

April 5, 2023

# ICBC 2023 RRA Workshop

Workshop Presentation



# Land Acknowledgement

ICBC respectfully acknowledges that we are privileged to live and work on the traditional and ancestral homelands, both unceded and treated, of Indigenous Peoples and Nations across British Columbia, each with their own unique traditions, histories and cultures.

We're committed to learning how to better partner with Indigenous communities to further reconciliation. We support employees on their individual paths towards reconciliation and encourage expressions of Indigenous culture at the workplace. We recognize that we are early in our reconciliation journey and will provide more information on the actions we're taking as we progress.



# Presentation Agenda

Components	ICBC Presenters	Duration
<b>A. Overview of Rate Setting and Actuarial Indicated Rate Change</b>	Kelly Aimers, Chief Actuary	20 Minutes
<b>B. Actuarial IR Themes</b>	Kelly Aimers, Chief Actuary Andrew Loach, Director Corporate Actuary	40 Minutes
<b>C. Overview of Investments</b>	Kevin Rye, Associate Director of Investments	30 Minutes
<b>D. Overview of Operating Expenses and Financial Indicators</b>	Harpreet Tamber, CFO (Acting)	30 Minutes
<b>E. Other Topics (Fraud and Survey)</b>	Kelli Munn, Senior Manager Claims Fraud Strategy Matt Cox, Director of Customer Experience	30 Minutes



# 2023 RRA Key Orders Sought

1. Proposed rate change is 0% due to directed 0% rate change floor applied to the actuarial indicated rate change (decrease of -6.5%).
2. Compliance Reporting FY 2023/24 :
  - For efficiency reasons align Performance Measures and Information Technology (IT) Capital Expenditure Plan to file by December 15, 2023.
  - Road Safety Report has no new programs requiring an update in this fiscal year. Hence, the proposal to file with the 2025 RRA by December 15, 2024.
3. Discontinue reporting on the Legal Representation Conversion Rate (LRCR) for future RRAs as this metric no longer provides a meaningful comparison with prior fiscal years.
4. Approval of the New Money Rate (NMR) and Yield on Capital Available for Rate (CARS) setting formulas to incorporate leverage.

*\* 2023.1 RR BCUC.44.1 – Draft Order for directives sought in relation to ICBC's 2023 Revenue Requirements Application*



# Actuarial Indicated Rate Change

Kelly Aimers, Chief Actuary



# Agenda

- 1. Overview of Ratemaking for ICBC**
- 2. Determination of PY 2023 Proposed Rate Change**
- 3. Actuarial IR Themes**
  - Consideration of external information and events
  - Frequency Trend approach and considerations in ICBC's best estimates
  - Severity Trend approach and considerations in ICBC's best estimates



# Key Themes

The PY 2023 proposed rate change is comprised of the actuarial indicated rate change (a decrease) subject to the directed rate change floor of 0%.

- Changes to *Special Direction IC2* for PY 2023 include a 7% capital provision and suspension of some components of the Capital Management Plan.
- Favourable -6.5% actuarial indicated rate change is due to a lower capital provision and a higher new money rate, offset by inflationary pressures on claims costs.
- The 0% rate change floor allows ICBC to rebuild depleted capital, absorb unexpected adverse events, and supports financial stability.
- Responses to issues raised in information requests:
  - External data is considered in the actuarial analysis.
  - Loss cost forecasts represent ICBC's best estimates which consider available data and expert judgment.
- Actuaries cannot foresee any change in assumption that would accord with accepted actuarial practice (AAP) leading to a proposed rate change greater than 0% floor.



# Overview of Ratemaking for ICBC





# Overview of Ratemaking for ICBC

- Basic is a closed system where all variances between required and collected premium are retained as capital available for future rate setting.
- Rates need to cover costs and expenses for crashes connected to policies written during the policy year.
  - Main driver of rates is the loss and allocated loss adjustment expense payments
  - Crashes can incur costs well into the future.
  - Estimating claims costs requires modelling, assumptions and expert judgment.
  - Since premiums are collected today to pay for costs in the future, investment income earned on these premiums provides an offset to the actuarial indicated rate change.
  - ICBC accounts for operating costs and depreciation expenses but, unlike utilities, this represents a small component of the rates.
- Rates must be set in accordance with AAP, and applicable legislation.



# Accepted Actuarial Practice (AAP)

AAP refers to performing work in accordance with the Rules of Professional Conduct and Standards of Practice (SOP) of the Canadian Institute of Actuaries (CIA).

- Applies to all aspects of actuarial work, defining the constraints of actuarial judgment.
- AAP is subject to compliance with the law.
- Notable components of AAP for this Application:
  - Rates should cover the costs including a provision for profit (in ICBC's case, it is a provision for capital).
  - All costs must be an unbiased best estimate.
  - It is appropriate for ICBC to rely on external data.
  - Selected assumptions are reasonable, both individually and in aggregate.

# Enhanced Care (EC) has Favourably Impacted Rates

- EC has reduced costs significantly while increasing eligible benefits and improving rate affordability:
  - In PY 2021: 15% rate reduction.
  - In PY 2023: ICBC is proposing a 0% rate change.
- EC has contributed to changes in the actuarial analysis:
  - Reliance on external information for some coverages to estimate costs given the lack of BC history under EC.
  - Longer payment horizon - claims payments can be well into future (especially for serious injuries).
    - Leads to a benefit in additional investment income.
  - Both of these changes increase the overall uncertainty of ICBC's Basic insurance costs.



# Determination of PY 2023 Proposed Rate Change



# PY 2023 Proposed Rate Change: Key Themes

The PY 2023 proposed rate change is comprised of the actuarial indicated rate change (a decrease) subject to the directed rate change floor of 0%.

- Changes to *Special Direction IC2* for PY 2023.
- Favourable -6.5% actuarial indicated rate change due to a lower capital provision and a higher new money rate, offset by inflationary pressures on claims costs.
- The 0% directed rate change floor allows ICBC to rebuild depleted capital and absorb impacts of unexpected adverse events, and supports financial stability.



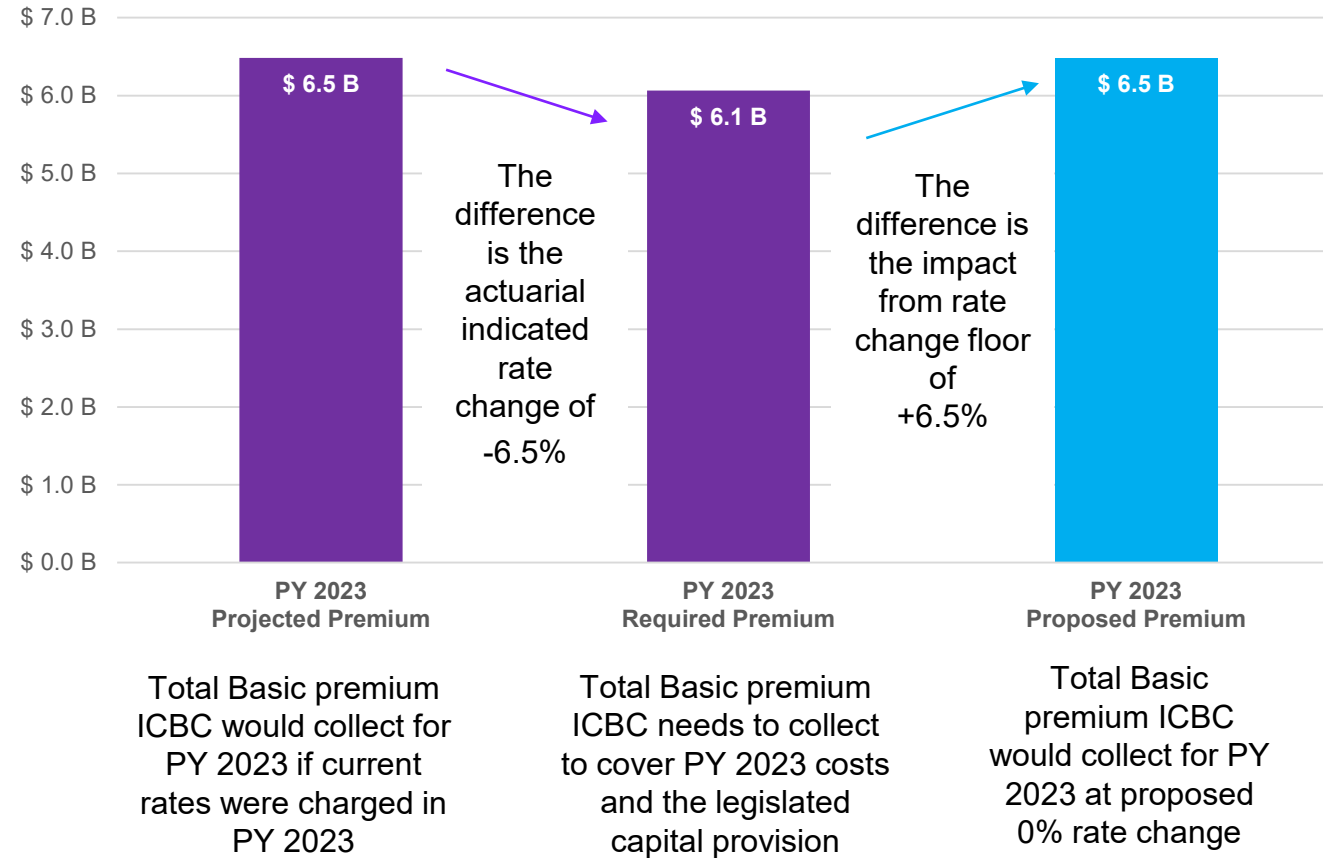
# Regulatory Framework: *Special Direction IC2*

- PY 2023 covers a 24-month period from April 1, 2023 to March 31, 2025.
- Keep Capital Management Plan (CMP) as of May 27, 2016 except:
  - Capital provision = 7% of required premium.
  - Suspend Minimum Capital Test (MCT) requirement of >100% and the customer renewal credit for PY 2023.
- Rate smoothing framework:
  - Repeal rate smoothing provision of +/- 1.5 percentage point band on the previous year rate change.
  - General rate change still cannot be less than 0% – ICBC refers to this as "rate change floor".



