

**PENSION & BENEFITS COMMITTEE**

FRIDAY, March 22, 2024

9:30 a.m.-12:00 p.m. EST

NH 3318

[Governing Documents and Resources](#)

TIMING	AGENDA ITEM	PAGE	ACTION
9:30 a.m.	<b>1. Agenda and Minutes</b> a) Declarations of Conflict of Interest b) Approval of Agenda c) Approval of the January 19, 2024 Minutes d) Business Arising	3 3 3 3	Information Decision Decision Information
9:35 a.m.	<b>2. Sub-Committee Reports</b> a) Report from the Pension Investment Committee [Basdeo]*	110	Information
9:45 a.m.	<b>3. Benefits</b> a) Group Benefits Program Annual Renewal effective May 1, 2024 [Hornberger] <ul style="list-style-type: none"> <li>i) Life Insurance – Premium Rate &amp; Unrestricted Deposit Account (UDA)</li> <li>ii) Long Term Disability – Premium Rate and Maximum Insured Earnings</li> <li>iii) Healthcare Benefits – ASO Fees/Charges &amp; Budget Rates</li> </ul>	6 6 6	Decision Decision Decision
9:55 a.m.	<b>4. Pension</b> a) Cost of Living Adjustments [Hornberger] <ul style="list-style-type: none"> <li>i) Pensions in Pay</li> <li>ii) Deferred Pensions</li> <li>iii) Pensionable Earnings for Members on LTD</li> </ul>	13 13 13	Decision Decision Information
10:05 a.m.	b) RPP Actuarial Valuation and Filing [Aon]	32	Information
10:50 a.m.	c) Pension Risk Management Dashboard, Q4 2023 [Aon]	78	Information
11:00 a.m.	<b>5. Governance</b> a) Annual Report to the Community [Willey-Thomas] b) Pension & Benefits Committee Planning for 2024-25 [Chair] c) Amendments to Pension & Benefits Committee Terms of Reference	97 101 102	Information Information Decision
11:05 a.m.	<b>6. Other Business</b> a) Execution Against Work Plan [Willey-Thomas]	107	Information

\*to be distributed

If you require assistance or need to convey regrets, please contact the Secretariat at [board@uwaterloo.ca](mailto:board@uwaterloo.ca).

TIMING	AGENDA ITEM	PAGE	ACTION
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15 March 2024

Sarah Willey-Thomas  
Associate University Secretary

**For Decision**

**Open Session**

**Date of Meeting:** March 22, 2024  
**To:** Members, Pension & Benefits Committee  
**From:** Sarah Willey-Thomas, Associate University Secretary  
**RE:** **1) Agenda and Minutes**

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**a) Declarations of Conflict of Interest**

Members are invited to declare any conflicts related to the confidential agenda at this time. Should a conflict of interest arise during the course of discussion, Members are invited to declare a conflict of interest as it arises.

The Secretariat can provide guidance regarding any potential conflicts of interest in advance of or during the Board meeting.

Governors are invited to review the Conflict of Interest webpage on the Secretariat [website](#).

**b) Approval of Agenda**

**Recommendation:**  
**That the March 22, 2024 meeting agenda be approved.**

**c) Minutes of the January 19, 2024 Meeting**

**Recommendation:**  
**That the minutes of the January 19, 2024 meeting be approved.**

**d) Business Arising**

All other matters of business arising will be addressed throughout the balance of the agenda.

**Documentation Provided:**

- January 19, 2024 Meeting Minutes

**University of Waterloo**  
**Board of Governors**  
**PENSION & BENEFITS COMMITTEE**  
**Minutes of the 19 January 2024 Meeting**  
**[in agenda order]**

**Present:** Linda Blair, Sara Cressman, Teresa Fortney (chair), Melissa Graham, Sarah Hadley, Michelle Hollis, Lily Hua, William Povelofskie, Jacinda Reitsma, David Saunders, David Taylor, James Thompson, Sarah Willey-Thomas (secretary)

**Regrets:** James Rush

**Resources/Guests:** Aubrey Basdeo, Linda Byron, Gen Gauthier-Chalifour, Melanie Figueiredo, Patti Hancock, Lee Hornberger, Laura McDonald, Allan Shapira, Michelle St. Amour, Holly Taylor, Tyler Wendland

**Organization of Meeting:** Teresa Fortney took the chair, and Sarah Willey-Thomas acted as secretary. The secretary advised that a quorum was present. The agenda was accepted as distributed.

**OPEN SESSION**

**1. APPROVAL OF THE AGENDA**

Recommendation moved by Graham, seconded by Hadley:

**Motion to approve the agenda as presented. Carried.**

**2. MINUTES OF THE 17 NOVEMBER 2023 MEETING (Open Session) AND BUSINESS ARISING**

The Committee noted corrections to the spelling of a member's name and naming of agenda item 2b in the minutes.

Recommendation moved by Hadley, seconded by Reitsma:

**Motion to approve the minutes of the 17 November 2023 meeting as amended. Carried.**

**a. Update on Summary of Fund Performance**

Allan Shapira provided an update on the summary, noting numbers were corrected in the version included in the agenda package but that the corrected figures did not change conclusions. Shapira also noted ongoing work regarding formatting of materials.

**b. Update on Bill 124 Payments**

Lee Hornberger provided an update with respect to the Bill 124 reopener across employee groups with respect to recalculation of pension and related pension payments.

**3. EXECUTION AGAINST THE WORKPLAN**

The Committee reviewed the work plan and noted a correction to the row of the work plan.

**4. PENSION INVESTMENT GOVERNANCE DOCUMENTS**

**a. Pension Fund Implementation Procedures (FIP)**

**b. Pension Statement of Investment Policies and Procedures (SIPP)**

**c. Responsible Investment Policy (RIP)**

Sarah Hadley presented the pension investment governance documents. The Committee discussed a summary of the changes to the FIP and noted grammatical amendments to the draft FIP in addition to clarifying references to the University's responsibility as University staff's responsibility in sections 7 and 9.

Recommendation moved by Hadley and seconded by Graham:

**Motion that the Pension & Benefits Committee approve changes to the Pension Fund Implementation Procedures (FIP) as amended. Carried.**

**4. UPP REVIEW**

Shapira presented the final UPP presentation to the Committee. The Committee discussed employee sponsor perspective; representation of unions on the employee sponsor side and implications for a largely non-unionized workforce; efficiency of the governance structure; appointment of trustees, and current appointees; process for consenting to the UPP and minimum thresholds; impact of financial health of UPP members; joining the UPP with a healthy pension plan; understanding of the asset side; impetus for creation of the UPP; protection of assets in the UWaterloo Plan; and, attention to how other Universities may be considering the UPP. The Committee heard that next steps would be brought back at a future meeting.

**5. APPROVAL OF ACTUARIAL VALUATION ASSUMPTIONS**

Linda Byron presented the actuarial valuation assumptions. The Committee discussed the process for determining contributions and catchup; existence of the Provision for Adverse Deviations (PfAD) and value as mandated; and, how the SIPP benchmark portfolio informs the actuarial assumptions.

Recommendation moved by Hadley and seconded by Taylor:

**Motion that Pension & Benefits Committee approve the actuarial valuation assumptions, as presented. Carried.**

**7. REVIEW OF RPP CONTRIBUTION, PROTOCOL CAPS AND OVERVIEW OF PENSION PROTOCOLS**

The Committee received a presentation on an overview of the pension protocols. The Committee agreed to add an item to the work plan with respect to a decision on the protocols; clarification on governance pathway for changes to the protocols; and an additional explanation on Indexation Protocol at a future meeting.

**8. OTHER BUSINESS**

There were no matters for other business.

23 January 2024

Sarah Willey-Thomas  
Associate University Secretary

**For Decision**

**Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefits Committee

**From:** Sarah Willey-Thomas, Associate University Secretary

**RE:** **3) Benefits**

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**a) Group Benefits Program Annual Renewal effective May 1, 2024**

Lee Hornberger, Director, Total Rewards will present Group Benefits Program Annual Renewal matters for decision by the Pension & Benefits Committee.

The Pension & Benefits Committee makes policy decisions relevant to administration of benefit plans and periodically adjust plans in accordance with the Committee's [terms of reference](#) (3.e-f).

**i) Life Insurance – Premium Rate & Unrestricted Deposit Account (UDA)**

Supporting materials have been included for the Committee's review and consideration.

**Recommendation:**

**That the Pension & Benefits Committee approve to increase the current life insurance paid rate by 5% effective May 1, 2024 (Option 3) and transfer the remaining Unrestricted Deposit Account (UDA) to the Claims Fluctuation Reserve (CFR) during the May 1, 2024 to April 30, 2025, as presented.**

**ii) Long Term Disability – Premium Rate and Maximum Insured Earnings**

Supporting materials have been included for the Committee's review and consideration.

**Recommendation:**

**That the Pension & Benefits Committee approve to increase the Long Term Disability (LTD) premium rate and maintain the current maximum insured earnings effective May 1, 2024 until at least April 30, 2025, as presented.**

**iii) Healthcare Benefits – ASO Fees/Charges & Budget Rates**

Supporting materials have been included for the Committee's review and consideration.

**Recommendation:**

**That the Pension & Benefits Committee approve to increase the extended health rates by 9.8% and dental rates by 13.2% effective May 1, 2024, as presented.**

**Documentation Provided:**

- Group Benefits Program – Annual Renewal effective May 1, 2024

**Report to the Pension & Benefits Committee  
22 March 2024**

**FOR DECISIONS**

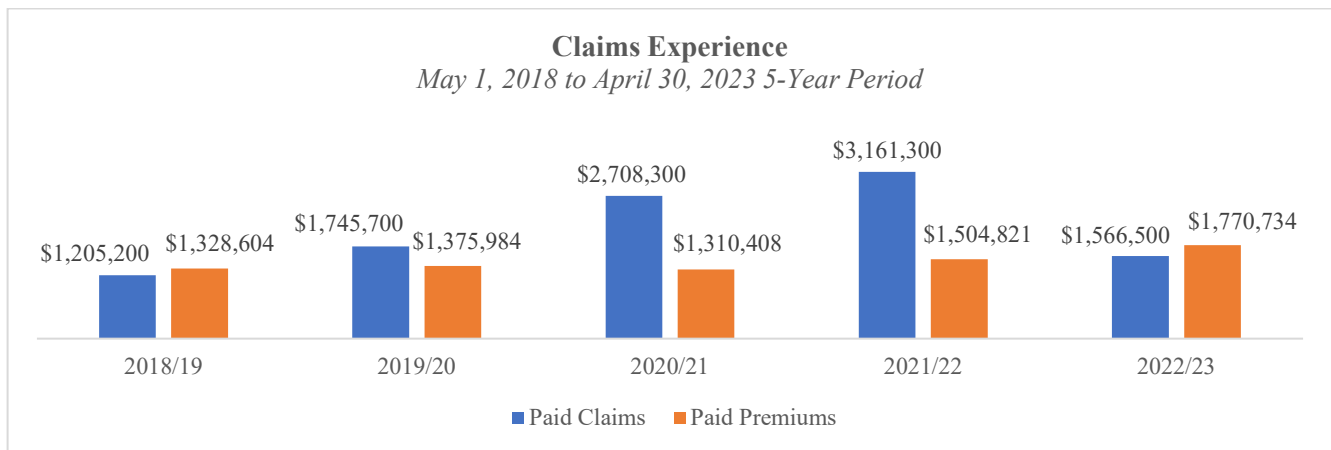
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**Group Benefits Program – Annual Renewal effective May 1, 2024  
From Human Resources**

**A. Life Insurance – Premium Rate & Unrestricted Deposit Account (UDA)**

The University participates in the University Life Insurance Plan (ULIP) with the support of the consulting firm, Mercer. A competitive bidding process was conducted by Mercer on behalf of the ULIP in late 2023/early 2024 which confirmed Sun Life Financial as the insurer effective May 1, 2024.

Premium rates are established based on experience and the participating universities have a share in the financial results. Claims for life insurance can be volatile and as such, five years of experience is included in the analysis and calculation of the required premium rates.



Premiums exceeded claims during the May 1, 2022 to April 30, 2023 period; however, the financial accounting (incl. retention charges, changes in reserves, etc.) resulted in a slight deficit of \$84,111 for the plan year.

The University's Claims Fluctuation Reserve (CFR) was insufficient with a balance of (\$3,257,436) as of May 1, 2022 and as such, the ULIP aggregate CFR was leveraged. The University's CFR has a negative balance of (\$3,214,814) as of April 30, 2023; a fully funded CFR amounts to 25% of premium (i.e. \$442,684 based on premium paid in the 2022/2023 year).

The Unrestricted Deposit Account (UDA) is \$764,968 as at April 30, 2023 and the estimated balance as of April 30, 2024 is \$550,000. The full amount in the UDA is available for withdrawal; alternatively, a transfer could be made to the CFR and/or used to reduce the premium rate for the upcoming year.

Although claims experience analysis as well as the financial accounting support a 10% increase to the contract rate for Basic Life for the upcoming year, no change is required due to the competitive bidding process that resulted in Sun Life Financial maintaining the ULIP contract. Similarly, no changes are required for the Optional Life rate table.



Volume of Basic Life Coverage	Current		Effective May 1, 2024		Change	
	Contract Rate	Annual Premium	Contract Rate	Annual Premium		
\$1,107,347,400	\$0.154 per \$1,000	\$2,046,378	\$0.154 per \$1,000	\$2,046,378	\$0	0%

Note: Rates do not include any applicable taxes

Mercer has indicated that the University should plan for annual increases of 10% to the contract rate (i.e. the maximum increase per year as per the ULIP agreement) for the next several years, commencing May 1, 2025 based on claims experience.

The University has been remitting premium to Sun Life Financial based on a rate that is subsidized by the UDA, the “paid rate”. At present, the paid rate of \$0.139 per \$1,000 is 10% lower than the 2023/24 contract rate. Due to the balance in the UDA, the University has flexibility with respect to the paid rate to be implemented effective May 1, 2024.

	Option 1 – Maintain Rate (10% Subsidy)		Option 2 – 10% Rate Increase (0% Subsidy)		Option 3 – 5% Rate Increase (5% Subsidy)	
	Rate per \$1,000	Annual Premium	Rate per \$1,000	Annual Premium	Rate per \$1,000	Annual Premium
Contract Rate	\$0.154	\$2,046,378	\$0.154	\$2,046,378	\$0.154	\$2,046,378
Paid Rate	\$0.139	\$1,847,055	\$0.154	\$2,046,378	\$0.146	\$1,940,073
Difference		\$199,323		\$0		\$106,305

Notes: “Difference” plus ORST would be funded through the UDA; rates do not include any applicable taxes; the University pays 100% of the premium for a Basic Life benefit of 1 times earnings and 67% of the premium for 2- or 3-times earnings. Optional Life is 100% employee paid. All employer paid life insurance premium results in a taxable benefit for employees.

Understanding that the contract rate is expected to increase by 10% effective May 1, 2025, and the University has a significant deficit within the ULIP, the recommendation is to:

- (i) increase the current paid rate by 5% effective May 1, 2024 which would reduce the subsidy from the UDA to 5% (Option 3); and
- (ii) transfer the remaining UDA to the CFR during the May 1, 2024 to April 30, 2025 period (since insurance volumes fluctuate during the year, the exact subsidy amount will not be known until the end of the financial period and the transfer will occur once finalized).

Note: this recommended action will result in a 15% increase to the paid rate effective May 1, 2025.

## B. Long Term Disability – Premium Rate & Maximum Insured Earnings

The insurer of the Long Term Disability (LTD) benefit transitioned from Canada Life to Sun Life Financial (SLF) effective May 1, 2022. The premium rate with SLF was guaranteed for a 24-month period expiring April 30, 2024, with a maximum rate adjustment of 15% guaranteed for another 24-month period, expiring April 30, 2026 (annual premium rate renewals thereafter).

The underwriting method utilized is an experience-rated, non-refund arrangement. Premium rates are established based on claims experience but the University does not have a share in the financial results. Until the University’s claims experience is fully credible with SLF, their “manual rate” is included in renewal calculations; SLF’s manual rate is 1.984% (95% higher than the current premium rate).

The premium rate adjustment calculated (with a 70% weighting applied to SLF’s manual rate) exceeds the 15% maximum rate adjustment agreed to with the transition to SLF and as such, 15% is the rate adjustment that applies effective May 1, 2024. This continues to be less than the 1.457% rate that applied effective May 1, 2021, prior to the transition from Canada Life to SLF effective May 1, 2022.

Monthly Insured Earnings	Current		Effective May 1, 2024		Change	
	Rate (% of earnings)	Annual Premium	Rate (% of earnings)	Annual Premium		
\$41,508,454	1.015%	\$5,055,730	1.167%	\$5,812,844	\$757,114	15%

*Note: Rates do not include any applicable taxes; insured earnings are based on SLF renewal package*

The LTD benefit is fully paid for by employees and as a result, in the event of a claim, benefit payments are non-taxable. The following table provides an illustration of the employee impact associated with the rate increase:

Sample Salary	LTD Monthly Premium for Employees		
	May 2023-April 2024	May 2024-April 2025	Difference
\$35,000	\$29.60	\$34.04	\$4.43
\$65,000	\$54.98	\$63.21	\$8.23
\$100,000	\$84.58	\$97.25	\$12.67
\$125,000	\$105.73	\$121.56	\$15.83
\$192,454 <i>(maximum insured earnings effective May 1, 2023)</i>	\$162.78	\$187.16	\$24.38

*Note: Based on rates that exclude any applicable taxes*

Historically, the maximum insured earnings has been adjusted each May 1 in alignment with the range increase for the faculty and staff compensation structures. The range increase effective May 1, 2024 has not yet been determined; however, discussions are well underway for the staff employee group and negotiations for the faculty and union groups are either underway or scheduled to commence in the near future.

The recommendation is to accept the 15% increase to the LTD premium rate (guaranteed until April 30, 2026) and to maintain the current maximum insured earnings, effective May 1, 2024 until at least April 30, 2025.

### C. Healthcare Benefits – Administrative Services Only (ASO) Fees/Charges & Budget Rates

The provider for the extended health (i.e. prescription drugs, paramedical practitioners, out-of-country, hospital, medical services & supplies) and dental benefits is GreenShield (GS). These benefits are provided mainly on an Administrative Services Only (ASO) basis – the University is responsible for paying GS for all claims paid plus their fees/charges up to the pooling limit of \$50,000 per year per individual.

There are two components to GS’s Stop Loss pooling threshold of \$50,000 per year per individual:

1. In-country component (calculated as a percentage of the University’s claims)
2. Out-of-country component (rates are based on the experience of GS’s entire pool)

Travel Assistance provides individuals outside of the country, with assistance in the event of a medical emergency (i.e. locating medical care, hospital admission, transportation services); this element is also fully pooled (premium rates are based on the experience of GS’s entire pool).

