount Rates net of investment expenses Expense Ratio 0.342%

Bucket (Months)	2020/2021	2021/2022	2022/2023	**2021-2022 Rating Year**
0-24	0.85%	1.25%	1.58%	**1.54%**
25-60	1.15%	1.70%	2.15%	**2.09%**
61-120	1.51%	2.12%	2.83%	**2.74%**
121-180	1.43%	2.38%	3.10%	**3.01%**
181-240	1.63%	2.56%	3.18%	**3.11%**
240+	6.23%	6.23%	6.23%	**6.23%**

So, the 2020/21 and 2021/22 projected rates do agree. The final 2021-2022 rating year discount rates were intended to be a weighted average of the 2020/21 and 2021/22 projected discount rates. The original table on page 286 of the Application mistakenly weighted the 2021/22 and 2022/23 values instead of the 2020/21 and 2021/22 values. The ones used in the Application calculations are correct. The error only occurred in this exhibit. The corrected exhibit table looks as follows.

Forecasted Discount Rates net of investment expenses

Expense Ratio 0.342%

Bucket (Months)	2020/2021	2021/2022	2022/2023	**2021-2022 Rating Year**
0-24	0.85%	1.25%	1.58%	**1.20%**
25-60	1.15%	1.70%	2.15%	**1.63%**
61-120	1.51%	2.12%	2.83%	**2.05%**
121-180	1.43%	2.38%	3.10%	**2.26%**
181-240	1.63%	2.56%	3.18%	**2.44%**
240+	6.23%	6.23%	6.23%	**6.23%**

The overall discount rate was determined from an internal rate of return (IRR) calculation and is for illustration purposes only. The overall discount rate is calculated as the IRR such that the total discounted cash flows for all coverage and vehicles classes combined (calculated using the bucket yields in each case) equals the discounted cash flows using the overall discount rate and payment patterns. Please note that the 2.98% in the application (page 132) was misstated and should be 3.01%. See the response to 2-23 for more detail.

c) An update to the analysis on page 283 based on the June 2021 interest rate update is attached. They are shown below.

June 2021 Interest Rate Update
Forecasted Discount Rates net of investment expenses

Expense Ratio 0.342%

Bucket (Months)	2020/2021	2021/2022	2022/202	**2021-2022 Rating Year**
0-24	1.10%	1.15%	1.29%	**1.14%**
25-60	1.40%	1.44%	1.76%	**1.44%**
61-120	1.99%	2.08%	2.45%	**2.07%**
121-180	1.91%	2.33%	2.69%	**2.28%**
181-240	2.16%	2.51%	2.76%	**2.47%**
240+	6.23%	6.23%	6.23%	**6.23%**

The overall discount rate based on the June 2021 interest rate update is 2.98%. The overall rate indication remains at 1.7% given this interest rate forecast.

d) The full investment forecast isn't available based on the June 2021 interest rate update. The investment returns will be updated when the full budget process is completed over the coming months. The attached forecast has been updated for the following:

- discount rates reflecting the June 2021 interest rate forecast; and,
- bond gains/losses, which largely offset the discounting adjustments to claims incurred.

For budget purposes, we assume bond gains/losses offset changes to the impact of discounting stemming from yield changes because of the asset-liability matching and quarterly rebalancing process. In reality, there is always some level of mis-match (gains/losses in the matching portfolio vs changes in discounting due to yield changes) and we have observed swings in either direction.

The MCT in this forecast is the same as in (a). Therefore, their impact on the capital release is nil.

SRRP (SAF) 2-52

Application Part and Chapter:	**SRRP (SAF) 1-72 (a) & (b)**	**Page No.:**	
Issue:	**Claims Incurred**		
Topic:	**Claims Incurred Trend**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

a) Please reconcile the Claims incurred reported in SRRP (SAF) 1-71 (a) with the total incurred losses in SRRP (SAF) 1-72.

b) Please update the response to SRRP (SAF) 1-72 providing the forecast of total incurred losses for 2022/23 and provide the growth rate from 2021/22 and comment on the trend relative to the last five years.

c) Please provide a table reflecting the related average severity for the claims incurred and the claims count provided in the response.

RESPONSE:

a) Claims incurred as it appears in 1-71 are direct from the financial statements of the Auto Fund. They include ultimate loss estimates of the current fiscal year's results, changes in ultimate loss estimates on prior years, manual adjustments, and other financial statement components.

Claims incurred as it appears in 1-72 are from the ultimate losses from the March 31, 2021 actuarial valuation of policy liabilities. It includes current estimates of the ultimate losses for each historical accident period and does not include any other manual adjustments or other financial statement components of the claims incurred.