# PY 2023 Proposed Rate Change

The PY 2023 proposed rate change is comprised of the actuarial indicated rate change (a decrease) subject to directed rate change floor of 0%.



# Components of Required Premium

Main contributing factors to the change in required premium are: increase in loss and allocated loss adjustment expenses, lower capital provision and increases in investment income.

Components of Required Premium	Required Premium per Policy	
	PY 2023	PY 2021
[1] Loss and Allocated Loss Adjustment Expenses	\$789	\$702
[2] Unallocated Loss Adjustment Expenses	\$75	\$64
[3] Road Safety and Loss Management and General Expenses	\$92	\$89
[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)
<b>Total - Required Premium per Policy</b>	<b>\$808</b>	<b>\$879</b>

← Unfavourable inflationary impacts.

← Favourable due to smaller capital provision compared to PY 2021.

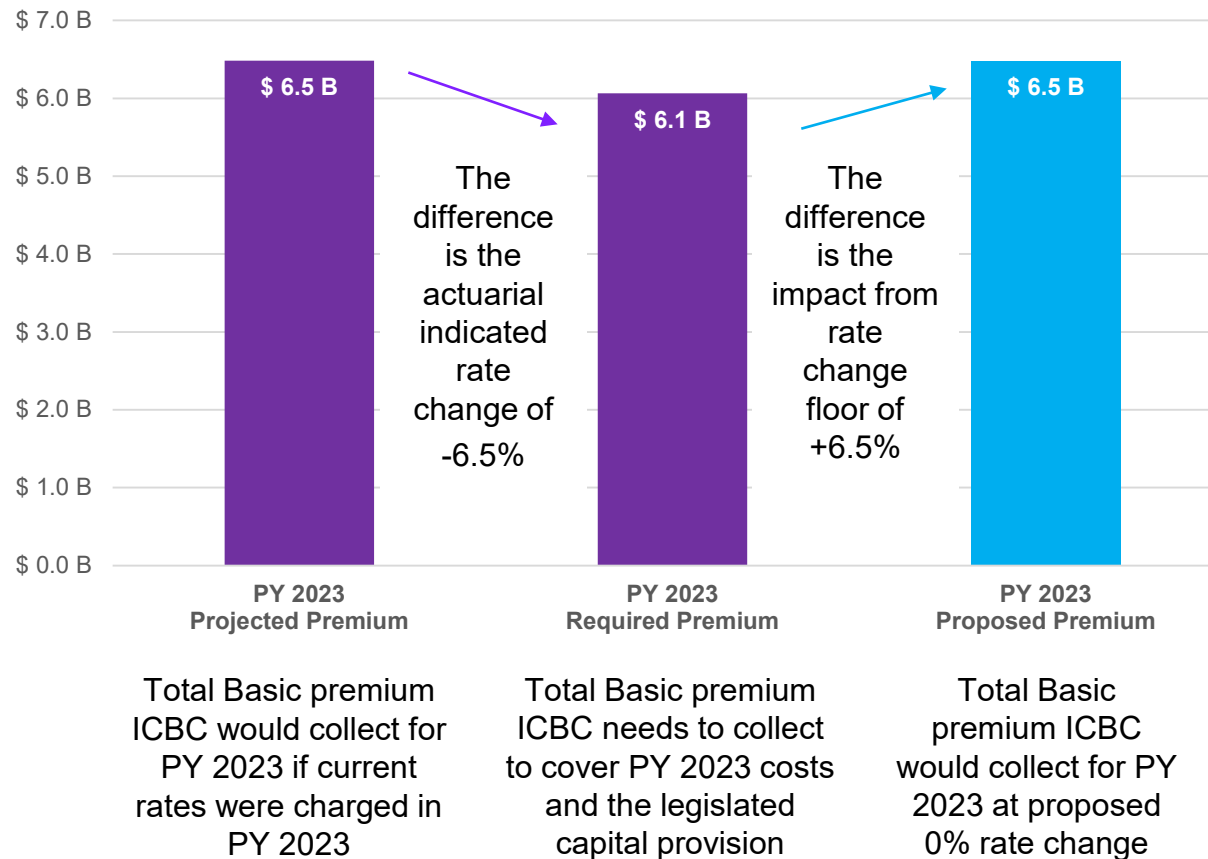
← Favourable due to higher new money rate.





# 0% Rate Change Floor

- Allows ICBC to rebuild its depleted capital and absorb impacts of unexpected adverse events, and supports financial stability.



# Capital Management Plan

- Per *Special Direction IC2*:
  - Capital Provision = 7% of Required Premium.
  - 100% minimum Basic MCT is suspended for PY 2023.
- ICBC’s Basic MCT is currently below the minimum, but is forecasted to be at 100% by FY 2023/24.

Basic Insurance Business - Q2 (\$ millions) <sup>1</sup>	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast
[A] Capital Available <sup>1</sup>	2,233	2,110	2,256	2,352
[B] Capital Required <sup>1</sup>	2,435	2,330	2,259	2,217
[C] MCT % [C=A/B]	92%	91%	100%	106%

<sup>1</sup> Rounding may affect totals

- ICBC plans to file a new Basic CMP by December 15, 2024, as part of the 2025 RRA.



Q & A



# Actuarial IR Themes



# Actuarial Information Request Themes

- 1) Consideration of external information and events for ICBC's forecasts.
- 2) Frequency Trend approach and considerations in ICBC's best estimates.
- 3) Severity Trend approach and considerations in ICBC's best estimates.



# 1) Consideration of External Information and Events

- Modelling: External influences (e.g., changes in immigration, COVID) are considered in the actuarial forecasting models, however the balance between added accuracy versus simplicity as well as providing a reasonable prediction need to be weighed in the decision.
- Cost Estimates: Reliance on relevant external information, in particular from Manitoba Public Insurance, is appropriate in context of the limited ICBC experience for claims under the new Enhanced Care product.



# 1) Consideration of External Information and Events: Reliance on MPI data

With 16 months of data under the new product, ICBC has moved to rely on ICBC’s own experience where appropriate, although data is still limited in some areas (e.g., severity) therefore MPI data is still relied upon.

Sub-coverage	2021 RRA		2023 RRA	
	Frequency	Severity	Frequency	Severity
<b>Medical Rehabilitation (MR)</b>	ICBC legal-based MR	MPI ICBC legal-based MR	ICBC EAB-MR ICBC legal-based MR	MPI ICBC legal-based MR
<b>Enhanced Disability (ED)</b>	MPI ICBC legal-based Weekly Benefits (WB)	MPI ICBC legal-based WB StatsCan Other External Sources	ICBC EAB-ED ICBC legal-based WB	MPI ICBC EAB-ED ICBC legal-based WB StatsCan
<b>Permanent Impairment (PI)</b>	<i>PI &amp; DB combined</i>	<i>PI &amp; DB combined</i>	MPI ICBC BVDC	MPI StatsCan ICBC EAB-DB
<b>Death Benefits (DB)</b>	MPI ICBC legal-based DB	MPI StatsCan	ICBC EAB-DB ICBC legal-based DB	ICBC EAB-DB ICBC legal-based DB



## 2) Frequency Trend Approach and Considerations

Frequency and severity statistics for each sub-coverage are analyzed in depth, consistent with Accepted Actuarial Practice.

- Basic Vehicle Damage Coverage (BVDC): reflects the pre-COVID-19 pandemic frequency level and trend.
- Enhanced Accident Benefit (EAB): based on the forecast for BVDC claims which is a change from 2021 RRA.
- Uncertainty remains in crash and propensity of EAB claims per crash forecasts.