The ASO fees/charges were guaranteed for a period of time with the provider transition to GS effective January 1, 2023 and as such, remain unchanged effective May 1, 2024. Based on projected claims (approx. \$26.05M on a combined basis) and December 2023 headcounts, the current fees/charges amount to the following:

ASO Fee/Charge			Effective January 1, 2023		
			Charge	Estimated May 2024 to April 2025 Cost	Guarantee Period
Administration (Claims Settlement)			2.75% of paid claims	\$716,400	Expires April 30, 2028
Stop Loss (Individual Pooling)			3.70% of paid extended health claims plus administration	\$619,300	Expires April 30, 2025
Travel Assistance	Single		\$0.25 per member	\$6,744	
	Family		\$0.50 per member	\$33,186	
\$50K Travel Stop Loss	Active Employees under age 70 (180 days per trip)	Single	\$0.85 per member	\$14,576	
		Family	\$1.70 per member	\$85,517	
	Active Employees age 70+ and Retirees (60 days per trip)	Single	\$4.05 per member	\$39,803	
		Family	\$8.10 per member	\$130,151	
<i>Combined</i>				<i>\$1,645,677</i>	

Note: in addition to the above, GS charges for their mailing of Member ID Cards (currently \$1.80 per card)

Budget rates for the extended health and dental benefits are calculated each year by Aon using underlying claims experience, ASO fees/charges, recent plan amendments (e.g. indexed maximums), and loss ratio against budget. These budget rates are used to determine applicable cost sharing (with affiliates and part-time employees) and to generate funds in the account which is used to pay the monthly ASO bill. These benefits are fully employer paid with the exception of part-time employees who have a share in the cost relative to their full-time equivalency (e.g. an employee who works 50% of the standard workweek pays 50% of the monthly rate).

Projected claims analysis indicates changes to the budget rates for the extended health and dental benefits for the upcoming year. The trend factors (including plan design changes) used by Aon for extended health has decreased from 6.7% to 6% and for dental, has decreased from 8.8% to 7%.

Benefit	Coverage Level	Members	Current		Effective May 1, 2024		Change	
			Monthly Rate	Aggregate Annualized	Monthly Rate	Aggregate Annualized		
Extended Health	Single	2,248	\$71.88	\$1,939,035	\$78.95	\$2,129,755	\$1,685,418	9.8%
	Family	5,531	\$229.38	\$15,224,409	\$251.90	\$16,719,107		
Dental	Single	1,429	\$55.00	\$943,140	\$62.25	\$1,067,463	\$1,222,459	13.2%
	Family	4,192	\$165.51	\$8,325,815	\$187.34	\$9,423,951		
<i>Combined</i>			\$26,432,399		\$29,340,276		\$2,907,877	11.0%

*Note: Rates include a margin for tax; based on projected claims experience and December 2023 headcounts*

The recommendation is to accept the budget rates calculated by Aon and increase the extended health rates by 9.8% and dental rates by 13.2% effective May 1, 2024.

**For Decision**

**Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefits Committee

**From:** Sarah Willey-Thomas, Associate University Secretary

**RE:** **4) Pension**

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**a) Cost of Living Adjustments**

**Lee Hornberger, Director, Total Rewards** will present cost of living adjustment considerations for pensions in pay and deferred pensions for decision by the Pension & Benefits Committee.

**i) Pensions in Pay**

Supporting materials have been included for the Committee's review and consideration.

**Recommendation:**

**That the Pension & Benefits Committee approve to apply a 3.90% Cost of Living Adjustment ("COLA") for pension benefits earned up to December 31, 2023 and 2.93% COLA for pension benefits earned on or after January 1, 2014, effective May 1, 2024, as presented.**

**ii) Deferred Pensions**

Supporting materials have been included for the Committee's review and consideration.

**Recommendation:**

**That the Pension & Benefits Committee approve to apply a 0% Cost of Living Adjustment ("COLA") for pension benefits earned up to December 31, 2023 and 0% COLA for pension benefits earned on or after January 1, 2014, effective May 1, 2024, as presented.**

**iii) Pensionable Earnings for Members on LTD**

Supporting materials have been included for the Committee's information.

**Documentation Provided:**

- Pension Plan – Cost of Living Adjustment (COLA) Presentation Slides

# PENSION PLAN – COST OF LIVING ADJUSTMENT (COLA)

Pension & Benefits Committee  
March 22, 2024

UNIVERSITY OF  
WATERLOO



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WATERLOO

# BACKGROUND

- Annual workplan item for the Pension & Benefits Committee to confirm the Cost of Living Adjustment (COLA) to apply each May 1
- Three categories of pension plan membership where COLA can/does apply:
  - Pensioners – typically an information item except decision required when the COLA calculation exceeds 5% or in years where a catch-up increase exists from a prior year
  - Deferred members – decision required, guiding principles developed by a subcommittee of the P&B Committee and adopted in 2015
  - Pensionable earnings for Long Term Disability (LTD) benefit recipients – decision required, guiding principles developed by a subcommittee of the P&B Committee and adopted in 2015

# SUMMARY OF COLA RECOMMENDATIONS EFFECTIVE MAY 1, 2024

COLA effective May 1, 2024	Pensioners		Deferred Members		Pensionable Earnings for LTD Benefit Recipients
	Pension Benefits Earned up to December 31, 2013	Pension Benefits earned on or after January 1, 2014	Pension Benefits Earned up to December 31, 2013	Pension Benefits earned on or after January 1, 2014	
Automatic as per plan text (no decision required)	3.90%	2.93%	n/a	n/a	n/a
Recommendation	3.90%	2.93%	0%	0%	To be determined (once the Range Increase has been finalized with the employee groups)



# COLA CALCULATION

	2018	2019	2020	2021	2022	2023	2024
Avg of the Monthly CPI	133.383	135.983	136.958	141.608	151.242	157.108	n/a
COLA Calculation*			$(135.983 / 133.383) - 1$ = .0195	$(136.958 / 135.983) - 1$ = .00717	$(141.608 / 136.958) - 1$ = .03395	$(151.242 / 141.608) - 1$ = .06803	$(157.108 / 151.242) - 1$ = .03879
100% COLA Factor effective May 1			1.95%	0.717%	3.4%	6.8%	3.90%

*\*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 monthly CPI figures for 2022 and 2023, as well as the average of the monthly CPI for each year, are as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
<b>2022</b>	145.3	146.8	148.9	149.8	151.9	152.9	153.1	152.6	152.7	153.8	154.0	153.1	151.242
<b>2023</b>	153.9	154.5	155.3	156.4	157.0	157.2	158.1	158.7	158.5	158.6	158.8	158.3	157.108

## COLA CALCULATION (CONT.)

- Effective January 1, 2014, the pension plan was amended to apply 75% of the COLA Factor to pension benefits earned on and after January 1, 2014
- Effective May 1, 2024, the COLA Factors are as follows:
  - 100% COLA Factor is 3.90%
  - 75% COLA Factor is 2.93%

# PENSIONERS

- If the 100% COLA Factor is 5% or less in any year, the 100% COLA Factor is automatically applied to benefits earned prior to 2014 and the 75% COLA Factor is automatically applied to benefits earned post 2013
- If the 100% COLA Factor exceeds 5% in any year, it may be reduced to the extent deemed necessary by the Pension & Benefits Committee on the advice of the Actuary, to 5% (not lower), and a corresponding 3.75% limit applies to the 75% COLA Factor
- If the increase is limited (to 5% / 3.75%) in any year, 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, as may be permitted by the Income Tax Act, but there will be no retroactivity in any catch-up increase

# PENSIONERS (CONT.)

Pension Benefits Earned	Effective May 1, 2020	Effective May 1, 2021	Effective May 1, 2022	Effective May 1, 2023			Recommendation	
				COLA calculated	COLA applied	Remaining COLA calculated (not applied)	Effective May 1, 2024 (Automatic COLA)	Carry forward to a subsequent year ( <i>Catch Up from 2023</i> )
Up to December 31, 2013	1.95%	0.717%	3.40%	6.8%	5%	1.8%	3.90%	1.80%
Accrual on and after January 1, 2014	1.46%	0.538%	2.55%	5.1%	5%	0.1%	2.93%	Up to 0.1%

- The automatic provision applies effective May 1, 2024 and the recommendation is to carry forward the catch-up increase from 2023 to a subsequent year

# DEFERRED MEMBERS

- The application of COLA to pension accruals for deferred members is fully at the discretion of the Pension & Benefits Committee
- If the decision is to apply a COLA to pension accruals for deferred members, the plan text stipulates that:
  - The COLA will be applied to the full deferred pension entitlement if:
    - The member terminated prior to January 1, 2008, or
    - The member terminated on or after January 1, 2008 at the age of 55 or older or had 20 or more years of continuous service.
  - The COLA will be applied to the pension benefit earned prior to 2008 only, if neither of the above criteria is met.

## DEFERRED MEMBERS (CONT.)

- 52% of deferred members align with the plan text eligibility criteria for application of COLA, if the decision is to apply COLA

COLA Eligibility	Deferred Members*	
	As at Dec 31/22	As at Dec 31/23
100% COLA on full deferred pension	175	168
100% COLA on pre 2008 deferred pension, no COLA on post 2007 deferred pension	161	160
100% COLA on pre 2014 deferred pension, 75% COLA on post 2013 deferred pension	51	49
75% COLA on full deferred pension	17	16
No COLA on full deferred pension	285 (41%)	362 (48%)
<b>Total</b>	<b>689</b>	<b>755</b>

*\*Based on Membership Reconciliation done in conjunction with the Valuation. Please refer to the appendix for further details.*

## DEFERRED MEMBERS (CONT.)

- In November 2015, the following guiding principles were adopted:
  - 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).

# DEFERRED MEMBERS (CONT.)

Pension Benefits Earned	Effective May 1, 2020	Effective May 1, 2021	Effective May 1, 2022	Effective May 1, 2023	Recommendation Effective May 1, 2024
Up to December 31, 2013	1.95%	0.717%	3.4%	5%	0%
Accrual on and after January 1, 2014	1.46%	0.538%	2.55%	5%	0%

- The recommendation is to apply no COLA increase to deferred pensions effective May 1, 2024 due to the third guiding principle that indicates that the "catch-up" provision for pensions in pay takes precedence over indexation of deferred members' pensions



# PENSIONABLE EARNINGS FOR LTD BENEFIT RECIPIENTS

- The application of an adjustment to pensionable earnings for LTD benefit recipients is fully at the discretion of the Pension & Benefits Committee
- In November 2015, the following guiding principles were adopted:
  - 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.

# PENSIONABLE EARNINGS FOR LTD BENEFIT RECIPIENTS (CONT.)

<b>Pension Benefits Earned</b>	<b>Effective May 1, 2020</b>	<b>Effective May 1, 2021</b>	<b>Effective May 1, 2022</b>	<b>Effective May 1, 2023</b>	<b>Effective May 1, 2024</b>
<b>Salary Range Increase</b>	2.15%	1%	1%	1%	Not available
<b>100% COLA Factor</b>	1.95%	0.717%	3.4%	6.8%	3.9%
<b>Indexation</b>	1.95%	0.717%	1%	1%	To be determined (once the Range Increase has been finalized with the employee groups)
<b>Number of Members as of December 31 of the prior calendar year</b>	80	104	92	82	108

- The recommendation is to determine the adjustment once salary changes are finalized with the employee groups

# SUMMARY OF COLA RECOMMENDATIONS EFFECTIVE MAY 1, 2024

COLA effective May 1, 2024	Pensioners		Deferred Members		Pensionable Earnings for LTD Benefit Recipients
	Pension Benefits Earned up to December 31, 2013	Pension Benefits earned on or after January 1, 2014	Pension Benefits Earned up to December 31, 2013	Pension Benefits earned on or after January 1, 2014	
Automatic as per plan text (no decision required)	3.90%	2.93%	n/a	n/a	n/a
Recommendation	3.90%	2.93%	0%	0%	To be determined (once the Range Increase has been finalized with the employee groups)

# APPENDIX

# DEFERRED MEMBERS – ADDITIONAL BREAKDOWN

Criteria for COLA		COLA Eligibility	Deferred Members*	
			As at Dec 31/22	As at Dec 31/23
Terminated prior to January 1, 2008		100% COLA on full pension	168	163
Terminated after January 1, 2008 and before January 1, 2014	Over 55 or > 20 years cont. service	100% COLA on full pension	7	5
	Under 55 and < 20 years cont. service	100% COLA on pre 2008 pension, no COLA on post 2007 pension	110	109
	No pre2008 CS and under 55 and < 20 years cont. service	No COLA on full deferred pension	36	36
Terminated on or after January 1, 2014	Over 55 or > 20 years of cont. service	100% COLA on pre 2014 pension, 75% COLA on post 2013	51	49
	No pre2014 CS and over 55 or > 20 years cont. service	75% COLA on full pension	17	16
	pre2008 CS and under 55 and < 20 years cont. service	100% COLA on pre 2008 pension, no COLA on post 2007 pension	51	51
	No pre2008 CS and under 55 and < 20 years cont. service	No COLA on full deferred pension	249	326
		<b>Total</b>	<b>689</b>	<b>755</b>

<sup>29 of 109</sup>  
<sup>16</sup> \*Based on Membership Reconciliation done in conjunction with the Valuation.

# COLA – EXCERPT FROM LAST ACTUARIAL REPORT

- The pension of each Member receiving pension payments on May 1 of any year shall be adjusted by the Postretirement Cost-of-Living Factor for each year, provided that the Member has received at least one regular pension payment prior to May 1.
  - **For any pension benefits accrued prior to January 1, 2014**, this factor is obtained by dividing the average Consumer Price Index for the preceding calendar year by the average index for the next preceding calendar year. In the first year of retirement, the increase will be provided on a pro rata basis subject to the Income Tax Act rules. However, if this factor exceeds 105% and if the financial position of the Plan is not sufficient to provide for this increase, the factor may be reduced, within certain limits, to maintain the solvency of the Plan.
  - **For any pension benefits accrued on and after January 1, 2014**, this factor is obtained by dividing the average Consumer Price Index from the preceding calendar year by the average index for next preceding calendar year, and then multiplying the result by 0.75. However, if this factor exceeds 103.75% and if the financial position of the plan is not sufficient to period for this increase, the factor may be reduced, within certain limits, to maintain the solvency of the Plan.
- In 2009, the date of the annual adjustment changed from July 1 to May 1, with the first such adjustment as of May 1, 2009 prorated to reflect the ten-month period since the prior adjustment.
- All terminated Members who are entitled to a terminated vested pension except for those who terminated between July 1, 1977 and December 31, 1986 shall have their terminated vested pensions adjusted on May 1 (July 1 prior to 2009) of each year by a cost-of-living factor to be determined annually by the Committee, subject to the Income Tax Act Rules. Notwithstanding the foregoing, if a Member terminates employment on or after January 1, 2008 and is not within ten years of his or her Normal Retirement Date, or has not completed 20 years or more of continuous employment, the Cost of Living Factor shall only apply to the terminated vested member's pension earned in respect of Credited Service prior to January 1, 2008.

UNIVERSITY OF  
**WATERLOO**



Canada's Innovation University

**For Information****Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefits Committee

**From:** Sarah Willey-Thomas, Associate University Secretary

**RE:** **4) Pension**

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**a) RPP Actuarial Valuation and Filing**

Allan Shapira, Aon, will provide an update to the Pension & Benefits Committee regarding the Registered Pension Plan's actuarial valuation and filing.

Members will recall that the Committee made a decision with respect to valuation assumptions at its January 18, 2024 meeting.

Members will also recall that the University of Waterloo Pension Plan is a defined benefit plan. The Plan is funded by contributions from the employees and the University, and by investment returns. An actuarial valuation report is required to be filed with the Ontario pension regulator at least every three years. In practice, the Committee commissions a report on an annual basis for planning and monitoring purposes and recommends filing the valuation more regularly than required. The Board approved the filing of the valuation most recently at its meeting on 6 June 2023.

**Documentation Provided:**

- Preliminary Actuarial Valuation Results as of January 1, 2024





# Preliminary Actuarial Valuation Results as of January 1, 2024

**Pension & Benefits Committee  
Meeting on March 22, 2024**

**Posted with Permission of Aon**



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1

Background



# Understanding the Actuarial Process



- Ultimate cost of Pension Plan equals the sum of benefits paid
- Cost is funded by University and member contributions and investment earnings, net of expenses
- Actuarial process from a funding perspective:
  - Using actuarial estimates to make periodic funding contributions in a systematic manner to meet the ultimate cost

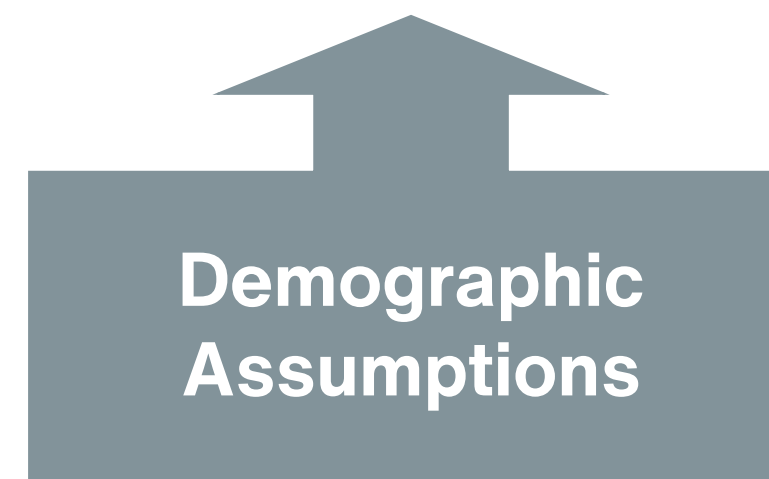
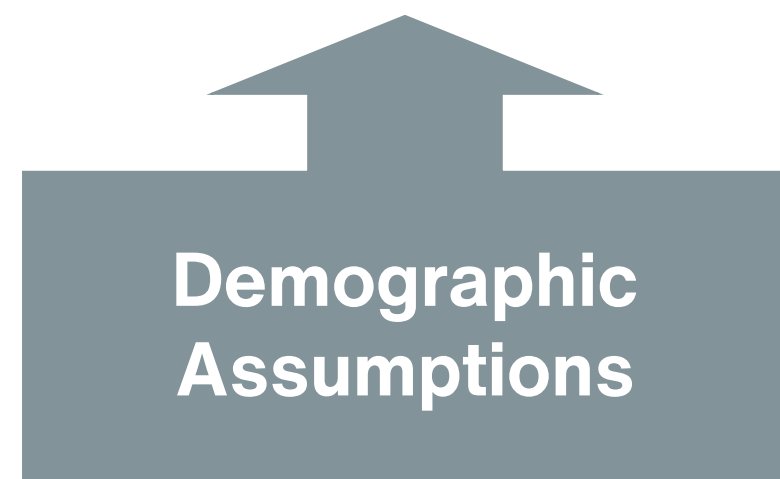
# Understanding the Actuarial Process (Cont'd)

Elements of an actuarial valuation:

Pension Plan:	Contractually promises to pay benefits defined by the plan formula(s) on retirement, death, disability and termination
Plan Members:	Current employees, retirees and beneficiaries in this group will be or are entitled to the benefits promised by the plan. Specific data is gathered and validated for all members
Actuarial Assumptions:	Actuary uses these to estimate who will receive a benefit, what the amount of benefit will be, when the benefit will start, and how long it will be paid
Actuarial Cost Method:	Used to allocate the cost of the estimated benefits (determined using the member data and actuarial assumptions) to various time periods

