

Board of Governors
PENSION & BENEFITS COMMITTEE
Friday 17 February 2023
9:30 a.m. to 12:00 noon

This meeting will be held via Microsoft Teams
Non-members may arrange to join the open session of the electronic meeting
by contacting Melissa Benjamin, melissa.benjamin@uwaterloo.ca

OPEN SESSION		ACTION
9:30	1. Approval of the 20 January 2023 Minutes (Open Session)* and Business Arising a. GSC Update [Reitsma & Hornberger]	Decision
	2. Execution Against the Work Plan* [Weber-Kraljevski]	Information
9:45	3. Pension Risk Management Dashboard, Q4 2022* [Byron]	Information
10:00	4. Investments Update, Q4 2022* [Reitsma]	Information
10:15	5. Annual Adjustments [McGrath] a. COLA for Pensions in Pay* b. COLA for Deferred Pensions* c. Pensionable Earnings for Members on LTD*	Information Decision Decision
10:30	6. Annual Report to the Community* [Weber-Kraljevski]	Discussion
	7. Other Business	
CONFIDENTIAL SESSION		
10:45	8. Approval of the 20 January 2023 Minutes (Confidential Session)+ and Business Arising	Decision

Next Meeting: Friday 10 March 2023, 9:30 a.m. – 12:00 noon

*attached ** to be distributed + distributed separately

Date

Tim Weber-Kraljevski
Associate University Secretary

Please convey regrets to Melissa Benjamin at melissa.benjamin@uwaterloo.ca

Future Agenda Items

- a. Pension Contribution for Members on LTD
- b. Level of LTD coverage vs. practical requirements
- c. EFAP Report Data Requirements
- d. Communication Plan re: Handling of Member Questions/Feedback

University of Waterloo
Board of Governors
PENSION & BENEFITS COMMITTEE
Minutes of the 20 January 2023 Meeting
[in agenda order]

Present: Peter Barr (chair), Sara Cressman, Melissa Graham, Mary Hardy, Lily Hua, William Povelofskie, Ranjini Jha, Jacinda Reitsma, David Saunders, David Taylor, Tim Weber-Kraljevski (secretary)

Regrets: Michelle Hollis, James Rush

Resources/Guests: Anata Alphonso, Linda Byron, Vivek Goel, Sarah Hadley, Patti Hancock, Lee Hornberger, Sue McGrath, Allan Shapira, Michelle St-Amour, Tyler Wendland,

Organization of Meeting: Peter Barr took the chair, and Tim Weber-Kraljevski acted as secretary. The secretary advised that a quorum was present. The agenda was accepted as distributed.

OPEN SESSION

The chair welcomed Patti Hancock and President Goel to the meeting.

1. APPROVAL OF THE 9 DECEMBER 2022 MINUTES (OPEN SESSION) AND BUSINESS ARISING

There was a motion to approve the minutes. Jha and Saunders. Carried.

In-Vitro Fertilization Coverage. Saunders provided an update that Bill C-32 received royal assent on 15 December 2022, noting the CRA has not yet published any update. Hornberger will investigate what Green Shield Canada (GSC) is or will be offering to address the new legislation.

2. EXECUTION AGAINST THE WORK PLAN

This item was received for information.

3. APPROVAL OF THE ACTUARIAL VALUATION ASSUMPTIONS

Shapira introduced the valuation assumptions, noting: that the full valuation will be brought to the March meeting; that a valuation was filed last year and that this valuation is not required, nor expected to be filed; the valuation will be reverting back to the January valuation date this year; the funding rules which came into effect May 1, 2018 for Ontario-registered pension plans; the valuation results will include the protocol calculations that determine the liabilities and normal cost without the RPP Hard-Dollar Cap but with the projected Income Tax Act maximum pension; and which demographic and economic assumptions are used. Byron took members through the material presented, highlighting: the assumptions for the prior valuations; how assumptions for going concern, solvency and wind-up valuations are set and what estimates they provide; that the valuation will reflect actual inflationary increases to be granted at May 1, 2023, and any carry-forward to revert to the long-term assumption of 2.0%; how the discount rate is calculated; the calculation and impact of the provision for adverse deviation; and the preliminary actuarial assumptions for January 1, 2023. Discussion included: the considerations for Bill 124 in the increase in pensionable earnings; the effects of inflation and how to address it; the effects of the pandemic on retirement and mortality rates; and possible changes to CPI.

4. UPDATE ON GREEN SHIELD CANADA IMPLEMENTATION

Hornberger provided an update on the GSC implementation project, noting: on January 1, 2023, the official change in benefit plan provider to GSC successfully occurred; member ID cards and welcome kits were released in early December 2022 but the travel information was missing so GSC reissued member ID cards and welcome kits in mid-December 2022 at no additional charge; the first batch of letters to members impacted by the committee's decisions from transition analysis were released; there was an error identified with co-pay in the claim system where if the out-of-pocket maximum is reached within the expense itself, GSC's system cannot automatically perform the transition from 80% to 100% reimbursement, GSC is currently monitoring, contacting those affected, and anticipating the system will be fixed on 27 January 2023; as of 20 January 2023, 38% of those eligible have

registered with GSCeverywhere; and contracts have been released to UW by GSC and are currently under review for accuracy prior to finalization. Members raised the following concerns: there was at least one example for compounding medications where the medication fits with GSC's policy, but it is not being considered eligible; plan members have experienced difficulty with Coordination of Benefits (COB) and physiotherapy reimbursement; retirees have reported having negative experiences with the GSC call center; and the committee had decided under the information provided by GSC that Flonase would not be considered eligible for reimbursement for adults because it is available as an over the counter medication, however there are plan members who are prescribed by a physician for a reason other than seasonal rhinitis. Hornberger will investigate the committee's concerns and if GSC would be able to provide coverage for adults for Flonase if it's prescribed by a physician for a reason other than seasonal rhinitis.

5. OTHER BUSINESS

There was no other business.

With no further business in open session, the committee moved into confidential session.

NEXT MEETING

The next regular meeting is scheduled for Friday, 17 February 2023, 9:30 a.m. – 12:00 noon.

26 January 2023

Tim Weber-Kraljevski
Associate University Secretary

Execution against Work Plan

Pension & Benefits Committee, Board of Governors, University of Waterloo

The below represents the annual responsibilities of the P&B Committee and has been prepared as an aid to planning only. The committee's activities are much broader, however, and include: legislative changes, plan changes and improvements; selection of managers and service providers; and requests from the UW community regarding pension and benefits plans.

Task	Frequency (Target month)	18 Feb 2022	11 Mar 2022	20 May 2022	24 June 2022	16 Sept 2022	07 Oct 2022	18 Nov 2022	9 Dec 2022	20 Jan 2023	17 Feb 2023
Approval of Actuarial Valuation Assumptions	Annual (Jan)									✓	
Investment Status of PPP	Annual (Feb)	✓									✓
Cost-of-living Increase for Pensioners	Annual (Feb)	✓									✓
Pensions for Deferred Members	Annual (Feb)	✓									✓
Salaries for Pension Purposes for Individuals on Long-term Disability	Annual (Feb)	✓									✓
Actuarial Valuations (RPP and PPP), with posting to website once approved	Annual (Mar)		✓								
Review of Contribution and Protocol Caps (RPP and PPP)	Annual (Mar)		✓								
Monitor sharing of current service cost between employee and university contributions	Annual (Mar)										
Benefits Plan Premium Renewals	Annual (Mar)		✓								
Indexing of Long-term Disability Plan Benefits and Maxima	Annual (Mar)		✓								
Annual Committee Self-Assessment	Annual (Mar)		✓								
Budget Overview	Annual (May)			✓							
Previous Years' Fees and Expenses	Annual (May)			✓							
Annual Audit of the Pension Plan Fund Financial Statements	Annual (May)			✓							

Task	Frequency	18 Feb 2022	11 Mar 2022	20 May 2022	24 June 2022	16 Sept 2022	07 Oct 2022	18 Nov 2022	9 Dec 2022	20 Jan 2023	17 Feb 2023
Benefits Utilization Report	Annual (June)				✓						
Annual review re: benefits added/removed from insured plans in the market	Annual (June)				D	D	✓				
Review of Committee Terms of Reference	Annual (June)				✓						
Review of Administrative Staffing Support for the Plan (first iteration to occur in 2023)	Annual (Oct)										
Indexing of Plan Maxima – Health, Dental, Retiree Life Insurance	Annual (Nov)							✓			
Employee and Family Assistance Program – report on utilization	Annual (Nov)							✓			
Maximum pension limits and caps adjustments, based on average industrial wage increase (AIW)	Annual (Dec)								✓		
Total Fund Overview	Quarterly					✓		✓			✓
Investment Manager Review	Semi-annually							✓			
Approval of the Statement of Investment Policies and Procedures (SIPP)	Annual								D	D	D
Annual Report to the Community	Annual	✓									✓
Actuarial Filing - Minimum every three years Secretariat to advise Aon and HR upon approval by BOG, to commence filing Most recent filings: 2017, 2018, 2020, 2021, 2022											



Pension Risk Management Dashboard

University of Waterloo

As of December 31, 2022

Proprietary and Confidential



About this Materials

This dashboard was prepared for the University of Waterloo to track changes in funded status of the Pension Plan over successive reporting periods, as well as quantify the amount of risk to which the Pension Plan is exposed. The report presents the funded status and performs the analysis on three bases:

Risk-Free Benchmark Basis – This liability is calculated using best estimate assumptions for retirement, termination and other demographic experience, and a discount rate and inflation assumption determined with reference to the risk-free environment. For this report, the liability has been determined using the real return bond yield plus a 20 basis point credit spread to reflect the additional yield that can be achieved with relatively little additional risk. This liability differs from the solvency calculation in that the demographic assumptions are best estimate and statutory “grow-in” provisions are not included.

Going Concern Basis – This liability is calculated using the going concern assumptions at the most recent valuation. The analysis is performed using the market value of assets with a Provision for Adverse Deviation as prescribed by the *Pension Benefits Act* (Ontario).

Solvency/Hypothetical Wind Up Basis – This liability is calculated using assumptions determined in accordance with the Canadian Institute of Actuaries Annuity Purchase guidance and Commuted Value standards in effect at each measurement date shown in this report. A summary of these assumptions is included on page 15.

This dashboard also contains a reconciliation that compares the going concern liability with the liability calculated using the risk-free benchmark. The difference between the two liabilities represents the amount of return expected to be provided by taking on risk in the investment portfolio. Over successive quarters the tool helps quantify how that risk changes as the underlying interest rates change.

On both bases the following information is shown:

- Current Funded Status and Historical Asset Liability Performance
 - How well funded is the plan?
 - What has been the return on plan assets and liabilities?
- Detailed Asset and Liability Performance Attribution
 - What factors drove the performance of assets and liabilities over the prior period?
 - What is the relative impact of these factors on the assets and liabilities in isolation and in combination?

For the Risk-Free Benchmark Basis, the following information is also shown:

- Scenario Testing
 - What risk exposures does the plan face?
 - What would be the impact of a downside event for each risk factor?

