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March 9, 2023

British Columbia Utilities Commission
Suite 410
900 Howe Street
Vancouver, BC V6Z 2N3

Attention: Ms. Sara Hardgrave, Acting Commission Secretary and Manager, Regulatory Services

Re: Insurance Corporation of British Columbia (ICBC) 2023 Revenue Requirements Application – Responses to Information Request No. 1

Dear Ms. Hardgrave:

Please find attached ICBC's responses to the Information Requests received from the British Columbia Utilities Commission (BCUC) on February 9, 2023 (Exhibit A-3).

The responses to information requests 2023.1 RR BCUC.43.1C through to and including 2023.1 RR BCUC.43.5C are being filed confidentially with the BCUC as they contain confidential security-sensitive information which, if made public, could result in cyber-attack harm to ICBC and its customers, as it provides insight into the scope and maturity of ICBC's cybersecurity program.

A full response to the confidential information requests, together with the reasons for the confidentiality requests are set out in a separate letter filed with the BCUC today.

Sincerely,

Randy Yu
Senior Manager, Regulatory Affairs
/ls

Cc: Bill Carpenter, Vice President, Insurance, ICBC

Attachment

2023.1 RR BCUC.1.1

Reference: APPLICATION OVERVIEW
Exhibit B-1 (Application), Chapter 1, Section E.1, p. 1-7
Interim Rate Considerations

On page 1-7 of the Insurance Corporation of British Columbia (ICBC) 2023 Revenue Requirements Application (Application), ICBC proposes to defer the implementation of any rate variances arising from the British Columbia Utilities Commission's (BCUC) final decision on this Application to policies beginning on April 1, 2024. ICBC states:

> **Deferring the implementation of rate variances until what would normally have been the following policy year [i.e. April 1, 2024] will prevent customer confusion and dissatisfaction by eliminating the need to adjust the premium paid mid-way through the policy. Further, ICBC expects operational savings from avoiding back-billing active certificates, and will eliminate operational and distribution costs from issuing refund cheques.**

Please provide a high-level description of the process for how ICBC would back-bill active certificates, if required.

Response:

ICBC has explored various options for back-billing active certificates in the event that BCUC approves a final rate change that is different than the interim approved rate. Based on that analysis, ICBC's current approach for back-billing is as follows:

1. Build a technology tool that is capable of completing backdated bulk re-rating.
   - This tool would recalculate the rate between April 1 of the policy year and the date that ICBC implements the new final BCUC approved rate.
   - ICBC estimates that this tool would cost approximately $1 million and require 14 months to build.
   - ICBC's analysis has shown that this tool would handle approximately 80% of impacted Basic insurance certificates.
2. Manually re-rate Basic insurance certificates for the 20% that the tool is unable to calculate.

- Guidewire PolicyCenter is unable to calculate rates for certificates that have had a mid-term change.
- As a result, an internal operational business area would manually calculate the rate change for approximately 20% of impacted certificates.
- ICBC estimates the labour cost to be approximately $2.5 million and the effort to be approximately 87,000 hours.
- This would be a recurring cost and effort anytime BCUC approves a final rate change which is different than the requested change.

3. Print and mail cheques and letters.

- Once the new rates are determined, ICBC would be required to distribute cheques and letters to customers.
- ICBC estimates the distribution cost to be approximately $3.5 million.
- This would be a recurring cost anytime BCUC approves a final rate change, which is different than the requested change.

2023.1 RR BCUC.1.2

Reference: APPLICATION OVERVIEW
Exhibit B-1 (Application), Chapter 1, Section E.1, p. 1-7
Interim Rate Considerations

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> **Deferring the implementation of rate variances until what would normally have been the following policy year [i.e. April 1, 2024] will prevent customer confusion and dissatisfaction by eliminating the need to adjust the premium paid mid-way through the policy. Further, ICBC expects operational savings from avoiding back-billing active certificates, and will eliminate operational and distribution costs from issuing refund cheques.**

Please provide the estimated operational savings from avoiding back-billing active certificates and the impact on Basic capital if the BCUC approves a final rate change that is greater than zero percent. As part of the response, please explain if the estimated savings would vary depending on the magnitude of the difference between the approved final rate change and zero.

Response:

Based on the back-billing solution described in the response to information request 2023.1 RR BCUC.1.1, the cost savings to ICBC by not back-billing active Basic insurance certificates is approximately $7 million, which equates to approximately 0.1 percentage points on the actuarial indicated rate change. This cost would not vary based on the magnitude of the difference between the approved final rate change and the 0% proposed rate change.

2023.1 RR BCUC.1.3

Reference: APPLICATION OVERVIEW
Exhibit B-1 (Application), Chapter 1, Section E.1, p. 1-7
Interim Rate Considerations

On page 1-7 of the Insurance Corporation of British Columbia (ICBC) 2023 Revenue Requirements Application (Application), ICBC proposes to defer the implementation of any rate variances arising from the British Columbia Utilities Commission's (BCUC) final decision on this Application to policies beginning on April 1, 2024. ICBC states:

> **Deferring the implementation of rate variances until what would normally have been the following policy year [i.e. April 1, 2024] will prevent customer confusion and dissatisfaction by eliminating the need to adjust the premium paid mid-way through the policy. Further, ICBC expects operational savings from avoiding back-billing active certificates, and will eliminate operational and distribution costs from issuing refund cheques.**

Please explain the implications, including the estimated costs, benefits and impacts, to (i) ICBC operations and (ii) Basic capital, of deferring the implementation of any rate variances arising from the BCUC's final decision on this Application, to the start of the next policy year (i.e. April 1, 2025) rather than April 1, 2024. For illustrative purposes, please estimate the impacts assuming the final rate change is (a) one percent and (b) three percent.

Response:

(i) ICBC estimates that the operational cost associated with back billing customers would be approximately $7 million as noted in the response to information request 2023.1 RR BCUC.1.1. Deferring the implementation of any rate variances arising from the BCUC's final decision on this Application to the start of the next policy year (April 1, 2025) would allow ICBC to avoid these costs.

(ii) The impact on Basic capital levels of delaying the incorporation of a final decision on rates from April 1, 2024 to April 1, 2025 for a) +1% final Basic rate change and b) a +3% final Basic rate change is as follows:

a) A delay in incorporating a +1% Basic rate change would result in lower capital levels in fiscal years (FY) 2024/25 and 2025/26 of $17 million and $51 million, respectively. This would result in a reduction to Basic MCT of 1 percentage point in FY 2024/25 and 2 percentage points in FY 2025/26.

b) A delay in incorporating a +3% Basic rate change would result in lower capital levels in FYs 2024/25 and 2025/26 of $48 million and $149 million, respectively. This would result in a reduction to Basic MCT of 2 percentage points in FY 2024/25 and 6 percentage points in FY 2025/26.

2023.1 RR BCUC.1.4

Reference: APPLICATION OVERVIEW
Exhibit B-1 (Application), Chapter 1, Section E.1, p. 1-7
Interim Rate Considerations

On page 1-7 of the Insurance Corporation of British Columbia (ICBC) 2023 Revenue Requirements Application (Application), ICBC proposes to defer the implementation of any rate variances arising from the British Columbia Utilities Commission's (BCUC) final decision on this Application to policies beginning on April 1, 2024. ICBC states:

> **Deferring the implementation of rate variances until what would normally have been the following policy year [i.e. April 1, 2024] will prevent customer confusion and dissatisfaction by eliminating the need to adjust the premium paid mid-way through the policy. Further, ICBC expects operational savings from avoiding back-billing active certificates, and will eliminate operational and distribution costs from issuing refund cheques.**

Further, on page 1-7 of the Application, ICBC proposes to implement the Driver Penalty Point (DPP) Premium and Driver Risk Premium (DRP) rate change if the BCUC approves a final rate change which is different from the interim rate change "on the first day of the month at least 60 days following the date of the final order."

ICBC's website states, "Driver Penalty Points are separate from Autoplan insurance premiums. They are billed even if you don't own or insure a vehicle."[1] Further, ICBC's website states the following with respect to the DRP:[2]

> **You receive only one DRP invoice per year, but each driving offence may impact DRP billings for more than one year, depending on the rest of your driving record in a three-year period.**
>
> **The Driver Risk Premium (DRP), like Driver Penalty Points (DPP), is separate from Autoplan insurance premiums. They are billed even if you don't own or insure a vehicle. [*Emphasis in original*]**

Please provide the pros and cons, including the estimated cost and benefit, of implementing DPP and DRP rate changes "on the first day of the month at least 60 days following the date of the final order" rather than the next invoice, if the BCUC approves a final rate change that is different from the interim rate change.

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[1] Retrieved February 9, 2023 from: https://www.icbc.com/driver-licensing/tickets/Pages/Driver-Penalty-Points.aspx

[2] Retrieved February 9, 2023 from: https://www.icbc.com/driver-licensing/tickets/Pages/Driver-Risk-Premium.aspx

Response:

ICBC clarifies that it is not seeking interim rates for DPP and DRP. There would be no impacts to DRP and DPP premiums if the BCUC approves a final change that is different from the interim change.

Throughout the year, DPP and DRP invoices are assessed and for most customers their assessment date is their birthdate. Each week, ICBC issues approximately 1,000 DPP and DRP invoices. As a result of frequent invoicing, the “next invoice” for a customer could be the day after the BCUC issues a final rate change order. Accordingly, ICBC would be unable to implement the required systems updates and testing to allow DRP and DPP rate changes by the “next invoice” (as that could be as early as the day after the issuance of an order).

The rationale for implementing DPP and DRP rate changes "on the first day of the month at least 60 days following the date of the final order" rather than “next invoice” is so that there is enough time for the changes to align with ICBC’s normal maintenance and update practices. Implementing an ad hoc DPP and DRP rate change would cost approximately $200,000 in order to schedule and execute the change. In addition to the cost, it would still require time to ensure proper implementation.

Using the example in the Application, Chapter 1, Section E.2, if the BCUC renders its final decision on September 15, 2023, the “next invoice” could be September 16, 2023 or even later in September and ICBC’s systems would not be able to reflect a change that quickly. However, implementing the DPP and DRP changes on December 1, 2023 as noted in the Application, prevents ICBC from incurring additional costs by implementing DPP and DRP rate changes as per ICBC’s normal maintenance and update practices.

2023.1 RR BCUC.2.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section A.3, p. 3-7, Figure 3.3
Actuarial Indicated Rate Change and Proposed Rate Change Components

On page 3-7 of the Application, ICBC provides Figure 3.3 which shows the components of the policy year (PY) 2023 required premium per policy.

On page 3-8 of the Application, ICBC explains that Line 2 of Figure 3.3 shows that PY 2023 unallocated loss adjustments expenses (ULAE) costs are higher than PY 2021, stating "[t]he increase is primarily caused by higher projected average costs in future years."

On page 3-9 of the Application, ICBC explains that Line 6 of Figure 3.3 shows that miscellaneous revenue is larger (more favourable) compared to PY 2021 mainly due to a change in how the payment plan finance fees are reflected in the PY 2023 analysis. ICBC states:

> **In the prior application, payment plan finance fees included the interest charged to ICBC on the money borrowed on behalf of payment plan participants, while in the current Application, ICBC's cost of financing is included in the calculation of the New Money Rate […].**

In the same format as Figure 3.3, please provide the percentage point impact for each major rating component, including the rate change floor, on the actuarial indicated rate change and proposed rate change for PY 2023.

Response:

The percentage point impact for each major rating component as shown in the Application, Chapter 3, Figure 3.3 can be found in the table below.

Component of Required Premium - PY 2023		Impact (Percentage points (ppt) of PY 2023 Actuarial Indicated Rate Change)
[1]	Loss and Allocated Loss Adjustment Expenses	10.0
[2]	Unallocated Loss Adjustment Expenses	1.4
[3a]	Road Safety and Loss Management	-0.2
[3b]	General Expenses	0.5
[4]	Broker Fees and Premium Tax	-0.1
[5]	Capital Provision	-9.3
[6]	Miscellaneous Revenue	-1.0
[7]	Investment Income on Policyholder Supplied Funds	-7.2
[8]	Investment Income on Capital Available for Rate Setting	-2.4
[9]	Other[1]	1.8
PY 2023 Actuarial Indicated Rate Change (prior to rate change floor)		-6.5
[10]	Impact of Rate Change Floor	6.5
PY 2023 Proposed Rate Change		**0.0**

[1] The "Other" component in this table is mainly due to the impact from the average premium trend (year-over-year changes in policy mix) which does not impact the change in components of required premium on a per policy basis as summarized in the Application, Chapter 3, Figure 3.3. "Other" also includes a small impact from rounding.

In order to estimate the impact of each major rating component, the PY 2023 cost and revenue items are compared to those presented in the 2021 Revenue Requirements Application. The calculations can be found in Attachment A – PY 2023 Actuarial Indicated Rate Change Calculations.

2023.1 RR BCUC.2.1 – Attachment A – PY 2023 Actuarial Indicated Rate Change Calculations

PY 2023 Actuarial Indicated Rate Change Calculations ($000s)

	Component of Required Premium (a)	Impact (Percentage points (ppt) of PY 2023 Actuarial Indicated Rate Change) (b)	Components in Appendix A.1 (c)	PY 2023 (24 months) Appendix A.1 Col (1) (d)	PY 2021 (23 months) Appendix A.1 Col (2) (e)	PY 2021 (Policy Count Adjusted to PY 2023 Level)[1,A] (f)	Change from PY 2021[2] (g)	Projected PY 2023 Premium at Current Rate Level[3] (h)	Impact (Percentage points (ppt) of PY 2023 Actuarial Indicated Rate Change) (i) = (g) / (h)
[1]	Loss and Allocated Loss Adjustment Expenses	10.0	row (a)	5,919,708	4,819,454	5,272,189	647,519	6,484,731	10.0
[2]	Unallocated Loss Adjustment Expenses	1.4	row (b)	565,224	436,359	477,350	87,874	6,484,731	1.4
[3a]	Road Safety and Loss Management	-0.2	row (c)	94,038	96,193	105,229	-11,191	6,484,731	-0.2
[3b]	General Expenses	0.5	rows (e) through (g)	593,777	515,034	563,416	30,361	6,484,731	0.5
[4]	Broker Fees and Premium Tax	-0.1	rows (h) and (i)	518,167	477,324	522,163	-3,996	6,484,731	-0.1
[5]	Capital Provision	-9.3	row (k)	424,433	939,604	1,027,869	-603,436	6,484,731	-9.3
[6]	Miscellaneous Revenue	-1.0	rows (m) through (q)	295,659	211,897	231,803	-63,857	6,484,731	-1.0
[7]	Investment Income on Policyholder Supplied Funds	-7.2	row (r)	1,563,825	1,004,774	1,099,161	-464,664	6,484,731	-7.2
[8]	Investment Income on Capital Available for Rate Setting	-2.4	row (s)	192,537	34,757	38,022	-154,515	6,484,731	-2.4
[9]	Other: Change in Average Premium	1.8	row (v)	6,484,731	7,098,736	6,599,232	114,500	6,484,731	1.8
	PY 2023 Actuarial Indicated Rate Change (prior to rate change floor)	**-6.5**					**-421,406**	**6,484,731**	**-6.5**
[10]	Impact of Rate Change Floor	6.5					421,406	6,484,731	6.5
	PY 2023 Proposed Rate Change	**0.0**					**0**	**6,484,731**	**0.0**

[1] Policy count difference is 9.4% between the 23-month PY 2021 projected exposure (6,858,095) and the 24-month PY 2023 projected exposure (7,502,336). (f) = (e) * PY 2023 projected exposure / PY 2021 projected exposure.

[2] (g) = (f) - (d) for revenue items; (g) = (d) - (f) for expense and other items.

[3] (h) = Application, Chapter 3, Appendix A.1 Row (v) Col (1).

[A] For "Other", PY 2021 projected premium adjusted to PY 2023 level includes the 2021 rate change (-15%), the impact of rounding the implemented rate change, and the exposure adjustment.

2023.1 RR BCUC.2.1.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section A.3, p. 3-7, Figure 3.3
Actuarial Indicated Rate Change and Proposed Rate Change Components

On page 3-7 of the Application, ICBC provides Figure 3.3 which shows the components of the policy year (PY) 2023 required premium per policy.

On page 3-8 of the Application, ICBC explains that Line 2 of Figure 3.3 shows that PY 2023 unallocated loss adjustments expenses (ULAE) costs are higher than PY 2021, stating "[t]he increase is primarily caused by higher projected average costs in future years."

On page 3-9 of the Application, ICBC explains that Line 6 of Figure 3.3 shows that miscellaneous revenue is larger (more favourable) compared to PY 2021 mainly due to a change in how the payment plan finance fees are reflected in the PY 2023 analysis. ICBC states:

> **In the prior application, payment plan finance fees included the interest charged to ICBC on the money borrowed on behalf of payment plan participants, while in the current Application, ICBC's cost of financing is included in the calculation of the New Money Rate […].**

Please provide additional information for Line 3 of Figure 3.3, which separates the impact of the road safety and loss management component from the general expenses component.

Response:

The table below provides Figure 3.3 of the Application, Chapter 3, with Line [3] broken down into the two requested components: [3a] Road Safety and Loss Management and [3b] General Expenses.

Component of Required Premium per Policy		Required Premium per Policy[1]	
		PY 2023	PY 2021[2, 3]
[1]	Loss and Allocated Loss Adjustment Expenses	$789	$702
[2]	Unallocated Loss Adjustment Expenses	$75	$64
[3a]	Road Safety and Loss Management	$13	$14
[3b]	General Expenses	$79	$75
[4]	Broker Fees and Premium Tax	$69	$70
[5]	Capital Provision	$57	$137
[6]	Miscellaneous Revenue	($39)	($31)
[7]	Investment Income on Policyholder Supplied Funds	($208)	($146)
[8]	Investment Income on Capital Available for Rate Setting	($26)	($5)
Total - Required Premium per Policy		**$808**	**$879**
[9]	Impact of Rate Change Floor[4]	$56	$0
Total - Proposed Premium per Policy		**$864**	**$879**

[1] Average per policy premiums are calculated from the values provided in Figure 3.1 divided by the number of policies to be written in PY 2023. The number of PY 2023 policies (also referred to as “written risk exposures”), excluding Trailers and Off-Road Vehicles, is 7,502,336 as shown in Appendix B.0.
[2] PY 2021 figures are before the errata.
[3] Lines [7] and [8] were combined as “Investment Income” in 2021 RRA. They are separately itemized out in this Application to provide additional detail on their impacts.
[4] Impact of the rate change floor is a component of proposed premium, not required premium, but is included for completeness.

2023.1 RR BCUC.2.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section A.3, p. 3-7, Figure 3.3
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> **In the prior application, payment plan finance fees included the interest charged to ICBC on the money borrowed on behalf of payment plan participants, while in the current Application, ICBC's cost of financing is included in the calculation of the New Money Rate […].**

Please explain the drivers of the higher projected average ULAE costs for PY 2023 as compared to PY 2021.

Response:

The projected average ULAE costs for PY 2023 are higher compared to PY 2021 because of general inflationary changes and anticipated increases to compensation costs in the next few years. As discussed in the Application, Chapter 6, Operating Expenses and Allocation Information, the drivers of the higher costs are anticipated compensation increases for unionized employees that will be negotiated under the Collective Agreement, merit increases for management and confidential employees, inflation and previously negotiated contract price increases.

As explained in the Application, Chapter 3, Appendix C.6, the ULAE costs for PY 2023 represent the internal claims servicing expense for the set of claims associated with PY 2023 policies. The expected reduction in claims-related FTE levels associated with the wind-down in legal-based claims and the corresponding net compensation, as further discussed in the Application, Chapter 6, Section D.1.3, will therefore have no impact on the ULAE costs for PY 2023.

2023.1 RR BCUC.2.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section A.3, p. 3-7, Figure 3.3
Actuarial Indicated Rate Change and Proposed Rate Change Components

On page 3-7 of the Application, ICBC provides Figure 3.3 which shows the components of the policy year (PY) 2023 required premium per policy.

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On page 3-9 of the Application, ICBC explains that Line 6 of Figure 3.3 shows that miscellaneous revenue is larger (more favourable) compared to PY 2021 mainly due to a change in how the payment plan finance fees are reflected in the PY 2023 analysis. ICBC states:

> **In the prior application, payment plan finance fees included the interest charged to ICBC on the money borrowed on behalf of payment plan participants, while in the current Application, ICBC's cost of financing is included in the calculation of the New Money Rate […].**

Please provide the rationale for the change in how the payment plan finance fees are reflected in PY 2023 as compared to PY 2021.

Response:

In the 2021 RRA, ICBC's strategic asset mix did not have an explicit leverage component and the payment plan cost of financing was directly netted against the payment plan finance fees. After the 2021 RRA, ICBC's Board of Directors approved a new strategic asset mix (effective May 2021) that included an explicit leverage component. This leverage component included the payment plan cost of financing and is a part of the New Money Rate calculation for PY 2023. Thus, for PY 2023 the payment plan cost of financing is no longer netted with the payment plan finance fees and is instead included in the calculation of the New Money Rate.

As described in the response to information request 2023.1 RR BCUC.19.1.1, the leverage component should also have been included in the calculation of the Yield on Capital Available for Rate Setting in the Application, Chapter 5. For more information on the impacts to the proposed rate change and the actuarial indicated rate change, please see the response to information request 2023.1 RR BCUC.19.1.1.

2023.1 RR BCUC.2.3.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section A.3, p. 3-7, Figure 3.3
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On page 3-9 of the Application, ICBC explains that Line 6 of Figure 3.3 shows that miscellaneous revenue is larger (more favourable) compared to PY 2021 mainly due to a change in how the payment plan finance fees are reflected in the PY 2023 analysis. ICBC states:

> **In the prior application, payment plan finance fees included the interest charged to ICBC on the money borrowed on behalf of payment plan participants, while in the current Application, ICBC's cost of financing is included in the calculation of the New Money Rate […].**

Please explain, in which line of Figure 3.3, the offsetting decrease (less favourable) impact is accounted for and provide an updated explanation for the change in that component between PY 2023 and PY 2021 as applicable.

Response:

The payment plan cost of financing is included in the leverage component of the New Money Rate which is accounted for in the Application, Chapter 3, Figure 3.3, line [7] "Investment Income on Policyholder Supplied Funds". While the payment plan cost of financing has an unfavourable impact, the leverage component has a favourable overall impact (it increases the New Money Rate) because ICBC invests in assets that produce higher returns versus the cost of borrowing. In addition, the description provided in the Application, Chapter 3, paragraph 20 for Line [7] focuses on the significant changes compared to PY 2021 and discusses the impact of higher expected returns from individual asset classes as well as a shift in the target asset allocation. These changes combined with the impact of leverage resulted in a net favourable impact to investment income on policyholder supplied funds as compared to the 2021 RRA.

2023.1 RR BCUC.3.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B, p. 3-12, Figure 3.4
Loss & ALAE per Policy by Sub-coverage

On page 3-12 of the Application, ICBC provides a comparison of the loss and allocated loss adjustment expenses (ALAE) per policy for PY 2021 and PY 2023 by sub-coverage in Figure 3.4, as follows:

Figure 3.4 – Loss and ALAE per Policy by Sub-Coverage

2023 RRA Sub-Coverage	PY 2023			PY 2021
	Frequency	Severity ($)	Loss and ALAE per policy ($)[1]	Loss and ALAE per policy ($)[2]
Enhanced Accident Benefits (EAB)				
Medical and Rehabilitation (EAB-MR)	1.65%	15,287	253	266
Enhanced Disability (EAB-ED)	0.25%	77,765	194	165
Permanent Impairment (EAB-PI)	0.17%	24,505	41	47[3]
Death Benefits (EAB-DB)	0.02%	61,940	12	
Basic Vehicle Damage Coverage (BVDC)	3.69%	6,672	247	187
Third Party Liability (TPL)				
TPL-Property Damage (TPL-PD)	0.25%	7,935	20	19
TPL-Out-of-Province Bodily Injury (TPL-OOP BI)[4]	0.021%	98,184	21	19
Total			**789**	**702**

In the same format as Figure 3.4, please provide the frequency and severity components of the loss and ALAE per policy by sub-coverage for PY 2021.

Response:

The table below presents the frequency and severity components of the Loss and ALAE per policy by sub-coverage for PY 2021. The table includes the Loss and ALAE per policy amounts for PY 2021, as shown in the Application, Chapter 3, Figure 3.4.

As a result of changes to the presentation and grouping of data in the Application as compared to the 2021 RRA, three adjustments have been made in order to present PY 2021 on a basis appropriate for comparison with PY 2023 in the Application, Chapter 3, Figure 3.4. The PY 2021 amounts in the table below reflect the following adjustments:

- The PY 2021 Loss and ALAE per policy total of $702 is the forecast provided in the 2021 RRA. In the 2021 RRA, claims under Manual Basic policies were analyzed separately, and contributed $14 per policy. The analysis for PY 2023 in the Application has merged these costs directly into the sub-coverages. To provide an appropriate comparison, the PY 2021 severities have been recalculated to include Manual Basic costs in each sub-coverage. The PY 2021 frequencies are assumed to remain unchanged.
- In the 2021 RRA, the severities for EAB-MR and EAB-ED sub-coverages were presented on a non-indexed basis, whereas in the Application, the comparable severities include indexation, as discussed in the Application, Chapter 3, Appendix 3B. To provide an appropriate comparison, these sub-coverages' severities from the PY 2021 forecast in the 2021 RRA have been recalculated to include indexation.
- In the 2021 RRA, Loss and ALAE amounts were analyzed separately for components of TPL-PD, whereas in the Application they are combined into a single analysis as the TPL-PD sub-coverage. To provide an appropriate comparison, claims statistics for the components from the PY 2021 forecast in the 2021 RRA have been combined.

Loss and ALAE per Policy by Sub-Coverage

2023 RRA Sub-Coverage	PY 2021		
	Frequency	Severity ($)	Loss and ALAE per Policy ($)[1]
Enhanced Accident Benefits (EAB)			
Medical and Rehabilitation (EAB-MR)	2.10%	12,610	266
Enhanced Disability (EAB-ED)	0.23%	72,342	165
Permanent Impairment (EAB-PI) and Death Benefits (EAB-DB)	0.19%	23,950	47
Basic Vehicle Damage Coverage (BVDC)	3.76%	4,962	187
Third Party Liability (TPL)			
TPL-Property Damage (TPL-PD)	0.23%	8,222	19
TPL-Out of Province Bodily Injury (TPL-OOP BI)	0.022%	84,901	19
Total			**702**

[1] PY 2021 Loss and ALAE per policy amounts include Bulk claims costs.

2023.1 RR BCUC.3.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B, p. 3-12, Figure 3.4
Loss & ALAE per Policy by Sub-coverage

On page 3-12 of the Application, ICBC provides a comparison of the loss and allocated loss adjustment expenses (ALAE) per policy for PY 2021 and PY 2023 by sub-coverage in Figure 3.4, as follows:

Figure 3.4 – Loss and ALAE per Policy by Sub-Coverage

2023 RRA Sub-Coverage	PY 2023			PY 2021
	Frequency	Severity ($)	Loss and ALAE per policy ($)[1]	Loss and ALAE per policy ($)[2]
Enhanced Accident Benefits (EAB)				
Medical and Rehabilitation (EAB-MR)	1.65%	15,287	253	266
Enhanced Disability (EAB-ED)	0.25%	77,765	194	165
Permanent Impairment (EAB-PI)	0.17%	24,505	41	47[3]
Death Benefits (EAB-DB)	0.02%	61,940	12	
Basic Vehicle Damage Coverage (BVDC)	3.69%	6,672	247	187
Third Party Liability (TPL)				
TPL-Property Damage (TPL-PD)	0.25%	7,935	20	19
TPL-Out-of-Province Bodily Injury (TPL-OOP BI)[4]	0.021%	98,184	21	19
Total			**789**	**702**

Please explain how the change in the frequency and severity components for Enhanced Accident Benefits (EAB) Medical and Rehabilitation (MR) benefits (EAB-MR) between PY 2023 and PY 2021 result in a change of -$13 (from $266 for PY 2021 to $253 for PY 2023) in the loss and ALAE per policy for EAB-MR.

Response:

The PY 2021 and PY 2023 forecasts for Enhanced Accident Benefits - Medical Rehabilitation (EAB-MR) frequency and severity, from the 2021 RRA and the current Application respectively, are displayed in the following table. The PY 2021 severity has been recalculated to include Manual Basic EAB-MR costs, as discussed in the response to information request 2023.1 RR BCUC.3.1.

EAB-MR	PY 2023	PY 2021
Frequency[1]	1.65%	2.10%
Severity[1]	$15,287	$12,610
Loss and ALAE per Policy[2]	$253	$266

[1]Frequency and Severity do not include Bulk claims costs.

[2]Loss and ALAE per Policy includes Bulk claims costs.

The decrease in Loss and ALAE per policy of -$13 from PY 2021 to PY 2023 is the result of a decrease in the frequency forecast partially offset by an increase in the severity forecast.

The decrease in EAB-MR frequency forecast from 2.10% in PY 2021 to 1.65% in PY 2023 is mainly due to the fact that fewer injury claims have been made than were forecasted at the time of the 2021 RRA. As a result, the frequency seen for FLY 2022 in the current Application is significantly below the forecast PY 2021 point, as shown in the Application, Chapter 3, Section B.2.1, Figure 3.7. In addition, a downward frequency trend rate of -1.0% is assumed in the current Application. Additional discussion regarding the decrease in frequency from the PY 2021 forecast to the PY 2023 forecast can be found in the Application, Chapter 3, Section B.2.1, paragraphs 37 and 39.

The increase in EAB-MR severity forecast from $12,610 in PY 2021 to $15,287 in PY 2023 is largely driven by the unexpected increases in the BC CPI inflation rate, and its forecast. Additional discussion regarding the increase in severity from the PY 2021 forecast to the PY 2023 forecast can be found in the Application, Chapter 3, Section B.2.1, paragraphs 40 to 43.

For a detailed review of the PY 2023 EAB-MR frequency and severity calculations, please see the Application, Chapter 3, Appendix C.1.0, Section B (EAB Frequency), Section C (EAB Severity), and Section D (EAB-MR).

2023.1 RR BCUC.3.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B, p. 3-12, Figure 3.4
Loss & ALAE per Policy by Sub-coverage

On page 3-12 of the Application, ICBC provides a comparison of the loss and allocated loss adjustment expenses (ALAE) per policy for PY 2021 and PY 2023 by sub-coverage in Figure 3.4, as follows:

Figure 3.4 – Loss and ALAE per Policy by Sub-Coverage

2023 RRA Sub-Coverage	PY 2023			PY 2021
	Frequency	Severity ($)	Loss and ALAE per policy ($)[1]	Loss and ALAE per policy ($)[2]
Enhanced Accident Benefits (EAB)				
Medical and Rehabilitation (EAB-MR)	1.65%	15,287	253	266
Enhanced Disability (EAB-ED)	0.25%	77,765	194	165
Permanent Impairment (EAB-PI)	0.17%	24,505	41	47[3]
Death Benefits (EAB-DB)	0.02%	61,940	12	
Basic Vehicle Damage Coverage (BVDC)	3.69%	6,672	247	187
Third Party Liability (TPL)				
TPL-Property Damage (TPL-PD)	0.25%	7,935	20	19
TPL-Out-of-Province Bodily Injury (TPL-OOP BI)[4]	0.021%	98,184	21	19
Total			**789**	**702**

Please explain how the change in the frequency and severity components for EAB Enhanced Disability (ED) benefits (EAB-ED) between PY 2023 and PY 2021 result in a change of +$29 (from $165 for PY 2021 to $194 for PY 2023) in the loss and ALAE per policy for EAB-ED.

Response:

The PY 2021 and PY 2023 forecasts for Enhanced Disability Benefits (EAB-ED) frequency and severity, from the 2021 Revenue Requirements Application (2021 RRA) and the current Application respectively, are displayed in the following table. The PY 2021 severity has been recalculated to include Manual Basic EAB-ED costs, as discussed in the response to information request 2023.1 RR BCUC.3.1.

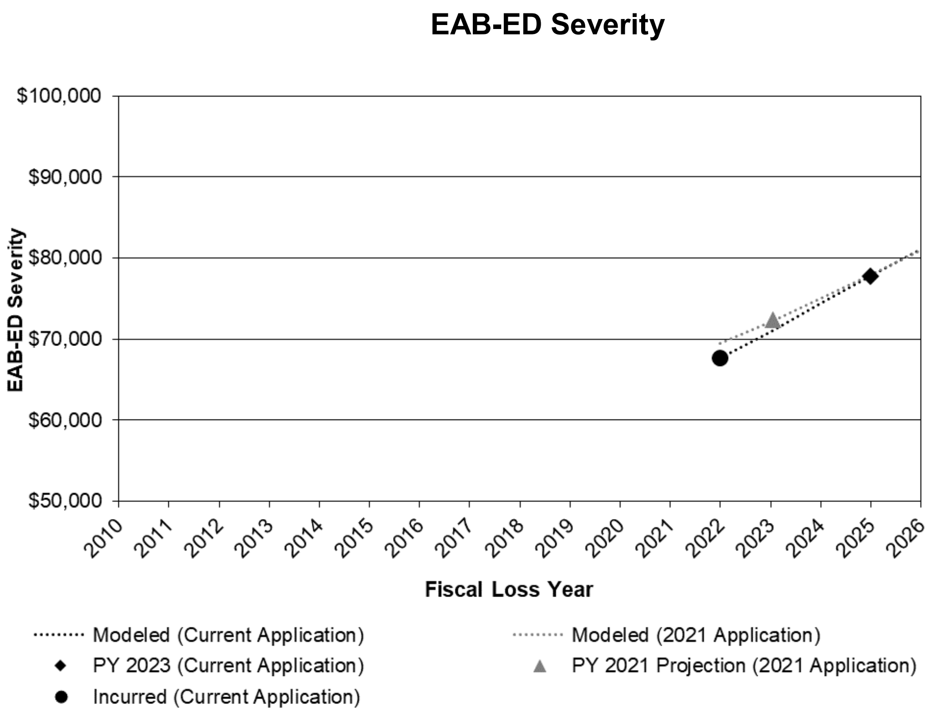
EAB-ED	PY 2023	PY 2021
Frequency[1]	0.25%	0.23%
Severity[1]	$77,765	$72,342
Loss and ALAE per Policy[2]	$194	$165

[1]Frequency and Severity do not include Bulk claims costs.
[2]Loss and ALAE per Policy includes Bulk claims costs.

The increase in loss and ALAE per policy of +$29 from PY 2021 to PY 2023 is the result of an increase in both the frequency and the severity, each accounting for approximately +$16 and +$13, respectively.

The increase in EAB-ED frequency forecast from 0.23% in PY 2021 to 0.25% in PY 2023 is mainly due to the higher propensity of EAB-ED to Basic Vehicle Damage Coverage (BVDC) claims that has been observed, compared to the original forecast. In the 2021 RRA, the propensity was forecast to be 6%, calculated as 0.23% (Income replacement and Indemnity Frequency in the 2021 RRA, Chapter 3, Figure 3.4) divided by 3.76% (BVDC Frequency in the 2021 RRA, Chapter 3, Figure 3.9). Based on the actual experience that has emerged, the propensity for fiscal loss year 2022 appears to be higher. This is the basis for the propensity estimate of 7% for PY 2023, as shown in the Application, Chapter 3, Appendix C.1.0, Figure C.1.0.2, column (2).

The increase in EAB-ED severity forecast from $72,342 in PY 2021 to $77,765 in PY 2023 is primarily driven by the severity trend as shown in the graph below, where the EAB-ED severity and its forecast in the current Application are compared to the corresponding forecast from the 2021 RRA. The impact from the unexpected increase in the BC CPI inflation rate and its forecast is largely offset by the decrease in collateral benefits reduction factor as further discussed in the Application, Technical Appendix C.1.0, Section C.2.4.



For a detailed review of the PY 2023 EAB-ED frequency and severity calculations, please see the Application, Chapter 3, Appendix C.1.0, Section B (EAB Frequency), Section C (EAB Severity), and Section E (EAB-ED).

2023.1 RR BCUC.3.4

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B, p. 3-12, Figure 3.4
Loss & ALAE per Policy by Sub-coverage

On page 3-12 of the Application, ICBC provides a comparison of the loss and allocated loss adjustment expenses (ALAE) per policy for PY 2021 and PY 2023 by sub-coverage in Figure 3.4, as follows:

Figure 3.4 – Loss and ALAE per Policy by Sub-Coverage

2023 RRA Sub-Coverage	PY 2023			PY 2021
	Frequency	Severity ($)	Loss and ALAE per policy ($)[1]	Loss and ALAE per policy ($)[2]
Enhanced Accident Benefits (EAB)				
Medical and Rehabilitation (EAB-MR)	1.65%	15,287	253	266
Enhanced Disability (EAB-ED)	0.25%	77,765	194	165
Permanent Impairment (EAB-PI)	0.17%	24,505	41	47[3]
Death Benefits (EAB-DB)	0.02%	61,940	12	
Basic Vehicle Damage Coverage (BVDC)	3.69%	6,672	247	187
Third Party Liability (TPL)				
TPL-Property Damage (TPL-PD)	0.25%	7,935	20	19
TPL-Out-of-Province Bodily Injury (TPL-OOP BI)[4]	0.021%	98,184	21	19
Total			**789**	**702**

Please explain how the change in the frequency and severity components for Basic Vehicle Damage Coverage (BVDC) between PY 2023 and PY 2021 result in a change of +$60 (from $187 for PY 2021 to $247 for PY 2023) in the loss and ALAE per policy for BVDC.

Response:

The PY 2021 and PY 2023 forecasts for Basic Vehicle Damage Coverage (BVDC) frequency and severity, from the 2021 RRA and the current Application respectively, are displayed in the following table. The PY 2021 severities have been recalculated to include Manual Basic BVDC costs, as discussed in the response to information request 2023.1 RR BCUC.3.1.

BVDC	PY 2023	PY 2021
Frequency[1]	3.69%	3.76%
Severity[1]	$6,672	$4,962
Loss and ALAE per Policy[2]	$247	$187

[1]Frequency and Severity do not include Bulk claims costs.
[2]Loss and ALAE per Policy includes Bulk claims costs.

The change in BVDC frequency forecast from 3.76% in PY 2021 to 3.69% in PY 2023 causes a slightly lower loss and ALAE per policy. Thus, the increase in Loss and ALAE per policy of +$60 from PY 2021 to PY 2023 is entirely the result of an increase in the severity forecast.

The increase in BVDC severity from $4,962 in PY 2021 to $6,672 in PY 2023 is based on a steeper trend rate and the high cost of vehicle damage claims observed in recent years. In the most recent two years, ICBC has observed very high inflation in parts costs and vehicle prices, accentuated by increased cycle times for vehicle repairs due to capacity and supply chain issues. In addition, ICBC has increased material damage supplier rates effective July 1, 2022, and is providing annual supplier rate increases over the next three years. In fiscal loss year (FLY) 2022, severity had already surpassed the forecast PY 2021 point, as shown in the Application, Chapter 3, Section B.1, Figure 3.6. Additional discussion regarding the increase in severity from the PY 2021 to PY 2023 forecast can be found in the Application, Chapter 3, Section B.1, Paragraphs 34 and 35.

For a detailed review of the PY 2023 BVDC frequency and severity calculations, please see the Application, Chapter 3, Appendix C.2.0, Section B (BVDC Frequency) and Section C (BVDC Severity).

2023.1 RR BCUC.4.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			6,772,239	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

Please provide reasons why the actual Year over Year (YoY) change in personal written risk exposure for FLY 2022 was +4.1 percent, as shown in Figure B.0.3, given that the historical YoY change as presented for the other FLYs is typically around 2.5 percent.

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[3] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

As a point of clarification, the term "fiscal loss year (FLY)" is used for grouping all claims for accidents that occur during the fiscal year (FY) whereas ICBC uses "FY" for risk exposure and premium which is the context of this information request. The 2023 RRA - Participants' Reference Guide, Section D.1, Figure 2 also provides more information on the differences between FLY and FY.

Written risk exposure presented in Figure B.0.3 is shown on a "net" basis, meaning that policy changes and cancellations are included in the month in which they occur. During the initial COVID-19 lockdowns, many policyholders cancelled their policies in March and April 2020. This resulted in unusually low written risk exposure amounts in these two months, lowering the overall exposure levels for both FYs 2019/20 and 2020/21 (March 2020 is in FY 2019/20 and April 2020 is in FY 2020/21). As vehicles were brought back onto the road following the lockdown period, and policies were renewed, exposure levels increased, contributing to the higher +4.1% year-over-year increase from the FY 2020/21 to FY 2021/22. This higher-than-average growth is expected to be a one-time increase bringing the exposure levels back in line with the historical growth pattern.

2023.1 RR BCUC.4.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			**6,772,239**	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

Please explain why the actual FLY 2022 was not used as the "starting point" to apply the selected +1.7 percent annual trend rate to determine estimated values for FLYs 2023, 2024 and 2025.

[3] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

Due to the instability of the recent few years in exposure growth resulting from the COVID-19 pandemic, economic impacts, and the slowdown in new vehicle production from supply chain issues, ICBC chose to rely on the most recent 12 months of data available (September 1, 2021 to August 31, 2022) as the "starting point" rather than fiscal year 2022 (April 1, 2021 to March 31, 2022). This was an attempt to best reflect how these events have impacted ICBC's policies.

Please note the FY 2022/23 forecast does not rely on the selected +1.7% annual trend rate. It is comprised of both actual data (from April 1, 2022 to August 31, 2022) and a short-term forecast (from September 1, 2022 to March 31, 2023).

2023.1 RR BCUC.4.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			**6,772,239**	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

Please explain why ICBC selected a 4-year regression model ending in FLY 2022 for all vehicle classes except motorcycle (that includes the lowest YoY change of -0.1 percent inclusive of all vehicle classes) to select its +1.7 percent trend rate, rather than a different time period that excludes the lowest YoY change of -0.1 percent.

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[3] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

ICBC would like to clarify the terminology used to indicate the starting and ending periods for the regression models. The 4-year regression models include data from March 2016 to February 2020 (2016-03 to 2020-02) and the 7-year regression model for Motorcycles includes data from March 2013 to February 2020 (2013-03 to 2020-02). With this clarification in mind, ICBC did exclude the time period that contributed to the low (-0.1%) year-over-year change. As explained in the response to information request 2023.1 RR BCUC.4.1, the -0.1% year-over-year change for fiscal year (FY) 2019/20 is a result of the lower exposure count for March 2020 which is excluded.

2023.1 RR BCUC.4.3.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			**6,772,239**	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

Please provide the personal written risk exposure trend rate if ICBC selected a 4-year regression model ending in FLY 2019 for all vehicle classes except motorcycles and explain if that assumption would be in accordance with Canadian accepted actuarial practice.

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[3]Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

The personal written risk exposure trend rate would be 2.0% using a 4-year regression model that includes data from April 2015 to March 2019 for all vehicle classes except motorcycles. The trend rate is higher than the selected 1.7% (which is based on the period between March 2016 and February 2020). This is because the additional period of data added to the trend model adds a higher year-over-year growth (2.2% growth from fiscal year (FY) 2015/16 to FY 2016/17) compared to the data that was excluded (1.4% growth from the 11 months ending February 2019 to the 11 months ending February 2020).

Yes, it is ICBC's opinion that using 4-year regression models ending in FY 2019 for all Personal vehicle classes except motorcycles is within Accepted Actuarial Practice. However, ICBC prefers its selected 4-year regression models ending in February 2020 as it relies on the most recent experience that is unaffected by the impacts resulting from the COVID-19 pandemic.

2023.1 RR BCUC.4.3.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			**6,772,239**	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

4.3.2 Please discuss whether ICBC considered excluding any part of FLY 2020 (e.g., the last quarter or the month of March 2020) so as to avoid any influence of the COVID-19 pandemic on the historical exposure trend.

4.3.2.1 If not, please explain how ICBC has otherwise considered the potential impact of the COVID-19 pandemic on the historical personal written risk exposures.

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[3] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

Yes, ICBC excluded March 2020 from the fiscal loss year (FLY) 2020 data to avoid the influence of the COVID-19 pandemic on the Personal written risk exposure regression models. The latest data included in these models was February 2020 (2020-02).

2023.1 RR BCUC.4.4

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
2012/13	2,706,957			
2013/14	2,740,929	1.3%		
2014/15	2,826,375	3.1%		
2015/16	2,893,678	2.4%		
2016/17	2,956,501	2.2%		
2017/18	3,024,700	2.3%		
2018/19	3,081,495	1.9%		
2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
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In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

4.4 Please explain what consideration(s), if any, ICBC has given to the Federal Government of Canada's November 1, 2022 news release regarding higher immigration targets in 2023 and beyond when selecting the personal written exposure growth rate of +1.7 percent. As part of the response, please explain if including such considerations would be in accordance with Canadian accepted actuarial practice.

4.4.1 If no consideration was given, please explain why not. As part of the response, please explain whether the Federal Government of Canada's immigration targets may influence ICBC's view of future exposure growth.

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[3] **Retrieved February 9, 2023 from:** https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

The Federal Government of Canada's revised immigration targets were reviewed prior to filing the Application. ICBC considered the information and its implications for the Application and after doing so ICBC concluded the higher immigrations levels could not be reasonably quantified given the level of detail in the announcement. High levels of immigration into Canada have existed for some time and ICBC believes its contribution to written risk exposure growth is already captured in the selected growth trend of +1.7%. Quantifying the impacts of additional immigration over and above the levels seen prior to 2019 would require consideration of, among other things, the proportion of immigrants choosing to settle in BC versus other provinces, the geographic distribution of additional immigrants within the province and the profile of each new immigrant (e.g., years of driving experience).

Considering immigration targets within the context of forecasting risk exposures would be in accordance with Accepted Actuarial Practice (AAP) in Canada. One approach is to assume that any additional policy exposure from additional immigration would have the same policy distribution (mix) as the forecasted policy year 2023 (PY 2023) distribution. In this case, both projected premium and claims costs would increase and largely offset each other with regards to an impact on the actuarial indicated rate change (e.g., an increase in projected premium is favourable to the actuarial indicated rate change whereas an increase in claims costs is unfavourable). As a result, there would be very little impact on the overall actuarial indicated rate change and no impact on the 0% proposed rate change for PY 2023.

ICBC's believes its current approach to modelling risk exposure is in accordance with AAP and provides a good balance between goodness of fit and simplicity and that any incremental changes in population growth rates, which includes immigration, will ultimately be captured in the estimated trends as they emerge in data.

In addition, as outlined in the Application, Chapter 3, Actuarial Indicated Rate Change Analysis, Appendix 3A, Section H, the actuarial rate indication should be prepared based on assumptions that are not only independently reasonable but also appropriate in aggregate. Thus, any revision to the Personal written exposure growth rate from other factors such as additional immigration to BC would also require revisiting other assumptions, including claims costs. While additional immigration could lead to more written exposures, and perhaps an increase in the overall average premium, it could also lead to a change in the forecasted crash frequency and severity. This hinders any meaningful quantification of the impact of additional immigration to the actuarial indicated rate change.

2023.1 RR BCUC.4.4.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section B.1, p. B.0-4, Figure B.0.3; Technical Appendix B.1
Personal Written Risk Exposure

On page B.0-4 of Appendix B to the Application, Figure B.0.3 presents ICBC's historical actual and modelled personal written risk exposure by fiscal loss year (FLY). As presented, the actual FLY 2022 personal written risk exposures are 3,281,860 and the forecast (modelled) FLY 2023 personal written risk exposures are 3,301,437 which equates to a percentage increase of +0.6 percent for FLY 2023.

Further, Figure B.0.3 shows that ICBC expects the modelled personal written risk exposures to increase by +1.7 percent each year thereafter (FLY 2024 and 2025) as follows:

Fiscal Year	Personal[2]			
	Actual	YoY Change	Modelled	YoY Change
2011/12				
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2019/20	3,078,640	-0.1%		
2020/21	3,153,949	2.4%		
2021/22	3,281,860	4.1%		
2022/23			3,301,437	
2023/24			3,357,584	1.7%
2024/25			3,414,655	1.7%
PY 2023[1]			**6,772,239**	

In Technical Appendix B-1, ICBC states that the modelled risks for personal written risk exposures are based on the following regression models, grouped by rate class:

- **Motorcycles - 7 year regression (2013-03 to 2020-02)**
- **Lower Mainland (Territory D) - 4 year regression (2016-03 to 2020-02)**
- **Maple Ridge and Fraser Valley (Territories E, H) - 4 year regression (2016-03 to 2020-02)**
- **All Other Personal Vehicles - 4 year regression (2016-03 to 2020-02)**

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[3] The Federal Government's news release states:

Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025.

The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.

Please explain any consideration(s), if any, ICBC gives to external data when forecasting the PY 2023 exposure estimates.

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[3] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

ICBC did consider external data in the course of forecasting PY 2023 written risk exposure. However, external data is not relied on if it does not provide meaningful improvement to ICBC's forecast.

As described in the Application, Chapter 3, Appendix B.0, paragraph 7, a simple regression model is the preferred model if it fits the historical exposure data well and produces a reasonable and intuitive forecast. A more complex model is chosen only if it provides a significant improvement over the simple model. This approach provides an appropriate balance between a model's goodness of fit and its simplicity.

Therefore, if a simple regression model produces a reasonable and intuitive result and can be validated by known influences, ICBC may not need to select an econometric model. Variables may be tested to provide useful information. However, variables will not be adopted if they do not provide meaningful improvements to the forecast. For example, ICBC monitors population estimates and projections for BC published by BC Stats as Personal written risk exposure has generally followed BC's population growth. However, ICBC ultimately determined that internal data was sufficient to provide a good balance between goodness of fit and simplicity and that any changes in external data, such as population growth rates, would not significantly improve the simple regression model.

2023.1 RR BCUC.5.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section C.1, p. B.0-10, Figure B.0.6; Technical Appendix B.1
Personal Average Premium at Current Rate Level, Actual and Modelled

On page B.0-10 of Appendix B to the Application, ICBC provides the historical actual and modelled personal average written premium at the current rate level by FLY. The modelled risks are based on a 33-month regression model over the time period 2019-10 to 2022-06. ICBC states, "[i]n Figure B.0.6 below, personal average premium at current rate level is expected to increase at a trend of +0.2% per year."[4]

Fiscal Year	Personal			
	Actual ($)	YoY Change	Modelled ($)	YoY Change
2011/12				
2012/13	813			
2013/14	811	-0.2%		
2014/15	811	-0.1%		
2015/16	813	0.3%		
2016/17	817	0.4%		
2017/18	818	0.1%		
2018/19	816	-0.2%		
2019/20	807	-1.1%		
2020/21	800	-0.8%		
2021/22	812	1.4%		
2022/23			814	
2023/24			816	0.2%
2024/25			818	0.2%
PY 2023			817	

On November 1, 2022, the Federal Government of Canada announced: "An Immigration Plan to Grow the Economy."[5] The Federal Government of Canada's news release states:

> **Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025. The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.**

5.1 Please explain what consideration(s), if any, ICBC has given to the Federal Government of Canada's news release of higher immigration targets in 2023 and beyond, when selecting the personal rate level average premium growth rate of +0.2 percent.

5.1.1 If no consideration was given, please explain why not and discuss whether the Federal Government of Canada's immigration targets and higher proportion of new drivers with associated higher premiums may impact the future premium trend beyond the selected +0.2%.

[4] In Technical Appendix Tab B.1, footnote 2, ICBC states that the first month after the implementation of the rate design in September 2019 is excluded due to potential data issues.

[5] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

The Federal Government of Canada's revised immigration targets were reviewed prior to filing the 2023 Revenue Requirements Application; however the information was not considered in ICBC's Personal average premium trend analysis. High levels of immigration into Canada have existed for some time and ICBC believes its contribution to average premium growth is already captured in the selected growth trend of +0.2%. Quantifying the impacts of additional immigration over and above the time period in the regression model (October 2019 to June 2022) would require consideration of, among other things, proportion of immigrants choosing to settle in BC versus other provinces, the geographic distribution of additional immigrants within the province, and the average years of driving experience of new immigrants. ICBC believes its current approach to modelling average premium provides a good balance between goodness of fit and simplicity and that any incremental changes in population growth rates, which includes immigration, will ultimately be captured in the estimated trends as they emerge in data.

It is ICBC's position that attempting to quantify the impacts of the Federal Government of Canada's revised immigration targets would not add to the statistical confidence of the estimate of written exposure, average premium, or the actuarial indicated rate change. In addition, as outlined in the Application, Chapter 3, Actuarial Indicated Rate Change Analysis, Appendix 3A, Section H, the actuarial rate indication is prepared based on assumptions that are not only independently reasonable but also appropriate in aggregate. Thus, any revision to the Personal average premium growth rate from other factors such as additional immigration to BC, would also require revisiting other assumptions, including crash frequency. While additional immigration could lead to an increase in the overall average premium, it could also lead to a change in the forecasted crash frequency. This hinders any meaningful quantification of the impact of additional immigration to the actuarial indicated rate change.

2023.1 RR BCUC.5.1.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section C.1, p. B.0-10, Figure B.0.6; Technical Appendix B.1
Personal Average Premium at Current Rate Level, Actual and Modelled

On page B.0-10 of Appendix B to the Application, ICBC provides the historical actual and modelled personal average written premium at the current rate level by FLY. The modelled risks are based on a 33-month regression model over the time period 2019-10 to 2022-06. ICBC states, "in Figure B.0.6 below, personal average premium at current rate level is expected to increase at a trend of +0.2% per year."[4]

Fiscal Year	Personal			
	Actual ($)	YoY Change	Modelled ($)	YoY Change
2011/12				
2012/13	813			
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5.1.2 Please explain if ICBC can distinguish between the current average premium level for policyholders that are new to British Columbia (BC) compared to renewing policyholders.

5.1.2.1 If yes, please provide the average current premium level for FLY 2022 split between policyholders that are new to BC versus renewing policyholders.

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[4] In Technical Appendix Tab B.1, footnote 2, ICBC states the that first month after the implementation of the rate design in September 2019 is excluded due to potential data issues.

[5] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

5.1.2

Yes, ICBC can distinguish the average premium level of policies that have one or more drivers that are new to BC.

5.1.2.1

In this response, ICBC defines policy holders new to BC as those having policies with one or more listed drivers that have less than one year of driving experience in BC. Renewing policy holders are defined as those having policies where all listed drivers have at least one year of driving experience in BC. Fiscal year (FY) 2021/22 actual average written premium for policies split between policy holders new (< 1 year) to BC and renewing policy holders (> 1 year of BC experience) is shown below.

Policy Holder	FY 2021/22 Average Premium (Actual)
Policy holders new to BC	$1,325
Renewing policy holders	$723

The values shown above:

- Include new and renew transactions only (e.g., exclude midterm policy changes and policy cancellation transactions).
- Include Enhanced Care policies only (policies effective from May 1, 2021 to March 31, 2022).
- Include non-fleet policies only since fleet policies are not required to list drivers.
- Exclude storage, temporary operation permit and Manual Basic policies.

The total difference in average premium is due in part to the 15% New Resident Driver Factor and also includes differences in other rating factors. For example, drivers new to BC have less driving experience on average versus renewing drivers.

As a point of clarification, fiscal loss year (FLY) is used for the actuarial claims analysis. FLY is used to group claims associated with accidents occurring during the fiscal year, while the term fiscal year (FY) refers to the 12-month reporting period. ICBC assumes the intervener is referring to FY 2021/22 in this information request. Please refer to the 2023 RRA - Participants' Reference Guide, Section D.1, Figure 2 for more information on FLY and FY.

2023.1 RR BCUC.5.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Appendix B, Section C.1, p. B.0-10, Figure B.0.6; Technical Appendix B.1
Personal Average Premium at Current Rate Level, Actual and Modelled

On page B.0-10 of Appendix B to the Application, ICBC provides the historical actual and modelled personal average written premium at the current rate level by FLY. The modelled risks are based on a 33-month regression model over the time period 2019-10 to 2022-06. ICBC states, "[i]n Figure B.0.6 below, personal average premium at current rate level is expected to increase at a trend of +0.2% per year."[4]

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> **Last year Canada welcomed over 405,000 newcomers - the most we've ever welcomed in a single year. The Government is continuing that ambition by setting targets in the new levels plan of 465,000 permanent residents in 2023, 485,000 in 2024 and 500,000 in 2025. The plan also brings an increased focus on attracting newcomers to different regions of the country, including small towns and rural communities.**

Please provide a sensitivity analysis on the impact to the actuarial indicated rate change of -6.5 percent from the November 1, 2022 Federal Government of Canada's announcement based on alternative immigration levels that are 10 percentage points above and below the government's target level, i.e. 110% and 90% of target.

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[4] In Technical Appendix Tab B.1, footnote 2, ICBC states the that first month after the implementation of the rate design in September 2019 is excluded due to potential data issues.

[5] Retrieved February 9, 2023 from: https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/11/an-immigration-plan-to-grow-the-economy.html

Response:

If immigration levels were to change within BC (higher or lower), there would likely be an impact to both average premium and claims costs (e.g., higher immigration levels would increase both average premium and claim costs). However, these impacts are expected to largely offset each other with regards to an impact on the actuarial indicated rate change (e.g., an increase in average premium is favourable to the actuarial indicated rate change whereas an increase in claims cost is unfavourable). As a result, ICBC expects any change in immigration levels to have a small impact on the overall actuarial indicated rate change and no impact on the 0% proposed rate change for Policy Year (PY) 2023.

As outlined in the Application, Chapter 3, Appendix 3A, Section H, the actuarial rate indication is prepared based on assumptions that are not only independently reasonable but also appropriate in aggregate. Thus, any revision to average premium from factors such as additional immigration to BC, would also require revisiting other assumptions, including crash frequency and severity. Undertaking a fulsome analysis on how higher immigration would impact all assumptions supporting the -6.5% actuarial indicated rate change would require a substantial and undue amount of time and effort.

2023.1 RR BCUC.6.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.2, p. 3-15, Appendix 3A p. 3A-4; Manitoba Public Utility Board Order No. 4/23 dated January 11, 2023[1]
Use of Manitoba Public Insurance 2023 General Rate Application (GRA)

On page 3-15 of the Application, ICBC states:

> **Enhanced Accident Benefits is comprised of Medical Rehabilitation (EAB-MR), Enhanced Disability (EAB-EB), Permanent Impairment (EAB-PI), and Death Benefits (EAB-DB) sub-coverages. EAB, which significantly expands the amount and type of coverage available to injured customers, was introduced on May 1, 2021; therefore, ICBC has limited experience available to rely on for its claims cost estimates and PY 2023 forecasts. ICBC has supplemented this experience with data for accident benefits claims under the legal-based product for estimation of claim frequency, and continues to rely on relevant information, in particular severity data from Manitoba Public Insurance (MPI), to estimate claim severity (similar to the methodology used in the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report that was included in the 2021 RRA [Revenue Requirements Application], Chapter 3, Appendix C.4.0). [*Emphasis added]***

On January 11, 2023, the Public Utilities Board of Manitoba (Board) released Order No. 4/23 on its review of the MPI 2023/2024 GRA. On page 52 of the order, the Board stated:

> **The claims forecast for 2023/24 and 2024/25 is to be adjusted, using the OW [Oliver Wyman Limited] recommendations for Weekly Indemnity frequency, Collision Total Loss frequency, Property Damage Third Party Deductible Transfer severity, and Property Damage Third Party Loss of Use severity.**

6.1 Please explain whether the adjustments directed by Board Order No. 4/23 in MPI 2023/2024 GRA impact the actuarial rate indication of -6.5 percent as estimated by ICBC.

6.1.1 If not, please explain why not.

6.1.2 If yes, please provide the approximate impact on the -6.5 percent actuarial rate indication and explain if including the adjustments would be within Canadian accepted actuarial practice.

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[1] Retrieved February 9, 2023 from: http://www.pubmanitoba.ca/v1/proceedings-decisions/orders/pubs/23-orders/4-23.pdf

Response:

The adjustments directed by Board Order No. 4/23 in MPI 2023/2024 GRA (Order) do not impact the rate indication as estimated by ICBC, because ICBC's claims estimates and forecasts do not rely on MPI's claims estimates or forecasts for any of the coverages and claims statistics affected by the Order.

The Order affects MPI's claim forecast for 2023/24 and 2024/25 for Weekly Indemnity frequency, Collision Total Loss frequency, Property Damage Third Party Deductible Transfer severity and Property Damage Third Party Loss of Use severity.

The ICBC counterpart of MPI's Weekly Indemnity frequency is the EAB-ED frequency. The EAB-ED frequency forecast does not rely on MPI data, but is based on ICBC's own EAB-ED claims data and ICBC's forecast of Basic Vehicle Damage (BVDC) coverage frequency. ICBC's forecasts for the BVDC and TPL-PD coverages are likewise based on ICBC’s historical claims data.

Therefore, the adjustments directed by the Order do not impact the actuarial rate indication as estimated by ICBC.

2023.1 RR BCUC.6.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.2, p. 3-15, Appendix 3A p. 3A-4; Manitoba Public Utility Board Order No. 4/23 dated January 11, 2023[6]
Use of Manitoba Public Insurance 2023 General Rate Application (GRA)

On page 3-15 of the Application, ICBC states:

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> **The claims forecast for 2023/24 and 2024/25 is to be adjusted, using the OW [Oliver Wyman Limited] recommendations for Weekly Indemnity frequency, Collision Total Loss frequency, Property Damage Third Party Deductible Transfer severity, and Property Damage Third Party Loss of Use severity.**

Please provide the FLY 2022 (11 months) severity estimates based on the actual emerged experience for ICBC for each of the EAB sub-coverages and compare these to: (i) the expected amounts from the ICBC 2021 Revenue Requirements Application (2021 RRA); and (ii) the estimates based on the MPI data, considering any implications of Board Order No. 4/23 to the extent that it is applicable and can be quantified.

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[6] **Retrieved February 9, 2023 from:** http://www.pubmanitoba.ca/v1/proceedings-decisions/orders/pubs/23-orders/4-23.pdf

Response:

Table 1 below compares the fiscal loss year (FLY) 2022 (11 months) incurred severity estimates based on ICBC actual paid data to the estimates in the 2021 Revenue Requirements Application (2021 RRA), and to the estimates in this Application which rely on Manitoba Public Insurance (MPI) data. The adjustments directed by Board Order No. 4/23 in MPI 2023/2024 General Rate Application (GRA) do not impact ICBC's claims estimates and forecasts as discussed in the response to information request 2023.1 RR BCUC.6.1.

Table 1 - FLY 2022 (11 months) Incurred Severities ($)

EAB Sub-Coverage	Incurred Severity Based on ICBC Actual Data (1)	(i) Incurred Severity as at 2021 RRA (2)	(ii) Incurred Severity as at 2023 RRA (3)
EAB-MR	12,657	12,214	13,290
EAB-ED	74,873	71,326	67,701
EAB-PI and EAB-DB	10,295	24,052	25,154

Notes:
(1) From Attachment A - ICBC Actual Emerged Experience, EAB-MR from (12d), EAB-ED from (13d), EAB-PI and EAB-DB from (17c).
(2) From Attachment B - 2021 RRA Expectation, EAB-MR from (6d), EAB-ED from (7d), EAB-PI and EAB-DB from (10c).
(3) EAB-MR and EAB-ED from the Application, Chapter 3, Technical Appendix C.1.0, Section C.4, Figure C.1.0.9, EAB-PI and EAB-DB from (2c) in Table 2 below.

Table 2 - FLY 2022 (11 months) EAB-PI and EAB-DB Incurred Frequency and Severity As at 2023 RRA

EAB Sub-Coverage	Incurred Frequency (1)	Incurred Severity ($) (2)
EAB-PI (a)	0.15%	21,718
EAB-DB (b)	0.02%	54,895
EAB-PI and EAB-DB (c)		25,154

Notes:
(1) From the Application, Chapter 3, Appendix C.1.1
(2a) and (2b) From the Application, Chapter 3, Appendix C.1.2
(2c) = [(1a) x (2a) + (1b) x (2b)] ÷ [(1a) + (1b)]

The estimates in Column (1) of Table 1 are based on the limited actual data, which can be a source of substantial volatility and bias in the estimate due to the high degree of leverage placed on the paid amount. In particular, the development pattern that ultimately emerges for ICBC's claims will most likely differ from the pattern of MPI's claims. In this case, reliance on the limited actual data produces severity estimates that are moderately to extremely different from ICBC's best estimates in column (3), and that vary both above and below them. Overall, in ICBC's view, it is too soon to rely on the incurred severity estimates based on ICBC actual data.

Comparison between column (1) and column (2) in Table 1

In addition to the volatility of the estimates in column (1) as a consequence of the limited data, for EAB-MR and EAB-ED, the estimate in column (1) is higher because it incorporates a higher BC Consumer Price Index (CPI) inflation rate and forecast than the uniform 2.0% assumed in the 2021 RRA.

Comparison between column (1) and column (3) in Table 1

Both column (1) and column (3) assume the same BC CPI inflation rate and its forecast. Therefore, the differences between the estimates in column (1) and column (3) are a result of volatility in the estimates in column (1) as a consequence of the limited data, as discussed above.