# Actuarial Assumptions for Going Concern Valuation

Assumptions to Estimate:			
When Pension Benefits Are Payable	Amount of Pension Benefits Payable	How Long Pension Benefits are Payable	How Much Money to Set Aside
<ul style="list-style-type: none"> <li>Termination Rates</li> <li>Disability Rates</li> <li>Preretirement Mortality Rates</li> <li>Retirement Ages</li> </ul>	<ul style="list-style-type: none"> <li>Increases in CPP Wage Base</li> <li>Increases in ITA Maximum Pension</li> <li>Increases in Salaries</li> <li>Inflation</li> </ul>	<ul style="list-style-type: none"> <li>Postretirement Mortality Rates</li> </ul>	<ul style="list-style-type: none"> <li>Investment Return on Pension Fund</li> </ul>



# Pension Liability/Asset Relationship

Growth in Liabilities From Year to Year	Growth in Assets From Year to Year
Liabilities at beginning of year (representing discounted present value of pension benefits earned in respect of service up to the valuation date)	Value of pension fund assets at beginning of year
Plus	Plus
Interest on liabilities at rate used to discount the liabilities	Rate of return on pension fund assets
Plus	Plus
New liability for benefits earned by members in the year (current service) and increase/(decrease) in liability from experience losses/(gains)	Contributions made by members and University
Less	Less
Pension payments and lump-sum transfers	Pension payments, lump-sum transfers, fees and expenses

# 2

## Introduction





# Introduction to the January 1, 2024 Valuation Results



- This material includes the going concern valuation results for the Registered Pension Plan (RPP) and the Payroll Pension Plan (PPP), as well as the solvency and hypothetical wind up valuation results for the RPP, at January 1, 2024
- The going concern results have been determined using the set of assumptions discussed with the Pension & Benefits Committee on January 19, 2024; the solvency and wind up results are based on the January 1, 2024 prescribed assumptions
- Aon has updated the going concern discount rate recommendation to reflect the December 31, 2023 capital market assumptions
- Aon has calculated the indexation at May 1, 2024 based on the increase in CPI for the period ending December 31, 2023 and included a reserve for carry-forward indexation from 2023

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## Assumptions



# Assumptions

The valuation has been performed using the assumptions discussed with the P&B Committee on January 19, 2024. We provide the following updates:

## Going Concern Discount Rate

- At the previous P&B Committee meeting Aon's capital market assumptions as at December 31, 2023 were not yet available
- These assumptions have since been released and Aon has provided updated information related to the going concern discount rate on the following pages
- The target asset mix at January 1, 2024 generates an expected return of 6.36% per annum net of passive investment expenses
- The provisionally-approved discount rate of 6.25% would include a margin of 0.11%
- The January 1, 2023 discount rate of 6.25% was net of a margin of 0.40%
- Aon has provided the results using the discount rate of 6.25% as well as 6.00% which would be net of a margin of 0.36%; the 6.00% discount rate is being recommended for the January 1, 2024 valuation

## Indexation

- The decision on May 1, 2024 indexation is not yet finalized at the time of this report
- Aon has calculated the indexation at May 1, 2024 based on the increase in CPI for the period ending December 31, 2023 and included a reserve for carry-forward indexation from 2023
- Consistent with prior practice, Aon has included 3 years of indexation for deferred vested members meeting the plan criteria for pre-retirement indexation

# Expected Investment Returns on Various Asset Classes and UW Pension Fund

Asset Class	Target Asset Mix Used for Discount Rate	30-Year Annualized Mean <sup>1</sup> (Nominal Return)	Annual Standard Deviation
Inflation	N/A	2.0%	2.3%
Cash (365-Day T-Bills)	2.0%	3.9%	3.5%
Universe Bonds	25.0%	4.7%	6.3%
Canadian Equities	5.0%	6.1%	15.8%
Global Equities	48.0%	7.1%	16.2%
Listed Infrastructure	5.0%	6.9%	14.7%
Direct Infrastructure	5.0%	6.7%	11.7%
Global Listed Real Estate	5.0%	6.6%	19.3%
Direct Real Estate	5.0%	4.7%	15.0%

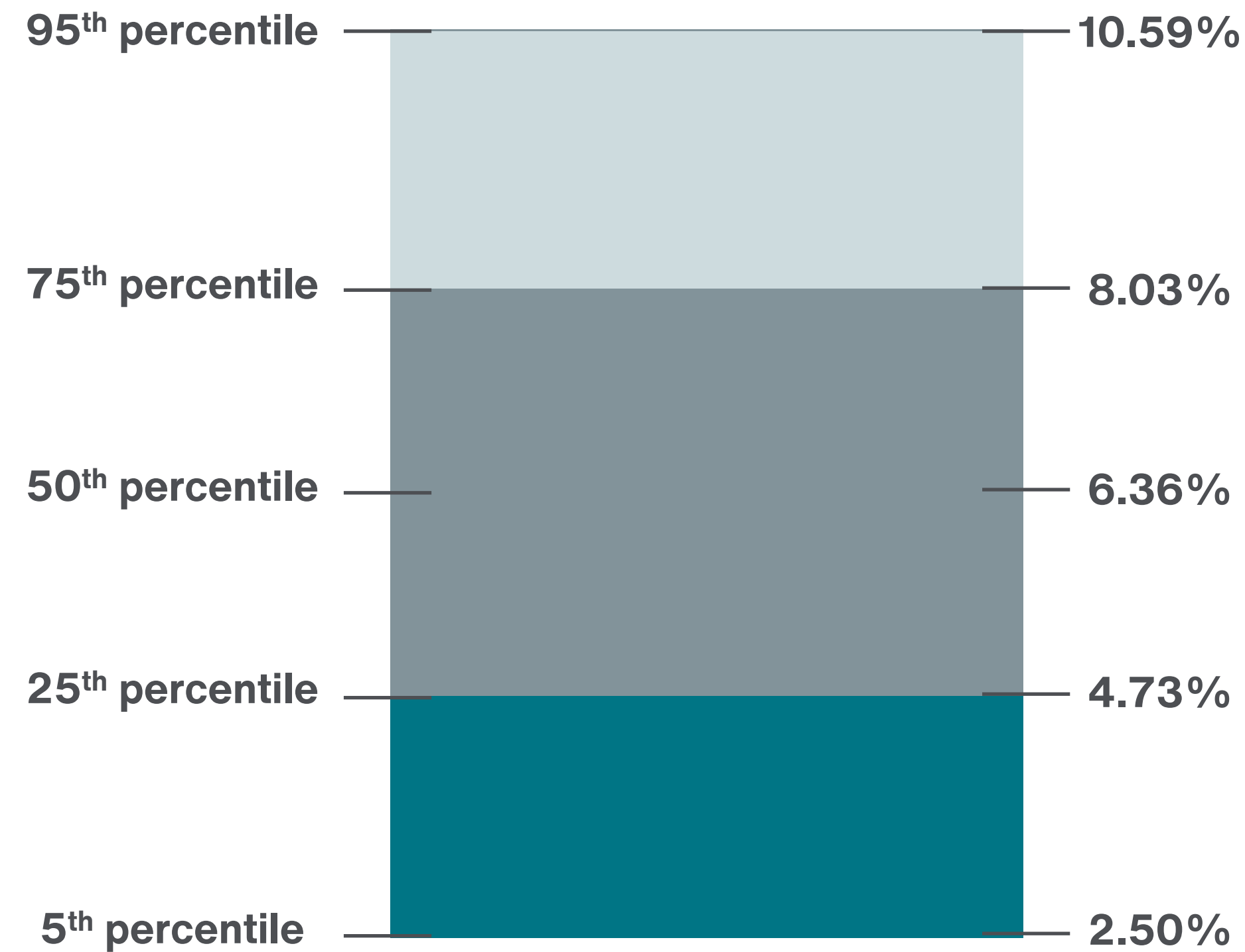
- Above returns determined at December 31, 2023
- Expected rate of return, net of passive investment fees and based on above target asset mix is **6.36%**
- Discount rate of 6.25% would be net of 0.11% additional margin
- Discount rate of 6.00% would be net of 0.36% additional margin

<sup>1</sup> Takes into effect the compounding for each underlying asset class

# Expected Investment Returns For UW Pension Fund (cont'd)

- The chart below provides the range of outcomes for the 30-year rate of return based on the target asset mix of the University of Waterloo pension fund:

**Annualized Rate of Return over a 30-Year Period (December 31, 2023)**



# Actuarial Assumptions for Going Concern Valuation

## Economic Assumptions

Economic Assumptions	January 1, 2023	January 1, 2024
Increase in Consumer Price Index (CPI)	2.00% per year	No change
Indexation of Benefits	May 1, 2023 – Actual indexation May 1, 2024 – 4.80% for 100% indexed benefits; 2.35% for 75% indexed benefits 2.00% per year thereafter	May 1, 2024 – 3.90% for 100% indexed benefits; 2.93% for 75% indexed benefits May 1, 2025 – 3.00% for 100% indexed benefits; 2.25% for 75% indexed benefits Carry forward of 1.80% for 100% indexed benefits and 0.1% for 75% indexed benefits held in reserve 2.00% per year thereafter
Increase in Year's Maximum Pensionable Earnings under Canada Pension Plan	2.75% per year (CPI + 0.75%)	No change
Increase in <i>Income Tax Act</i> maximum pension	\$3,506.67 in 2023; increased after 2023 at 2.75% per year subject to hard-dollar cap of \$4,000 in 2023 which increases at 0.92% per year from 2024	\$3,610.00 in 2024; increased after 2024 at 2.75% per year up to a hard-dollar cap of \$4,039.29 which increases at 0.92% per year after 2024
Increase in salaries <sup>1</sup>	3.00% per year for 2 years; 4.00% per year ultimate (CPI + 2.00%)	4.00% per year (CPI + 2.00%)

<sup>1</sup> Across the board increases plus grid steps / merit / promotion

# Actuarial Assumptions for Going Concern Valuation

## Economic Assumptions

Economic Assumptions	January 1, 2023	January 1, 2024
Increase in salaries (disabled)	2.00% per year (CPI + 0.00%)	No change
Interest rate used to discount liabilities	6.25% per year (CPI + 4.25%)	6.00% per year to 6.25% per year (CPI + 4.00% to 4.25%)
Interest rate used to calculate 50% rule	2.20% <sup>1</sup> per year for 10 years; 2.60% per year thereafter	2.40% <sup>1</sup> per year for 10 years; 2.50% per year thereafter
Interest rate for crediting on required member contributions	3.40% per year	3.00% per year
Loading for administrative expenses	Explicit assumption of \$1,654,000 in 2023 added to current service cost	Explicit assumption of \$1,704,000 in 2024 added to current service cost
Provision for Adverse Deviation (PfAD)	9.60% of non-indexed liabilities and current service cost	9.60% of non-indexed liabilities and current service cost

<sup>1</sup> 2.70% / 3.10% for 75% indexed benefits in 2023 and 2.80%/2.90% for 75% indexed benefits in 2024

# Actuarial Assumptions For Going Concern Valuation

## Demographic Assumptions

Demographic Assumptions	January 1, 2023		January 1, 2024
Mortality Rates	2014 Canadian Pensioners Public Sector Mortality Table (“CPM2014 Public”) with Improvements Under Scale MI-2017 projected from 2014		No Change
Retirement Rates	<b>Age</b>	<b>Rates Per 100</b>	No change
	60	5	
	61	5	
	62	25	
	63	10	
	64	10	
	65	50	
	66	25	
	67	25	
	68	25	
	69	50	
	70	100	



# Actuarial Assumptions For Going Concern Valuation

## Demographic Assumptions

Demographic Assumptions	January 1, 2023		January 1, 2024
Termination Rates	<b>Age</b>	<b>Rates Per 100</b>	No change
	20	10.0	
	25	10.0	
	30	5.6	
	35	3.2	
	40	2.2	
	45	1.7	
	50	1.2	
	55+	0.0	

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Assets

AON



# Reconciliation of Plan Assets (Market Value)

	Total
<b>Market Value of Assets, December 31, 2022 (Unadjusted for in-transit items)</b>	<b>\$ 2,129,494,000</b>
<b>Plus</b>	
Member contributions	\$ 49,235,000
University contributions	68,544,000
Flex contributions	0
Transfers in from other plans	1,709,000
Net transfers from other accounts	<u>0</u>
	<b>\$ 119,488,000</b>
<b>Less</b>	
Pensions and lump-sum refunds paid	\$ 96,651,000
Investment and non-investment expenses and fees	<u>5,384,000</u>
	<b>\$ 102,035,000</b>
<b>Plus</b>	
Investment return	\$ 269,391,000
<b>Market Value of Assets, December 31, 2023 (Unaudited)</b>	<b>\$ 2,416,338,000</b>
<b>Market Value of Assets, December 31, 2023 (Adjusted for in-transit cashflows)</b>	<b>\$ 2,415,547,000</b>
Rate of return (net of all expenses and fees)	12.33%

- Amount above adjusted for in-transit benefit payments of \$791,000; final valuation results will reflect asset value in audited financial statements

# Pension Fund Asset Mix as of January 1, 2024

Asset Class	Current Asset Mix	Target Asset Mix
Cash and short term	6%	2%
Fixed-income	30%	25%
Equities	53%	53%
Infrastructure	8%	10%
Real estate	<u>3%</u>	<u>10%</u>
<b>Total</b>	<b>100%</b>	<b>100%</b>

# 5

## Going Concern Valuation Results



# Going Concern Valuation Results as of January 1, 2024

## Registered Pension Plan – Past Service

	January 1, 2023	January 1, 2024 (6.25% discount rate)	January 1, 2024 (6.00% discount rate)
<b>Past Service</b>			
Actuarial (Market) value of assets	\$ 2,128,326,000	\$ 2,415,547,000	\$ 2,415,547,000
Less: Accrued liability			
Active members	\$ 1,047,312,000	\$ 1,108,739,000	\$ 1,161,720,000
Disabled and suspended members	18,929,000	18,842,000	19,615,000
Pensioners and beneficiaries <sup>1</sup>	951,224,000	1,038,055,000	1,059,755,000
Deferred vested members <sup>1</sup>	45,861,000	48,798,000	51,027,000
Additional voluntary contribution balances	219,000	252,000	252,000
Members flex contribution balances	618,000	538,000	538,000
Indexation Reserve (Carry-forward from 2023) <sup>2</sup>	21,607,000	22,946,000	23,493,000
<b>Total</b>	<b>\$ 2,085,770,000</b>	<b>\$ 2,238,170,000</b>	<b>\$ 2,316,400,000</b>
Going concern position	\$ 42,556,000	\$ 177,377,000	\$ 99,147,000
Provision for Adverse Deviation (PfAD)	(168,428,000)	(181,975,000)	(188,016,000)
<b>Funding Excess/(Unfunded Liability)</b>	<b>\$ (125,872,000)</b>	<b>\$ (4,598,000)</b>	<b>\$ (88,869,000)</b>
Going Concern Funded Ratio (before PfAD)	1.02	1.08	1.04
Going Concern Funded Ratio (with PfAD)	0.94	1.00	0.96

<sup>1</sup> Includes May 1 indexation adjustment; May 1, 2024 indexation adjustment of 3.90% on 100% indexed benefits and 2.93% on 75% indexed benefits

<sup>2</sup> Reflects carry-forward indexation from 2023 of 1.8% on 100% indexed benefits and 0.1% on 75% indexed benefits

# Going Concern Valuation Results as of January 1, 2024— Registered Pension Plan – Current Service

	January 1, 2023 to December 31, 2023		January 1, 2024 to December 31, 2024 (6.25% discount rate)		January 1, 2024 to December 31, 2024 (6.00% discount rate)	
	\$ Amount	% of Pensionable Earnings	\$ Amount	% of Pensionable Earnings	\$ Amount	% of Pensionable Earnings
<b>Current Service</b>						
Total current service cost	\$ 79,639,000	14.57%	\$ 84,238,000	14.32%	\$ 89,165,000	15.16%
Provision for non-investment expenses	1,654,000	0.30%	1,704,000	0.29%	1,704,000	0.29%
PfAD in respect of current service cost	6,923,000	1.27%	7,310,000	1.24%	7,714,000	1.31%
Additional margin to maintain 50/50 cost-sharing <sup>1</sup>	9,838,000	1.80%	12,454,000	2.12%	7,123,000	1.21%
Less: Members' required contributions	<u>(49,027,000)</u>	<u>(8.97%)</u>	<u>(52,853,000)</u>	<u>(8.99%)</u>	<u>(52,853,000)</u>	<u>(8.99%)</u>
<b>University Current Service Cost</b>	<b>\$ 49,027,000</b>	<b>8.97%</b>	<b>\$ 52,853,000</b>	<b>8.99%</b>	<b>\$ 52,853,000</b>	<b>8.99%</b>
As a % of members' required contributions	100.0%		100.0%		100.0%	
Pensionable earnings	\$ 546,417,000		\$ 588,159,000		\$ 588,159,000	
University total funding commitment as % of pensionable earnings		12.45%		12.45%		12.45%

<sup>1</sup> Reflects target 50/50 cost sharing on total current service cost in accordance with Funding Policy

# Analysis of Experience – Past Service

	In \$ Millions
Funding excess/(unfunded liability) as of January 1, 2023	\$ (125.9)
Plus: University contributions for current service	49.2
Member contributions for current service	49.2
Special payments	19.3
Less: Total current service cost	(88.2)
Plus: Interest at 6.25% per year	(7.0)
<b>Equals: Expected Funding Excess/(Unfunded Liability) as of January 1, 2024</b>	<b>\$ (103.4)</b>
Plus: Gains (losses) due to:	
Return on actuarial value of assets	131.6
Indexation adjustment higher than assumed	(15.5)
Salary increases higher than assumed	(23.8)
Change in ITA maximum pension higher than assumed	(0.5)
Change in YMPE higher than assumed	0.1
Mortality experience	(2.2)
Retirement experience	2.8
Termination experience	1.5
Additional year of COLA for deferred members	(0.6)
Article 12 service transferred in	0.9
Miscellaneous experience	0.4
<b>Equals: Funding Excess/(Unfunded Liability) as of January 1, 2024, Before Change in Assumptions</b>	<b>\$ (8.7)</b>
Impact of change in PfAD and PfAD experience	4.1
<b>Equals: Funding Excess/(Unfunded Liability) as of January 1, 2024 at 6.25% Discount Rate</b>	<b>\$ (4.6)</b>
Impact of change in discount rate from 6.25% to 6.00%	\$ (84.3)
<b>Equals: Funding Excess/(Unfunded Liability) as of January 1, 2024 at 6.00% Discount Rate</b>	<b>\$ (88.9)</b>



# 6

## Contribution Requirements



# Going Concern Valuation Results as of January 1, 2024

## Development of Special Payments

- Going concern deficits are required to be funded over 10 years with any adjustments in special payments made one year from the valuation date (if the valuation is filed)
- The University is currently required to contribute on the basis of the January 1, 2023 actuarial valuation of the plan on file with the regulators.

Valuation Date	Unfunded Liability	Period	Annual Statutory Special Payment
January 1, 2023	\$ 125,872,000	January 1, 2023 to December 31, 2032	\$ 16,828,000

- If this January 1, 2024 valuation is **not filed** with the regulators, the statutory special payments will remain at the current level shown above
- If this January 1, 2024 valuation is **filed** with the regulators, the statutory special payments required to fund the going concern deficit will depend on the discount rate used:

### 6.25% Discount Rate

Valuation Date	Unfunded Liability	Period	Annual Statutory Special Payment
January 1, 2024	\$ 4,598,000	January 1, 2024 to December 31, 2024	\$ 4,752,000 <sup>1</sup>
		January 1, 2025 to December 31, 2026	Nil

### 6.00% Discount Rate

Valuation Date	Unfunded Liability	Period	Annual Statutory Special Payment
January 1, 2024	\$ 88,869,000	January 1, 2024 to December 31, 2024	\$ 16,828,000
		January 1, 2025 to December 31, 2035	\$ 10,176,000

<sup>1</sup> Interest adjusted for monthly payments

# Contributions for 2024

The following table allocates the University funding commitment between current service, statutory special payments and additional contributions, according to whether the valuation is filed or not.