Highlights

- The going concern deficit decreased from \$350.8 million to \$47.5 million over the quarter due primarily to an increase in the discount rate used to value the liabilities to align with the proposed discount rate to be used for the January 1, 2023 valuation. Asset performance being higher than expected also contributed to the improved funded status.
- Improved funded status does not reflect the higher than expected indexation adjustment to be granted at May 1, 2023. This adjustment will be reflected in the funding valuation as well as the Q1 2023 dashboard.
- The risk-free deficit increased from \$829.4 million to \$895.6 million over the quarter due to an increase in expected inflation that was partially offset by an increase in risk free rates (nominal) and strong asset returns.
- The solvency surplus increased from \$102.8 million to \$236.8 million over the quarter primarily due to the plan's asset performance exceeding expectations and an increase in the risk-free rates that was partially offset by tightened credit spreads.
- The total fund had a rate of return after all fees of 4.7% for this quarter.



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Highlights (cont'd)

- The estimated December 31, 2022 liabilities are projected based on the most recent actuarial valuation, with membership data as at December 31, 2021.
- The annuity purchase guidance educational note for valuations as of December 31, 2022 and January 1, 2023 (published as of January 25, 2023) has been reflected in the interest rates used to calculate the December 31, 2022 Solvency liabilities.
- The estimated transfer ratio has not decreased by 10% or more over the period; no Regulation 19 filing is required.
- The most recent actuarial valuation was performed as at December 31, 2021.
- All figures are in \$1,000,000 (CAD).



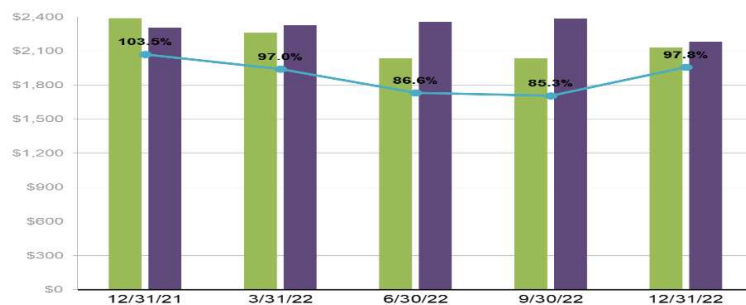
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Executive Summary – Going Concern

Values in \$1,000,000 (CAD)

Funded Status



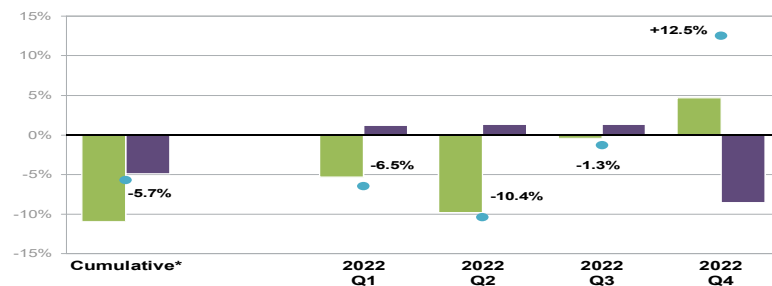
Highlights for the Quarter-Ending 12/31/22

The plans' funded ratio increased to 97.8% at 12/31/22. This result was primarily due to the combined effects of:

- A decrease in liabilities due to an increase in the discount rate;
- Asset performance exceeding expectations, and
- Contributions exceeded the cost of new benefit accruals

	12/31/21	3/31/22	6/30/22	9/30/22	12/31/22
Market Value of Assets	\$ 2,387.7	\$ 2,257.3	\$ 2,037.5	\$ 2,033.6	\$ 2,130.3
Going Concern Liability	2,306.3 ¹	2,327.1 ¹	2,353.8 ¹	2,384.4 ¹	2,177.8 ¹
Surplus/(Deficit)	\$ 81.4	\$ (69.8)	\$ (316.3)	\$ (350.8)	\$ (47.5)
Periodic Contributions	\$ 26.8	\$ 26.5	\$ 27.1	\$ 27.9	\$ 28.1
Effective Interest Rate	5.30%	5.50%	5.50%	5.50%	6.25%
Funded Ratio:	103.5%	97.0%	86.6%	85.3%	97.8%
Interest rate sensitivity:					
Asset:	1.8	1.6	1.5	1.5	1.6
Going Concern Liability:	14.4	14.1	14.1	14.1	13.2

Asset-Liability Return



Asset Liability Return for Quarter-Ending 12/31/22

Assets returned 4.7% during the quarter while liabilities returned -8.5%, resulting in a funded status increase of 12.5%.

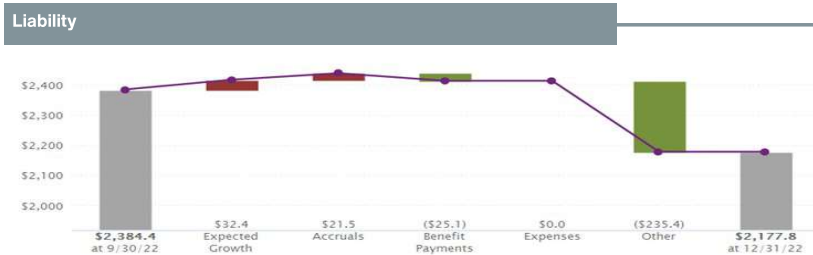
Periodic Return/Change	Cumulative	3/31/22	6/30/22	9/30/22	12/31/22
Market Value of Assets Return	-10.9%	-5.3%	-9.8%	-0.4%	4.7%
Going Concern: Return	-4.9%	1.2%	1.3%	1.3%	-8.5%
Funded Ratio Change	-5.7%	-6.5%	-10.4%	-1.3%	12.5%

Asset-Liability Performance Attribution – Going Concern

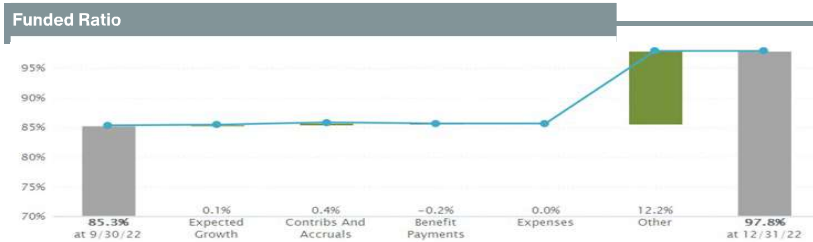
Values in \$1,000,000 (CAD)



- Overall, assets returned 4.7% during this quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by narrowing credit spreads.
- The plans' return-seeking assets performed better than expected during the quarter.
- The University and members made \$28.1 million in contributions during the quarter and the trust paid \$25.1 million in benefits to the participants.
- “Other” represents the scale of the over performance of the Plan’s assets versus expectation (based on the Plan’s going concern discount rate assumption).



- Liabilities as of 12/31/22 are calculated using a discount rate of 6.25% p.a.
- Liabilities were expected to grow by \$32.4 million due to interest cost during the quarter (using a discount rate of 5.50% p.a.).
- New benefit accruals increased the liability by \$21.5 million during the quarter.
- Plan liabilities decreased by \$25.1 million during the quarter as benefits were paid.
- “Other” represents the decrease in the liabilities primarily due to the change in discount rate assumption. (Note the impact of higher than expected inflation will be reflected in the next dashboard)



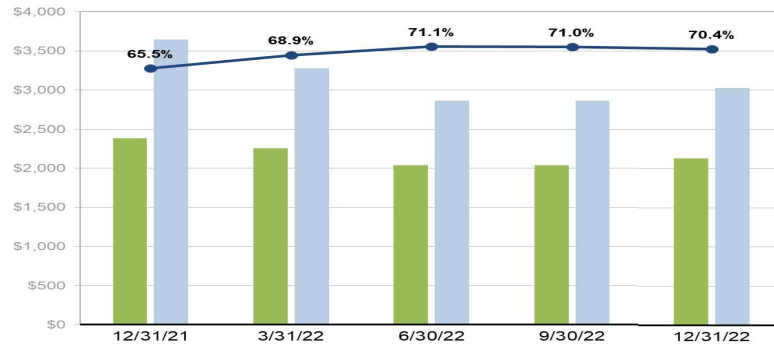
- Contributions exceeded the cost of new benefit accruals over the period leading to an increase of 0.4% in the funding ratio
- The gain on assets combined with the lowering of discount rate have improved the funded status by 12.2%.



Executive Summary – Risk Free

Values in \$1,000,000 (CAD)

Funded Status

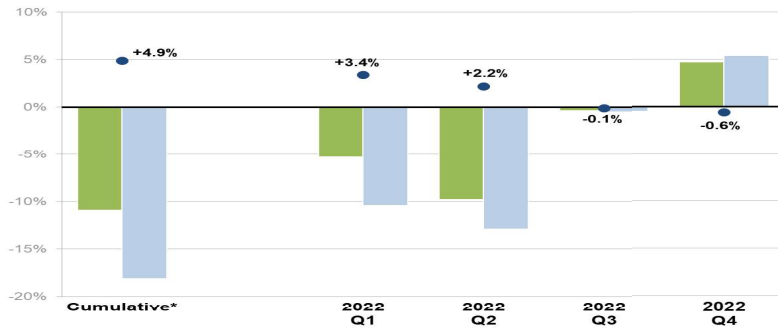


Highlights for the Quarter-Ending 12/31/22

- The plans' funded ratio decreased to 70.4% at 12/31/22. This result was primarily due to the combined effects of:
- Asset performance exceeding expectations, offset by
 - New benefit accruals exceeded contributions, and
 - An increase in liabilities due to an increase in inflation assumptions partially offset by an increase in underlying risk-free rates (nominal).

	12/31/21	3/31/22	6/30/22	9/30/22	12/31/22
Market Value of Assets	\$ 2,387.7	\$ 2,257.3	\$ 2,037.5	\$ 2,033.6	\$ 2,130.3
Risk-Free Liability	3,642.8	3,277.8	2,864.9	2,863.0	3,025.9
Surplus/(Deficit)	\$ (1,255.1)	\$ (1,020.5)	\$ (827.4)	\$ (829.4)	\$ (895.6)
Periodic Contributions	\$ 26.8	\$ 26.5	\$ 27.1	\$ 27.9	\$ 28.1
Discount Rate	0.23%	0.94%	1.76%	1.84%	1.59%
Funded Ratio:					
Assets/Risk-Free Liability	65.5%	68.9%	71.1%	71.0%	70.4%
Interest rate sensitivity:					
Assets:	1.8	1.6	1.5	1.5	1.6
Risk-Free Liability:	19.5	19.8	17.2	17.0	17.4

Asset-Liability Return



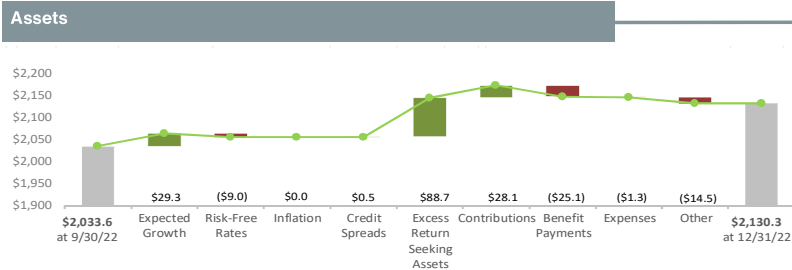
Asset Liability Return for Quarter-Ending 12/31/22

Assets returned 4.7% during the quarter while liabilities returned 5.4%, resulting in a funded status decrease of 0.6%.