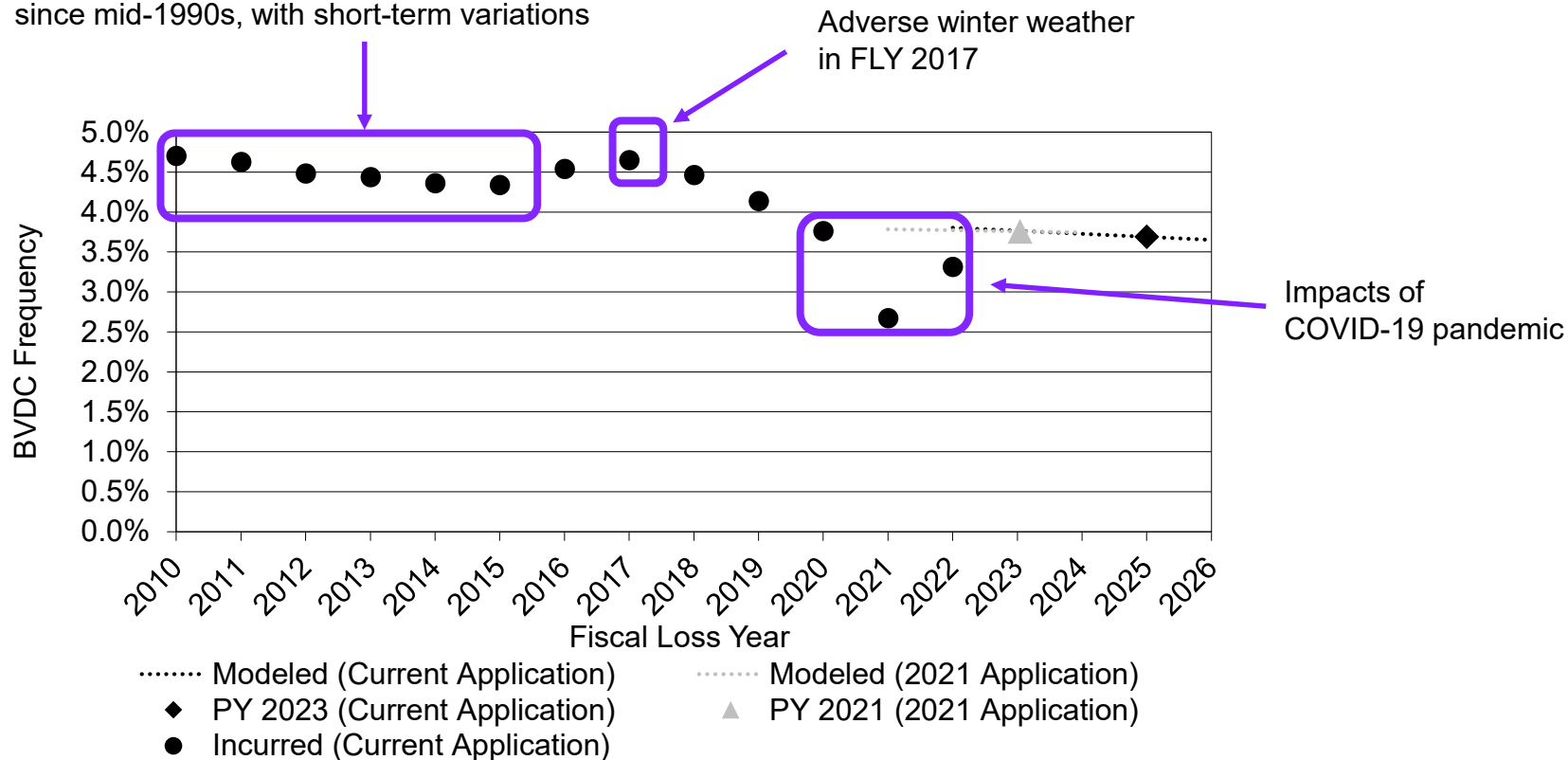


# 2) Frequency Trend

## Approach and Considerations

BVDC Frequency: In the absence of stable data in recent years ICBC has assumed BVDC frequency will resume its long term downward historical trend

General declining trend in crash frequency since mid-1990s, with short-term variations



Reference:  
2023 RRA, Chapter 3, Figure 3.5

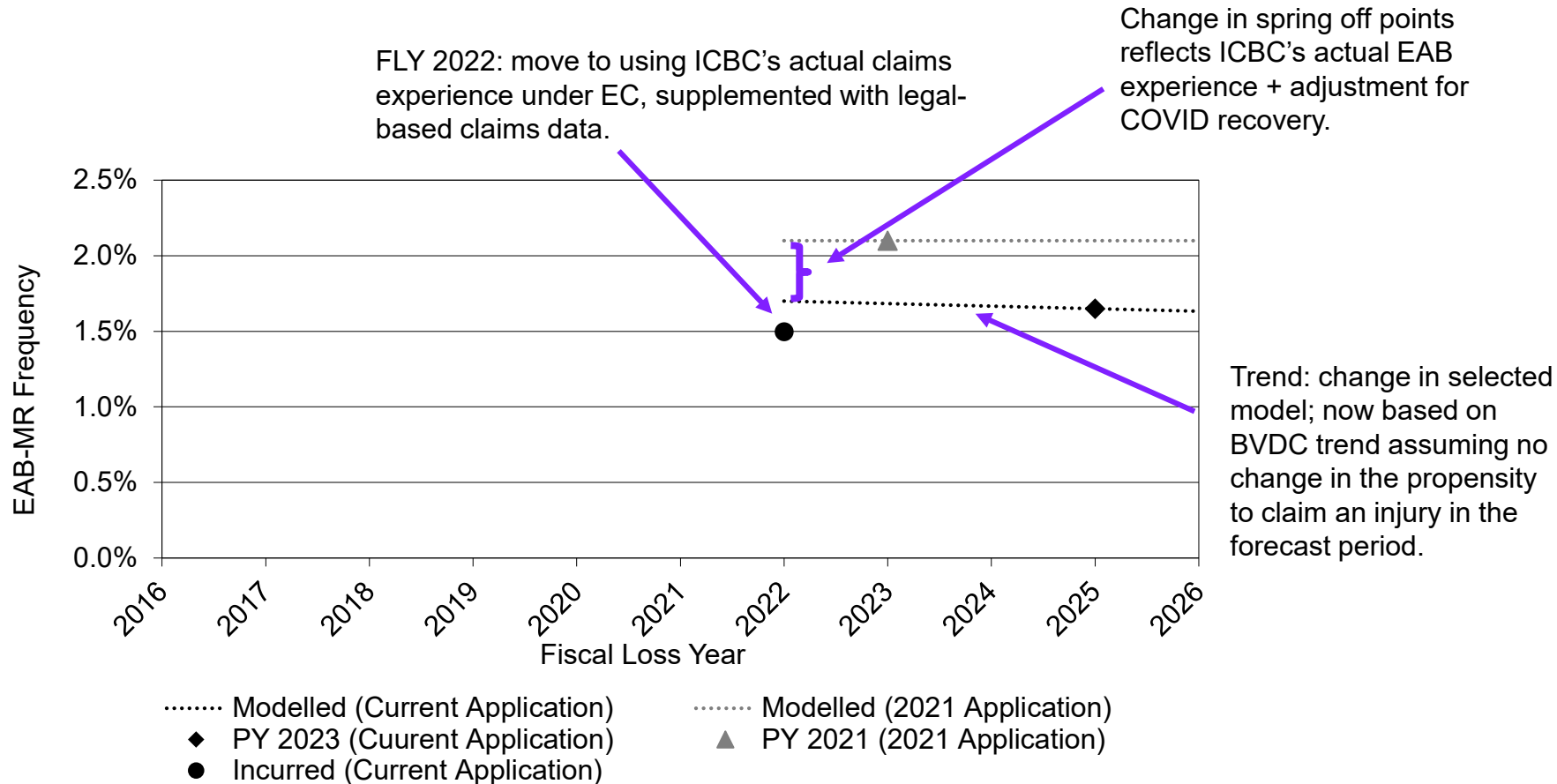
Additional Notes:

- BVDC loss and ALAE contributes \$247 per policy to the required premium for PY 2023.
- A 1% difference in the PY 2023 BVDC frequency forecast (3.69%) is approximately 0.8 ppt impact on the actuarial indicated rate change.
- A 1 ppt difference in the PY 2023 BVDC frequency trend (-1.0%) is approximately 1.8 ppt impact on the actuarial indicated rate change.
- Selected model for BVDC Frequency: 10-year simple regression ending at the third quarter of fiscal loss year 2020.

# 2) Frequency Trend

## Approach and Considerations

Enhanced Accident Benefits (EAB) Frequency: Now relying more on actual Enhanced Care experience



Reference:  
2023 RRA, Chapter 3, Figure 3.7

Additional Notes:

- EAB loss and ALAE contributes \$500 per policy to the required premium for PY 2023
- A 1% difference in the PY 2023 EAB frequency forecast is approximately 0.4 ppt impact on the actuarial indicated rate change
- Selected models for EAB Frequencies: based on BVDC forecast assuming a stable propensity (except for DB which assumes a flat 0% trend)

### 3) Severity Trend Approach and Considerations

Severities have increased driven by higher inflation and this is expected to continue.