	Based on January 1, 2023 Filed Valuation	Based on January 1, 2024 Filed Valuation at 6.25% Discount Rate	Based on January 1, 2024 Filed Valuation at 6.00% Discount Rate
Member Contributions: (8.99% of pensionable earnings)	\$ 52,853,000	Same	Same
University Contributions (12.45% of pensionable earnings):	\$ 73,201,000	Same	Same
Allocated to pay University current service cost under RPP in 2024 (100.0% of member contributions)	\$ 52,853,000	\$ 52,853,000	\$ 52,853,000
Allocated to pay University statutory special payments to amortize unfunded liability	16,828,000	4,752,000	16,828,000 <sup>1</sup>
Additional contributions allocated to RPP	<u>3,520,000</u>	<u>15,596,000</u>	<u>3,520,000</u>
<b>Total University Contributions</b>	<b>\$ 73,201,000</b>	<b>\$ 73,201,000</b>	<b>\$ 73,201,000</b>

<sup>1</sup> Will decrease to \$ 10,176,000 in 2025, with additional contributions increasing to \$10,172,000

# 7

## Solvency and Hypothetical Wind Up Valuation Results



# Solvency and Wind Up Valuations

- The solvency and wind up valuations are performed at January 1, 2024 using assumptions that are prescribed by legislation and actuarial standards
- The solvency and wind up valuations are both performed assuming the plan were to wind up on the valuation date and all benefits are settled either through an annuity purchase or the payment of lump-sum (commuted) values to members
- The solvency valuation excludes the value of indexation from the liabilities; solvency deficit is subject to funding requirements
- The wind up valuation represents the estimated liability of all benefits to be settled; wind up deficit is calculated for reporting purposes but is not required to be funded
- The wind up valuation is based on the premise that a market for fully-indexed annuities exists, which may not be practical for a pension plan of this size



# Actuarial Assumptions For Solvency and Wind-Up Valuations

Assumptions	January 1, 2023	January 1, 2024
Retirement Ages	50% at unreduced age and 50% at age that results in highest commuted value	No change
Mortality Rates	CPM2014 Combined with Improvements Under Scale CPM-B	No change
Interest Rates—Solvency Valuation (Per Year)		
Active Members Age 55 and Over, Pensioners and Deferred Pensioners <sup>1</sup>	4.91%	4.73%
Active Members Under Age 55 <sup>2</sup>	4.30% for 10 years; 4.70% thereafter	4.10% for 10 years; 4.20% thereafter
Interest Rates—Wind-Up Valuation (Per Year)		
Active Members Age 55 and Over, Pensioners and Deferred Pensioners <sup>1</sup>	0.99% (100% indexed) 1.97% (75% indexed)	1.20% (100% indexed) 2.08% (75% indexed)
Active Members Under Age 55 <sup>2</sup>	2.20% for 10 years; 2.60% thereafter (100% indexed) 2.70% for 10 years; 3.10% thereafter (75% indexed)	2.40% for 10 years; 2.50% thereafter (100% indexed) 2.80% for 10 years; 2.90% thereafter (75% indexed)

<sup>1</sup> Settled through annuity purchase

<sup>2</sup> Settled through commuted value

# Solvency and Wind Up Valuation Results as of January 1, 2024

	January 1, 2023		January 1, 2024	
	Solvency Valuation	Wind Up Valuation	Solvency Valuation	Wind Up Valuation
<b>Market Value of Assets</b>	<b>\$ 2,128,326,000</b>	<b>\$ 2,128,326,000</b>	<b>\$ 2,415,547,000</b>	<b>\$ 2,415,547,000</b>
Less: Wind up expenses	<u>(500,000)</u>	<u>(500,000)</u>	<u>(1,000,000)</u>	<u>(1,000,000)</u>
Solvency/wind up assets	\$ 2,127,826,000	\$ 2,127,826,000	\$ 2,414,547,000	\$ 2,414,547,000
<b>Solvency/Wind Up Liabilities</b>				
Active members	\$ 1,040,447,000	\$ 1,349,199,000	\$ 1,168,045,000	\$ 1,491,886,000
Disabled and suspended members	20,963,000	29,431,000	21,857,000	30,283,000
Pensioners and beneficiaries	859,300,000	1,180,253,000	978,314,000	1,258,833,000
Deferred vested members	46,028,000	80,357,000	52,257,000	85,604,000
Voluntary contribution balances	219,000	219,000	252,000	252,000
Member flex contribution balances	<u>618,000</u>	<u>618,000</u>	<u>538,000</u>	<u>538,000</u>
<b>Total</b>	<b>\$ 1,967,575,000</b>	<b>\$ 2,640,077,000</b>	<b>\$ 2,221,263,000</b>	<b>\$ 2,867,396,000</b>
<b>Excess/(Deficiency)</b>	<b>\$ 160,251,000</b>	<b>\$ (512,251,000)</b>	<b>\$ 193,284,000</b>	<b>\$ (452,849,000)</b>
Transfer ratio (market value of assets/ wind up liabilities)	N/A	0.81	N/A	0.84
Solvency ratio (market value of assets/ solvency liabilities)	1.08	N/A	1.09	N/A

**Notes:**

- Difference between Solvency and Wind Up Valuation is that Wind Up Valuation includes indexation under Plan, whereas Solvency Valuation excludes the indexation.

# 8

## Cap/ Protocol Calculations





# Past Service Liabilities – Impact of Indexing RPP Cap to Full Increase in ITA Limit

The chart below shows the increase in Accrued Liability at January 1, 2024 if the current RPP hard dollar cap of \$4,039.29 indexed each year at 1/3 of the increase in the ITA limit is removed, and the ITA limit is increased by full AIW increases:

6.25%	Current Provisions	Current RPP Cap Indexed at full AIW Increase
RPP <sup>1</sup>	\$ 2,420,145,000	\$ 2,452,850,000
Increase in Liability	N/A	\$ 32,705,000

Will be adjusted to reflect 6.00% discount rate upon adoption

<sup>1</sup> Includes PfAD

# Current Service Cost – Impact of Indexing RPP Cap to Full Increase in ITA limit

The chart below shows the increase in Total Current Service Cost at January 1, 2024 if the current RPP hard dollar cap of \$4,039.29 indexed each year at 1/3 of the increase in the ITA limit is removed, and the ITA limit is increased by full AIW increases:

	Current Provisions	Current RPP Cap Indexed at full AIW Increase
<b>6.25%</b>		
RPP <sup>1</sup>	\$ 93,252,000	\$ 96,651,000
As a % of Pensionable Earnings	15.85%	16.43%
Increase	N/A	0.58%

Will be adjusted to reflect 6.00% discount rate upon adoption

<sup>1</sup> Includes PfAD and provision for expenses

# 9

## Payroll Pension Plan Calculations



# Going Concern Valuation Results as of January 1, 2024 – Payroll Pension Plan

	January 1, 2023	January 1, 2024	January 1, 2024 (6.00% discount rate)
<b>Past Service</b>			
Market value of assets	\$ 36,214,000 <sup>1</sup>	\$ 34,483,000	\$ 34,483,000
Less:Accrued liability			
Active members	\$ 0	\$ 0	\$ 0
Pensioners and beneficiaries <sup>2</sup>	21,865,000 <sup>3</sup>	21,406,000 <sup>3</sup>	21,817,000 <sup>3</sup>
Indexation reserve (May 1, 2024) <sup>4</sup>	356,000	355,000	362,000
PfAD	N/A	N/A	N/A
<b>Total</b>	<b>\$ 22,221,000</b>	<b>\$ 21,761,000</b>	<b>\$ 22,179,000</b>
Funding excess/(unfunded liability)	\$ 13,993,000	\$ 12,722,000	\$ 12,304,000
<b>Current Service</b>			
University current service cost	\$ 0	\$ 0	\$ 0

<sup>1</sup> Reflects realignment of assets to liabilities over a three-year period

<sup>2</sup> Includes actual May indexation adjustment

<sup>3</sup> Annual pension payments from PPP are approximately \$1.8 million

<sup>4</sup> Reflects carry-forward from January 1, 2023

# 10

## Appendix



# Plan Members – Demographics

	January 1, 2023	January 1, 2024
<b>Active Members (Including Leaves)</b>		
Number	4,984	5,141
Average age	46.8	46.6
Average years of credited service	10.1	9.9
Average pensionable earnings	\$ 108,090	\$ 112,872
Total pensionable earnings	\$538,791,000	\$580,277,000
<b>LTD Members</b>		
Number	111	108
Average age	55.3	54.1
Average years of credited service	16.1	15.6
Average pensionable earnings	\$ 69,348	\$ 72,977
Total pensionable earnings	\$ 7,698,000	\$ 7,882,000

# Plan Members – Demographics (Cont'd)

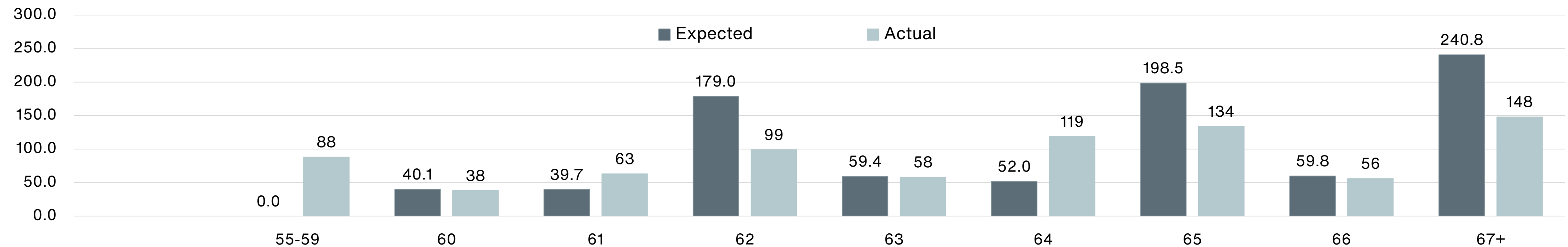
	January 1, 2023	January 1, 2024
<b>Pensioners and Survivors</b>		
Number	2,434	2,566
Average age	74.5	74.6
Average annual pension	\$ 33,419	\$ 35,105
Total annual pension	\$ 81,340,408 <sup>1</sup>	\$ 90,079,102 <sup>1</sup>
<b>Deferred Members: Eligible for COLA on All Service</b>		
Number	252	235
Average age	59.4	60.0
Average annual pension	\$ 8,957	\$ 9,020
<b>Deferred Members: Eligible for COLA on Pre-2008 Service</b>		
Number	152	145
Average age	51.8	52.6
Average annual pension	\$ 11,071	\$ 11,657
<b>Deferred Pensions: Not Eligible for COLA</b>		
Number	290	345
Average age	42.3	43.3
Average annual pension	\$ 4,918	\$ 5,652

<sup>1</sup> Does not reflect increase as of May 1, 2023 or 2024, as applicable

# Retirement Age Experience

The following chart compares the actual retirements in the period January 1, 2018 to December 31, 2023 to the retirements that would have been expected during the period based on the assumed retirement rates adopted at the January 1, 2020 valuation.

**Expected Compared to Actual Retirements from January 1, 2018 to December 31, 2023**



Ages	Expected	Actual
55-59	0.0	88
60	40.1	38
61	39.7	63
62	179.0	99
63	59.4	58
64	52.0	119
65	198.5	134
66	59.8	56
67+	240.8	148



# Mortality Rates

- Since January 1, 2020, the mortality table being used is 2014 Canadian Pensioners' Public Sector Mortality Table with Improvements Under Scale MI-2017, projected from 2014
- Following table shows actual versus expected deaths for members of the RPP for 2015 through 2023:

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Actual Deaths	51	57	53	62	61	74	68	87	73	586.0
Expected Deaths (2014 CPM Public Table with Improvements Under Scale MI-2017)	55.8	58.6	61.6	63.7	66.4	68.3	70.0	73.9	75.2	593.5

# Definition of Terms

Definition	
Accrued liability	The actuarial present value of the benefits earned by members in respect of their service prior to the valuation date. For active and disabled members, the accrued benefits reflect anticipated future salary increases. For pensioners, the accrued liability reflects the actuarial present value of future benefit payments.
Actuarial value of assets	The method for this valuation assumes the actuarial value of assets is set equal to the market value of assets.
Funding excess/(unfunded liability)	Amount by which the actuarial value of assets exceeds/(is less than) the accrued liability.
Funding reserve	The amount by which the market value of assets exceeds/(is less than) the actuarial value of assets.
Members' pensionable earnings	The covered earnings (see definition under "Plan Provisions") for active and disabled members accruing service at the valuation date.

# Definition of Terms

Definition	
Current service cost	The actuarial present value of the benefits expected to be earned by active and disabled members in respect of service during the year following the valuation date. The required member contributions are subtracted from the total current service cost to derive the University current service cost. For funding purposes, the University current service cost is expressed as a percentage of the required member contributions. This amount is also shown as a percentage of members' pensionable earnings.
Solvency liability	The actuarial present value of benefits earned for service prior to the valuation date, determined as if the Pension Plan were terminated on the valuation date. The solvency liability excludes liabilities for future escalated adjustments (indexation).
Wind up liability	Equal to the solvency liability, but including liabilities for future escalated adjustments.
Transfer ratio	The ratio of market value of assets to the wind up liability.

# Definition of Terms

Personnel Data	
Active members	Members contributing to the Pension Plan as of the valuation date. Includes both full-time and part-time members and members on a paid or unpaid leave of absence who have elected to pay their required member contributions.
Disabled members	Members who are certified to be totally disabled by a medical doctor and in receipt of disability income under the University's long-term disability income plan. Such members continue to accrue benefits but do not make the required member contributions.
Pensioners and surviving beneficiaries	Members who have retired as of the valuation date, or surviving beneficiaries of such members, and are in receipt of a pension from the trust fund.
Deferred vested members	Members who have terminated employment as of the valuation date and who are entitled to a monthly pension commencing at normal retirement date.
Suspended members	Members who have previously joined the Plan but elected to cease making further contributions to the Plan until age 35.

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**For Information**

**Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefits Committee

**From:** Sarah Willey-Thomas, Associate University Secretary

**RE:** **4. Pension**

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**c) Pension Risk Management Dashboard, Q4 2023**

**Background:**

Allan Shapira, Aon, will present the Pension Risk Management Dashboard for Q4 2023, presented for the Committee's information.

Members will recall that this report is provided quarterly to the Committee and is intended to track changes in the funded status of the Pension Plan and quantify risk to which the Pension Plan is exposed.

**Documentation Provided:**

- Pension Risk Management Dashboard, Q4 2023



# Pension Risk Management Dashboard

University of Waterloo

As of December 31, 2023



# About These Materials

This dashboard was prepared for the University of Waterloo to track changes in the 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 discount rate and inflation assumptions determined with reference to the risk-free environment. For this report, the liability has been determined using the real return bond yield plus a 40 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 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 all 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

## Over the Quarter:

- The fund had a rate of return after fees of 7.5%.
- Nominal risk-free rates decreased significantly.
- Inflation expectations implicit in the underlying bond yields decreased.

## As a Result:

- The going concern funded position improved from a \$96.8 million deficit to a \$45.9 million surplus over the quarter primarily due to better than expected asset performance, partly caused by decreases in bond yields and partly caused by significantly higher than expected returns on the plan's excess return seeking assets.
- The risk-free deficit increased from \$581.4 million to \$769.0 million over the quarter primarily due to a significant decrease in real return bond yields.
- The solvency surplus decreased from \$345.8 million to \$228.1 million over the quarter primarily due to a decrease in risk-free rates.

## Highlights (cont'd)

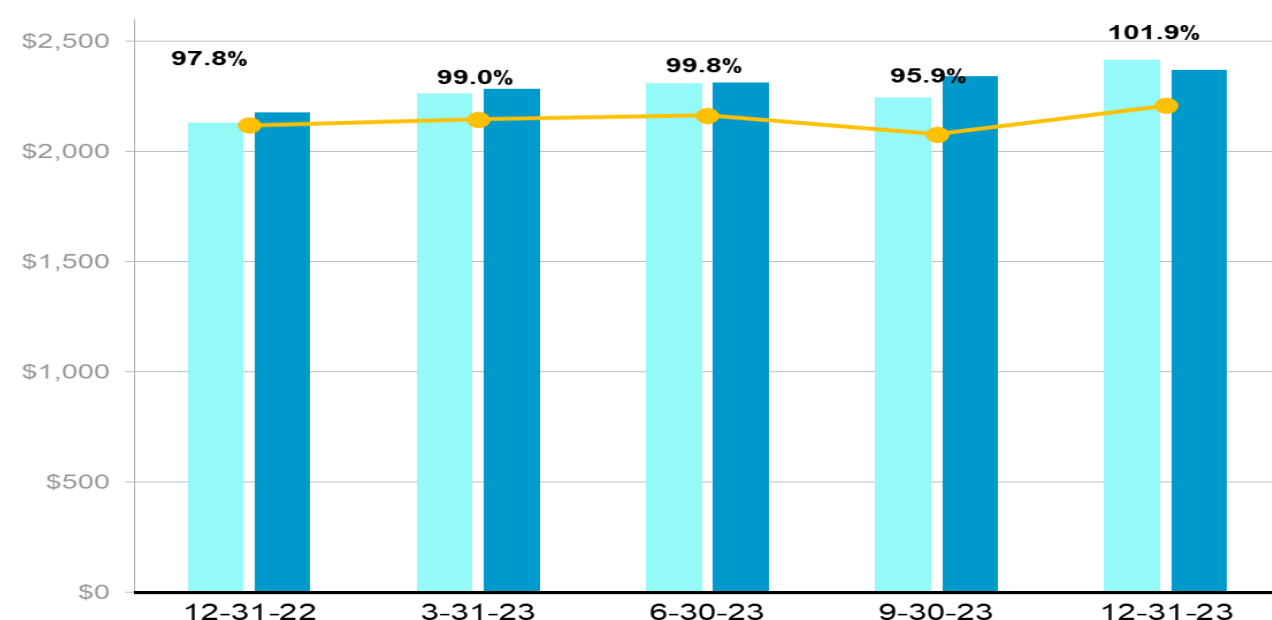
- The estimated December 31, 2023 liabilities are projected based on the results of the most recent actuarial valuation of the Plan as at January 1, 2023.
- The December 31, 2022 liabilities shown are based on the December 31, 2021 actuarial valuation projected forward.
- The annuity purchase guidance educational note for valuations on or after December 31, 2023 (published as of January 22, 2024) has been reflected in the interest rates used to calculate the December 31, 2023 Solvency liabilities.
- The estimated transfer ratio has not decreased by 10% or more over the period; no Regulation 19 filing is required.
- All figures are in \$1,000,000 (CAD).