2023.1 RR BCUC.6.2 – Attachment A – ICBC Actual Emerged Experience

Attachment A - ICBC Actual Emerged Experience: Incurred Severity Before and After Indexation for EAB Sub-Coverages - FLY 2022

	No indexation							
	Age-to-Age LDF		Age-to-Ultimate LDF		Cumulative % Paid		Incremental % Paid	
Development Month	EAB-MR (1)	EAB-ED (2)	EAB-MR (3)	EAB-ED (4)	EAB-MR (5)	EAB-ED (6)	EAB-MR (7)	EAB-ED (8)
12 to 24	2.052	1.966	4.560	8.411	21.93%	11.89%	21.93%	11.89%
24 to 36	1.155	1.279	2.222	4.279	45.00%	23.37%	23.07%	11.48%
36 to 48	1.076	1.177	1.924	3.346	51.97%	29.88%	6.97%	6.52%
48 to 60	1.052	1.128	1.787	2.843	55.95%	35.17%	3.98%	5.29%
60 to 72	1.035	1.098	1.700	2.519	58.83%	39.69%	2.88%	4.52%
72 to 84	1.030	1.075	1.641	2.296	60.92%	43.56%	2.09%	3.87%
84 to 96	1.030	1.064	1.594	2.134	62.75%	46.85%	1.83%	3.29%
96 to 108	1.030	1.059	1.547	2.007	64.63%	49.83%	1.88%	2.98%
108 to 120	1.030	1.052	1.502	1.896	66.57%	52.74%	1.94%	2.92%
120 to 132	1.030	1.047	1.458	1.801	68.57%	55.51%	2.00%	2.77%
132 to 144	1.030	1.042	1.416	1.721	70.63%	58.12%	2.06%	2.61%
144 to 156	1.030	1.041	1.375	1.651	72.75%	60.56%	2.12%	2.44%
156 to 168	1.028	1.037	1.335	1.587	74.92%	63.02%	2.18%	2.45%
168 to 180	1.023	1.033	1.298	1.530	77.02%	65.35%	2.10%	2.33%
180 to 192	1.019	1.031	1.269	1.481	78.79%	67.50%	1.77%	2.16%
192 to 204	1.017	1.028	1.245	1.438	80.29%	69.56%	1.50%	2.06%
204 to 216	1.017	1.026	1.225	1.399	81.66%	71.48%	1.36%	1.91%
216 to 228	1.016	1.025	1.205	1.363	83.00%	73.37%	1.35%	1.89%
228 to 240	1.015	1.023	1.186	1.330	84.34%	75.18%	1.34%	1.81%
240 to 252	1.015	1.021	1.168	1.300	85.63%	76.90%	1.29%	1.72%
252 to 264	1.014	1.020	1.151	1.273	86.87%	78.53%	1.24%	1.64%
264 to 276	1.013	1.018	1.135	1.249	88.07%	80.09%	1.20%	1.56%
276 to 288	1.012	1.017	1.121	1.226	89.23%	81.56%	1.15%	1.48%
288 to 300	1.012	1.016	1.107	1.205	90.34%	82.96%	1.11%	1.40%
300 to 312	1.011	1.015	1.094	1.186	91.41%	84.28%	1.07%	1.32%
312 to 324	1.011	1.014	1.082	1.169	92.44%	85.53%	1.03%	1.25%
324 to 336	1.010	1.013	1.070	1.153	93.42%	86.71%	0.99%	1.18%
336 to 348	1.010	1.012	1.060	1.139	94.37%	87.82%	0.95%	1.11%
348 to 360	1.009	1.011	1.050	1.125	95.28%	88.87%	0.91%	1.05%
360 to 372	1.009	1.010	1.040	1.113	96.16%	89.85%	0.87%	0.98%
372 to 384	1.008	1.010	1.031	1.102	96.99%	90.78%	0.84%	0.93%
384 to 396	1.008	1.009	1.023	1.091	97.79%	91.65%	0.80%	0.87%
396 to 408	1.007	1.008	1.015	1.081	98.56%	92.47%	0.77%	0.82%
408 to 420	1.007	1.008	1.007	1.073	99.30%	93.23%	0.74%	0.77%
420 to 432	1.000	1.007	1.000	1.064	100.00%	93.95%	0.70%	0.72%
432 to 444		1.007		1.057		94.63%		0.67%
444 to 456		1.006		1.050		95.26%		0.63%
456 to 468		1.006		1.043		95.85%		0.59%
468 to 480		1.005		1.037		96.40%		0.55%
480 to 492		1.005		1.032		96.92%		0.52%
492 to 504		1.005		1.027		97.40%		0.48%
504 to 516		1.004		1.022		97.85%		0.45%
516 to 528		1.004		1.018		98.27%		0.42%
528 to 540		1.004		1.013		98.67%		0.39%
540 to 552		1.003		1.010		99.04%		0.37%
552 to 564		1.003		1.006		99.38%		0.34%
564 to 576		1.003		1.003		99.70%		0.32%
576 to Ult		1.000		1.000		100.00%		0.30%

Payment Year	Inflation Assumption (9)	Indexation Factor for EAB-MR (10)	Indexation Factor for EAB-ED (11)	EAB-MR Incremental Paid ($) (12)	EAB-ED Incremental Paid ($) (13)
FY2021/22	1.000	1.000	1.000	2,251	6,572
FY2022/23	1.028	1.028	1.014	2,435	6,434
FY2023/24	1.060	1.090	1.058	780	3,812
FY2024/25	1.039	1.132	1.111	462	3,247
FY2025/26	1.024	1.159	1.146	343	2,862
FY2026/27	1.022	1.185	1.172	254	2,507
FY2027/28	1.020	1.209	1.197	227	2,175
FY2028/29	1.020	1.233	1.221	238	2,007
FY2029/30	1.020	1.257	1.245	250	2,007
FY2030/31	1.020	1.283	1.270	263	1,943
FY2031/32	1.020	1.308	1.295	276	1,868
FY2032/33	1.020	1.334	1.321	290	1,783
FY2033/34	1.020	1.361	1.348	304	1,827
FY2034/35	1.020	1.388	1.375	299	1,770
FY2035/36	1.020	1.416	1.402	257	1,671
FY2036/37	1.020	1.444	1.430	222	1,629
FY2037/38	1.020	1.473	1.459	206	1,543
FY2038/39	1.020	1.503	1.488	208	1,556
FY2039/40	1.020	1.533	1.518	210	1,515
FY2040/41	1.020	1.563	1.548	207	1,473
FY2041/42	1.020	1.595	1.579	204	1,429
FY2042/43	1.020	1.627	1.611	200	1,385
FY2043/44	1.020	1.659	1.643	197	1,339
FY2044/45	1.020	1.692	1.676	193	1,294
FY2045/46	1.020	1.726	1.709	189	1,249
FY2046/47	1.020	1.761	1.743	186	1,203
FY2047/48	1.020	1.796	1.778	182	1,158
FY2048/49	1.020	1.832	1.814	178	1,114
FY2049/50	1.020	1.868	1.850	174	1,070
FY2050/51	1.020	1.906	1.887	171	1,027
FY2051/52	1.020	1.944	1.925	167	985
FY2052/53	1.020	1.983	1.963	163	944
FY2053/54	1.020	2.022	2.002	159	904
FY2054/55	1.020	2.063	2.043	156	865
FY2055/56	1.020	2.104	2.083	152	828
FY2056/57	1.020	2.146	2.125	-	791
FY2057/58	1.020	2.189	2.168	-	756
FY2058/59	1.020	2.233	2.211	-	722
FY2059/60	1.020	2.278	2.255	-	689
FY2060/61	1.020	2.323	2.300	-	657
FY2061/62	1.020	2.370	2.346	-	627
FY2062/63	1.020	2.417	2.393	-	598
FY2063/64	1.020	2.465	2.441	-	570
FY2064/65	1.020	2.515	2.490	-	543
FY2065/66	1.020	2.565	2.540	-	517
FY2066/67	1.020	2.616	2.590	-	492
FY2067/68	1.020	2.669	2.642	-	468
FY2068/69	1.020	2.722	2.695	-	446
Incurred Severity after Indexation (d)				**12,657**	**74,873**
Indexation Impact				2,391	19,599

EAB Sub-coverages	Paid Losses excl. Large Losses (14)	Age-to-Ultimate LDF No indexation (15)	Incurred Loss and ALAE (16)	Incurred Severity before indexation (17)
EAB-MR (a)	226,950	2.22	504,642	10,266
EAB-ED (b)	95,282	4.28	408,259	55,275
EAB-PI and EAB-DB (c)	26,220	2.18	57,249	10,295

Notes:

(1) From Technical Appendix E.1 Col (a)
(2) From Technical Appendix E.2 Col (a)
(3) Selected To Ultimate = product of Col (1) beginning from same maturity
(4) Selected To Ultimate = product of Col (2) beginning from same maturity
(5) = 1 ÷ (3)
(6) = 1 ÷ (4)
(7) = (5) - (5) Prior
(8) = (6) - (6) Prior

Notes:

(9) From Appendix C.1.0, Figure C.1.0.3, column (2) (the September 2022 BC Budget, capped at 6.0%)
(10) Year n factor = PRODUCT(Year 1:Year n) of Col (9)
(11) Year n factor = PRODUCT(Year 1:Year n-1) * Year n^0.5 of Col (9)
Indexation for EAB-ED is applied on the anniversary of the date of loss, rather than EAB-MR, where indexation is applied all at once for all claims at the beginning of the fiscal year. More details are available in Technical Appendix E.0 Section B.2.

(12) = (17) x (7) x (10)
(13) = (17) x (8) x (11)

(d) = Sum of Col (12) for EAB-MR and Col (13) for EAB-ED

Notes:

(14) From ICBC internal database
(15a) = 24 month to ultimate factor from Col (3)
(15b) = 24 month to ultimate factor from Col (4)
(15c) = 24 month to ultimate factor derived from Technical Appendix E.3 column (a)
(16a) = (14a) x (15a) + Large losses from ICBC internal database
(16b) = (14b) x (15b) + Large losses from ICBC internal database
(16c) = (14c) x (15c) + Large losses from ICBC internal database
(17a) = (16a) ÷ Incurred counts from Technical Appendix C.1.1.2.1 Col (7)
(17b) = (16b) ÷ Incurred counts from Technical Appendix C.1.2.2.1 Col (7)
(17c) = (16c) ÷ sum of incurred counts from Technical Appendix C.1.3.2.1 Col (7) and Technical Appendix C.1.4.1 Col (12)

2023.1 RR BCUC.6.2 – Attachment B – 2021 RRA Expectation

Attachment B - 2021 RRA Expectation: Expected Severity from 2021 RRA for each EAB Sub-Coverages;

Period	Indexation Factor (1)	Payment Pattern: Payment Pattern Distribution (MR) (2)	Payment Pattern: Payment Pattern Distribution (IRI) (3)	Cashflows and Indexation Adjustment: Loss & ALAE Payments without indexation (MR) (4)=(2) x (10a)	Cashflows and Indexation Adjustment: Loss & ALAE Payments without indexation (IRI) (5)=(3) x (10b)	Cashflows and Indexation Adjustment: Loss & ALAE Payments with indexation (MR) (6) = (4) x (1)	Cashflows and Indexation Adjustment: Loss & ALAE Payments with indexation (IRI) (7) = (5) x (1)
Year 1 - Q1	1.00	0.11%	0.05%	11	25	11	25
Year 1 - Q2	1.00	1.12%	0.52%	115	283	115	283
Year 1 - Q3	1.00	2.92%	1.60%	299	874	299	874
Year 1 - Q4	1.00	6.39%	3.56%	656	1,940	656	1,940
Year 2 - Q1	1.02	5.43%	2.46%	557	1,343	568	1,370
Year 2 - Q2	1.02	6.26%	2.97%	643	1,619	656	1,651
Year 2 - Q3	1.02	5.29%	3.08%	543	1,681	554	1,714
Year 2 - Q4	1.02	5.52%	3.17%	567	1,731	578	1,765
Year 3	1.04	15.66%	9.24%	1,608	5,041	1,673	5,244
Year 4	1.06	5.70%	5.92%	585	3,230	621	3,428
Year 5	1.08	3.39%	4.84%	348	2,636	376	2,854
Year 6	1.10	2.28%	4.06%	234	2,216	259	2,447
Year 7	1.13	1.80%	3.54%	185	1,931	208	2,174
Year 8	1.15	1.86%	3.23%	191	1,763	219	2,025
Year 9	1.17	1.91%	3.03%	196	1,654	230	1,938
Year 10	1.20	1.97%	2.85%	202	1,557	242	1,860
Year 11	1.22	2.03%	2.70%	208	1,474	254	1,797
Year 12	1.24	2.09%	2.54%	214	1,385	267	1,722
Year 13	1.27	2.15%	2.40%	221	1,311	280	1,662
Year 14	1.29	2.16%	2.27%	222	1,237	287	1,600
Year 15	1.32	1.97%	2.06%	203	1,125	267	1,485
Year 16	1.35	1.66%	1.95%	170	1,063	229	1,431
Year 17	1.37	1.43%	1.92%	147	1,048	202	1,439
Year 18	1.40	1.34%	1.91%	137	1,040	192	1,456
Year 19	1.43	1.33%	1.87%	137	1,021	195	1,459
Year 20	1.46	1.33%	1.79%	137	975	199	1,421
Year 21	1.49	1.28%	1.71%	132	930	196	1,382
Year 22	1.52	1.24%	1.62%	127	885	193	1,341
Year 23	1.55	1.19%	1.54%	123	841	189	1,300
Year 24	1.58	1.15%	1.46%	118	798	186	1,258
Year 25	1.61	1.11%	1.39%	114	756	183	1,216
Year 26	1.64	1.06%	1.31%	109	716	179	1,174
Year 27	1.67	1.02%	1.24%	105	676	176	1,132
Year 28	1.71	0.98%	1.17%	101	639	172	1,090
Year 29	1.74	0.94%	1.11%	97	603	168	1,049
Year 30	1.78	0.90%	1.04%	93	568	165	1,009
Year 31	1.81	0.87%	0.98%	89	535	161	969
Year 32	1.85	0.83%	0.92%	85	503	158	930
Year 33	1.88	0.80%	0.87%	82	473	154	892
Year 34	1.92	0.76%	0.82%	78	445	151	855
Year 35	1.96	0.73%	0.77%	75	417	147	818
Year 36	2.00	0.00%	0.72%	-	392	-	783
Year 37	2.04	0.00%	0.67%	-	367	-	749
Year 38	2.08	0.00%	0.63%	-	344	-	716
Year 39	2.12	0.00%	0.59%	-	323	-	685
Year 40	2.16	0.00%	0.55%	-	302	-	654
Year 41	2.21	0.00%	0.52%	-	283	-	624
Year 42	2.25	0.00%	0.49%	-	265	-	596
Year 43	2.30	0.00%	0.45%	-	247	-	568
Year 44	2.34	0.00%	0.42%	-	231	-	542
Year 45	2.39	0.00%	0.40%	-	216	-	517
Year 46	2.44	0.00%	0.37%	-	202	-	493
Year 47	2.49	0.00%	0.35%	-	189	-	469
Year 48	2.54	0.00%	0.32%	-	176	-	447
(d) Total		**100.00%**	**100.00%**	**10,263**	**54,526**	**12,214**	**71,326**

EAB Sub-Coverage	FLY2022 Severity (8)	Manual Basic Adjustment (9)	FLY2022 Severity incl Manual Basic (10) = (8) x (9)
(a) EAB-MR	10,078	1.83%	10,263
(b) EAB-ED	53,544		54,526
(c) EAB-PI and EAB-DB	23,619		24,052

Notes:

(1) Prior year Indexation Factor + Indexation rate assumption of 2%.
From 2021 RRA, Technical Appendix A.0, paragraph 42.

(2) and (3) From 2021 RRA Appendix F.1, Col (1) and (2).

(8) From 2021 RRA, Appendix C.1.

(9) From 2021 RRA, Appendix A.6.

2023.1 RR BCUC.6.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.2, p. 3-15, Appendix 3A p. 3A-4; Manitoba Public Utility Board Order No. 4/23 dated January 11, 2023[1]
Use of Manitoba Public Insurance 2023 General Rate Application (GRA)

On page 3-15 of the Application, ICBC states:

> **Enhanced Accident Benefits is comprised of Medical Rehabilitation (EAB-MR), Enhanced Disability (EAB-EB), Permanent Impairment (EAB-PI), and Death Benefits (EAB-DB) sub-coverages. EAB, which significantly expands the amount and type of coverage available to injured customers, was introduced on May 1, 2021; therefore, ICBC has limited experience available to rely on for its claims cost estimates and PY 2023 forecasts. ICBC has supplemented this experience with data for accident benefits claims under the legal-based product for estimation of claim frequency, and continues to rely on relevant information, in particular severity data from Manitoba Public Insurance (MPI), to estimate claim severity (similar to the methodology used in the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report that was included in the 2021 RRA [Revenue Requirements Application], Chapter 3, Appendix C.4.0). [*Emphasis added]***

On January 11, 2023, the Public Utilities Board of Manitoba (Board) released Order No. 4/23 on its review of the MPI 2023/2024 GRA. On page 52 of the order, the Board stated:

> **The claims forecast for 2023/24 and 2024/25 is to be adjusted, using the OW [Oliver Wyman Limited] recommendations for Weekly Indemnity frequency, Collision Total Loss frequency, Property Damage Third Party Deductible Transfer severity, and Property Damage Third Party Loss of Use severity.**

ICBC states that it has supplemented the MPI *frequency* experience with actual experience under the new EAB product. Did ICBC give any consideration to the actual EAB *severity* experience to supplement the MPI data, in making its final selection of the PY 2023 severity for EAB?

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[1] Retrieved February 9, 2023 from: http://www.pubmanitoba.ca/v1/proceedings-decisions/orders/pubs/23-orders/4-23.pdf

Response:

For clarity, ICBC did not state that it supplemented Manitoba Public Insurance (MPI) frequency experience with actual experience under the new EAB product. Rather, ICBC stated that, for estimation of claim frequency, it supplemented the limited experience under Enhanced Care with data from accident benefit claims under the legal-based product.

ICBC considered the actual EAB severity experience in estimating claim severities and relied upon it for calculations where deemed appropriate. The table below presents the cumulative percentage paid at March 31, 2023 for fiscal loss year (FLY) 2022. This illustrates for the claims in each EAB sub-coverage whether most of the claims costs have been paid and to what degree they remain unpaid.

EAB Sub-coverage	Paid Loss & ALAE ($000's) (1)	Incurred Loss & ALAE ($000's) (2)	Percentage Paid at 23 months (3) = (1) ÷ (2)
(a) EAB-MR	226,950	653,291	35%
(b) EAB-ED	95,282	500,037	19%
(c) EAB-PI	5,110	108,263	5%
(d) EAB-DB	21,110	31,619	67%

Notes:
(1) From ICBC internal database
(2a) From Technical Appendix C.1.1.1 Column (4)
(2b) From Technical Appendix C.1.2.1 Column (3)
(2c) From Technical Appendix C.1.3.1 Column (3)
(2d) From Technical Appendix C.1.4.1 Column (13)

EAB-DB develops and settles fairly quickly with less uncertainty due to the short-tailed nature of this sub-coverage. Therefore, ICBC relies on the experience under Enhanced Care, supplemented with data for AB-DB under the legal-based product, in making the final selection of the PY 2023 severity.

EAB-MR, EAB-ED, and EAB-PI are longer-tailed than EAB-DB. ICBC has limited experience available to rely on for the severity estimates. As shown in the response to information request 2023.1 RR BCUC.6.3.1, there is significant room for the EAB-MR and EAB-ED paid severities to increase, and it is expected to take a long time for EAB-PI paid severity to stabilize. Therefore, severity estimates based on such a small portion of the total payments would place a high degree of leverage on the paid amount, which could be a source of substantial bias in the estimate. In particular, the development pattern that ultimately emerges for ICBC's claims will most likely differ from the pattern of MPI's claims. For these reasons, ICBC has assessed that it is more appropriate not to rely on the actual experience so far under Enhanced Care in making the final selection of the PY 2023 severity.

2023.1 RR BCUC.6.3.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.2, p. 3-15, Appendix 3A p. 3A-4; Manitoba Public Utility Board Order No. 4/23 dated January 11, 2023[1]
Use of Manitoba Public Insurance 2023 General Rate Application (GRA)

On page 3-15 of the Application, ICBC states:

> **Enhanced Accident Benefits is comprised of Medical Rehabilitation (EAB-MR), Enhanced Disability (EAB-EB), Permanent Impairment (EAB-PI), and Death Benefits (EAB-DB) sub-coverages. EAB, which significantly expands the amount and type of coverage available to injured customers, was introduced on May 1, 2021; therefore, ICBC has limited experience available to rely on for its claims cost estimates and PY 2023 forecasts. ICBC has supplemented this experience with data for accident benefits claims under the legal-based product for estimation of claim frequency, and continues to rely on relevant information, in particular severity data from Manitoba Public Insurance (MPI), to estimate claim severity (similar to the methodology used in the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report that was included in the 2021 RRA [Revenue Requirements Application], Chapter 3, Appendix C.4.0). [*Emphasis added]***

On January 11, 2023, the Public Utilities Board of Manitoba (Board) released Order No. 4/23 on its review of the MPI 2023/2024 GRA. On page 52 of the order, the Board stated:

> **The claims forecast for 2023/24 and 2024/25 is to be adjusted, using the OW [Oliver Wyman Limited] recommendations for Weekly Indemnity frequency, Collision Total Loss frequency, Property Damage Third Party Deductible Transfer severity, and Property Damage Third Party Loss of Use severity.**

Please provide any summary statistics prepared by ICBC in its review of the actual emerged frequency and severity experience under the new EAB product.

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[1] Retrieved February 9, 2023 from: http://www.pubmanitoba.ca/v1/proceedings-decisions/orders/pubs/23-orders/4-23.pdf

Response:

The tables below show the summary statistics for the actual emerged (reported) frequency and severity experience under each of the EAB sub-coverage for fiscal loss year (FLY) 2022 as of each evaluation date.

Figure 1 - Emerged (Reported) Frequency and Severity for EAB-MR

Fiscal Loss Year 2022 Evaluation Date (as of)	Reported Claim Exposure Counts excluding CNAs (1)	Reported Frequency (2)	CWA Claim Exposure Counts (3)	Paid Loss & ALAE on CWA ($000's) (4)	Paid Severity on CWA ($) (5) = (4) ÷ (3)
May 31, 2021	4,213	0.13%	43	8	179
Aug 31, 2021	19,403	0.59%	1,654	675	408
Nov 30, 2021	35,670	1.09%	6,166	3,624	588
Mar 31, 2022	50,600	1.54%	17,748	16,696	941
May 31, 2022	49,484	1.51%	23,684	25,291	1,068
Aug 31, 2022	49,101	1.50%	31,487	43,548	1,383

Notes: (These footnotes apply to all the tables in the response to this information request.)

(1) From ICBC internal database, CNA is Closed with No Payment Amount

(2) Calculated as col (1) Reported Claim Exposure Counts excluding CNAs ÷ 3,281,934. 3,281,934 is the Earned Risk Exposure from the Application, Chapter 3, Technical Appendix C.1.1

(3) From ICBC internal database, CWA is Closed With Payment Amount

(4) From ICBC internal database

(5) Does not include payments on open claims

EAB-MR reported frequency is equal to the best estimate incurred frequency of 1.50% for FLY 2022. Paid severity on CWA has been increasing towards our best estimate incurred severity of $13,290 for FLY 2022. There is significant room for the paid severity on CWA to increase, as the claims for relatively more significant injuries will tend to take longer to resolve and make use of a greater amount of insurance benefits.

Figure 2 - Emerged (Reported) Frequency and Severity for EAB-ED *

Fiscal Loss Year 2022 Evaluation Date (as of)	Reported Claim Exposure Counts excluding CNAs (1)	Reported Frequency (2)	CWA Claim Exposure Counts (3)	Paid Loss & ALAE on CWA ($000's) (4)	Paid Severity on CWA ($) (5) = (4) ÷ (3)
May 31, 2021	205	0.01%	-	-	-
Aug 31, 2021	1,673	0.05%	95	147	1,546
Nov 30, 2021	3,268	0.10%	431	968	2,247
Mar 31, 2022	5,478	0.17%	2,194	7,855	3,580
May 31, 2022	6,027	0.18%	2,844	10,946	3,849
Aug 31, 2022	6,318	0.19%	3,774	16,488	4,369

* Please see footnotes detailed in Table 1 above.

EAB-ED reported frequency has been increasing towards our best estimate incurred frequency of 0.23%. Paid severity on CWA has been increasing towards our best estimate incurred severity of $67,701. There is significant room for the paid severity on CWA to increase, as the injured customers that remain disabled for a longer period of time will generally receive a higher total amount of insurance benefits.

Figure 3 - Emerged (Reported) Frequency and Severity for EAB-PI *

Fiscal Loss Year 2022 Evaluation Date (as of)	Reported Claim Exposure Counts excluding CNAs (1)	Reported Frequency (2)	CWA Claim Exposure Counts (3)	Paid Loss & ALAE on CWA ($000's) (4)	Paid Severity on CWA ($) (5) = (4) ÷ (3)
May 31, 2021	1	0.000%	-	-	-
Aug 31, 2021	9	0.000%	-	-	-
Nov 30, 2021	56	0.002%	2	266	133,052
Mar 31, 2022	156	0.005%	10	825	82,511
May 31, 2022	215	0.007%	17	1,447	85,138
Aug 31, 2022	495	0.015%	49	1,674	34,169

* Please see footnotes detailed in Table 1 above.

Although EAB-PI reported frequency has been increasing towards our best estimate incurred frequency of 0.17%, it is still significantly lower as of August 31, 2022. Due to the long-tailed nature of this benefit, it is expected to emerge gradually over time as discussed in the response to information request 2023.1 RR BCUC.11.1.1-2. Paid severity on CWA has generally been decreasing towards our best estimate incurred severity of $21,718, and it is expected to take a long time to stabilize.

Figure 4 - Emerged (Reported) Frequency and Severity for EAB-DB *

Fiscal Loss Year 2022 Evaluation Date (as of)	Reported Claim Exposure Counts excluding CNAs (1)	Reported Frequency (2)	CWA Claim Exposure Counts (3)	Paid Loss & ALAE on CWA ($000's) (4)	Paid Severity on CWA ($) (5) = (4) ÷ (3)
May 31, 2021	17	0.001%	-	-	-
Aug 31, 2021	192	0.006%	35	2,051	58,609
Nov 30, 2021	381	0.012%	104	6,081	58,471
Mar 31, 2022	570	0.017%	184	9,525	51,765
May 31, 2022	608	0.019%	212	11,119	52,446
Aug 31, 2022	624	0.019%	252	13,441	53,337

* Please see footnotes detailed in Table 1 above.

EAB-DB reported frequency has been increasing towards our best estimate incurred frequency of 0.020%. Paid severity on CWA has been increasing since the March 31, 2022 evaluation towards our best estimate incurred severity of $54,895. Due to the relatively short-tailed nature of this benefit, only a limited amount of further emergence of costs is expected for these claims.

2023.1 RR BCUC.7.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section C.1.2, p. TA C.1.0-5; ICBC 2021 RRA, Exhibit B-1, Chapter 3, Appendix C.4.0 (December 2020 Ernst & Young Enhanced Accident Benefits Costing Report), p. 22
Severity Adjustment II – Provincial Health Service Adjustment to EAB -MR Severity

On page TA C.1.0-5 in Technical Appendix C.1.0 to the Application, ICBC states:

> **MPI's severities do not include payments made to the Manitoba Health Service Commission (MHSC) as they are treated as an unallocated loss adjustment expense (ULAE). ICBC's payments to the Medical Services Plan (MSP) are allocated to respective individual claims and thus are a part of allocated loss adjustment expenses (ALAE). A second adjustment factor is thus applied to reflect these additional costs in the forecast EAB-MR severity. Technical Appendix C.1.0.7 shows MPI's projected MHSC costs and the implied adjustment factor for these costs. An average loading factor is selected based on FLYs 2022 to 2027. Applying this adjustment factor of 47.70%, the resulting MPI severities after adjustment are shown in Technical Appendix C.1.0.8, column (2).**

In the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report, the stated adjustment for a similar Provincial Health Service Adjustment was a factor of 43.75 percent.

Please provide the reason(s) for the increase in the Provincial Health Service Adjustment factor applied to the EAB-MR severity from 43.75 percent in the 2021 RRA to 47.70 percent in the Application. As part of the response, please explain if the increase is associated with differences between Manitoba's Health Service system and BC's MSP system.

Response:

The increase in the Provincial Health Service Adjustment factor is primarily due to the updated Manitoba Public Insurance (MPI) forecasts provided in its 2023 General Rate Application and its previous 2021 General Rate Application. Regarding Manitoba Health Services Commission (MHSC) costs, ICBC relies on forecasts from MPI, the appropriateness of which is discussed in the Application, Chapter 3, Appendix 3A, Section D. MPI has a direct working relationship with the MHSC, and has not identified any significant cost changes within the system that contribute directly to changes in its forecasts.

Correspondingly, ICBC has a direct working relationship with BC's Medical Services Plan (MSP), and is not aware of any significant cost changes within the MSP system.

The Provincial Health Service Adjustment factor in this Application is derived using the same approach as the adjustment determined by Ernst & Young and used in the 2021 Revenue Requirements Application (RRA). The Health Service Adjustment factor used in the Application is selected based on MPI data from 2022 to 2027. The Health Service Adjustment factor used in the 2021 RRA was selected based on MPI data from 2020 to 2025, excluding 2020 and 2021 due to the impacts of the COVID-19 pandemic.

Therefore, the increase in the Provincial Health Adjustment factor in the Application is mainly driven by the use of the latest MPI forecasts, instead of differences between Manitoba’s Health Service system and BC’s MSP system.

2023.1 RR BCUC.7.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section C.1.2, p. TA C.1.0-5; ICBC 2021 RRA, Exhibit B-1, Chapter 3, Appendix C.4.0 (December 2020 Ernst & Young Enhanced Accident Benefits Costing Report), p. 22
Severity Adjustment II – Provincial Health Service Adjustment to EAB -MR Severity

On page TA C.1.0-5 in Technical Appendix C.1.0 to the Application, ICBC states:

> **MPI's severities do not include payments made to the Manitoba Health Service Commission (MHSC) as they are treated as an unallocated loss adjustment expense (ULAE). ICBC's payments to the Medical Services Plan (MSP) are allocated to respective individual claims and thus are a part of allocated loss adjustment expenses (ALAE). A second adjustment factor is thus applied to reflect these additional costs in the forecast EAB-MR severity. Technical Appendix C.1.0.7 shows MPI's projected MHSC costs and the implied adjustment factor for these costs. An average loading factor is selected based on FLYs 2022 to 2027. Applying this adjustment factor of 47.70%, the resulting MPI severities after adjustment are shown in Technical Appendix C.1.0.8, column (2).**

In the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report, the stated adjustment for a similar Provincial Health Service Adjustment was a factor of 43.75 percent.

7.2 Please discuss whether ICBC has inquired into potential cost changes in BC's MSP system and compared the potential changes to Manitoba's to validate the above-noted increase in the Provincial Health Service Adjustment factor.

7.2.1 If yes, please provide a summary of the information.

Response:

Please refer to the response to information request 2023.1 RR BCUC.7.1.

2023.1 RR BCUC.7.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section C.1.2, p. TA C.1.0-5; ICBC 2021 RRA, Exhibit B-1, Chapter 3, Appendix C.4.0 (December 2020 Ernst & Young Enhanced Accident Benefits Costing Report), p. 22
Severity Adjustment II – Provincial Health Service Adjustment to EAB -MR Severity

On page TA C.1.0-5 in Technical Appendix C.1.0 to the Application, ICBC states:

> **MPI's severities do not include payments made to the Manitoba Health Service Commission (MHSC) as they are treated as an unallocated loss adjustment expense (ULAE). ICBC's payments to the Medical Services Plan (MSP) are allocated to respective individual claims and thus are a part of allocated loss adjustment expenses (ALAE). A second adjustment factor is thus applied to reflect these additional costs in the forecast EAB-MR severity. Technical Appendix C.1.0.7 shows MPI's projected MHSC costs and the implied adjustment factor for these costs. An average loading factor is selected based on FLYs 2022 to 2027. Applying this adjustment factor of 47.70%, the resulting MPI severities after adjustment are shown in Technical Appendix C.1.0.8, column (2).**

In the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report, the stated adjustment for a similar Provincial Health Service Adjustment was a factor of 43.75 percent.

7.3 Please discuss whether ICBC considered other differences between BC and Manitoba, such as its urban density, geography, and weather, that may result in EAB-MR severity differences between the two provinces.

7.3.1 If yes, provide a description of those considerations.

7.3.2 If no, please explain why not.

Response:

7.3

Yes, ICBC has considered the differences between BC and Manitoba when estimating both the EAB-MR severity and the EAB-ED severity.

7.3.1-2

There are a number of possible adjustments that ICBC has considered, including those applied in the Application and those listed in this information request. However, in order to make a particular adjustment, reliable information at the required level of granularity from both BC and

Manitoba must be available without undue effort or cost, in consideration of the magnitude of the impact the adjustment is assessed to have. ICBC believes it has applied appropriate adjustments under the circumstances, given the product characteristics and limited availability of relevant experience to rely on.

ICBC does not make adjustments for urban density, geography and weather for the following reasons:

- A common definition for both BC and Manitoba is not readily available. For example, given the subjectivity of designating territories as urban or rural and the difficulty of comparing regions between provinces while controlling for differences other than population density, ICBC has assessed it would be difficult to make an explicit adjustment of this nature that would add meaningful precision to the estimates.
- The information at the required level of granularity by geography or by weather is less readily available, especially for Manitoba.
- ICBC does not analyze claims costs by urban density, geography and weather for reserving purposes.
- Income levels typically vary between urban and rural areas within provinces, which would be one reason for attempting to account for urban versus rural differences between the provinces. As the actuarial analysis accounts for differences in average income levels between the provinces, the portion of urban versus rural is accounted for in the adjustments.
- The impacts on EAB-MR and EAB-ED severities depend on the interplay among different elements. Generally, both lower traffic volumes and higher speeds are associated with higher injury severities. Furthermore, road design, road maintenance and road conditions particularly under rainy and snowy weather are interrelated and have influences on injury severity. It would be very challenging to isolate and accurately adjust for each element.

A significant amount of time and effort would be required to collect, review and analyze data from BC/ICBC and Manitoba/MPI. Due to the reasons above, ICBC does not make adjustments for the differences of urban density, geography and weather between BC and Manitoba when determining the EAB-MR and EAB-ED severities.

2023.1 RR BCUC.8.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section C.2.2, p. TA C.1.0-8; ICBC 2021 RRA, Exhibit B-1, Chapter 3, Appendix C.4.0 (December 2020 Ernst & Young Enhanced Accident Benefits Costing Report), p. 36
Severity Adjustment II - Population and Wage Adjustments to EAB-ED Severity

On page TA C.1.0-8 in Technical Appendix C.1.0 to the Application, ICBC states:

> **The selected adjustment factor for population and wage differences between Manitoba and British Columbia is 1.197 based on the observed period from FLYs 2016 to 2019 as shown in Technical Appendix C.1.0.11, row (a).**

In the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report that was included in the ICBC 2021 RRA, the stated adjustment for a similar population and wage adjustment was a factor of 1.147.

Please provide the rationale for the increase in the population and wage adjustment factor between BC and Manitoba from 1.147 in the ICBC 2021 RRA to 1.197 in this Application.

Response:

The increase in the adjustment factor reflects the change in BC and Manitoba income levels between 2018 and 2020. Per Statistics Canada[1], BC's average income level is higher than Manitoba's average income level in both 2018 and 2020. In the Application, Chapter 3, Technical Appendix TA C.1.0, Section C.3.2, BC's 2020 average gross income of $47,200 is compared to Manitoba's $44,200 and is higher by a factor of 1.068. In the 2021 Revenue Requirements Application (2021 RRA), BC's 2018 average gross income of $45,500 was compared to Manitoba's $44,700 and was higher by a factor of 1.018. 2018 average income data from Statistics Canada was used in the 2021 RRA as it was the most recent data available at that time. The 2020 average income data is used in the current Application as it is the most recent data available.

[1] Distribution of employment income of individuals by sex and work activity, Canada, provinces and selected census metropolitan areas (statcan.gc.ca)

2023.1 RR BCUC.8.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section C.2.2, p. TA C.1.0-8; ICBC 2021 RRA, Exhibit B-1, Chapter 3, Appendix C.4.0 (December 2020 Ernst & Young Enhanced Accident Benefits Costing Report), p. 36
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In the December 2020 Ernst & Young Enhanced Accident Benefits Costing Report that was included in the ICBC 2021 RRA, the stated adjustment for a similar population and wage adjustment was a factor of 1.147.

8.2 Please discuss whether ICBC has considered other differences between BC and Manitoba, such as its urban density, geography, and weather, that may result in EAB-ED severity differences between the two provinces.

8.2.1 If yes, provide a description of those considerations.

8.2.2 If no, please explain why not.

Response:

8.2

Yes, ICBC has considered other differences between BC and Manitoba when estimating the EAB-ED severity.

8.2.1

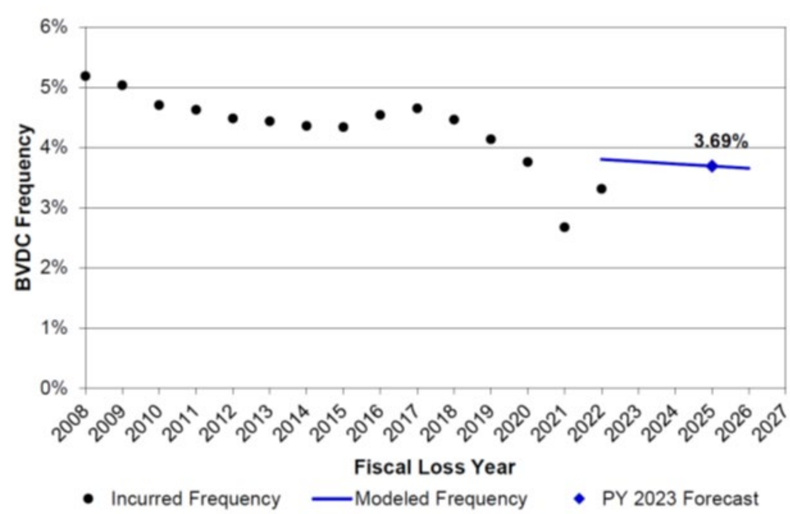
Please see the response to information request 2023.1 RR BCUC.7.3 for discussion about how ICBC has considered other differences between BC and Manitoba that may result in EAB-ED severity differences between the two provinces.

2023.1 RR BCUC.9.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



On page C.2.0-2, ICBC states:

> **A <u>10-year simple regression model (baseline) [for BVDC frequency] was selected</u> ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period could bias the trend.**
>
> **The resulting annualized trend rate of -1.0% is then applied from a point based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level. This spring-off point reflects the pre-COVID-19 pandemic frequency level and trend. [*Emphasis added]***

On page 3-14 of the Application, ICBC states:

> **Since the onset of the COVID-19 pandemic, new influences have impacted crash frequency including sudden changes in gas prices, changes in mix of drivers (i.e., inexperienced versus experienced drivers), and the evolution of where and how**

> **people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to <u>assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023</u>. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]**

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

Summary of Incurred Frequency and Severity

Basic Vehicle Damage Coverage

For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

Fiscal Loss Year	Earned Risk Exposure	(a) BVDC Frequency		(b) BVDC Severity ($)	
		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	5.19%		2,345	
2009	2,808,456	5.04%		2,390	
2010	2,831,762	4.71%		2,443	
2011	2,872,477	4.63%		2,534	
2012	2,907,909	4.48%		2,564	
2013	2,948,524	4.44%		2,629	
2014	2,997,254	4.36%		2,736	
2015	3,055,349	4.34%		2,941	
2016	3,138,276	4.54%		3,198	
2017	3,217,385	4.65%		3,445	
2018	3,295,151	4.47%		3,687	
2019	3,356,998	4.14%		3,842	
2020	3,402,980	3.76%		4,092	
2021	3,392,499	2.67%		4,475	
2022	3,565,834	3.31%	3.80%	5,009	5,009
2023			3.76%		5,626
2024			3.73%		6,158
2025			3.69%		6,664
2026			3.65%		7,198
PY 2023 Forecast (6)			3.69%		6,672

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC states:

> **The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a <u>five-year simple regression model</u>, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]**

Please explain why it is reasonable for the modelled FLY 2022 BVDC frequency of 3.80% to be higher than the actual frequency for FLY 2020 of 3.76%.

Response:

It is reasonable that the modelled fiscal loss year (FLY) 2022 Basic Vehicle Damage Coverage (BVDC) frequency of 3.80% is higher than the actual FLY 2020 frequency of 3.76% because of the low frequency observed in the fourth quarter of FLY 2020 due to the COVID-19 pandemic. As described in the Application, Chapter 3, Appendix C.2.0, Section B, Paragraph 5, the trend rate of -1.0% was applied from a point based on the first three quarters of FLY 2020 (excluding the fourth quarter), trended forward to the FLY 2022 level. The modelled FLY 2022 frequency point therefore reflects the pre-COVID-19 pandemic frequency level and trend.

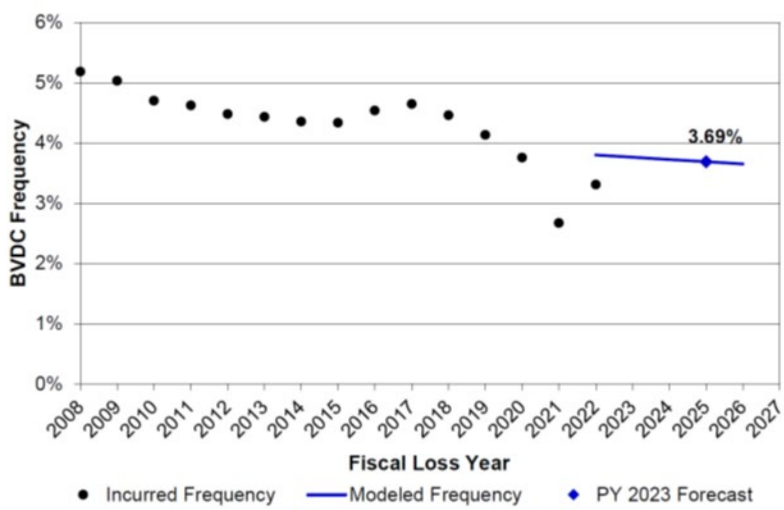
ICBC would like to note that, had the fourth quarter of FLY 2020 come in at a level consistent with Q1 to Q3 (seasonally adjusted), the actual FLY 2020 frequency value would have been 3.88%, approximately 2% higher than the FLY 2022 modelled frequency of 3.80%.

2023.1 RR BCUC.9.1.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



On page C.2.0-2, ICBC states:

> **A <u>10-year simple regression model (baseline) [for BVDC frequency] was selected</u> ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period could bias the trend.**
>
> **The resulting annualized trend rate of -1.0% is then applied from a point based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level. This spring-off point reflects the pre-COVID-19 pandemic frequency level and trend. [*Emphasis added]***

On page 3-14 of the Application, ICBC states:

> **Since the onset of the COVID-19 pandemic, new influences have impacted crash frequency including sudden changes in gas prices, changes in mix of drivers (i.e., inexperienced versus experienced drivers), and the evolution of where and how**

> **people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]**

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

Summary of Incurred Frequency and Severity

Basic Vehicle Damage Coverage

For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

Fiscal Loss Year	Earned Risk Exposure	(a) BVDC Frequency		(b) BVDC Severity ($)	
		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	5.19%		2,345	
2009	2,808,456	5.04%		2,390	
2010	2,831,762	4.71%		2,443	
2011	2,872,477	4.63%		2,534	
2012	2,907,909	4.48%		2,564	
2013	2,948,524	4.44%		2,629	
2014	2,997,254	4.36%		2,736	
2015	3,055,349	4.34%		2,941	
2016	3,138,276	4.54%		3,198	
2017	3,217,385	4.65%		3,445	
2018	3,295,151	4.47%		3,687	
2019	3,356,998	4.14%		3,842	
2020	3,402,980	3.76%		4,092	
2021	3,392,499	2.67%		4,475	
2022	3,565,834	3.31%	3.80%	5,009	5,009
2023			3.76%		5,626
2024			3.73%		6,158
2025			3.69%		6,664
2026			3.65%		7,198
PY 2023 Forecast (6)			3.69%		6,672

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC states:

> **The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a five-year simple regression model, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]**

Please comment on the statistical fit of the selected five-year simple regression model for BVDC severity. As part of the response, please include commentary on the fact that the modelled FLY 2022 frequency level is higher than the actual FLY 2020 value despite a declining trend rate pattern, and provide any supporting statistics.

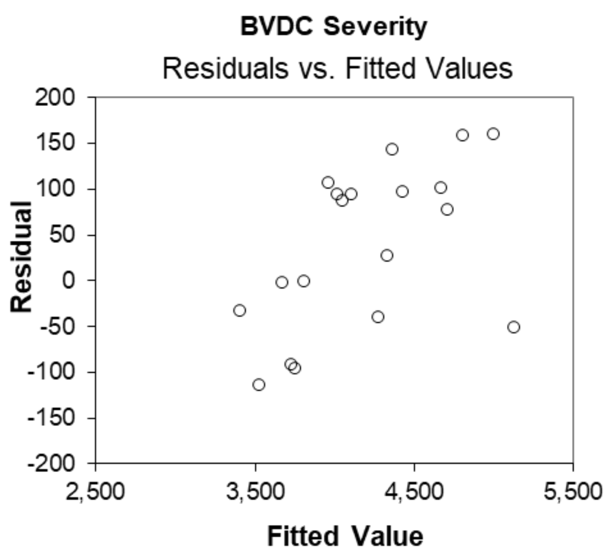
Response:

As described in the response to information request 2023.1 RR BCUC.9.1, the modelled FLY 2022 frequency level is higher than the actual FLY 2020 value due to the low frequency observed in the fourth quarter of FLY 2020. Please refer to the response to information request 2023.1 RR BCUC.9.1 for more detailed commentary.

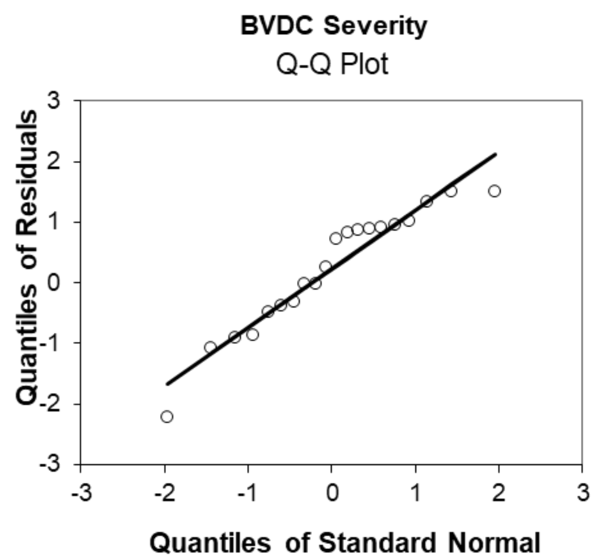
The coefficient of multiple determination (R-squared) is a measure of goodness of fit. The selected five-year simple regression model for BVDC severity has an R-squared value of 96.2%, which indicates that it provides a good fit to the historical values.

Some visual based diagnostics are considered as well; plots of residuals versus fitted values and Q-Q plots are shown below. ICBC uses the Q-Q plot to assess whether the residuals follow a standard Normal distribution. If this is the case, the points in the Q-Q plot should approximate a straight line. In this case, the Q-Q plot indicates this is a reasonable assumption, since the points are generally near the line. The plot of residuals versus fitted values is used to test the assumption that the regression residuals have a zero mean and constant variance across the entire domain of fitted values. In this case, the plot provides some evidence of a positive relationship between the residuals and fitted values. This is not surprising considering the additional inflation of costs that ICBC has observed in the most recent two years. Rather than using this model directly for forecasting, ICBC has made an adjustment due to the elevated inflationary levels.

The use of these plots requires judgement, and they are used, along with the R-squared statistical measure, to assess the fit of potential forecast models to the historical data.



BVDC Severity
Residuals vs. Fitted Values
Residual
Fitted Value
200
150
100
50
0
-50
-100
-150
-200
2,500
3,500
4,500
5,500



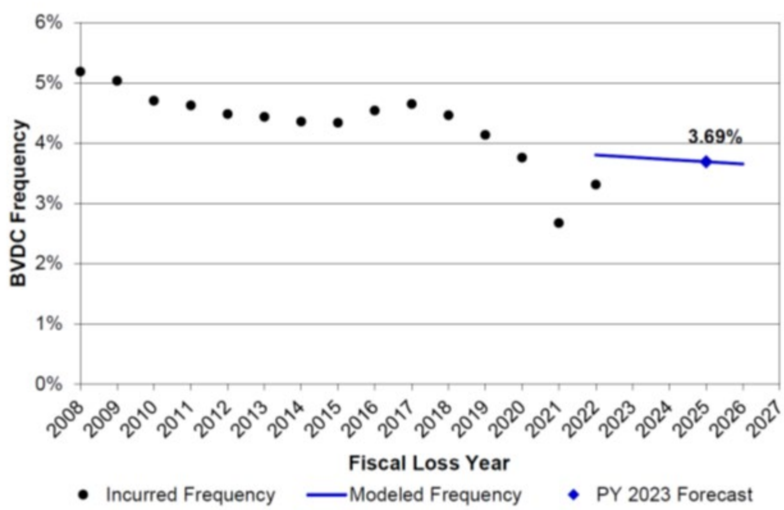
BVDC Severity
Q-Q Plot
Quantiles of Residuals
Quantiles of Standard Normal
3
2
1
0
-1
-2
-3

2023.1 RR BCUC.9.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



On page C.2.0-2, ICBC states:

> **A <u>10-year simple regression model (baseline) [for BVDC frequency] was selected</u> ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period could bias the trend.**
>
> **The resulting annualized trend rate of -1.0% is then applied from a point based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level. This spring-off point reflects the pre-COVID-19 pandemic frequency level and trend. [*Emphasis added]***

On page 3-14 of the Application, ICBC states:

> **Since the onset of the COVID-19 pandemic, new influences have impacted crash frequency including sudden changes in gas prices, changes in mix of drivers (i.e., inexperienced versus experienced drivers), and the evolution of where and how**

people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to <u>assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023</u>. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

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Basic Vehicle Damage Coverage
For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

Fiscal Loss Year	Earned Risk Exposure	(a) BVDC Frequency		(b) BVDC Severity ($)	
		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	5.19%		2,345	
2009	2,808,456	5.04%		2,390	
2010	2,831,762	4.71%		2,443	
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2021	3,392,499	2.67%		4,475	
2022	3,565,834	3.31%	3.80%	5,009	5,009
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2026			3.65%		7,198
PY 2023 Forecast (6)			3.69%		6,672

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC states:

The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a <u>five-year simple regression model</u>, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]

Please explain how ICBC considered the apparent change to a steeper decline over the 4-year FLY period 2017 to 2020 compared to the 6-year FLY period 2011 to 2016 that appears in Figure C.2.0.3.

Response:

Historically, over more than two decades, ICBC has noted a general decline in vehicle damage frequency. Though there can be short-term deviations that may result in divergences from the general trend line, ICBC believes that the 10-year model provides a reasonable forecast for the expected level of Basic Vehicle Damage Coverage (BVDC) frequency, which has been rising from the unusually low levels experienced during the travel restrictions and other impacts associated with the COVID-19 pandemic.

ICBC has considered short-term variation in trends in the BVDC frequency, including the period from fiscal loss years (FLY) 2017 to 2020, in this context. The steeper decreasing trend occurs directly following an increasing trend seen during the period from FLY 2015 to FLY 2017. Both of these short-term trends are partially affected by the high point, FLY 2017, the last two quarters of which were affected by significant adverse winter weather that resulted in an elevated number of crash claims.

With comparison to the steeper decreasing trend over the 4-year period from FLY 2017 to FLY 2020, the 6-year period from 2011 to 2016, viewed in isolation as a trending period, appears to follow only a very mild decreasing trend. It should be noted however that a trend model relying on this 6-year period to forecast out PY 2023 claims would be placing no reliance on historical data points within the latest six years. ICBC believes the 10-year model, excluding only the points beginning from the fourth quarter of FLY 2020, provides a more reasonable estimate of the BVDC frequency trend than to project either of the shorter-term trends contemplated in this request.

2023.1 RR BCUC.9.2.1

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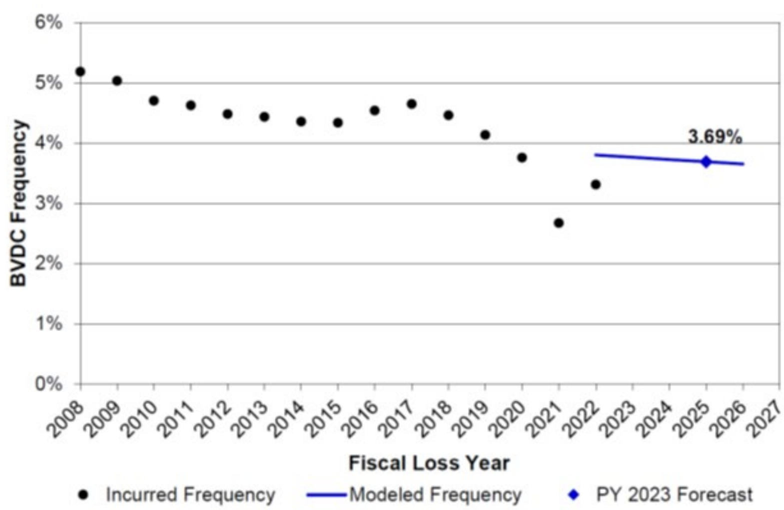

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people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]

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Please explain how ICBC tests for a "change" in the trend rate within the selected 10-year period.

Response:

When selecting for appropriate trend lines, it is key to identify that the focus of the models is for the purpose of forecasting. The model must be a "predictive model" in order to estimate future costs. This is opposed to a "descriptive model" that merely describes the historical data. In accordance with Accepted Actuarial Practice, ICBC actuaries consider the circumstances affecting the historical data in order to select an appropriate model for the purpose of forecasting. This includes attempting to identify underlying causes and emerging trends to determine whether a change from a 10-year period is warranted so that it is predictive of future costs. As part of this practice, the recent observed data points are evaluated against the candidate trend line to see whether they diverge significantly, and consideration is given as to whether there are factors in play that are likely to continue or diminish over the forecast period.

Historically, over more than two decades, ICBC has noted a general decline in vehicle damage frequency, influenced significantly by vehicle safety technology embedded in new vehicles, and improvements over time in road safety. A model over the baseline period, or longer, can capture this well, as long as it is not significantly affected by large short-term variations. Short term trends may vary, with increasing and steeper decreasing trends seen even prior to the decrease from travel restrictions under the COVID-19 pandemic, but there is a tendency to return back to a modest downward trend over time. A shorter-term model might provide a better fit as a "descriptive" model, but would not be considered a strong "predictive" model for the purpose of claims cost forecasting unless it reflected particular circumstances that were expected to continue through the forecast period or if for example there has been a permanent shift in circumstances where older data is no longer relevant. In the Application, the 10-year model ending at the third quarter of fiscal loss year 2020 appears to give a reasonable forecast of frequency that is in line with the recent points which, as impacts from the pandemic recede, are approaching back up to the level predicted by this trend line.

On the other hand, if there is a meaningfully different trend that is emerging from more recent years based on underlying factors that are likely to persist in the forecast period, then a shorter-term model may be more appropriate. A shorter-term model was selected for BVDC severity, reflecting the continuing rise in costs for parts and labour as vehicles include more complex technology and expensive materials, as further discussed in the response to information request 2023.1 RR BCUC.9.4.2. A 10-year exponential regression model would have produced a 7.2% annualized trend rate and would provide a good statistical fit to the historical data, but would not fully capture the steeper trend rates observed in recent years. The selection of a shorter-term model recognizes that the cost pressures associated with recent years are expected to persist in the forecast period.

2023.1 RR BCUC.9.2.2

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Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
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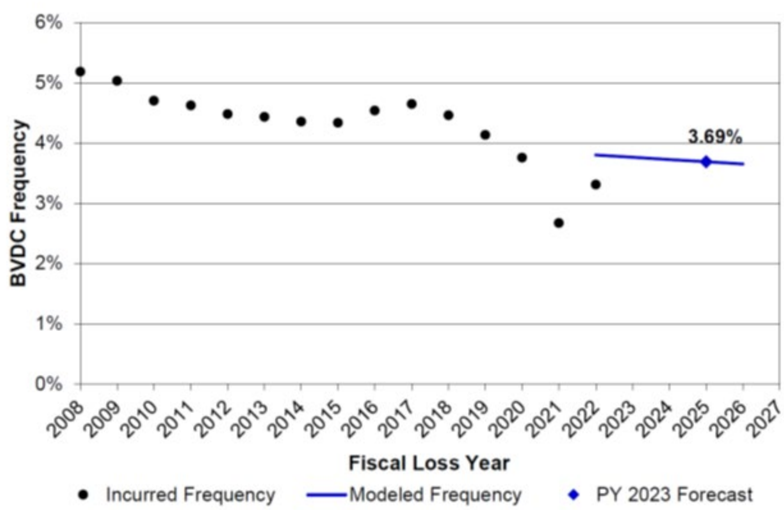

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The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a <u>five-year simple regression model</u>, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]

9.2.2 Please provide the BVDC frequency trend rate using the 4-year period from 2017–2020 rather than the 10-year period. Please assume the same exclusion of the last quarter of FLY 2020 (i.e. January 1, 2020 to March 31, 2020) for the 4-year model as in the 10-year model.

9.2.2.1 Please discuss whether ICBC considers the frequency trend rate provided in response to the information request (IR) above to be reasonable or within Canadian accepted actuarial practice. If not, please explain why not.

Response:

9.2.2

The resulting annualized Basic Vehicle Damage Coverage (BVDC) frequency trend rate using the 3.75-year period from April 1, 2016 to December 31, 2019 (fiscal loss year (FLY) 2017 to FLY 2020 with the exclusion of the period from January 1, 2020 to March 31, 2020) is -6.1%.

9.2.2.1

Work is consistent with Accepted Actuarial Practice in Canada if it has been performed in accordance with the Standards of Practice (SOP) of the Canadian Institute of Actuaries (CIA). In relation to determining a trend forecast for BVDC frequency, some sections of the SOP with particular application are:

- 1480.01: The actuary should examine the reasonableness of a calculation's result.
- 1620.02: The actuary should select an appropriate model or data assumption for a matter as the best estimate assumption relating to that matter, … the actuary should take account of the circumstances affecting the work, past experience data, the relationship of past to expected future experience, ….
- 1620.29: The assumptions that the actuary selects … would be independently reasonable and appropriate in the aggregate.

In order for an estimate to be consistent with Accepted Actuarial Practice, it must be a best-estimate, and it must rely on assumptions that are reasonable, and that take into account current circumstances, historical data, and the relationship of past to future experience. It should also generate a reasonable result. As discussed in the response to information requests 2023.1 RR BCUC.9.2 and 2023.1 RR BCUC.9.2.1, ICBC's forecast for BVDC frequency gives consideration to circumstances including the general declining trend in crash frequency that has been evident since the mid-1990s, short-term variations such as the increasing and steeper decreasing trends in the period from 2015 to 2020, and the decline and subsequent rise in crash frequency that has occurred following the onset of the COVID-19 pandemic. ICBC's actuaries also considered the effect of adverse winter weather in BC which resulted in an increased level of crashes during the third and fourth quarters of FLY 2017, and determined that it was not necessary to make an adjustment because their impact on the selected trend rate of the 10-year regression model was not significant. The forecast frequency resulting from ICBC's selected model falls above the most recent frequency point for FLY 2022, which is reasonable in light of the rising frequencies that have been observed most recently.

The selection of an alternative frequency trend rate could be consistent with Accepted Actuarial Practice if it was considered reasonable; accounted for current circumstances, historical data, and the relationship of past to future experience; and produced a reasonable forecast as a result. ICBC's actuaries would not find the 3.75-year model proposed in this information request to be appropriate to rely on for forecasting due to the following shortcomings:

1) The selection of a historical period over which a relatively steep declining trend is evident, with available historical experience that shows a more modest downward trend (and a short-term increase from 2015 to 2017), may not be a reasonable assumption in the context of CIA SOP 1620.29.
2) The selection of a historical period beginning in FLY 2017 will result in the trend rate for the 3.75-year model being significantly affected by the effect of adverse winter weather in BC during the third and fourth quarters of that year, likely introducing a downward bias to a forecast based on the model. The high frequency observed in those quarters is relatively unusual and should be treated as such in the determination of a forecast. The

regression statistics for the 10-year model, provided in the response to information request 2023.1 RR BCUC.9.3.2, show that the residual values for these quarters fall noticeably beyond the range of other residuals. However, in the regression statistics for the 3.75-year model, provided in the response to information request 2023.1 RR BCUC.9.2.3, these quarters do not have high residual values, which means that the model fits closely to these points. This means that the trend from the 3.75-year model is not recognizing these quarters as unusual; rather, it is treating them as part of the systemic change over time. Relying on a statistical model that fits closely to these points may represent a failure to recognize the circumstances affecting the work, in the context of CIA SOP 1620.02.

3) A forecast based on the proposed model would suggest that there would be fewer BVDC claims incurred in FLY 2023 and subsequent years, compared to FLY 2022, which is not a reasonable result in context of the upward trajectory of BVDC frequency following its decline at the onset of the COVID-19 pandemic. Examination of this result as required by CIA SOP 1480.01 should lead to the selection of a different trend assumption.

The table below provides the number of claim exposures for BVDC that were incurred within each fiscal year and reported by the end of the 5th month. These figures include all claim exposures, both with and without payments, and incorporate historical claim data from prior to May 1, 2021 as described in the Application, Chapter 3, Technical Appendix C.0, Section C.4. This demonstrates the decline of BVDC claims at the onset of the COVID-19 pandemic, and shows that the number of claims is rising, as noted by ICBC in the Application, Chapter 3, Appendix C.2.0, section B (BVDC Frequency) as a consideration in the selection of the BVDC frequency forecast trend.

Reported BVDC claim exposures at 5 months' development	
Fiscal Loss Year	**Claim Exposure Count**
2018	76,829
2019	71,127
2020	70,064
2021	40,744
2022	58,319
2023	67,235

2023.1 RR BCUC.9.2.3

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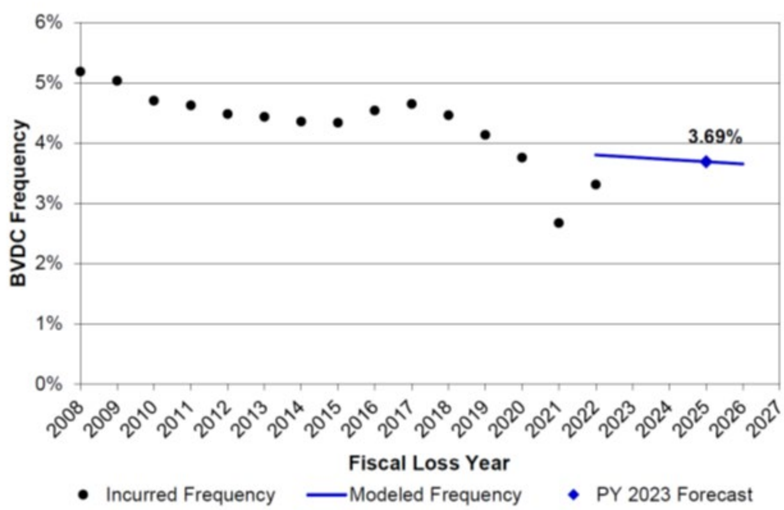

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2026			3.65%		7,198
PY 2023 Forecast (6)			3.69%		6,672

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC states:

> **The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a <u>five-year simple regression model</u>, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]**

Please provide a comparison of the regression statistics for a 10-year (2011–2020) and 4-year (2017–2020) BVDC frequency trend model, including the adjusted R-squared, *p*-values and any other regression statistics ICBC considers in its evaluation.

Response:

Comparison between the two trend models on the basis of regression statistics alone shows that the proposed BVDC frequency model using the period from 2017 to 2020 with the exclusion of the period from January 1, 2020 to March 31, 2020 (3.75-year model) has a good fit to the historical points. This suggests that it would likely perform well as a descriptive model for historical claim frequency within that period. However, it may not be appropriate for use in forecasting beyond that period, as discussed in response to information request 2023.1 RR BCUC.9.2.2.

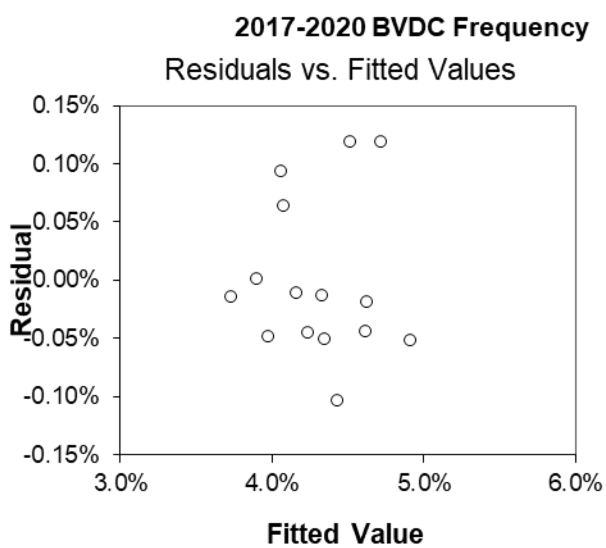
The R-squared values of the selected 10-year BVDC frequency model and the hypothetical BVDC frequency (3.75-year) model, are shown in the table below.

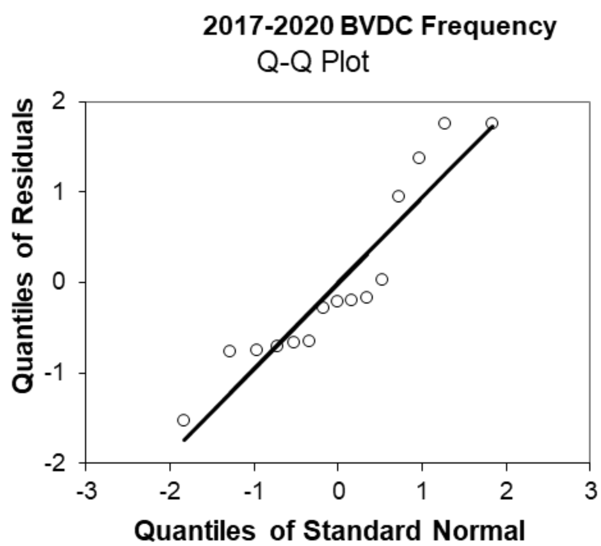
BVDC Trend Models	**10-year Model**	**3.75-year Model**
R-squared	49.5%	96.2%
R-squared (adj.)	43.7%	94.6%

For full model statistics of the two models, please see Attachment A - BVDC Frequency Model Statistics. Some visual based diagnostics are considered as well; plots of residuals versus fitted values and Q-Q plots are shown below. ICBC uses the Q-Q plot to assess whether the residuals follow a standard Normal distribution. If this is the case, the points in the Q-Q plot should approximate a straight line. In this case, the Q-Q plot indicates this is a reasonable assumption, since the points are generally near the line. The plot of residuals versus fitted values is used to test the assumption that the regression residuals have zero mean and constant variance across the entire domain of fitted values. In this case, the plot indicates this is a reasonable assumption, since the points generally appear to be randomly distributed across the Y-axis.

The corresponding charts for the selected 10-year model are provided in the response to information request 2023.1 RR BCUC.9.3.2.

It should be noted in relation to the model statistics for the 3.75-year model that the third and fourth quarters of fiscal loss year (FLY) 2017 were affected by adverse winter weather, and that the model is nonetheless fitting closely to these points. This is likely resulting in a both a more severe seasonal pattern (seen as high parameter estimates for the third and fourth quarter indicator variables) and a steeper trend rate (seen as a more negative parameter estimate for the Decimal Date variable). The model's close fit to these high frequency points is illustrated in the plot of residuals versus fitted values, where the residual values for these quarters are not very large (the values fall within 0.05 percentage points of zero). The model's close fit to this unusual event may introduce downward bias to the trend rate and have undesirable implications for the reasonableness of the model when forecasting beyond this period.