For a full reconciliation of these two sources, please see Appendix L of the Valuation of Policy and Liabilities in MFR 6, Indicated and Requested Rates Part 4 (page 6,132).

b) For detailed commentary on the trend in incurred claims in the past and future, please see the Loss Trend Summary and Exhibits provided in Minimum Filing Requirement #6. Please see attachment IR 2-58 "SAF Internal Operating Measures" for total incurred losses forecast and growth rate from 2021/22.

c) Please see attachment 2-52 (c).

SRRP (SAF) 2-53

Application Part and Chapter:	**SRRP (SAF) 1-74 (d)**	**Page No.:**	
Issue:	**Capital, Operating and Administrative Expenses**		
Topic:	**Repair and Rehabilitation Costs**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

Please summarize the schedule by two categories: payments made to the Ministry of Health and Medical Providers.

RESPONSE:

Payments Made to the Ministry of Health

Sask Health

Sum of Total Paid	Fiscal Year				
Row Labels	2016/17	2017/18	2018/19	2019/20	2020/21
SK Health Claim	$18,721,394.00	$18,580,574.48	$28,167,679.07	$28,697,072.28	$28,882,784.90

Payments Made to Medical Providers

Sum of Total Paid	Column Labels				
Row Labels	2016/17	2017/18	2018/19	2019/20	2020/21
M5-Acupuncture	$91,410.40	$88,464.64	$86,339.87	$103,400.56	$65,525.53
M6-Occupational Therapy	$1,273,674.24	$1,401,751.84	$1,459,835.51	$1,597,273.83	$1,408,710.45
MC-Chiro Rehab	$1,168,499.78	$1,140,176.78	$1,206,119.11	$1,269,298.41	$1,031,731.80
MG-Secondary Assessment	$1,212,973.33	$1,197,269.12	$1,158,011.91	$823,059.55	$606,687.90
MM-Massage	$737,798.98	$732,195.52	$769,181.48	$816,000.52	$501,116.81
MN-Secondary Treatment	$4,202,456.56	$3,893,349.93	$3,599,195.73	$3,399,363.13	$2,276,733.01
MP-Physio	$3,325,211.13	$3,446,195.86	$3,695,791.60	$3,857,256.72	$2,975,567.02
FIT for Active Living Tertiary Saskatoon	$2,767,600.96	$2,815,872.04	$3,393,691.00	$2,747,637.00	$2,747,637.00
Functional Rehabilitation Program Tertiary Regina	$2,435,600.60	$2,283,131.00	$2,328,806.00	$2,134,715.00	$2,328,780.00

OTHER

Acquired Brain Injury Partnership (Funding goes directly to 36 community-based programs (18 delivered by non-profit organizations, 17 delivered by SHA and one delivered by the Ministry of Health)

Sum of Total Paid	Fiscal Year				
Row Labels	2016/17	2017/18	2018/19	2019/20	2020/21
Acquired Brain Injury	$5,286,403.37	$5,394,046.96	$5,385,659.98	$5,340,029.61	$5,298,857.65

Shock Trauma Air Rescue Service Foundation (STARS) (Gift in Kind paid directly to STARS)

Sum of Total Paid	Fiscal Year				
Row Labels	2016/17	2017/18	2018/19	2019/20	2020/21
Shock Trauma Air Rescue Service Foundation (STARS)	$400,000.00	$400,000.00	$400,000.00	$400,000.00	$400,000.00

SRRP (SAF) 2-54

Application Part and Chapter:	**SRRP (SAF) 1-77 (a) - (c)**	**Page No.:**	**6,247**
Issue:	**Claims Incurred**		
Topic:	**After Market Part Usage**		
MFR:	**18**		

Preamble to IR (If Any):

Question:

a) Please update the tables provided to include columns for the compound annual growth for the last five historical years and the growth forecast for 2021/22.

b) Please provide a supplementary table to SRRP (SAF) 1-77 (a) indicating the relative mix of new after-market and used parts in each year and comment on the trend.

c) Please explain how SAF determined the estimated savings in SRRP (SAF) 1-77 (b) and update the schedule to illustrate the determination of the savings.

d) Please reconcile the autobody expenses forecast for 2021/22 reflected in SRRP(SAF) 1-5 with the detail and total provided in SRRP (SAF) 1-77 (c)

RESPONSE:

Please see the attachment IR 2-54.

SRRP (SAF) 2-55

Application Part and Chapter:	**SRRP (SAF) 1-79 (a) & (c)**	**Page No.:**	**6,271**
Issue:	**Cost Allocation**		
Topic:	**Cost Allocation Methodology Changes**		
MFR:	**21**		

Preamble to IR (If Any):

At least annually, Finance, with the input of applicable departments, completes a review of the allocation being used and update as applicable.

A first formal review process occurred in advance of the 2020/21 fiscal year.

SAF further states the past review did bring up some changes in cost drivers and percentages that were somewhat out of date. These changes were more than what would regularly occur in an annual review process.