# Executive Summary – Going Concern

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

## Funded Status



### Highlights for the Quarter-Ending 12/31/23

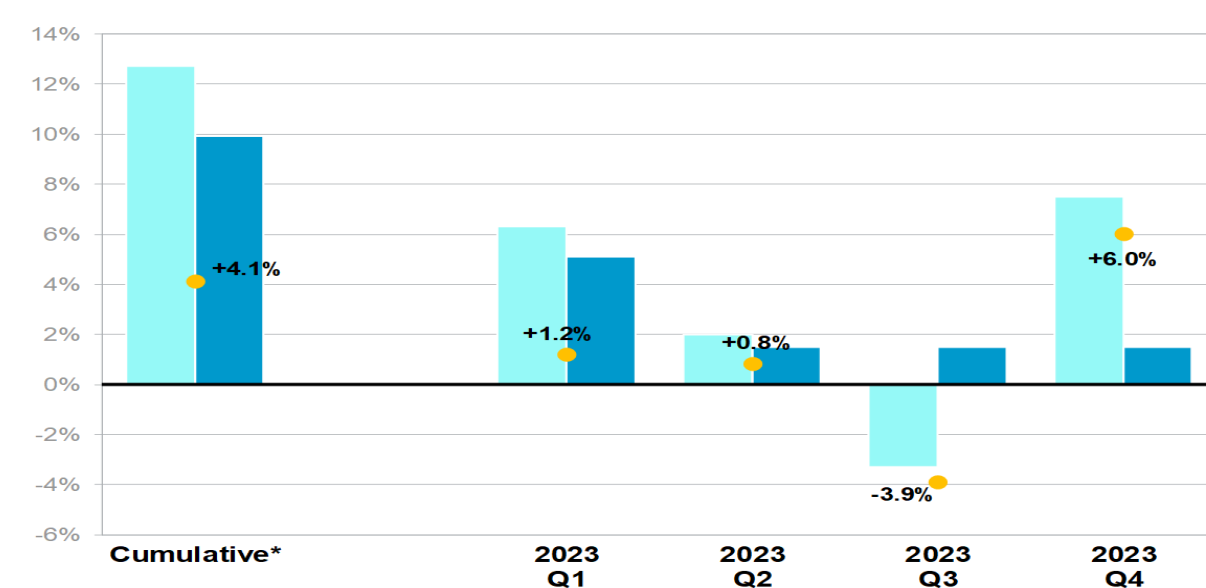
The plan's funded ratio increased to 101.9% at 12/31/23. This result was primarily due to the combined effects of:

- Asset performance better than expected;
- Contributions of \$30.6 million which exceeds the new benefit accruals.

	12/31/22	03/31/23	06/30/23	09/30/23	12/31/23*
Market Value of Assets	\$ 2,130.3	\$ 2,260.4	\$ 2,307.5	\$ 2,244.4	\$ 2,416.3
Going Concern Liability	2,177.8	2,284.2	2,312.5	2,341.2	2,370.4
Surplus/(Deficit)	\$ (47.5)	\$ (23.8)	\$ (5.0)	\$ (96.8)	\$ 45.9
Periodic Contributions	\$ 28.1	\$ 18.1	\$ 28.5	\$ 39.8	\$ 30.6*
Effective Interest Rate	6.25%	6.25%	6.25%	6.25%	6.25%
Funded Ratio:	97.8%	99.0%	99.8%	95.9%	101.9%
Interest rate sensitivity:					
Asset:	1.6	1.5	1.5	1.4	1.5
Going Concern Liability					
Duration:	13.2	13.2	13.2	13.2	13.2

\* Includes employee and University contributions to end of quarter; excludes investment manager and consulting expenses not yet invoiced

## Asset-Liability Return



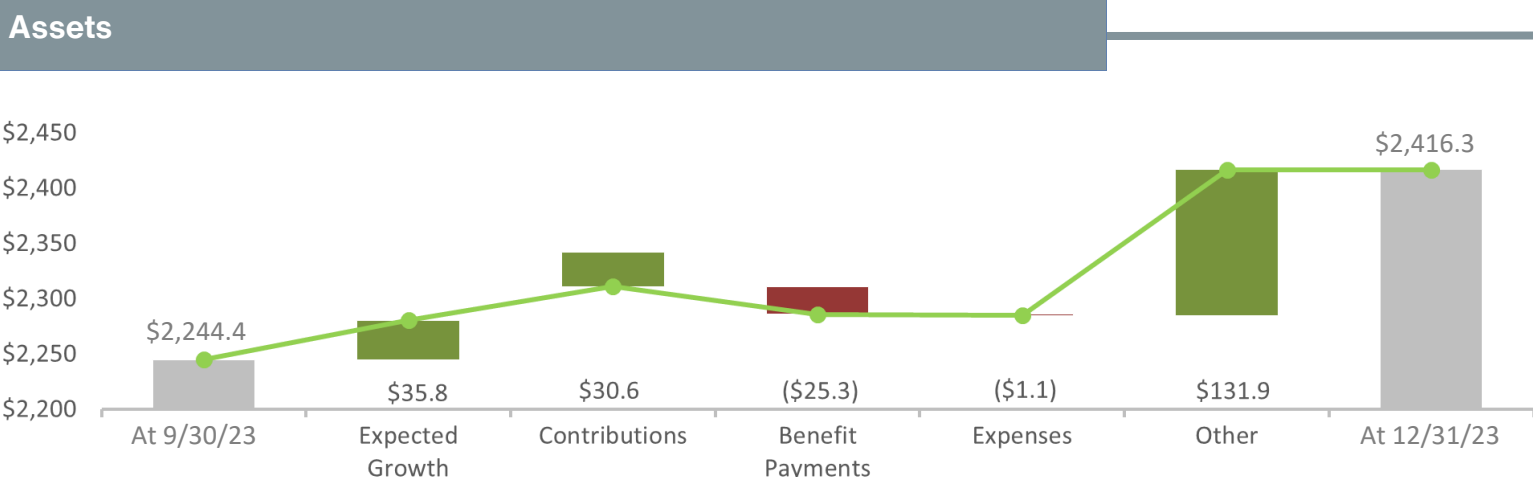
### Asset Liability Return for Quarter-Ending 12/31/23

Assets returned 7.5% during the quarter while liabilities returned 1.5%, resulting in a funded status increase of 6.0%.

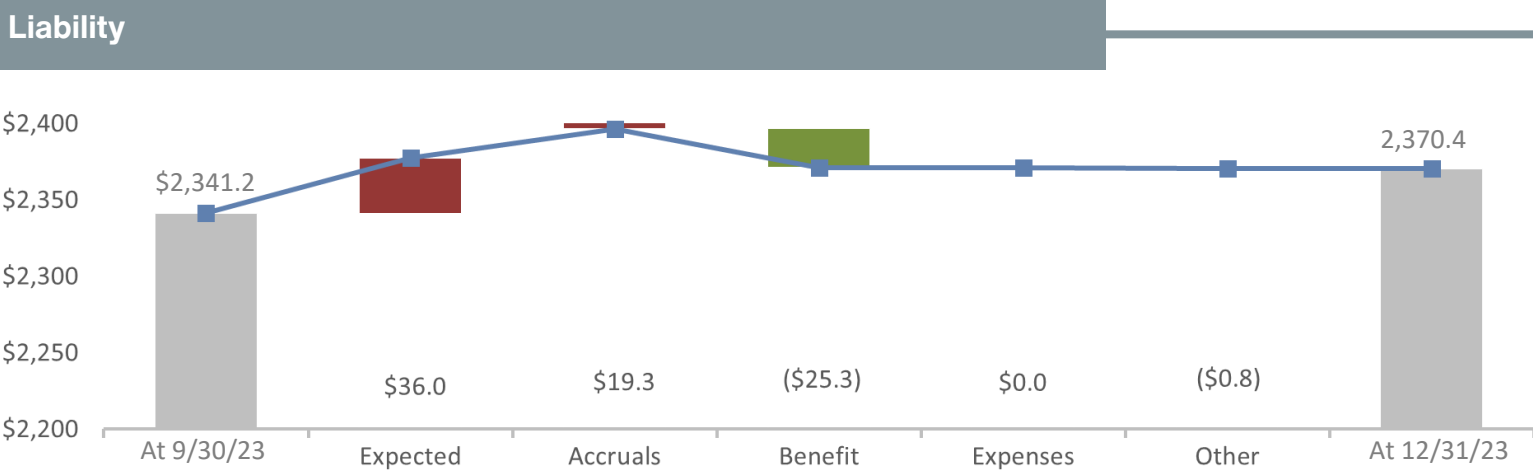
	Periodic Return/Change	Cumulative	3/31/23	6/30/23	9/30/23	12/31/23
Market Value of Assets	Return	12.7%	6.3%	2.0%	-3.3%	7.5%
Going Concern:	Return	9.9%	5.1%	1.5%	1.5%	1.5%
Funded Ratio Change		4.1%	1.2%	0.8%	-3.9%	6.0%

# Asset-Liability Performance Attribution – Going Concern

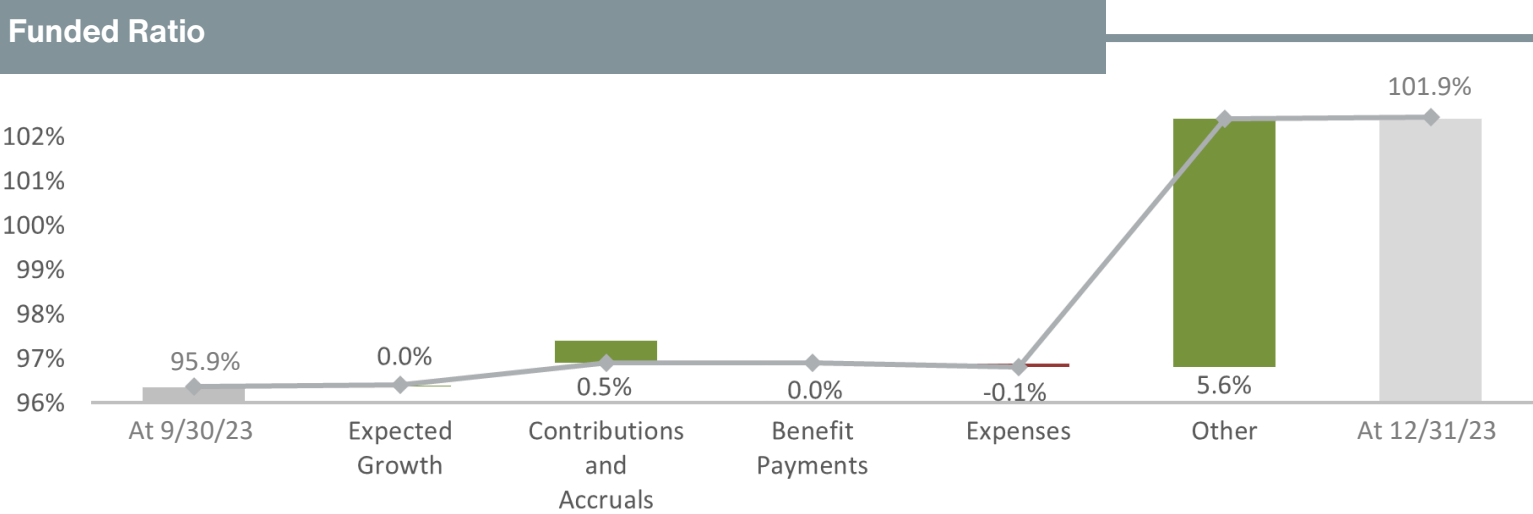
Values in \$1,000,000 (CAD)



- Overall, assets returned 7.5% during this quarter.
- The fixed income assets gained value due to a decrease in the underlying risk-free rates and narrowing credit spreads.
- The plan's return-seeking assets provided significantly higher returns than expected during the quarter.
- The University and members made \$30.6 million in contributions during the quarter and the trust paid \$25.3 million in benefits to the participants.
- “Other” represents the scale of the Plan’s asset outperformance relative to expectation.



- Liabilities were expected to grow by \$36.0 million due to interest cost during the quarter.
- New benefit accruals increased the liability by \$19.3 million during the quarter.
- Plan liabilities decreased by \$25.3 million during the quarter as benefits were paid.



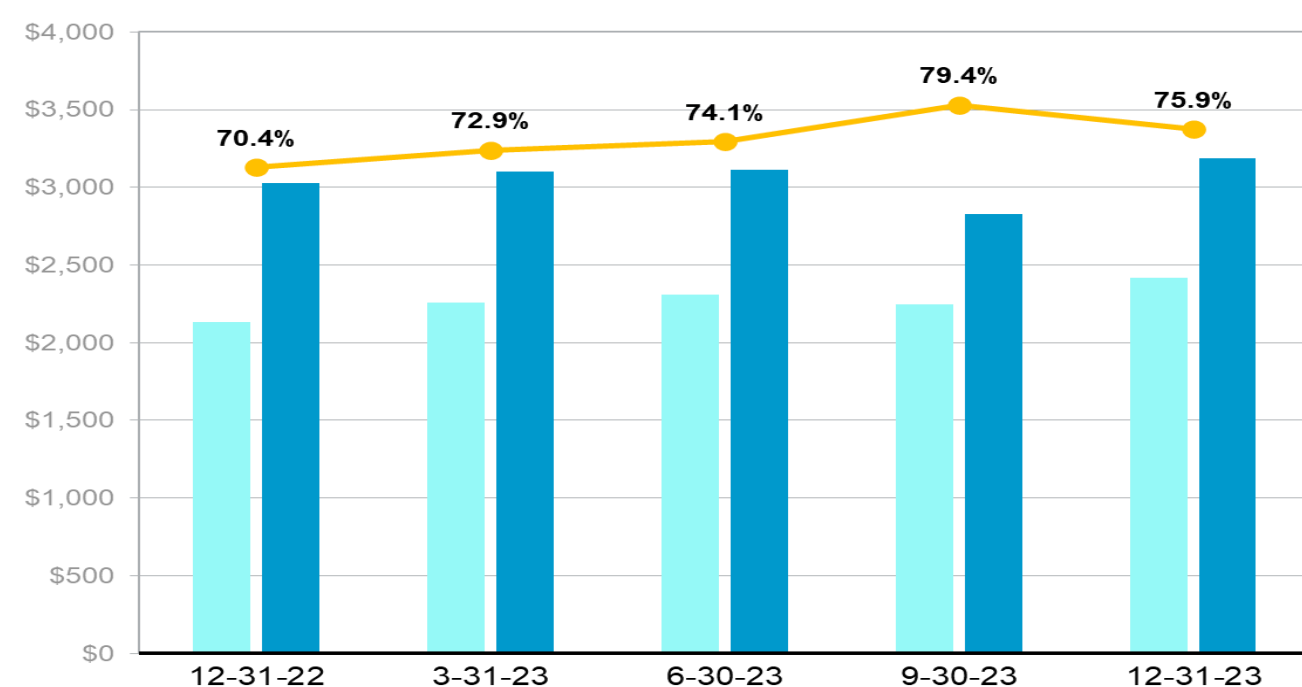
- Contributions exceeded the cost of new benefit accruals during the quarter, resulting in a net increase of 0.5% in the funded status.
- “Other” represents the impact of asset outperformance relative to the liabilities.



# Executive Summary – Risk Free

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

## Funded Status



### Highlights for the Quarter-Ending 12/31/23

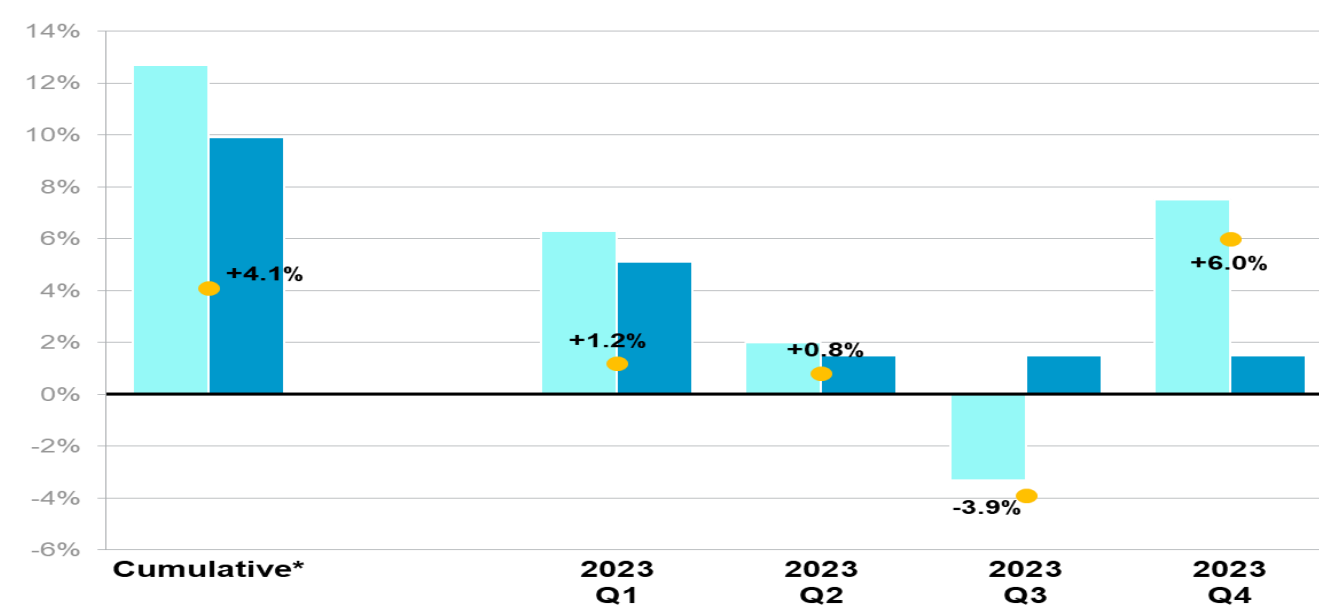
The plan's funded ratio decreased to 75.9% at 12/31/23. This result was primarily due to:

- A significant decrease in the net interest rate used to value liabilities, partially offset by
- Better than expected asset returns.