2023.1 RR BCUC.9.2.3 – Attachment A – BVDC Frequency Model Statistics

BVDC Frequency Model Statistics

10-year exponential model

The line is fitted over fiscal loss quarters 2010 Q4 to 2020 Q3.
BVDC Frequency = $\exp[16.99401 - 0.00998\ X_1 - 0.03337\ X_2 + 0.05708\ X_3 - 0.00678\ X_4]$

The sample size is 40

The F-statistic is 8.581

		Parameter Estimate	P-value	Standard Error
Intercept	X_0	16.99401	0.001	5.10693
Decimal Date	X_1	-0.00998	0.000	0.00253
Q2 Indicator	X_2	-0.03337	0.105	0.02059
Q3 Indicator	X_3	0.05708	0.006	0.02062
Q4 Indicator	X_4	-0.00678	0.742	0.02059
R-squared		0.495		
R-squared (adj)		0.437		

3.75-year exponential model

The line is fitted over fiscal loss quarters 2017 Q1 to 2020 Q3.
BVDC Frequency = $\exp[124.86324 - 0.06341\ X_1 - 0.02869\ X_2 + 0.07210\ X_3 + 0.02787\ X_4]$

The sample size is 15

The F-statistic is 62.650

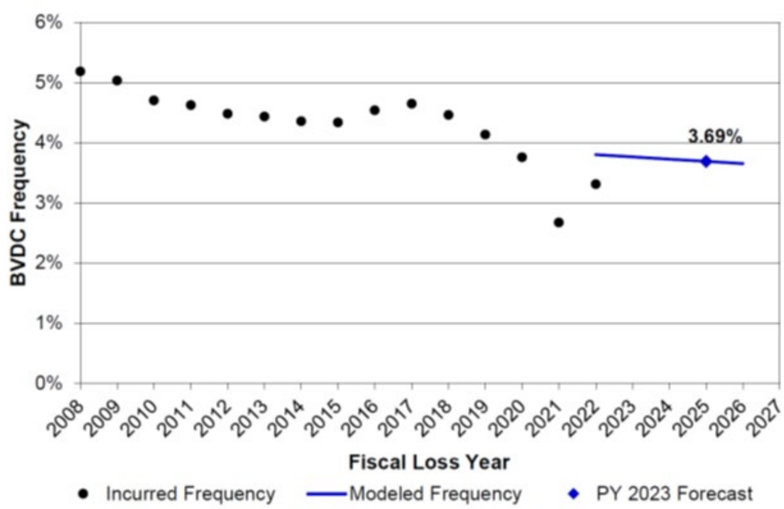
		Parameter Estimate	P-value	Standard Error
Intercept	X_0	124.86324	0.000	8.92282
Decimal Date	X_1	-0.06341	0.000	0.00442
Q2 Indicator	X_2	-0.02869	0.027	0.01293
Q3 Indicator	X_3	0.07210	0.000	0.01307
Q4 Indicator	X_4	0.02787	0.046	0.01396
R-squared		0.962		
R-squared (adj)		0.946		

2023.1 RR BCUC.9.2.4

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



On page C.2.0-2, ICBC states:

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> **The resulting annualized trend rate of -1.0% is then applied from a point based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level. This spring-off point reflects the pre-COVID-19 pandemic frequency level and trend. [*Emphasis added]***

On page 3-14 of the Application, ICBC states:

> **Since the onset of the COVID-19 pandemic, new influences have impacted crash frequency including sudden changes in gas prices, changes in mix of drivers (i.e., inexperienced versus experienced drivers), and the evolution of where and how**

people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

Summary of Incurred Frequency and Severity

Basic Vehicle Damage Coverage

For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

Fiscal Loss Year	Earned Risk Exposure	(a) BVDC Frequency		(b) BVDC Severity ($)	
		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	5.19%		2,345	
2009	2,808,456	5.04%		2,390	
2010	2,831,762	4.71%		2,443	
2011	2,872,477	4.63%		2,534	
2012	2,907,909	4.48%		2,564	
2013	2,948,524	4.44%		2,629	
2014	2,997,254	4.36%		2,736	
2015	3,055,349	4.34%		2,941	
2016	3,138,276	4.54%		3,198	
2017	3,217,385	4.65%		3,445	
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2019	3,356,998	4.14%		3,842	
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2021	3,392,499	2.67%		4,475	
2022	3,565,834	3.31%	3.80%	5,009	5,009
2023			3.76%		5,626
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On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC states:

The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a five-year simple regression model, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]

In the event that a 4-year frequency trend rate model was used for BVDC instead of the -1 percent trend selected by ICBC, please provide the impact on the actuarial rate indication and discuss whether use of the 4-year frequency trend rate would be within Canadian accepted actuarial practice. As part of the response, please provide supporting

worksheets as needed to show the related impact on the EAB sub-coverages that rely upon the BVDC frequency trend rate.

Response:

ICBC believes that the "4-year frequency trend rate model" referred to in this request is intended to be the same model as described in information request 2023.1 RR BCUC.9.2.2. Therefore ICBC is providing this comparison for the requested 4-year model in this information request excluding the last quarter in fiscal loss year (FLY) 2020 due to the impacts from the COVID-19 pandemic - referred to as the requested 3.75-year Basic Vehicle Damage Coverage (BVDC) frequency model.

If a trend rate based on the requested 3.75-year BVDC frequency model were used, it would result in a reduction to required premium of approximately $1,079 million over the 24-month policy period, or -16.6 percentage points (ppts) on the actuarial indicated rate change. However, the selection of this trend rate does not represent an appropriate forecast assumption in ICBC's view and therefore would not produce a rate indication consistent with Accepted Actuarial Practice (AAP). Please see the response to information request 2023.1 RR BCUC.9.2.2 for discussion on the shortcomings of this trend model.

Please see Attachment A – Sensitivity Summary for a list of all sensitivity scenarios provided in the information requests and their impact on the PY 2023 actuarial indicated rate change. These scenarios are provided for informational purposes only and, similar to the sensitivity analysis provided in the Application, Chapter 3, Section C.2, do not necessarily result in an updated rate indication that accords with AAP. Please refer to the Application, Chapter 3, Section C.2, for further discussion of sensitivity analysis and AAP. Due to the application of the rate change floor, none of these scenarios have an impact on the 0% proposed rate change.

For the impact of the requested 3.75-year BVDC frequency model on the EAB sub-coverages that rely upon the BVDC frequency trend rate, please see Attachment B – Modelled Frequency for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model and

Attachment C – FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model.

2023.1 RR BCUC.9.2.4 – Attachment A – Sensitivity Summary

2023.1 RR BCUC.9.2.4 - Attachment A -Sensitivity Summary

Line No.	Scenario	Percentage Point (ppt) Impact on the PY 2023 Actuarial Indicated Rate Change	Information Request
1	BVDC 3.75-year frequency trend model	-16.6 ppts	2023.1 RR BCUC.9.2.4
2	New TPL-PD mix	0.0 ppts	2023.1 RR BCUC.12.1
3	Favourable Evidence Act Appeal	-0.3 ppts	2023.1 RR BCUC.14.2
4	Yield on CARS includes leverage	-0.2 ppts	2023.1 RR BCUC.19.1.1
5	BVDC no additional inflation severity trend model	-1.7 ppts	2023.1 RR BCOAPO.3.7
6	Inflation +/-1% scenario	+5.7 ppts, -4.7 ppts	2023.1 RR BCOAPO.6.1

2023.1 RR BCUC.9.2.4 – Attachment B – Modelled Frequency for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model

Modelled Frequency for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model

Fiscal Loss Year	Enhanced Medical Rehabilitation (EAB-MR)		Enhanced Disability (EAB-ED)		Permanent Impairment (EAB-PI)		Death Benefits (EAB-DB)	
	Incurred (1)	Modelled (2)	Incurred (3)	Modelled (4)	Incurred (5)	Modelled (6)	Incurred (7)	Modelled (8)
2022 (11 months)	1.50%	1.53%	0.23%	0.23%	0.15%	0.15%	0.02%	0.02%
2023		1.43%		0.22%		0.15%		0.02%
2024		1.35%		0.20%		0.14%		0.02%
2025		1.26%		0.19%		0.13%		0.02%
2026		1.19%		0.18%		0.12%		0.02%
PY 2023 Forecast		**1.26%**		**0.19%**		**0.13%**		**0.02%**

Notes:

(1) The Application, Chapter 3, Technical Appendix C.1.1.1 Col (5).

(2) The EAB-MR frequency trend is set equal to the trend of -6.1% per year from the BVDC frequency model requested in information request 2023.1 RR BCUC.9.2.2, and applied from a spring-off point for FLY 2022 provided in Attachment C.

(3) The Application, Chapter 3, Technical Appendix C.1.2.1 Col (5).

(4) The EAB-ED frequency trend is set equal to the trend of -6.1% per year from the BVDC frequency model requested in information request 2023.1 RR BCUC.9.2.2, and applied from a spring-off point for FLY 2022 provided in Attachment C.

(5) The Application, Chapter 3, Technical Appendix C.1.3.1 Col (5).

(6) The EAB-PI frequency trend is set equal to the trend of -6.1% per year from the BVDC frequency model requested in information request 2023.1 RR BCUC.9.2.2, and applied from a spring-off point for FLY 2022 provided in Attachment C.

(7) The Application, Chapter 3, Technical Appendix C.1.4.1 Col (15).

(8) The EAB-DB frequency trend is 0%, as described in the Application, Chapter 3, Appendix C.1.0, Section G.

The models are described in the Application, Chapter 3, Appendix C.1.0.

2023.1 RR BCUC.9.2.4 – Attachment C – FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model

FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages Under the Requested 3.75-year BVDC Frequency Model

Sub-Coverage	Incurred Frequency (1)	Propensity to BVDC (2)	Frequency Spring-off Point (3)
BVDC	3.35%		3.42%
EAB-MR	1.50%	45%	1.53%
EAB-ED	0.23%	7%	0.23%
EAB-PI	0.15%	5%	0.15%
EAB-DB	0.02%	0.52%	0.02%

(1) BVDC from the Application, Chapter 3, Technical Appendix (TA) C.2.1 Col (1) Row (a) ÷ the Application TA C.1.1.1 Col (1)

EAB-MR from the Application, Chapter 3, TA C.1.1.1 Col (5)

EAB-ED from the Application, Chapter 3, TA C.1.2.1 Col (5)

EAB-PI from the Application, Chapter 3, TA C.1.3.1 Col (5)

EAB-DB from the Application, Chapter 3, TA C.1.4.1 Col (15)

(2) Each EAB coverage = Col (1) ÷ BVDC Col (1)

(3) BVDC from the 3.75-year BVDC frequency model requested in information request 2023.1 RR BCUC.9.2.2. Similar to the BVDC frequency forecast described in the Application, Chapter 3, Appendix C.2.0, Section B, the BVDC point is based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level at a trend rate of -6.1% per year.

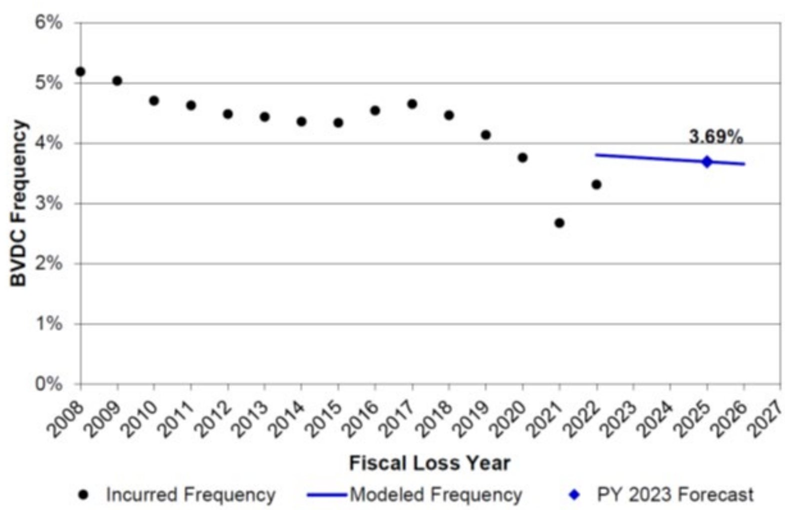
Each EAB coverage = Col (2) x BVDC Col (3)

2023.1 RR BCUC.9.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



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> **people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]**

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

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	(1)	(2)	(3)	(4)	(5)
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Please explain why a "long term" period of 10-years was chosen instead of some other value, such as 9 or 11 years for the BVDC frequency trend rate.

Response:

As described in the Application, Chapter 3, Appendix C.0, Section C, page C.0.5, Paragraph 11, a 10-year time period is considered as a baseline for trend selection, with other models being referred to as longer-term or shorter-term relative to the baseline. ICBC would like to clarify that the use of the term "long term" in the question is not a quotation from the Application, and that term was not used in relation to the selected BVDC trending model, which uses the baseline period of 10 years. The reference to the "pre-COVID-19 pandemic long-term downward trend" above is not related to the selected trending model but refers to the observation regarding historical data points.

In assessing the BVDC frequency trend, ICBC did not consider it appropriate to use a trend that included points in time beginning with the fourth quarter of fiscal loss year (FLY) 2020, because impacts of the COVID-19 pandemic in this period could bias the trend. Applying a 10-year (baseline) model to the period ending at the third quarter of FLY 2020 was found to reasonably capture the historical Basic Vehicle Damage Coverage (BVDC) claims frequency downward movement over time, despite short-term shifts above and below the general trend. This model also provided a reasonable forecast of the frequency level, supported by recent observed points that show a rise from the unusually low levels experienced during the travel restrictions and other impacts associated with the ongoing COVID-19 pandemic. Because this 10-year (baseline) model provided a reasonable and intuitive forecast, it was not necessary to consider other lengths of models.

For a further explanation of the methodology used to determine the period for ICBC's simple regression models, please refer to the Application, Chapter 3, Appendix C.0, Section C.

2023.1 RR BCUC.9.3.1

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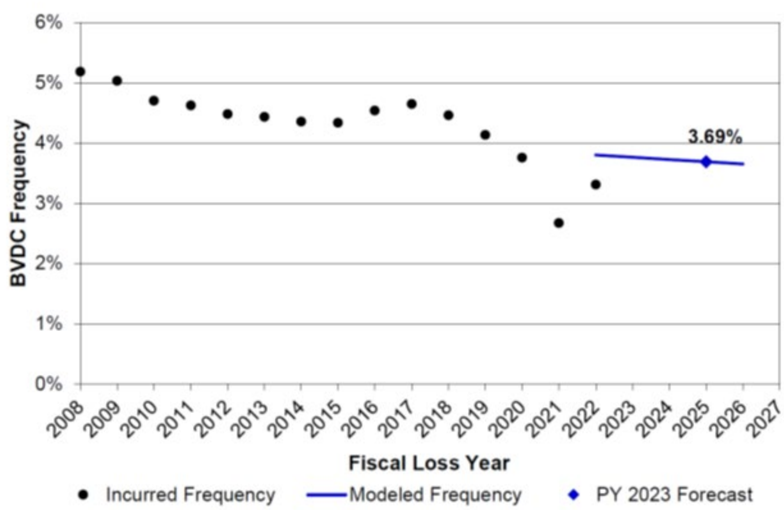

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Please provide ICBC's definition of what constitutes a "medium-term" and "short-term" period and explain what consideration, if any, ICBC gave to these periods in its selected model for BVDC frequency.

Response:

ICBC would like to clarify that the terms “medium-term” and “short-term” were not used in the Application in relation to the period of historical data used to fit loss trend models. As described in the response to information request 2023.1 RR BCUC.9.3, trending models are referred to as shorter-term or longer-term relative to the baseline period of 10 years.

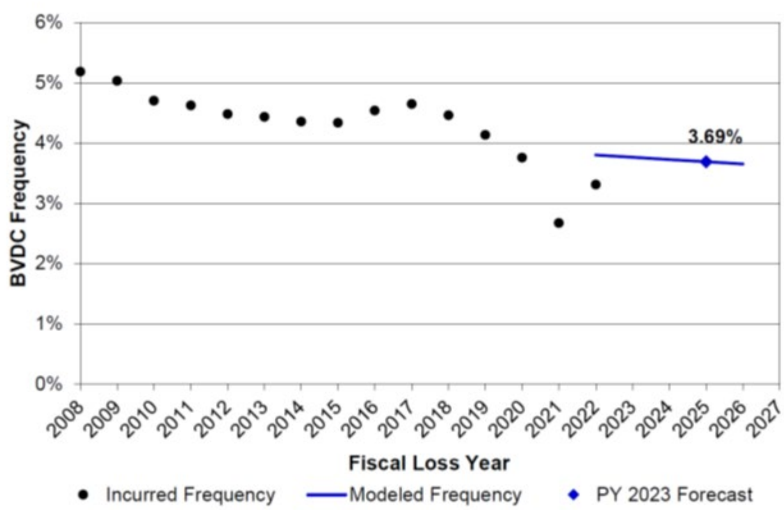
As discussed further in the response to information request 2023.1 RR BCUC.9.3, ICBC found that the 10-year model for Basic Vehicle Damage Coverage (BVDC) frequency was appropriate, and therefore did not need to consider a longer-term or shorter-term model for this coverage.

2023.1 RR BCUC.9.3.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Section B.1, p. 3-14; Appendix C.2.0, Section B, pp. C.2.0-2 to C.2.0-3; Appendix C.1.1
BVDC Frequency and Severity

On page C.2.0-3 of Appendix C.2.0 to the Application, ICBC presents a graphical presentation of the historical BVDC claims frequency level by FLY and the forecast PY 2023 BVDC frequency. ICBC states that the selected PY 2023 forecasted claims frequency level is 3.69% based on ICBC's regression analysis using modelled values for FLY 2023, 2024 and 2025:

Figure C.2.0.3 – BVDC Frequency Forecast



On page C.2.0-2, ICBC states:

> **A <u>10-year simple regression model (baseline) [for BVDC frequency] was selected</u> ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period could bias the trend.**
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> **The resulting annualized trend rate of -1.0% is then applied from a point based on the first three quarters of FLY 2020 (seasonally adjusted), trended forward to the FLY 2022 level. This spring-off point reflects the pre-COVID-19 pandemic frequency level and trend. [*Emphasis added]***

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> **Since the onset of the COVID-19 pandemic, new influences have impacted crash frequency including sudden changes in gas prices, changes in mix of drivers (i.e., inexperienced versus experienced drivers), and the evolution of where and how**

people work. Since there is not enough stability in the information available to develop a change in forecast at this time, ICBC deems it reasonable to assume that the pre-COVID-19 pandemic long-term downward trend will continue through PY 2023. As shown in the Figure 3.5, ICBC has selected a slight downward trend of -1.0% per year based on the historical long-term downward trend. [*Emphasis added*]

In Appendix C.1.1, ICBC provides the actual and forecasted (modelled) values for BVDC frequency and severity as follows:

Summary of Incurred Frequency and Severity
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For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

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		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	5.19%		2,345	
2009	2,808,456	5.04%		2,390	
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The BVDC severity forecast is shown in Figure C.2.0.4. ICBC actuaries selected a five-year simple regression model, resulting in a 7.9% annualized trend rate. Although this trend was selected to give consideration to the steeper trend rates observed in recent years, the trend does not fully capture the high cost of payments seen in the most recent two years, which have been in excess of 9%. [*Emphasis added*]

Please provide the trend rates and regression statistics ICBC considered for various long-term, medium-term and short-term models in its selection process for the BVDC frequency trend rate that resulted in the 10-year model being selected.

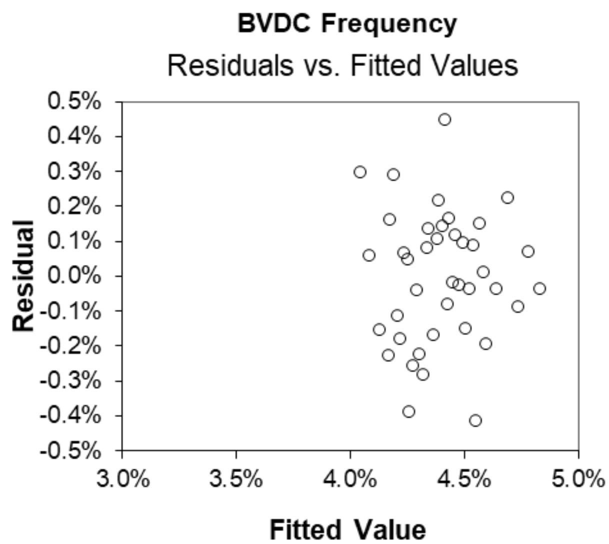
Response:

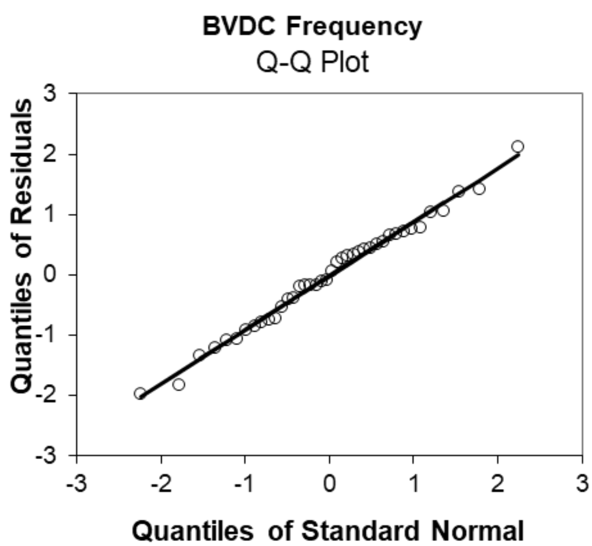
As described in the response to information request 2023.1 RR BCUC.9.3, ICBC would like to clarify that the use of the terms "long-term", “medium-term” and “short-term” models in the question are not quotations from the Application, and ICBC has not used those terms in direct relation to our Basic Vehicle Damage (BVDC) trending model.

ICBC found that the 10-year model captures the general tendency of the historical BVDC claims frequency to decline over time; and that it appeared to provide a reasonable forecast of the frequency level which has been rising from the unusually low levels experienced during the travel restrictions and other impacts associated with the COVID-19 pandemic. Because of this, ICBC did not consider other lengths of models. The selected 10-year simple regression model for BVDC frequency has an R-squared value of 49.5%. The full model statistics are provided in the response to information request 2023.1 RR BCUC.9.2.3, Attachment A - BVDC Frequency Model Statistics, and some visual based diagnostics relating to statistical fit are displayed in the charts below.

ICBC uses the Q-Q plot to assess whether the regression residuals follow a standard Normal distribution. If this is the case, the points in the Q-Q plot should approximate a straight line. In this case, the Q-Q plot indicates this is a reasonable assumption, since the points are generally near the line. The plot of residuals versus fitted values is used to test the assumption that the regression residuals have zero mean and constant variance across the entire domain of fitted values. In this case, this assumption is reasonable, since the points appear to be randomly distributed across the y-axis.

Noteworthy in relation to the plot of residuals versus fitted values is that Q3 and Q4 of fiscal loss year 2017 were affected by adverse winter weather, and the high frequency observed in these quarters produces the two largest negative residual values in the model, both of which fall more than 0.1 percentage points below the next-largest negative residual value. The correspondence of these quarters with large residuals is in line with the expected behaviour for a reasonable regression model for this unusual event.





2023.1 RR BCUC.9.4

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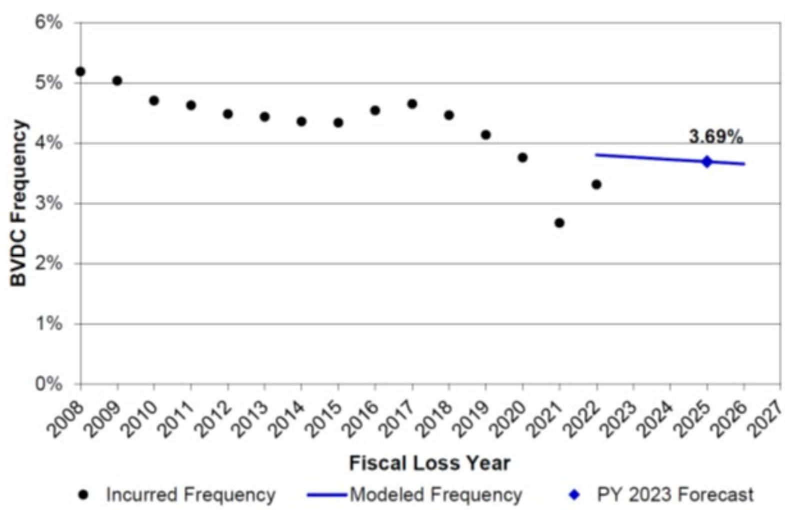

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Please explain why ICBC uses a 5-year period including the most recent data ending FLY 2022 for its BVDC severity trend model to recognize the more recent change in severity, but a longer 10-year period for its frequency trend model.

Response:

In determining an appropriate model for forecasting each claim statistic, ICBC actuaries consider the circumstances affecting the historical data, including emerging trends and underlying factors. Please refer to the response to information request 2023.1 RR BCUC.9.2.1 for additional discussion in relation to the BVDC frequency and severity models.

2023.1 RR BCUC.9.4.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
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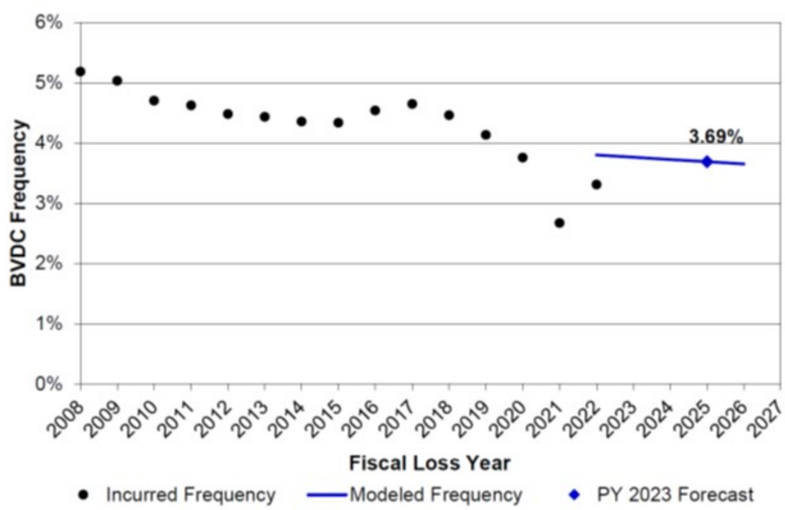

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Does ICBC consider the 5-year period for severity to be long-term, medium term or short term?

Response:

As discussed in the response to information request 2023.1 RR BCUC.9.3.1, ICBC does not use the terms "long-term", "medium-term" or "short-term" to describe the period of historical data used to fit loss trend models. ICBC considers the 5-year period to be a shorter-term model relative to the baseline of 10 years. This shorter period was selected for Basic Vehicle Damage Coverage (BVDC) severity in order to reflect the steeper trend rates observed in recent years that are expected to continue throughout the policy period.

2023.1 RR BCUC.9.4.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
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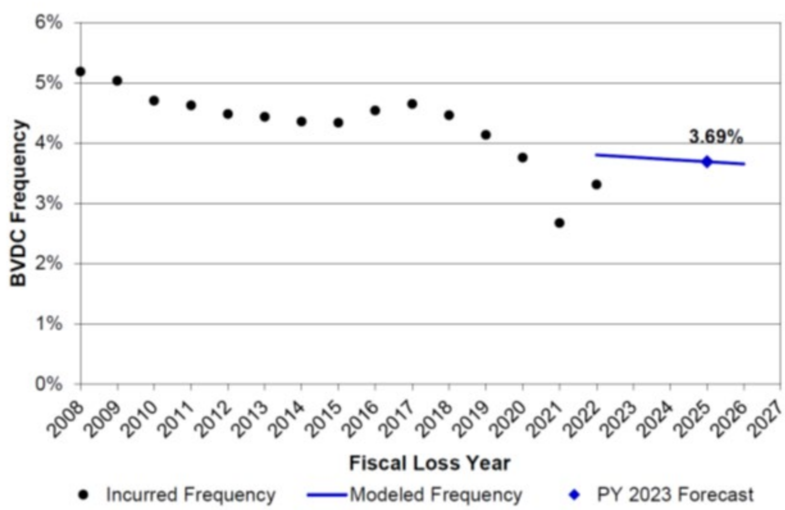

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Please provide ICBC's views regarding the underlying cause of the more rapid BVDC severity trend over the past 5-years. Specifically, what consideration, if any, has ICBC given to the potential that the BVDC *severity* may be increasing due to more expensive repairs associated with technology advances?

Response:

ICBC does believe that the steeper severity trend rate over the last 5 years is related to the continuing rise in costs for parts and labour as vehicles include more complex technology and expensive materials.

However, the ongoing trend to more complex technology and expensive materials is not the only contributor to the rapid severity trend seen most recently. The severity has further increased in the most recent years due to supply chain disruptions resulting in higher new and used vehicle prices, increasing cycle time, and increased associated costs from towing, storage and usage of rental and alternative transportation. Also as discussed in the Application, Chapter 7, Appendix 7B, annual rate increases are given to suppliers resulting from industry-wide cost pressures. This in effect has a compounded impact with increased cycle times as vehicles that would have been repaired earlier may now be associated with higher supplier rates. All of these contributing factors are not unique to ICBC as similar influences have also been observed across the industry.

ICBC believes that the ongoing trend to more complex technology and expensive materials will continue through policy year 2023 and is reasonably reflected within the five-year simple regression model that has been selected. Other inflationary cost factors that have been seen recently are expected to remain elevated, consistent with inflation, over the forecast period, and have motivated an additional adjustment for excess inflation beyond what is reflected in the five-year trend, as discussed in the Application, Chapter 3, Appendix C.2.0, Section C (BVDC Severity).

2023.1 RR BCUC.9.4.3

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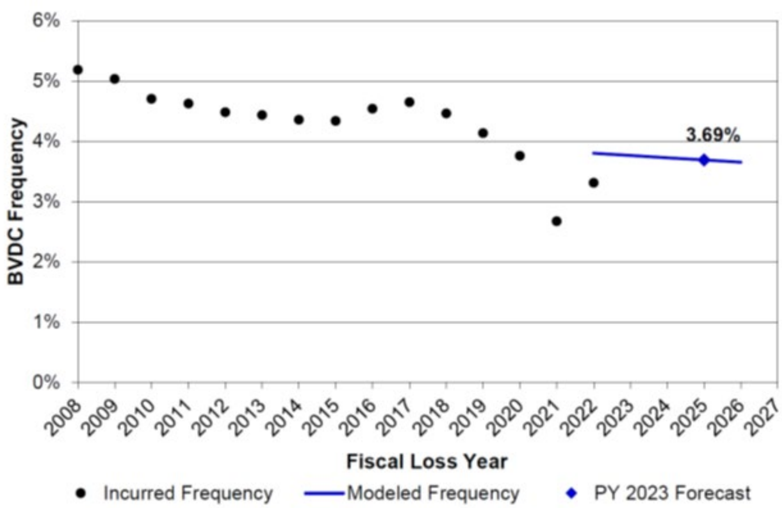

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Please explain the impact ICBC expects recent automotive safety technology advances will have on BVDC *frequency* and discuss how this impact was considered in the selection of the frequency trend.

Response:

Technology advances in vehicle safety are expected to impact Basic Vehicle Damage Coverage (BVDC) frequency by reducing the number of crashes. ICBC has already considered this within the 10-year simple exponential trend. The 10-year model implicitly assumes an increased effectiveness of safety features in the BC vehicle population each year, which affects frequency favourably as part of the downward 1% trend.

ICBC does not directly make adjustments for technology advances as it would be difficult to isolate, assess, quantify and predict the impact of new features entering the vehicle population each year, along with their interaction with other factors that also contribute to the trend such as customer behaviour, weather, and congestion. Overall, the impacts of past, current and future safety technologies on crash frequency will be experienced gradually as it takes time for any particular safety feature to penetrate into the vehicle population as new vehicles with the feature are made and purchased, and older vehicles without the feature are gradually retired. By using the 10-year model, the effect of new safety features is included in the frequency trend.

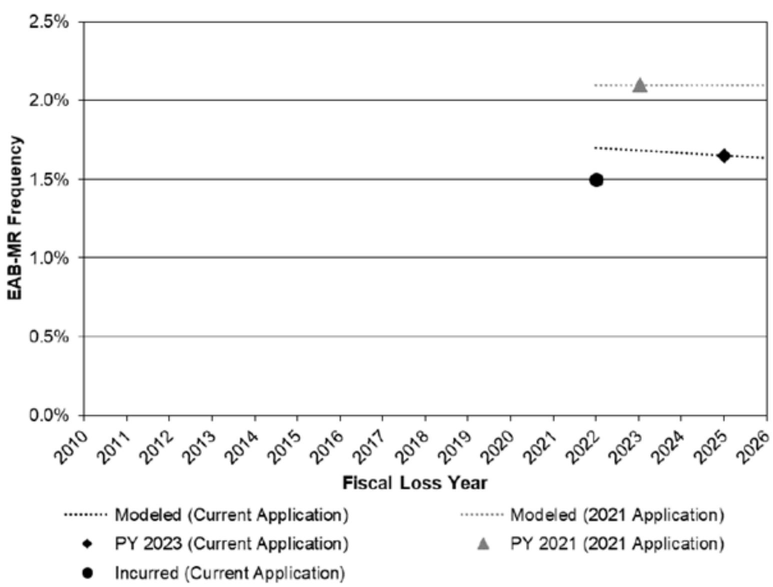
2023.1 RR BCUC.10.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Section B.2.1, p. 3-16, Figure 3.7; Appendix C.1.0, Section B, pp. C.1.0-1 to C.1.0-3
EAB-MR and BVDC Claim Frequency Relationship

On page 3-16 of the Application, ICBC provides Figure 3.7 as reproduced below and states:

> **Based on historical patterns for injury claims, ICBC expects that most of the injury claims occurring through March 2022 will have been reported to ICBC by August 31, 2022, and so at that point <u>the EAB-MR frequency for fiscal loss year 2022 can be estimated with relative confidence.</u> With the significant changes in coverage from the introduction of Enhanced Care, which could affect both claimant behaviour and claims processing, it is appropriate to rely on this experience under the new product, adjusting for expected changes in the occurrence of crashes. As a result, the <u>EAB-MR frequency forecast reflects a lower level compared to the trajectory that was expected in the 2021 RRA.</u> [*Emphasis added*]**

Figure 3.7 – EAB-MR Frequency



On pages C.1.0-1 to C.1.0-2 of Appendix C.1.0 to the Application, ICBC states:

> **Because there is not sufficient historical data under Enhanced Care to support a reliable regression model, ICBC has used an alternative approach to forecast EAB frequency for future FLYs (except for EAB-DB). The forecast approach relies on the assumption that the propensity to incur an injury claim against each of the EAB sub-coverages, in the event of a crash, will be relatively stable over time. <u>With this</u>**

> **<u>assumption, the frequency forecast for each EAB sub-coverage can be derived from the Basic Vehicle Damage Coverage (BVDC) frequency forecast,</u> based on the observed propensity to claim relative to BVDC claims. This propensity to BVDC approach is used to determine the FLY 2022 modelled frequency spring-off point for each of the EAB sub-coverages.**
>
> **Under the propensity approach, the following three components are needed to derive the FLY 2022 modelled frequency for each EAB sub-coverage, which is equal to (1) ÷ (2) x (3):**
>
> > **(1) FLY 2022 incurred frequency for each EAB sub-coverage;**
> >
> > **(2) FLY 2022 BVDC incurred frequency; and**
> >
> > **(3) FLY 2022 BVDC modelled frequency spring-off point. [*Emphasis added*]**

On page C.1.0-3 of Appendix C.1.0 to the Application, ICBC states:

> **The frequency trend for each EAB sub-coverage (except for EAB-DB) is set equal to the BVDC frequency trend of -1.0% per year, assuming forecast injury frequency will decrease at the same pace as the forecast BVDC frequency. For EAB-DB, a flat frequency trend is selected, as there does not appear to be an obvious upward or downward trend in the historical death benefits data.**

ICBC summarizes the selected starting points for (i.e. frequency spring-off points) for FLY 2022 in Figure C.1.0.2 below:

Figure C.1.0 2 – FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages

Sub-Coverage	Incurred Frequency (1)	Propensity to BVDC (2)	Frequency Spring-off Point (3)
BVDC	3.35%		3.80%
EAB-MR	1.50%	45%	1.70%
EAB-ED	0.23%	7%	0.26%
EAB-PI	0.15%	5%	0.17%
EAB-DB	0.02%	1%	0.02%

Please explain what consideration was given to the additional sensitivity placed on the projected BVDC frequency values given ICBC's assumption that the ratio of EAB-MR claims to BVDC claims is consistent over time.

Response:

The BVDC frequency forecast is determined as a best estimate, independently from the assumption that the propensity to incur an EAB-MR claim in the event of a crash will be relatively stable over time.

A sensitivity analysis is provided in the Application, Chapter 3, Figure 3.9. The purpose of the sensitivity analysis is to provide additional information to stakeholders when examining impacts on the actuarial indicated rate change from changes in various assumptions. Since it is reasonable that EAB-MR frequency could move differently from BVDC frequency over time, scenarios related to the forecasts for EAB and non-EAB loss and ALAE are listed separately in Figure 3.9.

2023.1 RR BCUC.10.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Section B.2.1, p. 3-16, Figure 3.7; Appendix C.1.0, Section B, pp. C.1.0-1 to C.1.0-3
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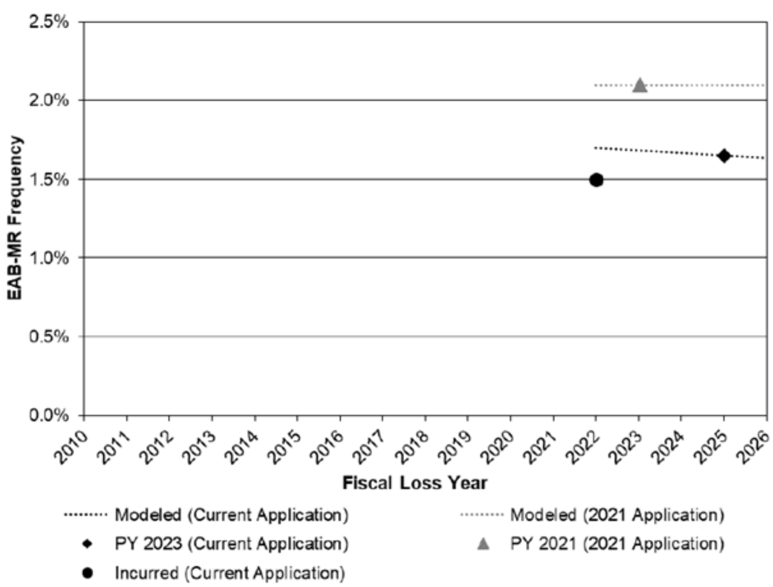

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assumption, the frequency forecast for each EAB sub-coverage can be derived from the Basic Vehicle Damage Coverage (BVDC) frequency forecast, based on the observed propensity to claim relative to BVDC claims. This propensity to BVDC approach is used to determine the FLY 2022 modelled frequency spring-off point for each of the EAB sub-coverages.

Under the propensity approach, the following three components are needed to derive the FLY 2022 modelled frequency for each EAB sub-coverage, which is equal to (1) ÷ (2) x (3):

(1) FLY 2022 incurred frequency for each EAB sub-coverage;

(2) FLY 2022 BVDC incurred frequency; and

(3) FLY 2022 BVDC modelled frequency spring-off point. [*Emphasis added*]

On page C.1.0-3 of Appendix C.1.0 to the Application, ICBC states:

The frequency trend for each EAB sub-coverage (except for EAB-DB) is set equal to the BVDC frequency trend of -1.0% per year, assuming forecast injury frequency will decrease at the same pace as the forecast BVDC frequency. For EAB-DB, a flat frequency trend is selected, as there does not appear to be an obvious upward or downward trend in the historical death benefits data.

ICBC summarizes the selected starting points for (i.e. frequency spring-off points) for FLY 2022 in Figure C.1.0.2 below:

Figure C.1.0 2 – FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages

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EAB-ED	0.23%	7%	0.26%
EAB-PI	0.15%	5%	0.17%
EAB-DB	0.02%	1%	0.02%

Please discuss whether it is plausible that the ratio of EAB-MR to BVDC claims may not be consistent over time. For example, could future technology advances reduce EAB-MR claims to a greater degree than BVDC claims?

Response:

It is plausible that the ratio of EAB-MR to BVDC claims may not be consistent over time. ICBC is uncertain whether the EAB-MR to BVDC claims propensity is likely to increase or decrease in the future, as it is subject to multiple influences.

The Enhanced Care product introduced significant changes that could influence claimant behaviour. On the one hand, the number of injury claims may increase because of the broader and more generous benefits provided to injured customers regardless of who was at-fault in the crash, leading to an increase in injury claim propensity. On the other hand, there is no direct financial incentive for customers who are not injured in a crash to report an injury claim, as compensation for pain and suffering is not provided under Enhanced Care, while customers who have been injured have access to significantly better benefits compared to the previous insurance model.

ICBC believes that future technology advances could reduce the number of crashes, as well as the number of customers injured in crashes, and thereby affect the ratio of EAB-MR to BVDC claims. However, these effects will depend on the interplay among different types of technology, and there is not a clear inclination for the ratio to either increase or decrease as a result.

Occupant protection technologies aim to protect occupants in the event of a crash by reducing the number of injuries and fatalities. For example, airbags and seatbelts have continually been improved. These technologies could reduce EAB-MR claims over time, resulting in a lower ratio of EAB-MR to BVDC claims, assuming BVDC claims remain unchanged.

Collision avoidance technologies focus on preventing crashes from occurring and making roads safer for all users. Advances in these technologies are expected to reduce the number of crashes and therefore the frequency of BVDC claims over time. The impact of such technologies on injury claims frequency is still unclear. For example, an Automatic Emergency Braking (AEB) system may help to eliminate lower-speed crashes, and therefore could reduce some EAB-MR claims that occur in these crashes. However, these systems may have less impact on the number of crashes that occur at higher speeds, which may have a greater injury propensity. A reduction in the number of crashes, and therefore BVDC claims, without a proportional reduction in the number of EAB-MR claims would produce an increase in the ratio of EAB-MR to BVDC claims.

In summary, the ratio of EAB-MR to BVDC claims could move in either direction. The impact of future technology advances is uncertain in this regard. ICBC is actively monitoring the ratio of EAB-MR to BVDC claims under the Enhanced Care model, and will have more information on this ratio as trends become established.

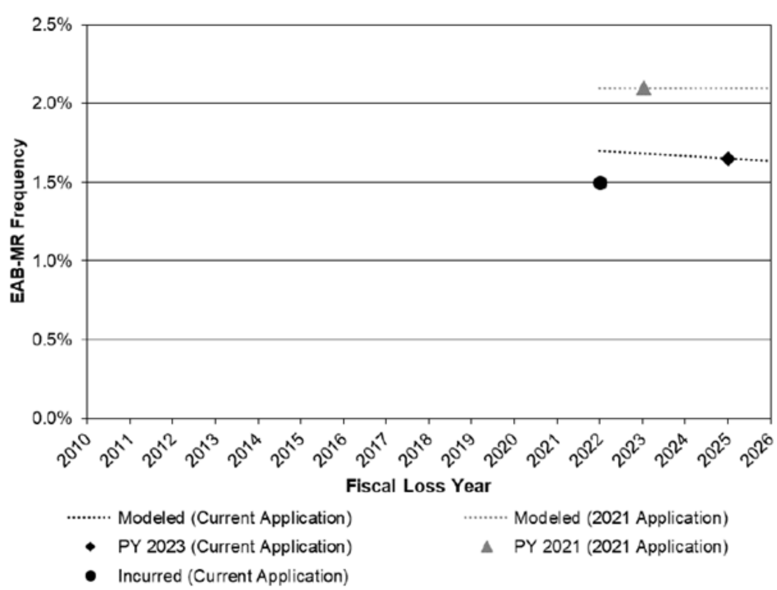
2023.1 RR BCUC.10.2.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Section B.2.1, p. 3-16, Figure 3.7; Appendix C.1.0, Section B, pp. C.1.0-1 to C.1.0-3
EAB-MR and BVDC Claim Frequency Relationship

On page 3-16 of the Application, ICBC provides Figure 3.7 as reproduced below and states:

> **Based on historical patterns for injury claims, ICBC expects that most of the injury claims occurring through March 2022 will have been reported to ICBC by August 31, 2022, and so at that point the EAB-MR frequency for fiscal loss year 2022 can be estimated with relative confidence. With the significant changes in coverage from the introduction of Enhanced Care, which could affect both claimant behaviour and claims processing, it is appropriate to rely on this experience under the new product, adjusting for expected changes in the occurrence of crashes. As a result, the EAB-MR frequency forecast reflects a lower level compared to the trajectory that was expected in the 2021 RRA. [*Emphasis added*]**

Figure 3.7 – EAB-MR Frequency



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> **Because there is not sufficient historical data under Enhanced Care to support a reliable regression model, ICBC has used an alternative approach to forecast EAB frequency for future FLYs (except for EAB-DB). The forecast approach relies on the assumption that the propensity to incur an injury claim against each of the EAB sub-coverages, in the event of a crash, will be relatively stable over time. With this**

> **assumption, the frequency forecast for each EAB sub-coverage can be derived from the Basic Vehicle Damage Coverage (BVDC) frequency forecast, based on the observed propensity to claim relative to BVDC claims. This propensity to BVDC approach is used to determine the FLY 2022 modelled frequency spring-off point for each of the EAB sub-coverages.**
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> **Under the propensity approach, the following three components are needed to derive the FLY 2022 modelled frequency for each EAB sub-coverage, which is equal to (1) ÷ (2) x (3):**
>
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>
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>
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On page C.1.0-3 of Appendix C.1.0 to the Application, ICBC states:

> **The frequency trend for each EAB sub-coverage (except for EAB-DB) is set equal to the BVDC frequency trend of -1.0% per year, assuming forecast injury frequency will decrease at the same pace as the forecast BVDC frequency. For EAB-DB, a flat frequency trend is selected, as there does not appear to be an obvious upward or downward trend in the historical death benefits data.**

ICBC summarizes the selected starting points for (i.e. frequency spring-off points) for FLY 2022 in Figure C.1.0.2 below:

Figure C.1.0 2 – FLY 2022 Modelled Frequency Spring-off Point for the EAB Sub-Coverages

Sub-Coverage	Incurred Frequency (1)	Propensity to BVDC (2)	Frequency Spring-off Point (3)
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EAB-ED	0.23%	7%	0.26%
EAB-PI	0.15%	5%	0.17%
EAB-DB	0.02%	1%	0.02%

Please explain why ICBC selects the same frequency trend rate for EAB coverages as it selects for BVDC.

Response:

The frequency of EAB claims arising in a year may be viewed as a combination of the frequency of crashes and the propensity to incur an injury claim in the event of a crash. As discussed in the response to information request 2023.1 RR BCUC.10.2, ICBC is uncertain whether the propensity element is likely to increase or decrease over time. Since there is not sufficient historical data under the EAB product to determine a trend, it is reasonable to assume that the propensity to incur an injury claim in the event of a crash may remain relatively stable over time.

In this case, the frequency of EAB claims will follow the same trend as the frequency of crash claims (i.e., BVDC frequency), for which there is sufficient historical data to support a reliable forecast model.

ICBC continues to monitor the frequency trends for both BVDC and EAB coverages and will observe to what extent their trends emerge similarly or differently.

2023.1 RR BCUC.10.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Section B.2.1, p. 3-16, Figure 3.7; Appendix C.1.0, Section B, pp. C.1.0-1 to C.1.0-3
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On page 3-16 of the Application, ICBC provides Figure 3.7 as reproduced below and states:

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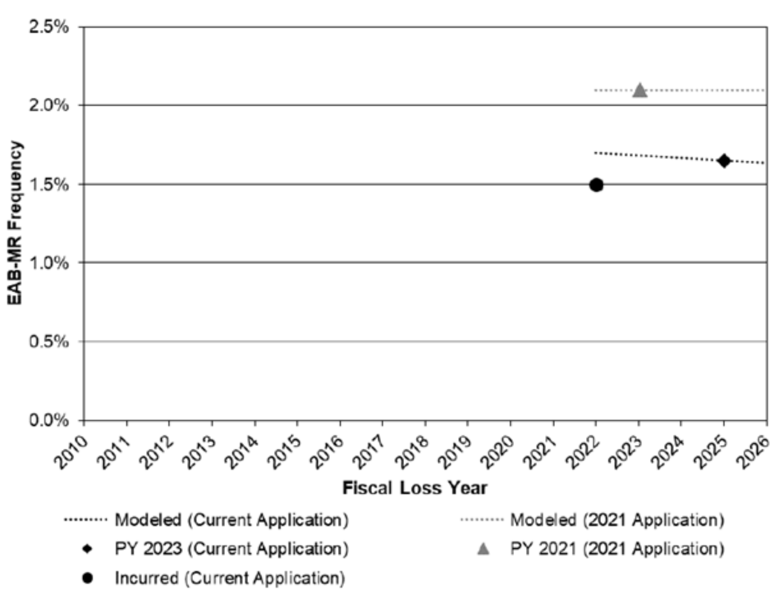

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> **<u>assumption, the frequency forecast for each EAB sub-coverage can be derived from the Basic Vehicle Damage Coverage (BVDC) frequency forecast,</u> based on the observed propensity to claim relative to BVDC claims. This propensity to BVDC approach is used to determine the FLY 2022 modelled frequency spring-off point for each of the EAB sub-coverages.**
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> **Under the propensity approach, the following three components are needed to derive the FLY 2022 modelled frequency for each EAB sub-coverage, which is equal to (1) ÷ (2) x (3):**
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> **(2) FLY 2022 BVDC incurred frequency; and**
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> **(3) FLY 2022 BVDC modelled frequency spring-off point. [*Emphasis added*]**

On page C.1.0-3 of Appendix C.1.0 to the Application, ICBC states:

> **The frequency trend for each EAB sub-coverage (except for EAB-DB) is set equal to the BVDC frequency trend of -1.0% per year, assuming forecast injury frequency will decrease at the same pace as the forecast BVDC frequency. For EAB-DB, a flat frequency trend is selected, as there does not appear to be an obvious upward or downward trend in the historical death benefits data.**

ICBC summarizes the selected starting points for (i.e. frequency spring-off points) for FLY 2022 in Figure C.1.0.2 below:

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EAB-PI	0.15%	5%	0.17%
EAB-DB	0.02%	1%	0.02%

Please discuss whether ICBC considered any alternative methodologies to develop an EAB-MR frequency trend. If not, please explain why not.

Response:

ICBC considered the following alternative methods to develop the EAB-MR frequency trend, but ultimately derived the EAB-MR frequency trend based on an EAB-MR to BVDC propensity approach. This approach was selected assuming the propensity to incur an injury claim in the event of a crash remains relatively stable over time.

Alternative methods considered:

- Frequency trend considering historical legal-based product AB-MR claims.
- Frequency trend considering Manitoba Public Insurance (MPI)'s Accident Benefit Other – Indexed claims.
- Propensity approach based on legal-based product AB-MR to material damage (property damage liability and/or collision) claims.
- Propensity approach based on MPI's Accident Benefit Other – Indexed to MPI's Collision claims.

2023.1 RR BCUC.10.3.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Section B.2.1, p. 3-16, Figure 3.7; Appendix C.1.0, Section B, pp. C.1.0-1 to C.1.0-3
EAB-MR and BVDC Claim Frequency Relationship

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> **Based on historical patterns for injury claims, ICBC expects that most of the injury claims occurring through March 2022 will have been reported to ICBC by August 31, 2022, and so at that point <u>the EAB-MR frequency for fiscal loss year 2022 can be estimated with relative confidence.</u> With the significant changes in coverage from the introduction of Enhanced Care, which could affect both claimant behaviour and claims processing, it is appropriate to rely on this experience under the new product, adjusting for expected changes in the occurrence of crashes. As a result, the <u>EAB-MR frequency forecast reflects a lower level compared to the trajectory that was expected in the 2021 RRA.</u> [*Emphasis added*]**

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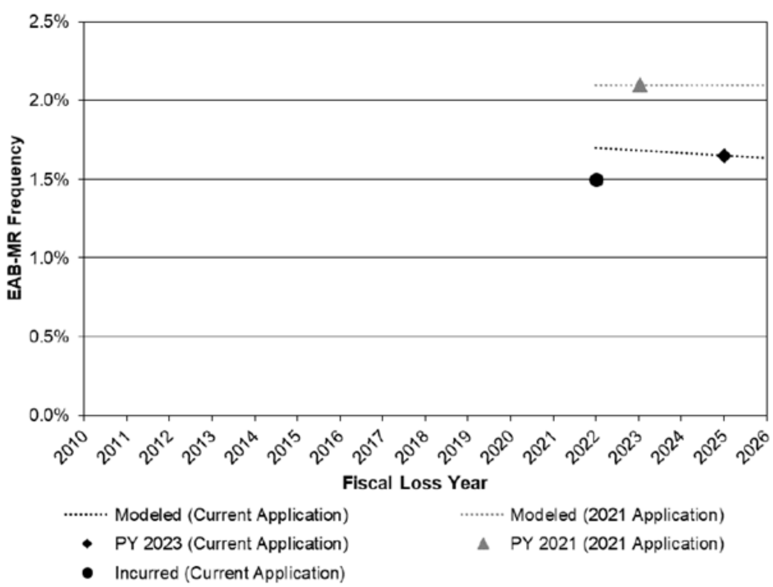

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> **Because there is not sufficient historical data under Enhanced Care to support a reliable regression model, ICBC has used an alternative approach to forecast EAB frequency for future FLYs (except for EAB-DB). The forecast approach relies on the assumption that the propensity to incur an injury claim against each of the EAB sub-coverages, in the event of a crash, will be relatively stable over time. <u>With this</u>**

> **assumption, the frequency forecast for each EAB sub-coverage can be derived from the Basic Vehicle Damage Coverage (BVDC) frequency forecast, based on the observed propensity to claim relative to BVDC claims. This propensity to BVDC approach is used to determine the FLY 2022 modelled frequency spring-off point for each of the EAB sub-coverages.**
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> **(1) FLY 2022 incurred frequency for each EAB sub-coverage;**
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> **(3) FLY 2022 BVDC modelled frequency spring-off point. [*Emphasis added*]**

On page C.1.0-3 of Appendix C.1.0 to the Application, ICBC states:

> **The frequency trend for each EAB sub-coverage (except for EAB-DB) is set equal to the BVDC frequency trend of -1.0% per year, assuming forecast injury frequency will decrease at the same pace as the forecast BVDC frequency. For EAB-DB, a flat frequency trend is selected, as there does not appear to be an obvious upward or downward trend in the historical death benefits data.**

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EAB-DB	0.02%	1%	0.02%

Please discuss whether ICBC considered the potential correlation between the current EAB-MR product and prior bodily injury product in determining a relevant frequency trend.

Response:

No, ICBC did not consider the correlation between EAB-MR and Bodily Injury (BI) under the legal-based product in determining the EAB-MR frequency trend. ICBC considered the legal-based product AB-MR frequency trend as one of the alternative methods, as discussed in the response to information request 2023.1 RR BCUC.10.3.

Under the legal-based product, a BI claim could be made by an injured not-at-fault party in a crash, when the at-fault party was insured by ICBC. In contrast, an AB-MR claim under the legal-based product could be made by any injured occupant of a vehicle insured by ICBC, and for other crash victims such as pedestrians and/or cyclists. Under the Enhanced Care product, EAB-MR is available to all British Columbians – drivers, passengers, cyclists and pedestrians, regardless of fault. Therefore, the AB-MR frequency is a closer match for the EAB-MR frequency.

2023.1 RR BCUC.11.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section F.1, pp. TA C.1.0-23 to TA C.1.0-24 ; Excel Technical Appendix C.1.3.2.1; Excel Technical Appendix C.1.3.1
Permanent Impairment (PI) Claim Count

In Excel Technical Appendix C.1.3.1.2.1 to the Application, the FLY 2022 claim count (11 months under EAB) for PI is 963 claims.

In Excel Technical Appendix C.1.3.1 to the Application, the modelled claim count for FLY 2022 is 4,985 PI claims.

On pages TA C.1.0-23 to TA C.1.0-24 of Technical Appendix C.1.0 to the Application, ICBC states the following regarding its calculation of the PI claim count:

> **The propensity of EAB-PI claim exposures to BVDC claim exposures can be viewed as representing the proportion of Basic crash claims that result in a permanent impairment. This ratio is 4.5%, calculated from the original forecasts for EAB-PI and EAB-DB (combined) frequency and BVDC frequency, accounting for the proportion of EAB-PI claims within the combined EAB-PI and EAB-DB claims.**

On page TA C.1.3.2.1, ICBC calculates the FLY 2022 4,985 PI claim count by using the BVDC FLY 2022 claim count of 109,968 and the selected proportionate ratio assumed for PI of 4.5%.

Please explain the difference between the actual PI claims for FLY 2022 (963 claims) and the PI claims count modelled with the formula assumed by ICBC for FLY 2022 (4,985 claims).

Response:

The 963 claims figure is the estimated number of EAB-PI claim exposures in fiscal loss year (FLY) 2022, which have been opened by the end of fiscal year 2023 (March 31, 2023), excluding those already closed with no payment by that time. However, ICBC's analysis is based on data known as of August 31, 2022. So to construct the outlook claim exposures figure for FLY 2022 as of March 31, 2023, the actual claim exposures to August 31, 2022 are combined with a projection of the claim exposures to be opened between August 31, 2022 and March 31, 2023. Please refer to the Application, Chapter 3, Technical Appendix C.0, Section C.5 for the discussion of the full fiscal year outlook of claims data.

The 4,985 figure is the actuarial best estimate of all EAB-PI incurred claim exposures for FLY 2022 derived based on the propensity of EAB-PI claim exposures to BVDC claim exposures. The remaining 4,022 (4,985 minus 963) are expected to be opened after March 31, 2023 due to the long-tailed nature of this coverage, which is discussed further in the response to information request 2023.1 RR BCUC.11.1.1-2.

2023.1 RR BCUC.11.1.1-2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3, Technical Appendix C.1.0, Section F.1, pp. TA C.1.0-23 to TA C.1.0-24 ; Excel Technical Appendix C.1.3.2.1; Excel Technical Appendix C.1.3.1
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> **The propensity of EAB-PI claim exposures to BVDC claim exposures can be viewed as representing the proportion of Basic crash claims that result in a permanent impairment. This ratio is 4.5%, calculated from the original forecasts for EAB-PI and EAB-DB (combined) frequency and BVDC frequency, accounting for the proportion of EAB-PI claims within the combined EAB-PI and EAB-DB claims.**

On page TA C.1.3.2.1, ICBC calculates the FLY 2022 4,985 PI claim count by using the BVDC FLY 2022 claim count of 109,968 and the selected proportionate ratio assumed for PI of 4.5%.

11.1.1 Given difference noted in the IR above, please explain whether ICBC considered giving more credence to the actual PI claim count for FLY 2022 of 963 claims, rather than using a formula/modelled PI claim count of 4,985 claims.

11.1.2 If not, please explain why not.

Response:

ICBC considered the actual and outlook claim exposures for EAB-PI when determining the actuarial best estimate, and found that it was not appropriate to rely on the actual or outlook claim count for the following reasons:

1. Long-tailed nature of the EAB-PI coverage

A permanent impairment payment is made after the injury has reached maximum medical recovery so that the extent of the impairment, and hence the benefit amount, can be properly assessed. The recovery process for an injured customer may take a long time to reach this point. An estimate derived based on only the first 16 months of actual experience (May 1, 2021 to August 31, 2022) would be highly leveraged and entail a high degree of uncertainty, as well as volatility between subsequent estimates.

2. Newness of this coverage means the initial experience will have limited relevance

EAB-PI has been introduced as a brand-new benefit under Enhanced Care, with no relevant claims history in the British Columbian environment prior to May 1, 2021. ICBC's Claims division is in the process of enhancing procedures to identify when to open an EAB-PI exposure. Certain injuries (for example, a wrist fracture) caused by an automobile incident may not be noticeable or reported to ICBC right away. Once the injury claim has been reported, it has to indicate a permanent impairment before being deemed eligible. An injured customer must also reach maximal medical recovery before ICBC can evaluate the customer’s permanent impairment. This will likely result in an EAB-PI claim exposure being opened towards the end of the treatment process, which could be a long time after the accident occurs. ICBC customers are also less familiar with the new EAB-PI benefit, which can result in a delay in reporting and opening an EAB-PI claim exposure.

ICBC has assessed that its best estimate of 4,985 incurred claim exposures, which is derived based on the propensity approach of EAB-PI to BVDC claims, is appropriate. Even though the actual claims count for the fiscal loss year (FLY) 2022 is 963 claims, EAB-PI claims are expected to emerge gradually over time and the identification of EAB-PI claims is likely to increase as both ICBC staff and customers gain familiarity with this benefit.

2023.1 RR BCUC.12.1

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Appendix C.3, Section B, p. C.0.3-2; Excel Appendix C.3
TPL-PD Claims Reserving Analysis

In Excel Appendix C.3, ICBC's historical actual and modelled claim frequency and severity amounts for Third Party Liability (TPL) Property Damage (PD) (TPL-PD) by FLY are presented as follows:

Summary of Incurred Frequency and Severity
Third Party Liability - Property Damage
For Fiscal Loss Years 2008 to 2026
as of August 31, 2022

Fiscal Loss Year	Earned Risk Exposure	(a) TPL - PD Frequency		(b) TPL - PD Severity ($)	
		Incurred	Modelled	Incurred	Modelled
	(1)	(2)	(3)	(4)	(5)
2008	2,760,184	0.37%		3,758	
2009	2,808,456	0.35%		3,814	
2010	2,831,762	0.34%	0.37%	3,760	3,490
2011	2,872,477	0.35%	0.36%	3,722	3,682
2012	2,907,909	0.34%	0.35%	4,000	3,896
2013	2,948,524	0.35%	0.34%	3,899	4,112
2014	2,997,254	0.35%	0.33%	4,253	4,343
2015	3,055,349	0.33%	0.32%	4,575	4,587
2016	3,138,276	0.33%	0.32%	4,745	4,843
2017	3,217,385	0.32%	0.31%	5,198	5,118
2018	3,295,151	0.30%	0.30%	5,499	5,407
2019	3,356,998	0.28%	0.29%	5,726	5,703
2020	3,402,980	0.26%	0.28%	6,048	6,015
2021	3,392,499	0.20%	0.28%	6,326	6,388
2022	3,565,834	0.30%	0.27%	5,272	6,737
2023			0.26%		7,102
2024			0.26%		7,515
2025			0.25%		7,938
2026			0.24%		8,385
PY 2023 Forecast (6)			0.25%		7,935

On page C.3.0-2 of Appendix C.3 to the Application, ICBC states:

> **The TPL-PD severity forecast is shown in Figure C.3.0.4. ICBC selected a 10-year simple regression (baseline) model, also ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period have altered the mix of claims and would bias the trend. The actuaries are assuming that the future mix of claims will return to levels consistent with the historical trend period. The selected model results in an annualized trend rate of 5.6%.**

12.1 Please explain the difference between the actual severity of $5,272 and modelled severity $6,737 (which equates to a difference of approximately 27.8 percent)[7] for FLY 2022.

12.1.1 Please explain why the difference as noted in the above question exists for FLY 2022 and not other years.

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[7] 27.8 percent = ($6,737 - $5,272)/$5,272.

Response:

12.1

The difference between the actual severity and the modelled severity for fiscal loss year (FLY) 2022 is due to the following two impacts that were reflected in the actual FLY 2022 severity amounts but were not reflected in the modelled severity:

- The COVID-19 pandemic led to fewer vehicles travelling out of province which was reflected in fewer out-of-province (higher average severity claims) Third Party Liability-Property Damage (TPL-PD) claims for both FLY 2021 and 2022.
- Following the implementation of Enhanced Care (EC), there was a higher proportion of other-than-vehicle claims (lower average severity claims) impacting FLY 2022.

The following figures provide further details of the number and severity of TPL-PD claim exposures at 17 months of development. Information regarding the mix of TPL-PD claims by type can be found in the Application, Chapter 3, Technical Appendix C.3.0, Figure TA C.3.0.1 – TPL-PD Mix of Claims at 17 Months of Development. Figure TA C.3.0.1 and Figure 1 show that there was a higher proportion of other-than-vehicle claims in FLY 2022, and Figure 2 shows that other-than-vehicle claims generally have lower severity than the overall average. The combination of these factors drives the overall lower severity seen for TPL-PD claims from fiscal loss year (FLY) 2022.

Figure 1 - Mix of counts (without CNA) at 17 months development

Fiscal Loss Year	Out-of-Province PD	Other-Than-Vehicle	Customer Vehicle Under Garage Service Operators Care	Total
2016	2,357	4,997	691	**8,045**
2017	2,190	4,728	758	**7,676**
2018	2,418	4,330	773	**7,521**
2019	2,206	3,653	825	**6,684**
2020	2,037	3,746	742	**6,525**
2021	946	3,758	462	**5,166**
2022	1,189	6,146	588	**7,923**

Figure 2 - Mix of Net Paid Severity at 17 months development ($)

Fiscal Loss Year	Out-of-Province PD	Other-Than-Vehicle	Customer Vehicle Under Garage Service Operators Care	Total
2016	4,912	3,540	2,593	**3,861**
2017	5,070	4,485	3,050	**4,510**
2018	5,081	4,729	3,120	**4,677**
2019	5,453	3,674	3,355	**4,221**
2020	6,132	4,224	3,651	**4,754**
2021	6,388	4,537	3,363	**4,771**
2022	7,650	3,214	3,437	**3,897**

As discussed above, actual FLY 2022 TPL-PD severity was impacted by both fewer out-of-province claims and more other-than-vehicle claims, resulting in a drop in observed severity. The impact resulting from fewer out-of-province claims is not expected to continue as borders have re-opened and out-of-province travel is moving back towards pre-COVID-19 pandemic levels, and therefore was not reflected in the modeled forecast. However, the proportion of other-than-vehicle claims is expected to be higher going forward, given it is a result of moving to Enhanced Care (EC). Some payments (for example, loss of income for taxi downtime and auto peripherals such as infant and toddler car seat) which were historically paid with vehicle damage claim exposure are now being separated out and paid under TPL-PD coverage. At the time of the Application, ICBC had not confirmed that this was a permanent change due to EC, therefore the modelled severity forecast did not include this impact. Going forward the count and severity assumptions for TPL-PD will reflect the new expectation of the mix of business. If the forecasts in the Application were revised in a manner consistent with ICBC's updated expectation, including the understanding of this change in mix under the Enhanced Care product, the forecast severity would be lower and the forecast frequency would be higher. In total, this would have a 0.0 percentage point (ppt) impact on the actuarial indicated rate change or about $2.7 million reduction in the required premium for PY 2023. Due to the application of the rate change floor, this has no impact on the proposed premium for PY 2023.

Please see the response to information request 2023.1 RR BCUC.9.2.4 for a summary of all sensitivities and their impacts on the PY 2023 actuarial indicated rate change discussed in the information requests.

12.1.1

The difference is seen in FLY 2022 and not other years due to the mix of claim exposures within TPL-PD for FLY 2022. Specifically, there is a higher proportion of other-than-vehicle claims, which generally have a lower average severity than the total severity.