- Basic Vehicle Damage Coverage (BVDC): higher costs for new vehicles / parts and trend to more complex technology and expensive materials.
- Enhanced Accident Benefit (EAB): costs are subject to annual increases based on the BC Consumer Price Index (capped at 6%) as well as other non-inflationary factors.
- Uncertainty in forecasts from economic environment / inflationary pressure and claims costs under the new Enhanced Care product.

Figure C.0.3 – BC Consumer Price Index Inflation

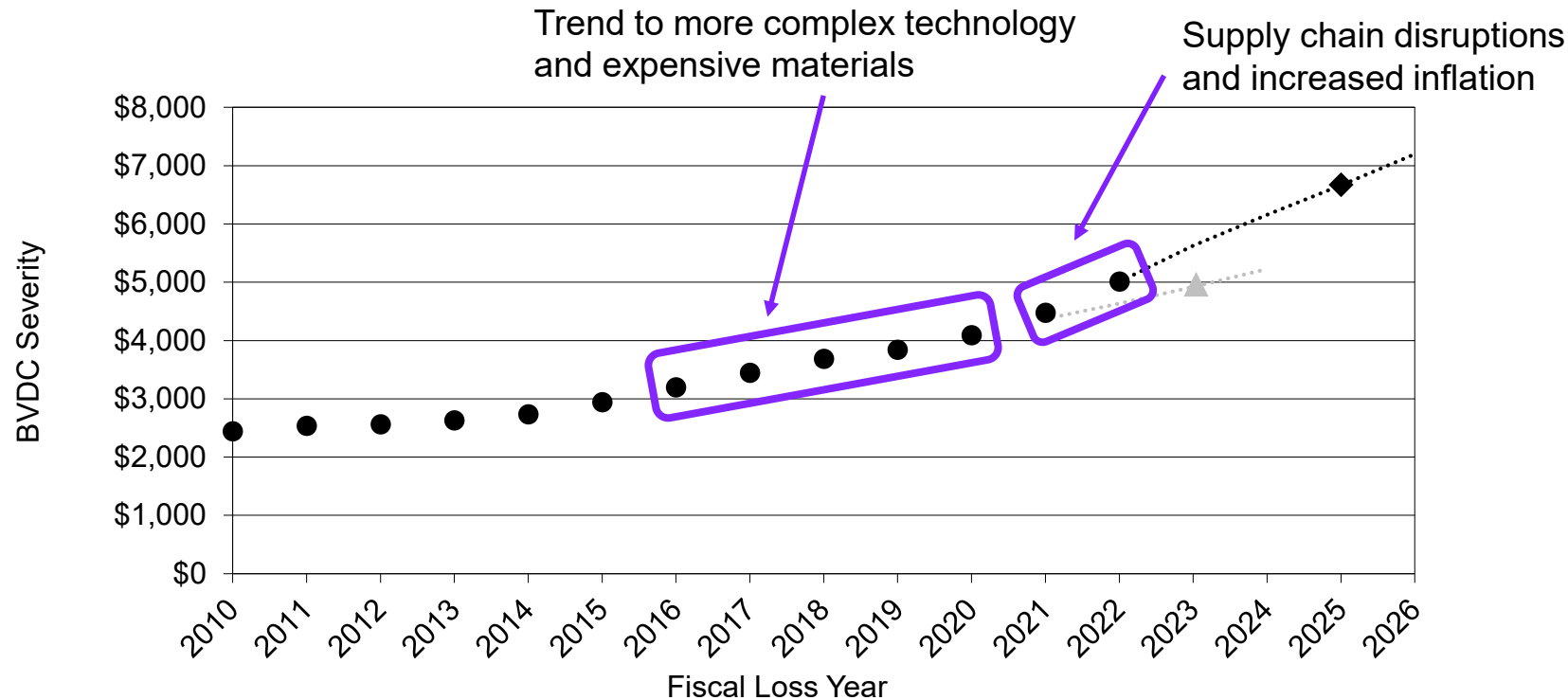
Calendar Year	BC CPI Inflation
2016	1.9%
2017	2.1%
2018	2.7%
2019	2.3%
2020	0.8%
2021	2.8%
2022	7.0%
2023	3.9%
2024	2.4%
2025	2.2%
2026+	2.0%
Average 2016-2020	2.0%



# 3) Severity Trend

## Approach and Considerations

BVDC Severity: Recent experience and economic environment support a steeper trend which we expect will continue through the policy year.



- ..... Modeled (Current Application)
- ..... Modeled (2021 Application)
- ◆ PY 2023 (Current Application)
- ▲ PY 2021 (2021 Application)
- Incurred (Current Application)

Reference:  
2023 RRA, Chapter 3, Figure 3.6

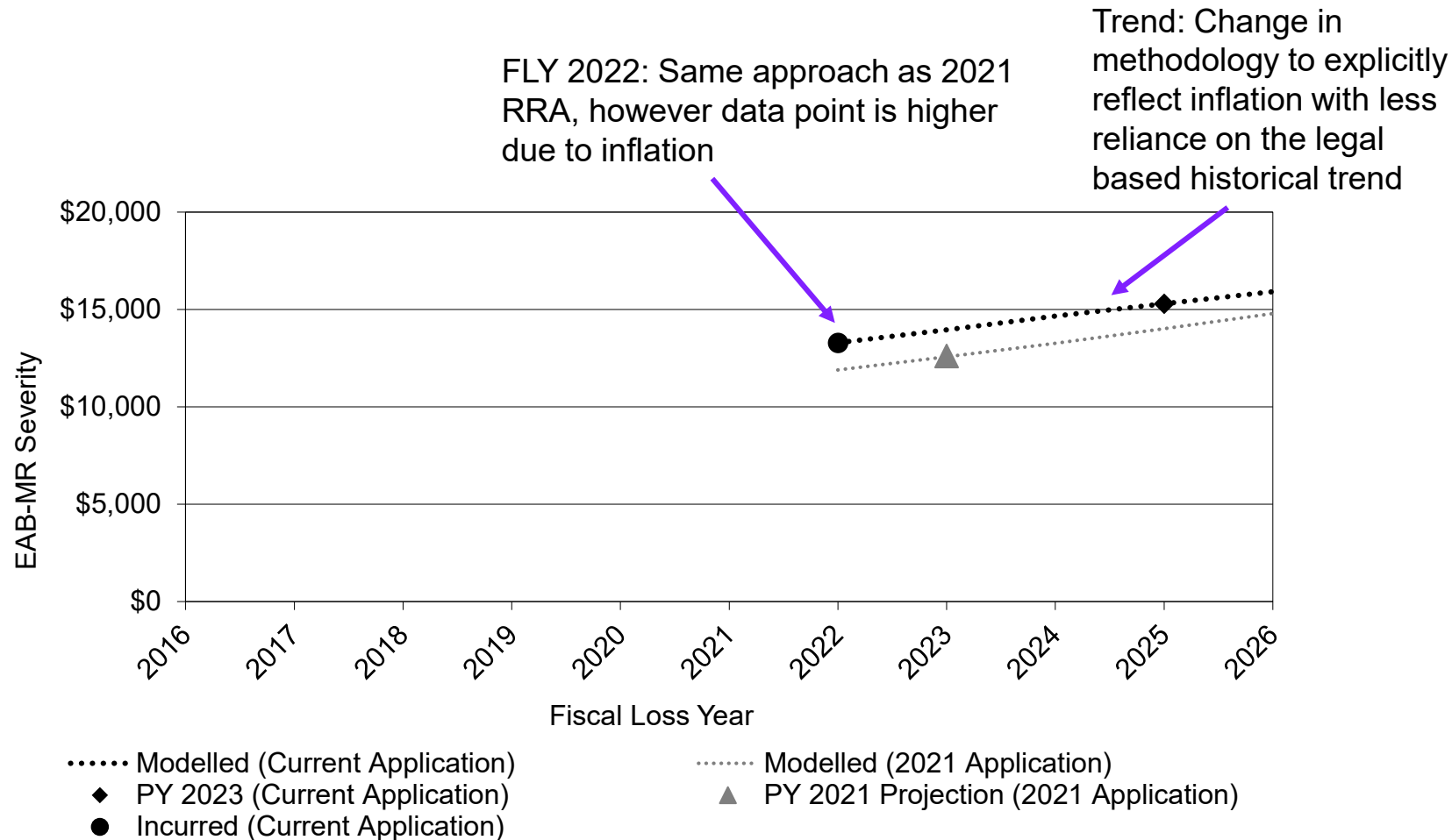
Additional Notes:

- BVDC loss and ALAE contributes \$247 per policy to the required premium for PY 2023
- A 1% difference in the PY 2023 BVDC severity forecast (\$6,672) is approximately 0.4 ppt impact on the actuarial indicated rate change
- Selected model for BVDC Severity: 5-year simple regression (7.9%) plus an adjustment for elevated forecasted inflation

# 3) Severity Trend

## Approach and Considerations

EAB Severity: Costs are higher due to inflation.