	12/31/22	3/31/23	6/30/23	9/30/23	12/31/23*
Market Value of Assets	\$ 2,130.3	\$ 2,260.4	\$ 2,307.5	\$ 2,244.4	\$ 2,416.3
Risk-Free Liability	3,025.9	3,100.7	3,112.8	2,825.8	3,185.3
Surplus/(Deficit)	\$ (895.6)	\$ (840.3)	\$ (805.3)	\$ (581.4)	\$ (769.0)
Periodic Contributions	\$ 28.1	\$ 18.8	\$ 28.5	\$ 39.8	\$ 30.6*
Discount Rate	1.59%	1.74%	1.79%	2.46%	1.80%
Funded Ratio: Assets/Risk-Free Liability	70.4%	72.9%	74.1%	79.4%	75.9%
Interest rate sensitivity:					
Assets:	1.6	1.5	1.5	1.5	1.5
Risk-Free Liability:	17.4	17.2	16.8	15.8	16.8

\* Includes employee and University contributions to end of quarter; excludes investment manager and consulting expenses not yet invoiced

## Asset-Liability Return



### Asset Liability Return for Quarter-Ending 12/31/23

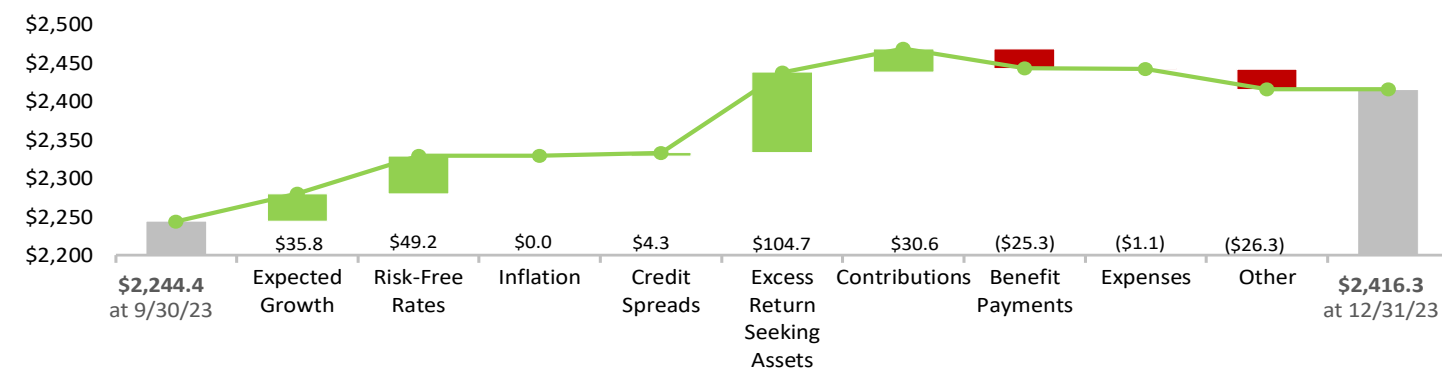
Assets returned 7.50% during the quarter while liabilities returned 12.5%, resulting in a funded status decrease of 3.5%.

Periodic Return/Change	Cumulative	3/31/23	6/30/23	9/30/23	12/31/23
Market Value of Assets Return	12.7%	6.3%	2.0%	-3.3%	7.5%
Risk-Free Liability: Return	4.1%	2.0%	0.1%	-9.4%	12.5%
Funded Ratio Change	5.5%	2.5%	1.2%	5.3%	-3.5%

# Asset-Liability Performance Attribution – Risk Free

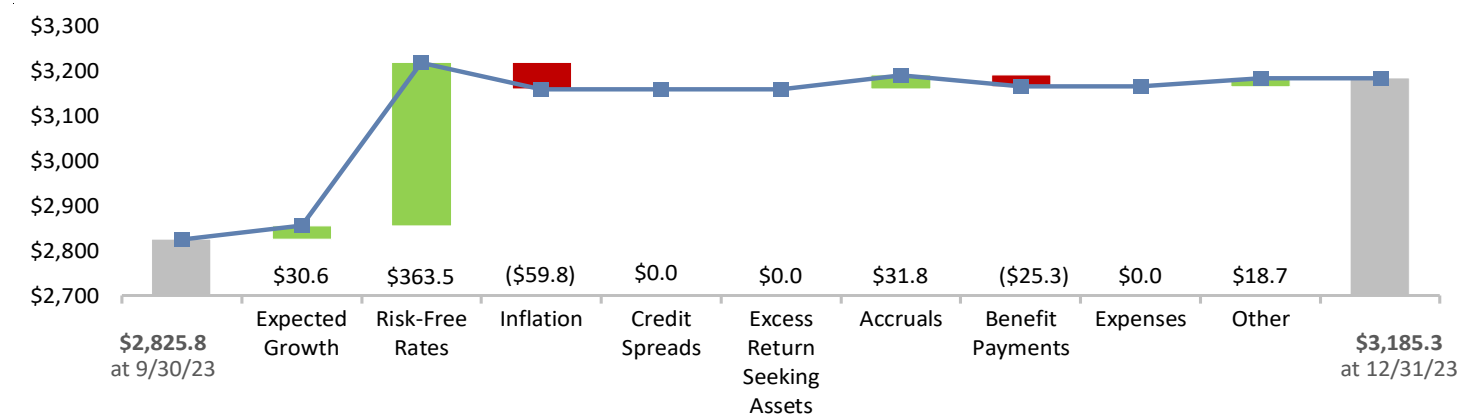
Values in \$1,000,000 (CAD)

## Assets



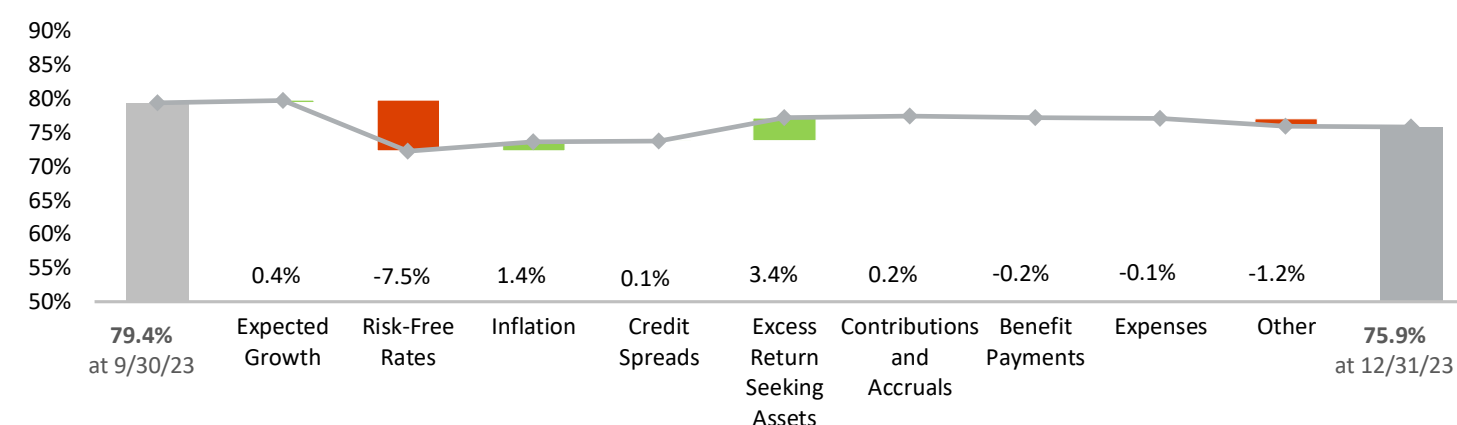
- Overall, assets returned 7.5% during this quarter.
- The fixed income assets gained value due to a decrease in the underlying risk-free rates and narrowing credit spreads.
- The plan's return-seeking assets performed significantly better than expected during the quarter.
- The University and members made \$30.6 million in contributions during the quarter and the trust paid \$25.3 million in benefits to the participants.
- "Other" includes the impact of active management, and differences between benchmark and actual investment allocations.

## Liability



- Liabilities were expected to grow by \$30.6 million due to the interest cost during the quarter.
- New benefit accruals increased the liability by \$31.8 million during the quarter.
- Plan liabilities decreased by \$25.3 million during the quarter as benefits were paid out.
- A decrease in risk-free rates led to a significant increase in the Plan's liabilities, although this was partially offset by a decrease in inflation expectations.

## Funded Ratio

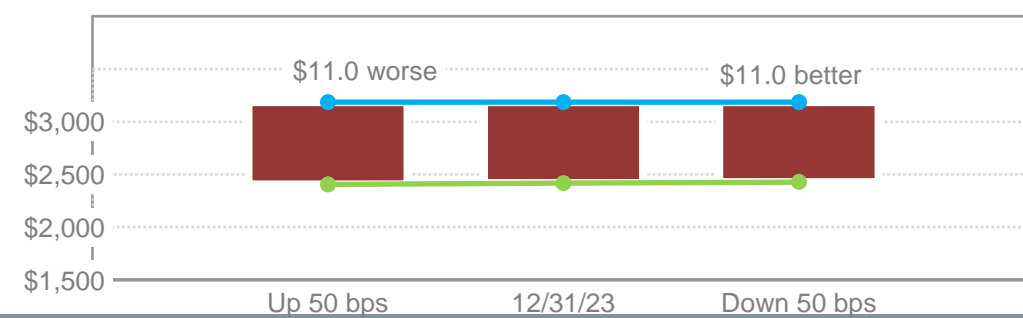


- The decrease in risk-free rates during the period, resulted in a decrease in the plan's funded status of 7.5%.
- The plan's return-seeking assets provided significantly higher returns than expected during the quarter, resulting in an increase of 3.4% in the plan's funded status during the period.
- A decrease in inflation expectations resulted in an increase of 1.4% in the plan's funded status during the period.

# Sensitivity Analysis – Risk Free Benchmark

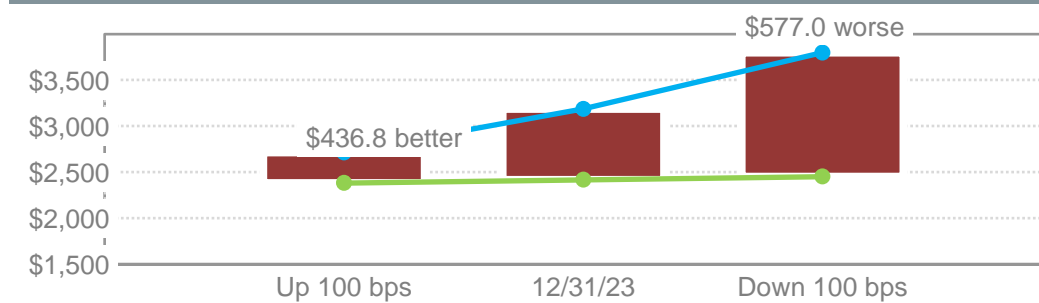
Values in \$1,000,000 (CAD)

## Credit Spreads



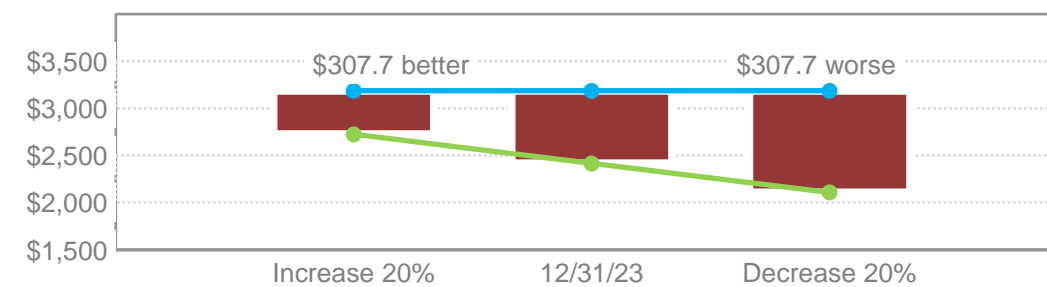
	Up 50bps	Current	Down 50bps
Market Value of Assets	\$2,405.3	\$2,416.3	\$2,427.3
Risk Free Liability	\$3,185.3	\$3,185.3	\$3,185.3
Surplus/(Deficit)	(\$780.0)	(\$769.0)	(\$758.0)
Change		(\$11.0)	\$11.0

## Risk Free Rates



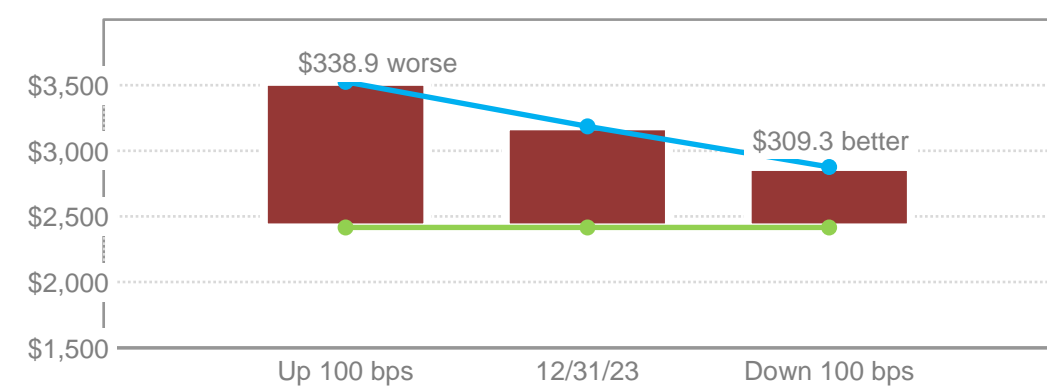
	Up 100bps	Current	Down 100bps
Market Value of Assets	\$2,381.8	\$2,416.3	\$2,451.3
Risk Free Liability	\$2,714.0	\$3,185.3	\$3,797.3
Surplus/(Deficit)	(\$332.2)	(\$769.0)	(\$1,346.0)
Change		\$436.8	(\$577.0)

## Return-Seeking Assets



	Increase 20%	Current	Decrease 20%
Market Value of Assets	\$2,724.0	\$2,416.3	\$2,108.6
Risk Free Liability	\$3,185.3	\$3,185.3	\$3,185.3
Surplus/(Deficit)	(\$461.3)	(\$769.0)	(\$1,076.7)
Change		\$307.7	(\$307.7)

## Inflation

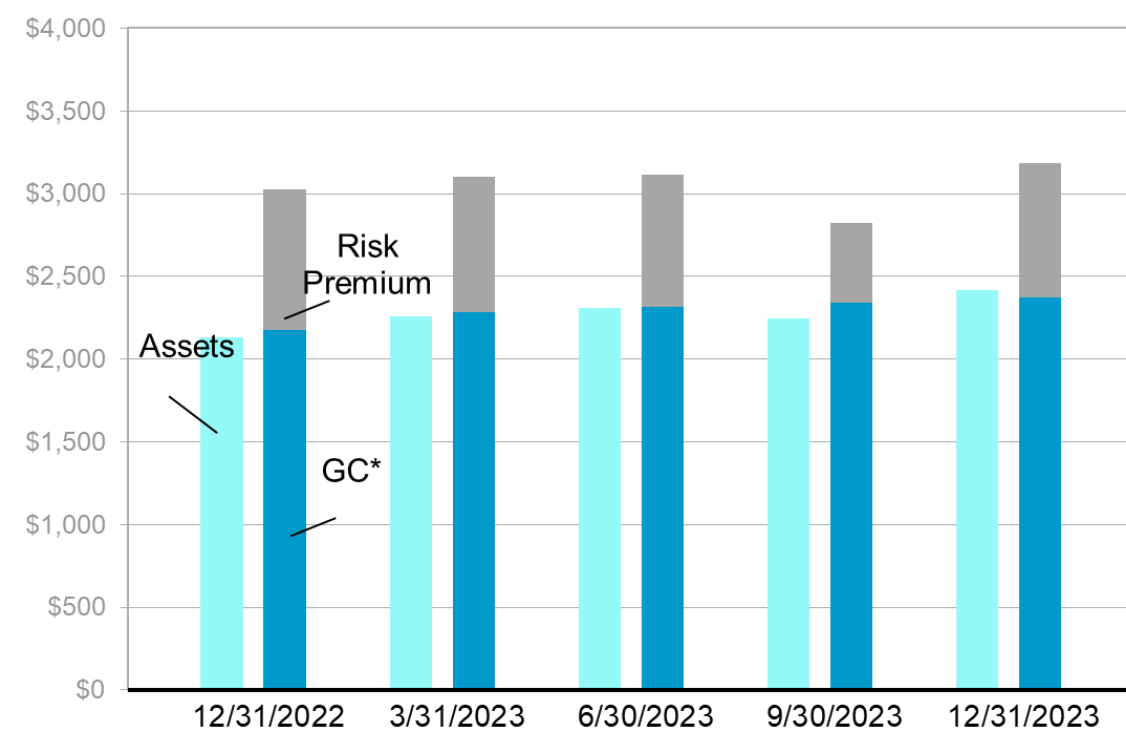


	Up 100bps	Inflation	Down 100bps
Market Value of Assets	\$2,416.3	\$2,416.3	\$2,416.3
Risk-Free Liability	\$3,524.2	\$3,185.3	\$2,876.0
Surplus/(Deficit)	(\$1,107.9)	(\$769.0)	(\$459.7)
Change		(\$338.9)	\$309.3

# Reconciliation of Risk-Free Benchmark and Going Concern Funded Status

## Funded Status

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



	12/31/22	03/31/23	06/30/23	09/30/23	12/31/23
Market Value of Assets	\$ 2,130.3	\$ 2,260.4	\$ 2,307.5	\$ 2,244.4	\$ 2,416.3
Going Concern Liability	\$ 2,177.8	\$ 2,284.2	\$ 2,312.5	\$ 2,341.2	\$ 2,370.4
Risk Premium	<u>848.1</u>	<u>816.5</u>	<u>800.3</u>	<u>484.6</u>	<u>814.9</u>
Risk-Free Liability	\$ 3,025.9	\$ 3,100.7	\$ 3,112.8	\$ 2,825.8	\$ 3,185.3

\* Going Concern

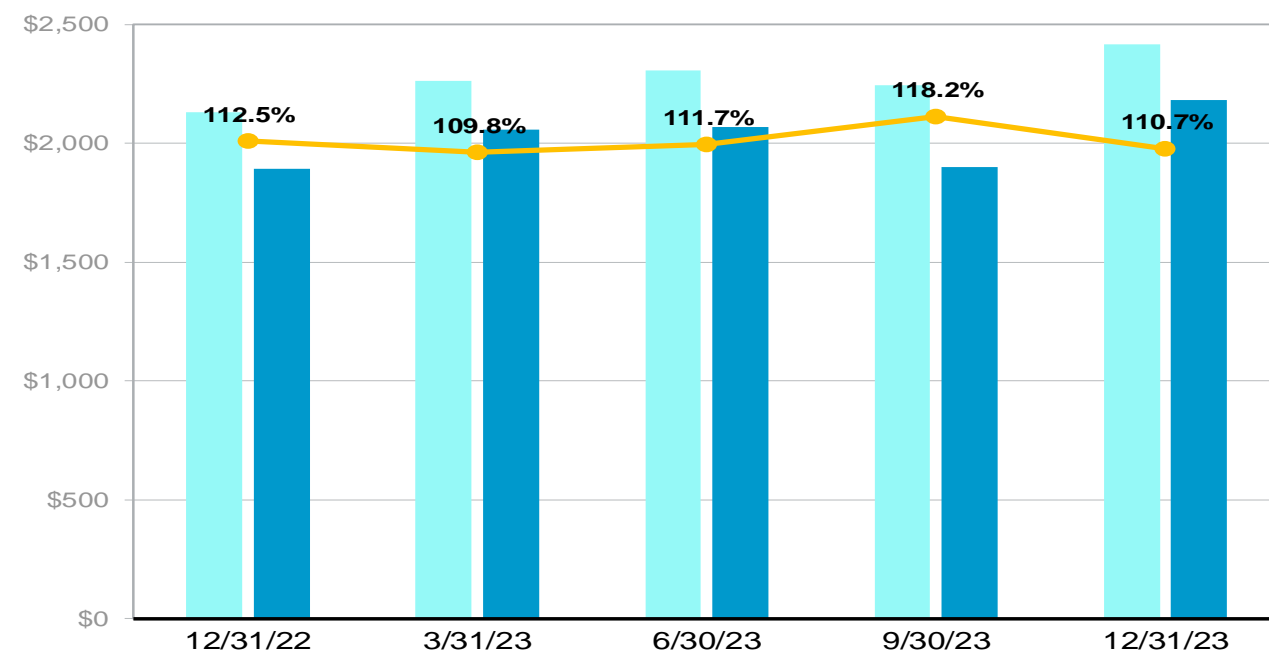
The difference between the Risk-Free Liability and the Going Concern Liability is a measure of the amount of risk premium on which the Pension Plan funding is based.