2023.1 RR BCUC.12.2

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
Exhibit B-1, Chapter 3: Appendix C.3, Section B, p. C.0.3-2; Excel Appendix C.3
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In Excel Appendix C.3, ICBC's historical actual and modelled claim frequency and severity amounts for Third Party Liability (TPL) Property Damage (PD) (TPL-PD) by FLY are presented as follows:

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PY 2023 Forecast (6)			0.25%		7,935

On page C.3.0-2 of Appendix C.3 to the Application, ICBC states:

> **The TPL-PD severity forecast is shown in Figure C.3.0.4. ICBC selected a 10-year simple regression (baseline) model, also ending at the third quarter of FLY 2020. The selected model excludes all points beginning with the fourth quarter of FLY 2020 because impacts of the COVID-19 pandemic in this period have altered the mix of claims and would bias the trend. The actuaries are assuming that the future mix of claims will return to levels consistent with the historical trend period. The selected model results in an annualized trend rate of 5.6%.**

Please explain why there is a YoY decrease for FLY 2022 severity of -16.7 percent[8] but an increase for FLY 2021 severity of +4.6 percent[9] given that both FLY 2021 and 2022 results may be impacted by the COVID-19 pandemic.

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[8] -16.7 percent = ($5,272 - $6,326)/$6,326.

[9] +4.6 percent = $6,326 / $6,048.

Response:

Claims from both fiscal loss years (FLY) 2021 and FLY 2022 within the Third Party Liability - Property Damage (TPL-PD) coverage would have been impacted by the out-of-province travel restrictions in force during the COVID-19 pandemic, as well as individuals' decisions to reduce travel even when restrictions were not in force.

For FLY 2021, there was a slight increase in severity (+4.6%) even though pandemic restrictions had limited out-of-province travel, reducing the proportion of out of province claims which as shown in the response to information request 2023.1 RR BCUC.12.1, have a higher severity compared to the other types of claims covered. Due to the low volume of TPL-PD claim exposures overall, the decrease in out-of-province claims only partially offset the increases in severity seen for both out of province travel and other-than-vehicle claims in FLY 2021.

In addition to the impacts from reduced out-of-province travel, FLY 2022 claims were also affected by the introduction of the Enhanced Care (EC) product. As detailed in the response to information request 2023.1 RR BCUC.12.1, changes in EC are expected to lead to more other-than-vehicle claim exposures as recorded in FLY 2022. These other-than-vehicle payments are typically lower than the overall severity, therefore having a greater proportion of these exposures has largely contributed to the -16.7% decrease for overall severity in FLY 2022.

2023.1 RR BCUC.12.3

Reference: ACTUARIAL INDICATED RATE CHANGE ANALYSIS
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12.3 In considering the -16.7 percent decline in the FLY 2022 severity compared to FLY 2021, and lack of similar large declines prior to this, has ICBC considered the possibility that the Enhanced Care product change effective May 2021 may have impacted TPL-PD?

12.3.1 If not, please explain why not.

Response:

As discussed in the response to information request 2023.1 RR BCUC.12.1, ICBC has found that the Enhanced Care product change effective May 2021 has affected the number of other-than-vehicle claim exposures within the Third Party Liability-Property Damage (TPL-PD) coverage, but has determined the impact on the actuarial indicated rate change is 0.0 percentage points with revised expectations for future frequency and severity of TPL-PD claims.

2023.1 RR BCUC.13.1

Reference: CAPITAL MANAGEMENT PLAN
Exhibit B-1, Chapter 4, Section A, p. 4-1, Section B.1, p. 4-2; Chapter 3, Section A.2, p. 3-6, Figure 3.2; ICBC 2021 RRA, Exhibit B-5, ICBC's response BCUC IR 60.2
Basic Minimum Capital Test (MCT)

On page 4-1 of the Application, ICBC states that *Special Direction IC2* is amended for PY 2023, including the following:

- **The capital build and capital maintenance provisions are substituted with a capital provision equal to an amount of 7% of required premium (section 3 (1)(e.2)).**

On page 4-2 of the Application, ICBC states that the outlook Basic MCT ratio for the end of FY 2022/23 and the most recent quarter's actual Basic MCT ratio (year-to-date value as of Q2 of FY 2022/23) are 78% and 91%, respectively.

In response to BCUC IR 60.2 in the 2021 RRA proceeding, ICBC stated:

> **Yes, the 2012 RRA rule of thumb that every 1.0 percentage point change in the Basic insurance rate represents an approximate 2.0 percentage point change in the Basic minimum capital test (MCT) ratio is valid for this Application.**

In Figure 3.2 on page 3-6 of the Application, ICBC shows that the difference between the proposed rate change and actuarial indicated rate change is 6.5 percentage points.

Please confirm, or explain otherwise, pursuant to the amendments to *Special Direction IC2,* that the calculation of the capital provision for PY 2023 is unrelated to ICBC's Basic capital available, which is part of the Basic MCT ratio calculation.

Response:

Pursuant to the amendments to *Special Direction IC2*, the capital provision is 7% of the required premium. This percentage is constant and not directly tied to ICBC's Basic capital available; however, the calculation of the capital provision for Policy Year (PY) 2023 is indirectly related to ICBC's Basic capital available in the sense that the required premium is affected by the amount of capital available via the Investment Income on Capital Available for Rate Setting (CARS) component of the required premium. Please refer to the Application, Chapter 3, Actuarial Indicated Rate Change Analysis, paragraph 21 for more information on this component of required premium.

For example, holding all else constant, a larger amount of ICBC’s Basic capital available will result in a larger amount of investment income on CARS, which will produce a smaller amount of the required premium. As the capital provision is a flat 7% of the required premium, a smaller amount of required premium results in a smaller capital provision in dollar terms.

2023.1 RR BCUC.13.2

Reference: CAPITAL MANAGEMENT PLAN
Exhibit B-1, Chapter 4, Section A, p. 4-1, Section B.1, p. 4-2; Chapter 3, Section A.2, p. 3-6, Figure 3.2; ICBC 2021 RRA, Exhibit B-5, ICBC's response BCUC IR 60.2
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In Figure 3.2 on page 3-6 of the Application, ICBC shows that the difference between the proposed rate change and actuarial indicated rate change is 6.5 percentage points.

Please explain, at a high level, the factors that may contribute to a difference between the outlook and actual Basic MCT ratio for the end of FY 2022/23.

Response:

The primary difference between the MCT estimates as of Year-to-Date September 30, 2022 and the MCT outlook estimate to March 31, 2023, is the result of a more favourable investment return forecast in the remaining forecast period for fiscal year (FY) 2022/23.

In Chapter 4, page 4-2 of the Application, in Figure 4.1, ICBC provides the most recent quarter's actual MCT ratio, which is as of September 30, 2022. The Actual Year-to-Date Basic MCT ratio as of September 30, 2022 is 78%. While this is referred to as "Actual Year-to-Date MCT Ratio", it is still an estimate because certain figures used in the determination of capital available and capital required are only recorded on an annual basis. The Actual Year-to-Date MCT Ratio is calculated based on the financial activity of the first six months of FY 2022/23, up to and including September 30, 2022.

Figure 4.1 also provides the 2022/23 outlook Basic MCT ratio for the end of the 2022/23 fiscal year of 91%. The 2022/23 outlook MCT ratio calculation reflects the forecast of the full FY 2022/23 financial results. That is, the 2022/23 outlook MCT encompasses the actual financial activity up to September 30, 2022, and includes a forecast of the additional financial activity that will occur over the remaining six months of the fiscal year.

The Basic MCT ratios are calculated at a point in time. Factors that may contribute to the differences in the MCT values estimated at different points in time are: Changes to net income and components thereof, changes in unrealized investment gains/losses and pension and post-retirement remeasurement. In addition, changes to the minimum capital required component of the MCT calculation can be impacted by changes to the investment portfolio (market values and asset mix), and changes to the balances of unpaid claims and unearned premium liabilities.

2023.1 RR BCUC.13.3

Reference: CAPITAL MANAGEMENT PLAN
Exhibit B-1, Chapter 4, Section A, p. 4-1, Section B.1, p. 4-2; Chapter 3, Section A.2, p. 3-6, Figure 3.2; ICBC 2021 RRA, Exhibit B-5, ICBC's response BCUC IR 60.2
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In Figure 3.2 on page 3-6 of the Application, ICBC shows that the difference between the proposed rate change and actuarial indicated rate change is 6.5 percentage points.

13.3 Please confirm whether the "rule of thumb" discussed in the response to BCUC IR 60.2 in the 2021 RRA remains valid for this Application and explain why or why not.

13.3.1 If confirmed, does this mean that, all else equal, the 6.5 percentage point difference between the proposed rate change and actuarial indicated rate change has a positive 13.0 percentage point impact on the Basic MCT ratio? Please explain why or why not.

Response:

13.3

The "rule of thumb" discussed in the response to 2021.1 RR BCUC.60.2 is not the same for this Application. For this Application, the annualized projected premium at the current rate level for Policy Year (PY) 2023 ($3,242 million as shown in Chapter 3, Appendix A.1, Row (v), Column (4) "PY 2023 Annualized"), is approximately 1.4 times the minimum capital required for fiscal year (FY) 2022/23 ($2,330 million, as shown in Chapter 8, Figure 8A.5, Line [H], "2022/23 Outlook"). That is, a 1.0 percentage point excess in the Basic insurance rate will increase the Basic minimum capital test (MCT) ratio by approximately 1.4 percentage points per year.

13.3.1

If the PY 2023 losses, premiums, expenses and investment income emerge as forecast in the 2023 RRA, a 6.5 percentage point ("ppt") difference between the proposed rate change and the actuarial indicated rate change for the 24-month policy period will have an approximate +18 percentage point impact on the Basic MCT ratio (= 6.5 ppt x 1.4 factor x 2-year policy period). The full 18 ppt impact will be realized after all PY 2023 premiums are fully earned, which occurs at the end of FY 2025/26.

2023.1 RR BCUC.14.1

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section E.1.1, pp. 2-7 to 2-8; Chapter 7, Appendix 7B, p. 7B-6
Tort Claims

On page 2-7 of the Application, ICBC states:

> **Under the *Evidence Amendment Act, 2020*, the Disbursements and Expert Evidence Regulation places a limit on the amount recoverable from an unsuccessful litigant for disbursements related to motor vehicle personal injury litigation at 6% of the overall judgment or settlement.**

Further, on page 2-7, ICBC states that, on July 8, 2022, the British Columbia Supreme Court (BCSC) found the 6 percent cap, as described above, to be unconstitutional. On page 2-8 of the Application, ICBC states that the Attorney General and ICBC appealed this decision on July 12, 2022. ICBC states, "The appeal hearing is scheduled for January 25 and 26, 2023."

On page 7B-6 of the Application, ICBC states that the cost of the adverse BCSC decision is already reflected in the provision for unpaid claims. On page 2-8 of the Application, ICBC states that it has included "no savings" in the provision for unpaid claims in ICBC's 2021/22 Annual Service Plan Report.

Please provide an update on the above-noted January 25 and 26, 2023 appeal hearing.

Response:

The above noted-appeal hearing proceeded as scheduled. The Supreme Court of British Columbia has reserved its decision until a later date. ICBC anticipates it will be another few months before the Court renders a decision. It is expected that the unsuccessful party will seek leave to appeal to the Supreme Court of Canada.

2023.1 RR BCUC.14.2

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section E.1.1, pp. 2-7 to 2-8; Chapter 7, Appendix 7B, p. 7B-6
Tort Claims

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14.2 Given that the cost of the adverse BCSC decision is already reflected in ICBC's 2021/22 provision for unpaid claims, please clarify whether a favourable ruling in the Attorney General and ICBC's appeal of the July 8, 2022 BCSC decision would have a positive effect on Basic net income and equity, and the investment income component of the rate indication.

14.2.1 If yes, please provide the estimated impact on: i) Basic net income and equity; ii) the investment component of the rate indication.

14.2.2 If no, please explain why not.

Response:

14.2

A favourable ruling in the Attorney General and ICBC's appeal of the July 8, 2022 BCSC decision is expected to have a positive (favourable) effect on Basic net income and equity, and the investment income component of the rate indication.

14.2.1

i) A favourable ruling in the Attorney General and ICBC's appeal of the July 8, 2022 BCSC decision is expected to result in a reduction to claims costs and therefore a favourable impact on net income and equity. The estimated benefit at the time of the Application would be a positive $165 million to Basic net income and equity. This is a point in time estimate, meaning, with the passing of time, the value of the benefit could change. For example, as more time passes, the potential benefit is expected to diminish as more claim files are closed.

ii) A favourable ruling would increase the investment component of the rate indication, the Capital Available for Rate Setting, by $165 million, which would increase the Investment Income on Capital Available for Rate Setting by approximately $16 million over the 24-month policy period. The impact on the actuarial indicated rate change would be approximately -0.3 ppt. Overall, this potential benefit would not affect the proposed rate change of 0.0% as the benefit will be limited to the rate change floor of 0.0%.

Please see the response to information request 2023.1 RR BCUC.9.2.4 for a summary of all sensitivities and their impacts on the PY 2023 actuarial indicated rate change discussed in the information requests.

14.2.2

Not applicable.

2023.1 RR BCUC.15.1

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section E.1.2, p. 2-8; ICBC 2021/22 Annual Service Plan Report,[10] Appendix C (ICBC Consolidated Financial Statements as at March 31, 2022), p. 71, Modified Tort Claims

On page 2-8 of the Application, ICBC states that, on May 12, 2022, the BC Court of Appeal overturned the March 2, 2021 BCSC decision which had ruled the Civil Resolution Tribunal's jurisdiction over minor injury claims was unconstitutional. ICBC also states:

> **The TLABC [Trial Lawyers Association of BC] has since filed leave to appeal to the Supreme Court of Canada (SCC). The SCC's decision on whether it will hear the appeal is expected in the first quarter of 2023.**

On page 71, Note 23c), of the ICBC Consolidated Financial Statements as at March 31, 2022, ICBC reports that the successful appeal decision in May 2022 resulted in a favourable impact on the Corporation's provision of unpaid claims.

Please clarify whether the TLABC's appeal to the SCC is reflected in ICBC's 2021/22 provision for unpaid claims. If not, please explain why not.

[10] ICBC, 2021/22 Annual Service Plan Report, August 2022, retrieved February 9, 2023 from: https://www.icbc.com/about-icbc/company-info/Documents/ar-22.pdf

Response:

On March 2, 2021, the BC Supreme Court determined that the Civil Resolution Tribunal's jurisdiction over minor bodily injury claims was unconstitutional. This Decision was overturned by the BC Court of Appeal on May 12, 2022, which resulted in a favourable impact on ICBC's 2021/22 provision for unpaid claims.

The TLABC sought leave to appeal the BC Court of Appeal ruling to the Supreme Court of Canada (SCC). At the time the 2021/22 financial statements were tabled in August 2022, the SCC's decision on the TLABC's appeal was still pending and the probability of success of the appeal, at that time, could not be determined. Therefore, the TLABC's appeal did not have an impact on the 2021/22 provision for unpaid claims.

On December 22, 2022, the SCC denied the TLABC's leave to appeal application and so the BC Court of Appeal's decision is final. This means that the Civil Resolution Tribunal continues to have jurisdiction over minor injury claims and there is no further impact to the financial results as a result of the TLABC lawsuit.

2023.1 RR BCUC.15.2

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section E.1.2, p. 2-8; ICBC 2021/22 Annual Service Plan Report,[10] Appendix C (ICBC Consolidated Financial Statements as at March 31, 2022), p. 71, Modified Tort Claims

On page 2-8 of the Application, ICBC states that, on May 12, 2022, the BC Court of Appeal overturned the March 2, 2021 BCSC decision which had ruled the Civil Resolution Tribunal's jurisdiction over minor injury claims was unconstitutional. ICBC also states:

> **The TLABC [Trial Lawyers Association of BC] has since filed leave to appeal to the Supreme Court of Canada (SCC). The SCC's decision on whether it will hear the appeal is expected in the first quarter of 2023.**

On page 71, Note 23c), of the ICBC Consolidated Financial Statements as at March 31, 2022, ICBC reports that the successful appeal decision in May 2022 resulted in a favourable impact on the Corporation's provision of unpaid claims.

Please confirm, or explain otherwise, that an unfavourable ruling to ICBC in TLABC's appeal to the SCC (if heard) would adversely affect Basic net income and equity, and the investment income component of the rate indication.

[10] ICBC, 2021/22 Annual Service Plan Report, August 2022, retrieved February 9, 2023 from: https://www.icbc.com/about-icbc/company-info/Documents/ar-22.pdf

Response:

As discussed in the response to information request 2023.1 RR BCUC.15.1, the SCC did not grant the TLABC's leave to appeal application regarding the BC Court of Appeal Decision.

2023.1 RR BCUC.16.1-4

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section F, pp. 2-8 to 2-9; ICBC 2021/22 Annual Service Plan Report,[11] ICBC Consolidated Financial Statements as at March 31, 2022, p. 71
Class Action Certification

On page 2-8 of the Application, ICBC states that, in March 2020, a Notice of Civil Claim was filed under the *Class Proceedings Act* in the Supreme Court of British Columbia against ICBC and the Province of British Columbia. ICBC explains that the civil suit alleges that there are two classes of allegedly injured parties. ICBC states:

The first class (the Ratepayer Class) alleges reimbursement of MSP increased ICBC's operating costs unlawfully which in turn caused ICBC to increase rates to individuals paying basic insurance. The second class (Accident Victim Class) claims that ICBC unlawfully reimbursed MSP for medical practitioner visits out of their individual limits for accident benefits, which caused them to receive fewer benefits than their entitlement.

On page 2-9 of the Application, ICBC states that, in April 2022, the Supreme Court of British Columbia dismissed the ratepayer class action but allowed the accident victim class action to proceed against ICBC. Further, ICBC states "both sides" have appealed the decision and an appeal date has not been set.

On page 71, Note 23c), of the ICBC Consolidated Financial Statements as at March 31, 2022, ICBC states the following as it relates to the above-noted civil claim:

At this stage of the proceedings, the probability of success on the <u>accident victim claim</u> cannot be determined and the financial impact can vary depending on the outcome. [*Emphasis added*]

16.1 Please explain what claims (i.e. tort claims, modified tort claims, or Enhanced Care claims) are impacted by: i) the ratepayer class action, and ii) the accident victim class action.

16.2 Please clarify the nature of the appeal from "both sides" as it relates to: i) the ratepayer class action, and ii) the accident victim class action.

16.3 Please explain the impact on the PY 2023 rate indication, if any, from the two class action suits as described in the preamble.

16.4 Please confirm, or explain otherwise, that an unfavourable ruling to ICBC on the accident victim class action would adversely affect Basic net income and equity, and the investment income component of the rate indication.

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[11] ICBC, 2021/22 Annual Service Plan Report, August 2022, retrieved February 9, 2023 from: https://www.icbc.com/about-icbc/company-info/Documents/ar-22.pdf

Response:

The Accident Victim Class refers to claims made under Part 7 of the *Insurance (Vehicle) Regulation*. Part 7 benefits were first party accident benefits provided to insureds regardless of fault. They are not tort and modified tort claims. According to ICBC's internal records, there are about 275 Accident Victim Class claims where the insured had reached their eligible Part 7 limit of either $150,000 or $300,000 where ICBC did not back out the Medical Services Plan (MSP) payments for medical practitioner services. In these cases, the insured had reached their limit of eligible payments, but had further expenses for reimbursement.

The plaintiff's appeal for the Accident Victim Class alleges that ICBC unlawfully reimbursed MSP for medical practitioner services out of the insured's limits for accident benefits under Part 7 of the *Insurance (Vehicle) Regulation*, which caused the insured to receive fewer benefits than their entitlement allowed. The plaintiffs are seeking compensatory and punitive damages. ICBC maintains that an internal policy instructing the removal of medical practitioner payments where an insured's claim was at its limit with additional expenses forthcoming was followed for most of the claims. Where payments did not follow the policy, it was due to oversight and not malfeasance. Prior to the certification of the class action, ICBC conducted a review of claims and reimbursed about half of the 275 impacted insureds. ICBC's appeal is that the analysis required to determine whether a specific insured suffered a loss is extremely fact specific making this process unsuitable for a class action proceeding.

With respect to the Ratepayer Class, the plaintiffs allege that the reimbursement of MSP payments to the Government improperly increased ICBC's operating costs, therefore contributing to an unlawful increase in, and an unconstitutional tax on, ICBC's Basic insurance rates charged to policyholders (Ratepayers). Subsequent to the class action, retroactive legislation passed, making the agreements for ICBC to reimburse the government lawful. ICBC maintains a position consistent with the Attorney General's in that the plaintiff has no cause to action to challenge the government's authority to set rates before the 2003 appointment of the

BCUC as ICBC's regulator or the BCUC's exercise of their statutory powers to set ICBC's Basic insurance rates as the regulator. The Attorney General is seeking to have the Ratepayer Class appeal dismissed on the grounds that the subject matter of the dispute is within the exclusive jurisdiction of the BCUC and that the BC Supreme Court has no jurisdiction to hear the matter.

There is no impact on the PY 2023 rate indication stemming from the above-mentioned class action proceeding. If the ultimate ruling is unfavourable to ICBC, there will be an adverse effect on the Basic net income and equity, and the investment income component of the rate indication. However, at this stage of the proceedings, the probability of success on the Accident Victim Class claim cannot be determined and the financial impact can vary depending on the outcome.

2023.1 RR BCUC.17.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
New Money Formula

On page 5-2 of the Application, ICBC notes that the current New Money Rate (NMR) formula was approved by the BCUC Order G-307-21 and the accompanying Decision on the ICBC 2021 RRA.

On pages 5-3 to 5-4 of the Application, ICBC provides the NMR in Figure 5.1 and states:

Figure 5.1 – New Money Rate Formula

	Asset Group Return		Weighting		Forecast
[A]	Fixed Income - Liquidity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - liquidity assets
[B]	Fixed Income - Credit Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - credit assets
[C]	Equity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equity assets
[D]	Real Assets Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real assets
[E]	Portfolio Leverage Cost	=	Strategic mix weight as % of the portfolio	x	BCI 15-year total return forecast for Canadian money market assets
[F]	Sum of Asset Group Returns		[A] + [B] + [C] + [D] + [E]		
[G]	Diversification & Rebalancing Premium				
[H]	**New Money Rate for each 12-month period**		[F]+[G]		
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
Equity Return [B]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equities assets
Real Estate Return [C]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real estate assets
Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D]				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
>
> **Although ICBC has included the Diversification & Rebalancing Premium in this approximation, this premium assumes a stable, fully funded portfolio subject to regular rebalancing over an extended investment period. During a transition between asset mixes, the full impact of the Diversification & Rebalancing Premium may be reduced.**
>
> **[…]**
>
> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	44	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.49
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.23
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.7	2.02
Real Assets	14	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	0.91
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
Real Assets	17	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	1.10
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

17.1 Please explain the following changes between the New Money Rate shown in Figure 5.2 in the 2021 RRA and Figure 5.1 in this Application:

	2021 RRA – Figure 5.2 (as approved by Order G-307-21)	**2023 RRA – Figure 5.1**
1	**[A] Fixed Income Return**	**Fixed Income Return – [A] Liquidity Return and [B] Credit Return**
2	**[C] Real Estate Return and [D] Infrastructure Return**	**[D] Real Assets Return**
3	**Not available**	**[E] Portfolio Leverage Cost**

17.1.1 Please confirm, or explain otherwise, that the breakdown between liquidity and credit for fixed income assets does not affect the result of the NMR that was approved by Order G-307-21.

Response:

17.1

Line 1 [A] Liquidity Return and [B] Credit Return: In the 2021 RRA, the classification of fixed income assets was based on the Statement of Investment Policy and Procedures (SIPP) dated October 29, 2020. At the time, the SIPP did not explicitly state the split between liquidity and credit investments. All fixed income investments were classified under the asset class, Fixed Income. For the 2021 RRA, the Fixed Income Return consisted of money market securities, Canadian bonds which included government and corporate bonds, mortgages and mezzanine debt. Subsequently, the SIPP, for greater granularity, provides a split between the liquidity and credit fixed income investments. In this Application, the Fixed Income Return has therefore been split between Liquidity Return and Credit Return. Liquidity Return consists of money market securities, short bonds and government bonds. Credit Return consists of corporate bonds, private debt and mortgages. Private debt is the only new investment type to the overall Fixed Income Return from the 2021 RRA. Private debt became a permissible investment by ICBC's Board of Directors in January 2021.

Line 2 [C] Real Estate Return and [D] Infrastructure Return: In the 2021 RRA, the real estate and infrastructure returns were presented separately. For this Application, they have been amalgamated into one line called, Real Assets Return. There is no change to the investments.

Line 3 [E] Portfolio Leverage Cost: Subsequent to the October 2020 SIPP, portfolio leverage was incorporated into the investment portfolio's strategic mix, and as such, ICBC has provided New Money Rate calculations incorporating the use of leverage.

17.1.1

The breakdown between liquidity and credit fixed income assets does not affect the results of the NMR that was approved by Order G-307-21. Rather, the split between liquidity and credit fixed income returns provides more granularity to the overall Fixed Income Return.

2023.1 RR BCUC.17.1.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
New Money Formula

On page 5-2 of the Application, ICBC notes that the current New Money Rate (NMR) formula was approved by the BCUC Order G-307-21 and the accompanying Decision on the ICBC 2021 RRA.

On pages 5-3 to 5-4 of the Application, ICBC provides the NMR in Figure 5.1 and states:

Figure 5.1 – New Money Rate Formula

	Asset Group Return		Weighting		Forecast
[A]	Fixed Income - Liquidity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - liquidity assets
[B]	Fixed Income - Credit Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - credit assets
[C]	Equity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equity assets
[D]	Real Assets Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real assets
[E]	Portfolio Leverage Cost	=	Strategic mix weight as % of the portfolio	x	BCI 15-year total return forecast for Canadian money market assets
[F]	Sum of Asset Group Returns		[A] + [B] + [C] + [D] + [E]		
[G]	Diversification & Rebalancing Premium				
[H]	**New Money Rate for each 12-month period**		[F]+[G]		
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
Equity Return [B]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equities assets
Real Estate Return [C]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real estate assets
Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D]				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
>
> **Although ICBC has included the Diversification & Rebalancing Premium in this approximation, this premium assumes a stable, fully funded portfolio subject to regular rebalancing over an extended investment period. During a transition between asset mixes, the full impact of the Diversification & Rebalancing Premium may be reduced.**
>
> **[…]**
>
> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	44	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.49
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.23
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.7	2.02
Real Assets	14	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	0.91
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
Real Assets	17	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	1.10
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

As the Portfolio Leverage Cost was not part of the approved NMR when it was presented in the ICBC 2021 RRA, please clarify whether ICBC is seeking approval of a revised NMR Formula in this Application.

Response:

Yes, ICBC is seeking approval for a revised NMR formula to include leverage as presented in the Application, Chapter 5, Figure 5.1 for Policy Year (PY) 2023. The revision to the NMR formula is required so that it is reflective of ICBC's current strategic asset mix as outlined in the Statement of Investment Policy and Procedures.

To be consistent with the proposed changes to the NMR formula, ICBC is also requesting approval for a revision to the formula for the Yield on Capital Available for Rate Setting to include leverage as shown in the table below:

	Asset Class Weight Component		Yield Component
[A]	Current Weighting of Fixed Income – Liquidity as % of portfolio	x	Current Yield at Market
[B]	Current Weighting of Fixed Income – Credit as % of portfolio	x	Current Yield at Cost / Market
[C]	Current Weighting of Equities as % of portfolio	x	BCI 15-year weighted average return on ICBC equity assets (CAD)
[D]	Current Weighting of Real Estate as % of portfolio	x	Current Yield at Cost / Market
[E]	Current Weighting of Infrastructure as % of portfolio	x	Current Yield at Market
[F]	Portfolio Leverage Cost	x	Current Yield at Market
[G]	Sum of Asset Group Returns [A] + [B] + [C] + [D] + [E] + [F]		
[H]	Fees for managing investment portfolio as % of portfolio value		
[I]	**Yield on Capital Available for Rate Setting for each 12-month period** [G] - [H]		

The amendments as stated above do not have an impact on the proposed Basic insurance rate change of 0%. ICBC has provided draft directives in the response to information request 2023.1 RR BCUC.44.1, Attachment A – Draft Order.

2023.1 RR BCUC.17.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
New Money Formula

On page 5-2 of the Application, ICBC notes that the current New Money Rate (NMR) formula was approved by the BCUC Order G-307-21 and the accompanying Decision on the ICBC 2021 RRA.

On pages 5-3 to 5-4 of the Application, ICBC provides the NMR in Figure 5.1 and states:

Figure 5.1 – New Money Rate Formula

	Asset Group Return		Weighting		Forecast
[A]	Fixed Income - Liquidity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - liquidity assets
[B]	Fixed Income - Credit Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - credit assets
[C]	Equity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equity assets
[D]	Real Assets Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real assets
[E]	Portfolio Leverage Cost	=	Strategic mix weight as % of the portfolio	x	BCI 15-year total return forecast for Canadian money market assets
[F]	Sum of Asset Group Returns		[A] + [B] + [C] + [D] + [E]		
[G]	Diversification & Rebalancing Premium				
[H]	**New Money Rate for each 12-month period**		[F]+[G]		
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
Equity Return [B]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equities assets
Real Estate Return [C]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real estate assets
Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D])				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
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> **Although ICBC has included the Diversification & Rebalancing Premium in this approximation, this premium assumes a stable, fully funded portfolio subject to regular rebalancing over an extended investment period. During a transition between asset mixes, the full impact of the Diversification & Rebalancing Premium may be reduced.**
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> **[…]**
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> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	44	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.49
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.23
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.7	2.02
Real Assets	14	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	0.91
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
Real Assets	17	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	1.10
Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

17.2 Please confirm, or explain otherwise, that repurchase agreements using short term government securities have been used previously by ICBC.

17.2.1 If confirmed, please explain why they were not included in the NMR.

17.2.2 If not confirmed, please explain why it is appropriate to include them now.

Response:

Yes, repurchase agreements have been used previously by ICBC with government bonds as collateral.

Prior to fiscal year 2021, the total amount of repurchase agreements were directly linked to the amount of payment plan receivables; therefore, the cost of borrowing was netted against payment plan finance fees. With the approval by ICBC's Board of Directors of the new strategic asset mix which commenced in May 2021, repurchase agreements are no longer linked to the payment plan receivables but are a part of the allocation of the investment portfolio as leverage. Since leverage is now included as part of the strategic asset mix, repurchase agreements are included in the calculation of the NMR.

2023.1 RR BCUC.17.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
New Money Formula

On page 5-2 of the Application, ICBC notes that the current New Money Rate (NMR) formula was approved by the BCUC Order G-307-21 and the accompanying Decision on the ICBC 2021 RRA.

On pages 5-3 to 5-4 of the Application, ICBC provides the NMR in Figure 5.1 and states:

Figure 5.1 – New Money Rate Formula

	Asset Group Return		Weighting		Forecast
[A]	Fixed Income - Liquidity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - liquidity assets
[B]	Fixed Income - Credit Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - credit assets
[C]	Equity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equity assets
[D]	Real Assets Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real assets
[E]	Portfolio Leverage Cost	=	Strategic mix weight as % of the portfolio	x	BCI 15-year total return forecast for Canadian money market assets
[F]	Sum of Asset Group Returns		[A] + [B] + [C] + [D] + [E]		
[G]	Diversification & Rebalancing Premium				
[H]	**New Money Rate for each 12-month period** [F]+[G]				
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
Equity Return [B]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equities assets
Real Estate Return [C]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real estate assets
Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D]				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
>
> **Although ICBC has included the Diversification & Rebalancing Premium in this approximation, this premium assumes a stable, fully funded portfolio subject to regular rebalancing over an extended investment period. During a transition between asset mixes, the full impact of the Diversification & Rebalancing Premium may be reduced.**
>
> **[…]**
>
> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	44	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.49
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.23
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Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
Real Assets	17	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	1.10
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Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Please explain what "enhanced portfolio returns" means given that leverage has a negative weighted yield of -0.24 in the NMR as shown in Figures 5.3 and 5.4.

Response:

The enhanced portfolio returns do not refer to the cost of borrowing itself but to the additional return expected over the long term from the assets obtained from borrowed funds over and above the cost of borrowing.

Please note that the negative yield shown is the cost of borrowing only and does not represent the anticipated return from the assets acquired from the proceeds of borrowing.

2023.1 RR BCUC.17.4

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
New Money Formula

On page 5-2 of the Application, ICBC notes that the current New Money Rate (NMR) formula was approved by the BCUC Order G-307-21 and the accompanying Decision on the ICBC 2021 RRA.

On pages 5-3 to 5-4 of the Application, ICBC provides the NMR in Figure 5.1 and states:

Figure 5.1 – New Money Rate Formula

	Asset Group Return		Weighting		Forecast
[A]	Fixed Income - Liquidity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - liquidity assets
[B]	Fixed Income - Credit Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income - credit assets
[C]	Equity Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equity assets
[D]	Real Assets Return	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real assets
[E]	Portfolio Leverage Cost	=	Strategic mix weight as % of the portfolio	x	BCI 15-year total return forecast for Canadian money market assets
[F]	Sum of Asset Group Returns		[A] + [B] + [C] + [D] + [E]		
[G]	Diversification & Rebalancing Premium				
[H]	**New Money Rate for each 12-month period**		[F]+[G]		
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
Equity Return [B]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for equities assets
Real Estate Return [C]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for real estate assets
Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D]				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
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> **Although ICBC has included the Diversification & Rebalancing Premium in this approximation, this premium assumes a stable, fully funded portfolio subject to regular rebalancing over an extended investment period. During a transition between asset mixes, the full impact of the Diversification & Rebalancing Premium may be reduced.**
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> **[…]**
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> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
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Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
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Leverage	-10	BCI 15-year total return forecast – ICBC Canadian money market assets	2.4	-0.24
Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Please explain why leverage offers a negative weighting to the investment portfolio in the NMR.

Response:

Leverage represents money borrowed by the portfolio for purposes of investing. As such leverage is a liability.

As this liability reduces the overall value of the total portfolio, the weight of leverage - with a target of 10% as laid out in the SIPP - is subtracted from the summation of the weightings of the other asset classes, bringing the overall portfolio to 100% of net value.

2023.1 RR BCUC.17.5

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp. 5-2 – 5-4, 5-6, 5-7; ICBC 2021 RRA, Exhibit B-1, Chapter 5, p.5-6, Exhibit B-8, ICBC's response to BCOAPO IR 32.1
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[H]	**New Money Rate for each 12-month period**		[F]+[G]		
Average of the New Money Rate calculated for each 12-month period is the New Money Rate for PY 2023					

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

On page 5-6 of Exhibit B-1 in the ICBC 2021 RRA, ICBC provided Figure 5.2 for its proposed New Money rate Formula, which was approved by Order G-307-21:

Figure 5.2 – Proposed New Money Rate Formula

Asset Group Return		Weighting		Forecast
Fixed Income Return [A]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for fixed income assets
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Infrastructure Return [D]	=	Strategic mix weight as % of the portfolio	x	Weighted average of BCI 15-year total return forecast for infrastructure assets
Sum of Asset Group Returns [E]=([A]+[B]+[C]+[D]				
Diversification & Rebalancing Premium [F]				
New Money Rate = [E]+[F]				

In response to BCOAPO IR 32.1 in the ICBC 2021 RRA proceeding, ICBC stated:

> **The new asset mix formally acknowledges the use of leverage in the portfolio. The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110%, however the cost of the leverage has not been factored into this approximation as leverage was not included in the original approved formula.**
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> **Future revenue requirement applications will incorporate changes to the calculation of the NMR to include the new Strategic Asset Mix and transition, which will have greater impact and clarity as the transition to the new asset mix progresses. Proposals may also be made for the NMR to incorporate the cost of leverage or a transitional level of diversification and rebalancing premium.**

On page 5-6 and 5-7 of the Application, ICBC provides New Money Rate for the first and second 12-month period in Figures 5.3 and 5.4 and states:

> **As can be seen from Figures 5.3 and 5.4, a different value of the New Money Rate is computed for the first 12-month period as compared to the second 12-month period. This results from the shift in ICBC's investment portfolio toward the long-term strategic asset mix according to the multi-year transition schedule contained in Appendix A of the January 2022 SIPP.**

Figure 5.3 – New Money Rate for the First 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
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Expected Return of Investment Assets				5.41
Diversification & Rebalancing Premium				0.25
New Money Rate for the first 12-month period[2]				**5.66**

[1] Weightings based on strategic mix target, as shown in Appendix 5A. Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.4 – New Money Rate for the Second 12-Month Period

Asset Group	Weighting (%)[1] (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)=(3)
Fixed Income - Liquidity	41	BCI 15-year weighted average total return forecast on ICBC fixed income assets	3.4	1.39
Fixed Income - Credit	22	BCI 15-year weighted average total return forecast on ICBC fixed income assets	5.6	1.24
Equity	30	BCI 15-year weighted average total return forecast on ICBC equity assets	6.8	2.05
Real Assets	17	BCI 15-year weighted average total return forecast on ICBC real assets	6.5	1.10
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Expected Return of Investment Assets				5.54
Diversification & Rebalancing Premium				0.25
New Money Rate for the second 12-month period[2]				**5.79**

[1] Weightings based on strategic mix target, as shown in Appendix 5A, Attachment 5A.1 (page 24).
[2] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

In general, please explain whether the inclusion of leverage (-0.24) is expected to offset the diversification & balancing premium (+0.25) in the NMR.

Response:

For greater clarity, leverage and the diversification and rebalancing premium are unrelated and are not expected to offset each other. The -0.24% weighted yield for leverage as shown in the Application, Chapter 5, Figure 5.3 and 5.4, represents the cost of leverage only and not the overall net contribution of leverage to the NMR. In general, leverage will allow ICBC to borrow funds to invest in assets which over the long term are forecast to return a higher amount than the cost of borrowing itself.

2023.1 RR BCUC.18.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

In response to BCOAPO IR 32.1 in the 2021 RRA proceeding, ICBC stated:

> **The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110% […]**

On pages 5A-1 to 5A-2 of Appendix 5A to the Application, ICBC states:

> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

> **Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.**

18.1 Please explain how ICBC's leverage asset class functions within ICBC's investment portfolio and how it fits within ICBC's investment strategy.

18.1.1 Please clarify how leverage can increase ICBC's individual assets class weightings to 110 percent.

Response:

18.1

Leverage allows the borrowed funds to be invested in assets which are forecast to return (over the long term) a higher amount than the borrowing cost of the leverage. By taking on leverage, ICBC takes on some additional risks around volatility and short-term performance in exchange for a forecast increase in returns over the longer run.

18.1.1

The additional funds provided by leverage (of approximately 10% of gross assets) are redeployed across the different asset classes such that the gross assets held would be 10% higher than the amount available before leverage.

2023.1 RR BCUC.18.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

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> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the**
>
> **Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.

Please explain why the 15-year expected return of BCI's Canadian Money Market program is an appropriate estimate of the forecasted cost of leverage over the investment horizon.

Response:

ICBC's allocation to leverage in its investment portfolio mainly consists of repurchase agreements with government securities as collateral. Both the term to maturity and the cost of these repurchase agreements are similar to the term and returns of the securities held in the BCI Canadian Money Market program. Therefore, the 15-year expected return of the BCI Canadian Money Market program is an appropriate proxy for the cost of leverage over the investment horizon. The difference is that for leverage it is a cost as opposed to an expected return as it is for money market securities. The 15-year expected return is used as it is consistent with the use of the long-term return forecasts that underpin this Application.

2023.1 RR BCUC.18.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

In response to BCOAPO IR 32.1 in the 2021 RRA proceeding, ICBC stated:

> **The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110% […]**

On pages 5A-1 to 5A-2 of Appendix 5A to the Application, ICBC states:

> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the**
>
> **Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.

Please explain how leverage may provide (i) enhanced portfolio returns and, (ii) under normal market conditions, add an additional source of liquidity.

Response:

Leverage can provide enhanced portfolio returns by allowing ICBC to use the borrowed funds to invest in assets that could generate returns over and above the cost of borrowing.

Introducing leverage into the investment portfolio also creates an additional source of liquidity for ICBC. By having established access to financial markets, ICBC can borrow to meet any immediate liquidity needs. Under certain circumstances, borrowing may be more preferential as it avoids having to sell higher returning assets or liquidating short-term fixed income investments required to maintain an adequate liquidity ratio.

2023.1 RR BCUC.18.3.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

In response to BCOAPO IR 32.1 in the 2021 RRA proceeding, ICBC stated:

> **The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110% […]**

On pages 5A-1 to 5A-2 of Appendix 5A to the Application, ICBC states:

> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

> **Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.**

Please explain whether leverage was included in the portfolio to increase returns or hedge risks.

Response:

Leverage was included primarily to add the potential for increased returns. It also offers some advantages in reducing liquidity risk while taking on some risks inherent in leverage. On balance, these risks are outweighed by the benefits of allowing some leverage in the portfolio.

2023.1 RR BCUC.18.3.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

In response to BCOAPO IR 32.1 in the 2021 RRA proceeding, ICBC stated:

> **The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110% […]**

On pages 5A-1 to 5A-2 of Appendix 5A to the Application, ICBC states:

> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

> **Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.**

Please explain what ICBC views as normal market conditions.

Response:

Normal market conditions would be characterized as those which provide adequate liquidity and access to financial markets without outsized movements in key metrics like prices or credit spreads. This would manifest as markets where there is sufficient supply and demand of public market securities such that transactions can occur in line with conditions that are routinely observed.

2023.1 RR BCUC.18.4

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-4, Appendix 5A, pp. 5A-1–5A-2, Appendix 5B, p. 5B-3; ICBC 2021 RRA, Exhibit B-8, BCOAPO IR 32.1
Leverage

On page 5-4 of the Application, ICBC states:

> **Leverage: An explicit allocation of leverage has been added to the portfolio, which currently consists of repurchase agreements using short term government securities. This may provide enhanced portfolio returns and, under normal market conditions, add an additional source of liquidity.**

In response to BCOAPO IR 32.1 in the 2021 RRA proceeding, ICBC stated:

> **The impact of leverage is captured in the calculation via the increase in the individual asset class weightings totaling 110% […]**

On pages 5A-1 to 5A-2 of Appendix 5A to the Application, ICBC states:

> **SIPP Appendix B has been updated to reflect additional pooled funds offered by BCI [British Columbia Investment Management Corporation] that have been approved by ICBC's Board of Directors and are eligible for investment, namely the Government Bond Fund and the Leveraged Bond Fund.**

On page 5B-3 of Appendix 5B to the Application, ICBC states:

> **Portfolio Leverage: ICBC's strategic asset allocation currently targets a 10% leverage ratio in the portfolio. For purposes of calculating returns, the cost of this leverage is taken to be equivalent to Money Market rates. Accordingly, the 15-year expected return of BCI's Canadian Money Market program of 2.4% is judged to be the best estimate of the forecasted cost of leverage over the investment horizon.**

Please explain whether the Leveraged Bond Fund represents all assets included in this class or if there are other assets included in this group.

Response:

The Leveraged Bond Fund does not represent all investments in the leverage asset class. While it is an eligible investment, leverage in ICBC's investment portfolio is largely achieved through repurchase agreements using government securities.

2023.1 RR BCUC.19.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp.5-8,5-9, Chapter 8, Appendix 8B, p. 8B-4
Yield on Capital Available for Rate Setting

On pages 5-8 to 5-9 of the Application, ICBC provides Figures 5.5 and 5.6 and states:

> **The Yield on Capital Available for Rate Setting for the first and second 12-month periods are 176 and 196 basis points higher than the second 12-month period in the previous filing, respectively. This increase is attributable largely to higher yields on fixed income investments generally as well as a shift in allocation toward higher yielding fixed income assets.**
>
> **The Yield on Capital Available for Rate Setting for the first 12-month period is 4.77% and for the second 12-month period is 4.97%. Calculations for the respective periods are shown below in Figures 5.5 and 5.6.**

Figure 5.5 – Yield on Capital Available for Rate Setting for the First 12-Month Period

Asset Class	Current Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	41.65	Current Money Market Yield at Cost	3.75	1.57
Fixed Income - Credit	21.22	Current Bond Portfolio Yield at Cost / Market	4.68	0.99
Equity	26.19	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.74
Real Estate	8.51	Current Real Estate Yield at Cost / Market	6.39	0.55
Infrastructure	2.43	Current Infrastructure Yield at Market	7.55	0.18
Total	**100.00**[1]			**5.03**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the first 12-month period[1]				**4.77**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.6 – Yield on Capital Available for Rate Setting for the Second 12-Month Period

Asset Class	Projected Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	36.75	Current Money Market Yield at Cost	3.75	1.38
Fixed Income - Credit	19.56	Current Bond Portfolio Yield at Cost / Market	4.68	0.92
Equity	28.09	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.87
Real Estate	9.91	Current Real Estate Yield at Cost / Market	6.39	0.63
Infrastructure	5.70	Current Infrastructure Yield at Market	7.55	0.43
Total	**100.00**[1]			**5.23**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the second 12-month period[1]				**4.97**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

On page 8B-4 of Appendix 8B, ICBC provides the annual management expense ratio (MER) from 2020 to 2022. The annual MER is 0.23 for year ended March 31, 2022.

As the leverage asset group relies on Canadian Money Market return forecast in the NMR, please clarify why the leverage asset group is not included in Yield on Capital Available for Rate Setting.

Response:

Please see the response to information request 2023.1 RR BCUC.19.1.1 regarding why leverage was not included in the formula for the Yield on Capital Available for Rate Setting.

2023.1 RR BCUC.19.1.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp.5-8,5-9, Chapter 8, Appendix 8B, p. 8B-4
Yield on Capital Available for Rate Setting

On pages 5-8 to 5-9 of the Application, ICBC provides Figures 5.5 and 5.6 and states:

> **The Yield on Capital Available for Rate Setting for the first and second 12-month periods are 176 and 196 basis points higher than the second 12-month period in the previous filing, respectively. This increase is attributable largely to higher yields on fixed income investments generally as well as a shift in allocation toward higher yielding fixed income assets.**
>
> **The Yield on Capital Available for Rate Setting for the first 12-month period is 4.77% and for the second 12-month period is 4.97%. Calculations for the respective periods are shown below in Figures 5.5 and 5.6.**

Figure 5.5 – Yield on Capital Available for Rate Setting for the First 12-Month Period

Asset Class	Current Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	41.65	Current Money Market Yield at Cost	3.75	1.57
Fixed Income - Credit	21.22	Current Bond Portfolio Yield at Cost / Market	4.68	0.99
Equity	26.19	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.74
Real Estate	8.51	Current Real Estate Yield at Cost / Market	6.39	0.55
Infrastructure	2.43	Current Infrastructure Yield at Market	7.55	0.18
Total	**100.00**[1]			**5.03**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the first 12-month period[1]				**4.77**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.6 – Yield on Capital Available for Rate Setting for the Second 12-Month Period

Asset Class	Projected Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	36.75	Current Money Market Yield at Cost	3.75	1.38
Fixed Income - Credit	19.56	Current Bond Portfolio Yield at Cost / Market	4.68	0.92
Equity	28.09	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.87
Real Estate	9.91	Current Real Estate Yield at Cost / Market	6.39	0.63
Infrastructure	5.70	Current Infrastructure Yield at Market	7.55	0.43
Total	**100.00**[1]			**5.23**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the second 12-month period[1]				**4.97**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

On page 8B-4 of Appendix 8B, ICBC provides the annual management expense ratio (MER) from 2020 to 2022. The annual MER is 0.23 for year ended March 31, 2022.

Please provide and explain the effect leverage would have on the yield and rate impact if it was included in Yield on Capital Available for Rate Setting.

Response:

Due to an oversight, leverage was not used in the calculations for the Yield on Capital Available for Rate Setting as shown in the Application, Chapter 5, Figures 5.4 and 5.5, and there was a small error in the equity yields. ICBC apologizes for this oversight and any inconvenience that this may have caused. However, as discussed below, the impact of these errors is below the materiality standard set out in the Application.

The tables below show the calculation for the Yield on Capital Available for Rate Setting inclusive of leverage for the two 12-month periods that constitute Policy Year (PY) 2023.

As stated in the October 28, 2021 Decision on the 2021 Revenue Requirements Application, the yield component of the Equities asset class in the Yield on Basic Equity (now known as Yield on Capital Available for Rate Setting) and the New Money Rate formulas is the weighted average of the BCI 15-year annualized total return for equities forecast. Accordingly, the equity yield in the tables below has been corrected from 6.65% for the two 12-month periods as presented in the Application, Chapter 5, Figures 5.5 and 5.6, to 6.7% and 6.8% respectively.

The overall effect of including leverage and the minor change in the equity yield in the calculation for the Yield on Capital Available for Rate Setting for the first 12-month period would be an increase of 27 bps from 4.77% to 5.04% and for the second 12-month period would be an increase of 34 bps from 4.97% to 5.31%. This results in a $12 million reduction to the required premium over the 24-month policy period, with $11 million pertaining to the inclusion of leverage in the calculation and about $1 million from updating the equity yield. This has a -0.2 percentage points impact on the actuarial indicated rate change and due to the application of the rate change floor, this would have no impact on the 0% proposed rate change.

As per the Application, Chapter 3, paragraph 53, the $12 million impact is below the materiality standard of $60.6 million over the 24-month policy period therefore ICBC is proposing no change to the Application.

Please see the response to information request 2023.1 RR BCUC.9.2.4, Attachment A – Sensitivity Summary for further discussion of all sensitivities and their impacts on the PY 2023 actuarial indicated rate change.

Figure 1 - Yield on Capital Available for Rate Setting for the First 12-Month Period Including Leverage

Asset Class	Weightings (%) including leverage	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	45.24	Current Fixed Income Liquidity Yield at Market	3.75	1.70
Fixed Income - Credit	23.04	Current Bond Portfolio Yield at Cost / Market	4.68	1.08
Equity	30.09	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.70	2.02
Real Estate	9.24	Current Real Estate Yield at Cost / Market	6.39	0.59
Infrastructure	2.64	Current Infrastructure Yield at Market	7.55	0.20
Leverage	-10.25		2.79	-0.29
Total	100.00			**5.29**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the First 12-Month Period [1]				**5.04**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding

Figure 2 - Yield on Capital Available for Rate Setting for the Second 12-Month Period Including Leverage

Asset Class	Weightings (%) including leverage	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	40.02	Current Fixed Income Liquidity Yield at Market	3.75	1.50
Fixed Income - Credit	21.30	Current Bond Portfolio Yield at Cost / Market	4.68	1.00
Equity	32.44	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.80	2.21
Real Estate	10.79	Current Real Estate Yield at Cost / Market	6.39	0.69
Infrastructure	6.20	Current Infrastructure Yield at Market	7.55	0.47
Leverage	-10.75		2.79	-0.30
Total	100.00			**5.56**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the Second 12-Month Period [1]				**5.31**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

2023.1 RR BCUC.19.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp.5-8,5-9, Chapter 8, Appendix 8B, p. 8B-4
Yield on Capital Available for Rate Setting

On pages 5-8 to 5-9 of the Application, ICBC provides Figures 5.5 and 5.6 and states:

> **The Yield on Capital Available for Rate Setting for the first and second 12-month periods are 176 and 196 basis points higher than the second 12-month period in the previous filing, respectively. This increase is attributable largely to higher yields on fixed income investments generally as well as a shift in allocation toward higher yielding fixed income assets.**
>
> **The Yield on Capital Available for Rate Setting for the first 12-month period is 4.77% and for the second 12-month period is 4.97%. Calculations for the respective periods are shown below in Figures 5.5 and 5.6.**

Figure 5.5 – Yield on Capital Available for Rate Setting for the First 12-Month Period

Asset Class	Current Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	41.65	Current Money Market Yield at Cost	3.75	1.57
Fixed Income - Credit	21.22	Current Bond Portfolio Yield at Cost / Market	4.68	0.99
Equity	26.19	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.74
Real Estate	8.51	Current Real Estate Yield at Cost / Market	6.39	0.55
Infrastructure	2.43	Current Infrastructure Yield at Market	7.55	0.18
Total	**100.00[1]**			**5.03**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the first 12-month period[1]				**4.77**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.6 – Yield on Capital Available for Rate Setting for the Second 12-Month Period

Asset Class	Projected Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	36.75	Current Money Market Yield at Cost	3.75	1.38
Fixed Income - Credit	19.56	Current Bond Portfolio Yield at Cost / Market	4.68	0.92
Equity	28.09	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.87
Real Estate	9.91	Current Real Estate Yield at Cost / Market	6.39	0.63
Infrastructure	5.70	Current Infrastructure Yield at Market	7.55	0.43
Total	**100.00[1]**			**5.23**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the second 12-month period[1]				**4.97**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

On page 8B-4 of Appendix 8B, ICBC provides the annual management expense ratio (MER) from 2020 to 2022. The annual MER is 0.23 for year ended March 31, 2022.

Given the Yield increase is attributable largely to higher yields on fixed income investments and to a shift in allocation toward higher yielding fixed income assets, please explain why Fixed Income – Liquidity and Fixed Income – Credit weighted yields decrease from the First 12-Month Period to the Second.

Response:

Please see the response to information request 2023.1 RR BCUC.19.1.1 regarding the updated figures for the Yield on Capital Available for Rate Setting for Policy Year (PY) 2023. The two 12-month period yields for PY 2023 should be 5.04% and 5.31% respectively. Compared to the second 12-month period from the previous filing, the PY 2023 Yield on Capital Available for Rate Setting for the first and second 12-month periods are 203 and 230 basis points higher.

Fixed Income – Liquidity and Fixed Income – Credit weighted yields decrease in PY 2023 from the first 12-month period to the second due to the continued transition of the investment portfolio to the long-term strategic asset mix. However, fixed income assets overall are still the largest contributor to the Yield on Capital Available for Rate Setting for the second 12-month period.

2023.1 RR BCUC.19.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, pp.5-8,5-9, Chapter 8, Appendix 8B, p. 8B-4
Yield on Capital Available for Rate Setting

On pages 5-8 to 5-9 of the Application, ICBC provides Figures 5.5 and 5.6 and states:

> **The Yield on Capital Available for Rate Setting for the first and second 12-month periods are 176 and 196 basis points higher than the second 12-month period in the previous filing, respectively. This increase is attributable largely to higher yields on fixed income investments generally as well as a shift in allocation toward higher yielding fixed income assets.**
>
> **The Yield on Capital Available for Rate Setting for the first 12-month period is 4.77% and for the second 12-month period is 4.97%. Calculations for the respective periods are shown below in Figures 5.5 and 5.6.**

Figure 5.5 – Yield on Capital Available for Rate Setting for the First 12-Month Period

Asset Class	Current Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
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Fixed Income - Credit	21.22	Current Bond Portfolio Yield at Cost / Market	4.68	0.99
Equity	26.19	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.74
Real Estate	8.51	Current Real Estate Yield at Cost / Market	6.39	0.55
Infrastructure	2.43	Current Infrastructure Yield at Market	7.55	0.18
Total	**100.00**[1]			**5.03**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the first 12-month period[1]				**4.77**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

Figure 5.6 – Yield on Capital Available for Rate Setting for the Second 12-Month Period

Asset Class	Projected Weightings (%)	Formula for Yield	Current Yields (%)	Weighted Yields (%)
Fixed Income - Liquidity	36.75	Current Money Market Yield at Cost	3.75	1.38
Fixed Income - Credit	19.56	Current Bond Portfolio Yield at Cost / Market	4.68	0.92
Equity	28.09	BCI 15-year weighted average return on ICBC equity assets (CAD)	6.65	1.87
Real Estate	9.91	Current Real Estate Yield at Cost / Market	6.39	0.63
Infrastructure	5.70	Current Infrastructure Yield at Market	7.55	0.43
Total	**100.00**[1]			**5.23**
Minus the Fees for Managing the Investment Portfolio				-0.26
Yield on Capital Available for Rate Setting for the second 12-month period[1]				**4.97**

[1] Differences between current weightings multiplied by actual yields and weighted yields are due to rounding.

On page 8B-4 of Appendix 8B, ICBC provides the annual management expense ratio (MER) from 2020 to 2022. The annual MER is 0.23 for year ended March 31, 2022.

Please explain how the ratio of fees for managing the investment portfolio increases from 0.23 as at March 31, 2022 to 0.26 in the Yield on Capital Available for Rate Setting. Please include a breakdown of expense ratios for the 0.26 percent.

Response:

The ratio of fees for managing the investment portfolio is referred to as the management expense ratio (MER) and is calculated by dividing the expenses by the market value of the assets. The MER increased to 0.26 as of June 30, 2022 from 0.23 on March 31, 2022 due to the decline in the market value of the investment portfolio. This decline was a result of increased market volatility due to rising interest rates and geopolitical events.

External Portfolios	Management Expense Ratio (MER)	
	31-Mar-22	30-Jun-22
Money Market and Canadian Bonds	0.07%	0.07%
Mortgages	0.12%	0.15%
Mortgage Fund	0.51%	0.54%
Mezzanine Debt	2.19%	2.08%
Private Debt	0.14%	0.09%
Canadian Equity	0.21%	0.21%
Global Equity	0.17%	0.18%
Private Equity	4.38%	2.98%
Real Estate	0.40%	0.28%
Real Estate Funds	1.13%	1.30%
Infrastructure	0.44%	0.43%
Investment Portfolio MER	**0.23%**	**0.26%**

2023.1 RR BCUC.20.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-1, Appendix 5B, p. 5B-1, Attachment 5B-1, p. 2; Bank of Canada Monetary Policy Report – January 2023,[12] pp. 2, 9
Expected Investment Performance

On page 5-1 of the Application, ICBC states:

> **Due to a shift in asset classes held in the portfolio, as well as changes in the expected return of each asset class, the New Money Rate and Yield on Capital Available for Rate Setting are higher for Policy Year (PY) 2023 than the equivalent investment yields for PY 2021. This means that ICBC is expected to generate higher investment returns, resulting in a favourable impact on rates. This favourable impact is in addition to the longer expected payout period for policyholder supplied funds under Enhanced Care, which enables ICBC to hold and invest premiums collected over a longer period of time.**

On page 5B-1 of Appendix 5B to the Application, ICBC states that: "The August 2022 edition reflects updates made to the expected return on assets to take into account the impacts of increased market volatility due to rising interest rates and geopolitical events."

On page 2 of Attachment 5B-1 - BCI Long-Term Capital Market Expectations Report – August 2022, BCI states: "The return expectations for each asset class are based on an updated economic outlook and data available as at June 30, 2022."

Page 2 of Bank of Canada Monetary Policy Report – January 2023 states in regard to the Global economy:

> **Growth is projected to slow in 2023 to roughly 2% as pent-up demand from the pandemic fades and the rise in interest rates slows activity. Growth is then expected to pick up to about 2½% in 2024, with monetary policy still restraining the level of activity.**

Page 9 of Bank of Canada Monetary Policy Report – January 2023 states in regard to the Canadian economy:

> **Economic growth is projected to slow at the end of 2022 and to stall through the middle of 2023. The tightening of monetary policy initially slowed housing activity followed by consumer demand for durables in the middle of 2022. The effects of the rise in interest rates are expected to broaden and moderate consumer spending on services as well as investment spending in 2023. Growth is then projected to pick up in late 2023.**

20.1 Please explain what information ICBC or BCI relied on when determining the market forecasts (i.e. 15-year return on fixed income, equity, real estate, infrastructure).

20.1.1 Please explain whether the methodology and/or source is different for each asset group.

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[12] **Bank of Canada, Monetary Policy Report – January 2023, retrieved February 9, 2023 from: https://www.bankofcanada.ca/wp-content/uploads/2023/01/mpr-2023-01-25.pdf**

Response:

20.1

BCI includes a wide range of information when compiling its long-term capital market assumptions including, but not limited to, consensus views on economic growth, inflation, interest rates, credit spreads, yields, credit ratings, foreign exchange rates and valuation ratios.

20.1.1

Several of the fundamental long-term building blocks for expected returns are similar among asset classes (e.g. GDP, inflation, interest rates, etc.), while others are specific to each asset class depending on their nature or geographic distribution (e.g. yield, leverage, borrowing costs, currency effects, credit ratings, etc.).

2023.1 RR BCUC.20.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-1, Appendix 5B, p. 5B-1, Attachment 5B-1, p. 2; Bank of Canada Monetary Policy Report – January 2023,[12] pp. 2, 9
Expected Investment Performance

On page 5-1 of the Application, ICBC states:

> **Due to a shift in asset classes held in the portfolio, as well as changes in the expected return of each asset class, the New Money Rate and Yield on Capital Available for Rate Setting are higher for Policy Year (PY) 2023 than the equivalent investment yields for PY 2021. This means that ICBC is expected to generate higher investment returns, resulting in a favourable impact on rates. This favourable impact is in addition to the longer expected payout period for policyholder supplied funds under Enhanced Care, which enables ICBC to hold and invest premiums collected over a longer period of time.**

On page 5B-1 of Appendix 5B to the Application, ICBC states that: "The August 2022 edition reflects updates made to the expected return on assets to take into account the impacts of increased market volatility due to rising interest rates and geopolitical events."

On page 2 of Attachment 5B-1 - BCI Long-Term Capital Market Expectations Report – August 2022, BCI states: "The return expectations for each asset class are based on an updated economic outlook and data available as at June 30, 2022."

Page 2 of Bank of Canada Monetary Policy Report – January 2023 states in regard to the Global economy:

> **Growth is projected to slow in 2023 to roughly 2% as pent-up demand from the pandemic fades and the rise in interest rates slows activity. Growth is then expected to pick up to about 2½% in 2024, with monetary policy still restraining the level of activity.**

Page 9 of Bank of Canada Monetary Policy Report – January 2023 states in regard to the Canadian economy:

> **Economic growth is projected to slow at the end of 2022 and to stall through the middle of 2023. The tightening of monetary policy initially slowed housing activity followed by consumer demand for durables in the middle of 2022. The effects of the rise in interest rates are expected to broaden and moderate consumer spending on services as well as investment spending in 2023. Growth is then projected to pick up in late 2023.**

Please explain whether BCI relies on macroeconomic factors, like economic growth, interest rates, inflations, etc. found in the Bank of Canada's Monetary Policy reports to forecast market returns. If so, please briefly explain the sources used and when the research was conducted.

[12] Bank of Canada, Monetary Policy Report – January 2023, retrieved February 9, 2023 from: https://www.bankofcanada.ca/wp-content/uploads/2023/01/mpr-2023-01-25.pdf

Response:

BCI considers many different sources and perspectives when creating and updating its economic assumptions, including the latest views of the Bank of Canada in their Monetary Policy Reports. Research is conducted in the weeks that lead up to the production of BCI's long-term capital market assumptions, which are typically updated annually.

2023.1 RR BCUC.20.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-1, Appendix 5B, p. 5B-1, Attachment 5B-1, p. 2; Bank of Canada Monetary Policy Report – January 2023,[12] pp. 2, 9
Expected Investment Performance

On page 5-1 of the Application, ICBC states:

> **Due to a shift in asset classes held in the portfolio, as well as changes in the expected return of each asset class, the New Money Rate and Yield on Capital Available for Rate Setting are higher for Policy Year (PY) 2023 than the equivalent investment yields for PY 2021. This means that ICBC is expected to generate higher investment returns, resulting in a favourable impact on rates. This favourable impact is in addition to the longer expected payout period for policyholder supplied funds under Enhanced Care, which enables ICBC to hold and invest premiums collected over a longer period of time.**

On page 5B-1 of Appendix 5B to the Application, ICBC states that: "The August 2022 edition reflects updates made to the expected return on assets to take into account the impacts of increased market volatility due to rising interest rates and geopolitical events."

On page 2 of Attachment 5B-1 - BCI Long-Term Capital Market Expectations Report – August 2022, BCI states: "The return expectations for each asset class are based on an updated economic outlook and data available as at June 30, 2022."

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Please explain how ICBC expects its investment portfolio to perform given the Bank of Canada's growth expectation for the Global and Canadian economies.

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[12] **Bank of Canada, Monetary Policy Report – January 2023, retrieved February 9, 2023 from: https://www.bankofcanada.ca/wp-content/uploads/2023/01/mpr-2023-01-25.pdf**

Response:

The expected long-term returns on ICBC's investment portfolio are not adjusted based on ongoing changes in the short-term growth outlook by the Bank of Canada. Nevertheless, under the Bank of Canada's current growth expectations, ICBC's investment portfolio may experience heightened volatility in the short term. The long-term performance is still expected to be in line with BCI's forecast.

2023.1 RR BCUC.20.3.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-1, Appendix 5B, p. 5B-1, Attachment 5B-1, p. 2; Bank of Canada Monetary Policy Report – January 2023,[12] pp. 2, 9
Expected Investment Performance

On page 5-1 of the Application, ICBC states:

> **Due to a shift in asset classes held in the portfolio, as well as changes in the expected return of each asset class, the New Money Rate and Yield on Capital Available for Rate Setting are higher for Policy Year (PY) 2023 than the equivalent investment yields for PY 2021. This means that ICBC is expected to generate higher investment returns, resulting in a favourable impact on rates. This favourable impact is in addition to the longer expected payout period for policyholder supplied funds under Enhanced Care, which enables ICBC to hold and invest premiums collected over a longer period of time.**

On page 5B-1 of Appendix 5B to the Application, ICBC states that: "The August 2022 edition reflects updates made to the expected return on assets to take into account the impacts of increased market volatility due to rising interest rates and geopolitical events."

On page 2 of Attachment 5B-1 - BCI Long-Term Capital Market Expectations Report – August 2022, BCI states: "The return expectations for each asset class are based on an updated economic outlook and data available as at June 30, 2022."

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> **Growth is projected to slow in 2023 to roughly 2% as pent-up demand from the pandemic fades and the rise in interest rates slows activity. Growth is then expected to pick up to about 2½% in 2024, with monetary policy still restraining the level of activity.**

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Please discuss if the Bank of Canada's growth expectations will change ICBC's investment strategy.

---

[12] **Bank of Canada, Monetary Policy Report – January 2023, retrieved February 9, 2023 from: https://www.bankofcanada.ca/wp-content/uploads/2023/01/mpr-2023-01-25.pdf**

Response:

ICBC has a long-term investment horizon and assesses its investment strategy with BCI staff regularly. As part of this process, BCI provides detailed economic scenario analysis, illustrating the potential implications to ICBC's portfolio under a broad range of economic and market outcomes (which would encompass the Bank of Canada's outlook).

2023.1 RR BCUC.21.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p. 8B-4; ICBC 2021 RRA, Exhibit B-8, ICBC response to BCUC IR 75.1
Management Expense Ratio

On page 8B-4 of Appendix 8B to the Application, ICBC provides the annual Management Expense Ratio (MER) from 2020 to 2022:

Figure 8B.3 – Annual Management Expense Ratios

(%)		Year Ended March 31		
		2022[1]	2021[1]	2020
Internal Portfolios	Money Market and Canadian Bonds	N/A	N/A	0.03
	Mortgages	N/A	N/A	0.02
	Real Estate	N/A	N/A	0.13
External Portfolios	Money Market and Canadian Bonds	0.07	0.06	N/A
	Mortgages[2]	0.12	0.03	N/A
	Mortgage Fund[2]	0.51	0.54	0.09
	Mezzanine Debt[2]	2.19	1.89	2.41
	Private Debt	0.14	N/A	N/A
	Canadian Equity	0.21	0.18	0.20
	Global Equity	0.17	0.18	0.17
	Private Equity	4.38	N/A	N/A
	Real Estate	0.40	0.30	N/A
	Real Estate Funds	1.13	0.99	0.85
	Infrastructure	0.44	1.88	2.18
Total		**0.23**	**0.20**	**0.15**

[1] All investments are now managed externally by the British Columbia Investment Management Corporation (BCI) or its subsidiary QuadReal Property Group.
[2] Effective May 1, 2021, Mortgages and Mezzanine Debt investments were combined into the Mortgages asset class. For greater clarity, the management expense ratio for each type of investment is shown.