Reference:  
2023 RRA, Chapter 3, Figure 3.8

Additional Notes:

- EAB loss and ALAE contributes \$500 per policy to the required premium for PY 2023.
- A 1% difference in the PY 2023 EAB severity forecast is approximately 0.4 ppt impact on the actuarial indicated rate change.
- Selected models for EAB Severities: inflation forecast plus a non inflationary trend (for MR and ED only, derived on legal based data).

# Summary

The PY 2023 proposed rate change is comprised of the actuarial indicated rate change (a decrease) subject to the rate change floor of 0%.

- Changes to *Special Direction IC2* for PY 2023 include a 7% capital provision and suspension of some components of the Capital Management Plan.
- A lower capital provision and a higher new money rate offset by inflationary pressures have led to the favourable -6.5% actuarial indicated rate change.
- The 0% directed rate change floor allows ICBC to rebuild its depleted capital and absorb impacts of unexpected adverse events, and supports financial stability.
- Responses to issues raised in information requests:
  - External data is considered in the actuarial analysis.
  - Loss cost forecasts represent ICBC's best estimates which consider available data and expert judgment.
- We cannot foresee any change in assumption that would accord with AAP leading to a proposed rate change greater than 0% floor.

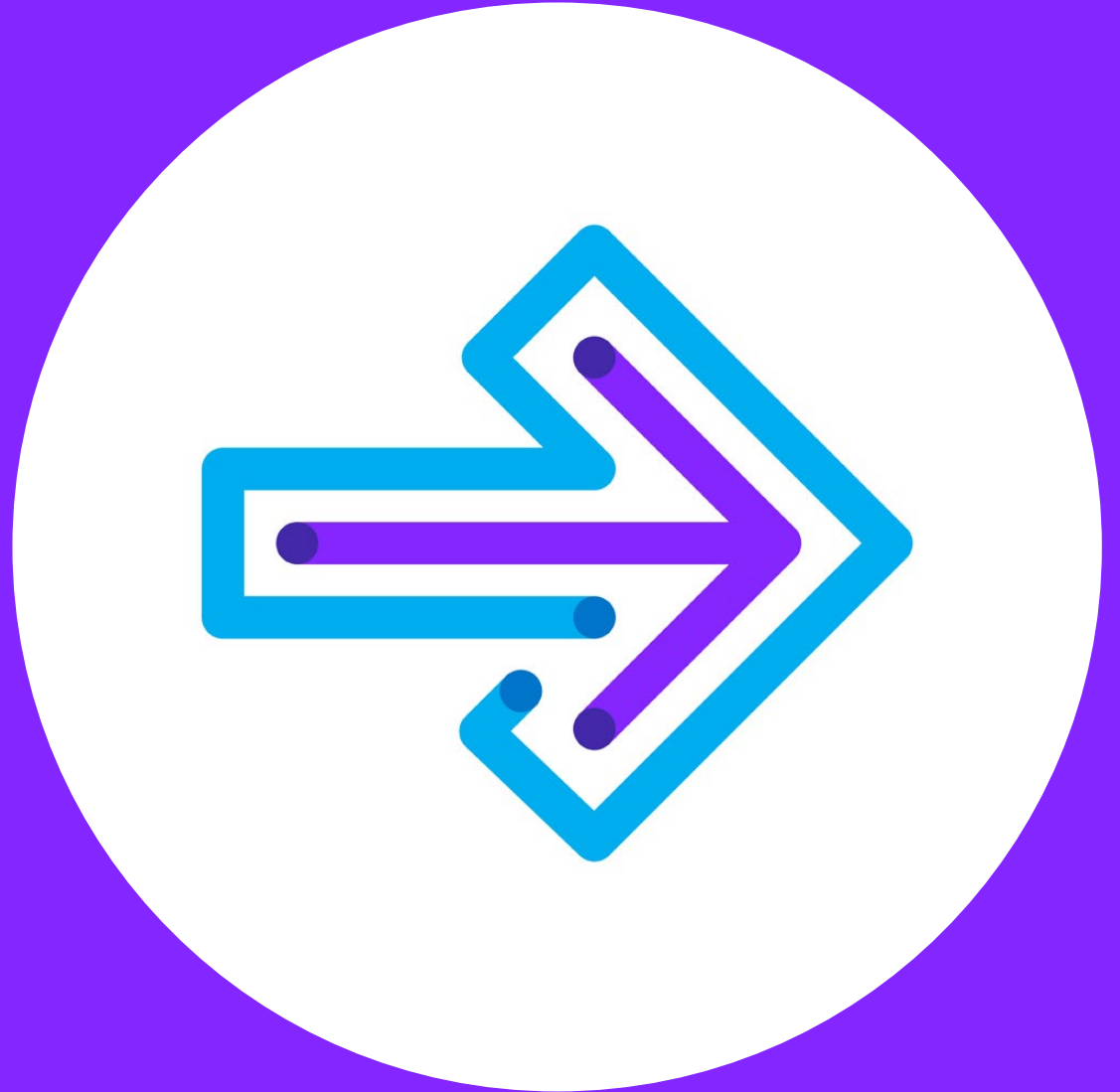


Q & A



# Investments Overview

Presented by Kevin Rye  
Associate Director of Investments





# Agenda

1. Key Themes
2. Overview of ICBC's Investment Portfolio
3. Components of Return – Asset Mix
4. Components of Return – BCI Long-Term Forecasts
5. Discussion on New Money Rate & Yield on Capital Available for Rate Setting
6. Overview and Required Revision to Add Leverage to the New Money Rate and Yield on Capital Available for Rate Setting Formulas
7. Summary



# Key Themes

- ICBC's investment portfolio is constructed with an asset mix designed to support payment of claims liabilities and to help keep rates low.
- Long-term focus assists in maintaining rate stability.
- New Money Rate and Yield on Capital Available for Rate Setting are the key investment calculations contributing to the actuarial indicated rate change.
- Introduction of leverage increases expected returns with minimal risk.



# Investment Portfolio Overview

**ICBC has an investment portfolio in excess of \$20 billion as at March 31, 2022.**

- Funds for investment purposes come primarily from premiums collected and set aside for unpaid claims.
- ICBC invests available funds to generate an investment return used to reduce Basic premiums.
- ICBC's investment portfolio is professionally managed by the British Columbia Investment Management Corporation (BCI). BCI is a leading provider of investment management services for BC's public sector and one of the largest asset managers in Canada.
- Several factors contribute to determining the investment returns which in turn influence the actuarial indicated rate change:
  - Asset mix is the primary driver of returns.
  - Long-term expected asset class returns as forecast by BCI.



# Components of Return – Asset Mix

## Asset Mix is Central to Investment Returns

- Percentage of the portfolio allocated to Fixed Income, Equity and Real Assets is the main determinant of the portfolio's risk profile and resulting returns.
- The strategic asset mix is selected after giving consideration to ICBC's liability profile, liquidity requirements, and risk tolerance.
- Portfolio benefits from broad diversification and regular rebalancing.
- Stochastic as well as scenario modelling are used to assist in developing the appropriate asset mix for ICBC.
- While manager performance has some impact, as a general rule, the majority of a portfolio's return and variability is attributable to the asset mix.



# Components of Return – Asset Mix

Asset Class	Target Weight
<b>Fixed Income - Liquidity</b>	<b>44%</b>
Money Market	5%
Short Bonds	39%
<b>Fixed Income - Credit</b>	<b>22%</b>
Corporate Bonds	12%
Private Debt	3%
Mortgages (including Mezzanine Debt)	7%
<b>Equity Assets</b>	<b>30%</b>
Global Equity	25%
Emerging Market Equity	2%
Private Equity	3%
<b>Real Assets</b>	<b>14%</b>
Real Estate	10%
Infrastructure & Renewable Resources	4%
<b>Sub Total</b>	<b>110%</b>
<b>Portfolio Leverage</b>	<b>-10%</b>
<b>Total Portfolio</b>	<b>100%</b>

## Changes to Asset Mix

- Fixed Income has been classified into Fixed Income-Liquidity and Fixed Income-Credit since the last filing to reflect the differing long-term expected returns and the role each plays in the portfolio.
- As part of the transition to the new long-term strategic asset mix, ICBC is reducing its position in liquid assets and investing in assets with a potential higher return.
- Introduction of leverage into the asset mix.

# Components of Return – Asset Mix

- Transition to ICBC's long-term strategic asset mix continues.
  - Transition timeline is best estimate based on forecast availability of investment opportunities and market conditions.
- Less liquid assets present opportunity for higher return. Real Assets also exhibit less volatility - this informs ICBC's shift towards a larger allocation.
- ICBC continues to ensure that ample liquidity is maintained throughout the transition.
- New asset classes are better fit for ICBC's long-term requirements with forecasted higher returns.
  - The updated transition schedule reflects that BCI is able to place more capital in these asset classes than originally estimated.