Question:

a) Please indicate whether the cost allocation methodology has been subject to an independent review to determine the appropriateness of cost drivers used and the methodology in general.

b) Please elaborate on cost drivers that were incorporated into the methodology in 2020/21, the reason for the use of the allocator and the directional impact of the change in methodology on SAF.

RESPONSE:

Confidential response was provided to the SRRP and consultants.

SRRP (SAF) 2-56

Application Part and Chapter:	**SRRP (SAF) 1-75**	**Page No.:**	**6,249**
Issue:	**Claims Incurred**		
Topic:	**Loss Adjustment Expenses**		
MFR:	**18. Financial Information**		

Preamble to IR (If Any):

The external loss adjustment expenses decline in 2020/21 then increase materially in 2021/22 from 2019/20 levels. It is not clear from the detail provided the reasons for the change.

Question:

Please provide a schedule detailing loss adjustment expense by cost element for both internal and external expenses and total expenses for the years 2018/19 through 2021/22 and explain the reasons for the variances.

RESPONSE:

The decline in external loss adjusting is primarily due to having significantly fewer claims in 2020-21 compared to 2019-20 as the pandemic drastically reduced the number of drivers on the roads. The 2021-22 budget expected a return to normal for claims plus compound growth in external LAE of 6.5% from 2019-20 to 2021-22 budget.

Details of external LAE included in workbook 2-56 LAE. Internal LAE is primarily salaries.

SRRP (SAF) 2-57

Application Part and Chapter:	**SRRP (SAF) 1-81 (a) & (b)**	**Page No.:**	**6,272**
Issue:	**Cost Allocation**		
Topic:	**Allocated Expenses**		
MFR:	**21, 18**		

Preamble to IR (If Any):

Question:

a) Please update the schedule to provide the detail of the total administrative expenses listed in Tab 21 for the years 2017/18 and 2018/19, including any updates to the forecast for 2021/22.

b) Please provide the compound annual growth for the five years 2017/18 through 2021/22 and comment on the trend.

c) Please refile the excel table reflecting (a) & (b) excluding one-time CT IT expenditures and comment on the change in the admin cost per insured vehicle on that basis.

d) Please file an update to the SRRP (SAF) 1-81 (a) & (b) excel comparing the detail of the 2021/22 budget by line item with the 2019/20 year and 2020/21 year and explain all the differences that are in excess of inflation.

e) Please file on a similar level of detail of (d) adjusting 2021/22 budget to include the reclassified contra account amounts to provide a comparison on the detail on the same accounting basis and explain the differences that are in excess of inflation.

RESPONSE:

See IR 2-57, details for each letter above have been included.

SRRP (SAF) 2-58

Application Part and Chapter:	**SRRP (SAF) 1-87**	**Page No.:**	
Issue:	**Productivity & Efficiencies**		
Topic:	**Key Performance Metrics**		
MFR:	**23**		

Preamble to IR (If Any):

Question:

Please provide a dashboard of operating statistics for the last five years and forecast for 2021/22 to 2025/26 key metrics on operations, including the compound annual growth for the historical period and for the 2021/22 to 2025/26 period.

RESPONSE:

See attachment 2-58. We included monthly operational statistics tracked internally for the Auto Fund.

SRRP (SAF) 2-59

Application Part and Chapter:	**SRRP (SAF) 1-89**	**Page No.:**	
Issue:	**Capital Improvement Spending Plans**		
Topic:	**Information Technology Capital Planning**		
MFR:	**24**		

Preamble to IR (If Any):

Question:

a) Please indicate to what extent SGI has engaged an external IT consultant to assist in its project development or assess its IT competencies and provide recommendations. Please file a copy of any reports or presentations.

b) Please indicate to what extent SGI has consulted with other Crowns that are undertaking similar IT transformation projects to leverage best practices.

RESPONSE:

a) Confidential Response was provided to the SRRP and consultants.

b) SGI has consulted with SaskTel on IT transformation projects however, no Saskatchewan Crown Corporations have undergone the extensive transformation that SGI is undertaking. Replacing SGI's core insurance solutions and IT infrastructure is to enable SGI's broad corporate-wide business transformation.

SRRP (SAF) 2-60

Application Part and Chapter:	**SRRP (SAF) 1-90**	**Page No.:**	**111, 6,282**
Issue:	**Capital Improvements Spending Plans**		
Topic:	**Capital expenditure projection**		
MFR:	**24**		

Preamble to IR (If Any):

Question:

a) Please update the Capital Improvements Spending Plans schedule to provide the detailed comparison of 2020/21 actual vs. budget and explain the differences.

b) Please provide a table that shows the SAF capital spending forecast for the years 2021/22 to 2025/26.

RESPONSE:

Confidential Response was provided to the SRRP and consultants.