In response to BCUC IR 75.1 in the 2021 RRA proceeding, ICBC stated with the following table:

> **The increase in the management expense ratio results from an increase in investment manager fees starting in fiscal year 2021/22, which is due to the transition to higher yielding asset classes that are more expensive to manage […]**

ICBC Investment Portfolio – Management Expenses For Year ending March 31							
(Total Costs $000s)	**2017/18 Actuals**	**2018/19 Actuals**	**2019/20 Actuals**	**2020/21 Outlook**	**2021/22 Forecast**	**2022/23 Forecast**	**2023/24 Forecast**
ICBC In-House Costs	5,871	4,908	3,708	1,709	1,266	1,266	1,266
Investment Manager Fees	6,844	12,140	21,763	25,881	45,300	47,300	49,300
BCI /QuadReal's Segregated Asset Management Fees and Costs for Legacy Assets	-	-	3,565	7,762	9,000	9,000	6,000
Total	**12,715**	**17,048**	**29,036**	**35,352**	**55,566**	**57,566**	**56,566**
Management Expense Ratio	**0.08%**	**0.10%**	**0.15%**	**0.20%[1]**	**0.28%[1]**	**0.32%[1]**	**0.33%[1]**

[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please explain the reasons for the increases for following asset classes' MERs from March 31, 2020 to March 31, 2022:

a. **Money Market and Canadian Bonds from 0.03 to 0.07;**
b. **Mortgages from 0.02 to 0.12;**
c. **Mortgage Funds 0.09 to 0.51; and**
d. **Real Estate Funds from 0.85 to 1.13;**

Response:

The increase in the MERs from March 31, 2020 to March 31, 2022 reflects the transition of most of ICBC's investment portfolio to BCI in November 2019.

a. Money Market and Canadian Bonds from 0.03 to 0.07: The increase is due to the segregated asset management fees that BCI charges on ICBC's legacy bond portfolio. As well, the MER includes investment management fees for the BCI money market and corporate bond funds.

b. Mortgages from 0.02 to 0.12: ICBC's segregated mortgage portfolio transitioned to QuadReal on April 1, 2021. The increase in MER reflects QuadReal's asset management fees as well as BCI's segregated asset management fee.

c. Mortgage fund from 0.09 to 0.51: ICBC originally invested in BCI's Fixed Term Mortgage Fund, which had lower fees as the investments were strictly Canadian fixed loan mortgages. However, in January 2021, BCI amalgamated all their various debt funds into one consolidated mortgage fund. The consolidated mortgage fund includes investments in fixed and variable mortgages, construction mortgages, mezzanine debt and US mortgages which are more expensive to manage. Due to this consolidation of investments, the MER increased.

d. Real Estate funds from 0.85 to 1.13: ICBC transitioned its real estate pooled funds to QuadReal in November 2019. Therefore, the MER for fiscal year ending March 31, 2020 primarily consisted of the external managers' management fees. Subsequently, the MER now includes the external managers' management fees as well as QuadReal's asset management fees and BCI's segregated asset management fees.

ICBC also commenced investing in QuadReal's real estate fund in January 2020, which also contributed to the increase in costs.

2023.1 RR BCUC.21.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p. 8B-4; ICBC 2021 RRA, Exhibit B-8, ICBC response to BCUC IR 75.1
Management Expense Ratio

On page 8B-4 of Appendix 8B to the Application, ICBC provides the annual Management Expense Ratio (MER) from 2020 to 2022:

Figure 8B.3 – Annual Management Expense Ratios

(%)		Year Ended March 31		
		2022[1]	2021[1]	2020
Internal Portfolios	Money Market and Canadian Bonds	N/A	N/A	0.03
	Mortgages	N/A	N/A	0.02
	Real Estate	N/A	N/A	0.13
External Portfolios	Money Market and Canadian Bonds	0.07	0.06	N/A
	Mortgages[2]	0.12	0.03	N/A
	Mortgage Fund[2]	0.51	0.54	0.09
	Mezzanine Debt[2]	2.19	1.89	2.41
	Private Debt	0.14	N/A	N/A
	Canadian Equity	0.21	0.18	0.20
	Global Equity	0.17	0.18	0.17
	Private Equity	4.38	N/A	N/A
	Real Estate	0.40	0.30	N/A
	Real Estate Funds	1.13	0.99	0.85
	Infrastructure	0.44	1.88	2.18
Total		**0.23**	**0.20**	**0.15**

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[2] Effective May 1, 2021, Mortgages and Mezzanine Debt investments were combined into the Mortgages asset class. For greater clarity, the management expense ratio for each type of investment is shown.

In response to BCUC IR 75.1 in the 2021 RRA proceeding, ICBC stated with the following table:

> **The increase in the management expense ratio results from an increase in investment manager fees starting in fiscal year 2021/22, which is due to the transition to higher yielding asset classes that are more expensive to manage […]**

ICBC Investment Portfolio – Management Expenses For Year ending March 31							
(Total Costs $000s)	**2017/18 Actuals**	**2018/19 Actuals**	**2019/20 Actuals**	**2020/21 Outlook**	**2021/22 Forecast**	**2022/23 Forecast**	**2023/24 Forecast**
ICBC In-House Costs	5,871	4,908	3,708	1,709	1,266	1,266	1,266
Investment Manager Fees	6,844	12,140	21,763	25,881	45,300	47,300	49,300
BCI /QuadReal's Segregated Asset Management Fees and Costs for Legacy Assets	-	-	3,565	7,762	9,000	9,000	6,000
Total	**12,715**	**17,048**	**29,036**	**35,352**	**55,566**	**57,566**	**56,566**
Management Expense Ratio	**0.08%**	**0.10%**	**0.15%**	**0.20%[1]**	**0.28%[1]**	**0.32%[1]**	**0.33%[1]**

[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please explain the reasons for Infrastructure's MERs to decrease from 2.18 percent in March 31, 2020 to 0.44 percent in March 31, 2022.

Response:

Prior to January 2021, ICBC's Infrastructure asset class consisted of two externally managed infrastructure pooled funds. Externally managed funds are more expensive, as well ICBC entered these investments during the start-up phase of the funds. As of December 31, 2020, ICBC sold their investments in the externally managed infrastructure funds and moved to the BCI Infrastructure and Renewable resources program. Infrastructure's MER decreased as a result of the move to the BCI Infrastructure and Renewable resources program. The decrease was primarily due to the fact that BCI's infrastructure program has been established for many years, is larger than the externally managed funds and that BCI internally manages over 80% of their infrastructure and renewable resources investments. BCI clients are able to benefit from the economies of scale and the lower cost of internally managed investments. ICBC also avoided acquisition costs on BCI's pre-existing investments by acquiring an interest in an established infrastructure and renewal resources portfolio.

2023.1 RR BCUC.21.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p. 8B-4; ICBC 2021 RRA, Exhibit B-8, ICBC response to BCUC IR 75.1
Management Expense Ratio

On page 8B-4 of Appendix 8B to the Application, ICBC provides the annual Management Expense Ratio (MER) from 2020 to 2022:

Figure 8B.3 – Annual Management Expense Ratios

(%)		Year Ended March 31		
		2022[1]	2021[1]	2020
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	Real Estate	N/A	N/A	0.13
External Portfolios	Money Market and Canadian Bonds	0.07	0.06	N/A
	Mortgages[2]	0.12	0.03	N/A
	Mortgage Fund[2]	0.51	0.54	0.09
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	Private Equity	4.38	N/A	N/A
	Real Estate	0.40	0.30	N/A
	Real Estate Funds	1.13	0.99	0.85
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Total		**0.23**	**0.20**	**0.15**

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> **The increase in the management expense ratio results from an increase in investment manager fees starting in fiscal year 2021/22, which is due to the transition to higher yielding asset classes that are more expensive to manage […]**

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[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please explain why Private Equity has a MER of 4.38 percent, what services are included in these expenses and what value added is included in these expenses.

Response:

ICBC began investing in private equities with BCI in May 2021. The MER for Private Equity is significantly higher at the commencement of the investment as start-up costs such as investment pursuit and acquisition costs are incurred at the beginning of the investing life cycle. These expenses also include compensation for BCI's private equities team, other BCI internal costs related to private equities, and third party legal and other professional services required to acquire new investments. Costs are expected to decrease as the private equity investments move into the maintenance stage of the investing life cycle. The value added of these costs expensed at the onset of the investment is that it allows BCI to ensure its due diligence in sourcing and obtaining quality investments for its clients and in doing so, providing good returns for clients.

2023.1 RR BCUC.21.4

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p. 8B-4; ICBC 2021 RRA, Exhibit B-8, ICBC response to BCUC IR 75.1
Management Expense Ratio

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Figure 8B.3 – Annual Management Expense Ratios

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[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please explain whether MERs are tied to ICBC's portfolio performance. Include any distinctions between internally and externally managed portfolios if different.

Response:

Yes, MERs are tied to ICBC's portfolio performance in two ways:

- **Asset Value**: MERs are expressed as a percentage of expenses divided by the value of the assets. Being the denominator, as the value of the assets rises, the MER will decrease as the expense is being divided by a larger number. The opposite is also true if the value of the assets were to fall.

- **Performance Based Compensation**: ICBC does not pay BCI performance-based compensation. However, BCI does allocate its costs and expenses back to its clients and as such, if BCI provides performance-based compensation to its employees, an equitable share of those expenses are allocated to ICBC. BCI also has the discretion to hire external managers for its pooled funds, and the fee arrangements, including any performance-based compensation, are not disclosed to its clients. All else equal, any additional performance fee would increase the overall expense and therefore the MER.

2023.1 RR BCUC.21.5

Reference: INVESTMENTS
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Total	**12,715**	**17,048**	**29,036**	**35,352**	**55,566**	**57,566**	**56,566**
Management Expense Ratio	**0.08%**	**0.10%**	**0.15%**	**0.20%[1]**	**0.28%[1]**	**0.32%[1]**	**0.33%[1]**

[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please provide the management expenses for 2021/22 actual, 2022/23 outlook, and 2023/24, 2024/25, and 2025/26 forecast in the same format as response to BCUC IR 75.1 in the 2021 RRA.

Response:

The table below shows the management expenses for 2021/22 actual, 2022/23 outlook and 2023/24, 2024/25 and 2025/26 forecast years. Similar to the response to information request 2021.2 RR BCUC.75.1 in the 2021 RRA proceeding, the management expense ratio is calculated for 2022/23 outlook and 2023/24, 2024/25, and 2025/26 forecast years using estimates of investment management costs and projections of assets under management provided by BCI. Investment manager fees increase as the allocation to illiquid investments increase. QuadReal and BCI segregated asset management fees decrease as the legacy assets move to BCI's pooled fund investments.

ICBC Investment Portfolio Management Expense - For Year Ending March 31					
(Total costs $000s)	**2021/22 Actuals**	**2022/23 Outlook**	**2023/24 Forecast**	**2024/25 Forecast**	**2025/26 Forecast**
ICBC In-house costs	1,129	1,142	1,150	1,150	1,150
Investment manager fees	39,510	43,500	53,890	58,600	59,900
BCI/ QuadReal's asset Segregated asset Management Fees and Costs for Legacy Assets	8,157	6,665	3,710	1,300	600
Total	**48,796**	**51,307**	**58,750**	**61,050**	**61,650**
Management Expense Ratio	**0.23%**	**0.26%**	**0.33%**	**0.35%**	**0.35%**

2023.1 RR BCUC.21.6

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p. 8B-4; ICBC 2021 RRA, Exhibit B-8, ICBC response to BCUC IR 75.1
Management Expense Ratio

On page 8B-4 of Appendix 8B to the Application, ICBC provides the annual Management Expense Ratio (MER) from 2020 to 2022:

Figure 8B.3 – Annual Management Expense Ratios

(%)		Year Ended March 31		
		2022[1]	2021[1]	2020
Internal Portfolios	Money Market and Canadian Bonds	N/A	N/A	0.03
	Mortgages	N/A	N/A	0.02
	Real Estate	N/A	N/A	0.13
External Portfolios	Money Market and Canadian Bonds	0.07	0.06	N/A
	Mortgages[2]	0.12	0.03	N/A
	Mortgage Fund[2]	0.51	0.54	0.09
	Mezzanine Debt[2]	2.19	1.89	2.41
	Private Debt	0.14	N/A	N/A
	Canadian Equity	0.21	0.18	0.20
	Global Equity	0.17	0.18	0.17
	Private Equity	4.38	N/A	N/A
	Real Estate	0.40	0.30	N/A
	Real Estate Funds	1.13	0.99	0.85
	Infrastructure	0.44	1.88	2.18
Total		**0.23**	**0.20**	**0.15**

[1] All investments are now managed externally by the British Columbia Investment Management Corporation (BCI) or its subsidiary QuadReal Property Group.
[2] Effective May 1, 2021, Mortgages and Mezzanine Debt investments were combined into the Mortgages asset class. For greater clarity, the management expense ratio for each type of investment is shown.

In response to BCUC IR 75.1 in the 2021 RRA proceeding, ICBC stated with the following table:

> **The increase in the management expense ratio results from an increase in investment manager fees starting in fiscal year 2021/22, which is due to the transition to higher yielding asset classes that are more expensive to manage […]**

ICBC Investment Portfolio – Management Expenses For Year ending March 31							
(Total Costs $000s)	**2017/18 Actuals**	**2018/19 Actuals**	**2019/20 Actuals**	**2020/21 Outlook**	**2021/22 Forecast**	**2022/23 Forecast**	**2023/24 Forecast**
ICBC In-House Costs	5,871	4,908	3,708	1,709	1,266	1,266	1,266
Investment Manager Fees	6,844	12,140	21,763	25,881	45,300	47,300	49,300
BCI /QuadReal's Segregated Asset Management Fees and Costs for Legacy Assets	-	-	3,565	7,762	9,000	9,000	6,000
Total	**12,715**	**17,048**	**29,036**	**35,352**	**55,566**	**57,566**	**56,566**
Management Expense Ratio	**0.08%**	**0.10%**	**0.15%**	**0.20%[1]**	**0.28%[1]**	**0.32%[1]**	**0.33%[1]**

[1] Management expense ratio is calculated for 2020/21 outlook, 2021/22 forecast, 2022/23 forecast, and 2023/24 forecast using estimates of investment management costs and projections of assets under management provided by BCI.

Please explain the variance between 2021/22 forecast MER of 0.28 percent and the 2021/22 actual MER of 0.23 percent.

Response:

The table below provides a breakdown of the variance between the 2021/22 forecast and 2021/22 actuals. The favourable variance between the 2021/22 forecast MER of 0.28% and the actual 2021/22 MER of 0.23% is mainly due to lower than forecasted expenses. The 2021/22 forecast numbers provided in the response to information request 2021.2 RR BCUC.75.1 used best estimates available at the time of the 2021 Revenue Requirements Proceeding. Actual expenses in fiscal year 2021/22 were lower primarily due to decreased third-party external investment manager fees.

Costs (in '000s)	**2021/22 Forecast**	**2021/22 Actuals**	**Variance**
ICBC In-House costs	1,266	1,129	137
Investment Manager Fees	45,300	39,510	5,790
BCI / QuadReal's Segregated Asset Management Fees and Costs for Legacy Assets	9,000	8,157	843
Total	**55,566**	**48,796**	**6,770**
Management Expense Ratio	**0.28%**	**0.23%**	**0.05%**

2023.1 RR BCUC.22.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	**2021**	**2020**
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

22.1 Please clarify whether One-Year Returns displayed in the table are net of expenses.

22.1.1 If not, please provide Figure 8B.5 – Annualized Returns net of expenses.

Response:

Yes, the annualized one-year returns shown in Figure 8B.5 are net of expenses.

2023.1 RR BCUC.22.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

Please explain what is used for the Real Estate Policy Benchmark and why Real Estate outperformed its benchmark in 2022.

Response:

The real estate policy benchmark consists of two parts:

- For the BCI real estate program assets (approximately 58% of assets as at March 31, 2022) a nominal benchmark of 6.8% annual return.

- For ICBC legacy real estate assets a benchmark of Canadian CPI + 4.25%.

Note that the nominal benchmark of 6.8% is not adjusted for inflation.

Performance for real estate in the year to March 31, 2022 was buoyed by strong returns and asset value growth in the second half of 2021, specifically led by strong momentum in the industrial and residential sectors. The ICBC legacy portfolio and real estate managers performed particularly well.

In an inflationary environment real estate has historically acted as a hedge as it dampens volatility and improves risk-adjusted returns in a multi-asset portfolio. Higher inflation is also generally positive for real estate income growth with an opportunity to recognize accelerating inflation in rent growth. Given that the benchmark for the BCI real estate program is a set nominal amount, it should be noted that an inflationary environment (all equal) would be positive for returns relative to a nominal benchmark.

2023.1 RR BCUC.22.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

Please explain what is used for the Infrastructure Policy Benchmark and why Infrastructure outperformed its benchmark in 2022 and 2020 but underperformed in 2021.

Response:

The current policy benchmark for the Infrastructure program is a nominal 6.3%. As a nominal benchmark of a set percentage, the performance is not reflective of the rise and fall of investment markets over the past three years.

For the year ended March 31, 2022, select infrastructure assets benefitted from a global recovery in trade while regulated assets and utilities continued to produce robust cash yields.

Support from broader markets for the year helped lift valuations, particularly investor demand for stable, income yield generating businesses.

The year ended March 31, 2021 corresponded with the first full year of the COVID-19 pandemic, which saw valuations fall. This was offset by stable cash yield, a typical feature of infrastructure businesses.

For the year ended March 31, 2020, the late fall off in valuations towards the end of the year due to the COVID-19 pandemic offset the otherwise strong operating performance of infrastructure assets held and the earlier demand for the purchase of infrastructure businesses.

2023.1 RR BCUC.22.4

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

Given that footnote 2 states, "One year returns for Corporate Bonds, Private Debt, [….] are not available as these asset classes commenced May 1, 2021, and therefore there is not a year's worth of returns yet," please explain why the Private Debt Portfolio shows a one-year return of 5.49 percent over a benchmark of 1.66 percent for the year ending March 31, 2022.

Response:

Although ICBC did not formally update the SIPP to include Private Debt until April 22, 2021, an initial investment was approved by ICBC's Board of Directors in December 2020. On January 4, 2021, ICBC invested in BCI's Principal Credit Fund in anticipation of formal adoption of Private Debt as an asset class effective May 1, 2021. The timing of the investment was necessitated by the opening date of the Principal Credit Fund largely being limited to the first business day of the calendar year.

The one-year returns provided for the Private Debt Portfolio and Policy Benchmark relate to the initial investment in the Principal Credit Fund. The table note regarding one-year returns not being available is meant to address the approved Private Debt program as a whole as opposed to the specific investment.

2023.1 RR BCUC.22.5-6

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

22.5 Please explain why ICBC commenced investing in Corporate Bonds, Private Debt, Emerging Markets and Private Equity. Please include in the response what these assets add to ICBC's investment portfolio.

22.6 Please explain why Corporate Bonds, Private Debt, Emerging Markets and Private Equity are appropriate for ICBC's Statement of Investment Policy and Procedure (SIPP).

Response:

Assets that are less liquid in nature or those that exhibit certain risks present an opportunity for ICBC to earn a higher return.

Accordingly, ICBC is reducing its position in more liquid, lower returning assets to capture this additional return by investing in Corporate Bonds, Private Debt, Emerging Markets and Private Equity. However, in the process of the gradual transition to these asset classes, ICBC still expects to maintain a strong liquidity position.

The new asset classes are appropriate for ICBC's SIPP, as among other things, the Enhanced Care model is expected to have longer and more predictable payment patterns. This supports the investment portfolio's ability to take on volatility and risk in exchange for higher long-term returns. In addition, private market investments tend to be less volatile than their public market equivalents, which could potentially help to offset some of the increased risk of volatility in the portfolio.

2023.1 RR BCUC.22.7

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

Please describe the type of investments that are included in Private Debt and Private Equity.

Response:

Private Debt is the investment in privately negotiated lending transactions involving private, and on occasion, public companies. Investments consist primarily of senior and subordinated debt. Public debt that is illiquid but offers the necessary yield may be included as well. Investments tend to be in companies that exhibit a low or sub-investment grade credit profile with a concomitant increased interest rate. An example of this might be senior loans that are provided to non-investment grade borrowers to finance acquisitions, leveraged buyouts and/or business expansions. They are generally secured by a first lien against the assets of the borrower. These investments are made through BCI either independently (by a BCI pooled fund), directly by BCI with other lending partners (co-investments), or by BCI through partnerships managed by external fund managers. Interest rates tend to be floating rather than fixed.

Private Equity is the investment in privately negotiated investment transactions involving private, and on occasion, public companies. Investments consist primarily of an equity position but may include debt or hybrid securities of investee companies. The focus tends to be on investments in established businesses, though venture capital and other areas are permitted. BCI makes private equity investments directly, or through limited partnerships managed by external fund managers. Direct investments can be made by BCI independently, or with other partners (co-sponsorships or co-investments). There is currently an ongoing initiative by BCI to bring more of this investing activity in-house.

2023.1 RR BCUC.22.8

Reference: INVESTMENTS
Exhibit B-1, Chapter 8, Appendix 8B, p.8B-6
Historical Investment Performance

In Appendix 8B of the Application, ICBC presents the investment performance for 2021/22. On page 8B-6, ICBC presents the following table:

Figure 8B.5 – Annualized Returns

Return (%)	One-Year Returns for the Year Ended March 31		
	2022	2021	2020
Total Plan	**2.89**	**11.19**	**1.40**
Total Plan Benchmark[1]	*1.74*	*10.87*	*1.98*
Money Market Portfolio	**0.74**	**0.00**	**2.14**
Money Market Policy Benchmark	*0.79*	*0.23*	*1.91*
Canadian Bond Portfolio	**(2.86)**	**2.64**	**4.00**
Canadian Bond Policy Benchmark	*(3.12)*	*2.44*	*3.89*
Corporate Bonds[2]	**N/A**	**N/A**	**N/A**
Corporate Bond Policy Benchmark	*N/A*	*N/A*	*N/A*
Mortgage Portfolio[3]	**3.47**	**5.42**	**2.84**
Mortgage Policy Benchmark	*(0.62)*	*3.77*	*4.23*
Mezzanine Debt	**N/A**	**8.99**	**(0.37)**
Mezzanine Debt Policy Benchmark	*N/A*	*3.52*	*4.77*
Private Debt Portfolio[2]	**5.49**	**N/A**	**N/A**
Private Debt Policy Benchmark	*1.66*	*N/A*	*N/A*
Canadian Equity Portfolio	**18.43**	**44.28**	**(13.03)**
Canadian Equity Policy Benchmark	*19.61*	*44.25*	*(14.21)*
Global Equity Portfolio	**8.27**	**38.64**	**(5.33)**
Global Equity Policy Benchmark	*8.34*	*35.86*	*(4.16)*
Emerging Markets Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Emerging Markets Policy Benchmark	*N/A*	*N/A*	*N/A*
Private Equity Portfolio[2]	**N/A**	**N/A**	**N/A**
Private Equity Policy Benchmark	*N/A*	*N/A*	*N/A*
Real Estate	**16.26**	**4.18**	**4.13**
Real Estate Policy Benchmark	*8.85*	*6.45*	*5.17*
Infrastructure	**14.30**	**3.28**	**11.96**
Infrastructure Policy Benchmark	*6.65*	*6.45*	*5.17*

[1] Benchmarks are listed in the SIPP for the relevant year.
[2] One year returns for Corporate Bonds, Private Debt, Emerging Markets and Private Equity are not available as these asset classes commenced May 1, 2021 and therefore there is not a year's worth of returns yet.
[3] Mezzanine Debt asset class was combined with Mortgages as of May 1, 2021.

22.8 Please confirm, or explain otherwise, whether ICBC invests in cryptocurrency.

22.8.1 If confirmed, please explain how cryptocurrency investment fits within ICBC's SIPP and risk tolerance.

22.8.2 If not confirmed, please explain whether ICBC's current SIPP and risk tolerance would allow or prohibit cryptocurrency investments.

Response:

No, ICBC does not invest in cryptocurrency as it is not listed as a permissible investment under ICBC's current SIPP.

2023.1 RR BCUC.23.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-2; ICBC 2021 RRA, Exhibit B-1, p. 5-3, Exhibit B-5, ICBC's response to BCUC IR 33.6
Statement of Investment Policy and Procedure (SIPP)

On page 5-2 of the Application, ICBC states:

> **The SIPP dated January 27, 2022 (January 2022 SIPP) is provided in Appendix 5A. Changes to the SIPP in comparison to the one dated April 22, 2021, filed as part of the 2021 Revenue Requirements Proceeding are described, and a blacklined version of the January 2022 SIPP showing the changes is provided.**

On page 5-3 of Exhibit B-1 in the 2021 RRA, ICBC stated:

> **The October 2020 SIPP is provided in Appendix 5A. Changes to the SIPP in comparison to the June 2018 SIPP that was filed as part of the 2019 RRA are described, and a blacklined version of the October 2020 SIPP showing the changes is provided.**

In the response to BCUC IR 33.6 in the 2021 RRA proceeding, ICBC stated:

> **The change to ICBC's risk tolerance of investments is not reflected in the October 2020 SIPP. The investment strategy review discussed in the Application, Chapter 5, Section E has been ongoing throughout 2020 and the new asset mix transition schedule was approved in January 2021. ICBC expects to recommend changes to the SIPP to ICBC's Board of Directors in April 2021 […]**

Please provide a blacklined version of the April 22, 2021 SIPP showing the changes from the October 2020 SIPP provided in the 2021 RRA.

Response:

Please see Attachment A – <u>Blacklined Statement of Investment Policy and Procedures Dated April 22, 2021</u>.

2023.1 RR BCUC.23.1 – Attachment A – Blacklined Statement of Investment Policy and Procedures Dated April 22, 2021

INSURANCE CORPORATION OF BRITISH COLUMBIA

STATEMENT OF INVESTMENT

POLICY AND PROCEDURES

~~October 29, 2020~~April 22, 2021

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INSURANCE CORPORATION OF BRITISH COLUMBIA

Statement of Investment Policy and Procedures

1 PURPOSE

The purpose of this Statement of Investment Policy and Procedures (the "Statement" or "SIPP") is to establish guidelines which will ensure ICBC's assets are managed prudently. The Statement will establish eligible investments, asset allocation ranges and the discretion given to fund managers, and consequently dictate the portfolio risk return profile.

2 CORPORATE LIABILITY AND RISK PROFILE

ICBC (the "Corporation" or "ICBC") is a Crown corporation offering compulsory basic automobile insurance and optional extension insurance.

As of ~~March~~December 31, ~~2019~~2020, ICBC's liabilities were profiled as follows:

	Liabilities ($000)	Duration in Years
Basic	12,~~022,270~~761,237	2.~~58~~71
Optional	~~5,234,051~~6,920,747	~~2.93~~3.23
Total	~~17,256,321~~19,681,984	2.~~68~~88

~~For the purposes of prudence and efficiency,~~ ICBC maintains one investment portfolio for both Basic and Optional insurance businesses ~~since the duration of the liabilities for each respective business is similar.~~for the purposes of operational efficiency and prudence. Like other insurers, ICBC's liabilities are subject to inflation risk and can be sensitive to price increases. ICBC ~~has~~can also have significant cash needs due to ~~the~~ volatility of claims payments. However, the relative predictability and volume of premium cash flows considerably reduce ICBC's cash flow risks.

Enhanced Care Insurance

The implementation of Enhanced Care Coverage Basic Insurance is expected to result in a longer average duration profile for Basic claims liabilities and less volatility in ICBC's operational cash requirements. This transition of ICBC's corporate liability profile is expected to occur gradually, over multiple years, as legacy tort claims are settled and no-fault liabilities are incurred. During this transition period, ICBC is expected to experience significant negative operational cash flows due to the payout of legacy claims settlements requiring liquidity from the ICBC Investment Fund.

ICBC Risk Tolerance Statement

The Risk Tolerance Statement formalizes the Board of Director's tolerance for risk related to its investment portfolio. The statement below helps to specify how ICBC Management, British Columbia Investment Management Corporation ("BCI") and the Board of Directors will monitor the ICBC Investment Fund to ensure it remains within an acceptable level of risk.

"ICBC's prime investment objective is to maintain sufficient assets and liquidity to meet insurance claims obligations while delivering an investment return within prudent investment parameters. In accordance with this objective, the investment portfolio should hold sufficient liquid assets to withstand a stressed financial market or insurance claims environment by maintaining a Liquidity Coverage Ratio of at least 1.5x under either scenario. If the portfolio's Liquidity Coverage Ratio falls below 1.5x there will be an immediate reassessment of the investment portfolio's strategic asset mix. Otherwise, the investment portfolio will be managed in accordance with the Statement of Investment Policy and Procedures."

The Liquidity Coverage Ratio will be reported to the Investment Committee by BCI in the Investment Risk Report.

3 REGULATORY FRAMEWORK

The legislative framework with respect to ICBC's obligations and responsibilities in the management of its investment portfolio is based on the "prudent person rule". This general prudent person standard is set out in section 492 of the *Insurance Companies Act* (Canada). This standard requires ICBC to make investments for its insurance business in the manner that "a reasonable and prudent person would apply in respect of a portfolio of investments to avoid undue risk of loss and to obtain a reasonable return".

The specific statutory framework and asset class limits with respect to ICBC's investments are outlined in Section 29 of the *Insurance Corporation Act* (British Columbia) and Section 2 of the Application of Legislation Regulation, BC Reg. 322/2003 deposited.

The regulatory asset class limits applicable to ICBC's Optional insurance business are as follows:

1. real estate investments are limited to 10% of total assets, as that term is defined in the Investment Limits (Insurance Companies) Regulations, SOR/2001-396;

2. the value of participating shares or other ownership interests in unincorporated businesses cannot exceed 25% of total assets;

3. investments in (1) and (2) in the aggregate cannot exceed 35% of assets; and

4. commercial and consumer lending cannot exceed 5% of total assets.

It should be noted that this Statement has been developed in consideration of the limits established by the legislative framework. For clarity, while ICBC maintains one investment portfolio for the purposes of operational efficiency and prudence, these limits shall be adhered to in respect of the ~~entire investment portfolio (i.e., the sum of both~~Optional insurance business for the purposes of determining actuarial discount rates and setting insurance rates. Accordingly, the strategic asset mix weighting for the Basic- and Optional-backing assets~~).~~ are provided in Appendix A.

4 ROLES AND RESPONSIBILITIES

1. ICBC Board of Directors

Under Corporate By-Laws, the Board of Directors has the responsibilities to (a) define and control strategies, policies and limitations related to the investment of the Corporation's funds, (b) exercise voting rights attached to corporate securities, and (c) provide for the custody of assets, registration of securities, and disposition of investments. The execution of most of these responsibilities has been delegated to the ICBC Investment Committee of the Board of Directors, ~~the British Columbia Investment Management Corporation ("BCI"),~~, and ICBC Management. The Board of Directors still retains responsibility for major changes to investment policies and procedures.

2. ICBC Investment Committee

The Investment Committee is responsible for recommending investment policies and procedures to the Board of Directors, ensuring investments are managed in compliance with the policies, and monitoring performance.

These responsibilities include making recommendations to the Board of Directors regarding:

a) asset allocation parameters (including tactical asset allocation ranges);

b) risk management parameters (e.g., benchmarks);

c) eligible investments (e.g., eligible BCI funds for investment); and

d) external investment management services.

3. BCI

BCI acts as an agent for investment of ICBC, and is responsible for providing all required day-to-day investment management services pursuant to the Funds Management Agreement dated November 1, 2019 between ICBC and BCI (the "**FMA**"), the First Additional Services Agreement dated November 1, 2019 between ICBC and BCI (the "**ASA**" and together with the FMA, the "**BCI Agreements**").

BCI has the following responsibilities:

a) invests or arranges for the investment of ICBC's assets and ensures ongoing compliance with this Statement;

b) collaborates with ICBC Management in the development of investment policies, procedures, and strategies for consideration by the Investment Committee;

c) recommends asset allocation parameters (including the strategic asset mix and tactical asset allocation ranges) to the Investment Committee;

d) rebalances the portfolio and completes tactical asset allocations within permitted ranges;

e) hires and manages contract arrangements with the custodian and other external providers of related services (e.g., external investment managers, data service providers, etc.) on behalf of ICBC;

f) monitors the activity of external investment managers (including ICBC's legacy external investment managers) and reports on ~~external~~ investment manager performance to the Investment Committee;

g) provides performance measurement services and fulfills all reporting requirements outlined in Section 9 of this Statement;

h) attends Investment Committee meetings at the request of the Investment Committee;

i) receives direction from ICBC Management regarding (i) the movement of funds between ICBC and BCI in respect of the Corporations' operational requirements and (ii) changes to the ICBC payment plan receivable;

j) arranges securities lending services; and

k) perform such other duties and provide such other services required to be performed or provided by BCI under the BCI Agreements and any other agreements for Additional Services (as defined in the FMA) entered into between ICBC and BCI from time to time.

4. ICBC Management

ICBC Management is responsible for providing investment advice, policy recommendations, and other information required by the Board of Directors and Investment Committee to discharge their responsibilities, and may work in collaboration with BCI or other external service providers in development of such information. Management is also responsible for ongoing governance and oversight over BCI, and ensuring that procedures are in place to confirm that BCI remains in compliance with this Statement.

ICBC Management has the following responsibilities:

a) recommends investment policies and procedures to the Investment Committee;

b) recommends asset allocation parameters (including the strategic asset mix and tactical asset allocation ranges) to the Investment Committee;

c) recommends eligible investments from among BCI's fund offerings to the Investment Committee;

d) ensures policy compliance, investment performance, and external management fees are monitored and reported to the Investment Committee;

e) recommends the termination of ICBC's legacy external investment managers to the Investment Committee;

f) with respect to ICBC's legacy assets (i.e., external funds, mortgages, real estate), authorize and provide instructions to BCI regarding any dispositions and subsequent reinvestment of those assets and the termination of legacy external investment managers; and

~~g) advises BCI of changes to the ICBC payment plan receivable on a monthly basis; and~~

~~h)~~g) ensures adequate cash flows to meet the Corporation's payment obligations.

5. External Investment Managers

ICBC utilizes external investment management services for certain portfolio strategies. For clarity, the external investment managers (other than BCI and through BCI, its affiliate, QuadReal Property Group Limited Partnership ("**QuadReal**")) that continue to manage ICBC assets upon the effective date of the transition of day-to-day investment management responsibilities to BCI are referred to as the "legacy external investment managers". For clarity,

a) all other references to external managers include BCI and to externally managed funds includes funds managed by BCI; and

b) external investment managers specifically exclude existing property managers and mortgage loan servicers.

The legacy external investment managers have the following responsibilities:

a) select securities within each permitted asset class for the portion of the portfolio allocated to the manager, subject to applicable legislation and to any constraints or directives within this Statement or established by the ICBC Investment Committee;

b) participate in a review of this Statement when requested by the Investment Committee;

c) provide a Statement of Investment Policy and Goals for any pooled fund investments;

d) provide quarterly performance reports;

e) inform ICBC Management and BCI of any element of the Statement or any other item that could prevent the achievement of the mandate objectives, and obtain prior approval from ICBC Management to materially deviate from the Statement;

f) inform ICBC Management and BCI of any changes in ownership of the firm or changes in key personnel, investment process, or style; and

g) inform ICBC Management and BCI if any of the investments fall outside of the investment constraints as a result of the Statement or changes to the Statement or applicable legislation.

6. Custodian

The custodian has the following responsibilities:

a) fulfills all their duties as outlined in their service agreement; and

b) fulfills the regular duties of a custodian as required by law.

5 CONFLICT OF INTEREST

All actual, potential, or perceived conflicts of interest between all parties associated with the investment of insurance assets, including officers, directors, designated employees, employees or agents of ICBC, but excluding BCI and external managers retained by BCI, shall be disclosed to the Investment Committee before any decision regarding the specific transactions are completed. If a conflict of interest arises, the party shall disclose such a conflict to the Chair of the Investment Committee or in the Chair's absence, the acting Chair. The party must be excluded from participating in any discussion or decision related to the area of conflict.

The Secretary of the Investment Committee will be responsible for recording the declaration of conflict and will advise the Board of Directors of the details of the conflict.

Guidance on what constitutes conflicts of interest will be provided by:

a. Section 2.04 of the Corporate By-Law No. 9 dated July 28, 2016 of the Insurance Corporation of British Columbia; and

~~b. The Insurance Corporation of British Columbia Investment Division Code of Conduct dated January 25, 2018 for designated employees; and~~

~~c.~~b. The Insurance Corporation of British Columbia's Code of Ethics for officers and employees of ICBC.

BCI and external managers retained by BCI shall not be subject to the above provisions. All actual, potential, or perceived conflicts of interest:

~~d.~~c. with respect to BCI and its officers and employees shall be governed by BCI's *Code of Ethics & Professional Conduct*; and

~~e.~~d. with respect to external managers retained by BCI shall be governed by the CFA Institute's *Code of Ethics and Standards of Professional Conduct*.

6 ASSET ALLOCATION

Strategic Asset Mix

The strategic asset mix is used to set the total return performance benchmark for the portfolio.

It establishes the long-term combination of asset classes normally split into three major groups categorized as fixed income, equities, and real assets. The broad fixed income category includes all interest-bearing instruments ~~like bonds, mortgages, mezzanine debt~~

~~and~~ , but for the purposes of risk monitoring has been categorized into two sub-groups as liquidity and credit. Liquid fixed income includes money market instruments and highly liquid bonds, while fixed income credit includes corporate bonds, private debt and mortgages. The equity category includes investments exhibiting elements of participation in ownership of companies like common stocks and private equity. The real assets category includes investments exhibiting elements of participation in ownership of physical assets like infrastructure and real estate.

The ~~optimal~~ strategic asset mix is determined ~~based on expected rate~~in consideration of ~~return for each asset class for the forecasting period and their associated range of returns expressed in standard deviations. Liquidity~~liquidity, risk constraints, and cash ~~flow considerations are also incorporated~~flows in order to meet the long-term investment objectives of the ~~determination~~Fund.

Leverage is used to satisfy the ICBC receivables program. The level of leverage in the strategic asset mix is approximately the historical value of the ICBC payment plan receivable.

Asset Class	**Strategic Mix**
Fixed Income Assets	**55%**
Money Market	2%
Government Bonds	25%
Corporate Bonds	12%
Private Debt	10%
Mortgages	6%
Equity Assets	**25%**
Global Equity	13%
Emerging Markets Equity	2%
Private Equity	10%
Real Assets	**30%**
Real Estate	15%
Infrastructure	15%
Sub Total	**110%**
Portfolio Leverage	-10%
Total Portfolio	**100%**

Tactical Asset Mix

~~Tactical~~The tactical asset mix focuses on short-term asset allocations that attempt to increase investment return or manage risk through opportunistic shifts in asset weightings. Since tactical asset allocation can either add or detract from the overall strategic asset mix return, the extent of tactical asset mix decisions are limited by the following ranges. These ranges are set in consideration of the overall financial strength of ICBC and its sensitivity to negative or positive investment returns.

~~Asset Mix Ranges[1]~~

~~Asset Class~~	~~Tactical Minimum %~~	~~Strategic Mix %~~	~~Tactical Maximum %~~
~~**Fixed Income**~~	~~**62.0**~~	~~**67.0**~~	~~**72.0**~~
~~**Money Market**~~	~~**0.0**~~	~~**1.0**~~	~~**5.0**~~
~~**Canadian Bonds**~~	~~**45.0**~~	~~**52.0**~~	~~**59.0**~~
~~**Mortgages**~~	~~**8.5**~~	~~**11.5**~~	~~**14.5**~~
~~**Mezzanine Debt**~~	~~**1.5**~~	~~**2.5**~~	~~**3.5**~~
~~**Equity**~~	~~**20.0**~~	~~**23.0**~~	~~**26.0**~~
~~**Canadian Equities**~~	~~**6.0**~~	~~**8.0**~~	~~**10.0**~~
~~Large Cap~~	~~5.0~~	~~7.0~~	~~9.0~~
~~Small Cap~~	~~0.0~~	~~1.0~~	~~2.0~~
~~**Global Equities**~~	~~**13.0**~~	~~**15.0**~~	~~**17.0**~~
~~Large Cap~~	~~10.5~~	~~12.5~~	~~14.5~~
~~Small Cap~~	~~0.5~~	~~1.5~~	~~2.5~~
~~Emerging Market~~	~~0.0~~	~~1.0~~	~~2.0~~
~~**Real Assets**~~	~~**8.0**~~	~~**10.0**~~	~~**12.0**~~
~~Real Estate~~	~~6.0~~	~~8.0~~	~~10.0~~
~~Infrastructure~~	~~1.0~~	~~2.0~~	~~3.0~~

~~[1] Allocations to~~ ICBC recognizes the difficulty in fully funding the long-term allocations in illiquid asset classes ~~(i.e., mortgages, mezzanine debt, real estate~~. As a temporary measure, the Strategic Asset Mix will track the mandate at a given time and ~~infrastructure)~~will adjust each year until such time as the fully funded long-term mandates are ~~permitted to~~ achieved. The Asset Mix Transition Schedule, showing intended interim asset allocation targets, is shown in Appendix A and should be ~~below long-term tactical minimums~~reviewed annually as implementation progresses, and adjusted as required.

Tactical ranges applicable during the transition mix will be reviewed and updated annually.

Benchmark weights shall be set in alignment with funded allocations in respect~~investment periods~~ of the illiquid asset classes, up to the long-term strategic mix targets. Over or under allocations to these asset classes – and the associated ~~funds. The transition schedule contained in Appendix A represents Management's estimate~~benchmark weights – will be invested by BCI in accordance with BCI's internal proxy asset guidelines.

Due to the significant asset mix transitions effective May 1, 2021, benchmark weights will be set to actual portfolio allocations for ~~the pace~~a maximum transitional period of ~~implementation~~ five months. The allocation may temporarily be outside of the ~~target strategic asset mix.~~

policy range during the transitional period.

7 INVESTMENT RISK

Diversification of investment risk between asset classes is provided through the asset allocation guidelines set forth in the previous section.

Tactical Asset Mix - May 1, 2021 to March 31, 2022			
Asset Class	**Tactical Minimum**	**Strategic Target**	**Tactical Maximum**
Fixed Income - Liquidity	**46.0%**	**50.0%**	**58.0%**
Money Market	0.0%	5.0%	10.0%
Short Bonds (segregated)	41.0%	45.0%	53.0%
Government Bonds	-	-	-
Fixed Income - Credit	**17.0%**	**20.0%**	**23.0%**
Corporate Bonds	7.5%	9.5%	11.5%
Private Debt	0.0%	0.5%	2.5%
Mortgages[1]	6.0%	10.0%	13.0%
Equity Assets	**22.0%**	**30.0%**	**33.0%**
Canadian Equity	2.0%	4.0%	6.0%
Global Equity	15.5%	23.5%	27.5%
Emerging Markets Equity	0.0%	2.0%	4.0%
Private Equity	0.0%	0.5%	2.5%
Real Assets	**5.0%**	**10.0%**	**14.0%**
Real Estate	4.0%	8.0%	12.0%
Infrastructure	0.0%	2.0%	5.0%
Sub Total	**100%**	**110%**	**115%**
Portfolio Leverage	0%	-10%	-15%
Total Portfolio	**100%**	**100%**	**100%**

- Investment risk guidelines within each asset class are set out in the definitions of eligible investments.

[1] Mortgages asset class includes Mezzanine Debt.

8 RETURN OBJECTIVES

The return objectives for ICBC's investment portfolio is to achieve superior investment returns through management of its assets subject to level of risk deemed appropriate by the Statement.

ICBC will measure individual asset categories against the appropriate index with added excess returns. Measurement will be assessed net of associated management fees over four-year moving periods.

Below is a list of the appropriate benchmarks for each asset class and the expected incremental return for active management. These following benchmarks are referred to herein as the "Index".

ASSET CLASS ~~BENCHMARK~~	**~~BENCHMARK~~SUB – CATERGORIES**	**BENCHMARK~~TARGET EXCESS RETURN AFTER FEES~~**
Fixed Income – Liquidity		
Money Market	CAD~~FTSE Canada 91-day T-Bill Index~~	FTSE Canada 91-day T-Bill Index~~N/A~~
	USD	Secured Overnight Financing Rate (SOFR)
~~Canadian~~**Short Bonds**	~~67%~~ Short Bonds~~FTSE Canada Short term Overall Bond Index +~~ ~~33% FTSE Canada Mid Term Overall Bond Index~~	FTSE Canada Short term Overall Bond Index~~+15 basis points~~
	Legacy Mid Bonds Investments	FTSE Canada Mid term Overall Bond Index
Government Bonds		FTSE Canada All Government Bond Index
Fixed Income – Credit		

Corporate Bonds		50 per cent Investment Grade: Bank of America Merrill Lynch US Corporate Index (CAD Hedged) *Plus* 50 per cent High Yield: Bank of America Merrill Lynch BB-B US Cash Pay High Yield Constrained Index (CAD Hedged)
Private Debt		S&P/LSTA U.S. Leveraged Loan 100 Index (CAD Hedged)
Mortgages	BCI Program	ICE Bank of America Merrill Lynch 1-3 Year Canada + 270 bps
~~Mortgages~~	Legacy Fixed Term Investments~~FTSE Canada Short Term Bond Index + 100 basis points~~	FTSE Canada Short Term Bond Index + 100 basis points~~N/A~~
~~Mezzanine Debt~~	Legacy Mezzanine Investments~~ICE BAML 1-3 Year U.S. Corporate/Government Index + 200 basis points (hedged to CAD)~~	ICE BAML 1-3 Year U.S. Corporate/Government Index + 200 basis points (hedged to CAD)~~N/A~~
Equities		
Canadian Equities	~~S&P/TSX 10% Capped Composite Index~~Large Cap	~~+75 basis points~~S&P/TSX Capped Composite Index
	Legacy Small Cap Investments	S&P/TSX Small Cap Index
Global Equities	~~MSCI World Index Ex Canada~~ Large Cap	~~+15 basis points~~MSCI World Ex-Canada Net Index
	Legacy Small Cap Investments	MSCI World Small Cap Net Index

Emerging Markets Equities		MSCI Emerging Markets Net Index
Private Equity		MSCI All Country World Net Index plus 200 basis points
Real Assets		
Real Estate	BCI Program	6.8% Nominal
~~Real Estate~~	~~Canadian CPI + 4.25%~~Legacy Investments	Canadian CPI + 4.25%~~N/A~~
Infrastructure	~~Canadian CPI + 4.25%~~	~~N/A~~6.3% Nominal

~~The total fund investment return will be expected to exceed the weighted average of benchmark returns for the strategic asset mix plus an excess return over four years, net of management fees and operating expenses, of 0.1605% effective June 30, 2021 on a go forward basis.~~

The excess return objective for Short Bonds is 10 basis points. All other excess return objectives are as per BCI's pooled fund policies.

For performance measurement purposes, the benchmark proportion within asset classes will be set to actual to account for the legacy investments.

9 PERFORMANCE MEASUREMENT AND REPORTING

Performance Measurement

Investment returns will be reported to the Investment Committee on a quarterly basis. As a general rule, investments should be priced using market values derived from independent pricing sources in accordance with standard industry practices, and returns determined using time-weighted rates of return.

Private assets that are not regularly traded (e.g., private equity and infrastructure) shall be valued at least annually, in accordance with the valuation policies established by the managers and standard industry practices, and returns, will also be calculated using internal rates of return.

Reporting

BCI will provide ICBC with reports as outlined in the following table:

Report	Frequency
Asset Allocation	Weekly
Performance Report	Monthly; Quarterly

Investment Risk Report	~~At least annually, and to the extent BCI is able, semi~~Semi-annually
Investment Strategy Report	Quarterly
Fee Statement	Quarterly
Client Investment Fee Outlook	Annually

Performance reports will include the following information:

- market values and share of overall portfolio of individual asset classes;
- quarterly, annual, and longer-term returns for the total portfolio, individual funds, and performance benchmarks;
- discussion of performance at the total portfolio and asset class levels;
- sources / uses of funds;
- contribution to returns analysis;
- attribution analysis for liquid asset classes;
- comparison of asset class performance with manager universes; and
- a certificate of attestation of compliance with this Statement, and compliance with BCI's internal pooled fund policies.

For clarity, the performance reports will capture all ICBC investment assets (i.e., BCI-managed assets and ICBC's legacy assets~~), though not all measures will be available immediately following the transition to BCI.~~).

BCI shall provide ICBC with the information reasonably requested to conduct its evaluation of legacy external investment managers provided for in this Statement pursuant to the ASA.

BCI will also provide ICBC with additional reports and information as may be reasonably requested from time to time.

10 FUND MANAGEMENT STRUCTURE AND INVESTMENT MANAGER MANDATES

Manager Structure

The ICBC Investment Committee has adopted a diversified manager structure which employs a mix of active and passive styles. Active management has been adopted for a portion of assets because it provides the opportunity to outperform market indices over the long run. Passive management, in the form of index or enhanced index mandates, has been adopted for a portion of the assets because it minimizes the risk of underperformance relative to a benchmark index ~~and~~, is less expensive than active management~~.~~ and facilitates allocation changes (e.g., rebalancing and transitions). Specialist managers are used where there is a potential added value benefit.

Transition to BCI

Approval of the Investment Committee is required to terminate legacy external investment managers. The Investment Committee shall also approve any BCI pooled fund into which ICBC assets can be invested. A schedule of approved eligible BCI pooled funds is maintained in Appendix B. ICBC Management shall authorize legacy external investment manager dispositions and reinvestment into BCI funds, including the date of disposition and how cash and/or securities are moved between the legacy fund and the target BCI fund.

Decisions in respect of dispositions of ICBC's legacy direct mortgage and real estate assets and capital expenditures on the legacy real estate assets shall remain subject to ICBC's *Investment Approval Authorities*, as approved by the Board of Directors. BCI shall be entitled to rely on instructions received from ICBC Management and shall have no obligation to investigate or confirm whether any instructions are compliant with such internal ICBC *Investment Approval Authorities.* All other references to such authorities herein shall be similarly qualified with respect to BCI.

Rebalancing

BCI is responsible for portfolio rebalancing. Portfolio assets will be rebalanced whenever actual allocations to an asset class fall outside the maximum or minimum allocation or whenever it is deemed otherwise appropriate by BCI. Rebalancing may be suspended if market conditions, such as excessive volatility or illiquidity, preclude cost effective rebalancing. Should such conditions occur, the ICBC Investment Committee and the Board of Directors will assess the Fund's asset allocation and market conditions with regard to the appropriateness of rebalancing and approve deviations from the tactical asset mix range as required.

Evaluation of Investment Managers

Investment managers will be reviewed by the Investment Committee at least quarterly. BCI will regularly review the legacy external investment managers and shall report on such managers pursuant to the terms set out in the ASA. BCI shall provide ICBC Management with the information needed to conduct ICBC's review of all other external investment managers on a regular basis as agreed between BCI and ICBC.

Investment manager(s) excluding index managers, will be expected to exceed their applicable index, including an additional return net of fees for active management, and exceed the median manager, as applicable. Quarterly (to the extent practical) and annual returns will be monitored, but the four-year moving average return will be the primary measurement. All return calculations will be determined using time-weighted rates of return based on market values derived from independent pricing sources. Return calculations are in accordance with industry standards.

11 ELIGIBLE INVESTMENTS

ICBC's investment assets can be held in segregated accounts or invested in pooled funds and similar or alternative structures (e.g., limited partnerships) where ICBC's assets are commingled with other investors. Investments held in segregated accounts shall be invested in accordance with the following eligible investments guidelines. Investments held in pooled funds shall be invested in accordance with the pooled funds' investment policies. The Investment Committee shall approve any pooled fund or similar commingled structure into which ICBC assets can be invested.

11.1 FINANCING INSTRUMENTS

BCI may transact in repurchase agreements (repos) and repos are an approved instrument for financing. Leverage will be used in accordance with the strategic asset mix set out in section 6 of the Statement.

For clarity, BCI will not combine the liability portfolio with the asset portfolio for purposes of asset allocation, accounting, performance and risk measurement.

Benchmark(s) for liabilities: Realized cost of financing.

BCI will report on the realized cost of financing.

Leverage is employed at the Fund level to satisfy the ICBC receivables program. Leverage may be employed within pooled funds as consistent with BCI's pooled fund policies.

The Fund's use of leverage may result in commitments for which the Fund could retain liability even upon withdrawal, within pooled funds as consistent with BCI's pooled fund policies.

11.2 FIXED INCOME

The broad fixed income category includes all interest-bearing instruments. Liquid fixed income includes Money Market, Short Bonds and Government Bonds while fixed income credit includes Corporate Bonds, Private Debt, and Mortgages.

11.3 LIQUID

~~11.1~~ 11.3 A MONEY MARKET INVESTMENTS

Money market investments held for cash management purposes must have a term to maturity of less than fifteen months at time of purchase and will be consolidated with the bond portfolio for the purpose of measuring credit quality, liquidity, duration, and diversification, as outlined in section 11.2~~11.3.~~ B. All non-government guaranteed issuers will be subject to the same due diligence process that is applied to credit in the bond portfolio. Money market investments may include both Canadian and US dollar denominated securities. The following investments will be authorized for cash management purposes:

> Treasury bills; provincial promissory notes; repos; certificates of deposit; bankers acceptances & bearer deposit notes; commercial paper; corporate bonds; asset backed securities; swapped deposits; and derivative instruments.

~~11.2~~1.1 ~~FINANCING INSTRUMENTS~~

~~BCI may transact in repurchase agreements (repos) and repos are an approved instrument for financing. Leverage will be used to satisfy the ICBC receivables program. The size of the repo portfolio should match the value of the ICBC payment plan receivable.~~

~~For clarity, BCI will not combine the liability portfolio with the asset portfolio for purposes of asset allocation, accounting, performance and risk measurement. Borrowing is permissible if supported, or covered, by appropriate liquid assets.~~

~~Benchmark(s) for liabilities: Realized cost of financing.~~

~~BCI will report on the realized cost of financing.~~

~~11.3~~ ~~CANADIAN~~11.3 B SHORT BONDS

ICBC can invest in bonds directly and through externally managed pooled funds. Direct bond investments shall be in bonds held in the Index and secured and unsecured floating, fixed rate and inflation linked debt obligations denominated in Canadian dollars or any major foreign currency of Canadian and foreign corporations, governments and government agencies, and supranational development banks. Bonds may also include coupons, residuals, and synthetic fixed income securities.

Derivative instruments for the purposes of synthetic indexing, risk control, lowering transaction costs, and or liquidity management, may be held.

Private placement bonds are permitted, provided it can be demonstrated that they conform to quality and diversification guidelines. For clarification purposes, private placements are bonds issued by companies with publicly traded debt that are rated by an industry recognized rating agency, that are legally privately placed, subscription based, and may or may not have a broad issuance, liquidity, dealer support, or are of small deal size.

ICBC can also invest in illiquid private debt securities~~ through an externally managed open- or closed- end pooled fund~~. Private debt securities are not publicly traded and are not normally rated by an industry recognized rating agency. For private debt that is managed by a legacy external investment manager, the services to be performed are provided in the ASA.

~~For private debt that is a legacy asset, the services to be performed are provided in the ASA.~~

Direct bond investments shall be invested in accordance with the following guidelines:

Quality

All publicly traded bonds must be rated a minimum of BBB- or its equivalent by an industry recognized rating agency. In the case of split ratings, Standard and Poor's (S&P) will be considered the appropriate rating. If not rated by S&P, another equivalent industry recognized credit agency's rating will be used.

~~The following minimum quality limits will apply at all times:~~

- ~~25% of the portfolio will be rated AAA and government issued; and~~

~~The bond portfolio's weighting of BBB bonds shall not exceed 5 percentage points above the weighting of BBB bonds within the Index.~~

-

Diversification

All category and individual limits include issuer margin exposure from repo and derivative activity.

The following minimum diversity limits will apply at all times:

- Not more than 5% of the market value of the bond portfolio can be invested in the debt of any one company; and

- The bond portfolio's allocation to corporate[2] bonds shall not exceed 25 percentage points above the weighting of corporate bonds within the Index.

Foreign bonds are defined as bonds issued by an entity not domiciled in Canada. This includes "Maple" bonds, which are issued by foreign entities in Canadian dollars. It also includes foreign pay bonds issued by foreign entities; however, it would exclude foreign pay bonds issued by Canadian entities (e.g., Yankee bond issued by a Canadian company but denominated in US dollars).

- ~~Foreign bonds may not exceed 10% of the portfolio value.~~

- Foreign currency exposure will be hedged back to Canadian dollars using derivatives. For clarity, US Money Market Funds are not required to be hedged.

Liquidity

Liquidity will be maintained by holding at least 30% of the combined Canadian bond and money market portfolios in Government of Canada, Government of Canada Agency and major Provincial debt securities at all times, net of posted collateral.

Duration

The duration of the Canadian bond portfolio will be managed within plus or minus ~~40% and plus 15~~20% of the benchmark index duration.

Related Securities

Coupons, residuals, and synthetic securities will fall under the category and guidelines of the underlying security.

CREDIT

11.3 C CORPORATE BONDS

Corporate bonds will include fixed income securities invested primarily in corporate investment grade and high yield bonds issued in the United States and Canada. Corporate bond investments will be made through BCI's pooled funds.

[2] Defined as including fixed income securities issued by: corporations, trusts, income trusts, limited partnerships and non-profit entities (such as airports, universities and pension funds) and includes private debt securities.

~~11.4~~ 11.3 D MORTGAGES

It is recognized that ICBC's direct mortgage loans will be ~~considered for potential sale and/or alignment with BCI mortgage pooled funds,~~liquidated over time and that no additional direct mortgage investments will be made~~, with the exception of loan approvals related to outstanding expressions of interest~~.

Following the transition of the management of ICBC's direct mortgage investments to BCI, mortgage investments will be made in accordance with this Statement through BCI mortgage pooled funds and/or externally managed open- or closed-end pooled funds.

Approvals & Authorities

1. Approval for new loans, renewals, assumptions and the placement of secondary debt or encumbrances shall be governed by the Investment Approval Authorities as approved by the Investment Committee from time to time;

2. Approval of the Investment Committee is required to sell the mortgage portfolio, in whole or in part, either directly or through securitization to the public market; and

3. BCI shall be responsible for the day-to-day administration of the mortgage portfolio following the effective date of the transition of these responsibilities from ICBC Management to BCI. The transition of responsibility for the day-to-day administration of the mortgage portfolio may occur in one or more tranches. BCI has the ability to delegate the mortgage administration functions to third party managers with appropriate knowledge, ability, experience and integrity required to complete the assignment competently as determined by BCI.

For the existing mortgage portfolio, the services to be performed are provided in the ASA.

~~11.5 MEZZANINE DEBT~~

For clarity, the BCI Mortgage program will consist of a broad range of mortgage products, diversified by geographic location, type of mortgage, size of mortgage, and type of real estate. It may include direct mortgage loans and mortgage instruments (e.g., mortgage bonds) as well as real estate loans, real estate-related debt and equity investments, and equity interest in QuadReal. No debt will be assumed or created if, as a result, the Leverage Ratio would exceed 40% of the gross asset value of the Mortgage Program.

The Mortgages asset class includes Mezzanine debt. Mezzanine debt includes subordinate or senior core-plus fixed or floating rate debt obligations secured by real assets (real estate or infrastructure) issued by private corporations. Assets are generally income producing with periodic scheduled repayment of interest and principal. The asset class may also include debt obligations secured by non-income producing real assets (e.g., construction lending, land loans, etc.).
~~Investments will be made through externally managed open- or closed-end pooled funds.~~ Net asset value on foreign currency denominated investment vehicles may be hedged back to the domestic currency as contemplated in Section 11.9 below. Currency hedging decisions are most appropriately made at the global portfolio level rather than at the asset class level and consider net currency exposures.

For mezzanine debt that is managed by a legacy external investment manager, the services to be performed are provided in the ASA. Mezzanine debt is included in the BCI mortgage program. Any new mezzanine debt investments will be through BCI pooled funds.

11.3 E PRIVATE DEBT

Private Debt is broadly defined as less liquid debt provided primarily to non-public companies. ICBC can invest in private debt (i.e., illiquid private debt securities), in accordance with the strategic asset mix set out in section 6 of the Statement. Private debt securities are not publicly traded and are not normally rated by an industry recognized rating agency. Investments may be made directly by BCI or indirectly through external managers. Any new private debt investments will be through BCI pooled funds.

~~11.6~~11.4 EQUITIES

~~Canadian and foreign equity~~Equity investments will be made through direct holdings of securities (common shares, convertible preferred shares, convertible debentures, options, warrants, installment receipts, rights, etc.), stock index futures contracts, equity linked bonds and swaps or indirectly through externally managed pooled and mutual funds or any combination of the above.

For public equities that are managed by a legacy external investment manager, the services to be performed are provided in the ASA.

Private equity investments will typically consist of long-term debt or equity investments that are made primarily outside of the public market. These are long-term commitments made on behalf of the Fund.

Investments in private equity are permitted within the policy limits set forth in Section 6 of the Statement. Investments may be made directly by BCI or indirectly through external managers.

Direct holdings of securities in segregated accounts shall be invested in accordance with the following guidelines:

Diversification

Diversification will be maintained by restricting the number of equity holdings in any separate asset class to no less than 20 individual holdings. No single issuer will represent more than 10% of the portfolio's equity exposure as calculated by market value.

Liquidity

Liquidity will be maintained by limiting public equity holdings to securities listed on major exchanges. No more than 20% of the public equity portfolio will be invested in companies with market capitalization of less than $100 million.

~~11.7~~11.5 REAL ESTATE

It is recognized that ICBC's direct real estate investments will be considered for potential liquidation and/or alignment with BCI real estate pooled funds, and that no additional direct real estate investments will be made outside of BCI's real estate pooled funds.

Following the transition of the management of ICBC's real estate investments to BCI, real estate investments will be made in accordance with this Statement through BCI real estate pooled funds including an equity interest in QuadReal and/or externally managed open- or closed-end pooled funds.

~~Direct~~Legacy direct real estate investments – including joint ventures and co-ownership vehicles – shall be in accordance with the following guidelines:

Use of Debt (Leverage)

Leverage will be permitted for direct investments to a maximum of 75% loan-to-value at the property level and to a maximum of 45% of the value of the total real estate portfolio. All new debt will be non-recourse to ICBC.

Approvals & Authorities

1. Approval for acquisitions and disposals shall be governed by the Investment Approval Authorities as approved by the Investment Committee from time to time;

2. The selection of any investment manager, joint venture partner or co-ownership vehicle requires the prior approval of the Investment Committee; and

3. BCI shall be responsible for the day-to-day operations and leasing of the real estate investment portfolio following the effective date of the transition of these responsibilities from ICBC Management to BCI. BCI has the ability to delegate the day-to-day property management functions to third party property managers with appropriate knowledge, ability, experience and integrity required to complete the assignment competently, as determined by BCI. Notwithstanding the foregoing, BCI must obtain the prior approval of the Investment Committee before BCI appoints a third party, other than QuadReal Property Group Limited Partnership or its affiliates, to act as the primary provider of property management services in respect of the real estate investment portfolio.

For the legacy real estate investment portfolio, the services to be performed are provided in the ASA.

~~11.8~~11.6 INFRASTRUCTURE AND RENEWABLE RESOURCES

Infrastructure investments encompass equity investments in real assets with relatively stable inelastic demand, providing services to a country, city, or region. Infrastructure investment sectors can generally be broken down between energy & utilities, transportation, social infrastructure, and communications. Renewable resources investments will typically consist of timberland, farmland and energy production assets such as wind and solar.

Infrastructure and renewable resource investments will be made through ~~externally managed~~BCI pooled funds.

Net asset value on foreign currency denominated investment vehicles may be hedged back to the domestic currency as contemplated in Section 11.9 below. Currency hedging decisions are most appropriately made at the global portfolio level rather than at the asset class level and consider net currency exposures.

~~For infrastructure investments that are managed by a legacy external investment manager, the services to be performed are provided in the ASA.~~

~~11.9~~11.7 DERIVATIVE INSTRUMENTS

Swaps, options, forwards, future contracts and other derivative instruments are permitted as long as they are used to hedge portfolio risks or enhance portfolio returns. These strategies can involve foreign exchange components on a hedged basis. BCI shall have discretion to hedge any foreign exchange risk of externally managed funds in the portfolio. For certainty, repo and reverse-repo transactions shall not be deemed to be derivatives transactions.

Derivatives can only be applied to asset classes contemplated in the investment policy. All derivative usage shall be structured to ensure that the aggregate amount of market exposure of the investments (on an aggregate basis or with respect to any asset class) does not increase as a result of derivative transactions, except as expressly permitted by BCI pooled fund policies.

BCI will manage the collateral for derivatives, including posting securities as collateral for ICBC's obligations under derivative agreements, and receiving securities posted by counterparties as collateral for their obligations to ICBC under those agreements. All ICBC derivative transaction settlements will be debited or credited by BCI using ICBC assets.

Derivative activities related to segregated funds, direct investments, and legacy assets will be disclosed to the Investment Committee on a quarterly basis.

~~11.10 BORROWING AUTHORITY~~

~~In general, neither BCI nor the external managers can borrow funds directly to make investments. Exceptions include short-term borrowing to finance temporary cash flow shortfalls, financing techniques to support customer payment plans, real estate transactions, infrastructure transactions, and derivative transactions where financing techniques are used to hedge revenue enhancing strategies.~~

12 VOTING RIGHTS

The Board of Directors delegates its voting rights to the legacy external investment managers and to BCI. Voting rights will be exercised in the best financial interests of ICBC. BCI shall vote proxies in accordance with BCI's proxy voting policy, a copy of which has been provided to ICBC.

The voting policies and practices of the legacy external investment managers and BCI are to be reviewed periodically by ICBC Management.

Issues deemed to be of concern to the Board will be brought to the attention of the Chair of the Investment Committee.

13 SECURITIES LENDING

ICBC may loan its securities, or participate in pooled funds that lend securities provided that:

- the securities lending agent provides an indemnity for losses relating to a borrower failing to return securities on loan;
- lent securities are indemnified by the securities lending agent;
- the loan and collateral are valued daily on a "mark-to-market" basis;
- the collateral consists of highly liquid and marketable securities under normal market conditions; and
- the loans meet the terms and conditions of ICBC's external manager's Securities Lending Programs.

14 POOLED FUNDS

ICBC investments held in pooled funds, other commingled investment funds and alternative investment vehicles shall be invested in accordance with such funds' investment policies and product descriptions. Pooled fund managers shall provide ICBC with product descriptions and policies covering investment constraints, conflicts of interest, voting rights and securities lending.

Pooled fund managers shall inform ICBC of any material changes to these policies in a timely fashion.

15 POLICY REVIEW

This Statement will be reviewed annually by the Investment Committee to confirm that the existing asset allocations will result in the best projected investment return for the selected risk level. Current economic and political conditions will be reviewed by the Investment Committee to ascertain if the necessary conditions exist for the investment policies to succeed. Current guidelines will be reviewed by the Investment Committee to maintain their relevance and updated if changes are required. The annual review will not prohibit the interim modification of the investment policy if there have been fundamental changes which affect the underlying assumptions of the investment policy.