# Components of Return – Accelerated Transition in Asset Mix

## Overview of Changes

- Fixed Income Liquidity – reduced but still sufficient to meet obligations.
- Reduction in public equity assets with increase in credit, private equity and real assets with lower volatility.
- BCI identified opportunities in the market to slightly accelerate placement in private market assets.

Asset Class	Apr 2021 SIPP Target Weight	Jan 2022 SIPP Target Weight	Change
<b>Fixed Income - Liquidity</b>	<b>46%</b>	<b>44%</b>	<b>-2</b>
Money Market	5%	5%	-
Short Bonds	41%	39%	-2
<b>Fixed Income - Credit</b>	<b>20%</b>	<b>22%</b>	<b>+2</b>
Corporate Bonds	11%	12%	+1
Private Debt	1%	3%	+2
Mortgages (including Mezzanine Debt)	8%	7%	-1
<b>Equity Assets</b>	<b>32%</b>	<b>30%</b>	<b>-2</b>
Global Equity	29%	25%	-4
Emerging Market Equity	2%	2%	-
Private Equity	1%	3%	+2
<b>Real Assets</b>	<b>12%</b>	<b>14%</b>	<b>+2</b>
Real Estate	9%	10%	+1
Infrastructure & Renewable Resources	3%	4%	+1
<b>Sub Total</b>	<b>110%</b>	<b>110%</b>	<b>-</b>
<b>Portfolio Leverage</b>	<b>-10%</b>	<b>-10%</b>	<b>-</b>
<b>Total Portfolio</b>	<b>100%</b>	<b>100%</b>	<b>--</b>

# Components of Return – BCI Forecasts

**Use of BCI's capital market forecasts align with the longer-term investment horizon expected under the Enhanced Care model and promote rate stability.**

- Asset class returns for the New Money Rate and Yield on Capital Available for Rate Setting use BCI's 15-year expected return forecasts as approved by BCUC.
- BCI includes a wide range of information when compiling capital market forecasts.
  - Some factors are similar among asset classes while others are specific to each asset class.
- As these forecasts are *long term* in nature they do not move significantly in response to specific announcements or isolated events.
  - E.g., Bank of Canada forecasts tend to focus on the short term.
- In forecasting asset class returns, ICBC takes a longer term view of markets. This avoids having rate applications be subject to the volatility of financial markets.
- The nature and the forecast return of each of the asset classes feeds into the returns of the New Money Rate and Yield on Capital Available for Rate Setting formulas.





# New Money Rate Overview

## 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

- The New Money Rate represents the investment yield expected for premiums collected over the policy period. Investment income is earned on these premiums until they are paid out for costs related to the policy period.
- The New Money Rate uses target weightings of each asset class based on the transition schedule in ICBC's Statement of Investment Policy and Procedures and expected returns based on BCI's Long-Term Capital Market Expectations Report.



# Yield on Capital Available for Rate Setting

## Yield on Capital Available for Rate Setting Formula

	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
[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 Yield on Capital Available for Rate Setting represents the yield on the current portfolio.
- Uses actual weightings of each asset class and actual yield for all asset classes except equity assets which use expected returns based on BCI's Long-Term Capital Market Expectations Report.



# Leverage – Overview and Benefits


**Leverage is an investment strategy involving the use of borrowed funds to enhance investment returns.**

- The 10% leverage target in the asset mix effectively increases the total assets available for investment.
- Leverage is expected to increase returns as returns on invested assets exceed the cost of the leverage employed.
- Using Government bonds as collateral, leverage can be obtained at relatively low cost.
- Leverage can also be used to increase liquidity as an alternative to selling assets.
- As ICBC's use of leverage consists of short-term borrowing, this introduces some interest rate risk (short-term volatility).
  - This is mitigated by the expected higher returns generated by the increase in assets.



# Leverage – Revisions Required to Formulas

**Revisions to the New Money Rate and Yield on Capital Available for Rate Setting formulas are required to account for leverage.**

- 
- Leverage formally recognized in asset mix within the Statement of Investment Policy and Procedures.
  - The proposed changes to the New Money Rate and the Yield on Capital Available for Rate Setting formulas capture both the increase in assets available for investment and the cost of including leverage.



# Leverage – Example Using New Money Rate for First 12-Month Period

- Leverage results in increase in assets available to 110%.
- Gross return increases by 0.51% before factoring in cost of leverage.
- Cost of using leverage is subtracted from return calculation.
- After subtracting the cost of leverage, return is 0.27% higher than without.

Asset Group	Weighting (%) (1)	Formula for Asset Yield	Forecast Yield (%) (2)	Weighted Yield (%) (1)x(2)
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
Gross Assets	110%			
Leverage	-10%	BCI 15-year total return forecast on ICBC Canadian money market assets	2.4	-0.24
Net Assets	100%			
Expected Return of Investment Assets				5.41
Diversification and Rebalancing Premium				0.25
<b>New Money Rate for the first 12-month period.</b>				<b>5.66</b>



# Impact of Leverage on Returns for PY 2023

Leverage has a favourable impact to both the New Money Rate and the Yield on Capital Available for Rate Setting.

## New Money Rate

Policy Period	Without Leverage	With Leverage	Change
1	5.39%	5.66%	+0.27%
2	5.50%	5.79%	+0.29%

## Yield on Capital Available for Rate Setting

Policy Period	Without Leverage	With Leverage	Change
1	4.77%	5.04%	+0.27%
2	4.97%	5.31%	+0.34%



# Summary

- Investment portfolio is designed to help keep rates low and stable.
- Asset mix drives the results.
- Portfolio is transitioning to adapt to the liability profile of the Enhanced Care model.
- An increase in less liquid assets can increase returns and reduce volatility.
- Portfolio designed with sufficient liquidity to withstand short-term volatility and meet remaining legal-based claim payments.
- Long-term focus of portfolio assists in rate stability.
- Conservative use of leverage can enhance returns without a material increase in risk.



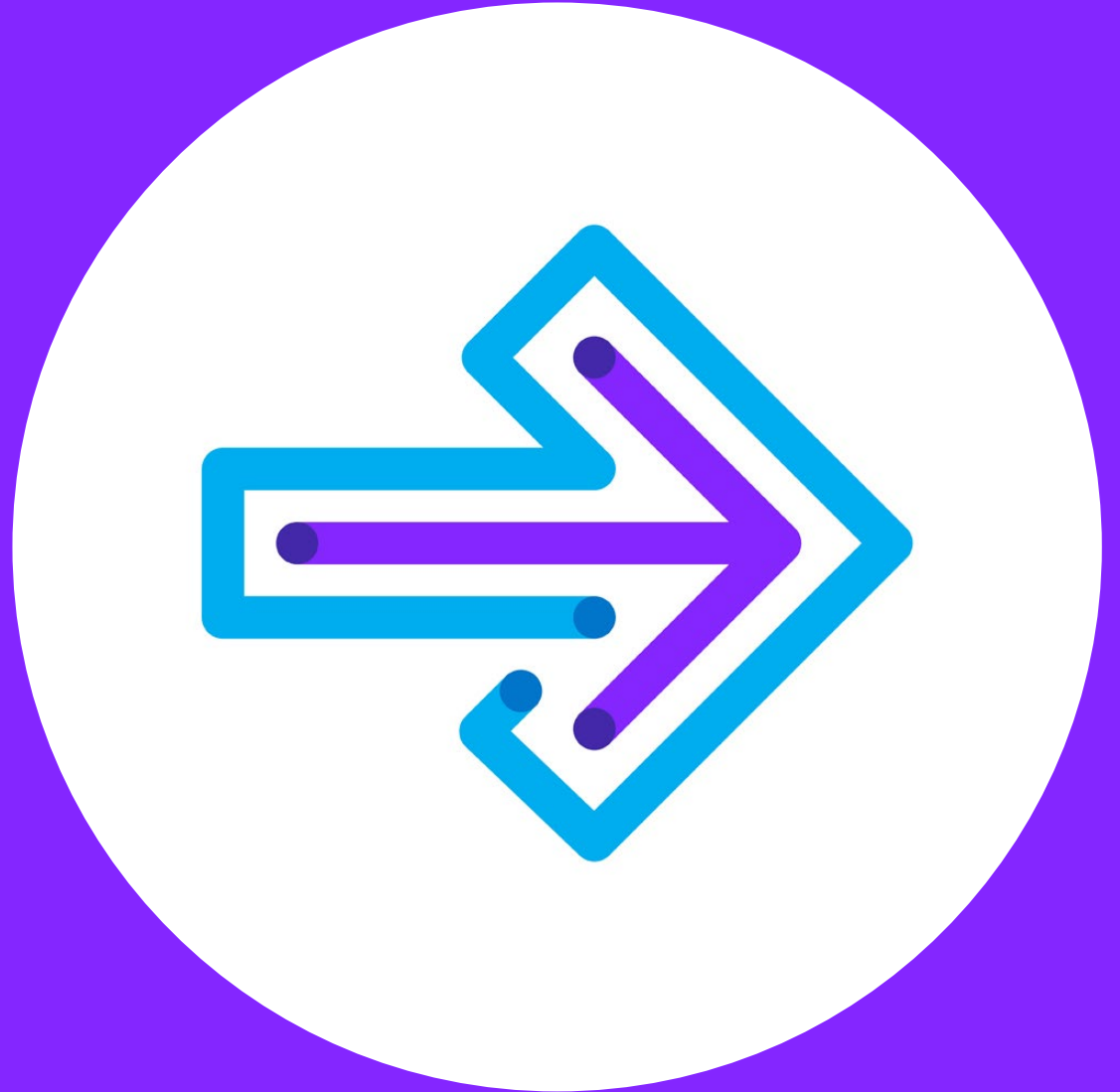
Q & A





# Operating Expenses Overview

Presented by Harpreet Tamber  
Interim Chief Financial Officer &  
Corporate Controller