# Executive Summary – Solvency

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

## Funded Status



### Highlights for the Quarter-Ending 12/31/23

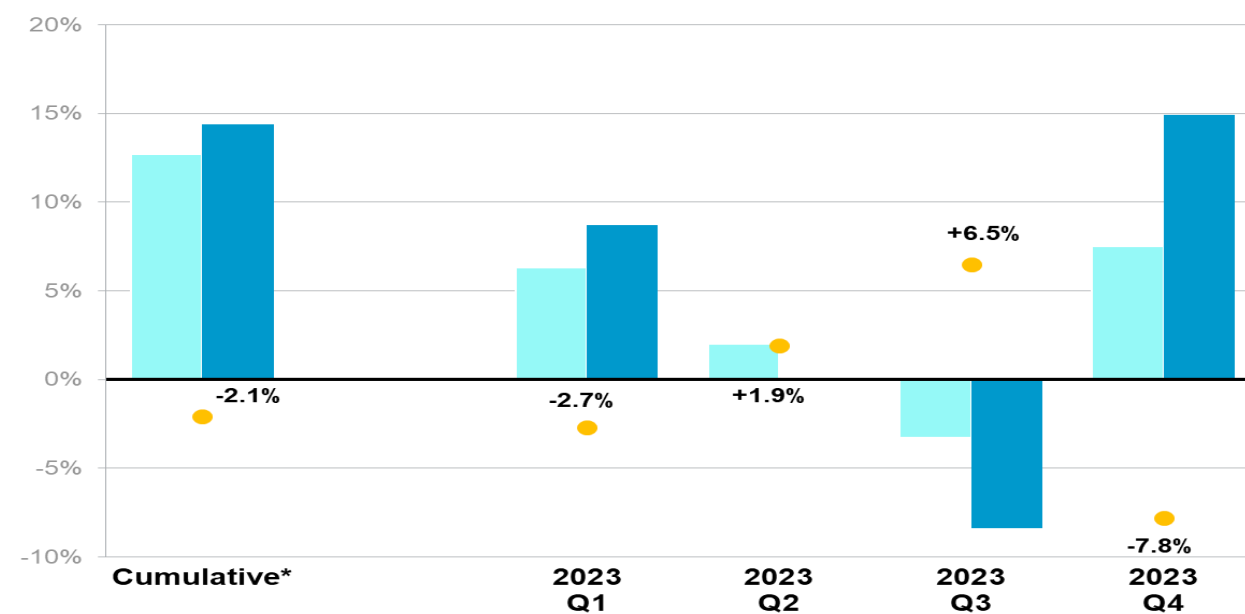
The plan's solvency ratio decreased to 110.7% at 12/31/23. This result was primarily due to the combined effects of:

- A significant decrease in the net interest rates used to value liabilities, partially offset by
- Better than expected asset returns.

	12/31/2022	03/31/2023	06/30/2023	09/30/2023	12/31/2023*
Market Value of Assets	\$ 2,130.3	\$ 2,260.4	\$ 2,307.5	\$ 2,244.4	\$ 2,416.3
Solvency Liability	1,893.5	2,057.8	2,066.0	1,898.6	2,188.2
Surplus/(Deficit)	\$ 236.8	\$ 202.6	\$ 241.5	\$ 345.8	\$ 228.1
Periodic Contributions	\$ 28.1	\$ 18.8	\$ 28.5	\$ 39.8	\$ 30.6
Effective Interest Rate	4.76%	4.52%	4.61%	5.44%	4.40%
Funded Ratio: Assets/Solvency Liability	112.5%	109.8%	111.7%	118.2%	110.7%
Interest rate sensitivity:					
Assets	1.6	1.5	1.5	1.5	1.5
Solvency Liability	12.4	12.6	12.6	11.7	12.8

\* Includes employee and University contributions to end of quarter; excludes investment manager and consulting expenses not yet invoiced

## Asset-Liability Return



### Asset Liability Return for Quarter-Ending 12/31/23

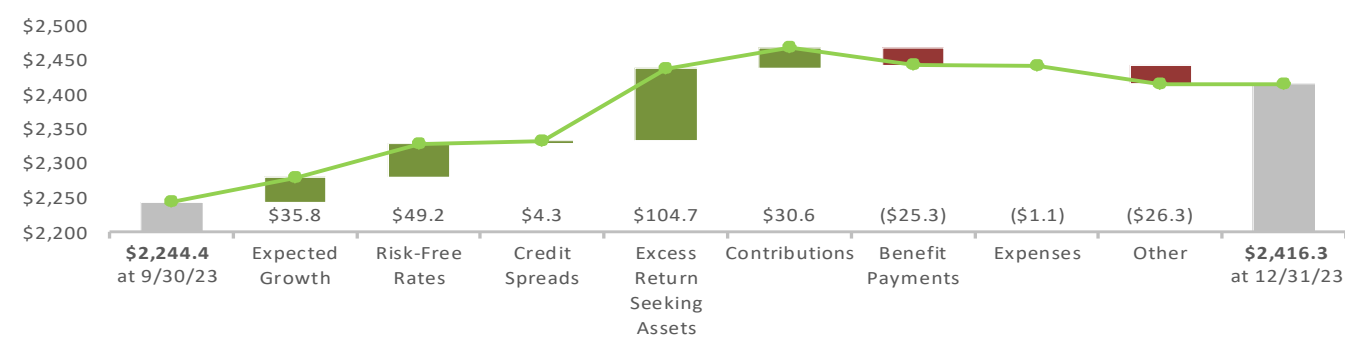
Assets returned 7.5% during the quarter while liabilities returned 14.9%, resulting in a funded status decrease of -7.8%.

Periodic Return/Change	Cumulative	03/31/23	06/30/23	09/30/23	12/31/23
Market Value of Assets Return	12.7%	6.3%	2.0%	-3.3%	7.5%
Solvency Liability:					
Return	14.4%	8.7%	0.0%	-8.4%	14.9%
Funded Ratio Change	-2.1%	-2.7%	1.9%	6.5%	-7.8%

# Asset-Liability Performance Attribution – Solvency

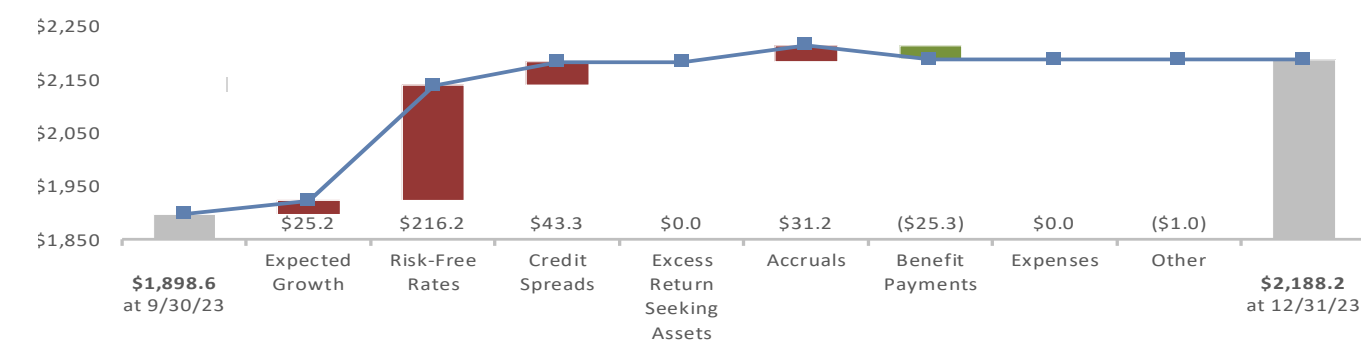
Values in \$1,000,000 (CAD)

## Assets



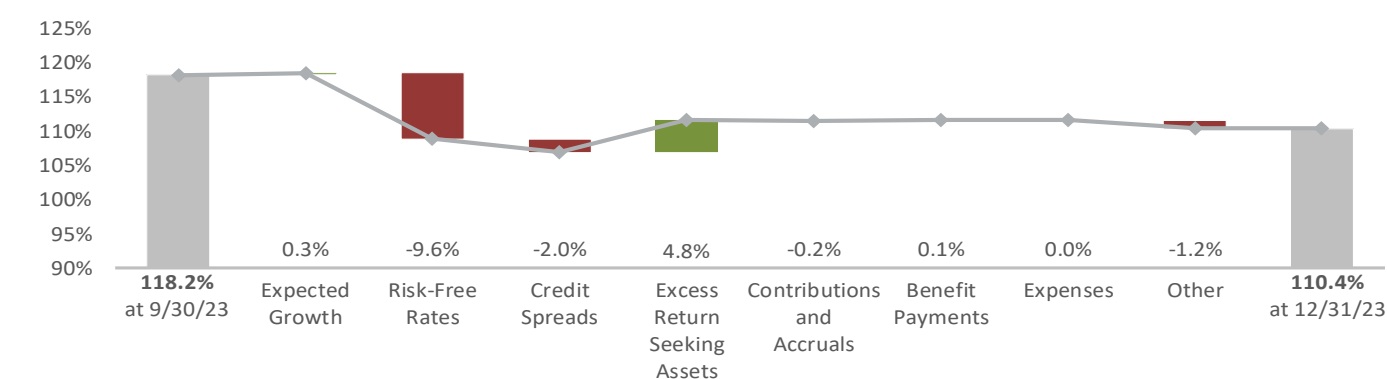
- Overall, assets returned 7.5% during this quarter.
- The fixed income assets gained value due to a decrease in the underlying interest rates and narrowing credit spreads.
- The plan's return-seeking assets performed significantly better than expected during the quarter.
- The University and members made \$30.6 million in contributions during the quarter and the trust paid \$25.3 million in benefits to the participants.
- “Other” includes the impact of active management, and differences between benchmark and actual investment allocations.

## Liability



- Liabilities were expected to grow by \$25.2 million due to interest cost during the quarter.
- Risk-free rates decreased, resulting in a net increase of \$216.2 million.
- New benefit accruals increased the liability by \$31.2 million during the quarter.
- Plan liabilities decreased by \$25.3 million during the quarter as benefits were paid out.

## Funded Ratio



- The difference in exposure to risk-free rates between assets and liabilities combined with changes in risk-free rates resulted in a decrease in funded status of 11.9%.
- Return-seeking assets performed in excess of expectations during the quarter, adding 4.8% to the plan's funded status during the period.

# Appendix



# Plan Provisions & Membership Data



The Plan provisions and membership data are outlined in the Actuarial Valuation as at January 1, 2023 for University of Waterloo Pension Plan Report, dated August 2023.

# Actuarial Methods & Assumptions

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

	12/31/22	03/31/23	06/30/23	09/30/23	12/31/23
<b>Going Concern</b>					
Discount Rate	6.25%	6.25%	6.25%	6.25%	6.25%
Inflation	2.00%	2.00%	2.00%	2.00%	2.00%
Salary Increase	3.00%/4.00% <sup>1</sup>	3.00%/4.00% <sup>1</sup>	3.00%/4.00% <sup>1</sup>	3.00%/4.00% <sup>1</sup>	3.00%/4.00% <sup>1</sup>
PfAD	9.00%	9.60%	9.60%	9.60%	9.60%
Mortality	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public
<b>Risk-Free Benchmark</b>					
Discount Rate (Net of inflation)	1.59%	1.74%	1.79%	2.46%	1.80%
<b>Solvency</b>					
Annuity Purchase Interest Rate	4.91%	4.63%	4.74%	5.48%	4.55%
Effective Date of Annuity Purchase Guidance Used	12/31/22	05/01/23	07/24/23	10/24/23	1/22/24
Lump Sum Value Interest Rate (Years 1-10) <sup>2</sup>	4.30%	4.10%	4.40%	5.30%	4.10%
Lump Sum Value Interest Rate (Years 10+) <sup>2</sup>	4.70%	4.50%	4.40%	5.10%	4.20%
Mortality <sup>3</sup>	CPM2014	CPM2014	CPM2014	CPM2014	CPM2014
<b>Underlying Canadian Reference Data</b>					
CANSIM v39054 (7 Year)	3.27%	2.86%	3.38%	4.11%	3.09%
CANSIM v39056 (30 Year Long Term)	3.28%	3.02%	3.09%	3.81%	3.02%
CANSIM v39057 (30 Year Real Return)	1.19%	1.34%	1.39%	2.06%	1.40%
CANSIM v39062 (Over 10 Years)	3.31%	3.03%	3.14%	3.88%	3.05%

<sup>1</sup> 3.00% per year for 1 year; 4.00% year thereafter

<sup>2</sup> 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).

<sup>3</sup> 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 Results presentation as of January 1, 2023. 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, 2023.**

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 permitted without the prior 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 2024

# Asset Allocation and Benchmarking

<b>Asset Class</b>	<b>12/31/23</b>
Alternatives	
• FTSE EPRA NAREIT DEVELOPED Total Return Index USD	2.9%
• MSCI USA Infrastructure Index	5.9%
Fixed Income	
• FTSE TMX Universe Bond Index	33.0%
International Equities	
• MSCI World Index	52.5%
• S&P TSX	5.7%
Total	100.0%

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**For Information**

**Open Session**

**Date of Meeting:** March 22, 2024  
**To:** Members, Pension & Benefits Committee  
**From:** Sarah Willey-Thomas, Associate University Secretary  
**RE:** **5) Governance**

---

**a) Annual Report to the Community**

Background:

In accordance with the Pension's [Fund Implementation Procedures \(1\)\(c\)\(viii\)](#), the Pension & Benefits Committee is required to report annually to Plan members.

Members will find enclosed a copy of the draft report for 2023. Members can provide feedback directly to the Secretariat or during the course of the meeting. A final report will be posted to the Secretariat's website for the University community's reference.

**Documentation Provided:**

- Draft Report to the Community 2023

## PENSION & BENEFITS COMMITTEE 2023 Report to the Community

This report provides an overview of issues addressed by the Pension & Benefits Committee for the calendar year (1 January 2023 – 31 December 2023). 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 (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 regularly (eight meetings during the calendar year). Meetings are open to the University community and agendas and minutes are available on the Committee's [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.

The Committee annually participates in governance activities related to Committee orientation, development of priorities for the next governance cycle and engages in a committee self-assessment.

### B. Benefits

**GreenShield.** The Committee received regular reports on the implementation of GreenShield throughout the year to ensure that the transition from Canada Life to GreenShield was as smooth as possible. The Committee also received a presentation from GreenShield with respect to various aspects of the benefits program.

The Committee recommended to the Board, which subsequently approved, the Family Building Benefit item, which revises coverage for in vitro fertilization treatments by removing exhaustion of the provincial coverage requirement; removing two-cycle limit for coverage (while maintaining \$30,000 maximum); and, extending eligibility to individuals who are acting as surrogates for members of the benefit plan.

**Homewood Health.** The Committee approved a new contract with Homewood Health to deliver the Employee and Family Assistance Program (EFAP) services after the EAP Committee and others from administration and participating Affiliated and Federated Institutions of Waterloo (AFIW) undertook a formal RFP process.

**Annual Work Plan Items.** In accordance with the annual work plan for the committee, the committee:

- Received reports on the benefits plan utilization rates and approved associated premium/budget rates; and
- Reviewed and approved a number of other items that occur annually according to plan provisions e.g. indexation of extended health and dental benefits maxima, life insurance for future retirees.

**C. Pension**

**31 December 2022 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 as of December 31, 2021.

P&B receives a presentation from the pension actuary annually on the actuarial valuation of the Registered Plan and based on this information makes recommendations including on the funding guideline and policy and filing the actuarial valuation with the pension regulator. The University continues to make additional contributions to the Registered Plan in order to achieve funding sustainability and lower contribution volatility.

**Pension Projection Tool.** The Committee approved amendments to the pension projection tool and language on the tool to provide for worst case scenario calculations when calculating early retirement.

**Pension Investment Committee.** The Committee received quarterly reports from the Pension Investment Committee (PIC) on pension fund investments, meetings with investment managers and other activities of PIC. The Committee recommended to the Board, which subsequently approved, a suite of changes to the Terms of Reference of the Pension Investment Committee, Pension & Benefits Committee, and Finance and Investment Committee to harmonize language and responsibilities. The Committee further recommended and the Board approved changes to the SIPP (Statement of Investment Policies and Procedures) and FIP (Fund Implementation Procedures), which included both strategic and compliance related changes. An annual review of the RIP (Responsible Investment Policy) was also undertaken.

**Education and Monitoring.** The Committee received 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 discussed implications for the University's pension plans and takes said information into account when making decisions on matters including plan design, funding and administration. The Committee received a series of education sessions, delivered by Aon, with respect to the University Pension Plan (UPP), and continues its education on this matter.

**Annual Work Plan Items.** In addition to the above, the committee:

- Reviewed and approved the audited pension fund financial statements for filing and that no adjustments to the financial statements were needed due to the audit;
- Reviewed and approved COLA increases to pensionable earnings of pensions in pay; individuals on long-term disability for the purpose of calculating pension entitlements, and to eligible deferred pensions;
- Reviewed the Carbon Disclosure report as it relates to the University's pension investments; and,
- Provided oversight to a number of other items that occur annually according to plan provisions, e.g. maximum annual contribution for 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](#).

*March 15, 2024*



**For Information**

**Open Session**

**Date of Meeting:** March 22, 2024  
**To:** Members, Pension & Benefits Committee  
**From:** Sarah Willey-Thomas, Associate University Secretary  
**RE:** **5. Governance**

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**b) Pension & Benefit Committee Planning for 2024-25**

Each year, each of the Board of Governor’s standing committees engage in a verbal discussion regarding planning and priorities for the coming governance year. Planning and priorities are identified within the larger context of the committee’s terms of reference and the committee’s annual work plan.

In anticipation of the 2024-25 governance cycle, the Secretariat will again be supporting the Committee’s planning discussions and introducing an annual Board Strategic Agenda Plan to further support and elevate this work. The Board Strategic Agenda Plan is intended to serve as a strategic view of priorities across the entirety of the Board and its committees. The Board Strategic Agenda Plan serves as a further iteration in the implementation of leading governance practices, including refreshed committee work plans, new committee orientation presentations, among other developments.

The Board Strategic Agenda Plan will aim to be both informed by the Board of Governors and administration to find synergies across priorities and to be strategic and forward-looking in approach. The Plan is intended to serve as a guiding document and is subject to change given emergent priorities.

Committee members are invited to provide their reflections on planning for 2024-25.

**Documentation Provided:**

- N/A



**For Decision**

**Open Session**

**Date of Meeting:** March 22, 2024  
**To:** Members, Pension & Benefits Committee  
**From:** Sarah Willey-Thomas, Associate University Secretary  
**RE:** **5. Governance**

---

**c) Amendments to Pension & Benefits Committee Terms of Reference**

**Background:**

With the addition of a new union group and collective agreement, the following language is proposed for the Membership Section of the Pension & Benefits Committee's terms of reference is included below:

"i. One member of the unionized staff appointed on the recommendation of the President of OPSEU"

**Recommendation:**

**That the Pension & Benefits Committee recommend that the Governance Committee and Board of Governors approve changes to the membership of the Pension & Benefits Committee to include one member appointed on the recommendation of the President of OPSEU.**

**Next steps:**

The proposed change will be considered by the Governance Committee with final approval resting with the Board of Governors.