APPENDIX A – ASSET MIX TRANSITION SCHEDULE

This asset mix transition schedule represents management's estimate for the pace of implementation of the Fund's long-term strategic asset mix. It will be reviewed and updated periodically in alignment with the anticipated pacing of the portfolio's investments in the illiquid asset classes (i.e. private debt,mortgages~~,~~ & mezzanine debt, private equity, real estate and infrastructure).

~~**Asset Class**~~	~~**Effective Date**~~			
	~~**06/30/2018 Target %**~~	~~**06/30/2019 Target %**~~	~~**06/30/2020 Target %**~~	~~**06/30/2021 Target %**~~
~~**Fixed Income**~~	~~**68.50**~~	~~**68.00**~~	~~**67.25**~~	~~**67.00**~~
~~Money Market~~	~~1.00~~	~~1.00~~	~~1.00~~	~~1.00~~
~~Canadian Bonds~~	~~55.75~~	~~54.50~~	~~52.75~~	~~52.00~~
~~Mortgages~~	~~11.50~~	~~11.50~~	~~11.50~~	~~11.50~~
~~Mezzanine Debt~~	~~0.25~~	~~1.00~~	~~2.00~~	~~2.50~~
~~**Equity**~~	~~**23.00**~~	~~**23.00**~~	~~**23.00**~~	~~**23.00**~~
~~Canadian Equities~~	~~8.00~~	~~8.00~~	~~8.00~~	~~8.00~~
~~Global Equities~~	~~15.00~~	~~15.00~~	~~15.00~~	~~15.00~~
~~Real Estate~~	~~8.00~~	~~8.00~~	~~8.00~~	~~8.00~~
~~Infrastructure~~	~~0.50~~	~~1.00~~	~~1.75~~	~~2.00~~

~~Benchmark weights shall be set in alignment with funded allocations in respect of the mortgages, mezzanine debt, real estate and infrastructure asset classes, up to the long-term strategic mix targets set out in section 6 of this Statement. Unfunded allocations to these asset classes – and the associated benchmark weights – will be invested in accordance with the following guidelines:~~

~~**Asset Class**~~	~~**Money Market**~~	~~**Canadian Bonds**~~	~~**Canadian Equity**~~	~~**Global Equity**~~
~~Mortgages / Mezzanine~~	~~25%~~	~~60%~~		~~15%~~

~~Debt~~				
~~Real Estate~~		~~40%~~	~~30%~~	~~30%~~
~~Infrastructure~~		~~40%~~		~~60%~~

Asset Class	May 1 2021	Apr 1, 2022	Apr 1, 2023	Apr 1, 2024	Apr 1, 2025	Apr 1, 2026	Apr 1, 2027	Apr 1, 2028
Fixed Income - Liquidity	**50%**	**47%**	**45%**	**41%**	**36%**	**33%**	**30%**	**27%**
Money Market	5%	5%	5%	5%	2%	2%	2%	2%
Short Bonds (segregated)[1]	45%	42%	40%	33%	26%	15%	3%	-
Government Bonds	-	-	-	3%	8%	16%	25%	25%
Fixed Income - Credit	**20%**	**21%**	**21%**	**22%**	**24%**	**26%**	**28%**	**28%**
Corporate Bonds	9.5%	12%	12%	12%	12%	12%	12%	12%
Private Debt	0.5%	1%	2%	4%	6%	8%	10%	10%
Mortgages[2]	10%	8%	7%	6%	6%	6%	6%	6%
Equity Assets	**30%**	**30%**	**30%**	**30%**	**30%**	**28%**	**26%**	**25%**
Canadian Equity	4%	-	-	-	-	-	-	-
Global Equity	23.5%	27%	26%	24%	22%	18%	14%	13%
Emerging Markets Equity	2%	2%	2%	2%	2%	2%	2%	2%
Private Equity	0.5%	1%	2%	4%	6%	8%	10%	10%
Real Assets	**10%**	**12%**	**14%**	**17%**	**20%**	**23%**	**26%**	**30%**
Real Estate	8%	9%	10%	11%	12%	13%	14%	15%
Infrastructure	2%	3%	4%	6%	8%	10%	12%	15%
Real Assets	**10%**	**12%**	**14%**	**17%**	**20%**	**23%**	**26%**	**30%**
Real Estate	8%	9%	10%	11%	12%	13%	14%	15%
Infrastructure	2%	3%	4%	6%	8%	10%	12%	15%
Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**

[1] ICBC's Canadian Bond portfolio ("Short Bonds") includes federal and provincial government bonds as well as investment grade corporate bonds. Investment grade corporate bonds in the Short Bond portfolio are not included in the Liquidity Coverage Ratio calculation as saleable liquid assets.

[2] Mortgages asset class includes Mezzanine Debt.

Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

BCI will trade as close to the transition date as prudent while being mindful of operational considerations such as, but not limited to, market liquidity, trading costs and client fairness. In the event that BCI elects to deviate from the formal transition dates, BCI will disclose such deviations and the practical effect on the Fund's investment portfolio as part of its regular reporting activities.

Basic Insurance and Optional Insurance

ICBC's Optional insurance business is subject to limitations on its holdings of Private Debt, Equity and Real Estate investments. As such, the following asset mixes should be used for the purpose of determining ICBC's discount rate and pricing of Basic and Optional insurance.

Asset Class	**Basic Insurance**		**Optional Insurance**	
	May 1, 2021	**Apr 1, 2022**	**May 1, 2021**	**Apr 1, 2022**
Fixed Income - Liquidity	**49%**	**46%**	**54%**	**51%**
Money Market	5%	5%	5%	5%
Short Bonds (segregated)[3]	44%	41%	49%	46%
Fixed Income - Credit	**19%**	**20%**	**21%**	**22%**
Corporate Bonds	9.0%	11%	10%	13%
Private Debt	0.5%	1%	0.5%	1%
Mortgages[4]	9.5%	8%	10.5%	8%
Equity Assets	**32%**	**32%**	**25%**	**25%**
Canadian Equity	4%	-	3%	-
Global Equity	25%	29%	20%	22%
Emerging Markets Equity	2%	2%	2%	2%
Private Equity	1%	1%	0%	1%
Real Assets	**10%**	**12%**	**10%**	**12%**
Real Estate	8%	9%	8%	9%
Infrastructure	2%	3%	2%	3%
Sub Total	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**

[3] ICBC's Canadian Bond portfolio ("Short Bonds") includes federal and provincial government bonds as well as investment grade corporate bonds. Investment grade corporate bonds in the Short Bond portfolio are not included in the Liquidity Coverage Ratio calculation as saleable liquid assets.
[4] Mortgages asset class includes Mezzanine Debt.

APPENDIX B – PARTICIPATING BCI POOLED FUNDS

Asset Class	Pooled Fund	Benchmark	Managers	Opening Frequency
Money Market	Canadian Money Market Fund (~~ST2~~ST1)	~~FTSE Canada 91 Day T-Bill Index~~Canadian Overnight Repo Rate Average (CORRA)	BCI	Any business day
	~~US Dollar~~Canadian Money Market Fund (~~ST3~~ST2)	~~Citigroup 30~~FTSE Canada 91 Day ~~Treasury~~ T-Bill Index	BCI	Any business day
	US Dollar Money Market Fund (ST3)	Secured Overnight Financing Rate (SOFR)	BCI	Any business day
Mortgages	~~Fixed Term~~BCI Quadreal Mortgage ~~Fund~~Program	ICE BAML 1-~~10~~3 Year Canada Government Index + ~~120~~270 bps	Quadreal + External Manager~~*~~	~~Monthly~~First business day of each year*
Corporate Bonds	Corporate Bond Fund	50% BAML U.S. Corporate Index (CAD Hedged) 50% BAML BB-B U.S. Cash Pay High Yield Constrained Index (CAD Hedged)	BCI + External Managers	First business day of each year*
Private Debt	Principal Credit Fund	S&P/LSTA U.S. Leveraged Loan 100 Index	BCI + External Managers	First business day of each year*
Canadian Equity	Indexed Canadian Equity Fund	S&P / TSX Composite Index	BCI	Weekly
	Active Canadian Equity Fund	S&P / TSX Capped Composite Index	BCI + External Managers	Weekly
Global Equity	Indexed Global Equity Fund	MSCI World ex-Canada Net Index	BCI	Weekly
	~~Indexed Emerging Markets Fund~~	~~MSCI Emerging Markets Net Index~~	~~BCI~~	~~Weekly~~

	~~Active Emerging Markets Fund~~	~~MSCI Emerging Markets Net Index~~	~~BCI + External Managers~~	~~Weekly~~
Emerging Market Equity	Indexed Emerging Markets Fund	MSCI Emerging Markets Net Index	BCI	Weekly
	Active Emerging Markets Fund	MSCI Emerging Markets Net Index	BCI + External Managers	Weekly
Private Equity	Private Equity Vintage Funds (2021)	PE Fund investments: Morgan Stanley Capital International (MSCI) All Country World Net Index plus 200 basis points Direct/Co-investments: CoC based on the LTCMA Review = 8.3%	BCI + External Managers	As required
Real Estate	Realpool Program	Cost of Capital of 6.8% (nominal)	External Manager*	First business day of each year***
Infrastructure	Infrastructure & Renewable Resources Program	Cost of Capital of 6.3% (nominal)	BCI + External Managers	Semi-annually (January, July)

* ~~QuadReal.~~
** Special openings throughout the year as required.

2023.1 RR BCUC.23.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, p. 5-2; ICBC 2021 RRA, Exhibit B-1, p. 5-3, Exhibit B-5, ICBC's response to BCUC IR 33.6
Statement of Investment Policy and Procedure (SIPP)

On page 5-2 of the Application, ICBC states:

> **The SIPP dated January 27, 2022 (January 2022 SIPP) is provided in Appendix 5A. Changes to the SIPP in comparison to the one dated April 22, 2021, filed as part of the 2021 Revenue Requirements Proceeding are described, and a blacklined version of the January 2022 SIPP showing the changes is provided.**

On page 5-3 of Exhibit B-1 in the 2021 RRA, ICBC stated:

> **The October 2020 SIPP is provided in Appendix 5A. Changes to the SIPP in comparison to the June 2018 SIPP that was filed as part of the 2019 RRA are described, and a blacklined version of the October 2020 SIPP showing the changes is provided.**

In the response to BCUC IR 33.6 in the 2021 RRA proceeding, ICBC stated:

> **The change to ICBC's risk tolerance of investments is not reflected in the October 2020 SIPP. The investment strategy review discussed in the Application, Chapter 5, Section E has been ongoing throughout 2020 and the new asset mix transition schedule was approved in January 2021. ICBC expects to recommend changes to the SIPP to ICBC's Board of Directors in April 2021 […]**

Please indicate when ICBC plans to recommend changes to its next SIPP to its Board of Directors. To the extent possible, please describe the recommended changes ICBC expects to make.

Response:

On January 26, 2023, the Statement of Investment Policies and Procedures (SIPP) was updated and approved by ICBC's Board of Directors. The main changes from the January 27, 2022 SIPP, which was provided in the Application, Chapter 5, Appendix 5A, Attachment 5A.1, are as follows:

- Clarification around the Regulatory Framework and the allocation of the asset mix to Basic and Optional insurance.

- While the Risk Tolerance Statement maintains a Liquidity Coverage Ratio (LCR) of 18 months, an update has been made to allow for a mechanism to restore liquidity to an acceptable level should the LCR fall below 15 months.
- Amendments to the Asset Mix Transition Schedule accelerating the shift to Government Bonds from Short Bond holdings to better align portfolio duration with liability duration. In addition, Government Bonds and Short Bonds have been combined into one asset class called Government Bonds. The move to Private Markets has also been accelerated. Market conditions present opportunities to deploy additional capital into these asset classes.
- Incorporation of language to allow for additional financial instruments for the purposes of leverage.
- Inclusion of further BCI funds permissible for investing.

2023.1 RR BCUC.24.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1
Environmental, Social and Governance

On page 5A-1 of Appendix 5A to the Application, ICBC states:

> **The January 2022 SIPP reflects an updated set of investment beliefs to ensure that environmental, social and governance (ESG) factors are considered as part of investing activities.**
>
> **Climate change and reconciliation with Indigenous peoples have been noted as specific priorities for ICBC. In coordination with the Investment Committee and ICBC management, the British Columbia Investment Management Corporation (BCI) has established a set of beliefs around environmental, social and governance issues to guide ICBC's investment approach.**

Please clarify whether these ESG investment beliefs are specific to ICBC or are used by BCI for all its clients.

Response:

The ESG investment beliefs outlined in the SIPP are specific to ICBC and are not used by other BCI clients.

2023.1 RR BCUC.24.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1
Environmental, Social and Governance

On page 5A-1 of Appendix 5A to the Application, ICBC states:

The January 2022 SIPP reflects an updated set of investment beliefs to ensure that environmental, social and governance (ESG) factors are considered as part of investing activities.

Climate change and reconciliation with Indigenous peoples have been noted as specific priorities for ICBC. In coordination with the Investment Committee and ICBC management, the British Columbia Investment Management Corporation (BCI) has established a set of beliefs around environmental, social and governance issues to guide ICBC's investment approach.

24.2 Please explain whether ICBC has a direct policy or guidelines related to ICBC's ESG investments in addition to the beliefs included in the SIPP.

24.2.1 If so, please provide this policy or guidelines with a summary of its objectives and explain how often it is reviewed and updated.

Response:

ICBC has no other policies or guidelines with regards to its ESG investments beyond those included in the SIPP.

2023.1 RR BCUC.24.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1
Environmental, Social and Governance

On page 5A-1 of Appendix 5A to the Application, ICBC states:

> **The January 2022 SIPP reflects an updated set of investment beliefs to ensure that environmental, social and governance (ESG) factors are considered as part of investing activities.**
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> **Climate change and reconciliation with Indigenous peoples have been noted as specific priorities for ICBC. In coordination with the Investment Committee and ICBC management, the British Columbia Investment Management Corporation (BCI) has established a set of beliefs around environmental, social and governance issues to guide ICBC's investment approach.**

Please explain how ICBC's set of investment beliefs around ESG factors compares to other institutional investors, such as insurance companies or large pension plans.

Response:

In developing its investment beliefs around ESG factors, ICBC examined peers in the insurance industry as well as peer clients of BCI and other large institutional investors. While similar in nature, ICBC's beliefs tend to call out a particular focus on climate and reconciliation with Indigenous peoples which is not typical of other investment beliefs that were reviewed.

2023.1 RR BCUC.25.1

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

On page 5A-1 of Appendix 5A to the Application, ICBC states:

> **Other revisions to the SIPP relate to findings from the most recently completed asset-liability management study and its implications on the strategic asset mix for ICBC's investment portfolio or for general housekeeping. […]**
>
> **Revisions to the SIPP (SIPP Section 7 and Appendix A), reflect an accelerated timetable to achieve ICBC's strategic shift to hold fewer highly liquid fixed income investments in exchange for less liquid investments that offer the potential for higher returns over the long run. This revision was done in conjunction with BCI, which believes that the capital can be placed on the accelerated timetable in a prudent fashion.**

Appendix A of ICBC's January 2022 SIPP states:

APPENDIX A – ASSET MIX TRANSITION SCHEDULE

This asset mix transition schedule represents management's estimate for the pace of implementation of the Fund's long-term strategic asset mix. It will be reviewed and updated annually in alignment with the anticipated pacing of the portfolio's investments in the illiquid asset classes (i.e., private equity, private debt, mortgages ~~& mezzanine debt~~, private equity, real estate and infrastructure & renewable resources).

Asset Class	May 1, 2021	Apr 1, 2022	Apr 1, 2023	Apr 1, 2024	Apr 1, 2025	Apr 1, 2026	Apr 1, 2027	Apr 1, 2028
Fixed Income - Liquidity	**50%**	**47%**	**45%**	**41%**	**36%**	**33%**	**30%**	**27%**
Money Market	5%	5%	5%	5%	2%	2%	2%	2%
Short Bonds (segregated)[1]	45%	42%	40%	33%	26%	15%	3%	-
Government Bonds	-	-	-	3%	8%	16%	25%	25%
Fixed Income - Credit	**20%**	**~~21~~22%**	**~~21~~22%**	**22%**	**24%**	**26%**	**28%**	**28%**
Corporate Bonds	9.5%	12%	12%	12%	12%	12%	12%	12%
Private Debt	0.5%	~~1~~2%	~~2~~3%	4%	6%	8%	10%	10%
Mortgages[2]	10%	8%	7%	6%	6%	6%	6%	6%
Equity Assets	**30%**	**~~30~~29%**	**~~30~~29%**	**30%**	**30%**	**28%**	**26%**	**25%**
Canadian Equity	4%	-	-	-	-	-	-	-
Global Equity	23.5%	~~27~~25%	~~26~~24%	24%	22%	18%	14%	13%
Emerging Markets Equity	2%	2%	2%	2%	2%	2%	2%	2%
Private Equity	0.5%	~~1~~2%	~~2~~3%	4%	6%	8%	10%	10%
Real Assets	**10%**	**12%**	**14%**	**17%**	**20%**	**23%**	**26%**	**30%**
Real Estate	8%	9%	10%	11%	12%	13%	14%	15%
Infrastructure & RR	2%	3%	4%	6%	8%	10%	12%	15%
Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please explain the objective of the asset-liability management study in relation to ICBC's investment portfolio, and whether the study informs ICBC's risk tolerance.

Response:

The objective of the asset-liability management study is to craft a portfolio which is forecast to deliver the highest and best possible return while working within certain risk constraints and mandates such as volatility, liquidity and Environmental, Social and Governance (ESG) related issues.

In terms of the relationship to risk tolerance, it would be more accurate to say that the risk tolerance of ICBC informs the asset-liability management study rather than the asset-liability management study informing ICBC's risk tolerance.

2023.1 RR BCUC.25.2

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

On page 5A-1 of Appendix 5A to the Application, ICBC states:

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Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please explain whether the asset-liability management study is administered internally by ICBC, or externally either by BCI or another independent party.

Response:

The asset-liability management study is completed by BCI with guidance and direction from ICBC. While much of the detailed actuarial work would be done by BCI, information relating to ICBC's liabilities, risk tolerance and specific investment constraints are provided by ICBC.

2023.1 RR BCUC.25.3

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

On page 5A-1 of Appendix 5A to the Application, ICBC states:

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Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please explain how often asset-liability management studies are completed and when was the previous study completed.

Response:

The last asset-liability management (ALM) study was initiated in April 2020 and implemented in 2021. Generally, an ALM study is conducted once every four years to help confirm or revise the fund's strategic asset mix.

2023.1 RR BCUC.25.4

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

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Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please explain the implications of the asset-liability management study and how it affects the strategic mix of the assets.

Response:

The last asset-liability management study was initiated in April 2020. For a summary of the key findings and impacts to the strategic asset mix, please see the response to information request 2021.1 RR BCOAPO.13.1.

2023.1 RR BCUC.25.5

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

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Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please confirm, or explain otherwise, that the asset-liability management study impacted the accelerated timetable to achieve ICBC's strategic shift to hold fewer highly liquid fixed income investments in exchange for less liquid investments that offer the potential for higher returns over the long run.

Response:

The current adjustments to the timetable as reflected in the SIPP are based on BCI's estimates of their ability to shift to these holdings in a prudent fashion. While the latest completed asset-liability management (ALM) study supports holding more illiquid investments in ICBC's investment portfolio, the current changes to an accelerated timetable were not triggered by the ALM study.

2023.1 RR BCUC.25.5.1

Reference: INVESTMENTS
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Infrastructure & RR	2%	3%	4%	6%	8%	10%	12%	15%
Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please discuss the trade-off between risk and return from transferring liquid fixed income and equity assets to credit fixed income and real assets as shown in the asset mix transition schedule.

Response:

Generally, assets that are less liquid in nature present an opportunity for a higher return as compensation for the reduced liquidity. This is often referred to as a liquidity premium.

In transferring to less liquid fixed income investments, ICBC expects a potential higher return as exhibited by this liquidity premium. As an aside, much of the private fixed income credit tends to be floating not fixed rate which reduces exposure in a rising interest rate environment, all else being equal.

Similarly, in terms of a move from public equities to real assets, ICBC expects to capture an additional return over and above a publicly traded asset of a similar nature. Also, most real assets such as real estate and infrastructure generally have more established and less volatile cash flows than the operating companies represented by publicly listed equities. This reduced volatility represents another attractive component of real assets and informs ICBC's shift towards a larger allocation.

Finally, even with the increasing portfolio allocation to less liquid assets, ICBC ensures that it maintains more than sufficient liquid assets to meet operational and claims payment needs.

2023.1 RR BCUC.25.6

Reference: INVESTMENTS
Exhibit B-1, Chapter 5, Appendix 5A, p. 5A-1, Attachment 5A.1 - January 2022 SIPP, Appendix A
Asset Mix Transition

On page 5A-1 of Appendix 5A to the Application, ICBC states:

> **Other revisions to the SIPP relate to findings from the most recently completed asset-liability management study and its implications on the strategic asset mix for ICBC's investment portfolio or for general housekeeping. […]**
>
> **Revisions to the SIPP (SIPP Section 7 and Appendix A), reflect an accelerated timetable to achieve ICBC's strategic shift to hold fewer highly liquid fixed income investments in exchange for less liquid investments that offer the potential for higher returns over the long run. This revision was done in conjunction with BCI, which believes that the capital can be placed on the accelerated timetable in a prudent fashion.**

Appendix A of ICBC's January 2022 SIPP states:

APPENDIX A – ASSET MIX TRANSITION SCHEDULE

This asset mix transition schedule represents management's estimate for the pace of implementation of the Fund's long-term strategic asset mix. It will be reviewed and updated annually in alignment with the anticipated pacing of the portfolio's investments in the illiquid asset classes (i.e., private equity, private debt, mortgages ~~& mezzanine debt~~, private equity, real estate and infrastructure & renewable resources).

Asset Class	May 1, 2021	Apr 1, 2022	Apr 1, 2023	Apr 1, 2024	Apr 1, 2025	Apr 1, 2026	Apr 1, 2027	Apr 1, 2028
Fixed Income - Liquidity	**50%**	**47%**	**45%**	**41%**	**36%**	**33%**	**30%**	**27%**
Money Market	5%	5%	5%	5%	2%	2%	2%	2%
Short Bonds (segregated)[1]	45%	42%	40%	33%	26%	15%	3%	-
Government Bonds	-	-	-	3%	8%	16%	25%	25%
Fixed Income - Credit	**20%**	**~~21~~22%**	**~~21~~22%**	**22%**	**24%**	**26%**	**28%**	**28%**
Corporate Bonds	9.5%	12%	12%	12%	12%	12%	12%	12%
Private Debt	0.5%	~~1~~2%	~~2~~3%	4%	6%	8%	10%	10%
Mortgages[2]	10%	8%	7%	6%	6%	6%	6%	6%
Equity Assets	**30%**	**~~30~~29%**	**~~30~~29%**	**30%**	**30%**	**28%**	**26%**	**25%**
Canadian Equity	4%	-	-	-	-	-	-	-
Global Equity	23.5%	~~27~~25%	~~26~~24%	24%	22%	18%	14%	13%
Emerging Markets Equity	2%	2%	2%	2%	2%	2%	2%	2%
Private Equity	0.5%	~~1~~2%	~~2~~3%	4%	6%	8%	10%	10%
Real Assets	**10%**	**12%**	**14%**	**17%**	**20%**	**23%**	**26%**	**30%**
Real Estate	8%	9%	10%	11%	12%	13%	14%	15%
Infrastructure & RR	2%	3%	4%	6%	8%	10%	12%	15%
Sub Total	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**	**110%**
Portfolio Leverage	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Total Portfolio	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Please clarify what does ICBC mean by "capital can be placed on the accelerated timetable in a prudent fashion." Why is an accelerated timetable important?

Response:

An accelerated timetable is not as important as it is preferable in an effort to move the portfolio towards the approved strategic asset mix.

The assets to which ICBC is shifting its capital are thought to be a better fit for its long-term requirements and are forecast to offer a higher return. The original transition schedule was based on the estimated pace at which these new investments would be available in the market. Over the past year, BCI was able to place more capital in these asset classes than originally estimated. That said, given the nature of these assets - private investments are not always readily available - ICBC and BCI are both aware that they do not wish to overpay for these assets in order to fulfill the mandate faster than what would be done at reasonable valuations.

2023.1 RR BCUC.26.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-2, 6-7; ICBC 2021 RRA, Exhibit B-1, Chapter 6, p. 6-6
2021/22 Forecast and Actual

In Figure 6.1 on page 6-7 of the Application, ICBC shows Insurance Services Corporate expenses for 2021/22 actual are $125 million.

In Figure 6.1 on page 6-6 of the ICBC 2021 RRA, ICBC the 2021/22 forecast for Insurance Services Corporate expenses were $114 million.

On page 6-2 of the Application, ICBC states:

> **In 2021/22, operating expenses were lower than budgeted due to lower average (full time equivalents) FTEs and related costs. Fewer overall FTEs were mainly the result of higher attrition rates and recruitment challenges experienced in hiring to address staffing requirements during the transition to the Enhanced Care model, as well as the return of higher claims volume. Non-compensation expenses were lower due to savings from continuing COVID-19 impacts resulting from supply chain issues and resource constraints. Additionally, pension expenses were lower than budgeted due to a higher than planned discount rate for pension liabilities.**

Given that 2021/22 operating expenses were lower than budgeted, please explain why Insurance Services Corporate expenses increased from $114 million in the 2021/2022 forecast to $125 million in the 2021/2022 actual.

Response:

The increase in the Insurance Services Corporate expenses from 2021/22 forecast of $114 million to 2021/22 actuals of $125 million was mainly due to the following factors:

- $6 million increase in merchant fees expense, resulting from higher net premiums written and higher credit card transaction volumes.
    - The 2021/22 merchant fee forecast included in the 2021 RRA filing represented a $13 million decrease from 2020/21 actuals. As noted in 2021 RRA Chapter 6 (section D.1.4), this decrease in forecast was attributed primarily to lower anticipated premium revenue resulting from the implementation of Enhanced Care (i.e., anticipated changes in the Optional Third Party Liability Extension and Basic coverage through the introduction for Basic Vehicle Damage Coverage). The two contributing factors to the diversion between 2021/22 forecast and actuals were the i) premium revenue, which was higher than anticipated at the time of the 2021 RRA filing, and ii) credit card transaction volumes, which were

also higher as customers switched from payment plan transactions to credit card transactions.

- $5 million increase resulting from unplanned project expenses related to the issuance of customer relief rebate cheques (Relief Rebate project).

2023.1 RR BCUC.26.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-2, 6-7; ICBC 2021 RRA, Exhibit B-1, Chapter 6, p. 6-6
2021/22 Forecast and Actual

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Please explain how ICBC managed the “higher attrition rates and recruitment challenges” experienced in 2021/22 and discuss whether these challenges are expected to continue to impact PY 2023.

Response:

Following the lifting of COVID-19 restrictions and the reopening of global economies, companies worldwide have experienced tight labour markets and high inflation rates, which have led to widespread challenges for recruitment and retention. The challenges experienced at ICBC have been in line with the national average for increasing attrition rates.

ICBC has done extensive work in the first year of its multi-year people strategy to enhance employee experience and increase retention.

ICBC has been managing recruitment challenges by implementing a number of tactics to broaden its pool of candidates with a focus on matching the right applicant to the right role.

These tactics include:

1. Expanding sources of candidates such as engaging with various recruitment vendors and social media channels (e.g., Zip recruiter with AI technology, LinkedIn, Indeed/Glassdoor) to identify a bigger talent pool.
2. Working with Community Partners more closely and formally to attract and create loyal employment relationships with qualified candidates in particular from under-represented groups with a focus on Indigenous peoples and people with disabilities.
3. Adding an assessment via a vendor, TalentClick, when hiring for any leadership role to assess natural fit to roles in an effort to help with retention.
4. Monitoring dashboards such as Time to Fill and turnover rates to determine performance level in recruiting/retaining talent and implementing necessary actions when needed.
5. Conducting onboarding surveys to assess the experience of employees and determine any issue that would indicate underlying concerns:
   - 1 week from start of employment (Onboarding)
   - 12 weeks from start of employment (Onboarding)
6. Implementing programs to attract and/or retain talent, (e.g., Co-op student program, Employee referral program, Corporate Onboarding program).

Recruitment challenges may continue to occur over the next several years. To address this, ICBC is actively managing the tactics above. To the extent that ICBC is not able to meet forecasted FTE targets, this would not have an impact on PY2023 proposed 0% rate change.

2023.1 RR BCUC.26.3

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-2, 6-7; ICBC 2021 RRA, Exhibit B-1, Chapter 6, p. 6-6
2021/22 Forecast and Actual

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Please explain how resource constraints affect non-compensation expenses.

Response:

Non-compensation expenses include project implementation expenses, computer costs, building operating expenses and other expenses. Specifically, project implementation expenses are impacted by resource constraints. Resource constraints for projects include challenges in allocating the required internal and external labour (e.g., employees, contractors) to execute the project due to lower FTEs in required roles, recruitment challenges and higher attrition rates, and the timing of new employee and contractor onboarding. These resource constraints can result in delayed project implementation that may cause project expenses that were planned for one fiscal year to be incurred in a subsequent year. Absent other factors, these resource constraints would result in lower non-compensation expenses than initially planned, for a given period.

2023.1 RR BCUC.27.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-2
Controllable Operating Expenses

On page 6-2 of the Application, ICBC states:

> **In the 2022/23 outlook, controllable operating expenses are expected to increase to $821 million, $61 million higher than 2021/22 actual.[…] Further increase in controllable operating expenses is primarily due to anticipated general wage increases that will be negotiated under the Collective Agreement and approved by the Public Sector Employers' Council (PSEC) Secretariat, merit increases for management and confidential employees, individual length of service increases and <u>higher project expenses to support ICBC's five-year corporate strategy which defines priorities to 2025</u>. […]**
>
> **Controllable operating expenses are forecasted to increase to $870 million in 2024/25 and $902 million in 2025/26. The increase is primarily driven by general salary increases for unionized employees, inflation, sustainment expenses and <u>expenses to support ICBC's 2025 strategy</u>. [*Emphasis added*]**

Please provide a breakdown of the Year-over-Year increases from 2022/23 outlook to 2025/26 forecast for controllable operating expenses by cost driver.

Response:

The 2023/24 forecast for controllable operating expenses is $848 million, a $27 million increase over the 2022/23 outlook of $821 million. The increase is driven by the following factors:

- $20 million for general wage increases that will be negotiated under the Collective Agreement and reported and approved by the Public Sector Employers' Council (PSEC) Secretariat, as well as individual length of service increases.
- $4 million for expected merit increases in salaries for management and confidential employees.
- $2 million for increases in the cost of non-pension benefits. Changes in cost of non-pension benefits reflect changes initiated by government, inflation, demographics of ICBC's employees and new market trends.
- $4 million for increase in the professional general and administrative expenses including:
    - $8 million increase due to inflation and contractor commitments
    - $1 million increase due to higher merchant fees

  - $1 million increase due to higher sustainment expenses
  - partially offset by $6 million from lower depreciation and project expenses

The increases are expected to be partially offset with a $3 million decrease in net compensation due to a forecast decrease in average FTEs.

The 2024/25 forecast for controllable operating expenses is $870 million, a $22 million increase over the 2023/24 forecast of $848 million. The increase is driven by the following factors:

- $11 million increase in net compensation, please see response to information request 2023.1 RR BCUC.30.2 for further details.
- $11 million increase in general and administrative expenses including:
  - $7 million increase due to inflation and contractor commitments
  - $2 million increase due to higher merchant fees
  - $2 million increase due to higher sustainment expenses

The 2025/26 forecast for controllable operating expenses is $902 million, a $32 million increase over the 2024/25 forecast of $870 million. The increase is driven by the following factors:

- $13 million increase in net compensation, please see response to 2023.1 RR BCUC 30.2 for further details.
- $19 million increase in general and administrative expenses including:
  - $7 million increase due to inflation and contractor commitments
  - $2 million increase due to higher merchant fees
  - $1 million increase due to other miscellaneous expenses
  - $3 million increase due to higher sustainment expenses
  - $6 million increase in project depreciation expenses

2023.1 RR BCUC.27.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-2
Controllable Operating Expenses

On page 6-2 of the Application, ICBC states:

> **In the 2022/23 outlook, controllable operating expenses are expected to increase to $821 million, $61 million higher than 2021/22 actual.[…] Further increase in controllable operating expenses is primarily due to anticipated general wage increases that will be negotiated under the Collective Agreement and approved by the Public Sector Employers' Council (PSEC) Secretariat, merit increases for management and confidential employees, individual length of service increases and <u>higher project expenses to support ICBC's five-year corporate strategy which defines priorities to 2025</u>. […]**
>
> **Controllable operating expenses are forecasted to increase to $870 million in 2024/25 and $902 million in 2025/26. The increase is primarily driven by general salary increases for unionized employees, inflation, sustainment expenses and <u>expenses to support ICBC's 2025 strategy</u>. [*Emphasis added*]**

Please explain and provide the forecasting methodology for the inflation increases contributing to ICBC's expected total corporate operating expense increases for 2024/25 and 2025/26 forecast.

Response:

At the time the Application was prepared, detailed budgets for 2023/24, 2024/25 and 2025/26 forecasts had not been developed. The 2023/24, 2024/25 and 2025/26 forecasts were developed using the 2022/23 outlook as the basis and adjusted for expected known changes as of August 31, 2022. The forecast was developed using high-level estimates and was not prepared at the same level of granularity as budget and outlook. In the absence of more specific information with respect to anticipated changes in corporate operating expenses, ICBC makes high-level assumptions in order to arrive at forecasts.

General wage increases are expected based on the BC General Employees' Union's tentative agreement. Please see the response to information request 2023.1 RR BCUC.30.1 for the percentage negotiated wage increases in the Collective Agreement included in net compensation for 2023/24, 2024/25 and 2025/26 forecasts. For increases in cost of non-pension benefits, these costs reflect changes initiated by government, inflation, demographics of ICBC's employees and new market trends. After taking into account historical trends, $2 million was chosen as a proxy for increases in non-pension benefit costs each year.

Further, ICBC uses the BC Consumer Price Index as a guide for forecasting increases in non-compensation operating expenses. This rate of inflation was chosen as a proxy for increases in operating expenses as it provides best available and consistent approximation of the average anticipated increases. For example, software maintenance, office supplies and professional services contracts commonly contain annual price escalation based on consumer price indexing. The rate of inflation is reviewed regularly for the operating expense forecast.

In developing the 2023/24, 2024/25 and 2025/26 forecast of non-compensation operating expenses, ICBC anticipated that the majority of costs will not increase in excess of inflation.

2023.1 RR BCUC.27.2.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-2
Controllable Operating Expenses

On page 6-2 of the Application, ICBC states:

> **In the 2022/23 outlook, controllable operating expenses are expected to increase to $821 million, $61 million higher than 2021/22 actual.[…] Further increase in controllable operating expenses is primarily due to anticipated general wage increases that will be negotiated under the Collective Agreement and approved by the Public Sector Employers' Council (PSEC) Secretariat, merit increases for management and confidential employees, individual length of service increases and <u>higher project expenses to support ICBC's five-year corporate strategy which defines priorities to 2025</u>. […]**
>
> **Controllable operating expenses are forecasted to increase to $870 million in 2024/25 and $902 million in 2025/26. The increase is primarily driven by general salary increases for unionized employees, inflation, sustainment expenses and <u>expenses to support ICBC's 2025 strategy</u>. [*Emphasis added*]**

Please explain whether inflation is contributing to the increase in controllable operating expenses for the 2022/23 outlook. If so, please provide ICBC's inflation estimate and explain how it was determined.

Response:

Inflation is contributing to the increase in controllable expenses for the 2022/23 outlook; however, ICBC does not have the data to determine the inflation estimate. Such increases occur through either general vendor price increases, or through contractual prices being indexed to the BC Consumer Price Index.

Inflationary pressures also include wage increases determined based on the BC General Employees' Union's tentative agreement and merit increases for management and confidential employees' salaries. ICBC received a letter dated September 26, 2022 setting out the terms on which the government has approved the 2022 bargaining plan. These wage increases shall be retroactive to July 1, 2022, with retroactive payments to be paid in the ratification year, to all active employees, including those on all forms of leave of absence. These wage increases are higher than anticipated, mainly driven by rising inflation and higher cost of living.

2023.1 RR BCUC.27.3

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-2
Controllable Operating Expenses

On page 6-2 of the Application, ICBC states:

> **In the 2022/23 outlook, controllable operating expenses are expected to increase to $821 million, $61 million higher than 2021/22 actual.[…] Further increase in controllable operating expenses is primarily due to anticipated general wage increases that will be negotiated under the Collective Agreement and approved by the Public Sector Employers' Council (PSEC) Secretariat, merit increases for management and confidential employees, individual length of service increases and <u>higher project expenses to support ICBC's five-year corporate strategy which defines priorities to 2025</u>. […]**
>
> **Controllable operating expenses are forecasted to increase to $870 million in 2024/25 and $902 million in 2025/26. The increase is primarily driven by general salary increases for unionized employees, inflation, sustainment expenses and <u>expenses to support ICBC's 2025 strategy</u>. [*Emphasis added*]**

Please explain and provide a breakdown of the forecast sustainment expenses for 2024/25 and 2025/26.

Response:

Under controllable operating expenses, sustainment expenses relate to:

- Ongoing sustainment expenses that ICBC incurs to maintain IT solutions that have been implemented through projects (i.e., project sustainment expenses, as referred to in Chapter 6, Section D.2, paragraph 45).
- Expenses incurred for implementation of critical sustainment projects, which is covered in Chapter 6, Section D.3.

Based on the reference to this information request, ICBC has interpreted that this request is for a breakdown of project sustainment expenses as opposed to the expenses for implementation of critical sustainment projects.

In the Application, Chapter 6, Figure 6.2, project sustainment expenses are included as part of Professional, Administrative and Other Expenses. Out of the overall Professional, Administrative and Other Expenses, the ongoing sustainment expenses that ICBC incurs to maintain IT solutions are included under a Computer Costs cost element. The Computer Costs cost element, consisting of ongoing sustainment expenses, are forecast to be $36 million in 2024/25 and $39 million in 2025/26. The increase results from factors explained in Chapter 6, section D.2, paragraph 45 (i.e., inflationary increases, project sustainment expenses and contractual commitments).

2023.1 RR BCUC.27.4

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-2
Controllable Operating Expenses

On page 6-2 of the Application, ICBC states:

> **In the 2022/23 outlook, controllable operating expenses are expected to increase to $821 million, $61 million higher than 2021/22 actual.[…] Further increase in controllable operating expenses is primarily due to anticipated general wage increases that will be negotiated under the Collective Agreement and approved by the Public Sector Employers' Council (PSEC) Secretariat, merit increases for management and confidential employees, individual length of service increases and <u>higher project expenses to support ICBC's five-year corporate strategy which defines priorities to 2025</u>. […]**
>
> **Controllable operating expenses are forecasted to increase to $870 million in 2024/25 and $902 million in 2025/26. The increase is primarily driven by general salary increases for unionized employees, inflation, sustainment expenses and <u>expenses to support ICBC's 2025 strategy</u>. [*Emphasis added*]**

Please provide a breakdown of the anticipated project expenses to support ICBC's five-year corporate strategy for 2022/23 outlook and for each forecast year from 2023/24 to 2025/26.

Response:

The table below shows the project expenses and depreciation expenses for 2022/23 outlook and 2023/24 to 2025/26 forecast years.

($ Millions)	**2022/23 Outlook**	**2023/24 Forecast**	**2024/25 Forecast**	**2025/26 Forecast**
Project Expenses	$40	$35	$35	$35
Depreciation Expenses	$46	$45	$45	$51
Total Project and Depreciation Expenses	**$86**	**$80**	**$80**	**$86**

At the time of filing the Application, project expenses were expected to be $40 million in 2022/23 and $35 million per year for 2023/24, 2024/25 and 2025/26.

2023.1 RR BCUC.28.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-8
Allocation Methodology

On page 6-8 of the Application, ICBC states that it has commenced the initial steps of undertaking a review of its financial allocation methodology and is in the final steps of procuring an external consultant. ICBC states:

The objective of the [financial allocation methodology] review is to fulfill the BCUC's 2021 RRA directive and to assess if the current model should be maintained. The review will examine:

- **The tradeoff between model precision and simplicity**
- **Reliance on manual processes/subjective measures and model complexity**
- **Adaptability to ICBC's evolving business model**

If available, please provide the terms of reference for the external consultant's work on the financial allocation methodology review. If not available, please explain when they will be available.

Response:

Please see Attachment A - Negotiated Request For Proposal, NFRP 2340, Issued: November 4, 2022 for the review of ICBC's financial allocation methodology. The background, business objectives, and project scope are described on pages 21 to 24 of this document.

2023.1 RR BCUC.28.1 – Attachment A – Negotiated Request For Proposal, NRFP 2340

NEGOTIATED REQUEST FOR PROPOSAL

PROJECT DETAILS and IMPORTANT EVENTS

NRFP NUMBER:	2340
NRFP NAME:	BCUC Financial Allocation Methodologies
ISSUE DATE:	November 4, 2022 6:00 pm PT
CLOSING DATE AND TIME:	December 15, 2022 6:00 pm PT
PROPOSAL VALIDITY PERIOD:	60 days from the Closing Date and Time.
ICBC CONTACT:	Ama Danso Strategic Supply Management Insurance Corporation of British Columbia 151 West Esplanade North Vancouver, BC V7M 3H9
ICBC ADDRESS FOR DELIVERY OF SAMPLES (IF REQUIRED):	Ama Danso Strategic Supply Management Insurance Corporation of British Columbia 151 West Esplanade North Vancouver, BC V7M 3H9
PROPONENTS' MEETINGS:	No
DEADLINE DATE FOR ENQUIRIES:	December 8, 2022 12:00 pm PT
JOINT VENTURES PERMITTED:	No

Enquries, submissions and other communications related to this NRFP must be completed on Bonfire at:

https://icbc.bonfirehub.ca/portal

Insurance Corporation of British Columbia uses Bonfire for accepting and evaluating Proposals digitally. Please contact Bonfire at Support@GoBonfire.com for technical questions related to your submission. You can also visit their help forum at https://bonfirehub.zendesk.com/hc.

NRFP TIME LINE

Activity	Estimated Date (unless indicated as Firm Date)
ICBC posts NRFP on BCBid and Bonfire	See Issue Date on the cover page.
Proponents' Meetings/ Site Visits	N/A
Deadline for Enquiries (FIRM DATE)	See the Deadline Date for Enquiries on the cover page.
Proposal Submission Deadline (FIRM DATE)	See the Closing Date and Time on the cover page.
ICBC to conduct evaluation of responses	January 10, 2023
Selection and notification of short-listed Proponents [and invitation to presentation(s)/site visit(s) >	January 13, 2023
Notification to Proponents who are not short-listed	January 13, 2023
Presentation(s) / Site Visit(s)	January 23, 2023
Evaluation of presentations /site-visit(s)	January 26, 2023
Product Proof of Concept	N/A
Selection of Preferred Proponent(s)	January 31, 2023
Financial assessment	February 1, 2023
Reference checks	February 1, 2023
Notification to selected Preferred Proponent	February 8, 2023
Commence contract negotiations	February 9, 2023
Contract award	March 7, 2023
Notification to Proponents(s) who are not selected	March 13, 2023

TABLE OF CONTENTS

1. INTRODUCTION AND NRFP PROCESS OVERVIEW

1.1 Introduction

1.1.1 ICBC, a provincial Crown corporation established in 1973, is the sole provider of Basic (universal compulsory) auto insurance in British Columbia. ICBC also sells Optional auto insurance products in a competitive marketplace and is responsible for driver licensing, vehicle registration and licensing.

Further details about ICBC can be found at www.icbc.com.

1.2 Scope and Requirements

1.2.1 The requirements for this procurement are set out in the Attachments to this NRFP provided by ICBC on Bonfire.

1.3 Timetable

1.3.1 The timeline provided for the NRFP process is an estimate only. ICBC may adjust deadlines at ICBC's discretion by providing notice on Bonfire or, if bidders have been pre-qualified, through Bonfire only to pre-qualified bidders.

1.3.2 The procurement method that will be used for the NRFP will involve negotiation and will not involve electronic auction.

1.4 Use of Third Party Portal

1.4.1 ICBC utilizes BC Bid to post notices of solicitation and uses Bonfire for its procurement processes, including posting the NRFP, any Addendum and accepting and evaluating Proposals digitally.

1.4.2 ICBC does not provide technical support for use of Bonfire. Proponents are required to contact Bonfire at Support@GoBonfire.com for technical questions related to the portal. Proponents can also visit the Bonfire help forum at https://bonfirehub.zendesk.com/hc.

1.5 Definitions and Interpretation

1.5.1 If not otherwise defined in this NRFP or any additional documents provided with this NRFP, capitalized terms and expressions used in the NRFP shall have the same meaning provided in Schedule 1: *Definitions and Interpretation* to this NRFP.

1.6 Communications & Enquiries

1.6.1 Proponents are required to register at least one (1) named individual (**Proponent Contact**) through Bonfire. ICBC will send communications to all Proponent Contacts through Bonfire using the email address registered by the Proponent, and assumes no obligation to ensure that any particular Proponent Contact email address is correct or that any particular Proponent Contact is aware of or has received any or all such communications.

1.6.2 To ensure the integrity of the competitive process, enquiries and other communications regarding the NFRP must be directed only to the ICBC Contact through Bonfire (each an "**Enquiry**"). The following applies to any Enquiry:

(a) directing an Enquiry to anyone other than the ICBC Contact may result in a Proposal being disqualified;

(b) significant Enquiries and ICBC's written response will be provided to all Proponents by posting on Bonfire;

(c) if a Proponent submits an Enquiry marked as 'confidential' or 'proprietary' that ICBC believes is a significant Enquiry the response to which should be provided to all Proponents, ICBC will request that the Proponent resubmit the Enquiry in a nonconfidential form that can be distributed to all Proponents. The Proponent will have one (1) Business Day to resubmit the Enquiry, failing which ICBC may, in its discretion, choose to revise the question to remove the information designated as confidential or proprietary to enable it to be shared with all Proponents;

(d) Enquiries not submitted in a form that can be distributed to all Proponents may not be answered by ICBC;

(e) notwithstanding subsection (d), if ICBC determines, in its discretion that an Enquiry marked as 'confidential' or 'proprietary', even if withdrawn, is of general application or would provide a significant clarification of the NRFP or its processes to Proponents, then ICBC may issue a clarification to Proponents that addresses the same subject matter as the withdrawn Enquiry; and

(f) Enquiries must be submitted by the Deadline for Enquiries or, if no date is specified, then not less than five (5) Business Days before the Proposal Submission Deadline.

1.6.3 Information obtained from sources other than the ICBC Contact with regard to the NRFP is not official, may be inaccurate, and must not be relied upon. Only ICBC, through Bonfire or the ICBC Contact may provide official information with respect to the NRFP.

1.7 Amendments to the NRFP

1.7.1 ICBC may, in its discretion, amend the NRFP at any time including correction of minor issues, such as of typographical errors or formatting, by issuing an Addendum or an amended and restated NRFP on Bonfire that integrates all prior Addendums. In the event of a discrepancy between documents posted on BC Bid and Bonfire, the documents posted on Bonfire will prevail.

1.8 Proponents' Meeting

1.8.1 ICBC may elect to hold a meeting for prospective Proponents (the **"Proponents' Meeting**") to provide further information about the NRFP process, and to respond to any immediate questions that Proponents may have. If ICBC elects to do so, the date, time, and location of the meeting will be set out in the NRFP Estimated Time Line or provided via a Website Notice. Proponents' Meetings may be held with all Proponents together or with individual Proponents, at ICBC's discretion.

1.8.2 For any Proponents' Meetings, Proponents will be asked to provide to the ICBC Contact, through Bonfire, a written list of the proposed attendees (including individual name, title, and firm name). ICBC may, in its discretion, limit the number of attendees.

1.8.3 For in person meetings, Proponent attendees must arrive at ICBC's facilities sufficiently in advance of the time scheduled for the Proponents' Meeting to enable facility sign in to be completed.

1.8.4 Proponents' attendees may be required to execute a non-disclosure agreement prior to the Proponents' Meeting. Individuals who do not do so will be excluded from the Proponents' Meeting.

1.9 Confidentiality and Disclosures

1.9.1 All Proposals become the property of ICBC and will not be returned to the Proponent.

1.9.2 Proponents should clearly indicate in their Proposal or for other information disclosed to ICBC any information or elements of the Proposal that should be considered confidential and could harm the Proponent's competitive interests if released.

1.9.3 The Proponent will not make any public announcement or make any reference to ICBC, the NRFP or the NRFP process without the prior written consent of ICBC.

1.10 Applicable Policies; Trade Agreements

1.10.1 In addition to any other policies identified in the NRFP, the ICBC *Code of Ethics* (www.icbc.com) applies to and is incorporated by reference into this NRFP.

1.10.2 The NRFP is subject to the New West Partnership Trade Agreement (**NWPTA**), the Canadian Free Trade Agreement (**CFTA**), the Canada-European Union Comprehensive Economic and Trade Agreement (**CETA**), and the Canada-United Kingdom Trade Continuity Agreement (**Canada-UK TCA**) where the value of the goods or services meets or exceeds the financial thresholds or is not otherwise excluded from the application of any trade agreement.

2. PROPONENT INSTRUCTIONS

2.1 Submission of Proposals

2.1.1 Proposals must be submitted electronically using Bonfire on or before the Proposal Submission Deadline. At the Proposal Submission Deadline, Proponents will be unable to submit Proposals and any transmissions that are not completed at the Proposal Submission Deadline will be terminated. ICBC does not accept Proposals in hard copy.

2.1.2 An email confirmation receipt with a unique confirmation number will be sent once the Proponent finalizes its electronic Proposal submission. The ability to submit Proposals will terminate as of the Proposal Submission Deadline. Proposals that are not fully uploaded as of the Proposal Submission Deadline will be deemed incomplete and will be rejected.

2.1.3 The date and time will be finally and conclusively determined in accordance with Bonfire's procedures as are in effect from time to time, and such recording shall conclusively be deemed to be correct as of the date and time of delivery.

2.1.4 Proposals must remain open for acceptance for a period of not less than sixty (60) Business Days from the Proposal Submission Deadline, unless specified otherwise in the NRFP. ICBC reserves the right to seek an extension of the Proposal validity period from all responsive Proponents in writing prior to the end of the Proposal validity period. If the extension is accepted by all responsive Proponents, ICBC will continue with the evaluation of the Proposals. If the extension is not accepted by all responsive Proponents, ICBC will, at its discretion, either continue with the evaluation of the Proposals of those who have accepted the extension or cancel the NRFP.

2.1.5 If samples are required to be provided in the NRFP, they must be delivered only to the attention of the ICBC Contact at the address specified in the Project Details and Important Events section of the NRFP. Samples must be identified by the NRFP solicitation number and the Proponent's name. ICBC's time stamp shall conclusively determine the time of receipt of any Proponent samples by ICBC.

2.2 Proposal Format and Length

2.2.1 Proponents are required to respond to all requirements of the NRFP and its Attachments as are made available on Bonfire.

2.2.2 If a maximum Proposal length is specified, or if a maximum size is specified for portions of the Proposal (for example, resumes), ICBC will only evaluate the first set of pages up to the maximum number of pages so specified, and will only determine a score based upon this information. Information provided in any additional pages will not be evaluated.

2.2.3 If a Form is provided by ICBC, Proponents must use the specified Form for the applicable portion of their Proposal.

2.3 Financial Bid

2.3.1 The Financial Bid must be in the Form as provided by ICBC. Inclusion of financial information in any other portion of the Proposal other than the Financial Bid will result in the rejection of the Proposal.

2.3.2 Proponents must provide all costs associated with providing the solution to ICBC in their Financial Bid. Pricing information must be provided in Canadian dollars and include as separate items all federal and provincial taxes, where applicable.

2.4 Proponents Team Members and References

2.4.1 Proponents must identify in their Proposals any first tier subcontractors who will be providing any of the work under the Contract.

2.4.2 Proponents should provide references for the proposed key personnel or subcontractors in accordance with the requirements in the NRFP.

2.4.3 Proponents are not permitted to withdraw, substitute, add to, or otherwise change any Team Member, subcontractor or key personnel that ICBC required be expressly identified in their Proposals and are evaluated by ICBC as part of the evaluation process after the Proposal Submission Deadline.

2.5 Certifications and Legal Capacity

2.5.1 Proponent must provide those certifications, licenses or other verifications or proof (collectively, "**certifications**") as required for the NRFP within the time period or by the date specified (either in the NRFP or as required by the ICBC Contact).

2.5.2 If no time period is specifically provided for in the NRFP or in any notice from the ICBC Contact, then the required certification shall be deemed due on the third (3rd) Business Day after the date of request.

2.5.3 If the Proponent is a sole proprietorship, a partnership or a corporate body, the Proponent must provide, if requested by the ICBC Contact, a statement and any requested supporting documentation indicating the laws under which it is registered or incorporated together with the registered or corporate name and place of business and evidence that the Proponent is in good standing (**proof of legal capacity**). This also applies to Proponents submitting a Proposal as a joint venture.

2.5.4 If a certification or proof of legal capacity is not provided within the time period or by the date specified, it shall be deemed not to have been delivered.

2.5.5 By submitting a Proposal, the Proponent acknowledges and agrees that: (i) acceptance of any terms and conditions identified as mandatory or non-negotiable in Annex D is a mandatory requirement of this NRFP; (ii) it accepts all such terms and conditions; and (iii) any modification or qualification of such terms and conditions by the Proponent will render the Proposal non-conforming and result in rejection of the Proposal.

2.6 Security Risk Assessment

2.6.1 Proponents, and any subcontractors or other parties who may receive or have access to ICBC information, or who may supply products or services that may interface with ICBC networks, will be required to undergo a security risk assessment as part of the evaluation process.

2.6.2 ICBC will initiate the security risk assessment by issuing a questionnaire (**Security Questionnaire**) to Proponents or, if shortlisting Proponents, only to shortlisted Proponents.

2.6.3 Security Questionnaires must be submitted within the time frame specified by ICBC. Failure to submit the Security Questionnaire as required may result in the rejection of the Proposal.

2.6.4 ICBC will assess the information provided by a Proponent and determine, in its discretion, whether the Proponent, or its subcontractors or other parties, present an unacceptable risk to ICBC. If ICBC determines that there exists any unacceptable risk to ICBC, ICBC may, at its discretion, reject the Proponent's Proposal or require that the Proponent propose mitigation measures to address the risk within a specified time period. If mitigation measures are accepted by ICBC, the Proponent's Proposal will be deemed amended to include the mitigation measures.

2.6.5 Should a Proponent not propose mitigation measures to the satisfaction of ICBC within the time period so specified, ICBC may, at its discretion, provide an extension to the Proponent or may disqualify the Proponent, and exercise any rights it has, including the right to notify the next highest-ranked Proponent and commence negotiations with that Proponent.

2.7 Amending or Withdrawing Proposals; Late Proposals

2.7.1 Proponents may submit part or all of a Proposal, or amend part or all of a Proposal in advance of the Proposal Submission Deadline. The Proposal in whole or in part will not be accessible to ICBC until the Proposal Submission Deadline.

2.7.2 Proposals that are not submitted in full by Proposal Submission Deadline and do not otherwise comply with the NRFP requirements will be rejected.

2.7.3 Notwithstanding the foregoing, a Proposal submitted after the Proposal Submission Deadline will not be rejected where the Proponent is able to provide evidence to substantiate to the satisfaction of ICBC that its Proposal was sent before the Proposal Submission Deadline and the late delivery was solely as a result of delays occurring outside of the Proponent's control and which could not have been reasonably foreseen or prevented.

2.7.4 At any time, a Proponent may withdraw its Proposal and terminate its participation in the NRFP process by notifying ICBC through Bonfire.

2.8 Participation in Multiple Proposals

2.8.1 A Proposal may be submitted for more than one stream or category in an NRFP or as an "alternative" solution offering if permitted by an NRFP (each an "**opportunity**"). Proponents should submit only one (1) Proposal for each opportunity in an NRFP.

2.8.2 If a Proponent is participating in more than one Proposal (for example, as a Proponent in one Proposal and as a Team Member or a subcontractor in another Proposal) ICBC may determine that this constitutes a conflict of interest and, at its discretion, require the Proponent to withdraw one of the Proposals or notify the Proponent that it will only evaluate the Proposal that was first submitted, in full, on Bonfire. ICBC reserves the right to further query Proposals where a Team Member or a subcontractor is a Team Member or a subcontractor in multiple Proposals.

2.9 Evaluation

2.9.1 Proposals will be evaluated against all of the requirements of the NRFP, including the evaluation criteria set out in the Attachments (the "**Evaluation Criteria**").

2.9.2 Any element of the NRFP or any Attachment that is identified specifically with the words "shall", "must" or "mandatory" is a mandatory requirement.

2.9.3 Proposals that do not meet all of the mandatory requirements will be rejected.

2.9.4 As part of the evaluation process, ICBC may also choose to conduct interviews and/or require Proponents to provide presentations of their proposed solution. Any such requirements will be described in the Attachments.

2.9.5 A Proposal must comply with the requirements of the NRFP and meet all mandatory requirements to be declared responsive.

2.9.6 Based on the results of the evaluation, the Evaluation Team will recommend a Preferred Proponent for Contract negotiation.

2.10 Preferred Proponent; Conditions Precedent to Award of Contract

2.10.1 If a Proponent is selected as a Preferred Proponent, that Proponent shall only be considered to be a Preferred Proponent during active negotiations of a Contract with ICBC. If ICBC terminates or suspends negotiations with the Preferred Proponent, it shall no longer be considered to be a Preferred Proponent.

2.10.2 Once ICBC has successfully negotiated a Contract with the Preferred Proponent, ICBC will forward an award letter to the Preferred Proponent which outlines the Conditions Precedent to award, if any, of the Contract (**Conditions Precedent**) which ICBC requires a Preferred Proponent to meet in order to be eligible for Contract award.

2.10.3 Prior to the award of any Contract, the Preferred Proponent must meet the Conditions Precedent within any specified time period (each a "**CP period**" and collectively the "**CP periods**")).

2.10.4 If a Preferred Proponent has failed to meet a Condition Precedent within the applicable CP period, ICBC may, in its discretion, choose to extend the applicable CP period or may disqualify the Preferred Proponent as a Preferred Proponent, and exercise any rights it has, including the right to notify the next highest-ranked Proponent that it is a Preferred Proponent and commence negotiations with that Proponent.

2.10.5 If ICBC has set a minimum score or ranking that must be achieved for a Proponent to be considered a potential Preferred Proponent, ICBC may, in its discretion, waive one or both requirements in order to enable ICBC to assure a sufficient roster of potential suppliers under this NRFP.

2.10.6 Upon all Conditions Precedent being met, as determined in ICBC's discretion, ICBC shall, subject to section 2.10.8 prepare a final Contract for execution by the parties and the Preferred Proponent shall deliver a fully executed Contract to ICBC within two (2) Business Days of delivery thereof.

2.10.7 ICBC may make those amendments to the form of the Contract to reflect the Preferred Proponent's Proposal, minor changes, additions or modifications to those provisions that are identified as requiring completion or finalization (such as inserting contact details; operative dates, pricing etc.) or other non-material modifications. Preferred Proponent acknowledges that it must accept such changes as a Condition Precedent to Contract award.

2.10.8 The award of any Contract by ICBC is at all times subject to ICBC obtaining appropriate approvals to proceed, notwithstanding the fact that any or all of the Conditions Precedent have been met.

2.11 Notification of Award; Debriefing

2.11.1 The Proponents will be notified by ICBC in writing as to their success or failure in the NRFP process in accordance with the process as determined by ICBC.

2.11.2 If a Proponent wishes to request a debriefing, it must submit its request to the ICBC Contact within ten (10) Business Days of the earlier of notice of its disqualification from the procurement process, notice of the shortlisted Proponents or Preferred Proponent(s), or notice of Contract award to the successful Preferred Proponent(s). ICBC may provide the debriefing orally, in person, or in writing, at its discretion.

2.12 Proponent's Obligations

2.12.1 It is the Proponent's responsibility to:

(a) ensure it has the appropriate and necessary minimum system requirements or any other technological requirements to use the bid platforms identified in the NRFP, such as Bonfire and BC Bid;

(b) monitor BC Bid and Bonfire for information relating to the NRFP;

(c) ensure that it has downloaded the complete NRFP, including any and all Addendum and/or restated and amended NRFP;

(d) obtain clarification of the requirements contained in the NRFP, if necessary, before the Deadline for Enquiries;

(e) prepare its Proposal in accordance with the instructions contained in the NRFP;

(f) submit a complete Proposal on or before the Proposal Submission Deadline in compliance with the Proposal submission requirements;

(g) ensure that the Proponent's name, return address, email address, telephone contact information, NRFP number, and Proposal Submission Deadline are clearly visible on the Proposal; and

(h) provide a comprehensible and sufficiently detailed Proposal, including all requested pricing details, that will permit a complete evaluation in accordance with the criteria set out in the NRFP.

2.13 ICBC Reserved Rights in the Conduct of the Evaluation

2.13.1 In addition to any other rights of ICBC, in the evaluations of Proposals ICBC may, but will have no obligation to, do the following:

(a) seek clarification or verification from Proponents regarding any or all information provided by them with respect to the NRFP;

(b) contact any or all references supplied by Proponents to verify and validate any information submitted by them;

(c) request, before award of any Contract, specific information with respect to Proponents' legal status;

(d) conduct a survey of Proponents' facilities and/or examine their technical, managerial, and financial capabilities to determine if they are adequate to meet the requirements of the NRFP;

(e) correct any error in the extended pricing of Proposals by using unit pricing and any error in quantities in Proposals to reflect the quantities stated in the NRFP; in the case of error in the extension of prices, the unit price will govern;

(f) verify any information provided by Proponents through independent research, use of any government resources or by contacting third parties;

(g) interview, at the sole costs of Proponents, any Proponents and/or any or all of the resources proposed by Proponents to fulfill the requirement of the NRFP;

(h) consult with others including ICBC staff members, third parties and references;

(i) request correction of unintentional errors of form from any Proponent with respect to its Proposal; and

(j) for presentations conducted for the purposes of permitting Proponents to clarify their Proposals, not request any presentations from Proponents.

2.13.2 Proponents will have the number of days specified in the request by the ICBC Contact to comply with any request related to any of the above items. Failure to comply with the request may result in the Proposal being rejected.

SCHEDULE 1 - DEFINITIONS AND INTERPRETATION

1. DEFINITIONS

Unless otherwise defined in the NRFP, capitalized terms and expressions used in the NRFP shall have the same meaning provided below:

Addendum means a written document issued by the ICBC Contact and identified as an Addendum for the purpose of amending the NRFP;

Attachments means collectively the Annexes, Appendices, Questionnaires, and/or Forms that are part of the NRFP and provided by ICBC on Bonfire;

Authorized Persons means employees, associates and subcontractors (if any) of the Proponent are required to collect, access, use or disclose the personal information for the purpose of the Proponent performing its obligations under the Contract;

Business Day means any day other than a Saturday or Sunday or statutory holiday in British Columbia;

Code of Ethics means ICBC's *Code of Ethics* policy in effect from time to time;

Confidential Information has that meaning ascribed to it under any non-disclosure agreement between the Proponent and ICBC with respect to the NRFP process or the Contract negotiations;

Conflict of Interest (*or* ***conflict of interest)*** includes any situation or circumstance where a Proponent, Team Member, subcontractor, or any persons engaged in the development or oversight of development of the Proponent's Proposal (including for such persons in their personal capacities) has:

(i) other commitments, relationships, financial interests or involvement in any litigation or proceeding that could or could be seen: (a) to exercise an improper influence over the objective, unbiased and impartial exercise of ICBC's independent judgment; or (b) to compromise, impair or be incompatible with the effective performance of its obligations under any Contract awarded;

(ii) contractual or other obligations to ICBC that could or could be seen to have been compromised or impaired as a result of its participation in the procurement process; or

(iii) knowledge of confidential information (other than confidential information disclosed by ICBC in the normal course of the procurement process) of strategic and/or material relevance to the procurement process that is not available to other Proponents and that could or could be seen to give the Proponent an unfair advantage.

Contract means a formal written contract between ICBC and a Preferred Proponent (who is thereafter referred to as the Vendor) to undertake the work as described in the NRFP and the Contract;

Evaluation Team means the evaluation team appointed by ICBC in its discretion, from time to time for the purposes of evaluating Proposals;

Financial Bid means any information with respect to cost or pricing in a Proposal;

ICBC means the Insurance Corporation of British Columbia;

ICBC Contact means the individual identified as the ICBC Contact on the first page of the NRFP, or as otherwise identified to Proponents by ICBC using a Website Notice;

NRFP means this Negotiated Request for Proposals including all Attachments or requirements posted on Bonfire or otherwise identified by, and any Addendums or restatements made by ICBC;

Personal information has that meaning ascribed to the term in the *Freedom of Information and Protection of Privacy Act* (British Columbia) (**FIPPA)** as in effect from time to time or as provided in any successor or replacement legislation;

Preferred Proponent(s) means the Proponent(s) selected to enter into negotiations for a Contract;

Privacy Policy means ICBC's Privacy Policy in effect from time to time;

Proponent means the person or entity (or, in the case of a joint venture, the persons or entities) submitting a Proposal to perform a Contract for goods, services or both. It does not include the parent, subsidiaries or other affiliates of the Proponent, Team Members, its subcontractors or any other entity;

Proposal means a proposal submitted in response to the NRFP, including any amendments thereto as permitted by the NRFP;

Security Policy(ies) means the ICBC policy or policies in effect from time to time that provide for information and facility security;

Team Member means any employees, contractors, subcontractors or other party identified in the Proponent's Proposal that will provided goods or services by or on behalf of the Proponent or as a subcontractor or other provider of the Proponent;

Website Notice means any solicitation notice posted by ICBC on BC Bid, and/or for any procurement process, Bonfire. Cancellation notices will be posted on BC Bid and Bonfire; suspension notices will be posted only on Bonfire.

2. INTERPRETATION

2.1 Any reference in the NRFP to a submission deadline means the noted time to the second, even where seconds are not explicitly noted. For greater certainty, a submission deadline is as of the zero count in seconds of the noted time.

2.2 In the NRFP, the singular shall include the plural and the plural shall include the singular, except where the context otherwise requires; and words in the singular include the plural and vice-versa and words in one gender include all genders.

2.3 All references in the NRFP to ICBC's "discretion" means ICBC's sole, absolute and unfettered discretion.

2.4 In the NRFP, all references to dollar amounts are to the lawful currency of Canada.

2.5 All references in the NRFP to "Contract" shall be deemed to be followed by the phrase "if any, issued by ICBC".

2.6 The words "include", "includes", "including", or any variations shall be deemed to be followed by the phrase "without limitation" and, when following any general term or statement, are not to be construed as limiting the general term or statement to the specific items or matters set forth or to similar items or matters.