# Agenda

## 1. Key Themes

## 2. Controllable Costs

- Compensation & FTEs
- Claims-related FTEs
- Professional, Admin and Other
- Projects and Depreciation

## 3. Non-Controllable Costs

- Pension and Post-Retirement Benefits

## 4. Summary



# Key Themes

- While operating expenses have a limited impact on rate indication, ICBC strives to keep controllable operating expenses as low as possible.
- At the same time, ICBC:
  - invests in technology necessary to run the business; and
  - maintains adequate staffing by forecasting staffing requirements.
- Compensation is the largest controllable operating expense. Increases are driven by general wage increases under BC General Employees Union tentative Collective Agreement.
- Pension and Post-Retirement Benefit expense fluctuations are primarily from changes in market-based discount rate for pension liabilities.



# Corporate Operating Expenses

- The four largest line items are circled below and consist of both controllable and non-controllable operating expenses.

	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	Compound Annual Growth Rate FY2020 to FY2026
1 Net Compensation	451	449	490	516	540	551	564	3.8%
2 Professional, Administrative and Other Expenses	144	127	133	146	154	162	171	2.9%
3 Project and Depreciation expenses	57	55	66	86	80	80	86	7.0%
Merchant Fees	43	44	37	40	41	43	46	1.1%
Road Improvements and Traffic Safety	32	31	34	33	34	35	36	2.3%
<b>Controllable Operating Expenses</b>	<b>727</b>	<b>706</b>	<b>760</b>	<b>821</b>	<b>848</b>	<b>870</b>	<b>902</b>	<b>3.7%</b>
4 Pension and Post-Retirement Benefit Expenses	92	68	101	66	53	53	53	-8.7%
<b>Total Corporate Operating Expenses</b>	<b>818</b>	<b>774</b>	<b>862</b>	<b>887</b>	<b>901</b>	<b>923</b>	<b>955</b>	<b>2.6%</b>



# Compensation and FTEs

- Approximately 2/3 of controllable operating expenses are compensation and benefits.
- Expected increases in net compensation mainly driven by general salary increases under Collective Agreement, partially offset by decrease in average FTEs.
- 2025/26 total FTEs are expected to be consistent with 2019/20 levels.

(\$ millions)	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	Compound Annual Growth Rate FY2020-FY2026
Net Compensation	451	449	490	516	540	551	564	3.8%

Average FTEs	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	CAGR FY2020-FY2026
Total ICBC FTEs	5,461	5,351	5,473	5,593	5,581	5,476	5,467	0.0%
Contractors	22	28	48	44	30	30	30	5.5%
Total Corporate FTEs	5,482	5,379	5,521	5,637	5,611	5,506	5,497	0.0%



# Compensation and FTEs – Claims FTE Spotlight

- Approximately, 55% of ICBC Total FTEs are Claims staff involved with processing and settlement of claims.
- Transition to Enhanced Care largely accomplished by claims staff moving from legal-based to Enhanced Care roles.
- Staffing in Claims Injury and Legal Services expected to gradually reduce as remaining legal-based bodily injury claims continue to close.
- Staffing in Claims Customer and MD Services expected to remain consistent with 2019/20.

Average FTEs	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	CAGR FY2020-FY2026
Claims Injury and Legal Services	1,497	1,514	1,518	1,486	1,329	1,203	1,168	-4.1%
Claims Customer and Material Damage Services	1,757	1,596	1,632	1,677	1,720	1,751	1,770	0.1%



# Professional, Admin & Other Expenses

- Includes professional services (i.e., costs for legal, actuarial, audit and other miscellaneous services), computer costs, building operating expenses.
- Expected increase is mainly driven by inflation, project sustainment expenses and other contractual commitments.

(\$ millions)	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	Compound Annual Growth Rate FY2020-FY2026
Professional, Administrative and Other Expenses	144	127	133	146	154	162	171	2.9%



# Project and Depreciation Expense

Increase predominantly due to increased project expenses:

- In prior years, ICBC was focused on Rate Affordability Action Plan (RAAP), Enhanced Care (both funded by 100% Optional Insurance) and delivering on key business strategies.
- ICBC is now undertaking critical sustainment projects, annual renewal and maintenance and other project expenses to support ICBC’s 2025 strategy, which are partially allocated to Basic.
- Work includes Usage-based Insurance and Streamline Claims Processes Program projects (to redesign and implement a new operating model for non-injury claims operations and claims handling processes).

(\$ millions)	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	Compound Annual Growth Rate FY2020-FY2026
Project and Depreciation Expenses	57	55	66	86	80	80	86	7.0%





# Pension and Post-Retirement Benefits Expense

- This is a non-controllable cost. The primary reason for the decreases in pension and post-retirement benefit expenses (for the outlook and forecasts) is an increase in the market-based discount rate.
- A higher discount rate will reduce the pension & post-retirement benefits expenses.

(\$ millions)	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Outlook	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	Compound Annual Growth Rate FY2020-FY2026
Pension and Post-Retirement Benefit Expenses (\$ millions)	92	68	101	66	53	53	53	-8.7%

Discount rate %	3.3%	3.9%	3.3%	4.1%	4.9%	4.9%	4.9%
1% decrease – impact on P&PR expense (\$ millions)	40	41	50	49	45	45	45
1% increase – Impact on P&PR expense (\$ millions)	(51)	(52)	(64)	(60)	(55)	(55)	(55)



# Summary

- From a rate setting standpoint operating expenses are only a small portion of the indicated rate change.
- ICBC strives to keep its operating expenses as low as possible.
- Increases in controllable costs are mainly due to general salary increases per the Collective Agreement and higher project expenses to support ICBC's 2025 corporate strategy.
- Changes in the Pension and Post-Retirement Benefit expense reflect changes in market-based discount rate.