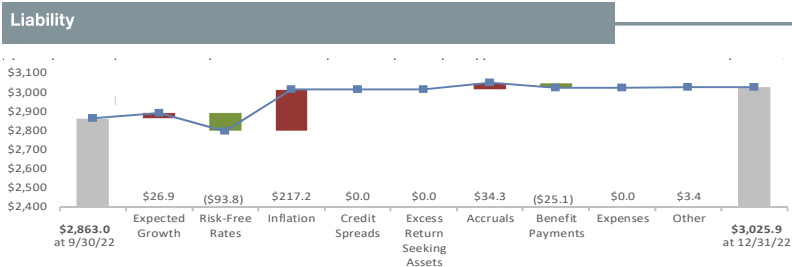
Periodic Return/Change	Cumulative	3/31/22	6/30/22	9/30/22	12/31/22
Market Value of Assets Return	-10.9%	-5.3%	-9.8%	-0.4%	4.7%
ABO:					
Return	-18.1%	-10.4%	-12.9%	-0.5%	5.4%
Funded Ratio Change	4.9%	3.4%	2.2%	-0.1%	-0.6%

Asset-Liability Performance Attribution – Risk Free

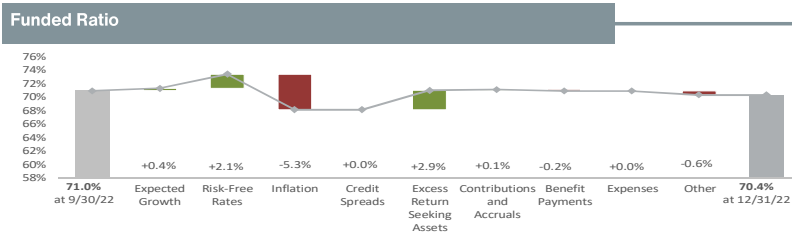
Values in \$1,000,000 (CAD)



- Assets returned 4.7% during this quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by narrowing credit spreads.
- The plans' return-seeking assets performed better than expected during the quarter.
- The university and members made \$28.1 million in contributions during the quarter and the trust paid \$25.1 million in benefits to the participants.
- "Other" includes the impact of active management, and differences between benchmark and actual investment allocations.



- Liabilities were expected to grow by \$26.9 million due to interest cost during the quarter.
- Risk-free nominal rates used to determine the liabilities increased resulting in a decrease in liabilities of \$93.8 million.
- Expected inflation increased resulting in an increase in the liabilities of \$217.2 million.
- New benefit accruals increased the liability by \$34.3 million during the quarter.
- Plan liabilities decreased by \$25.1 million during the quarter as benefits were paid.



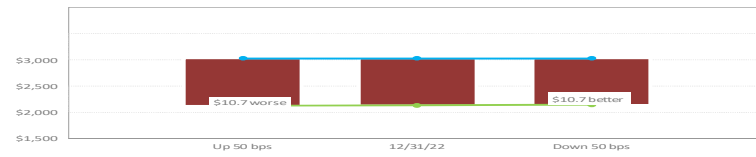
- The difference in exposure to risk-free rates between assets and liabilities combined with changes in risk-free rates resulted in an increase in funded status of 2.1%.
- Similarly, the difference in exposure to credit spreads between assets and liabilities combined with changes in credit spreads resulted in no change in funded status.
- Increase in inflation expectation resulted in a decrease in funded status of 5.3%.
- Return-seeking assets experienced gains during the quarter in excess of expected, adding 2.9% to the plans' funded status during the period.



Sensitivity Analysis – Risk Free Benchmark

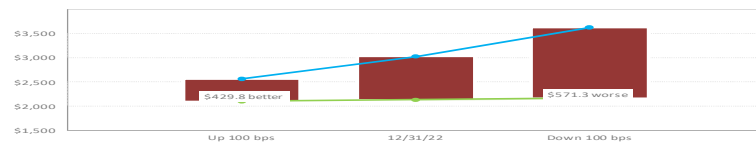
Values in \$1,000,000 (CAD)

Credit Spreads



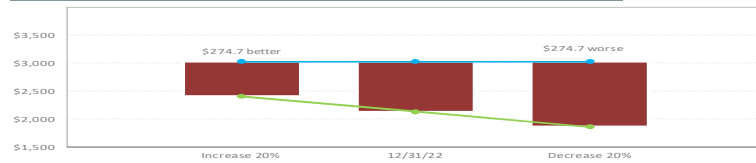
	Up 50bps	Current	Down 50bps
Market Value of Assets	\$2,119.6	\$2,130.3	\$2,141.0
Risk Free	\$3,025.9	\$3,025.9	\$3,025.9
Surplus/(Deficit)	(\$906.3)	(\$895.6)	(\$884.9)
Change		(\$10.7)	\$10.7

Risk Free Rates



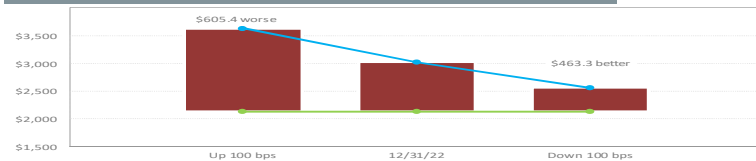
	Up 100bps	Current	Down 100bps
Market Value of Assets	\$2,096.8	\$2,130.3	\$2,164.4
Risk Free	\$2,562.6	\$3,025.9	\$3,631.3
Surplus/(Deficit)	(\$465.8)	(\$895.6)	(\$1,446.9)
Change		\$429.8	(\$571.3)

Return-Seeking Assets



	Increase 20%	Current	Decrease 20%
Market Value of Assets	\$2,405.0	\$2,130.3	\$1,855.6
ABO	\$3,025.9	\$3,025.9	\$3,025.9
Surplus/(Deficit)	(\$620.9)	(\$895.6)	(\$1,170.3)
Change		\$274.7	(\$274.7)

Inflation

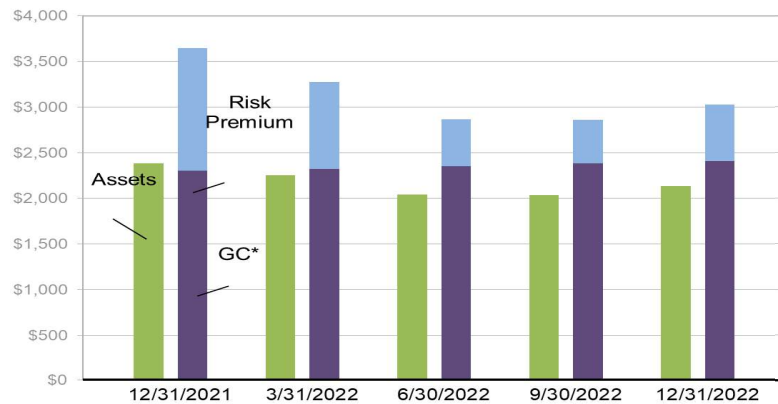


	Up 100bps	Inflation	Down 100bps
Market Value of Assets	\$2,130.3	\$2,130.3	\$2,130.3
Risk-Free	\$3,631.3	\$3,025.9	\$2,562.6
Surplus/(Deficit)	(1,501.0)	(\$895.6)	(\$432.3)
Change		(\$605.4)	\$463.3

Reconciliation of Risk-Free Benchmark and Going Concern Funded Status

Funded Status

Values in \$1,000,000 (CAD)



*Going Concern

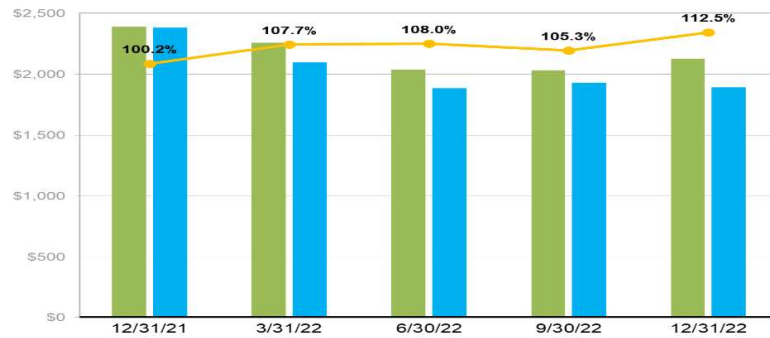
	12/31/21	3/31/21	6/30/22	9/30/22	12/31/22
Market Value of Assets	\$ 2,387.7	\$ 2,257.3	\$ 2,037.5	\$ 2,033.6	\$ 2,130.3
Going Concern Liability	\$ 2,306.3	\$ 2,327.1	\$ 2,353.8	\$ 2,384.4	\$ 2,177.8
Risk Premium	<u>1,336.5</u>	<u>950.7</u>	<u>511.1</u>	<u>478.6</u>	<u>848.1</u>
Risk-Free Liability	\$ 3,642.8	\$ 3,277.8	\$ 2,864.9	\$ 2,863.0	\$ 3,025.9

The difference between the Risk-Free Liability and the Going Concern Liability is a measure of the amount of risk premium on which the Pension Plan funding is based.

Executive Summary – Solvency

Values in \$1,000,000 (CAD)

Funded Status



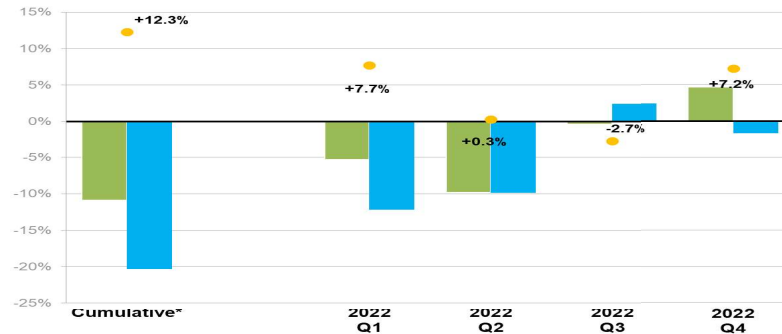
Highlights for the Quarter-Ending 12/31/22

The plans' funded ratio increased to 112.5% at 12/31/22. This result was primarily due to the combined effects of:

- Asset performance exceeding expectations,
- Contributions of \$28.1 million which exceeded new benefit accruals, and
- Decrease in liabilities due to an increase in the effective interest rates.