2.7 Unless otherwise indicated, all references in the NRFP to any legislation include the regulations thereunder, and any replacement or successor legislation or regulations in effect from time to time.

SCHEDULE 2 - GENERAL TERMS AND CONDITIONS

1. USE OF THIRD PARTY PORTAL

1.1 Any use of third party portals, including Bonfire, is subject to the terms and conditions of the site provider. ICBC bears no responsibility and is not liable for any errors or omissions in a Proponent's Proposal due to a Proponent's failure to obtain information available on BC Bid or Bonfire. Proponents are responsible for ensuring that they meet the minimum system requirements for use of such sites and for use of any other on-line communication platforms used (for example, online Proponents' Meetings).

2. AMENDMENTS TO THE NRFP

2.1 No communication whether written or oral, including written responses to Enquiries as may be provided from time to time, information provided at any industry or Proponents' Meetings (if held), or information exchanged with or provided by any party, will be included in or in any way amend the NRFP. No amendment of any kind to the NRFP is effective or may be relied upon unless it is contained in an Addendum or an amended and restated NRFP that is provided by ICBC. Each Addendum forms an integral part of the NRFP.

3. NO COLLUSION OR CONFLICT OF INTEREST

3.1 ICBC's *Code of Ethics* applies to the NRFP process and to all Proponents.

3.2 Proponents must prepare and submit Proposals independently and without any connection, knowledge, comparison of information or arrangement, direct or indirect, with any other Proponent.

3.3 A Proponent must not discuss or communicate, directly or indirectly, with any other Proponent, any information whatsoever regarding its own Proposal or the Proposals of other Proponents in a manner contrary to applicable law.

3.4 Proponents must disclose any potential conflicts of interest and existing business relationships they may have with ICBC and ICBC may consider this information in its assessment of the Proponent(s)' Proposal, whether to the Proponent(s)' advantage or disadvantage.

3.5 In order to protect the integrity of the procurement process, Proponents are advised that ICBC may reject a Proposal if the Proponent: (a) was involved in any manner in the preparation of the NRFP or in any situation of conflict of interest or appearance of conflict of interest; or (b) had access to information related to the NRFP that was not available to other Proponents and that would, in ICBC's opinion, give or appear to give the Proponent an unfair advantage.

3.6 The experience acquired by a Proponent who is providing or has provided the goods and services described in the NRFP (or similar goods or services) will not, in itself, be considered by ICBC as conferring an unfair advantage or creating a conflict of interest. The Proponent remains however subject to the criteria above.

3.7 The Proponent acknowledges that it is within ICBC's discretion to determine whether a conflict of interest, unfair advantage or an appearance of conflict of interest or unfair advantage exists and to reject a Proposal accordingly.

3.8 Proponents must not lobby any employee, officers or director of ICBC or any BC government representative regarding the NRFP or their Proposal. For greater certainty, lobbying consists of contacting any employee, officer or director of ICBC other than the ICBC Contact, or any other attempt to influence ICBC's administration of the NRFP process or Contract award.

3.9 This section applies to Proponents, each Proponent Team Member and their respective employees, subcontractors, contractors, agents and representatives.

4. PROPONENT ACKNOWLEDGEMENT AND ICBC LIMITATION OF LIABILITY

4.1 By submitting its Proposal, and participating in the process as outlined in the NRFP, Proponent acknowledges and agrees that:

(a) it is solely responsible to ensure that it has received a complete NRFP and all Website Notices;

(b) it is solely responsible for all costs and expenses incurred or arising with respect to participation in the NRFP and for conducting all due diligence necessary to fully understand the Proposal requirements and to prepare its Proposal. Nothing in the NRFP or in the NRFP process itself will relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in the NRFP;

(c) no guarantee, representation or warranty, express or implied, is made with respect to the completeness or accuracy of any information presented in the NRFP or during the NRFP process. ICBC or any of its officers, directors, servants, contractors and agents shall not be liable to anyone as a result of the use of any information contained in the NRFP or provided during the NRFP process;

(d) acknowledges and agrees that all services provided to ICBC under any contract must be provided in the English language by personnel fluent in written and spoken English;

(e) no contract of any kind is formed under, or arises from, the NRFP, prior to the signing of a formal written Contract;

(f) ICBC and any of its officers, directors, servants, contractors and agents shall have no liability whatsoever, whether arising at law, in contract or in tort, arising out of Proponent's participation in or exclusion from the NRFP process, for or in connection with any action, cause of action, suit, claim, loss, damage, cost or expense of any nature or kind whatsoever incurred or suffered by Proponent as a result of or in connection with, any act, omission, decision or step taken by ICBC or any of its officers, directors, servants, contractors and agents in the exercise of any right or discretion under the NRFP or otherwise relating to or arising out of the NRFP process, including where ICBC is in breach of any duty owed at law to Proponent;

(g) if, notwithstanding the foregoing, ICBC or any of its officers, directors, servants, contractors and agents incur any liability to Proponent arising out of or in connection with the NRFP process, the total aggregate liability of ICBC**,** and its officers, directors, servants, contractors and agents shall under no circumstances exceed the reasonable actual, direct costs incurred by Proponent in the preparation of its Proposal or $10,000, whichever is less. This limitation of liability shall survive the completion or termination of the NRFP process; and

(h) it has and does waive any and all claims against ICBC and its officers, directors, servants, contractors and agents or at all, including without limitation any claims described herein.

5. LITIGATION HISTORY

5.1 The Proponent, by submitting the Proposal, warrants and represents that it is neither currently nor in the ten (10) years prior to the Proposal Submission Deadline, involved in Litigation with ICBC or the Government of BC other than those situations explicitly disclosed in the Proposal Submission Form.

5.2 ICBC will be assessing each Proponent, and reserves the right to assess any related entities who share all or some of the same directors and officers as the Proponent in light of past or current Litigation to determine if ICBC would face unacceptable risks if ICBC were to enter into a Contract with that Proponent.

5.3 ICBC reserves the right to disqualify a Proponent from the NRFP process where ICBC discovers a Proponent's misrepresentation of the facts in the Proposal Submission Form or its failure to disclose its Litigation history, or as a result of its risk assessment.

5.4 For the purposes of this provision, "**Litigation**" refers to an action in the courts, an arbitration, or other formal dispute resolution proceeding brought by or against the Proponent, either directly or indirectly through another party (e.g. a service provider or related party), by, against or involving Proponent on behalf of itself for:

(a) any matter involving the provision of goods or services, including construction and consulting services;

(b) any matter involving the disposition, acquisition or leasing of real property; or

(c) any matter arising from ICBC or any of its predecessor corporations' exercise of their powers, duties or functions under applicable legislation and policies, and includes:

(i) any action(s) that have been completed where the full amount of damages payable by way of settlement or court order have been paid;

(ii) any action(s) that have been completed where the full amount of damages payable by way of settlement or court order have not been fully paid; and

(iii) any actions that remain ongoing in the courts, through arbitration, or other formal dispute resolution proceeding.

6. GENERAL RESERVATION OF RIGHTS - NRFP PROCESS

6.1 Without derogating from and in addition to any other rights of ICBC, ICBC reserves the right, in its discretion, to:

(a) determine the composition, from time to time, of the Evaluation Team;

(b) extend or amend, from time to time, any date, time period or deadline provided in the NRFP upon written notice to all Proponents;

(c) reject any or all Proposals received in response to the NRFP;

(d) enter into negotiations with Proponents on any or all aspects of their Proposal;

(e) accept any Proposal in whole or in part without negotiation;

(f) cancel the NRFP at any time;

(g) reissue the NRFP;

(h) if no responsive Proposals are received and the requirement is not substantially modified, reissue the NRFP by inviting only the Proponents who submitted Proposals to resubmit Proposals within a period designated by ICBC;

(i) if a Preferred Proponent is selected, negotiate any aspect of a Preferred Proponent's Proposal; and

(j) negotiate with the sole responsive Proponent to ensure best value to ICBC.

7. DEEMED CONSENT

7.1 Submission of a Proposal is deemed to constitute the consent of the Proponent(s) and identified subcontractors or Team Members, and their respective directors, officers, shareholders or owners and any other person named in the Proposal to ICBC's receipt of this information and any exercise of any right reserved to ICBC within the NRFP.

8. ICBC RIGHTS TO REJECT PROPOSALS

8.1 In addition to its other rights, ICBC may reject a Proposal in its discretion where any of the following circumstances is present:

(a) on the basis of information provided by the Proponent's references;

(b) if, in its review of a Proponent's Proposal, ICBC determines that the Proposal contains misrepresentations or any other inaccurate or misleading information, including with respect to the goods or services to be provided;

(c) a Proponent, Team Member, subcontractor, or any person included as part of the Proposal (**"identified entity"** or collectively, **"identified entities"**), is subject to any restrictions, or has been otherwise prohibited from contracting with ICBC or entering ICBC's premises where the work is to be performed, and which would render the identified entity ineligible to provide the work, or the portion of the work that it is to perform;

(d) the Proponent is bankrupt or where, for whatever reason, its activities are rendered inoperable for an extended period;

(e) a Proponent or an identified entity has engaged in conduct prohibited by the NRFP;

(f) evidence, satisfactory to ICBC, of fraud, bribery, fraudulent misrepresentation or failure to comply with any law protecting individuals against any manner of discrimination, with respect to a Proponent or an identified entity;

(g) evidence satisfactory to ICBC that, based on past conduct or behaviour, a Proponent or an identified entity is unsuitable or has conducted itself improperly;

(h) on grounds of conflict of interest for a Proponent or an identified entity where the Proponent or an identified entity has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including (i) having or having access to confidential information of ICBC in the preparation of its Proposal that is not available to other Proponents; (ii) communicating with any person with a view to influencing preferred treatment in the NRFP process (including but not limited to the lobbying of decision makers involved in the NRFP process); or (iii) engaging in conduct that compromises or could be seen to compromise the integrity of the NRFP process;

(i) a Proponent has not demonstrated that it has sufficient qualifications, resources, or where a Proponent has submitted a price that is too low to be sustainable and to ensure its ability to deliver the work;

(j) with respect to current or prior transactions with ICBC:

(i) a Proponent or an identified entity has failed to satisfactorily meet its contractual obligations to ICBC in any prior Contract, including breaching a current or prior Contract with ICBC or repeated performance deficiencies without satisfactory remedial actions;

(ii) ICBC has exercised its contractual remedies of suspension or termination for default with respect to a Contract with a Proponent or an identified entity; or

(iii) For a Proponent or an identified entity ICBC determines that their performance on other Contracts, including the efficiency and workmanship as well as the extent to which it performed the work in accordance with contractual requirements, is sufficiently poor to jeopardize the successful completion of the requirement being contracted for.

8.2 Where ICBC intends to reject a Proposal pursuant to subsection 8.1(e) or (g), the ICBC Contact will so inform the Proponent and provide the Proponent a period of time within which to make representations, before making a final decision on the Proposal rejection. Any decision by ICBC is considered conclusive and final.

8.3 ICBC reserves the right to apply additional scrutiny, in particular, when multiple Proposals are received in response to the NRFP from a single Proponent or a joint venture. ICBC reserves the right to:

(a) reject any or all of the Proposals submitted by a single Proponent or joint venture if their inclusion in the evaluation has the effect of prejudicing the integrity and fairness of the process; or

(b) reject any or all of the Proposals submitted by a single Proponent or joint venture if their inclusion in the procurement process would distort the solicitation evaluation, and would cause a result that would not reasonably have been expected under prevailing market conditions and/or would not provide good value to ICBC.

8.4 Proponent (and if awarded a Contract, the Vendor) acknowledges that ICBC has proceeded with evaluation of a Proponent's Proposal, or the award of a Contract, in reliance upon amongst other things, certifications provided by Proponent.

8.5 ICBC may verify compliance with any certification at any time, including following any Contract award. ICBC may request any additional information it deems reasonably necessary to verify certification compliance. Failure to deliver the requested information by the delivery date specified by ICBC may result in disqualification of the Proponent's Proposal, or following Contract award, be deemed a breach of a material term of the Contract.

9. CONFIDENTIALITY

9.1 All information received will be held in confidence by ICBC, subject to the disclosure provisions of the *Freedom of Information and Protection of Privacy Act* (British Columbia) (**FIPPA**), or any other disclosure obligations imposed upon ICBC at law including, any request, requirement, decision or order of the British Columbia Utilities Commission (**BCUC**) or other regulatory body with jurisdiction over ICBC.

9.2 If the Evaluation Team includes individuals who are external to ICBC, ICBC will require such individuals to agree to hold Proposals in confidence.

10. LEGAL CAPACITY

10.1 The Proponent must have the legal capacity to Contract.

11. PREFERRED PROPONENTS; CONDITIONS PRECEDENT

11.1 Preferred Proponents have no greater rights, and ICBC has no additional obligations to Preferred Proponents except as expressly set out in the NRFP.

11.2 It is a Condition Precedent to any Contract award that ICBC and the Preferred Proponent have come to full and final agreement with respect to the Contract on or before the date identified as the end of the negotiation period, unless such date is otherwise extended by ICBC or ICBC has determined at any time that it will be unable to conclude acceptable terms with the Preferred Proponent, in its discretion.

11.3 For clarity and not by way of limitation, ICBC is not required to wait until the end of any CP period to disqualify a Preferred Proponent if it has failed to meet a Condition Precedent, or to terminate negotiations with such Preferred Proponent.

12. GOVERNING LAW

12.1 The NRFP and the NRFP process shall be governed and construed in accordance with the laws of British Columbia.

SCHEDULE 3 – APPLICABLE ATTACHMENTS

The following Attachments are applicable and form part of this NRFP:

Title	Description	Applicable (yes/ no)	Primary Location
Appendix A	Background and Scope of NRFP	Yes	Attached to this document
Annex A	Proposal Structure	Yes	Attached to this document
Annex B	Evaluation Criteria	Yes	Attached to this document
Annex C	Costing	Yes	Attached to this document
Annex D	Contract	Yes	Attached to this document
Form 1	Proponent Corporate Information	Yes	Bonfire
Form 2	Account Team Member Information	Yes	Bonfire
Form 3	Pricing	Yes	Bonfire
Form 4	Privacy Assessment	Yes	Bonfire
Form 5	N/A	N/A	N/A
Questionnaire	Mandatory Requirements	Yes	Bonfire
Questionnaire	Business Requirements	Yes	Bonfire
Sample Contract	Sample Contractual for Services	Yes	Bonfire
Questionnaire	Sample Contract Compliance	Yes	Bonfire

Forms and Questionnaires are to be downloaded by Proponents from Bonfire.

Do **not** re-format Questionnaires. If Questionnaire formatting is altered, the completed Questionnaire document may not be accepted by Bonfire.

In Forms, Proponents may alter tables to add more rows, or add space in order to respond to requested information immediately below a requirement, if necessary.

APPENDIX A – BACKGROUND AND SCOPE

1. BACKGROUND

The Insurance Corporation of British Columbia (ICBC) is a provincial Crown corporation established in 1973 to provide universal compulsory automobile insurance (Basic insurance) to British Columbia (BC) motorists. ICBC is the sole provider of Basic insurance in the province. ICBC's Basic insurance premiums also provide for the cost of vehicle and driver licensing, vehicle registration, government debt collection, and funding for commercial vehicle compliance. These costs are classified as Non-insurance costs and, along with the cost of road safety initiatives, are included in the Basic insurance rates. Since 2003, Basic insurance rates have been regulated by the British Columbia Utilities Commission (the BCUC), an independent, arms-length regulatory body.

ICBC competes with other insurance companies in the sale of optional automobile insurance coverages (Optional insurance), but Optional insurance is not regulated by the BCUC. ICBC operates all three of its lines of business (Basic, Optional and Non-insurance) on a fully integrated basis so that economies of scope and scale of ICBC's operations can benefit BC motorists.

Vehicle registration and selling of ICBC insurance products and other services (e.g., fine and debt collection) are provided primarily through Autoplan insurance brokers, an independent distribution channel consisting of over 900 broker offices throughout the Province, ICBC also provides services to customers through its various service facilities and call centres. In addition, customers living in rural areas may access a variety of ICBC services through BC Services Centres and Appointed Agents. At the end of fiscal year 2021/22, ICBC provided Basic Insurance coverage to approximately 3.5 million customers.[1]

The Corporation currently processes approximately 1 million claims annually through a 24 hour telephone claims handling facility, a province-wide network of 32 claims centres and its corporate website, www.icbc.com. To service these claims ICBC contracts with suppliers and service providers in a variety of industries in all parts of the province.

On May 1, 2021, ICBC launched a new care-based approach for automobile insurance, moving away from the previous legal based (tort) insurance model. The new Enhanced Care model reduced automobile insurance premiums for policyholders while giving British Columbians access to significantly improved accident benefits if they are injured in a crash, regardless of who is responsible. One of the key outcomes of the change to the Enhanced Care model was to largely remove legal and expert report costs and general damages payments related to injury. At the same time vehicle damage became part of a policyholders Basic insurance coverage, removing the need to sue an at-fault driver to cover the cost of vehicle repairs, replacement and loss of use.

BCUC's regulation of ICBC and allocation methodology

As noted above, ICBC's Basic insurance rates are set under the authority of the BCUC, in accordance with Sections 44, 45, and 49 of the *Insurance Corporation Act.* The associated legal framework includes the following:

- The BCUC regulates ICBC's Basic insurance business. In this capacity, the BCUC reviews and approves rates for the Basic insurance product. This product will continue to be defined by the provincial government in legislation.

[1] Based on policies earned.

- ICBC's Basic insurance premiums are not to be used to subsidize ICBC's Optional insurance business.

ICBC operates on an integrated basis and utilizes a BCUC-approved financial allocation methodology in order to ensure that only costs and revenues associated with the Basic insurance and Non-insurance lines of business are included in its Basic insurance rate indication. The BCUC-approved financial allocation methodology is a fully allocated costing (or pro-rata) methodology that allocates the actual costs and revenues in accordance with the principles of cost causality.

The essence of ICBC's financial allocation methodology is:

(i) Categories of costs that are associated exclusively with a single business segment (direct costs) are assigned directly to the appropriate business segment (Basic insurance, Optional insurance and Non-insurance).

(ii) The remaining cost categories (indirect costs), which are incurred in support of the business segments, are allocated in a manner that reflects the principles of cost causality.

(iii) Where the causal relationship may be unclear, costs are allocated in an equitable, balanced and symmetric manner.

The current BCUC-approved financial allocation methodology was originally approved for ICBC's use by the BCUC in its January 19, 2005 Decision on ICBC's Application for Approval of a Financial Allocation Methodology,[2] with only minor modifications from time to time.

The changeover to Enhanced Care on May 1, 2021 represents a significant change to ICBC's operating business model, which may have an impact on ICBC's current financial allocation methodology. In its 2021 Revenue Requirements Applications (RRA), ICBC stated:

> The changeover from a tort-based system to the Enhanced Care model and resulting organizational changes, may impact allocation methodologies in the future. ICBC anticipates that it will take at least two to three years of operation under Enhanced Care in order for the data under the new model to develop and to inform an updated financial allocation methodology.

ICBC further proposed to BCUC in the 2021 RRA that it would file a review of its financial allocation methodology by December 2023 and the BCUC approved ICBC's proposed timeframe in Order G-307-21.[3]

BUSINESS OBJECTIVES

The objective of the review of the current allocation methodology is to:

- Fulfill the BCUC's 2021 RRA direction to review the allocation methodology in its entirety, following the implementation of RAAP and Enhanced Care and to report findings/recommendations to the BCUC as part of the general RRA filing scheduled in December 2023.

[2] BCUC Order G-9-05, pages 20 to 43.

[3] BCUC Order G-307-21, Section 4.2

- Assess if the current pro-rata approach should be maintained and if there is an opportunity to adopt a more streamlined and efficient approach that meets BCUC requirements as well as objectives of verifiability, transparency, credibility and objectivity.
- Provide a financial allocation methodology process that can be repeated and that will be used annually to allocate the revenues and costs of ICBC to the two major categories of business – Basic and Optional.

ICBC currently has approximately 18 months of experience under the Enhanced Care model. It is now looking to engage the services of a qualified firm with the expertise of one or more individuals to assist ICBC in:

- Reviewing ICBC's existing financial allocation methodology and provide ICBC with an expert opinion on the appropriateness of the allocation methodology.

- Making recommendations for improvements, documented in a final report.

- Presenting the results of the review to ICBC Executive and other Committees as required.

- Serving as an expert witness on ICBC's behalf during any regulatory proceeding which may be directed by the BCUC. Being an expert witness may include preparing written materials for inclusion in ICBC's application and other ICBC documents submitted to the BCUC, providing written and oral expert testimony, participating in witness preparation work, and providing written responses to BCUC and interveners' information requests within strict and short timeframes.

Any regulatory proceedings following the ICBC's filing of its financial allocation review in December 2023 has yet to be set by the BCUC.

2. SCOPE

The scope of the review will be limited to the basis of allocation used to allocate ICBC's Statement of Operations and Statement of Financial Position between Basic, Optional, and Non-insurance operations for fiscal years 2024/25 and future years. Fiscal years 2020/21 and 2021/22 and 2022/23 will be provided as reference to evaluate and review current state allocation methodology.

Time Frame

The documentation supporting the allocations and methodology used will be available immediately upon conclusion of the contract negotiations for this procurement. The review should commence by March 15, 2023 and be completed no later than July 31, 2023, including the final report to ICBC management. This timeline should allow for review time by ICBC.

The corporation expects the Consultant to be available for work associated with the various steps in the regulatory process that begin with the submission of ICBC's Financial Allocation Methodology Application to BCUC by December 15, 2023. The regulatory schedule following that date has yet to be set by the BCUC. The schedule may proceed as follows:

- A public workshop in January 2024;

- Two rounds of information requests from BCUC and Interveners for response within a short period of time (usually 3-4 weeks each round) during the months of February to April;
- An Oral public hearing could be held in the May to June period.
- Closing arguments would be made in July.

All final allocation methods have to be acceptable to ICBC and should be acceptable to the BCUC. As appropriate, the Consultant should provide realistic and actionable recommendations that improve the allocation methods, are cost effective to implement, and improve efficiency. As ICBC will be required to apply the allocation methodology to future financial periods, the Consultant should provide recommendations on how ICBC can successfully maintain and apply the methodology in a way that is responsive to organizational change.

In order to satisfy the requirements of the BCUC, the consultant will need to identify appropriate criteria by referring to sources such as Canadian Institute for Chartered Accountants' standards, International Financial Reporting Standards, common industry practices, standards accepted by other regulatory commissions or boards, and standards provided by recognized government agencies such as the Office of the Superintendent of Financial Institutions ("OSFI").

The criteria and its source should be described in the Consultant's report and agreed upon by ICBC management.

It should be noted that any materials prepared by the Consultant and included in ICBC's filings with the BCUC will be made public by being posted on the Internet and distributed to all Interveners participating in the regulatory proceedings.

ANNEX A – PROPOSAL STRUCTURE

A.1 FORMAT OF PROPOSAL

Proponents are to download the provided Forms and Questionnaires from Bonfire, complete them and then upload them as part of their submission. Proponents are to submit the documents listed below as part of their Proposal and label the documents with the suggested files names.

Proponents are to provide requested information in the format of their choice where ICBC does not prescribe a specific Form or Questionnaire.

A.2 REQUESTED INFORMATION

Requested Information	File Name	File Type	Required/ Optional	Single or Multiple Files permitted
Main Proposal	[Proponent Name]_ICBC_2340_MainProposal	.pdf	Required	Single
Proponent Corporate Information (Form 1)	[Proponent Name]_ICBC_2340_Form1	.pdf	Required	Single/ Multiple
Account Team Member (Form 2)	[Proponent Name]_ICBC_2340_Form2	.pdf	Required	Single
Pricing (Form 3)	[Proponent Name]_ICBC 2340_Form3	.xls or .xlsx	Required	Single
Privacy Assessment (Form 4)	[Proponent Name]_ICBC 2340_Form4	.pdf	Required	Single
Completed Mandatory Requirements Questionnaire **(Q-06QS)**	Mandatory Requirements (Q-06QS)	.xls or .xlsx	Required	Single
Evidence of compliance with Mandatory Requirements	[Proponent Name]_ICBC 2340_MReq_Evidence	.pdf	Required	Multiple
Completed Business Requirements Questionnaire **(Q-39PQ)**	Business Requirements (Q-39PQ)	.xls or .xlsx	Required	Single

Requested Information	**File Name**	**File Type**	**Required/ Optional**	**Single or Multiple Files permitted**
Sample Contract Compliance Questionnaire **(Q-14IT)**	Sample Contract Compliance (Q-14IT)	.xls or .xlsx	Required	Single

ANNEX B – EVALUATION

B.1 EVALUATION PROCESS

1.1 The Evaluation Team will first evaluate Proposals on a pass/fail basis to determine if they are compliant with the mandatory requirements. Proposals that do not meet all of the mandatory requirements will be rejected.

1.2 Proposals that meet all mandatory requirements will be evaluated on the remaining evaluation criteria. If there are criteria that are evaluated based on a minimum points threshold, these criteria will be evaluated next.

1.3 Failure to meet an applicable mandatory minimum points score may, subject to ICBC's waiver rights, result in disqualification. Proposals that meet the mandatory minimum points score (if not so waived) will proceed to the next phase of evaluation when the Evaluation Team will evaluate the Proposals' responses, along with any other evaluation criteria that the Proponent must meet.

1.4 Proposals will be ordered by evaluation score. Depending upon the number of Proposals received, ICBC reserves the right (including its rights of waiver) to move all Proposals to the next step of the evaluation process, or to only move a limited sub-set of Proposals having the top ranked scores.

1.5 If a presentation component is not allocated its own weighting criteria in section B.2 below, ICBC may revise the pre-presentation scoring of a Proposal as a result of the presentation. The purpose of the non-weighted presentation is to validate the information contained in the short-listed Proponent's submission.

B.2 EVALUATION CRITERIA

2.1 Overview

The Evaluation Team will first evaluate Proposals on a pass/fail basis to determine if they are compliant with the mandatory requirements. Proposals that do not meet all of the mandatory requirements will be rejected.

2.2 Evaluation Criteria

Proposals will first be evaluated based on meeting the evaluation criteria.

Evaluation Criteria	Weighting
Business Requirements	55%
Professional Services Requirements	10%
Pricing	35%

ICBC will shortlist up to 3 or more Proposals that meet or surpass the requirements. The number of shortlisted suppliers will be at ICBC's sole discretion.

2.3 Presentation Evaluation Criteria

ICBC may ask the shortlisted Proponent for a presentation (including a demo) at no cost to ICBC.

Confirmation of your presentation date and time will be provided by email in advance of your presentation.

All information related to the presentation will only be provided to the invited shortlisted Proponents.

After the Presentation Evaluation Criteria, ICBC may shortlist one or more top ranked Proposals to continue to the Pricing Evaluation stage. The number of shortlisted suppliers will be at ICBC's sole discretion.

ANNEX C – COSTING

C.1 PRICING FORM

Form 3 for pricing breakdown is downloadable from Bonfire.

C.2 TOTAL COST OF OWNERSHIP

ICBC will factor in its ICBC internal costs and any expenditures with third parties that are necessary for the implementation, sustainment, use, and/or disposal of the proposed goods and/or services by ICBC that are not included in the Proponent's pricing proposal in Form 3 - Pricing in determining the total cost of ICBC ownership ("**TCO**") of the proposed good and/or services. Where ICBC has already incurred the costs of resources, materials, hardware, etc., such costs will not be included in the overall TCO to avoid any double factoring of ICBC's costs to support the proposed goods and/or services.

C.3 CALCULATION OF SCORES FOR PRICING

Each Proposal will receive a percentage of the total possible points allocated to pricing by dividing that Proponent's price adjusted for TCO into the lowest price submitted. For example, if a Proponent proposes $120.00 and that is the lowest price amongst qualified Proposals, that Proposal receives 100% of the possible points (120/120 = 100%). A Proponent who proposes $150.00 receives 80% of the possible points (120/150 = 80%), and a Proponent who proposes $240.00 receives 50% of the possible points (120/240 = 50%) and so forth.

C.4 DELIVERY OF GOODS

The delivery of all goods will made Delivery Duty Paid (DDP) to ICBC facilities in accordance with INCOTERMS 2020.

ANNEX D - CONTRACT

D.1 CONTRACT TERM

ICBC anticipates entering into negotiations with the Preferred Proponent for a 2 year Contract.

D.2 FORM OF CONTRACT

A sample contract (“**Sample Contract**”) is provided as part of this NRFP. This Sample Contract may form the basis for an agreement between ICBC and the Preferred Proponent (s). Other contractual provisions may be added or some contractual terms in the Sample Contract may be deleted or modified in the final agreement between ICBC and the Preferred Proponent(s).

Proponents are requested to advise if they can comply with the terms of the Sample Contract by completing the requested information in the applicable questionnaire.

D.3 SAMPLE CONTRACT

The Sample Contract is downloadable from Bonfire.

2023.1 RR BCUC.28.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-8
Allocation Methodology

On page 6-8 of the Application, ICBC states that it has commenced the initial steps of undertaking a review of its financial allocation methodology and is in the final steps of procuring an external consultant. ICBC states:

The objective of the [financial allocation methodology] review is to fulfill the BCUC's 2021 RRA directive and to assess if the current model should be maintained. The review will examine:

- **The tradeoff between model precision and simplicity**
- **Reliance on manual processes/subjective measures and model complexity**
- **Adaptability to ICBC's evolving business model**

Please explain whether ICBC intends to rank: i) the trade-off between model precision and simplicity, ii) reliance on manual processes/subjective measures and model complexity, and iii) adaptability to ICBC's evolving business model in any priority or ranking of importance when conducting its review of the financial allocation methodology.

Response:

Each of the bullet points referenced in this information request represent considerations that ICBC will undertake in its evaluation of potential improvements to ICBC's current financial allocation methodology. ICBC expects that it will rank these criteria although the ranking order is likely to be dependent upon the nature of the particular allocation function that is being considered. For example, ICBC may place a lower ranking on model precision for an allocation function that represents a relatively small amount of operating costs than it would for an allocation function representing a large amount of operating costs.

2023.1 RR BCUC.29.1-2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 2, p. 2-8; Chapter 6, pp. 6-2, 6-14
Civil Resolution Tribunal Jurisdiction

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**
>
> **Overall, FTEs are forecast to reduce to 5,581 in 2023/24, 5,476 in 2024/25 and 5,467 in 2025/26.**

On page 2-8 of the Application, ICBC states that the Trial Lawyer Association of British Columbia (TLABC) has filed leave to appeal to the Supreme Court of Canada (SCC) with respect to the BC Court of Appeal's May 12, 2022 overturn of the British Columbia Supreme Court's March 2, 2021 decision that the Civil Resolution Tribunal's jurisdiction over minor injury claims is unconstitutional. ICBC states, "The SCC's decision on whether it will hear the appeal is expected in the first quarter of 2023."

29.1 Please explain how ICBC anticipates staffing requirements will be impacted if the SCC rules in favour of TLABC and discuss how ICBC's current FTE forecast for 2023/24, 2024/25 and 2025/26 will change, if at all.

29.2 Please explain and provide the impact to operating expenses for forecast 2023/24, 2024/25 and 2025/26 if the SCC rules in favour of TLABC.

Response:

On December 22, 2022, the Supreme Court of Canada dismissed the application for leave to appeal.

Accordingly, there will be no change to staffing requirements and operating expenses for forecast years 2023/24, 2024/25 and 2025/26.

2023.1 RR BCUC.30.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12 to 6-15
Net Compensation

On pages 6-12 to 6-13 of the Application, ICBC states:

> **[…] changes in ICBC's compensation costs are attributable to a combination of factors including the number of FTEs, negotiated wage increases for unionized employees ([…]), the mix of employees (e.g., Management and Confidential, Bargaining Unit, professional, administrative, etc.) and changes in employee benefits costs or compensation levels in a particular year.**
>
> **The net compensation is expected to further increase to $551 million in 2024/25 and $564 million in 2025/26 [from the 2023/24 forecast]. The negotiated increases per the Collective Agreement and other increases are expected to be partially offset with the decrease in average FTEs.**

On page 6-15 of the Application, ICBC states that it is on target to achieve the expected reduction in claims related FTEs in 2022/23 and 2023/24, but that the expected savings in net compensation costs is not on target due to pressures that are unrelated to the transition to Enhanced Care. ICBC states:

> **These pressures include the effects of rising inflation and higher cost of living which are expected to result in higher than anticipated general wage increases for unionized employees (per the Collective Agreement), as well as increases due to changes in staff mix, individual job progression and other factors. […]**

Please provide the percentage negotiated wage increases in the Collective Agreement which are included in net compensation for 2023/24, 2024/25 and 2025/26 forecast.

Response:

The current Collective Agreement expired on June 30, 2022, and the parties are presently engaged in collective bargaining to negotiate a new Collective Agreement. Prospective wage increases for July 1, 2022 through March 31, 2023 (2022/23), 2023/24, 2024/25 and 2025/26 have been determined based on the BC General Employees' Union tentative agreement. Figure 1 below sets out the tentative wage increase percentages for the three-year term (July 1, 2022 - June 30, 2025).

These wage increases would apply to all current employees who are members of the bargaining unit on the date of ratification. These wage increases would be retroactive to July 1, 2022, with retroactive payments to be paid in the ratification year, to all active employees, including those on all forms of leaves of absence.

Figure 1 - Wage increase percentages for three-year term (July 1, 2022- June 30, 2025)

Year	Guaranteed General Wage Increase (GWI)	Contingent Cost of Living Adjustment (COLA)
July 1, 2022 – June 30, 2023[1]	3.24%	-
July 1, 2023 – June 30, 2024	5.50%	Up to 1.25%
July 1, 2024 – June 30, 2025[2]	2.00%	Up to 1.00%

[1] Year 1 (July 1, 2022 – June 30, 2023) also includes a flat $0.25/hour increase to all wage grids, or equivalent value salary grid adjustment as determined by the Public Sector Employers' Council Secretariat.

[2] Wage increase provision for July 1, 2025 through March 31, 2026 (2025/26) were kept consistent at 2% GWI.

2023.1 RR BCUC.30.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12 to 6-15
Net Compensation

On pages 6-12 to 6-13 of the Application, ICBC states:

> **[…] changes in ICBC's compensation costs are attributable to a combination of factors including the number of FTEs, negotiated wage increases for unionized employees ([…]), the mix of employees (e.g., Management and Confidential, Bargaining Unit, professional, administrative, etc.) and changes in employee benefits costs or compensation levels in a particular year.**
>
> **The net compensation is expected to further increase to $551 million in 2024/25 and $564 million in 2025/26 [from the 2023/24 forecast]. The negotiated increases per the Collective Agreement and other increases are expected to be partially offset with the decrease in average FTEs.**

On page 6-15 of the Application, ICBC states that it is on target to achieve the expected reduction in claims related FTEs in 2022/23 and 2023/24, but that the expected savings in net compensation costs is not on target due to pressures that are unrelated to the transition to Enhanced Care. ICBC states:

> **These pressures include the effects of rising inflation and higher cost of living which are expected to result in higher than anticipated general wage increases for unionized employees (per the Collective Agreement), as well as increases due to changes in staff mix, individual job progression and other factors. […]**

Please clarify the factors contributing to the "further increase" in net compensation to $551 million in 2024/25 and $564 million in 2025/26. As part of the response, please quantify how much the forecast decrease in average FTEs offsets the expected cost increases.

Response:

The 2024/25 forecast for net compensation is $551 million, an $11 million increase over the 2023/24 forecast of $540 million. The increase in net compensation is driven by the following factors:

- $14 million forecasted for general wage increases that are to be negotiated under the Collective Agreement and reported and approved by the Public Sector Employers' Council (PSEC) Secretariat, as well as individual length of service increases.
- $4 million for expected merit increase in salaries for management and confidential employees.

- $2 million for increase in the cost of non-pension benefits. Changes in cost of non-pension benefits reflect changes initiated by government, inflation, demographics of ICBC's employees and new market trends.

The increases are expected to be partially offset by a $9 million decrease in net compensation due to a forecast decrease in average FTEs.

The 2025/26 forecast for net compensation is $564 million, a $13 million increase over the 2024/25 forecast of $551 million. The increase in net compensation is driven by the following factors:

- $10 million forecasted for general wage increases that are to be negotiated under the Collective Agreement and reported and approved by PSEC Secretariat, as well as individual length of service increases.
- $2 million for expected merit increases in salaries for management and confidential employees.
- $2 million for increases in the cost of non-pension benefits. Changes in cost of non-pension benefits reflect changes initiated by government, inflation, demographics of ICBC's employees and new market trends.

The increases are expected to be partially offset by a $1 million decrease in net compensation due to a forecast decrease in average FTEs.

2023.1 RR BCUC.30.3

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12 to 6-15
Net Compensation

On pages 6-12 to 6-13 of the Application, ICBC states:

> **[…] changes in ICBC's compensation costs are attributable to a combination of factors including the number of FTEs, negotiated wage increases for unionized employees ([…]), the mix of employees (e.g., Management and Confidential, Bargaining Unit, professional, administrative, etc.) and changes in employee benefits costs or compensation levels in a particular year.**
>
> **The net compensation is expected to further increase to $551 million in 2024/25 and $564 million in 2025/26 [from the 2023/24 forecast]. The negotiated increases per the Collective Agreement and other increases are expected to be partially offset with the decrease in average FTEs.**

On page 6-15 of the Application, ICBC states that it is on target to achieve the expected reduction in claims related FTEs in 2022/23 and 2023/24, but that the expected savings in net compensation costs is not on target due to pressures that are unrelated to the transition to Enhanced Care. ICBC states:

> **These pressures include the effects of rising inflation and higher cost of living which are expected to result in higher than anticipated general wage increases for unionized employees (per the Collective Agreement), as well as increases due to changes in staff mix, individual job progression and other factors. […]**

Please explain whether ICBC has targets for reduction in claims related FTE for 2024/25 and 2025/26 forecast. If so, please provide these targets and how the net compensation increases in 2024/25 and 2025/26 will be affected if the expected reduction in claims related FTEs does not meet those targets by +/- 10 percent.

Response:

There are no specific targets for reduction in claims related FTEs for 2024/25 and 2025/26 forecasts.

To forecast staffing requirements across claims-related roles, ICBC uses an integrated staffing model, which uses projected business/work volumes (in the case of claims, actuarially forecasted claims intake and pending levels by claim type), productivity/workload benchmark expectations, as well as retirement, promotion and training assumptions.

Staffing requirements in claims-related areas are expected to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle. Please see the table in the response to information request 2023.1 RR BCUC.31.6, setting out the 2023/24, 2024/25 and 2025/26 FTE forecasts by Division. The table shows an expected decrease over this period in the average number of FTEs in the Claims Injury and Legal Services Division, for both the Bargaining Unit and Management and Confidential employee groups.

2023.1 RR BCUC.30.4

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12 to 6-15
Net Compensation

On pages 6-12 to 6-13 of the Application, ICBC states:

> **[…] changes in ICBC's compensation costs are attributable to a combination of factors including the number of FTEs, negotiated wage increases for unionized employees ([…]), the mix of employees (e.g., Management and Confidential, Bargaining Unit, professional, administrative, etc.) and changes in employee benefits costs or compensation levels in a particular year.**
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> **The net compensation is expected to further increase to $551 million in 2024/25 and $564 million in 2025/26 [from the 2023/24 forecast]. The negotiated increases per the Collective Agreement and other increases are expected to be partially offset with the decrease in average FTEs.**

On page 6-15 of the Application, ICBC states that it is on target to achieve the expected reduction in claims related FTEs in 2022/23 and 2023/24, but that the expected savings in net compensation costs is not on target due to pressures that are unrelated to the transition to Enhanced Care. ICBC states:

> **These pressures include the effects of rising inflation and higher cost of living which are expected to result in higher than anticipated general wage increases for unionized employees (per the Collective Agreement), as well as increases due to changes in staff mix, individual job progression and other factors. […]**

Please explain if higher cost of living contributes to pressures on the expected savings in net compensation costs for 2022/23 and 2023/24.

Response:

Rising inflation and a higher cost of living contribute to putting pressure on expected savings in net compensation costs for 2022/23 and 2023/24 fiscal years (FY). The net compensation expense line item includes salaries and employee benefits but does not include pension and post-retirement benefit expenses. Some of the factors contributing to pressures on expected savings in net compensation are discussed in detail below:

- **Increase in salaries:** The current Collective Agreement expired on June 30, 2022. The negotiated wage increase for July 1, 2022 through March 31, 2023 and

FY 2023/24 were determined based on the BC General Employees' Union tentative agreement, subject to the Public Sector Employers' Council Secretariat's approval. ICBC received a letter dated September 26, 2022, setting out the terms on which the government has approved the 2022 bargaining plan. These wage increases are higher than anticipated, mainly driven by rising inflation and higher cost of living.

- **Canada Pension Plan (CPP) and Employment Insurance:** Starting in 2019, the CPP contribution has gradually been increasing. These increases result in additional costs for ICBC.

- **Extended health and dental:** The costs ICBC incurs for extended health and dental benefits are based on the frequency of benefits used and the cost of services. Additional factors that influence extended health and dental costs are:
    1. Age of ICBC's staff
    2. Pharmaceutical trends and new medications that enter the market
    3. Inflation of medical services and prescription costs

- **Long Term Disability (LTD) and Life Insurance:** ICBC has a LTD and a life insurance plan for employees. Contractual premium increases to these plans result in higher costs to ICBC.

2023.1 RR BCUC.30.5

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12 to 6-15
Net Compensation

On pages 6-12 to 6-13 of the Application, ICBC states:

> **[…] changes in ICBC's compensation costs are attributable to a combination of factors including the number of FTEs, negotiated wage increases for unionized employees ([…]), the mix of employees (e.g., Management and Confidential, Bargaining Unit, professional, administrative, etc.) and changes in employee benefits costs or compensation levels in a particular year.**
>
> **The net compensation is expected to further increase to $551 million in 2024/25 and $564 million in 2025/26 [from the 2023/24 forecast]. The negotiated increases per the Collective Agreement and other increases are expected to be partially offset with the decrease in average FTEs.**

On page 6-15 of the Application, ICBC states that it is on target to achieve the expected reduction in claims related FTEs in 2022/23 and 2023/24, but that the expected savings in net compensation costs is not on target due to pressures that are unrelated to the transition to Enhanced Care. ICBC states:

> **These pressures include the effects of rising inflation and higher cost of living which are expected to result in higher than anticipated general wage increases for unionized employees (per the Collective Agreement), as well as increases due to changes in staff mix, individual job progression and other factors. […]**

Please clarify what is meant by net compensation cost increases "due to changes in staff mix, individual job progression and other factors," and explain the impact of each of these factors.

Response:

Change in staff mix: Assigning work to more experienced staff to effectively manage the cost and length of time of work assigned. For example, with the introduction of Enhanced Care and the gradual reduction of the legal-based pending claims over time, the remaining claims are more complex and are more challenging to resolve or likely to proceed to trial. Therefore, these claims are assigned to more experienced defense counsel.

Individual job progression and promotions: Staff movement from junior roles to more senior roles, as well as progressions between step 1 to step 5 in the salary grades as more years of experience are gained by staff.

ICBC cannot determine the impact of each of these factors; however, based on historical trends, a proxy of $0.5 million increase in net compensation has been included in the FY 2023/24 forecast.

2023.1 RR BCUC.31.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

Please explain why there is an expected increase in net compensation for 2023/24, 2024/25 and 2025/26 forecast as shown in Figure 6.3 whereas there is a forecast reduction in the average number of FTEs in the same years as shown in Figure 6.4.

Response:

The net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years mainly due to the general wage increases that have been determined based on the BC General Employees' Union's tentative agreement and will be negotiated under the Collective Agreement, reported and approved by the Public Sector Employers' Council Secretariat. In addition, there will be individual length of service increases and merit increases for management and confidential staff. The increases are expected to be partially offset by the decrease in the average number of FTEs.

In fiscal year (FY) 2023/24, staffing is expected to remain relatively consistent with the FY 2022/23 outlook. Please refer to pages 6-13 of the Application, Chapter 6 and paragraph 34 for factors contributing to the increase in net compensation.

Please see the response to information request 2023.1 RR BCUC.30.2 for factors contributing to the increase in net compensation in the FY 2024/25 and FY 2025/26 forecasts, partially offset by a forecast reduction in the average number of FTEs.

2023.1 RR BCUC.31.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

Please explain whether staff in legal-based claims-related areas will be reassigned to other areas of ICBC. If yes, please explain where they will be reassigned.

Response:

Yes, as legal-based injury claims continue to gradually reduce, legal-based injury staff will have an opportunity to transition to support the Enhanced Care model and other parts of the organization. These transitions have been underway since the implementation of Enhanced Care and depend on staff skillsets and interest.

2023.1 RR BCUC.31.3

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

Given that FTEs are expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years, please explain whether the forecast net compensation costs include severance pay.

Response:

There are no amounts for severance pay included in net compensation costs for the 2023/24, 2024/25 and 2025/26 forecast years. The reduction in FTEs is expected to be met by voluntary staff attrition (e.g., retirements and resignations).

2023.1 RR BCUC.31.4

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

31.4 Considering the categories of controllable operating expenses shown in Figure 6.2, please identify which expense categories are expected to vary with the number of FTEs.

31.4.1 For the expense categories identified in the IR above, please provide a calculation of the operating expenses per FTE for 2021/22 actual, 2022/23 outlook, and 2023/24 to 2025/26 forecast.

Response:

31.4

In the Application, Chapter 6, Figure 6.2, the expenses that vary with the number of FTEs are net compensation and a portion of the professional, administrative and other expenses.

These variable expenses make up approximately 3 to 4 percent of the total professional, administrative and other expenses each year and are comprised of staff training, travel for training, staff recognition, employment expenses, and dues and memberships.

- With the launch of Enhanced Care on May 1, 2021, some processes were completely redesigned, contributing to a steep learning curve for new Enhanced Care claims employees, thus, contributing to higher staff training expenses. As COVID-19 impacts diminish and restrictions have lifted there has also been a gradual return of travel and in-person training.
- Employment expenses are higher as a result of increased recruitment efforts to address staffing needs. Due to a competitive job market, external firms were engaged along with increased outreach to adequately recruit staff.

Expenses like building operating expenses and computer costs are influenced by FTEs but they do not directly vary with every change in FTEs. Therefore, for the purpose of calculating operating expenses per FTE, these costs have been excluded.

ICBC expects to accommodate the FTE changes within its existing facilities by reconfiguring and repurposing existing spaces and applying flexible work strategies.

31.4.1

The table below presents the average annual operating expenses per FTE for the requested periods:

	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast
Operating Expenses per FTE	$90,159	$93,307	$97,850	$101,711	$104,417

The moderate year over year increase is due to inflationary salary increases and the gradual return of travel and in-person training as COVID-19 restrictions have lifted.

2023.1 RR BCUC.31.5

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

Given that staffing requirements in legal-based claims-related areas are expected to gradually reduce, please explain why M&C employee FTEs for the claims injury and legal services division has increased each year from 2019/20 actual through 2022/23 outlook as shown in Figure 8C.5.

Response:

Claims Injury and Legal Services Division includes both legal-based and Enhanced Care books of business. The increase in FTEs in 2021/22 actual compared to the 2019/20 actual was primarily to support the transition to the Enhanced Care model and the need to service two books of business. The increase in 2022/23 outlook is also due to the continual need to service both sides of the business.

With respect to the increase in Management and Confidential (M&C) FTEs from fiscal year (FY) 2019/20 through to FY 2022/23, this was due in part to maintaining span of control with the Bargaining Unit (BU) during the transition to Enhanced Care in May 2021. It was also due to there now being two books of business within Claims Injury and Legal Services:

the Legal-based side (pre-Enhanced Care) as well as the Recovery side (Enhanced Care). As a result, there were a number of roles that had to be developed to support the transition. For example, Quality Assurance (QA)[1] has two separate teams with separate focus on legal-based and recovery claims. This results in a higher number of Claims Review Advisors and Management (both M&C) until the volume of claims within the legal-based book of business decreases to the point where the QA teams can be reduced and amalgamated. In addition, to support the transition of specialists into Enhanced Care, a Recovery Learning team was established for the design and delivery of cohort training as well as ongoing development. This team is also part of the M&C employee group.

Over time, these additional staffing requirements will reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle, and as experience is gained under the new Enhanced Care model. Please see the table in the response to information request 2023.1 RR BCUC.31.6, setting out the 2023/24, 2024/25 and 2025/26 FTE forecasts by Division. The table shows an expected decrease over this period in the average number of FTEs in the Claims Injury and Legal Services Division, for both the Bargaining Unit and M&C employee groups.

[1] Quality Assurance ensures best practice is adhered to with respect to claim management in both legal based and recovery.

2023.1 RR BCUC.31.6

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-10, 6-12, 6-14; Chapter 8, Appendix 8C, p. 8C-10
FTEs

Figure 6.3 on page 6-12 of the Application shows that net compensation is expected to increase in 2023/24, 2024/25 and 2025/26 forecast years.

Figure 6.4 on page 6-14 of the Application shows that the average number of FTEs by employee group is expected to decrease in 2023/24, 2024/25 and 2025/26 forecast years.

On page 6-14 of the Application, ICBC states:

> **In 2023/24, 2024/25 and 2025/26 forecast years ICBC anticipates its staffing requirements in legal-based claims-related areas to gradually reduce as injury claims that occurred prior to the implementation of Enhanced Care continue to settle.**

On page 6-10 of the Application, ICBC provides Figure 6.2 which summarizes the total corporate operating expenses by expense category.

On page 8C-10 of Appendix 8C, ICBC provides Figure 8C.5 showing the number of FTEs by division in each of the Management and Confidential (M&C), and Bargaining Unit employee groups for the years 2019/20 to 2021/22 actual and 2022/23 outlook.

31.6 Please provide the average number of FTEs by division for 2023/24, 2024/25, and 2025/26 forecast for each of the M&C and Bargaining Unit employee groups, if available.

31.6.1 If not available, please explain why not.

Response:

The table below includes the average number of FTEs by division for 2023/24, 2024/25 and 2025/26 forecasts for each of the Bargaining Unit and Management and Confidential employee groups.

Average number of FTEs by Division

FTEs	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast
BARGAINING UNIT	**4,280**	**4,195**	**4,198**
Claims Injury and Legal Services	1002	896	870
Claims Customer and Material Damage Services	1468	1497	1516
Insurance	376	378	379
Customer Experience and Public Affairs	59	59	59
Information Services	531	531	531
Finance	138	138	138
Driver Licensing and Corporate Affairs	679	670	677
Human Resources	27	27	27
MANAGEMENT AND CONFIDENTIAL	**1,301**	**1,281**	**1,269**
Claims Injury and Legal Services	327	307	298
Claims Customer and Material Damage Services	252	255	254
Insurance	93	93	93
Customer Experience and Public Affairs	80	80	80
Information Services	154	154	154
Finance	111	111	111
Driver Licensing and Corporate Affairs	157	155	153
Human Resources	113	113	113
Executive	14	14	14

2023.1 RR BCUC.32.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-16; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 50.2; ICBC 2019 RRA, Exhibit B-1, p. 7-17; Global News Article dated September 23, 2022: "ICBC to vacate North Vancouver offices in next 3 to 5 years, leaving prime real estate empty"[13]

Building Expenses

On page 6-16 of the Application, ICBC states that building operating expenses contribute to expected increases in professional, administrative and other expenses in the 2022/23 outlook due to an expected increase in operating expenses, including property tax, security, utilities and other building operating expenses, for existing facilities.

In response to BCUC IR 50.2 in the ICBC 2021 RRA proceeding, ICBC provided the following table as it relates to building operating expenses:

Figure 1 – Building Operating Expenses

($ Millions)	2018/19 Actual	2019/20 Actual	2020/21 Outlook	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast
Building Operating Expenses	28	23	22	24	25	26

Further, ICBC stated in response to BCUC IR 50.2 that building operating expenses decreased in 2019/20 compared to 2018/19 actuals mainly due to a change in accounting methodology for recording operating leases as a result of the required adoption of the International Financial Reporting Standard (IFRS) 16 standard. ICBC stated: "The adoption of IFRS 16 on April 1, 2019 led to the recognition and reclassification of operating leases, mainly real estate leases being accounted for as right-of use assets and lease liabilities on the consolidated statement of financial position, which resulted in a decrease in building operating expenses."

In the Global News article from September 23, 2022, it is stated:

> **After more than four decades on Lower Lonsdale, ICBC informed its employees this week that it will be vacating its headquarters at 151 West Esplanade St. in North Vancouver in the next three to five years.**

Further, it is stated in the Global News article that ICBC is yet to determine whether it will sell or lease its North Vancouver building but no employees will be moving out until 2025 at the earliest.

Please provide the building operating expenses for 2021/22 actual, 2022/23 outlook, and 2023/24 to 2025/26 forecast. As part of the response, please clarify in which years building operating expenses for the building at 151 West Esplanade Street are included.

[13] **Retrieved on February 9, 2023 from: https://globalnews.ca/news/9153208/icbc-to-vacate-north-vancouver-offices-in-next-3-to-5-years-leaving-prime-real-estate-empty/**

Response:

The table below provides building operating expenses for 2021/22 actual, 2022/23 outlook, and 2023/24 to 2025/26 forecast.

($ Millions)	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast
Building Operating Expenses	23	25	25	26	27

Building operating expenses for the building at 151 West Esplanade Street are included in the 2021/22 actual, 2022/23 outlook, and 2023/24 to 2025/26 forecast. ICBC expects to continue occupying the building from 2023/24 to 2025/26.

2023.1 RR BCUC.32.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, p. 6-16; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 50.2; ICBC 2019 RRA, Exhibit B-1, p. 7-17; Global News Article dated September 23, 2022: "ICBC to vacate North Vancouver offices in next 3 to 5 years, leaving prime real estate empty"[13]
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Building Operating Expenses	28	23	22	24	25	26

Further, ICBC stated in response to BCUC IR 50.2 that building operating expenses decreased in 2019/20 compared to 2018/19 actuals mainly due to a change in accounting methodology for recording operating leases as a result of the required adoption of the International Financial Reporting Standard (IFRS) 16 standard. ICBC stated: "The adoption of IFRS 16 on April 1, 2019 led to the recognition and reclassification of operating leases, mainly real estate leases being accounted for as right-of use assets and lease liabilities on the consolidated statement of financial position, which resulted in a decrease in building operating expenses."

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> **After more than four decades on Lower Lonsdale, ICBC informed its employees this week that it will be vacating its headquarters at 151 West Esplanade St. in North Vancouver in the next three to five years.**

Further, it is stated in the Global News article that ICBC is yet to determine whether it will sell or lease its North Vancouver building but no employees will be moving out until 2025 at the earliest.

If ICBC decides to lease the building at 151 West Esplanade Street, please explain how the associated revenues will be reported and forecasted in future revenue requirements.

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[13] **Retrieved on February 9, 2023 from: https://globalnews.ca/news/9153208/icbc-to-vacate-north-vancouver-offices-in-next-3-to-5-years-leaving-prime-real-estate-empty/**

Response:

If ICBC decides to lease the building at 151 West Esplanade Street, the building becomes an investment property. Properties held for rental income that are not occupied by ICBC are classified as investment properties. Income from investment properties is reported as investment income and includes rental income less any direct and indirect operating expenses.

2023.1 RR BCUC.33.1

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12, 6-19; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 57.7, 57.7.1, 57.8
Pension and Post-Retirement Benefit Expenses

On page 6-12 of the Application, ICBC provides the following table:

Figure 6.3 – Compensation Details

($ Millions)[1]	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast
Net Compensation (excluding Pension and Post-Retirement Benefit Expense)	$490	$516	$540	$551	$564
Pension and Post-Retirement Benefit Expense	101	66	53	53	53
Total Compensation	**$591**	**$582**	**$593**	**$604**	**$617**

[1] Rounding may affect totals.

On page 6-19 of the Application, ICBC states:

> **The 2022/23 outlook for pension and post-retirement benefit expense of $66 million, which is part of the non-controllable portion of total corporate operating expenses, has decreased by $35 million from the 2021/22 actual of $101 million […]**
>
> **The change in the outlook for 2022/23 as compared to the 2021/22 actual is due to the following main factors:**

- **A decrease of $24 million due to an 80-basis-point increase in discount rate, from 3.3% in 2021/22 to 4.1% in 2022/23.**
- **A decrease of $15 million due to an improvement in the net deficit position from $368 million to the net asset position of $59 million.**
- **An increase of $4 million due to an increase in forecasted payroll.**

> **The pension and post-retirement benefit expense is estimated to further decrease by $13 million in the 2023/24 forecast due to the following main factors:**

- **A decrease of $17 million due to an 80-basis-point increase in discount rate, from 4.1% in 2022/23 to 4.9% in 2023/24.**
- **An increase of $4 million due to an increase in the inflation rate and rate of compensation increase assumptions.**

> **As the pension and post-retirement benefit expense is based on a number of long-term assumptions at a point in time, this expense is held constant for the 2024/25 and 2025/26 forecasts.**

In response to BCUC IR 57.7 and 57.7.1 in the 2021 RRA proceeding, ICBC stated:

> **Aon prepares two types of pension actuarial reports for ICBC's pension plans. The first type, a pension accounting disclosure report, is prepared annually and used by ICBC to prepare its March 31 consolidated financial statements. The 2021 report will directly affect the 2021/22 pension expense. The report prepared in 2022 will directly affect the 2022/23 pension expense and the report prepared in 2023 will directly affect the 2023/24 pension expense.**
>
> **The second type of actuarial report is a pension funding report. It is prepared at least once every three years for each registered pension plan. It is primarily used to establish the contributions that ICBC and its employees make to the respective plans.**
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> **[…] These reports affect the pension expense starting in 2021/22 and are already reflected in the forecasts. The next required funding reports with an assessment date of December 31, 2022 would affect pension expense no earlier than 2024/25.**

In response to BCUC IR 57.8 in the 2021 RRA proceeding, ICBC stated:

> **The pension and post-retirement benefit expense is based on International Financial Reporting Standards and actuarial standards and methodologies. For purposes of this information request, ICBC's external pension actuary, Aon, provided an estimate of the 2021/22 pension and post-retirement benefit expense based on the most recent assumptions available when the forecast was prepared as of August 31, 2020.**
>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please provide the breakdown between pension expense and post-retirement benefit expense for 2021/22 actual, 2022/23 outlook, and 2023/24 to 2025/26 forecast.

Response:

The breakdown between pension expense and post-retirement benefit expense is as follows:

($ Millions)	2021/22 actual	2022/23 outlook	2023/24 forecast	2024/25 forecast	2025/26 forecast
Pension Expense	89	53	39	39	39
Post-Retirement Benefit Expense	12	13	14	14	14
Total	**$101**	**$66**	**$53**	**$53**	**$53**

2023.1 RR BCUC.33.2

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12, 6-19; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 57.7, 57.7.1, 57.8
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On page 6-12 of the Application, ICBC provides the following table:

Figure 6.3 – Compensation Details

($ Millions)[1]	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast
Net Compensation (excluding Pension and Post-Retirement Benefit Expense)	$490	$516	$540	$551	$564
Pension and Post-Retirement Benefit Expense	101	66	53	53	53
Total Compensation	**$591**	**$582**	**$593**	**$604**	**$617**

[1] Rounding may affect totals.

On page 6-19 of the Application, ICBC states:

> **The 2022/23 outlook for pension and post-retirement benefit expense of $66 million, which is part of the non-controllable portion of total corporate operating expenses, has decreased by $35 million from the 2021/22 actual of $101 million […]**
>
> **The change in the outlook for 2022/23 as compared to the 2021/22 actual is due to the following main factors:**
>
> - **A decrease of $24 million due to an 80-basis-point increase in discount rate, from 3.3% in 2021/22 to 4.1% in 2022/23.**
> - **A decrease of $15 million due to an improvement in the net deficit position from $368 million to the net asset position of $59 million.**
> - **An increase of $4 million due to an increase in forecasted payroll.**
>
> **The pension and post-retirement benefit expense is estimated to further decrease by $13 million in the 2023/24 forecast due to the following main factors:**
>
> - **A decrease of $17 million due to an 80-basis-point increase in discount rate, from 4.1% in 2022/23 to 4.9% in 2023/24.**
> - **An increase of $4 million due to an increase in the inflation rate and rate of compensation increase assumptions.**

> **As the pension and post-retirement benefit expense is based on a number of long-term assumptions at a point in time, this expense is held constant for the 2024/25 and 2025/26 forecasts.**

In response to BCUC IR 57.7 and 57.7.1 in the 2021 RRA proceeding, ICBC stated:

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>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain and provide any other key assumptions driving the decrease in annual pension costs from $101 million in 2021/22 actual to $66 million in 2022/23 outlook.

Response:

The key assumptions driving the $35 million reduction in annual pension costs from $101 million in 2021/22 actual to $66 million in 2022/23 outlook are:

- A decrease of $24 million due to an 80-basis-point increase in discount rate, from 3.3% in 2021/22 to 4.1% in 2022/23.

- A decrease of $15 million due to an improvement in the net deficit position from $368 million to the net asset position of $59 million. Please see the response to information request 2023.1 RR BCUC.33.4 illustrating the change from a net deficit position to a net asset position.
- An increase of $4 million due to an increase in forecasted payroll.

2023.1 RR BCUC.33.3

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
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> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain and provide the key assumptions driving the decrease in annual pension costs from 2022/23 outlook of $66 million to $53 million for each 2023/24 to 2025/26 forecast.

Response:

The key assumptions driving the $13 million reduction in annual pension cost from 2022/23 outlook of $66 million to $53 million for 2023/24 forecast are:

- A decrease of $17 million as a result of an increase in discount rate from 4.1% in 2022/23 to 4.9% in 2023/24, which is offset by;

- An increase of $4 million due to an increase of 0.25% to both the inflation rate and the rate of compensation increase assumptions.

The annual pension costs are held constant for 2024/25 and 2025/26 forecast years as the costs are based on a number of long-term assumptions at a point in time.

2023.1 RR BCUC.33.4

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Exhibit B-1, Chapter 6, pp. 6-12, 6-19; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 57.7, 57.7.1, 57.8
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As the pension and post-retirement benefit expense is based on a number of long-term assumptions at a point in time, this expense is held constant for the 2024/25 and 2025/26 forecasts.

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>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain the factors that contributed to the increase from the net deficit pension position of $368 million to a net asset position of $59 million. Please provide a breakdown of this change including any contributions, experience gains and losses, and changes in pension actuarial assumptions or methods.

Response:

The table below breaks down the factors that contributed to the improvement in the net deficit position as at March 31, 2021 to a net asset position as at March 31, 2022:

Factors Influencing Pension and Post-Retirement Benefits Position March 31, 2021 to March 31, 2022 ($ millions)	
Accrued benefit (liability) March 31, 2021	**(368)**
2021/22 expense	(101)
Actuarial gain on assets	41
Remeasurement on obligation	444
Contributions from ICBC	43
Accrued benefit asset March 31, 2022	**59**

The main factor contributing to the remeasurement on obligation is due to an increase in the discount rate from 3.3% to 4.1%, with a change in attribution method for non-pension post-retirement benefits contributing $26 million of this change.

2023.1 RR BCUC.33.5

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12, 6-19; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 57.7, 57.7.1, 57.8
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>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain whether the 2022/23 outlook and 2023/24 to 2025/26 forecast pension expense have been determined by a pension accounting disclosure report and/or a pension funding report and how each were used, if at all. If neither were used, please explain how forecasted pension expense was determined.

Response:

The pension and post-retirement benefit expense is based on International Financial Reporting Standards and actuarial standards and methodologies. ICBC engages Aon, an external pension actuary, to provide an estimate of the 2022/23 outlook and 2023/24 to 2025/26 forecasts for the pension and post-retirement benefit expense using these standards and methodologies and based on the most recent and relevant assumptions available. The 2022/23 outlook was provided in the March 31, 2022 pension accounting disclosure report. The 2023/24 to 2025/26 forecasts were an estimate provided in September 2022 based on data and assumptions at that time.

2023.1 RR BCUC.33.6

Reference: OPERATING EXPENSES AND ALLOCATION INFORMATION
Exhibit B-1, Chapter 6, pp. 6-12, 6-19; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR 57.7, 57.7.1, 57.8
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> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain when the last pension funding report was completed and when the next pension funding report is expected.

Response:

The last actuarial funding valuation for ICBC's registered pension plans was as at December 31, 2021 and related reports were filed in September 2022 with the pension regulators. The next pension funding report must be performed at the latest as at December 31, 2024 and filed with the pension regulators by September 27, 2025.

2023.1 RR BCUC.33.7

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>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please confirm, or explain otherwise, that pension actuarial standards and methodologies used in determining the post-retirement benefit expense have not changed since the 2021 RRA.

Response:

A change in attribution method for the post-retirement benefits plan was reflected going forward from the March 31, 2022 disclosures and 2022/23 outlook which resulted in a $26 million impact to the pension and post-retirement obligation. As shown in the response to information request 2023.1 RR BCUC.33.4, this is not a material impact to the pension and post-retirement obligation. All other pension actuarial standards and methodologies used in determining the post-retirement benefit expense have not changed since the 2021 RRA.

Under the old attribution method, the projected benefit is prorated by the service from the date of hire to the earliest eligibility date for benefits. Under the new attribution method, the projected benefit is prorated over 5 years (Bargaining Unit) or 10 years (Management and Confidential) preceding their earliest date of eligibility for benefits. The proration period relates to each plan's eligibility provisions. This change was implemented to align with a clarification issued by the International Financial Reporting Standards Interpretation Committee in May 2021.

2023.1 RR BCUC.33.8

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> **The change in the outlook for 2022/23 as compared to the 2021/22 actual is due to the following main factors:**
>
> - **A decrease of $24 million due to an 80-basis-point increase in discount rate, from 3.3% in 2021/22 to 4.1% in 2022/23.**
> - **A decrease of $15 million due to an improvement in the net deficit position from $368 million to the net asset position of $59 million.**
> - **An increase of $4 million due to an increase in forecasted payroll.**
>
> **The pension and post-retirement benefit expense is estimated to further decrease by $13 million in the 2023/24 forecast due to the following main factors:**
>
> - **A decrease of $17 million due to an 80-basis-point increase in discount rate, from 4.1% in 2022/23 to 4.9% in 2023/24.**
> - **An increase of $4 million due to an increase in the inflation rate and rate of compensation increase assumptions.**

> **As the pension and post-retirement benefit expense is based on a number of long-term assumptions at a point in time, this expense is held constant for the 2024/25 and 2025/26 forecasts.**

In response to BCUC IR 57.7 and 57.7.1 in the 2021 RRA proceeding, ICBC stated:

> **Aon prepares two types of pension actuarial reports for ICBC's pension plans. The first type, a pension accounting disclosure report, is prepared annually and used by ICBC to prepare its March 31 consolidated financial statements. The 2021 report will directly affect the 2021/22 pension expense. The report prepared in 2022 will directly affect the 2022/23 pension expense and the report prepared in 2023 will directly affect the 2023/24 pension expense.**
>
> **The second type of actuarial report is a pension funding report. It is prepared at least once every three years for each registered pension plan. It is primarily used to establish the contributions that ICBC and its employees make to the respective plans.**
>
> **[…] These reports affect the pension expense starting in 2021/22 and are already reflected in the forecasts. The next required funding reports with an assessment date of December 31, 2022 would affect pension expense no earlier than 2024/25.**

In response to BCUC IR 57.8 in the 2021 RRA proceeding, ICBC stated:

> **The pension and post-retirement benefit expense is based on International Financial Reporting Standards and actuarial standards and methodologies. For purposes of this information request, ICBC's external pension actuary, Aon, provided an estimate of the 2021/22 pension and post-retirement benefit expense based on the most recent assumptions available when the forecast was prepared as of August 31, 2020.**
>
> **[…] For post-retirement benefits, expected benefits are prorated based on service to earliest full eligibility date. The annual cost of benefit refers to the estimated annual cost of accruing benefits.**

Please explain and provide the assumptions that were used in preparing of the post-retirement benefit expense forecast.