**Documentation Provided:**

- Draft revisions to Pension & Benefits Committee Terms of Reference

# Pension & Benefits Committee - Terms of Reference

## 1. MEMBERSHIP

The membership of this Committee shall be appointed by the Board of Governors on the recommendation of the Governance Committee and shall consist of the following voting members:

- a. The Vice-President, Academic & Provost
- b. The Vice-President, Administration & Finance
- c. Two members of the Board of Governors from among the seventeen (17) Board members appointed by the Lieutenant Governor-in-Council or elected by the Board from the community-at-large
- d. Two members appointed on the recommendation of the President of the University of Waterloo
- e. Three members of the regular faculty appointed on the recommendation of the President of the University's Faculty Association
- f. Two members of the regular University Support Staff appointed on the recommendation of the President of the University's Staff Association
- g. One member of the unionized staff appointed on the recommendation of the President of CUPE Local 793
- h. One retiree who is receiving a University of Waterloo pension, appointed on the recommendation of the President of the University's Retirees Association

[i. One member of the unionized staff appointed on the recommendation of the President of OPSEU](#)

In addition, a non-voting member representing the Affiliated and Federated Institutions of Waterloo (AFIW) shall be appointed by the Board of Governors on the recommendation of the AFIW Heads.

The normal term of office shall be three years, renewable once.

The Chair of the Committee shall be appointed from among the external members of the committee by the Board of Governors on the recommendation of the Governance Committee.

## **2. MEETINGS**

The Committee will meet at least 4 times a year and may meet more often as necessary. Recent practice has been to meet monthly from September to March, and in May and June.

## **3. TERMS OF REFERENCE**

The Committee shall have full power to administer employee pension and benefits plans approved by the Board, such power to include, but not limited to, the following:

### **Pension Plan Administration**

- a. To make and enforce such rules and regulations as it shall deem necessary for the effective and efficient administration of the pension plan under the relevant legislation and regulations and to decide all questions concerning the pension plan, including who is eligible to participate. The Committee delegates day-to-day responsibility for the administration of the pension and benefits plans to Human Resources of the University.
- b. To prepare accounts and records showing the detailed operation of the pension plan and to make an annual report to the Board of Governors.
- c. To review the annual audit of the Pension Plan Fund Financial Statements.
- d. To appoint a consulting actuary and to commission research on pension or benefits.
- e. To recommend changes in pension and benefits plans to keep them current with respect to other universities and major employers, being mindful of the financial context in which the University operates.
- f. To make policy decisions relevant to administration of benefits plans and to periodically adjust plans as required to comply with legislation, changes in medical fee schedules, changes in insurance premiums due to changing experience ratings or other causes, creation of new categories of employees and other such changes required to keep benefit plans current.
- g. To recommend to the Board the appointment of custodians / trustees and fund managers

### **Oversight of pension investments**

- h. To recommend to the Board of Governors the investment policy for pension assets as described in the Statement of Investment Policy and Procedures (SIPP) and to approve the Fund Implementation Procedures (FIP), both on the recommendation of the Pension Investment Committee.



i. To approve on behalf of the Board of Governors the approval/termination of external fund managers/mandates for the pension fund investments, on the recommendation of the Pension Investment Committee.

j. To exercise oversight and responsibility for compliance with Board-approved Responsible Investment Policy for funds/investments falling within the committee's authority, with delegation for this activity to the Pension Investment Committee

k. To approve asset mix changes and investment decisions in compliance with the SIPP and FIP amongst the approved managers/mandates where the cumulative annual transaction(s) represents greater than 20% of the Plan's total assets at the beginning of the calendar year, upon the recommendation of the Pension Investment Committee, with review and advice from the Finance & Investment Committee

### **Reporting and Liaison**

l. To review, at least annually, the adequacy of the Committee's terms of reference as well as those of the Pension Investment Committee, in consultation with the chairs of the Finance & Investment Committee and the Pension Investment Committee, and to propose any needed amendments to the Governance Committee.

m. The chair is to meet, at least annually, with the chairs of the Finance & Investment Committee and the Pension Investment Committee to ensure efficiency and effectiveness of investment governance.

## **4. GENERAL PROVISIONS**

Members of the Committee may participate in the benefits under the pension plan provided they are otherwise eligible to do so. Except as otherwise provided by the Board of Governors of the University, no member of the Committee shall receive any compensation for services. No bond or other security shall be required of any member of the Committee in such capacity in any jurisdiction, except as expressly required by law.

In administering the pension plan neither the Committee, or any member thereof, nor the Board of Governors of the University, or any member thereof, nor the University, or any officer or employee thereof, shall be liable for any acts of omission or commission, except for his/her or its own individual, willful and intentional malfeasance or misfeasance. The University and its officers and directors, and each member of the Committee shall be entitled to rely conclusively on all tables, valuations, certificates, opinions and reports which shall be furnished by any actuary, accountant, trustee, counsel or other expert who shall be employed or engaged by the University or the Committee.

Whenever, in the administration of the pension plan, any action by the Committee or the University is required, such action shall be uniform in nature as applied to all persons similarly situated.

*Approved by the Board of Governors, June 6, 2006.*

*Amended by the Board of Governors, April 1, 2008.*

*Amended by the Board of Governors, October 30, 2018.*

*Amended by the Board of Governors, April 4, 2023.*

**For Information****Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefits Committee

**From:** Sarah Willey-Thomas, Associate University Secretary

**RE:** **6) Other Business**

---

**a) Execution Against Work Plan**

Sarah Willey-Thomas will provide an overview of the Committee Work Plan.

Members will recall that the work plan is an iterative document which is supplied for the Committee's information and reference at each Committee meeting.

**Documentation Provided:**

- 2023/24 Pension & Benefits Committee Work Plan

**2023-2024 Pension & Benefits Committee Work Plan**

<b>Pension &amp; Benefits Committee Agenda Items</b>	<b>19 May 2023</b>	<b>16 June 2023</b>	<b>15 September 2023</b>	<b>13 October 2023</b>	<b>17 November 2023</b>	<b>8 December 2023</b>	<b>19 January 2024</b>	<b>16 February 2024</b>	<b>22 March 2024</b>
• expected *as needed/available									
<b>OPEN SESSION</b>									
Execution against Audit Committee Work Plan – Consent Agenda	■	■	■	■	■	■	■	■	■
Minutes of the Previous Meeting – Consent Agenda				■	■	■	■	■	■
Budget Overview	■								
<b>Finance</b>									
Previous Years’ Fees and Expenses	■								
Annual Audit of the Pension Plan Fund Financial Statements	■								
Carbon Metrics Reporting	■								
Summary of Total Fund Investment Performance	■		■		■			■	
Statement of Investment Policies and Procedure and Fund Implementation Procedures; Pension Statement SIPP						■			
<b>Actuarial Consultants</b>									
Pension Risk Management Dashboard (Quarterly)	■		■		■			■	
Approval of Actuarial Valuation Assumptions							■		
RPP Actuarial Valuation, decision on filing									■
Review of RPP Contribution and Protocol Caps						■			
<b>Human Resources</b>									
Extended Health & Dental Benefits – Indexation of Maxima effective January 1					■				
Retiree Life Insurance – Indexation of Coverage effective January 1					■				
Annual Benefits Utilization Report					■				
NEW: Annual Plan Design Review					■				
Maximum Pension Limits and Caps Adjustments, Based on Average Industrial Wage Increase (AIW)						■			
Cost of Living Adjustments <ul style="list-style-type: none"> <li>• Pensions in Pay</li> <li>• Deferred Pensions</li> <li>• Pensionable Earnings for Members on LTD</li> </ul>								■	

<sup>1</sup> Annual, as required

<sup>2</sup> Note Committee approved threshold

<sup>3</sup> Completed every five years

Group Benefits Program – Annual Renewal <ul style="list-style-type: none"> <li>Life Insurance – Premium Rate</li> <li>Long Term Disability <ul style="list-style-type: none"> <li>Premium Rate</li> <li>Maximum Insured Salary (Indexation)</li> </ul> </li> <li>Healthcare Benefits – ASO Fees/Charges</li> <li>Healthcare Benefits – Budget Rates</li> </ul>									■
<b>Governance</b>									
Review of Committee Terms of Reference		■							
Annual Report to the Community								■	
Annual Committee Self Assessment									■
Committee Priorities									■
<b>CONFIDENTIAL SESSION</b>									
Minutes of the Previous Meeting	■	■	■	■	■	■	■	■	■
Other Business	*	*	*	*	*	*	*	*	*
<b>IN CAMERA SESSION</b>									
Minutes of the Previous Meeting and Business Arising	■	■	■	■	■	■	■	■	■
Other Business	*	*	*	*	*	*	*	*	*

Special Topics for 2023-2024 to be Scheduled:

- Reports from Pension Investment Committee (PIC)
  - New or terminating investment managers (as the need arises)
  - Appointment of investment consultant
- Responsible Investment Policy (recommendation to Board)

**For more information:**

[uwaterloo.ca/secretariat](http://uwaterloo.ca/secretariat)

[board@uwaterloo.ca](mailto:board@uwaterloo.ca)

NH 3060

<sup>1</sup> Annual, as required

<sup>2</sup> Note Committee approved threshold

<sup>3</sup> Completed every five years

**For Information**

**Open Session**

**Date of Meeting:** March 22, 2024

**To:** Members, Pension & Benefist Committee

**From:** Aubrey Basdeo, Chair, Pension Investment Committee

**RE:** **Pension Investment Committee – Report from the Chair**

---

**Background:**

In accordance with the [Terms of Reference for the Committee](#), the Pension Investment Committee is a subcommittee of the Pension & Benefits Committee that is mandated to oversee the investment of the assets of the University of Waterloo Pension Plan .

Additional information about the Committee can be found on the [Secretariat website](#).

**Key Items**

At its meeting held March 5, 2024, the Pension Investment Committee discussed the following in confidential session:

*Quarterly Reports and Dashboards*

The Committee received a pension risk management dashboard prepared by Aon , for Q4 of 2023, which is also provided to the Pension & Benefits Committee.

*Key Highlights:*

- The going concern funded position improved from a \$96.8 million deficit to a \$45.9 million surplus over the quarter primarily due to better than expected asset performance, partly caused by decreases in bond yields and partly caused by significantly higher than expected returns on the plan's excess return seeking assets
- The solvency surplus decreased from \$345.8 million to \$228.1 million over the quarter primarily due to a decrease in risk-free rates

The Committee received an investment performance review prepared by Eckler for Q4 of 2023; the executive summary from this reporting is attached.

*Key Highlights:*

- The Pension Plan returned 7.4% over the quarter, underperforming the benchmark return of 8.6% by 1.2%, ranking in 2<sup>nd</sup> quartile of the Eckler Balanced Fund Universe.
- The Pension Plan has underperformed its benchmark over the 4 and 5-year periods ending December 31, 2023.



#### *Presentations from Investment Managers*

The Committee received presentations from two investment managers, IFM and CBRE. The pension infrastructure investment with IFM took place in Q4 of 2023. The pension has a capital commitment to a real estate investment with CBRE and this capital will be called and the investment made in the near future. The Committee is scheduled to have one or two presentations from managers at each meeting. The presentations from the investment managers included reviews of historical performance, investment decision making process, including incorporation of ESG factors, and market outlook.

Generally, the Committee remains committed to the current strategy and will continue to monitor performance of all investment portfolios.

#### *Fixed Income Investment Manager Search Working Group Update*

The Working Group reviewed a long list of potential private credit investment managers for consideration. Members will continue this working in the coming weeks.

Members also continued the review of the transition to long bonds from universe bonds.

# Performance Summary

Fund	Gross Rate Of Return (%) as of December 31, 2023 and Percentile Rank													
	MRQ		YTD		1 Year		2 Years		3 Years		4 Years		5 Years	
<b>Total Fund</b>	<b>7.4</b>	<b>44</b>	<b>12.6</b>	<b>11</b>	<b>12.6</b>	<b>11</b>	<b>0.1</b>	<b>83</b>	<b>4.1</b>	<b>80</b>	<b>4.9</b>	<b>89</b>	<b>6.7</b>	<b>91</b>
Total Fund Benchmark <sup>1</sup>	8.6	14	12.2	15	12.2	15	0.0	84	4.1	77	5.1	88	7.2	81
CPI + 3.5% <sup>2</sup>	0.7	100	7.0	99	7.0	99	8.5	1	8.5	1	7.5	6	7.2	82
Value Added (Total Fund Benchmark)	-1.2		0.4		0.4		0.1		0.0		-0.2		-0.5	
Value Added (CPI + 3.5%)	6.7		5.6		5.6		-8.4		-4.4		-2.6		-0.5	
<b>Canadian Equities</b>	<b>8.1</b>	<b>37</b>	<b>11.8</b>	<b>34</b>	<b>11.8</b>	<b>34</b>	<b>2.6</b>	<b>77</b>	<b>9.6</b>	<b>75</b>	<b>6.4</b>	<b>100</b>	<b>8.7</b>	<b>100</b>
TD Emerald Canadian Equity Index <sup>3</sup>	8.1	37	11.8	34	11.8	34	2.6	77	9.6	75	8.6	69	11.3	50
S&P/TSX Composite Index	8.1	37	11.8	34	11.8	34	2.6	78	9.6	76	8.6	69	11.3	50
Value Added	0.0		0.0		0.0		0.0		0.0		0.0		0.0	
<b>U.S. Equities</b>														
TD Emerald Pooled U.S. Fund	8.8	57	22.8	50	22.8	50	3.9	54	11.2	39	12.5	43	14.8	43
S&P 500 (\$C)	8.9	53	22.9	49	22.9	49	3.9	54	11.3	38	12.5	42	14.9	42
Value Added	-0.1		-0.1		-0.1		0.0		-0.1		0.0		-0.1	
<b>Global Equities</b>	<b>9.1</b>	<b>24</b>	<b>17.7</b>	<b>41</b>	<b>17.7</b>	<b>41</b>	<b>0.3</b>	<b>73</b>	<b>5.9</b>	<b>60</b>	<b>6.7</b>	<b>85</b>	<b>9.1</b>	<b>82</b>
Global Equity Benchmark <sup>6</sup>	8.3	45	18.9	34	18.9	34	2.0	60	7.2	50	8.8	45	11.2	47
Value Added	0.8		-1.2		-1.2		-1.7		-1.3		-2.1		-2.1	
<b>Walter Scott Global Equity</b>	<b>9.3</b>	<b>20</b>	<b>20.0</b>	<b>26</b>	<b>20.0</b>	<b>26</b>	<b>2.2</b>	<b>58</b>	<b>7.3</b>	<b>49</b>	<b>10.0</b>	<b>26</b>	<b>12.6</b>	<b>24</b>
MSCI World Index	8.7	36	20.5	23	20.5	23	2.8	40	8.5	35	9.8	27	12.0	31
Value Added	0.6		-0.5		-0.5		-0.6		-1.2		0.2		0.6	
<b>RBC Global Focus Equity<sup>4</sup></b>	<b>7.7</b>	<b>57</b>	<b>8.6</b>	<b>97</b>	<b>8.6</b>	<b>97</b>	<b>-6.4</b>	<b>97</b>	<b>1.3</b>	<b>89</b>	<b>7.0</b>	<b>76</b>	<b>10.6</b>	<b>58</b>
<b>Mirova Global Sustainable Equity<sup>4</sup></b>	<b>9.1</b>	<b>23</b>	<b>15.8</b>	<b>60</b>	<b>15.8</b>	<b>60</b>	<b>-1.5</b>	<b>79</b>	<b>4.6</b>	<b>71</b>	<b>10.8</b>	<b>10</b>	<b>13.8</b>	<b>11</b>
MSCI ACWI (Net)	8.3	45	18.9	34	18.9	34	2.0	60	7.0	52	8.7	48	10.9	50
Value Added (RBC Global Focus Equity)	-0.6		-10.3		-10.3		-8.4		-5.7		-1.7		-0.3	
Value Added (Mirova Global Sustainable Equity)	0.8		-3.1		-3.1		-3.5		-2.4		2.1		2.9	

Please refer to Appendix A for applicable notes.



# Performance Summary

Fund	Gross Rate Of Return (%) as of December 31, 2023 and Percentile Rank													
	MRQ		YTD		1 Year		2 Years		3 Years		4 Years		5 Years	
<b>International Equities</b>														
<b>TD Emerald International Equity Index</b>	7.7	38	15.1	35	15.1	35	2.8	34	5.3	34	5.4	54	7.5	63
MSCI EAFE (Net)	7.7	38	15.1	35	15.1	35	2.8	34	5.2	35	5.4	54	7.4	67
Value Added	0.0		0.0		0.0		0.0		0.1		0.0		0.1	
<b>Fixed Income</b>	6.4	100	6.7	97	6.7	97	-0.9	1	-1.1	1	0.9	7	1.9	54
<b>TDAM Universe Bond Index</b>	8.2	85	6.7	98	6.7	98	-2.9	88	-2.8	97	-0.1	100	1.2	100
FTSE Canada Universe Bond	8.3	84	6.7	97	6.7	97	-2.9	88	-2.8	96	-0.1	100	1.3	100
Value Added	-0.1		0.0		0.0		0.0		0.0		0.0		-0.1	
<b>TDAM Active Short Term Corporate</b>	4.9	100	6.7	97	6.7	97	1.0	1	0.5	1	1.9	1	2.4	2
FTSE Canada Short Term Corporate Bond	4.8	100	6.7	97	6.7	97	1.0	1	0.5	1	1.9	1	2.4	2
Value Added	0.1		0.0		0.0		0.0		0.0		0.0		0.0	
<b>Real Estate<sup>5</sup></b>														
<b>iShares S&amp;P/TSX Capped REIT Index ETF</b>	8.9	--	1.8	--	1.8	--	-8.3	--	4.1	--	-0.6	--	3.5	--
FTSE EPRA Nareit Developed	12.7	--	7.9	--	7.9	--	-6.5	--	3.3	--	-0.1	--	3.1	--
Value Added	-3.8		-6.1		-6.1		-1.8		0.8		-0.5		0.4	
<b>Infrastructure<sup>5</sup></b>														
<b>IFM Global Infrastructure Fund</b>	2.7	--	8.0	--	8.0	--	9.2	--	11.4	--	9.3	--	9.9	--
<b>Brookfield Infrastructure Partners L.P. (BIP.UN)</b>	6.1	--	4.4	--	4.4	--	-5.4	--	3.1	--	6.6	--	13.4	--
<b>Brookfield Renewable (BEP.UN)</b>	19.5	--	6.8	--	6.8	--								
FTSE Global Core Infrastructure 50/50 Index	8.4	--	0.3	--	0.3	--	1.6	--	5.8	--	3.0	--	6.1	--
Value Added (IFM Global Infrastructure Fund)	-5.7		7.7		7.7		7.6		5.6		6.3		3.8	
Value Added (Brookfield Infrastructure Partners L.P. (BIP.UN))	-2.3		4.1		4.1		-7.0		-2.7		3.6		7.3	
Value Added (Brookfield Renewable (BEP.UN))	11.1		6.5		6.5		--		--		--		--	

Please refer to Appendix A for applicable notes.