	12/31/2021	3/31/2022	6/30/2022	9/30/2022	12/31/2022
Market Value of Assets	\$ 2,387.7	\$ 2,257.3	\$ 2,037.5	\$ 2,033.6	\$ 2,130.3
Solvency Liability	2,382.8	2,092.4	1,885.8	1,930.8	1,893.5
Surplus/(Deficit)	\$ 4.9	\$ 164.9	\$ 151.7	\$ 102.8	\$ 236.8
Periodic Contributions	\$ 26.8	\$ 26.5	\$ 27.1	\$ 27.9	\$ 28.1
Effective Interest Rate	2.81%	3.70%	4.62%	4.52%	4.76%
Funded Ratio:					
Assets/Solvency Liability	100.2%	107.9%	108.0%	105.3%	112.5%
Interest rate sensitivity:					
Assets	1.8	1.6	1.5	1.6	1.6
Solvency Liability	14.9	14.6	12.5	12.6	12.4

Asset-Liability Return



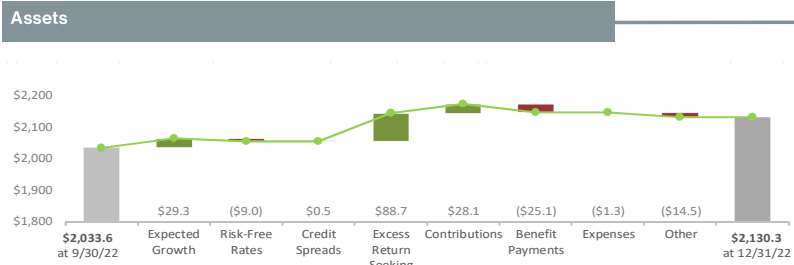
Asset Liability Return for Quarter-Ending 12/31/22

Assets returned 4.7% during the quarter while liabilities returned -1.7%, resulting in a funded status increase of 7.2%.

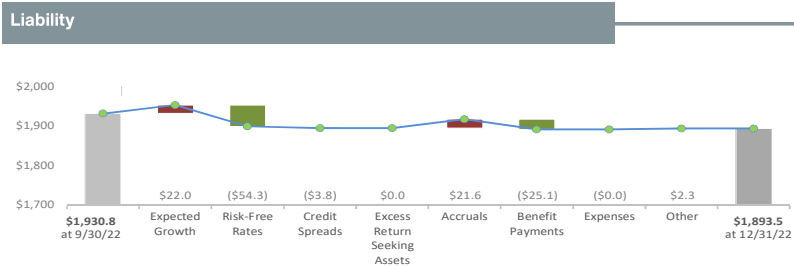
Periodic Return/Change	Cumulative	3/31/22	6/30/22	9/30/22	12/31/22
Market Value of Assets Return	-10.9%	-5.3%	-9.8%	-0.4%	4.7%
Funding Target:					
Return	-20.3%	-12.2%	-9.9%	2.4%	-1.7%
Funded Ratio Change	12.3%	7.7%	0.3%	-2.7%	7.2%

Asset-Liability Performance Attribution – Solvency

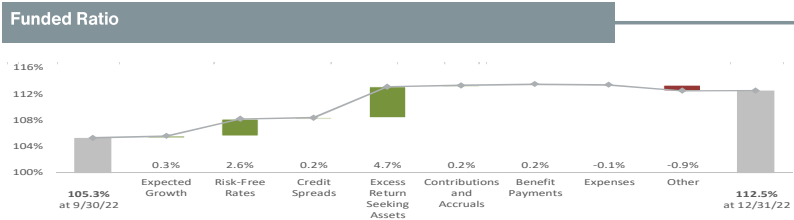
Values in \$1,000,000 (CAD)



- Assets returned 4.7% during this quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by narrowing credit spreads.
- The plans' return-seeking assets were a significant contributor to the performance of the portfolio.
- The University and members made \$28.1 million in contributions during the quarter and the trust paid \$25.1 million in benefits to the participants.
- Other¹ includes the impact of active management, and differences between benchmark and actual investment allocations.



- Liabilities were expected to grow by \$22.0 million due to interest cost during the quarter.
- Risk-free rates increased, and credit spreads used for annuity purchase rates widened, resulting in a net decrease of \$58.1 million (\$54.3 million + \$3.8 million).
- New benefit accruals increased the liability by \$21.6 million during the quarter.
- Plan liabilities decreased by \$25.1 million during the quarter as benefits were paid.



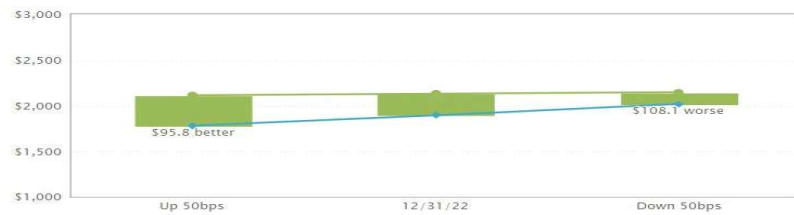
- The difference in exposure to risk-free rates between assets and liabilities combined with changes in risk-free rates resulted in an increase in funded status of 2.6%.
- Return-seeking assets experienced gains during the quarter in excess of expected, adding 4.7% to the plans' funded status during the period.
- Contributions exceeded benefit accruals during the quarter, resulting in a net increase of 0.2% in the funded status.



Sensitivity Analysis – Solvency

Values in \$1,000,000 (CAD)

Credit Spreads



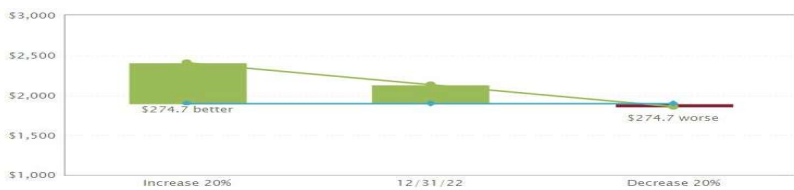
	Up 50bps	Current	Down 50bps
Market Value of Assets	\$2,113.6	\$2,130.3	\$2,147.3
Funding Target	\$1,781.0	\$1,893.5	\$2,018.6
Surplus/(Deficit)	\$332.6	\$236.8	\$128.7
Change		\$95.8	(\$108.1)

Risk Free Rates



	Up 100bps	Current	Down 100bps
Market Value of Assets	\$2,078.7	\$2,130.3	\$2,185.6
Funding Target	\$1,679.4	\$1,893.5	\$2,158.1
Surplus/(Deficit)	\$399.3	\$236.8	\$27.5
Change		\$162.5	(\$209.3)

Return-Seeking Assets



	Increase 20%	Current	Decrease 20%
Market Value of Assets	\$2,405.0	\$2,130.3	\$1,855.6
Funding Target	\$1,893.5	\$1,893.5	\$1,893.5
Surplus/(Deficit)	\$511.5	\$236.8	(\$37.9)
Change		\$274.7	(\$274.7)

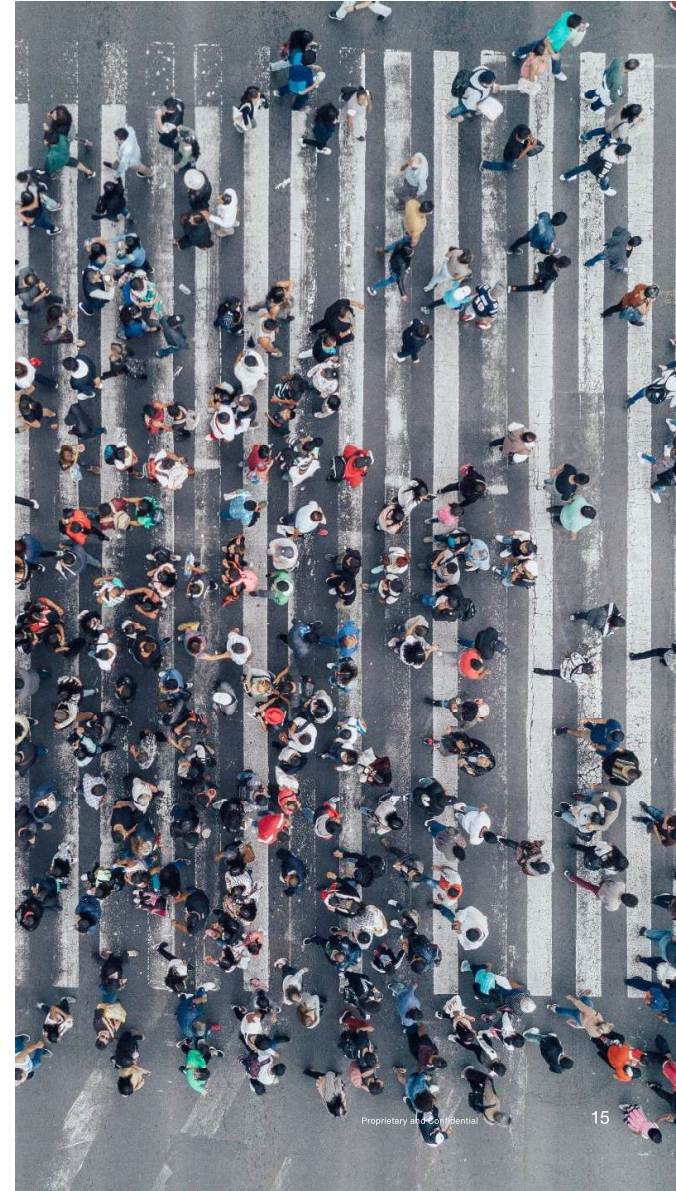
Appendix



Proprietary and Confidential

Plan Provisions & Membership Data

Same as in the Actuarial Valuation Report as of December 31, 2021.



Proprietary and Confidential

Actuarial Methods & Assumptions

Our analysis of the estimated financial position of the Pension Plan is based on the following:

	12/31/21	3/31/22	6/30/22	9/30/22	12/31/22
Going Concern					
Discount Rate	5.30%	5.50%	5.50%	5.50%	6.25%
Inflation	2.00%	2.00%	2.00%	2.00%	2.00%
Salary Increase	3.00%/4.00% ¹	3.00%/4.00% ¹	3.00%/4.00% ¹	3.00%/4.00% ¹	3.00%/4.00% ¹
PfAD	9.00%	9.00%	9.00%	9.00%	9.00%
Mortality	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public
Risk-Free Benchmark					
Discount Rate	0.23%	0.94%	1.76%	1.84%	1.59%
Solvency					
Annuity Purchase Interest Rate	2.86%	3.81%	4.69%	4.64%	4.91%
Effective Date of Annuity Purchase Guidance Used	12/31/21	3/31/22	6/30/22	9/30/22	12/31/22
Lump Sum Value Interest Rate (Years 1-10) ²	2.10%	3.40%	4.30%	4.30%	4.30%
Lump Sum Value Interest Rate (Years 10+) ²	3.10%	3.70%	4.60%	4.30%	4.70%
Mortality ³	CPM2014	CPM2014	CPM2014	CPM2014	CPM2014
Hypothetical Wind Up					
Annuity Purchase Interest Rate (100% Indexed)	-0.54%	0.14%	0.76%	1.04%	0.99%
Annuity Purchase Interest Rate (75% Indexed)	0.26%	1.06%	1.74%	1.94%	1.97%
Effective Date of Annuity Purchase Guidance Used	12/31/21	3/31/22	6/30/22	9/30/22	12/31/22
Lump Sum Value Interest Rate (100% Indexed) (Years 1-10) ²	0.70%	1.50%	2.50%	2.50%	2.20%
Lump Sum Value Interest Rate (100% Indexed) (Years 10+) ²	1.00%	1.80%	2.80%	2.60%	2.60%
Lump Sum Value Interest Rate (75% Indexed) (Years 1-10) ²	1.00%	2.00%	2.90%	3.00%	2.70%
Lump Sum Value Interest Rate (75% Indexed) (Years 10+) ²	1.50%	2.30%	3.20%	3.00%	3.01%
Mortality ³	CPM2014	CPM2014	CPM2014	CPM2014	CPM2014
Underlying Canadian Reference Data					
CANSIM v39054 (7 Year)	1.27%	2.37%	3.15%	3.19%	3.27%
CANSIM v39056 (30 Year Long Term)	1.68%	2.37%	3.14%	3.09%	3.28%
CANSIM v39057 (30 Year Real Return)	-0.14%	0.54%	1.36%	1.44%	1.19%
CANSIM v39062 (Over 10 Years)	1.66%	2.41%	3.19%	3.14%	3.31%

¹ 3.00% per year for 2 years; 4.00% year thereafter

² Lump Sum Value Interest Rates are based on rates in effect on the first day of the month following quarter end (i.e., January 1st, April 1st, July 1st and October 1st).