Response:

The key assumptions used in forecasting the cost of post-retirement benefits are the discount rate, life expectancies, retirement rates, termination rates and extended healthcare cost trends. Together with plan member data, these and other assumptions are used to estimate future benefit eligibility, amount and duration of payments.

The discount rate is used to calculate the present value of the expected future benefit payments and to calculate the interest on net liability. The discount rate is based on high-grade corporate bond yields at the measurement date. A higher discount rate will reduce the post-retirement benefit expense. The discount rate used for the 2022/23 outlook is 4.07% and the 2023/24 forecast is 4.88%.

Life expectancies are based on Canadian mortality tables and contain a provision for future longevity improvements. The mortality scaling factors used for the post-retirement benefits outlook and forecast are 100% for male and 105% for female.

Retirement and termination rates have been developed based on recent plan experience.

The extended healthcare trend rate is based on the analysis of plan experience, assumptions about the trend in total healthcare costs, and the proportion that will be covered by private plans.

2023.1 RR BCUC.34.1

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7A, p. 7A-2
Insurance Distribution – Online Renewals

On page 7A-2 of the Application, ICBC discusses online renewals of policies. ICBC states:

> **With the launch of online renewals, ICBC has been monitoring the performance of the new service. From May 1 to October 31, 2022, approximately 9% of eligible policies have renewed online. Furthermore, about 75% of customers who start an eligible online renewal completed the transaction online.**

Please discuss the performance of the online renewals service compared to ICBC's expectations. As part of the response, please include any key performance indicators or metrics, and describe the financial or operational efficiencies that have been gained for ICBC or brokers, if any.

Response:

As of December 31, 2022[1], 117,565 customers successfully processed a renewal online, resulting in an adoption rate of 9% for eligible policies. Prior to the launch of the new online insurance service, ICBC's 2022 target for adoption was set at 10 % for eligible ICBC policies. Our completion rate is 75% which indicates that the majority of customers find the renewal application easy to use. On average, customers complete their renewal in nine minutes. Customers' feedback on exit surveys indicate that customer satisfaction is high with 83% of respondents rating the online renewal process as Satisfied.

ICBC's primary reason for introducing the online service channel was not to improve financial or operating efficiencies, but rather to enhance customer experience by giving customers another convenient way to interact with a broker of their choice to transact certain Autoplan insurance renewals. Regardless of how the transaction is initiated, Autoplan brokers are still relied upon to ensure all customers are properly advised on their insurance needs, that they are rated correctly, that they understand the declarations they make, and that the appropriate discounts have been applied and the correct premium charged. Whether online, email or over the phone,

[1] Measurement period: March 17 (launch of online insurance renewals) to December 31, 2022.

Autoplan brokers are an important part of the transaction to explain the complexities of insurance and to answer any questions customers may have about their Autoplan insurance.

2023.1 RR BCUC.34.2

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7A, p. 7A-2
Insurance Distribution – Online Renewals

On page 7A-2 of the Application, ICBC discusses online renewals of policies. ICBC states:

> **With the launch of online renewals, ICBC has been monitoring the performance of the new service. From May 1 to October 31, 2022, approximately 9% of eligible policies have renewed online. Furthermore, about 75% of customers who start an eligible online renewal completed the transaction online.**

Please discuss whether there are any future phases to the online renewals project and if so, discuss the timing for additional features/phases to be implemented.

Response:

There are currently no phases or projects planned for the online renewals in the 2023/24 fiscal year. Beyond the 2023/24 fiscal year, ICBC is committed to the success of this channel and is working with our customer experience team and with brokers to evaluate future opportunities and design enhancements together through existing structures and resource planning processes.

2023.1 RR BCUC.35.1

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-4
Claims Costs Management – Injury Claims Handling

On page 7B-4 of the Application, ICBC addresses the transition of its staff under the Enhanced Care model, citing:

> **With the transition of the majority of Claims Injury Services staff to roles handling Enhanced Care claims, ICBC still needs to ensure that there is sufficient experienced injury claims staff to effectively manage the remaining legal-based injury claim files. As such, there is an ongoing commitment to continue training of Claims Injury Services staff.**

Please provide the percentage of Claims Injury Services staff that are still working primarily on legal-based injury claims.

Response:

At the time the 2023 Revenue Requirements Application was prepared, the percentage of Claims Injury Services staff that were still working primarily on legal-based injury claims was 46%.

2023.1 RR BCUC.35.2

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-4
Claims Costs Management – Injury Claims Handling

On page 7B-4 of the Application, ICBC addresses the transition of its staff under the Enhanced Care model, citing:

> **With the transition of the majority of Claims Injury Services staff to roles handling Enhanced Care claims, ICBC still needs to ensure that there is sufficient experienced injury claims staff to effectively manage the remaining legal-based injury claim files. As such, there is an ongoing commitment to continue training of Claims Injury Services staff.**

Please discuss how ICBC is addressing knowledge retention for legal-based injury claim files with the migration of staff to different roles.

Response:

The legal-based injury team is addressing knowledge retention with ongoing training and upskilling of staff. A team is in place to develop training materials for several focus areas, including topics related to working collaboratively, investigation and negotiation, and settlement strategies. Subject matter experts and lawyers will provide both new and refresher training on claims handling best practices. The training on these new modules will commence March 2023 and are expected to be completed by September 2023.

2023.1 RR BCUC.35.3

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-4
Claims Costs Management – Injury Claims Handling

On page 7B-4 of the Application, ICBC addresses the transition of its staff under the Enhanced Care model, citing:

> **With the transition of the majority of Claims Injury Services staff to roles handling Enhanced Care claims, ICBC still needs to ensure that there is sufficient experienced injury claims staff to effectively manage the remaining legal-based injury claim files. As such, there is an ongoing commitment to continue training of Claims Injury Services staff.**

Please discuss if ICBC has conducted any staff engagement surveys to understand how the transition to the Enhanced Care model has impacted staff, in terms of their acceptance of changing roles and/or comments on the adequacy of training, and the findings of such surveys.

Response:

ICBC contracted EY to conduct two change adoption surveys through the launch of Enhanced Care to all Enhanced Care Recovery employees and leaders. The first survey took place from May 25, 2021 – May 31, 2021 with a follow up survey conducted from August 16, 2021 – August 23, 2021. The response rate to these surveys were 76% and 65%.

Some of the key findings from the initial change adoption surveys were:

- Results painted a positive picture about the launch of Enhanced Care for Recovery. On average, positive sentiment responses across all questions for employees were 81% and for leaders were 92%. Positive sentiment is defined as "Agree" or "Strongly Agree" responses.
- Over 90% of employees either Agreed or Strongly Agreed to questions related to being aligned with the change.
- Employees showed more confidence in their response to themes around ***quality.***
- Nearly 90% of employees and 100% of leaders felt comfortable sharing new ideas with their leaders.

- The majority of leaders expressed they spend at least 70% of their time on quality activities such as coaching, one-on-ones, and customer insights and targets.

Areas of improvement highlighted in the survey were around employees feeling they had the knowledge needed to make informed decisions in a timely manner and having the tools required to meet role expectations. In response, ICBC developed an in-house training pathway that is continually being reviewed and is evolving as further experience and insights is gained.

In addition to change adoption surveys, ICBC surveys employees going through Enhanced Care training to receive feedback and stay informed on what staff need to feel equipped to meet the expectations of their role. At the launch of Enhanced Care in 2021, with no experience or existing case examples to build into training, the training was heavily geared towards theory, with some hands-on experience embedded in mock hypothetical cases. Feedback received through the surveys was that participants wanted more real-life case scenarios, a ClaimCenter® practice environment, opportunities to job shadow, less theory and more hands-on experience.

As a result of these surveys, in 2022, with a year of experience in the new model, ICBC embarked on a project called the Enhanced Care Learning Experience where it engaged an external learning consultant to provide recommendations on how to evolve the training program. Recommendations involved "Flipping the Classroom" to allow for more hands-on practice with real scenarios vs. lecture time, adding in further assessments throughout training and developing a competency framework. After implementing these recommendations in May 2022, the survey results showed participants felt better prepared for the role due to the hands-on approach with real claims, including job shadowing, ClaimCenter sandbox experience and more real life case activities/role plays. As part of the Enhanced Care Learner Experience recommendations, ICBC is gathering more feedback from learners throughout training and after training when they are in-role, which is continuously monitored to improve the program.

2023.1 RR BCUC.36.1

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

ICBC's response to BCUC IR 23.1 in the 2021 RRA proceeding and the statement on page 7B-13 of Appendix 7B to the Application, regarding the level of fraud activity under Enhanced Care appear to be contradictory. Please reconcile these statements.

Response:

ICBC believes the referenced sections of the Application and the response to information request 2021.1 RR BCUC.23.1 regarding the level of fraud activity are aligned. In the Application, ICBC stated that under Enhanced Care there will be impacts on the types and severity of fraud claims encountered. In the response to information request 2021.1 RR BCUC.23.1, ICBC stated that with the new benefits and increased limits, ICBC expected potential increases in fraudulent claims related to medical rehabilitation and indemnity benefits. Despite this general expectation, as explained in the Application, at this point, ICBC is not yet able to quantify how its counter-fraud program will impact Enhanced Care claims costs.

2023.1 RR BCUC.36.1-2

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

36.1.1 Please clarify the impact the Enhanced Care model has had or is still expected to have on the types and severity of fraud in the claims process.

36.1.2 Please discuss the types of fraud that are more prevalent under the new Enhanced Care model.

Response:

Under Enhanced Care, ICBC provides customers with Enhanced Accident Benefits (EAB) and Basic Vehicle Damage Coverage (BVDC). ICBC has not seen any change to the level of fraud activity related to BVDC.

The introduction of EAB under Enhanced Care has resulted in a decrease in the number of injury investigations conducted by the Special Investigation Unit (SIU) for fraudulent and exaggerated injury claims. As discussed in the Application, Chapter 7, Appendix 7B on page 7B-15, under Enhanced Care, there is less incentive for individuals to exaggerate an injury due to the elimination of payments for pain and suffering that were available under the legal-based system. ICBC believes that this is the main reason for the decrease in the number of injury investigations.

As anticipated, the overall number of injury claim investigations conducted by the SIU has steadily decreased since FY2018/19 as ICBC has transitioned away from legal-based claims; however, ICBC is seeing increased instances of fraud relating to Income Replacement Benefits and Personal Care Assistance.

2023.1 RR BCUC.36.1.3

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

Please discuss how ICBC distinguishes between fraudulent and exaggerated claims.

Response:

Wording in the Application, in particular in Chapter 7B, Section D.1, may have implied that ICBC makes a distinction between fraudulent and exaggerated claims; however, operationally it does not. Fraud involves knowingly providing false or misleading information in order to obtain an insurance benefit the person is not entitled.

Exaggerating an injury or vehicle damage claim is fraud. It also involves knowingly providing false or misleading information and can take several forms including:

- Embellishing the extent of an injury.
- Misrepresenting a previous medical condition.
- Claiming additional vehicle damage from an unrelated incident or crash.

2023.1 RR BCUC.36.2

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

Please clarify whether ICBC has considered the impacts of changes in fraud (increased or decreased) and counter-fraud savings in the PY 2023 rate indication. If yes, please provide the amount(s) that are included.

Response:

As discussed in the Application, ICBC does not currently have enough data to determine what impact fraud and counter-fraud savings will have on the PY 2023 rate indication.
ICBC is not able to quantify how changes in the types of fraud will affect Enhanced Care claims costs. As noted in the Application, Chapter 7B, page 7B-13, "ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs."

ICBC also notes in the Application, Chapter 7B, page 7B-16 that "estimating injury claims fraud savings under the new model will not be possible at this time due to a lack of data under the new model. However, ICBC is looking at various options and alternatives to estimate savings until sufficient amounts of data are collected and can be used for estimating fraud savings."
Please see the response to information request 2023.1 RR BCUC.36.5 for further explanation.

2023.1 RR BCUC.36.3

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

With regards to ICBC's consultation with other entities, please discuss what progress ICBC has made with the consultation process. To the extent possible, please identify the entities involved and their expertise in such matters.

Response:

In preparation for the implementation of Enhanced Care, ICBC consulted with several entities about its counter-fraud program.

ICBC consulted with Manitoba Public Insurance (MPI), WorkSafeBC, Workplace Safety and Insurance Board of Ontario, Pacific Blue Cross, Manulife, and Saskatchewan Government Insurance. ICBC also consulted with Ernst and Young during the development of Enhanced Care.

The insurance companies consulted had experience managing medical and disability claims with a risk of fraud. In particular, MPI has coverage similar to ICBC's Enhanced Accident Benefits (EAB). These consultations helped ICBC to make adjustments to claims-handling policies, processes and procedures in preparation for the implementation of EAB and Enhanced Care.

ICBC continues to consult with insurance companies in other provinces to share knowledge, gain insights and leverage their experiences in mitigating the risk of fraud.

2023.1 RR BCUC.36.4

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

With reference to the adjustments made to ICBC's claims-handling policies, processes and procedures as stated in response to BCUC IR 23.2 in the ICBC 2021 RRA proceeding, please discuss the impact(s) the adjustments have had on the efficacy of the counter-fraud program.

Response:

In preparation for the introduction of Enhanced Accident Benefits (EAB), adjustments to ICBC's counter-fraud program claims handling policies, processes and procedures were implemented to provide claims representatives with the necessary knowledge and resources to support them in the identification and management of claims with a risk of fraud.

ICBC has found that the impact of these adjustments has resulted in enhanced governance over the investigation of EAB claims with a risk of fraud. The adjustments are working as designed and they are helping claims representatives to identify, investigate and manage EAB claims with a risk of fraud. ICBC will continue to monitor EAB claims and the effectiveness of the counter-fraud program.

2023.1 RR BCUC.36.5

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, p. 7B-13; ICBC 2021 RRA, Exhibit B-1, Chapter 4, Appendix 4A, Section C.4, p. 4A-20; ICBC 2021 RRA, Exhibit B-5, ICBC's response to BCUC IR.23.1, 23.2
Counter-Fraud Program

On page 7B-13 of Appendix 7B to the Application, ICBC provides an overview of its counter-fraud program, stating:

> **ICBC's overall counter-fraud program remains essentially the same as it has in prior years, although, as discussed below, Enhanced Care will have an impact on the types and severity of fraud that ICBC expects to encounter and ICBC is making the consequential adjustments to its operations. ICBC is not yet able to quantify how the counter-fraud program will impact Enhanced Care claims costs. Nevertheless, ICBC believes that its counter-fraud program will continue to reduce claims costs and positively impact future Basic insurance rates.**

On page 4A-20 of the 2021 RRA, ICBC stated, "There are no counter-fraud savings associated with the PY 2021 rate indication, as ICBC is not yet able to quantify how the fraud program will impact claims post May 1, 2021."

In response to BCUC IR 23.1 in the ICBC 2021 RRA proceeding, ICBC discussed "other types of fraud" in relation to transition to the Enhanced Care model, stating:

> **With access to new benefits and higher limits under Enhanced Accident Benefits coverage, ICBC anticipates a potential increase in fraud with benefits relating to medical rehabilitation and indemnity benefits. These include, but are not limited to, the medical and paramedical benefit, personal care assistance benefit, loss of studies benefit, retirement benefit, income replacement benefit, caregiver benefit, non-earner benefit, and the permanent impairment benefit.**

In response to BCUC IR 23.2 in the 2021 RRA proceeding, ICBC stated it "consulted with other insurance companies, industry experts, and service providers within Canada and the United States to assist with the assessment of, and improvements to, its counter-fraud program." And,

> **[…] adjustments have been made to some claims-handling policies, processes and procedures. This includes updated risk indicators, training, the development of vendor verification surveys, and increased management oversight, to ensure ICBC continues to mitigate its exposure to fraud risk. ICBC will continue to monitor and assess the effectiveness of its counter-fraud program.**

Please indicate when ICBC can quantify how its counter-fraud program will impact Enhanced Care claims costs. What type and how much data are required to enable such analysis?

Response:

ICBC expects its counter-fraud program will continue to reduce claims costs, however, it could take several years to build a sufficient sample size for analysis before ICBC can quantify how its current counter-fraud program will impact Enhanced Care claims costs.

The data required for this analysis are closed Enhanced Accident Benefit (EAB) claims that were suspected of fraud. Of these closed claims, some will have evidence of fraud confirmed, and others will not. The data would include details about the loss, financial payments, and the duration and severity of the injury.

If ICBC is able to use a smaller sample size it may shorten the timeline for when ICBC can quantify the impact. ICBC will assess how reliable this data is and if the smaller sample size is effective for the analysis. How much data is required depends on the variability of the outcomes of EAB claims that were suspected of fraud.

2023.1 RR BCUC.37.1

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, pp. 7B-13, 7B-15
Fraud Analytics Tool

On page 7B-13 of Appendix 7B to the Application, ICBC notes that its "overall counter-fraud program remains essentially the same as it has in prior years."

On page 7B-15 of Appendix 7B to the Application, ICBC discusses a change in its fraud analytics tool, stating:

> **ICBC fraud analytics software tool, NetReveal, generates potential fraud alerts which signal investigative opportunities that may not otherwise be apparent to a claims representative. ICBC has utilized NetReveal since 2017 and the majority of its benefits have been through the identification of potential instances of fraud in pre-Enhanced Care injury claims. With the implementation of Enhanced Care in May 2021 and the expected reduction in the number of fraud files, ICBC has determined that the benefits of NetReveal are no longer viable. ICBC's contract with BAE Systems for NetReveal expires near the end of 2022. A new fraud analytics tool is being developed internally and will be available shortly thereafter. ICBC will continue to monitor the effectiveness of the fraud analytics tool in the Enhanced Care Product.**

Please clarify if the counter-fraud program has had any other significant modifications made to it other than the new fraud analytics software under development.

Response:

ICBC's counter-fraud program has not had any other significant modifications made to it other than the implementation of the new fraud analytics tool that was deployed for use on December 5, 2022. ICBC made consequential adjustments to the counter-fraud program in preparation for the introduction of Enhanced Care on May 1, 2021. For more information on these consequential adjustments, please see the response to information request 2023.1 RR BCUC.36.4.

2023.1 RR BCUC.37.2

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, pp. 7B-13, 7B-15
Fraud Analytics Tool

On page 7B-13 of Appendix 7B to the Application, ICBC notes that its "overall counter-fraud program remains essentially the same as it has in prior years."

On page 7B-15 of Appendix 7B to the Application, ICBC discusses a change in its fraud analytics tool, stating:

> **ICBC fraud analytics software tool, NetReveal, generates potential fraud alerts which signal investigative opportunities that may not otherwise be apparent to a claims representative. ICBC has utilized NetReveal since 2017 and the majority of its benefits have been through the identification of potential instances of fraud in pre-Enhanced Care injury claims. With the implementation of Enhanced Care in May 2021 and the expected reduction in the number of fraud files, ICBC has determined that the benefits of NetReveal are no longer viable. ICBC's contract with BAE Systems for NetReveal expires near the end of 2022. A new fraud analytics tool is being developed internally and will be available shortly thereafter. ICBC will continue to monitor the effectiveness of the fraud analytics tool in the Enhanced Care Product.**

As of January 1, 2023, please explain and discuss if ICBC has a working fraud analytics tool following the end of its contract with BAE Systems for NetReveal at the end of 2022. If not, please clarify how this is currently impacting fraud investigations and claims.

Response:

ICBC deployed a new fraud analytics tool on December 5, 2022 following the expiration of its contract with BAE Systems. As discussed in the Application, the new tool was developed internally, more specifically by data scientists in ICBC's Strategic Analytics team. The new tool uses ICBC data and advanced analytics to identify claims that may contain an element of fraud. The Special Investigation Unit (SIU) Detection Unit reviews the tool's alerts and contacts claims representatives when a claim that may need an SIU investigation is identified.

The new fraud analytics tool is functioning as designed and is providing timely alerts to the SIU Detection Unit. The project team involved in the development and deployment of the new fraud analytics tool is actively monitoring its performance to identify opportunities for improvements to be deployed in subsequent build and release phases.

2023.1 RR BCUC.37.3

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, pp. 7B-13, 7B-15
Fraud Analytics Tool

On page 7B-13 of Appendix 7B to the Application, ICBC notes that its "overall counter-fraud program remains essentially the same as it has in prior years."

On page 7B-15 of Appendix 7B to the Application, ICBC discusses a change in its fraud analytics tool, stating:

> **ICBC fraud analytics software tool, NetReveal, generates potential fraud alerts which signal investigative opportunities that may not otherwise be apparent to a claims representative. ICBC has utilized NetReveal since 2017 and the majority of its benefits have been through the identification of potential instances of fraud in pre-Enhanced Care injury claims. With the implementation of Enhanced Care in May 2021 and the expected reduction in the number of fraud files, ICBC has determined that the benefits of NetReveal are no longer viable. ICBC's contract with BAE Systems for NetReveal expires near the end of 2022. A new fraud analytics tool is being developed internally and will be available shortly thereafter. ICBC will continue to monitor the effectiveness of the fraud analytics tool in the Enhanced Care Product.**

Please explain the purpose of the new fraud analytics tool and how ICBC anticipates that it will differ from NetReveal.

Response:

The new fraud analytics tool has the same business purpose as NetReveal: To utilize internal ICBC data to identify potential instances of fraud on specific claims from all books of business, including Enhanced Accident Benefit claims, material damage claims, and legal-based injury claims.

Compared to NetReveal, the new fraud analytics tool gives ICBC greater control over how the model operates, how it identifies potential instances of fraud, and how improvements can be made to the model. ICBC anticipates that the fraud analytics tool will perform as well as or better than NetReveal from a fraud risk identification perspective.

Please see the response to information request 2023.1 RR BCUC.37.4 for additional information regarding the new fraud analytics tool.

2023.1 RR BCUC.37.4

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, pp. 7B-13, 7B-15
Fraud Analytics Tool

On page 7B-13 of Appendix 7B to the Application, ICBC notes that its "overall counter-fraud program remains essentially the same as it has in prior years."

On page 7B-15 of Appendix 7B to the Application, ICBC discusses a change in its fraud analytics tool, stating:

> **ICBC fraud analytics software tool, NetReveal, generates potential fraud alerts which signal investigative opportunities that may not otherwise be apparent to a claims representative. ICBC has utilized NetReveal since 2017 and the majority of its benefits have been through the identification of potential instances of fraud in pre-Enhanced Care injury claims. With the implementation of Enhanced Care in May 2021 and the expected reduction in the number of fraud files, ICBC has determined that the benefits of NetReveal are no longer viable. ICBC's contract with BAE Systems for NetReveal expires near the end of 2022. A new fraud analytics tool is being developed internally and will be available shortly thereafter. ICBC will continue to monitor the effectiveness of the fraud analytics tool in the Enhanced Care Product.**

Please discuss why the software for the new fraud analytics tool is being developed internally instead of using a tool available on the market. As part of the response, please include the costs associated with developing the software and the development timeline.

Response:

ICBC decided to develop a new fraud analytics tool after assessing all the alternatives, which included:

- Renewing the NetReveal contract;
- Purchasing a different third-party fraud analytics tool available on the market; or
- Building a fraud analytics tool internally.

After assessing the options, ICBC determined the best option was to build the fraud analytics tool internally with ICBC resources. This decision was based on the following factors:

- Building the new tool internally was much less expensive compared to purchasing a third-party product or renewing the NetReveal contract.
- ICBC's Strategic Analytics team had the capability and expertise to build an equally effective fraud analytics tool.
- Building internally allowed ICBC to have more control over development, implementation, functionality and continuous improvement of the fraud analytics tool.
- By developing the model and its logic internally ICBC has full control over the data and how ICBC is able to refine our analysis of the data to meet our needs.

ICBC did not formally track the cost of the development of the new fraud analytics tool as all of the work fell within approved operational budgets. The initial version of the fraud analytics tool took approximately seven months to design, develop, test and deploy and approximately 2,200 person hours of work.

NetReveal software also included a case management system (CMS). With the conclusion of ICBC's contract with BAE Systems, ICBC decided to develop a new CMS for the Special Investigation Unit. Like the new fraud analytics tool, the new CMS was developed internally with ICBC resources. The development of the new CMS took approximately eight months to develop and approximately 500 person hours of work.

2023.1 RR BCUC.37.5

Reference: BUSINESS OPERATIONS
Exhibit B-1, Chapter 7, Appendix 7B, pp. 7B-13, 7B-15
Fraud Analytics Tool

On page 7B-13 of Appendix 7B to the Application, ICBC notes that its "overall counter-fraud program remains essentially the same as it has in prior years."

On page 7B-15 of Appendix 7B to the Application, ICBC discusses a change in its fraud analytics tool, stating:

> **ICBC fraud analytics software tool, NetReveal, generates potential fraud alerts which signal investigative opportunities that may not otherwise be apparent to a claims representative. ICBC has utilized NetReveal since 2017 and the majority of its benefits have been through the identification of potential instances of fraud in pre-Enhanced Care injury claims. With the implementation of Enhanced Care in May 2021 and the expected reduction in the number of fraud files, ICBC has determined that the benefits of NetReveal are no longer viable. ICBC's contract with BAE Systems for NetReveal expires near the end of 2022. A new fraud analytics tool is being developed internally and will be available shortly thereafter. ICBC will continue to monitor the effectiveness of the fraud analytics tool in the Enhanced Care Product.**

Please discuss, at a high level, how ICBC measures the effectiveness of any fraud analytics tool.

Response:

ICBC has a fraud analytics tool that detects potential indicators of fraudulent claims. ICBC measures and monitors the effectiveness of its fraud analytics tool based on the relevance of the alerts as determined by the SIU Detection Unit. Specifically, ICBC tracks the proportion of alerts that were deemed suspicious, that lead to investigations and that have confirmed fraud. This also enables ICBC to identify opportunities for improving the effectiveness of the tool.

2023.1 RR BCUC.38.1

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

In Figure 8E.1 on page 8E-1 of Appendix 8E to the Application, ICBC provides the number of claim fraud investigations opened as follows:

Figure 8E.1 – Number of Claim Fraud Investigations Opened

Fiscal Year	Material Damage Investigations	Injury Investigations	Cyber Investigations[1]	Total Opened Investigations	Monthly Average	Y/Y % Change[2]
2018/19	1,613	786	3,040	5,439	453	11%
2019/20	1,866	654	2,198	4,718	393	-13%
2020/21	2,124	447	2,030	4,601	383	-2%
2021/22	2,127	187	865	3,179	265	-31%
YTD Oct 2022	1,278	109	403	1,790	256	-3%

[1] The Cyber Unit investigates publicly available information online that may suggest fraudulent activity.
[2] The Y/Y % Change is a comparison of the Monthly Average to the prior year.

On page 8E-2 of Appendix 8E to the Application, ICBC states, "As the number of legal-based injury claims have diminished over the last couple of years, SIU has been able to provide additional focus on Material Damage (MD) claims and this accounts for the increase in the number of MD investigations over the last several years."

In Figure 8E.3, ICBC provides the number of charges laid and convictions.

Figure 8E.3 – Number of Charges Laid and Convictions[1]

	2018/19	2019/20	2020/21	2021/22	YTD Oct 2022
Charges laid by Crown	42	38	31	24	13
Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

Please explain ICBC's process and criteria to open a fraud investigation.

Response:

ICBC's criteria and process to open a fraud investigation with SIU is similar for both MD, Injury and Cyber Investigations.

The criteria to initiate a fraud investigation requires the claim representative to first identify whether any contradictory information and/or indicators of fraud risk exists on the claim before engaging with the SIU. ICBC has developed a list of common indicators of fraud risk to support claim representatives in determining when to initiate a fraud investigation with SIU. As an example, a vehicle theft claim is reported, and the customer stated no keys were missing. The vehicle is later recovered and upon inspection of the vehicle it has no signs of forced entry, which is what you would typically see on a vehicle that was stolen without keys. Contradictory information and/or indicators of fraud risk can be identified throughout the claims handling process.

The process to open a fraud investigation is for the claims representative to get authority from their manager to request an SIU investigation.

2023.1 RR BCUC.38.1.1

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

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Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

Please explain whether there were any process or criteria changes from 2020/21 to 2021/22 that resulted in a 31% decrease in investigations opened. If such changes differ between MD, Injury, and Cyber investigations, please specify.

Response:

The 31% decrease in the number of fraud investigations opened from 2020/21 to 2021/22 was not due to any process or criteria changes in ICBC's fraud program during this period. As noted in the Application, Chapter 8E, Figure 8E.1, ICBC believes the 31% decrease is primarily due to ICBC's transition to the Enhanced Care model in May 2021. Under Enhanced Care, there is less incentive for individuals to exaggerate or make a fraudulent injury claim. As a result, ICBC saw a significant decrease in the number of injury claim investigations being opened by the Special Investigation Unit and referrals for cyber investigations.

2023.1 RR BCUC.38.1.2

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

In Figure 8E.1 on page 8E-1 of Appendix 8E to the Application, ICBC provides the number of claim fraud investigations opened as follows:

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[1] The Cyber Unit investigates publicly available information online that may suggest fraudulent activity.
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On page 8E-2 of Appendix 8E to the Application, ICBC states, "As the number of legal-based injury claims have diminished over the last couple of years, SIU has been able to provide additional focus on Material Damage (MD) claims and this accounts for the increase in the number of MD investigations over the last several years."

In Figure 8E.3, ICBC provides the number of charges laid and convictions.

Figure 8E.3 – Number of Charges Laid and Convictions[1]

	2018/19	2019/20	2020/21	2021/22	YTD Oct 2022
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Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

Please provide the proportion of investigations opened that are triggered by customers vs. service providers. To the extent possible, please show separately MD and Injury, and if applicable, Cyber investigations.

Response:

Figure 8E.1 on page 8E-1 of Appendix 8E to the Application provides the proportion of investigations that are triggered by customers, not service providers.

The table below provides the number of service provider investigations opened and separated by MD and Injury. Cyber investigations are for customers only and are not applicable to service provider investigations.

Number of Service Provider Fraud Investigations Opened

	2018/19	**2019/20**	**2020/21**	**2021/22**	**YTD October 2022**
MD Investigations	12	3	7	12	3
Injury Investigations	13	10	18	26	9
Total Opened Investigations	**25**	**13**	**25**	**38**	**12**

2023.1 RR BCUC.38.2

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

In Figure 8E.1 on page 8E-1 of Appendix 8E to the Application, ICBC provides the number of claim fraud investigations opened as follows:

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On page 8E-2 of Appendix 8E to the Application, ICBC states, "As the number of legal-based injury claims have diminished over the last couple of years, SIU has been able to provide additional focus on Material Damage (MD) claims and this accounts for the increase in the number of MD investigations over the last several years."

In Figure 8E.3, ICBC provides the number of charges laid and convictions.

Figure 8E.3 – Number of Charges Laid and Convictions[1]

	2018/19	2019/20	2020/21	2021/22	YTD Oct 2022
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Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

38.2 Please explain why MD investigations opened have increased from 1,613 in 2018/19 to 2,127 in 2021/22 and appear to trend downward to 1,278 YTD October 2022.

38.2.1 Please clarify if the increase in the number of MD investigations is due to increased staff capacity, or if there is any correlation to the types of fraud occurring under the Enhanced Care model.

Response:

38.2

Material Damage (MD) investigations have historically increased year over year. As shown in the Application, Appendix 8E, Figure 8E.1, the October 2022 year to date number of MD investigations opened is 1,278. This may appear to be a decrease from the previous years; however, this represents only seven months of the 2022/23 fiscal year. ICBC's fiscal year reporting period is April 1 to March 31. The monthly average opened MD claims fraud investigations year to date to October 2022 is 183 cases per month, which is an approximate 3% increase compared to the 2021/22 fiscal year monthly average of 177 cases per month.

38.2.1

The increase in the number of MD investigations compared to the number of Injury investigations over the last several years is due to the repurposing of staff capacity, not due an increase in staff capacity. There is no correlation to the types of MD fraud occurring under the Enhanced Care model as the majority of MD fraud investigations are comprehensive claims, which is under the optional insurance product.

2023.1 RR BCUC.38.3

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

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[1] The Cyber Unit investigates publicly available information online that may suggest fraudulent activity.
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On page 8E-2 of Appendix 8E to the Application, ICBC states, "As the number of legal-based injury claims have diminished over the last couple of years, SIU has been able to provide additional focus on Material Damage (MD) claims and this accounts for the increase in the number of MD investigations over the last several years."

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Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

Please clarify the scope of Cyber investigations, and how Cyber investigations differ from Injury investigations. In the response, please explain how ICBC avoids any double counting.

Response:

The scope of a SIU cyber investigation is to locate, capture and record publicly available online information relevant to the investigation of an injury claim with a risk of fraud. A cyber investigation is completed by an SIU Cyber Investigator and does not involve offsite investigations. Cyber Investigators do not conduct investigations on material damage (MD) claims, however, SIU MD Officers will conduct online searches as a part of their MD investigation if warranted, and those are recorded as a single MD investigation.

An injury investigation is completed by an SIU Officer and typically involves offsite investigations. This can include liaising with external policing agencies, gathering statements, interviewing witnesses, collecting video evidence, scene investigations and verifying documentation.

If there are both an injury and a cyber investigation on the same customer, the cyber investigation is considered the secondary investigation and the injury investigation is considered the primary investigation for reporting purposes. In these instances, in order to avoid double counting, only the primary investigation (the injury investigation) is included in the reporting.

2023.1 RR BCUC.38.4

Reference: FRAUD INVESTIGATION METRIC
Exhibit B-1, Chapter 8, Appendix 8E, pp. 8E-1 to 8E-2
Fraud Investigation Metrics

In Figure 8E.1 on page 8E-1 of Appendix 8E to the Application, ICBC provides the number of claim fraud investigations opened as follows:

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[1] The Cyber Unit investigates publicly available information online that may suggest fraudulent activity.
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On page 8E-2 of Appendix 8E to the Application, ICBC states, "As the number of legal-based injury claims have diminished over the last couple of years, SIU has been able to provide additional focus on Material Damage (MD) claims and this accounts for the increase in the number of MD investigations over the last several years."

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Number of convictions	22	25	22	32	5

[1] Data may vary over time due to changes in the timing of criminal charge reporting. Estimates are refreshed periodically in order to account for current information.

If possible, please expand Figure 8E.3 to show the charges laid by Crown and number of convictions stemming from ICBC's MD, Injury, and Cyber investigations.

Response:

At this time, the reporting system used to track charges laid and number of convictions does not have the capability to differentiate between MD and Injury investigations. ICBC is unable to report out on cyber investigations as they do not directly result in criminal charges. If there is a cyber investigation conducted, it will be reported under the injury investigation (the primary investigation) in order to avoid double counting. For further explanation, please see the response to information request 2023.1 RR BCUC.38.3.

Starting in fiscal year 2023/24, ICBC will introduce changes to the reporting system so that we are able to provide this information in future revenue requirements applications.

2023.1 RR BCUC.39.1

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

If available, please provide ICBC's historical customer satisfaction levels based on the new seven-point satisfaction measurement scale for 2019/20 to 2021/22 actual.

Response:

Between June 2021 and March 2022, ICBC conducted parallel testing of the four-point satisfaction scale and seven-point satisfaction scale by surveying customers with both scales concurrently. The table below shows customer satisfaction results on the seven-point satisfaction scale for the parallel testing period.

	Customer Satisfaction Parallel Testing Data, Seven-Point Satisfaction Scale (June 2021 to March 2022)
Driver Licensing	75%
Insurance	85%
Claims	69%

ICBC did not carry out parallel testing of the satisfaction scales prior to June 2021, so there are no results on the seven-point satisfaction scale for FY 2019/20 and 2020/21.

2023.1 RR BCUC.39.2

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

Please discuss how ICBC will identify if future lower satisfaction scores are a result of the change in the satisfaction measurement scale or actual customer dissatisfaction in the future, considering that there are several variables affecting customer experience, such as the online renewals, the upcoming Streamline Claims Processes Program (SCPP), and the Enhanced Care model.

Response:

ICBC is going through a one-year transition in which the prior year's data is not fully comparable to current year data due to the change in satisfaction measurement scales. To mitigate impacts on monitoring practices, ICBC completed parallel testing between June 2021 and March 2022, which allows for an ability to compare year-over-year results more effectively. After the one-year transition, ICBC will be able to fully compare year-over-year results on the new seven-point satisfaction measurement scale. In addition, ICBC can look at month-over-month trends on the seven-point scale and customer verbatim comments to identify themes in customer satisfaction or dissatisfaction.

2023.1 RR BCUC 39.3

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

Please clarify how the F2022/23 outlook customer satisfaction levels were derived based on the new seven-point scale satisfaction measurement framework.

Response:

In June 2021, ICBC began collecting parallel testing data using the seven-point satisfaction measurement scale as well as the four-point satisfaction measurement scale. The outlook for FY2022/23 satisfaction was set to be about equivalent to the four-point satisfaction results from the previous year's results, based on insights from the parallel testing data collected from June to November 2021.

2023.1 RR BCUC.39.4

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

Please explain and discuss if there are other variables, in particular the transition to the Enhanced Care model, which impact the F2022/23 outlook for Claims Services satisfaction.

Response:

ICBC incorporates multiple factors into its Claims Services customer satisfaction outlook. Primarily these include trends in customer satisfaction scores and feedback, as well as operational insights and business plans that may impact satisfaction in the target year. The satisfaction measure aims to capture overall sentiment of the customer experience at multiple touchpoints across the journey with ICBC, and as a result does reflect the overall impact that changes in people, processes, and technology have on customers, including the transition to Enhanced Care. Prior to setting the FY2022/23 outlook, Enhanced Care was in its early stages and the data available was included in the outlook.

2023.1 RR BCUC.39.5

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

Please discuss why target satisfaction scores are lower compared to targets from previous years and how ICBC plans on raising the satisfaction scores?

Response:

The lowering of targets compared to previous years is the result of a change from a four-point to a seven-point satisfaction scale, and not an anticipated drop in satisfaction.

With the four-point satisfaction measurement scale, customers who felt somewhat satisfied (rating of three out of four) and very satisfied (rating of four out of four) were included in the satisfaction score.

With the new seven-point satisfaction measurement scale, only customers who rate as satisfied (six out of seven) and very satisfied (seven out of seven) are included in the satisfaction score. This means that ICBC will no longer measure "somewhat satisfied" as a positive outcome, as ICBC strives to improve its overall customer experience. This transition to a new measurement scale means that targets and results are now lower than previous years.

For further information, please refer to Appendix 8A - Performance Measures, Section D.2.1.1 of the Application.

2023.1 RR BCUC.39.6

Reference: PERFORMANCE MEASURES
Exhibit B-1, Chapter 8, Appendix 8A, pp. 8A-8 to 8A-13
Service Measures

On pages 8A-8 to 8A-9 of Appendix 8A to the Application, ICBC discusses the transition of its customer measurement framework from a four-point satisfaction measurement scale to a calibrated seven-point scale. ICBC states, "Because of this shift, both targets and Satisfaction scores will be lower in future years."

Further, on pages 8A-11 to 8A-13, ICBC submits the following customer satisfaction levels for the F2022/23 outlook:

- **Driver Licensing Service customer satisfaction:74%.**
- **Insurance Services customer satisfaction: 86%.**
- **Claims Services customer satisfaction: 71%**

Please confirm, or explain otherwise, that the survey methods used for the above-noted satisfaction measurements remain unchanged from the previous methodology.

Response:

Confirmed. The survey methods remain unchanged compared to the existing methodology, with the exception of the change in the satisfaction measurement scale.

2023.1 RR BCUC.40.1

Reference: COMPLIANCE REPORTING
Exhibit B-1, Chapter 8, Appendix 8G, pp. 8G-6 to 8G-7; ICBC 2015 Revenue Requirements Decision and Order G-74-16 dated May 27, 2016 (2015 RRA Decision), Section 5.2, p. 31
Road Improvement Program

On pages 8G-6 and 8G-7 of Appendix 8G to the Application, ICBC states:

> **The goal of the Road Improvement Program is to partner with provincial and municipal road authorities to implement road improvements that will help reduce the frequency and/or severity of crashes.**
>
> **A total of 321 Road Improvement Program projects were completed during the 2021/22 fiscal period, with approximately 85 municipal and provincial road authorities participating in the Road Improvement Program.**

On page 31 of the ICBC 2015 RRA Decision, the BCUC states:

> **The Panel continues to support ICBC's Road Safety programs, including the initiatives taken towards distracted driving and road improvements among others. In particular, the Road Improvement Program evaluation indicated that there is a $4.70 in crash cost savings for every $1 spent. Although the Panel recognizes that ICBC is committed to hold controllable expenses flat to the 2014 budget, in light of the <u>4.7:1 payoff ratio of existing programs</u>, it would appear to be in the best interests of both ICBC and the ratepayer for ICBC to spend more funds in this area. The Panel encourages ICBC to continue to find ways to effectively use Road Safety initiatives for the benefit of Basic policyholders.**
> **[*Emphasis added*]**

Please discuss whether the payoff ratio continues to be 4.7:1 for Road Improvement Projects as stated in the ICBC 2015 RRA Decision. If not, please provide the current payoff ratio and explain how it is derived at a high level.

Response:

The most recent evaluation of the Road Improvement Program was conducted in June 2015 and the 4.7:1 payoff ratio established at that time was consistent with past evaluations of the program. A summary of evaluations since 2001 and the corresponding payoff ratios are provided in the table below. ICBC believes that the 4.7:1 payoff ratio is still applicable given the consistency of results with past Road Improvement Program evaluations. A new Road Improvement Program evaluation is planned to be completed in 2023.

Date of Road Improvement Program Evaluation	Payoff Ratio
June 2015	4.7:1
December 2009	5.6:1
December 2006	4.4:1
December 2001	4.7:1

2023.1 RR BCUC.40.2

Reference: COMPLIANCE REPORTING
Exhibit B-1, Chapter 8, Appendix 8G, pp. 8G-6 to 8G-7; ICBC 2015 Revenue Requirements Decision and Order G-74-16 dated May 27, 2016 (2015 RRA Decision), Section 5.2, p. 31
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> **[*Emphasis added*]**

Please provide the number of Road Improvement Program Projects planned for the fiscal periods applicable to PY 2023.

Response:

The number of projects completed under the Road Improvement Program each year varies depending on the mix of projects, their value and total annual budget available. The table below shows the forecast for the number of projects for the 2023/24 and 2024/25 fiscal years. The forecast of road improvement projects in FY 2023/24 and FY 2024/25 is based upon a 3-year average of road improvement projects[1] plus additional projects to be funded from a $2 million increase in the road improvement budget in FY 2023/24.

Road Improvement Program Projects

Fiscal Year	Number of Planned Projects
2023/24 (forecast)	417
2024/25 (forecast)	417

[1] 3-year average of road improvement projects: 360 (2020/21 actual), 321 (2021/22 actual) and 320 (2022/23 outlook).

2023.1 RR BCUC.41.1

Reference: COMPLIANCE REPORTING
Exhibit B-1, Chapter 8, Appendix 8G, p. 8G-15; Attachment 8G.1
Ongoing Road Safety Expenses

On page 8G-15 of Appendix 8G to the Application, in regard to road safety enforcement costs, ICBC states:

> **The Enhanced Road Safety Enforcement line item reflects costs under the Road Safety MOU and these costs in FY 2021/22 are $1.8 million higher than FY 2020/21 due to planning and leasing costs towards a Lower Mainland Integrated Road Safety Unit facility […]**

In Attachment 8G.1 - Traffic and Road Safety Law Enforcement Funding Memorandum of Understanding, Schedule C provides the following:

> **Integrated Road Safety Units (IRSU): the IRSU initiative currently consists of 19 integrated enforcement units (with combined RCMP and independent municipal police membership) based throughout the province dedicated to reducing injuries and fatalities through enhanced traffic enforcement of leading causes of crashes that result in injuries or fatalities (e.g. distracted driving, high risk driving behaviours at intersections, impaired driving, speeding, etc.). They are an enhancement to regular baseline police traffic enforcement. The MOU funds the operations of these units, including personnel, equipment, and related administrative costs. [*Emphasis in original*]**

Please confirm, or otherwise explain, that the Lower Mainland IRSU is one of the 19 integrated enforcement units in BC as defined in Schedule C of Attachment 8G.1.

Response:

The Lower Mainland Integrated Road Safety Units (IRSU) remains one of the integrated units as defined in the Application, Schedule C of Attachment 8G.1. The Lower Mainland IRSU was renamed to Fraser Coast IRSU as part of BC Highway Patrol’s rebranding in 2021.

2023.1 RR BCUC.41.2

Reference: COMPLIANCE REPORTING
Exhibit B-1, Chapter 8, Appendix 8G, p. 8G-15; Attachment 8G.1
Ongoing Road Safety Expenses

On page 8G-15 of Appendix 8G to the Application, in regard to road safety enforcement costs, ICBC states:

> **The Enhanced Road Safety Enforcement line item reflects costs under the Road Safety MOU and these costs in FY 2021/22 are $1.8 million higher than FY 2020/21 due to planning and leasing costs towards a Lower Mainland Integrated Road Safety Unit facility […]**

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Please provide the location of the facility referenced above and the purpose of the facility.

Response:

The Fraser Coast IRSU (formerly known as Lower Mainland IRSU) operational enforcement location is 20178 96 Avenue, Langley, BC. The Fraser Coast IRSU facility meets RCMP operational needs for traffic enforcement, evidence storage and security requirements sufficient to support an integrated traffic enforcement team.

2023.1 RR BCUC.42.1

Reference: LEGISLATIVE AND REGULATORY FRAMEWORK
Exhibit B-1, Chapter 2, Section E, p. 2-7
License Plate Validation Decals

In Section E of Chapter 2 of the Application, ICBC summarizes the regulatory amendments since the ICBC 2021 RRA that affect ICBC's operations, but which ICBC states, "do not impact the 2023 rate indication."

On page 2-7 of the Application, ICBC states that amendments to the *Motor Vehicle Act* under the *Motor Vehicle Amendment Act (No. 2), 2020 (Bill 20)*, allowed ICBC to remove the requirement to display license plate validation decals as of May 1, 2022.

Please explain why there are no impacts on the 2023 rate indication as a result of the amendments to the *Motor Vehicle Act* allowing ICBC to remove the requirement to display license plate validation decals. As part of the response, please discuss the historical capital and/or operating expenses associated with printing and distributing license plate validation decals, prior to May 1, 2022.

Response:

ICBC eliminated decals to support the introduction of online renewals. Costs associated with decals amounted to approximately $1.2 million in FY 2021/22. Starting from FY 2022/23 and onwards, these costs were removed from the outlook/forecast. Of the $1.2 million, approximately $1.1 million was allocated to Basic under non-insurance and insurance operating expense costs.

For the 2023 RRA, ICBC's Basic operating costs are $1.1 million lower related to printing and distributing decals; however, this impact amounts to less than 0.1 percentage point of rate and therefore has no impact to the overall PY 2023 rate indication.

2023.1 RR BCUC.43.1

Reference: 2022/23 ANNUAL IT CAPITAL EXPENDITURE PLAN
Exhibit B-1, Chapter 8, Appendix 8J, p. 8J-4; ICBC 2021 2021 RRA, Exhibit B-1, Chapter 7, Appendix 7C, p. 7C-13
Cybersecurity

On page 8J-4 of Appendix 8J to the Application, ICBC states:

> **Project descriptions and timing are based on current estimates and our understanding of the scope of each project. These projects are subject to change as further analysis is completed throughout the year and may be re-prioritized. ICBC takes into account its strategic priorities, current IT capability and capacity, as well as industry trends, to guide decisions on the allocation of IT resources and investments. This is necessary to deliver required business capabilities, to continue to meet appropriate operational service levels, and to enhance IT capabilities costs effectively and securely. In addition, cybersecurity is integrated into ICBC's business processes and is a core element of ICBC's IT planning and spending.**

On page 7C-13 of Appendix 7C of the ICBC 2021 RRA, ICBC states the following has been identified as a foundational initiative to ensure ICBC continues to sustain its operations and positions ICBC to be responsive to current and future business needs:

> **Information Security Program. This program leverages an industry standard aligned risk management process, along with regular collaboration with broader public sector peers. It also includes validation by expert third parties. ICBC will continue to review and enhance its information security system program and ability to respond to cyberattacks. ICBC will consider acquiring additional technology and services to keep pace amidst evolving cybersecurity threats.**

Please provide the amount ICBC has budgeted for responding to cybersecurity breaches, cybersecurity prevention activities and any other cybersecurity-related items for each of the 2022/23 outlook and 2023/24 forecast fiscal years.

Response:

The information below contains confidential, security-sensitive information, which if made public could result in cyber-attack harm to ICBC and its customers (as it provides insight into the scope and maturity of ICBC's cybersecurity posture). To reduce the risk of any inadvertent disclosure, ICBC requests that the contents of this response be limited to the BCUC only.

2023.1 RR BCUC.43.2

Reference: 2022/23 ANNUAL IT CAPITAL EXPENDITURE PLAN
Exhibit B-1, Chapter 8, Appendix 8J, p. 8J-4; ICBC 2021 2021 RRA, Exhibit B-1, Chapter 7, Appendix 7C, p. 7C-13
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Considering the evolving nature of cybersecurity threats, especially due to internet connectivity and dependence on technology, please discuss the measures ICBC has taken to protect private and confidential information, for its IT projects, specifically, online renewals and SCPP.

Response:

The information below contains confidential security-sensitive information, which if made public could result in cyber-attack harm to ICBC and its customers (as it provides insight into the scope and maturity of ICBC's cybersecurity posture). To reduce the risk of any inadvertent disclosure, ICBC requests that the contents of this response be limited to the BCUC only.

2023.1 RR BCUC.43.3

Reference: 2022/23 ANNUAL IT CAPITAL EXPENDITURE PLAN
Exhibit B-1, Chapter 8, Appendix 8J, p. 8J-4; ICBC 2021 2021 RRA, Exhibit B-1, Chapter 7, Appendix 7C, p. 7C-13
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> **Information Security Program. This program leverages an industry standard aligned risk management process, along with regular collaboration with broader public sector peers. It also includes validation by expert third parties. ICBC will continue to review and enhance its information security system program and ability to respond to cyberattacks. ICBC will consider acquiring additional technology and services to keep pace amidst evolving cybersecurity threats.**

Please discuss whether ICBC has conducted a cybersecurity vulnerability assessment and provide an overview of the findings of any such assessments.

Response:

The information below contains confidential, security-sensitive information, which if made public could result in cyber-attack harm to ICBC and its customers (as it provides insight into the scope and maturity of ICBC's cybersecurity posture). To reduce the risk of any inadvertent disclosure, ICBC requests that the contents of this response be limited to the BCUC only.

2023.1 RR BCUC.43.4

Reference: 2022/23 ANNUAL IT CAPITAL EXPENDITURE PLAN
Exhibit B-1, Chapter 8, Appendix 8J, p. 8J-4; ICBC 2021 2021 RRA, Exhibit B-1, Chapter 7, Appendix 7C, p. 7C-13
Cybersecurity

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On page 7C-13 of Appendix 7C of the ICBC 2021 RRA, ICBC states the following has been identified as a foundational initiative to ensure ICBC continues to sustain its operations and positions ICBC to be responsive to current and future business needs:

> **Information Security Program. This program leverages an industry standard aligned risk management process, along with regular collaboration with broader public sector peers. It also includes validation by expert third parties. ICBC will continue to review and enhance its information security system program and ability to respond to cyberattacks. ICBC will consider acquiring additional technology and services to keep pace amidst evolving cybersecurity threats.**

Please explain and discuss any significant updates to ICBC's corporate policy governing Information Security.

Response:

The information below contains confidential, security-sensitive information, which if made public could result in cyber-attack harm to ICBC and its customers (as it provides insight into the scope and maturity of ICBC's cybersecurity posture). To reduce the risk of any inadvertent disclosure, ICBC requests that the contents of this response be limited to the BCUC only.

2023.1 RR BCUC.43.5

Reference: 2022/23 ANNUAL IT CAPITAL EXPENDITURE PLAN
Exhibit B-1, Chapter 8, Appendix 8J, p. 8J-4; ICBC 2021 2021 RRA, Exhibit B-1, Chapter 7, Appendix 7C, p. 7C-13
Cybersecurity

On page 8J-4 of Appendix 8J to the Application, ICBC states:

> **Project descriptions and timing are based on current estimates and our understanding of the scope of each project. These projects are subject to change as further analysis is completed throughout the year and may be re-prioritized. ICBC takes into account its strategic priorities, current IT capability and capacity, as well as industry trends, to guide decisions on the allocation of IT resources and investments. This is necessary to deliver required business capabilities, to continue to meet appropriate operational service levels, and to enhance IT capabilities costs effectively and securely. In addition, cybersecurity is integrated into ICBC's business processes and is a core element of ICBC's IT planning and spending.**

On page 7C-13 of Appendix 7C of the ICBC 2021 RRA, ICBC states the following has been identified as a foundational initiative to ensure ICBC continues to sustain its operations and positions ICBC to be responsive to current and future business needs:

> **Information Security Program. This program leverages an industry standard aligned risk management process, along with regular collaboration with broader public sector peers. It also includes validation by expert third parties. ICBC will continue to review and enhance its information security system program and ability to respond to cyberattacks. ICBC will consider acquiring additional technology and services to keep pace amidst evolving cybersecurity threats.**

Please explain and discuss any significant updates to ICBC's Cybersecurity Strategy.

Response:

The information below contains confidential, security-sensitive information, which if made public could result in cyber-attack harm to ICBC and its customers (as it provides insight into the scope and maturity of ICBC's cybersecurity posture). To reduce the risk of any inadvertent disclosure, ICBC requests that the contents of this response be limited to the BCUC only.

2023.1 RR BCUC.44.1

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section C, p. 1-4
Other Requests for Approval

On page 1-4 of the Application, ICBC outlines its other requests for approval relating to the (i) discontinuance of reporting on legal representation conversion rate and (ii) proposed dates for compliance reporting.

Please provide the draft directive(s) for ICBC's other requests for approval as outlined in the two items above, and any other approvals arising from IR No. 1 responses.

Response:

Please find the requested draft directives in Attachment A – Draft Order. The Draft Order outlines approvals relating to the (i) proposed dates for compliance reporting, (ii) the discontinuance of reporting on the legal representation conversion rate and (iii) other approvals arising from responses to this round of information requests.

2023.1 RR BCUC.44.1 – Attachment A – Draft Order

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British Columbia
Utilities Commission

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ORDER NUMBER
G-xx-Year

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

the *Insurance Corporation Act*, RSBC 1996, Chapter 228, as amended

and

Insurance Corporation of British Columbia
2023 Revenue Requirements Application

BEFORE:
E.B. Lockhart, Panel Chair
B. A. Magnan, Commissioner
A. Pape-Salmon, Commissioner

on Month, Day, 2023

ORDER

WHEREAS:

A. On December 15, 2022, the Insurance Corporation of British Columbia (ICBC) filed an application with the British Columbia Utilities Commission (BCUC) for its 2023 Revenue Requirements for Universal Compulsory Automobile Insurance (Basic insurance), seeking a Basic insurance rate change order of 0% of current rates for the policy year commencing April 1, 2023 (PY 2023), among other requests (Application);

B. Pursuant to the *Insurance Corporation Act* and *Special Direction IC2 to the BCUC, BC Regulation 307/2004*, as amended (Special Direction IC2), the BCUC's jurisdiction with respect to the regulation of ICBC's revenue requirements and rates is restricted to Basic insurance. The BCUC has no jurisdiction over ICBC's Optional insurance business;

C. On December 12, 2022, the Lieutenant Governor General in Council approved Order in Council No. (OIC) 666/22 directing ICBC to file a 24-month Basic insurance revenue requirements application for PY 2023, and to reflect in the rates a capital provision equal to 7% of the required premium for PY 2023;

D. By Order G-2-23 dated January 10, 2023, the BCUC approved an interim rate change of 0% for all new or renewal policies with an effective date on or after April 1, 2023;

E. By Order G-2-23, the BCUC established, among other things, a regulatory timetable for the review of the Application, which included public notice, intervener registration, a round of BCUC and intervener information requests, and a workshop; and

F. The BCUC has reviewed the Application and evidence filed in the proceeding and makes the following determinations.

NOW THEREFORE the BCUC orders as follows:

1. ICBC is approved to maintain a rate change of 0% on a permanent basis for the 24- month policy year commencing April 1, 2023.

2. ICBC is approved to defer the filing of its next annual Report on Road Safety from September 30, 2023 to December 15, 2024, to conincide with the filing of ICBC's next revenue requirements application.

3. ICBC is approved to defer the filing of the Report on Performance Measures from August 31, 2023 to December 15, 2023, to conincide with the filing of ICBC's Annual IT Capital Expenditures Report.

4. ICBC is approved to discontinue reporting on the Legal Representation Conversion Rate in future revenue requirements applications.

5. ICBC is approved to change the formula for the New Money Rate for the 24-month policy period as set out in Chapter 5, Section B.2 of the Application and requested in ICBC's response to information request 2023.1 RR BCUC.17.1.2.

6. ICBC is approved to change the formula for the Yield on Capital Available for Rate Setting for the 24-month policy period as set out in the response to information request 2023.1 RR BCUC.17.1.2.

7. ICBC's request to keep the following information confidential is accepted:
   - The unredacted version of Chapter 8, Appendix 8J – 2022/23 Annual Information Technology Capital Expenditure Plan.
   - 2023.1 RR BCUC.43.1
   - 2023.1 RR BCUC.43.2
   - 2023.1 RR BCUC.43.3
   - 2023.1 RR BCUC.43.4
   - 2023.1 RR BCUC.43.5

8. ICBC is directed to comply with all other terms and directives in the decision that have been issued concurrently with this order.

DATED at the City of Vancouver, in the Province of British Columbia, this XX day of Month, 2023.

BY ORDER

(X. X. last name)
Commissioner

Attachments

2023.1 RR BCUC.45.1

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section C.2, pp. 1-4 to 1-5
Proposed Dates for Compliance Reporting

On page 1-4 of the Application, ICBC outlines that *Special Direction IC2* does not exempt ICBC from filing fiscal year 2023/24 annual compliance reports to the BCUC.

Figure 1.1 sets out ICBC's proposed filing dates for three filings and the rationale for each proposal. Related to the Road Safety Compliance Report, ICBC states in Figure 1.1, "There are no new programs requiring an update in FY 2023/24."

Please confirm, or explain otherwise, that the filings referenced in Figure 1.1 each relate to reports for the fiscal year 2023/24.

Response:

Correct, the compliance filings contained in Figure 1.1 relate to the reports for fiscal year 2023/24. Specifically, the reports will include details on the actuals for fiscal year 2022/23 and outlooks for fiscal year 2023/24. The information will be presented in the same format as this Application.

2023.1 RR BCUC.45.2

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section C.2, pp. 1-4 to 1-5
Proposed Dates for Compliance Reporting

On page 1-4 of the Application, ICBC outlines that *Special Direction IC2* does not exempt ICBC from filing fiscal year 2023/24 annual compliance reports to the BCUC.

Figure 1.1 sets out ICBC's proposed filing dates for three filings and the rationale for each proposal. Related to the Road Safety Compliance Report, ICBC states in Figure 1.1, "There are no new programs requiring an update in FY 2023/24."

Please provide the year that each of the referenced filings in Figures 1.1 are due in the absence of ICBC's proposed filing dates.

Response:

Figure 1.1 has been updated to provide the calendar date of the compliance filings that would be due if no revenue requirements application is filed, regardless of the year. ICBC confirms that all of the compliance reports listed are due in 2023. Please see Figure 1.1 reflecting the year the compliance reports are due (all in 2023).

Figure 1.1 – Compliance Reporting Timetable Proposal

Compliance Report	Order	Filing Date if No RRA	Proposed Next Filing Date	Reason
Road Safety	May 19, 2015 Decision on the 2014 Revenue Requirements Application (Order G-81-15)	September 30, 2023	December 15, 2024	There are no new programs requiring an update in FY2023/24. ICBC publicly provides a significant amount of road safety information in the media as well as on icbc.com.
Performance Measures	May 11, 2016 Letter (L-10-16)	August 3, 2023	December 15, 2023	To align the timing of the compliance report with the IT Strategic Plan.
Information Technology (IT) Capital Expenditure Report	August 9, 2010 Letter (L-61-10)	The requirement is to file on a consistent annual date, which has been December 15, 2023	December 15, 2023	ICBC is requesting to maintain the December 15 annual date and file concurrently with Performance Measures and the IT Strategic Plan.
Information Technology (IT) Strategic Plan	July 26, 2018 Decision on ICBC's Application to Streamline IT Compliance Reporting Requirements (Order G-139-18)	The requirement is to file on a consistent annual date, which has been December 15, 2023	December 15, 2023	ICBC is requesting to maintain the December 15 annual date and file concurrently with Performance Measures and the IT Capital Expenditure Report.

2023.1 RR BCUC.45.3

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section C.2, pp. 1-4 to 1-5
Proposed Dates for Compliance Reporting

On page 1-4 of the Application, ICBC outlines that *Special Direction IC2* does not exempt ICBC from filing fiscal year 2023/24 annual compliance reports to the BCUC.

Figure 1.1 sets out ICBC's proposed filing dates for three filings and the rationale for each proposal. Related to the Road Safety Compliance Report, ICBC states in Figure 1.1, "There are no new programs requiring an update in FY 2023/24."

With reference to the response provided to BCUC IR 45.1 above, please clarify the anticipated content of the road safety compliance report if ICBC's proposed filing deadline of December 15, 2024 is approved.

Response:

If ICBC's proposed filing deadline of December 15, 2024 is approved, the following is the anticipated content of the road safety compliance report:

- Updates to the Rate Affordability Action Plan (RAAP) initiatives.
  - Intersection Safety Camera Program-Speed Activation.
- Updates to other ongoing initiatives that are not part of RAAP.
  - Hazard Perception Assessment and Training (Street Sense).
  - Traffic and Road Safety Law Enforcement Funding Memorandum of Understanding (Road Safety MOU).
  - The completed Road Improvement Program projects for the 2023/24 fiscal period.
  - ICBC's Education and Awareness Initiatives.
- Updates on any new Road Safety Initiatives.
- Information on Road Safety statistics including crash data and learner and novice crash ratios.
- Update on the Graduated Licensing Program Review.
- An overview of ICBC's Road Safety programs and actual costs and outlook.

2023.1 RR BCUC.46.1

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section D, p. 1-6; ICBC Application in Support of a Basic Insurance Relief Rebate (Basic Insurance Relief Rebate), Exhibit B-2, ICBC's response to BCUC Staff Question 1.2
Response to BCUC Directions Related to Order G-96-22

In Figure 1.2 on page 1-6 of the Application, pursuant to Order G-96-22, ICBC reports $2.74 million of costs incurred to-date against a budget of $5 million as it relates to the actual administrative costs incurred in distributing the relief rebate (Relief Rebate) to customers. ICBC states, "[it] is still handling costs associated with reissuances and exceptions."

In response to BCUC Staff Question 1.2 in the ICBC Basic Insurance Relief Rebate proceeding, ICBC explained that some administrative costs of the Relief Rebate "may take time to materialize depending on various factors including whether exceptions occur […], and when customers cash their rebate cheques[…]."

Please provide the approximate timing for when the final actual administrative costs incurred in distributing the Relief Rebate to customers will be known. As part of the response, please discuss whether this timing is longer or shorter than what was expected at the time of ICBC's response to BCUC Staff Question 1.2 in the ICBC Basic Insurance Relief Rebate proceeding and explain why.

Response:

ICBC anticipates that most of the administrative costs related to the Basic insurance Relief Rebate will be known by the end of April 2023. It should be noted, however, that certain costs will still be incurred after this date. As indicated in the response to BCUC Staff Question 1.2, factors such as when cheques are cashed will affect the amount of total costs. The estimate of the timing of final actual costs is consistent with ICBC's expectations when the response was provided to BCUC Staff Question 1.2. The response was based on the timing of when administrative costs were incurred for the previous two COVID-19 rebates.

2023.1 RR BCUC.46.2

Reference: APPLICATION OVERVIEW
Exhibit B-1, Chapter 1, Section D, p. 1-6; ICBC Application in Support of a Basic Insurance Relief Rebate (Basic Insurance Relief Rebate), Exhibit B-2, ICBC's response to BCUC Staff Question 1.2
Response to BCUC Directions Related to Order G-96-22

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46.2 Please provide a breakdown for the administrative costs of the Relief Rebate for each of: i) the budget of $5 million; ii) the actual costs incurred to-date of $2.74 million; and iii) ICBC's outlook for the total actual administrative costs incurred.

46.2.1 Please explain any variances which are greater than +/- 10 percent between the budget and ICBC's outlook as provided in the response above.

Response:

A breakdown of the budgeted and actual incurred-to-date costs as stated in the Application is provided in the table below. For the reasons given in the response to BCUC Staff Question 1.2 in the ICBC Basic Insurance Relief Rebate Proceeding, such as the time involved for some of the costs to materialize, ICBC is unable to provide an outlook for the total administrative costs incurred.

Expense Category	Budgeted Costs ($)	Actual Costs ($)	Variance (%)	Explanation for Variance Greater than +/- 10 percent
Merchant Fee Reimbursements	(924,000)	(996,960)	**7.9**	Not applicable.
Postage	2,730,731	2,285,925	**-16**	ICBC budgeted higher mailing costs based on the fact that the eligible customer mix for the Relief Rebate was slightly different than the previous two COVID-19 rebates.
Program Management	80,885	59,213	**-27**	Costs were lower than budgeted due to changes in customer payment methods and vehicle ownership status (lessee vs. owner). Also, ICBC did not experience as much returned mail which would have to be resent to customers as compared to the previous two COVID-19 rebates.
Bank Charges	1,464,729	748,792	**-49**	Bank charges are incurred when a customer cashes their Relief Rebate cheque. Budgeted costs for this line item also include expenses related to cheque reissuances.
Returns Handling	544,731	180,665	**-67**	Based on ICBC's experience with the previous two COVID-19 rebates, parts of the returns handling process were automated as opposed to be being handled manually as in the past. This led to a reduction in the number of FTEs required for processing returns.
Technology Enablement	13,488	-	**-100**	Costs for two internal employees to work in the capacity of a developer and a support person were included in the budget but the Relief Rebate was implemented without having to use them.
Third-Party Vendor Processing	720,000	467,656	**-35**	Budgeted vendor processing costs were based on the high-end estimate provided by ICBC's third party vendor. The estimated costs were developed taking into consideration potential supply chain issues which did not materialize.
Total Costs	**4,630,564**	**2,745,291**		