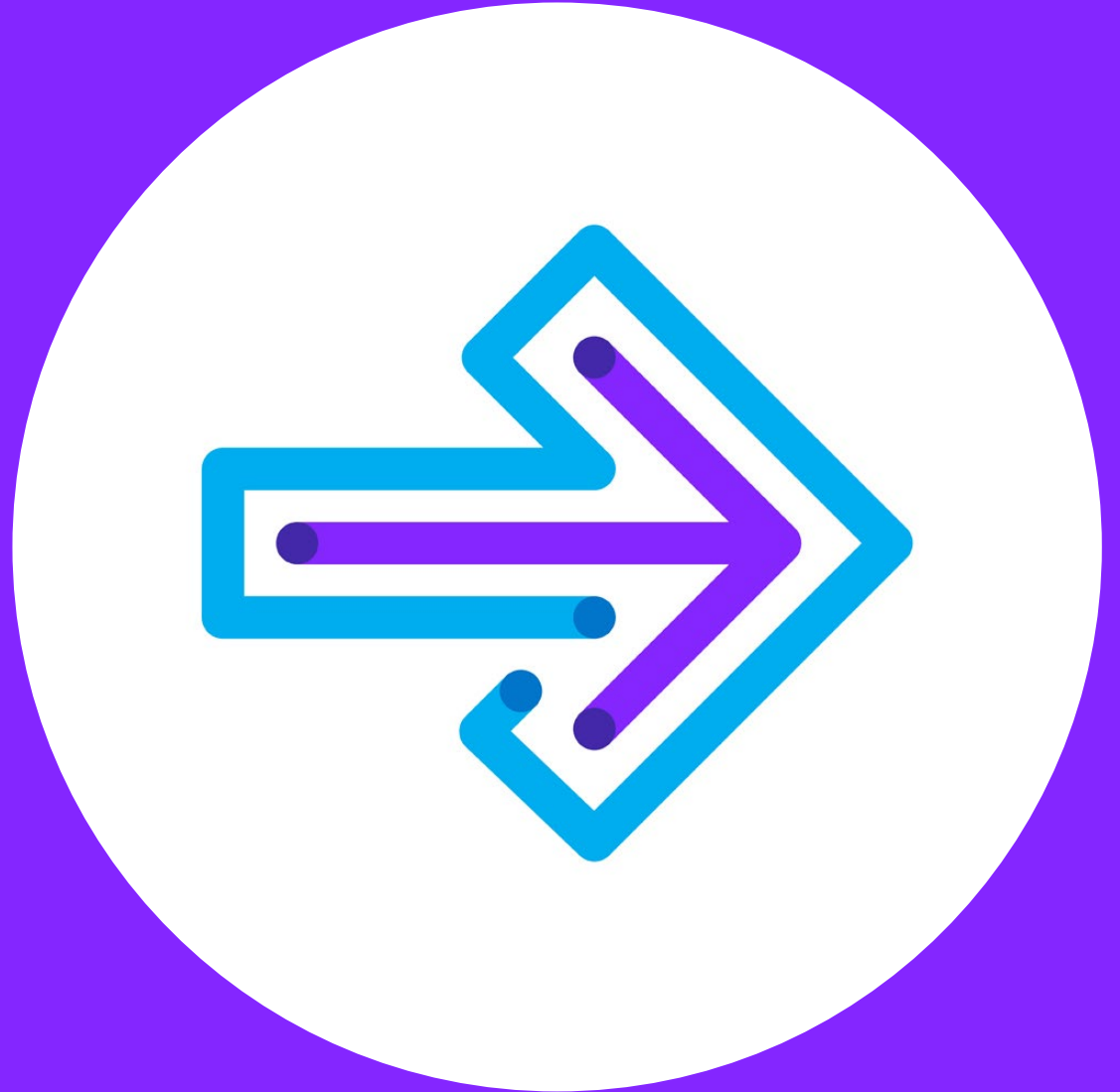


Q & A



# Claims Counter-Fraud

Presented by Kelli Munn  
Senior Manager Claims Fraud Strategy  
& SIU



# Key Themes

1. ICBC has a well developed, robust counter-fraud program that has been applied to the new Enhanced-Accident Benefits (EAB).
2. Measures have been implemented to support EAB counter-fraud efforts.
3. ICBC continues to get a better understanding of how EAB claims are developing. Data is being collected to better inform us of claim payments, fraud trends, and potential claim impacts.



# Claims Counter-Fraud Program

**ICBC has an established structure in place to address fraud.**

- ICBC has dedicated claims handlers to manage claims that have been identified as having a risk of fraud.
- ICBC's fraud analytics tool reviews policy and claim data to identify claims with a risk of fraud.
- ICBC has a Special Investigation Unit (SIU) that investigates injury and material damage claims fraud under all types of coverage.
- ICBC has a dedicated team of advisors who support SIU and Claims Operations to identify, develop and implement continuous improvement initiatives.



# EAB Counter-Fraud Measures

- ICBC developed specific policies, process and procedures for specialists who handle EAB claims.
  - Similar to those used under legal-based system, but with adjustments to address different benefits under EAB and shift to Enhanced Care.
- ICBC delivered training to all recovery specialists and their managers to ensure they understood:
  - How to identify and manage claims with a risk of fraud.
  - Key risk indicators, fraud scenarios and recommended actions to take.
- ICBC implemented a working group comprised of Claims Operations, SIU, and Claims Fraud Programs to ensure that the procedures and training provided the right level of knowledge to manage claims with a risk of fraud.
  - Working group recommendations have been implemented (e.g., internal newsletter on fraud awareness and tactics).



# EAB Counter-Fraud Savings and Resources

- Quantifying EAB counter-fraud savings will take time as we require a sufficient sample size of closed claims for the analysis.
- Types of EAB claims data that needs to be gathered includes:
  - Nature and severity of injury.
  - Duration of the injury.
  - Benefits paid.
  - Treatments received.
- ICBC will need several years of claims data in order to estimate EAB counter-fraud savings.





# EAB Counter-Fraud Savings and Resources

- Once sufficient data is collected there are different methodologies that ICBC can implement to determine EAB counter-fraud savings.
- The current legal-based (Tort) claims fraud analysis is conducted using the Nearest Neighbor Model. This approach compares each fraudulent claim to legitimate claims to determine what would have been paid, in the absence of fraud.
- ICBC will rely on several resources to determine when we have the right amount of data to estimate fraud savings including but not limited to our Actuarial Department, Strategic Analytics, Operational Analytics, Claims Operations, and the Claims Fraud Strategy and SIU team.



Q & A



# Customer Measurement Framework Overview

Presented by Matt Cox  
Director of Customer Experience



# Key Themes

1. In April 2022, ICBC transitioned from a 4-point customer satisfaction (CSAT) survey scale to a 7-point scale to better measure and reflect the customer experience.
2. Parallel testing allowed ICBC to compare results under the two scales.
3. The decrease in score was attributable to the transition to the new scale, not a reduction in the quality of service.



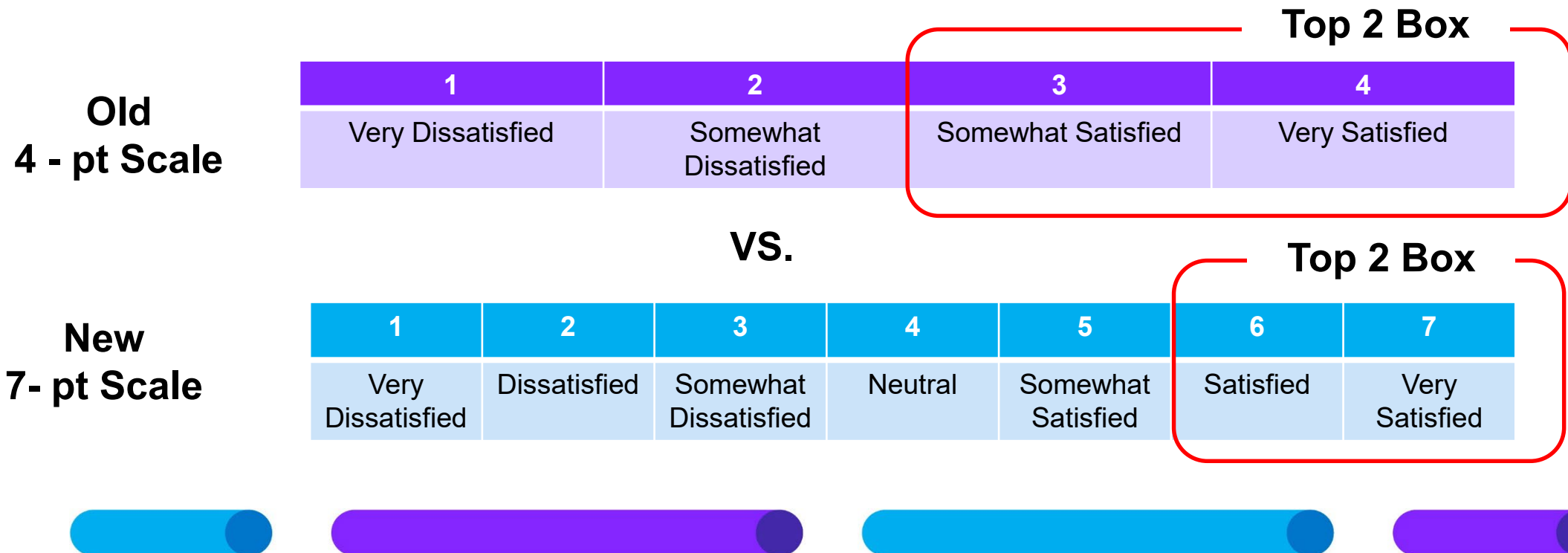
# Why Transition to 7-Point Scale?

- A 7-point scale is superior to a 4-point scale:
  - Provides a wider range of response options which makes the score more sensitive to changes.
  - Customers have more differentiation in their response.
  - Mid-point helps better recognize indifference/neutrality (more accurate).



# Old vs. New Scale

- ICBC uses the top 2 boxes to determine customer satisfaction (CSAT) scores.
- In transitioning to the new framework parallel testing was performed from June 2021 to March 2022.



# The Parallel Testing

- ICBC collected CSAT on the 7-point scale in addition to the 4-point scale from June 2021 to March 2022.
- In the same survey, customers were asked the same questions to rate their overall experience on the 4-point scale followed by the 7-point scale.

On 4pt Scale	On 7pt Scale
1. Very Dissatisfied	1. Very Dissatisfied
2. Somewhat Dissatisfied	2. Dissatisfied
3. Somewhat Satisfied	3. Somewhat Dissatisfied
	4. Neutral
	5. Somewhat Satisfied
4. Very Satisfied	6. Satisfied
	7. Very Satisfied



# Understanding the Analysis

- When looking at the top 2 boxes, there is a reduction in score from the old 4-point scale to the current 7-point scale.
- However, if you compare the 50<sup>th</sup> percentile of the 4-point scale to the 57% percentile of the 7-point scale the results are comparable.

Insurance	4-pt Scale		7-pt Scale	
	Jun-Mar		Jun-Mar	vs. 4pt
Top 2 Box	95.8%		85.4%	-10.4ppt
Top 3 Box			94.9%	-0.9ppt
Top 4 Box			97.5%	+1.7ppt





Q & A