³ With improvement scale MI-2017 for Going Concern and Risk Free and CPM-B for Solvency.

All other assumptions and methods are the same as those shown in the Actuarial Valuation Report as of December 31, 2021. For the Risk-Free Benchmark basis, all other assumptions and methods are the same as those used for the Going Concern basis.



Actuarial Attestation

This document is intended to provide the University of Waterloo with a summary of the performance of the Pension Plan as of December 31, 2022.

This analysis is intended to assist the University of Waterloo with a review of the associated issues and options, and its use may not be appropriate for other purposes. This analysis has been prepared solely for the benefit of the University of Waterloo. Any further dissemination of this report is not allowed without the written consent of Aon.

In conducting the analysis, we have relied on plan design, demographic and financial information provided by other parties, including the plan sponsor. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

Experience different than anticipated could have a material impact on the ultimate costs of the benefits. In addition, changes in plan provisions or applicable laws could have a substantial impact on cost. Actual experience may differ from our modeling assumptions.

Aon
February 2023

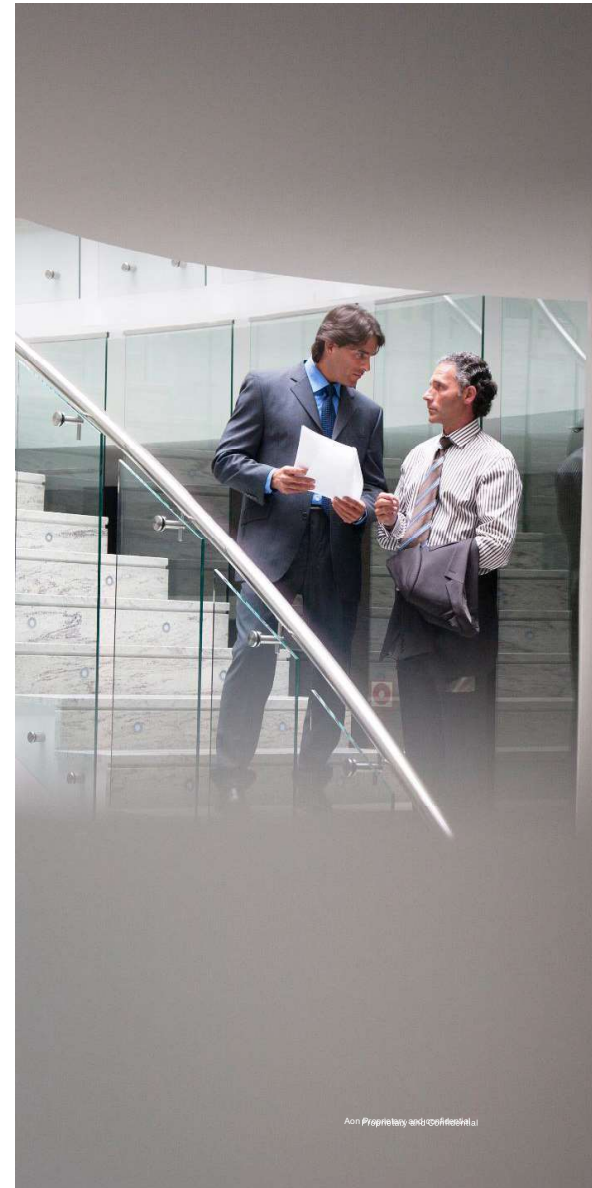
Asset Allocation and Benchmarking

Asset Class	12/31/22
Alternatives	
• FTSE EPRA NAREIT DEVELOPED Total Return Index USD	2.8%
• MSCI USA Infrastructure Index	6.9%
Fixed Income	
• FTSE TMX Universe Bond Index	35.5%
International Equities	
• MSCI World Index	49.1%
• S&P TSX	5.7%
Total	100.0%

Legal Disclaimer

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Aon Proprietary and Confidential

Aon
Investment Consulting

Performance Update

University of Waterloo Pension Plan

Period Ending 31 December 2022

Executive Summary

Executive Summary

Performance Summary¹

As of 31 December 2022

	Allocation		Performance (%)								
	Market Value (\$000)	%	1 Quarter	2022	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
Total Fund	2,129,495	100.0	4.63	-11.00	-11.00	0.07	2.52	5.14	4.19	6.47	5.41
CPI + 3.5% ²			1.13	10.04	10.04	9.25	7.56	7.13	6.81	5.95	5.68
Value Added			3.50	-21.04	-21.04	-9.18	-5.04	-1.99	-2.62	0.52	-0.27
Total Fund Benchmark ¹⁰			5.64	-10.51	-10.51	0.48	3.19	6.26	4.87	7.26	-
Value Added			-1.01	-0.49	-0.49	-0.41	-0.67	-1.12	-0.68	-0.79	-
Canadian Equities³	121,888	5.7	5.95 (50)	-5.82 (86)	-5.82 (86)	7.15 (94)	3.43 (100)	7.03 (100)	3.43 (100)	6.64 (98)	-
S&P/TSX Composite Index			5.96 (50)	-5.84 (86)	-5.84 (86)	8.53 (87)	7.54 (73)	11.19 (61)	6.85 (59)	7.74 (89)	5.38 (87)
Value Added			-0.01	0.02	0.02	-1.38	-4.11	-4.16	-3.42	-1.10	-
TD Emerald Canadian Equity Index⁴	121,888	5.7	5.95 (50)	-5.82 (86)	-5.82 (86)	8.55 (87)	7.56 (73)	11.17 (62)	6.84 (59)	7.72 (89)	5.38 (87)
S&P/TSX Composite Index			5.96 (50)	-5.84 (86)	-5.84 (86)	8.53 (87)	7.54 (73)	11.19 (61)	6.85 (59)	7.74 (89)	5.38 (87)
Value Added			-0.01	0.02	0.02	0.02	0.02	-0.02	-0.01	-0.02	0.00
Global Equities⁶	576,464	27.1	10.68 (44)	-14.48 (77)	-14.48 (77)	0.42 (75)	3.40 (91)	7.12 (88)	6.44 (66)	11.21 (76)	6.10 (91)
Global Equity Benchmark ¹¹			8.77 (67)	-11.12 (63)	-11.12 (63)	4.73 (47)	8.40 (17)	12.06 (13)	9.84 (12)	14.44 (12)	9.76 (14)
Value Added			1.91	-3.36	-3.36	-4.31	-5.00	-4.94	-3.40	-3.23	-3.66
Walter Scott⁵	404,112	19.0	11.29 (39)	-13.01 (68)	-13.01 (68)	1.52 (70)	6.79 (41)	10.78 (31)	10.22 (10)	13.36 (27)	10.27 (12)
MSCI World Index (Net) (CAD)			8.24 (76)	-12.35 (67)	-12.35 (67)	2.97 (57)	6.48 (47)	10.02 (47)	7.81 (41)	12.26 (53)	7.65 (68)
Value Added			3.05	-0.66	-0.66	-1.45	0.31	0.76	2.41	1.10	2.62
RBC Global Focus Equity⁹	84,582	4.0	5.44 (93)	-19.30 (87)	-19.30 (87)	-2.23 (84)	6.51 (47)	11.12 (24)	9.24 (18)	-	-
MSCI AC World Index (Net)			8.24 (76)	-12.59 (67)	-12.59 (67)	1.44 (70)	5.53 (66)	9.05 (62)	6.89 (58)	11.36 (74)	7.08 (79)
Value Added			-2.80	-6.71	-6.71	-3.67	0.98	2.07	2.35	-	-
Mirova Global Sustainable Equity⁹	87,694	4.1	13.26 (22)	-16.36 (82)	-16.36 (82)	-0.60 (79)	9.23 (12)	13.58 (6)	11.36 (4)	-	-
MSCI AC World Index (Net)			8.24 (76)	-12.59 (67)	-12.59 (67)	1.44 (70)	5.53 (66)	9.05 (62)	6.89 (58)	11.36 (74)	7.08 (79)
Value Added			5.02	-3.77	-3.77	-2.04	3.70	4.53	4.47	-	-

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

¹⁰ Total Fund Benchmark was implemented as a performance objective in February 2022. Due to licensing constraints

FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Executive Summary

Performance Summary¹

As of 31 December 2022

	Allocation		Performance (%)										
	Market Value (\$000)	%	1 Quarter	2022	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years		
U.S. Equities													
TD Emerald Pooled U.S. Fund⁷	338,214	15.9	6.05 (64)	-12.12 (59)	-12.12 (59)	5.88 (56)	9.23 (45)	12.93 (41)	11.12 (38)	-	-		
S&P 500 (CAD)			6.07 (63)	-12.16 (59)	-12.16 (59)	5.87 (57)	9.25 (45)	12.95 (41)	11.15 (37)	16.08 (39)	11.13 (55)		
Value Added			-0.02	0.04	0.04	0.01	-0.02	-0.02	-0.03	-	-		
International Equities													
TD Emerald International Equity Index⁷	183,109	8.6	15.68 (41)	-8.14 (48)	-8.14 (48)	0.71 (51)	2.44 (65)	5.64 (67)	3.24 (62)	8.04 (81)	4.10 (90)		
MSCI EAFE (Net)			15.71 (41)	-8.23 (48)	-8.23 (48)	0.61 (53)	2.35 (66)	5.57 (69)	3.14 (64)	7.95 (86)	3.98 (93)		
Value Added			-0.03	0.09	0.09	0.10	0.09	0.07	0.10	0.09	0.12		
Fixed Income													
TDAM Universe Bond Index	673,318	31.6	0.63 (92)	-7.92 (78)	-7.92 (78)	-4.82 (89)	-0.93 (99)	0.68 (100)	0.86 (100)	-	-		
FTSE Canada Universe Bond			0.10 (91)	-11.69 (78)	-11.69 (78)	-7.22 (83)	-2.20 (98)	-0.01 (97)	0.27 (97)	1.63 (93)	3.18 (96)		
Value Added			-0.03	0.01	0.01	-0.06	-0.10	-0.11	-0.08	0.74	0.48		
TDAM Active Short Term Corporate	358,118	16.8	1.12 (91)	-4.31 (78)	-4.31 (78)	-2.47 (89)	0.35 (99)	1.40 (100)	1.47 (100)	-	-		
FTSE Canada Short Term Corporate Bond			1.10 (91)	-4.42 (78)	-4.42 (78)	-2.47 (89)	0.37 (99)	1.40 (100)	1.48 (100)	1.94 (93)	3.22 (96)		
Value Added			0.02	0.11	0.11	0.00	-0.02	0.00	-0.01	-	-		
Alternatives													
XRE ETF (Real Estate)	62,351	2.9	8.88 (1)	-17.38 (100)	-17.38 (100)	5.26 (100)	-1.43 (100)	3.95 (100)	4.29 (100)	4.24 (100)	-		
FTSE EPRA Nareit Developed			5.62 (1)	-18.91 (100)	-18.91 (100)	1.13 (100)	-2.65 (100)	1.90 (100)	2.28 (100)	7.15 (84)	5.14 (-)		
Value Added			3.26	1.53	1.53	4.13	1.22	2.05	2.01	-2.91	-		
BIP.UN (Infrastructure)	69,122	3.2	-13.68 (1)	-14.25 (100)	-14.25 (100)	2.50 (100)	7.39 (100)	15.74 (100)	9.50 (100)	17.05 (100)	-		
FTSE Global Core Infrastructure 50/50 Index			7.72 (1)	2.63 (100)	2.63 (100)	8.60 (100)	3.85 (100)	7.65 (100)	7.20 (100)	11.24 (100)	-		
Value Added			-21.40	-16.88	-16.88	-6.10	3.54	8.09	2.30	5.81	-		

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

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⁸ The Currency Overlay was discontinued on 20 November 2017.

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FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Executive Summary

Performance Summary¹

As of 31 December 2022

	Allocation		Performance (%)								
	Market Value (\$000)	%	1 Quarter	2022	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
BEP.UN (Infrastructure)	47,110	2.2	-19.60	-	-	-	-	-	-	-	-
FTSE Global Core Infrastructure 50/50 Index			7.72	2.63	2.63	8.60	3.85	7.65	7.20	11.24	-
Value Added			-27.32	-	-	-	-	-	-	-	-
Operating Account	57,918	2.7									
BAs/U.S. and CDN Cash	38,127	1.8	0.91	1.86	1.86	1.00	0.86	1.08	1.17	1.06	-
Operating Account	19,791	0.9	0.04	0.19	0.19	0.25	0.19	0.28	0.27	0.21	0.45
Currency Overlay Effect (Historical)⁸											
Total Fund & CO	2,129,495	100.0	4.63	-11.00	-11.00	0.07	2.52	5.14	4.19	6.29	4.92
Total Fund ex CO			4.63	-11.00	-11.00	0.07	2.52	5.14	4.19	6.47	5.41
Value Added			0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.18	-0.49

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

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⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

¹⁰ Total Fund Benchmark was implemented as a performance objective in February 2022. Due to licensing constraints

FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Executive Summary

Rolling Year Performance¹

As of 31 December

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Fund	-11.00	12.51	7.60	13.42	0.46	9.06	6.19	8.61	10.48	9.72
CPI + 3.5% ²	10.04	8.47	4.26	5.83	5.56	5.43	5.05	5.16	5.02	4.78
Value Added	-21.04	4.04	3.34	7.59	-5.10	3.63	1.14	3.45	5.46	4.94
Total Fund Benchmark ¹⁰	-10.51	12.83	8.82	16.02	-0.50	8.69	5.69	7.82	11.43	15.15
Value Added	-0.49	-0.32	-1.22	-2.60	0.96	0.37	0.50	0.79	-0.95	-5.43
Canadian Equities³	-5.82 (86)	21.90 (99)	-3.62 (95)	18.57 (81)	-9.80 (68)	10.53 (23)	25.49 (16)	-7.36 (72)	8.15 (77)	15.69 (83)
S&P/TSX Composite Index	-5.84 (86)	25.09 (76)	5.60 (37)	22.88 (30)	-8.89 (52)	9.10 (52)	21.08 (35)	-8.32 (82)	10.55 (57)	12.99 (95)
Value Added	0.02	-3.19	-9.22	-4.31	-0.91	1.43	4.41	0.96	-2.40	2.70
TD Emerald Canadian Equity Index⁴	-5.82 (86)	25.11 (76)	5.60 (37)	22.76 (32)	-8.85 (52)	9.05 (54)	20.98 (36)	-8.27 (82)	10.54 (57)	12.95 (95)
S&P/TSX Composite Index	-5.84 (86)	25.09 (76)	5.60 (37)	22.88 (30)	-8.89 (52)	9.10 (52)	21.08 (35)	-8.32 (82)	10.55 (57)	12.99 (95)
Value Added	0.02	0.02	0.00	-0.12	0.04	-0.05	-0.10	0.05	-0.01	-0.04
Global Equities⁶	-14.48 (77)	17.93 (52)	9.63 (56)	19.10 (58)	3.78 (14)	15.70 (53)	6.52 (23)	18.44 (58)	10.55 (81)	31.24 (77)
Global Equity Benchmark ¹¹	-11.12 (63)	23.40 (13)	16.14 (37)	23.78 (26)	1.40 (26)	16.64 (47)	5.87 (27)	21.32 (35)	16.66 (23)	37.84 (38)
Value Added	-3.36	-5.47	-6.51	-4.68	2.38	-0.94	0.65	-2.88	-6.11	-6.60
Walter Scott⁵	-13.01 (68)	18.48 (49)	18.17 (28)	23.65 (27)	7.99 (3)	17.87 (38)	3.44 (46)	21.49 (34)	13.70 (54)	27.92 (86)
MSCI World Index (Net) (CAD)	-12.35 (67)	20.98 (31)	13.86 (45)	21.35 (40)	-0.59 (41)	14.35 (65)	3.80 (44)	18.94 (55)	14.37 (46)	35.14 (54)
Value Added	-0.66	-2.50	4.31	2.30	8.58	3.52	-0.36	2.55	-0.67	-7.22
RBC Global Focus Equity⁹	-19.30 (87)	18.46 (49)	26.39 (14)	26.17 (13)	2.07 (23)	26.73 (7)	1.03 (69)	24.85 (16)	-	-
MSCI AC World Index (Net)	-12.59 (67)	17.72 (54)	14.21 (43)	20.34 (47)	-1.35 (47)	15.82 (52)	4.14 (40)	17.15 (67)	13.52 (55)	31.00 (77)
Value Added	-6.71	0.74	12.18	5.83	3.42	10.91	-3.11	7.70	-	-
Mirova Global Sustainable Equity⁹	-16.36 (82)	18.15 (52)	31.89 (10)	27.68 (7)	2.94 (16)	23.27 (13)	-3.64 (94)	28.71 (7)	8.53 (89)	-
MSCI AC World Index (Net)	-12.59 (67)	17.72 (54)	14.21 (43)	20.34 (47)	-1.35 (47)	15.82 (52)	4.14 (40)	17.15 (67)	13.52 (55)	31.00 (77)
Value Added	-3.77	0.43	17.68	7.34	4.29	7.45	-7.78	11.56	-4.99	-

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

¹⁰ Total Fund Benchmark was implemented as a performance objective in February 2022. Due to licensing constraints

FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Executive Summary

Rolling Year Performance¹

As of 31 December

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
U.S. Equities										
TD Emerald U.S. Pooled Fund⁷	-12.12 (59)	27.56 (34)	16.27 (45)	24.76 (41)	4.20 (45)	13.72 (49)	8.06 (41)	21.55 (46)	-	-
S&P 500 (CAD)	-12.16 (59)	27.61 (33)	16.32 (45)	24.84 (41)	4.23 (44)	13.83 (49)	8.09 (41)	21.59 (46)	23.93 (34)	41.27 (68)
Value Added	0.04	-0.05	-0.05	-0.08	-0.03	-0.11	-0.03	-0.04	-	-
International Equities										
TD Emerald International Equity Index⁷	-8.14 (48)	10.42 (66)	5.97 (59)	15.88 (59)	-5.84 (38)	16.83 (68)	-2.43 (57)	19.06 (69)	3.83 (65)	31.12 (61)
MSCI EAFE (Net)	-8.23 (48)	10.32 (67)	5.92 (59)	15.85 (60)	-6.03 (39)	16.82 (68)	-2.49 (57)	18.95 (71)	3.67 (69)	31.02 (62)
Value Added	0.09	0.10	0.05	0.03	0.19	0.01	0.06	0.11	0.16	0.10
Fixed Income										
TDAM Universe Bond Index	-11.68 (78)	-2.66 (90)	8.47 (93)	6.71 (80)	1.45 (63)	2.39 (79)	-3.89 (100)	7.64 (1)	13.08 (1)	4.52 (1)
FTSE TMX Canada Bond Universe	-11.69 (78)	-2.54 (86)	8.68 (91)	6.87 (67)	1.41 (65)	2.52 (73)	1.66 (88)	3.52 (47)	8.79 (42)	-1.19 (82)
Value Added	0.01	-0.12	-0.21	-0.16	0.04	-0.13	-5.55	4.12	4.29	5.71
TDAM Active Short Term Corporate	-4.31	-0.60	6.24	4.62	1.72	1.00	2.46	2.66	-	-
FTSE Canada Short Term Corporate Bond	-4.42	-0.49	6.32	4.55	1.81	1.03	2.29	2.74	3.57	2.40
Value Added	0.11	-0.11	-0.08	0.07	-0.09	-0.03	0.17	-0.08	-	-
Alternatives										
XRE ETF (Real Estate)	-17.38 (100)	34.11 (1)	-13.57 (100)	21.92 (1)	5.69 (100)	9.59 (23)	16.58 (1)	-4.82 (100)	9.45 (1)	-7.79 (100)
FTSE EPRA Nareit Developed	-18.91 (100)	26.13 (1)	-9.79 (100)	16.84 (1)	3.84 (100)	4.10 (100)	1.35 (100)	20.00 (1)	26.33 (1)	11.39 (23)
Value Added	1.53	7.98	-3.78	5.08	1.85	5.49	15.23	-24.82	-16.88	-19.18
BIP.UN (Infrastructure)	-14.25	22.53	17.87	44.88	-12.26	30.77	37.13	11.63	23.91	23.63
FTSE Global Core Infrastructure 50/50 Index	2.63	14.91	-5.04	19.90	5.44	11.47	7.90	10.33	26.63	21.92
Value Added	-16.88	7.62	22.91	24.98	-17.70	19.30	29.23	1.30	-2.72	1.71
BEP.UN (Infrastructure)	-	-	-	-	-	-	-	-	-	-
FTSE Global Core Infrastructure 50/50 Index	2.63	14.91	-5.04	19.90	5.44	11.47	7.90	10.33	26.63	21.92
Value Added	-	-	-	-	-	-	-	-	-	-

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

¹⁰ Total Fund Benchmark was implemented as a performance objective in February 2022. Due to licensing constraints

FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Executive Summary

Performance Summary (Net of Fees)¹

As of 31 December 2022

	Performance (%)								
	1 Quarter	2022	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
Total Fund	4.58	-11.16	-11.16	-0.16	2.31	4.92	3.95	6.20	5.13
CPI + 3.5% ²	1.13	10.04	10.04	9.25	7.56	7.13	6.81	5.95	5.68
Value Added	3.45	-21.20	-21.20	-9.41	-5.25	-2.21	-2.86	0.25	-0.55
Total Fund Benchmark ¹⁰	5.64	-10.51	-10.51	0.48	3.19	6.26	4.87	7.26	-
Value Added	-1.06	-0.65	-0.65	-0.64	-0.88	-1.34	-0.92	-1.06	-
Canadian Equities³	5.94	-5.84	-5.84	7.06	3.38	6.98	3.39	6.63	-
S&P/TSX Composite Index	5.96	-5.84	-5.84	8.53	7.54	11.19	6.85	7.74	5.38
Value Added	-0.02	0.00	0.00	-1.47	-4.16	-4.21	-3.46	-1.11	-
TD Emerald Canadian Equity Index⁴	5.94	-5.84	-5.84	8.52	-	-	-	-	-
S&P/TSX Composite Index	5.96	-5.84	-5.84	8.53	7.54	11.19	6.85	7.74	5.38
Value Added	-0.02	0.00	0.00	-0.01	-	-	-	-	-
Global Equities⁶	10.53	-14.96	-14.96	-0.13	2.68	6.38	5.71	10.49	5.39
Global Equity Benchmark ¹¹	8.77	-11.12	-11.12	4.73	8.40	12.06	9.84	14.44	9.76
Value Added	1.76	-3.84	-3.84	-4.86	-5.72	-5.68	-4.13	-3.95	-4.37
Walter Scott⁵	11.15	-13.48	-13.48	0.97	6.18	10.13	9.55	12.60	9.49
MSCI World Index (Net) (CAD)	8.24	-12.35	-12.35	2.97	6.48	10.02	7.81	12.26	7.65
Value Added	2.91	-1.13	-1.13	-2.00	-0.30	0.11	1.74	0.34	1.84
RBC Global Focus Equity⁸	5.30	-19.74	-19.74	-2.75	5.94	10.53	8.67	-	-
MSCI AC World Index (Net)	8.24	-12.59	-12.59	1.44	5.53	9.05	6.89	11.36	7.08
Value Added	-2.94	-7.15	-7.15	-4.19	0.41	1.48	1.78	-	-

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

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Executive Summary

Performance Summary (Net of Fees)¹

As of 31 December 2022

	Performance (%)								
	1 Quarter	2022	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
Mirova Global Sustainable Equity⁸	13.10	-16.24	-16.24	-0.85	8.80	13.04	10.79	-	-
MSCI AC World Index (Net)	8.24	-12.59	-12.59	1.44	5.53	9.05	6.89	11.36	7.08
Value Added	4.86	-3.65	-3.65	-2.29	3.27	3.99	3.90	-	-
U.S. Equities									
TD Emerald Pooled U.S. Fund⁷	6.04	-12.14	-12.14	5.85	9.21	12.90	11.09	-	-
S&P 500 (CAD)	6.07	-12.16	-12.16	5.87	9.25	12.95	11.15	16.08	11.13
Value Added	-0.03	0.02	0.02	-0.02	-0.04	-0.05	-0.06	-	-
International Equities									
TD Emerald International Equity Index⁷	15.68	-6.24	-6.24	1.74	3.12	6.17	3.65	8.23	4.21
MSCI EAFE (Net)	15.71	-8.23	-8.23	0.61	2.35	5.57	3.14	7.95	3.98
Value Added	-0.03	1.99	1.99	1.13	0.77	0.60	0.51	0.28	0.23
Fixed Income									
TDAM Universe Bond Index	0.61	-7.97	-7.97	-4.88	-0.97	0.65	0.83	-	-
FTSE Canada Universe Bond	0.07	-11.71	-11.71	-7.30	-2.33	-0.15	0.15	1.51	3.05
Value Added	0.10	-11.69	-11.69	-7.22	-2.20	-0.01	0.27	1.63	3.18
	-0.03	-0.02	-0.02	-0.08	-0.13	-0.14	-0.12	-0.12	-0.13
TDAM Active Short Term Corporate	1.09	-4.40	-4.40	-2.57	0.25	1.31	1.37	-	-
FTSE Canada Short Term Corporate Bond	1.10	-4.42	-4.42	-2.47	0.37	1.40	1.48	1.94	3.22
Value Added	-0.01	0.02	0.02	-0.10	-0.12	-0.09	-0.11	-	-

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² CPI+3.5% benchmark has been implemented since February 2022. CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.

³ There was no exposure to Canadian Equities from January 2012 to April 2012.

⁴ TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.

⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

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⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

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Executive Summary

Rolling Year Performance (Net of Fees)¹

As of 31 December 2022

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Fund	-11.16	12.20	7.42	13.18	0.15	8.70	5.90	8.33	10.18	9.41
CPI + 3.5% ²	10.04	8.47	4.26	5.83	5.56	5.43	5.05	5.16	5.02	4.78
Value Added	-21.20	3.73	3.16	7.35	-5.41	3.27	0.85	3.17	5.16	4.63
Total Fund Benchmark ¹⁰	-10.51	12.83	8.82	16.02	-0.50	8.69	5.69	7.82	11.43	15.15
Value Added	-0.65	-0.63	-1.40	-2.84	0.65	0.01	0.21	0.51	-1.25	-5.74
Canadian Equities³										
TD Emerald Canadian Equity Index⁴	-5.82	25.11	5.60	22.76	-8.85	9.05	20.98	-8.27	10.54	12.95
S&P/TSX Composite Index	-5.84	25.09	5.60	22.88	-8.89	9.10	21.08	-8.32	10.55	12.99
Value Added	0.02	0.02	0.00	-0.12	0.04	-0.05	-0.10	0.05	-0.01	-0.04
Global Equities⁶										
Global Equity Benchmark	-14.96	17.29	8.53	18.30	3.08	15.05	5.82	17.83	9.86	30.37
Global Equity Benchmark	-11.12	23.40	16.14	23.78	1.40	16.64	5.87	21.32	16.66	37.84
Value Added	-3.84	-6.11	-7.61	-5.48	1.68	-1.59	-0.05	-3.49	-6.80	-7.47
Walter Scott⁵										
MSCI World Index (Net) (CAD)	-13.48	17.83	17.43	22.87	7.26	17.05	2.69	20.61	12.85	26.97
MSCI World Index (Net) (CAD)	-12.35	20.98	13.86	21.35	-0.59	14.35	3.80	18.94	14.37	35.14
Value Added	-1.13	-3.15	3.57	1.52	7.85	2.70	-1.11	1.67	-1.52	-8.17
RBC Global Focus Equity⁸										
MSCI AC World Index (Net)	-19.74	17.84	25.73	25.51	1.52	26.07	0.49	24.19	-	-
MSCI AC World Index (Net)	-12.59	17.72	14.21	20.34	-1.35	15.82	4.14	17.15	13.52	31.00
Value Added	-7.15	0.12	11.52	5.17	2.87	10.25	-3.65	7.04	-	-
Mirova Global Sustainable Equity⁸										
MSCI AC World Index (Net)	-16.24	17.36	31.00	26.81	2.23	22.43	-4.31	27.83	7.78	-
MSCI AC World Index (Net)	-12.59	17.72	14.21	20.34	-1.35	15.82	4.14	17.15	13.52	31.00
Value Added	-3.65	-0.36	16.79	6.47	3.58	6.61	-8.45	10.68	-5.74	-

¹ Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.

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³ There was no exposure to Canadian Equities from January 2012 to April 2012.

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⁵ Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.

⁶ The global equities return prior to August 2018 includes Trilogy.

⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

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Executive Summary

Rolling Year Performance (Net of Fees)¹

As of 31 December 2022

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
U.S. Equities										
TD Emerald Pooled U.S. Fund⁷	-12.14	27.53	16.24	24.72	4.16	13.69	8.03	21.51	-	-
S&P 500 (CAD)	-12.16	27.61	16.32	24.84	4.23	13.83	8.09	21.59	23.93	41.27
Value Added	0.02	-0.08	-0.08	-0.12	-0.07	-0.14	-0.06	-0.08	-	-
International Equities										
TD Emerald International Equity Index⁷	-6.24	10.40	5.95	15.86	-5.87	16.79	-2.46	19.02	3.79	31.07
MSCI EAFE (Net)	-8.23	10.32	5.92	15.85	-6.03	16.82	-2.49	18.95	3.67	31.02
Value Added	1.99	0.08	0.03	0.01	0.16	-0.03	0.03	0.07	0.12	0.05
Fixed Income										
TDAM Universe Bond Index	-7.92	-1.63	7.34	5.66	1.59	1.70	-2.27	2.66	-	-
TDAM Universe Bond Index	-11.71	-2.68	8.44	6.69	1.37	2.36	1.49	3.48	8.71	-1.38
FTSE Canada Universe Bond Index - C\$	-11.69	-2.54	8.68	6.87	1.41	2.52	1.66	3.52	8.79	-1.19
Value Added	-0.02	-0.14	-0.24	-0.18	-0.04	-0.16	-0.17	-0.04	-0.08	-0.19
TDAM Active Short Term Corporate										
TDAM Active Short Term Corporate	-4.40	-0.70	6.14	4.54	1.62	0.89	2.34	2.54	-	-
FTSE Canada Short Term Corporate Bond	-4.42	-0.49	6.32	4.55	1.81	1.03	2.29	2.74	3.57	2.40
Value Added	0.02	-0.21	-0.18	-0.01	-0.19	-0.14	0.05	-0.20	-	-

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⁷ In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

⁸ The Currency Overlay was discontinued on 20 November 2017.

⁹ In August 2021, RBC Global Focus Equity and Mirova Sustainable Global Equity strategies were added. Returns prior to these dates are representative only.

¹⁰ Total Fund Benchmark was implemented as a performance objective in February 2022. Due to licensing constraints

FTSE Global Infrastructure 50/50 Index is used in place of UBS 50/50

¹¹ Global Equity Benchmark is 100% MSCI ACWI as of February 2022. Prior Benchmark was MSCI World

Appendix A - Statement of Disclosure

Statement of Disclosure

As of 31 December 2022

Aon Solutions Canada Inc. reconciles the rates of return with each investment manager quarterly. Aon Solutions Canada Inc. calculates returns from the custodian/trustee statements while the managers use different data sources. Occasionally discrepancies occur because of differences in computational procedures, security prices, "trade date" versus "settlement date" accounting, etc. We monitor these discrepancies closely and find that they generally do not tend to persist over time. However, if a material discrepancy arises or persists, we will bring the matter to your attention after discussion with your money manager.

This report may contain slight discrepancies due to rounding in some of the calculations. All data presented is in Canadian dollars unless otherwise stated.

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Cost of Living Adjustment (COLA)

Changes Effective May 1, 2023

Section 7.01 of the plan text defines the Cost-of-Living (COLA) Factor as the ratio of the average of the monthly Consumer Price Indices (CPI) for the preceding calendar year divided by the average of the monthly CPI for the previous calendar year, minus 1.

The following table provides the monthly CPI figures for 2021 and 2022, as well as the average of the monthly CPI for each year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
2021	138.2	138.9	139.6	140.3	141	141.4	142.3	142.6	142.9	143.9	144.2	144.0	141.608
2022	145.3	146.8	148.9	149.8	151.9	152.9	153.1	152.6	152.7	153.8	154	153.1	151.242

$$(2022 \text{ Avg. CPI} / 2021 \text{ Avg. CPI}) - 1 = (151.242 / 141.608) - 1 = .06803 \text{ or } \mathbf{6.8\%}$$

Effective January 1, 2014, the plan was amended to apply 75% of the COLA Factor to pension benefits earned on and after January 1, 2014.

Effective May 1, 2023 → 100% COLA Factor = **6.80%**
 → 75% COLA Factor = **5.10%** (.75*6.8)

Pensioners

Section 7.02 of the plan text stipulates if the 100% COLA Factor exceeds 5% in any year, it may be reduced to the extent deemed necessary by the Pension Committee on the advice of the Actuary, to 5% (not lower), and a corresponding 3.75% limit applies to the 75% COLA Factor.

COLA for pension benefits earned up to December 31, 2013:
5% is automatic, decision required for balance

COLA for pension benefits earned on and after January 1, 2014:
3.75% is automatic, decision required for balance

If the increase is limited (to 5% / 3.75%) in any year, the plan text also stipulates that a catch-up increase will be given on a cumulative and compounded basis in the following year or as soon as the plan resources permit, but there will be no retroactivity in any catch-up increase.

Pension Benefits Earned	Automatic COLA	COLA Decision Required
Up to December 31, 2013	5.0%	Additional COLA: 0% - 1.8%
Accrual on and after January 1, 2014	3.75%	Additional COLA: 0% - 1.35%

Action Required: *Decision*

Deferred Members

The COLA adjustment for deferred pensions is determined in accordance with Article 7.03(d) of the plan text, which requires the amount of COLA increase be determined by the Pension & Benefits Committee each year.

Once the Committee determines the amount of COLA that is to apply to deferred pension benefits, the plan text stipulates that COLA will be applied to the full deferred pension entitlement if one of the following criteria is met:

- the member terminated prior to January 1, 2008, or
- for terminations on or after January 1, 2008, at the date of date of termination the member was 55 years of age or older, or had 20 or more years of continuous service.

If neither criterion is met, COLA will only be applied to the pension benefit earned prior to 2008, and the pension benefit earned for service on or after January 1, 2008 is not eligible for a COLA adjustment.

	Criteria for COLA	COLA Eligibility	# of Deferred Members
Terminated prior to January 1, 2008		100% COLA on full pension	168
Terminated after January 1, 2008 and before January 1, 2014	Over 55 or > 20 years continuous service	100% COLA on full pension	7
	Under 55 and < 20 years continuous service	100% COLA on pre 2008 pension, no COLA on post 2007 pension	110
	No pre2008 CS and under 55 and < 20 years continuous service	No COLA on full deferred pension	36
Terminated on or after January 1, 2014	Over 55 or > 20 years of continuous service	100% COLA on pre 2014 pension, 75% COLA on post 2013	51
	No pre2014 CS and over 55 or > 20 years continuous service	75% COLA on full pension	26
	pre2008 CS and under 55 and < 20 years continuous service	100% COLA on pre 2008 pension, no COLA on post 2007 pension	42
	No pre2008 CS and under 55 and < 20 years continuous service	No COLA on full deferred pension	249
Total as at December 31, 2022			689

**Based on Membership Reconciliation done in conjunction with the Valuation.*

100% COLA on full deferred pension	175
100% COLA on pre 2008 deferred pension, no COLA on post 2007 deferred pension	161
100% COLA on pre 2013 deferred pension, 75% COLA on post 2014 deferred pension	51
75% COLA on full deferred pension	17
No COLA on full deferred pension	285

Guiding Principles

In November 2015, the Pension & Benefits Committee approved the following guiding principles for deciding the COLA for deferred pensions:

- All deferred pension accruals currently eligible for indexation should be treated the same with respect to indexation decisions, subject to any future plan provision changes that provide otherwise,
- If indexation is granted in a particular year, the 100% COLA Factor will be applied for pre-2014 service and the 75% COLA Factor will be applied for post 2013 service,
- The post retirement COLA increase “catch up” provision for pensions in pay takes precedence over indexation of deferred members’ pensions, and
- Financial status of the plan should be considered by the Pension & Benefits Committee before deciding on deferred indexation (no specific metrics).

Action Required: *Decision*

Pensionable Earnings for LTD Benefit Recipients

Section 9.01 of the pension plan provides that the pensionable earnings for members on LTD be adjusted annually by a cost-of-living factor to be determined by the Pension Committee. Section 2.14 outlines that the Committee should take into consideration other factors including the cost-of-living adjustment awarded to pensioners and the salary increases awarded to active faculty and staff, subject to the Income Tax Act limits.

As of December 31, 2022, there were 82 individuals in receipt of LTD benefit payments.

Guiding Principles

In November 2015, the Pension & Benefits Committee approved the following guiding principles for deciding the COLA applied to salaries for pension purposes for members on LTD:

- Members on LTD are more like active members than other groups receiving COLA increases,
- Therefore, salaries for pension purposes for members on LTD should be indexed by the lesser of 100% COLA Factor and the range increase for active employees.

Under the current Faculty and Staff Memorandums of agreement, and the CUPE contract, effective May 1, 2023 the range increase is 1%. These agreements were negotiated based on Bill 124, which was declared void effective November 29, 2022.

Action Required: *Decision*

UNIVERSITY OF WATERLOO
BOARD OF GOVERNORS
PENSION & BENEFITS COMMITTEE
2022 Report to the Community

This report provides an overview of issues addressed by the Pension & Benefits Committee for the calendar year. Further information on any of these topics may be obtained by contacting the Secretariat or by visiting the [committee webpage](#).

A. The Committee and its Members

The Pension & Benefits Committee is a standing committee of the Board of Governors (Board) responsible for overseeing the University's employee pension plans, health care and dental plans, sick leave benefits, long-term disability benefit, and life insurance benefit (Plans). The committee consists of representatives from the University's employee groups, administration, the Board, retirees, and affiliated and federated institutions of Waterloo. The committee meets on a monthly basis (except April, July and August); meetings are open to the University community and agendas and minutes are available on the [committee webpage](#). The committee monitors the health and oversees the administration of the Plans. Changes and improvements to the Plans are developed by the committee with support from staff and external consultants, and recommended to the Board for approval.

B. Benefits

1. **Benefits Plan Provider.** The provider for the Long-Term Disability (LTD), Extended Health, and Dental (EHD) benefits was reviewed through a Request for Proposal (RFP) process that commenced June 2021. In October 2021, the Pension & Benefits Committee approved engaging Sun Life Financial to insure the LTD benefit effective 1 May 2022, and Green Shield Canada (GSC) to administer the EHD benefits effective 1 January 2023. The implementation of Sun Life Financial occurred successfully as scheduled. The committee received regular reports on the implementation of GSC leading up to 1 January 2023 and made various decisions to address differences in administrative arrangements between the previous provider and GSC.
2. **In Vitro Fertilization (IVF) Working Group:** The committee formed a working group to conduct a fact-finding exercise regarding benefits coverage supporting plan members with family aspirations, and to examine the prospective implications to expand provision of coverage for reproductive procedures that extend beyond the current scope. The IVF Working Group provided the committee with a report of their findings. Based on report and the legal advice sought by the University, the Committee decided to adopt an active watching brief to monitor for changes.
3. **Annual Work Plan Items.** In accordance with the annual work plan for the committee, the committee:
 - Approved the benefits plans premium renewals negotiated by Human Resources in conjunction with our consultants. The long-term disability premium (employee paid) decreased 30% with the transitioned to the new provider, Sun Life Financial, on 1 May 2022;
 - Received reports on the benefits plan utilization rates and associated costs; and
 - Provided oversight to a number of other items that occur automatically according to plan provisions e.g. annual indexation of pensionable earnings for employees on long term disability.

C. Pension Plans

4. **31 December 2021 Actuarial Valuation and Filing.** An actuarial valuation report is required to be filed at least every three years; notwithstanding this, a valuation is completed on an annual basis for the purposes of assisting with planning and the University's budgeting. The most recent actuarial valuation was filed in 2021. The 31 December 2021 valuation was prepared largely using the same assumptions as the 1 January 2021 valuation, except for a slight change in timing of valuation from 1 January 2022 to 31 December 2021, and an increase to the discount rate from 5.30% to 5.50%.

As at 31 December 2021, registered pension plan (Registered Plan) was in a surplus for both the going concern and solvency basis, at \$75 million and \$16.2 million respectively. The University continues to make additional contributions to the Registered Plan. This valuation was filed with the regulator, and

the full actuarial report for the Registered Plan and Payroll Plan can be found on the committee's webpage: [31 December 2021 Actuarial Valuation Report](#).

5. **Pension Investment.** The committee receives quarterly reports from the Pension Investment Committee (PIC) on pension fund investments, meetings with investment managers and other activities of PIC. In 2022, following diligence by PIC, the committee made a recommendation to the Board re: appointing two new infrastructure investment managers based on both their long-term performance and their approach to environmental, social and governance factor integration in investment decisions. The Board approved these investment decisions in April 2022.

Following diligence by PIC and legal council, the committee made the recommendation to Board to approve the [Responsible Investment Policy \(RIP\)](#) to govern the registered pension plan and the endowment fund. The Board approved the RIP in April 2022. Following a recommendation from PIC, the committee amended the [Fund Implementation Procedures \(FIP\)](#). The committee also approved the [Funding Policy & Guideline for the Registered Pension Plan](#) to establish a formal framework to achieve the Plan's funding requirements subject to the provisions of the Plan Text and Applicable Laws.

6. **Pension Plan Amendment – Pension Cap:** The committee made the recommendation to Board to amend the pension plan text to raise the nominal pension cap from \$3400 per year of service to \$4000, effective 1 January 2023, allowing pensions to be earned up to the Income Tax Act limit, or \$4000 plus indexation. The Board approved this recommendation in June 2022.
7. **Education and Monitoring.** The committee receives regular reports from the consulting actuary on legislative and policy changes anticipated and in force that impact public sector pensions, as well as changes implemented by other public sector pension plans. The committee discusses implications for the University's pension plans and takes said information into account when making decisions on matters including plan design, funding and administration.
8. **Annual Work Plan Items.** In addition to the above, the committee:
- Reviewed and approved the audited pension fund financial statements for filing with FSCO. The statements show, among other things, that there are significant assets in the fund, the change in assets over the year and drivers for that change, amounts paid out of assets, and compliance with the SIPP;
 - Reviewed and approved cost of living increases to pensionable earnings of individuals on long-term disability for the purpose of calculating pension entitlements, and to eligible deferred pensions;
 - Received the annual report from Aon re: the contribution and protocol caps, including the impact of indexing or removing the caps on costs and liabilities, the number of individuals who would be impacted if the caps were not indexed, and the projected date on which the cap under the *Income Tax Act* will hit the hard cap in the pension plan, if the cap is not increased. The committee monitors these numbers annually in order to make decisions about how and when to increase the caps; and
 - Provided oversight to a number of other items that occur automatically according to plan provisions, e.g. annual indexation of pensions.

We would appreciate your feedback on this report. If you have any suggestions, for example, on content, timing or format, please send them to the [committee secretary](#).

XX February 2023