

**Board of Governors  
PENSION & BENEFITS COMMITTEE  
Friday 18 June 2021  
9:30 a.m. to 12:00 noon**

**This meeting will be held via Microsoft Teams  
Non-members may arrange to join the open session of the electronic meeting  
by contacting Melissa Holst, [mjholst@uwaterloo.ca](mailto:mjholst@uwaterloo.ca)**

	<b>ACTION</b>
9:30 1. Approval of the 14 May 2021 2021 Minutes (Open Session)* and Business Arising a. Follow up activity re: Policy 23/59 legal opinion (Hornberger) b. Update re: Benefits Plan Implementation (Huber)	Decision Information Information
9:40 2. Execution Against the Work Plan* [Grivicic]	Information
3. Update on Government Pension Plan Initiatives [Shapira]	Discussion
4. Pension Risk Management Dashboard, Q1 2021* (Byron)	Information
5. Investments Update, Q1 2021* (Huber)	Decision
10:00 6. Benefits Utilization Report* (Kennedy)	Information
10:20 7. Progress on Benefits Plan Marketing Process (Byron)	Information
8. Annual Review re: Benefits Added/Removed from Insured Plans in the Market <i>Note to members:</i> With the benefits plan marketing activity, the chair has determined that this item may be bypassed in 2021 and will resume in 2022	
10:30 9. Discussion Points* re: Endorsement of Responsible Investment Advisory Group Recommendations by the Board of Governors (Jha)	Discussion
10. Annual Review of Committee Terms of Reference* (Grivicic)	Discussion
11. Committee Self-Assessment Survey (Barr)	Completion
<b>CONFIDENTIAL SESSION</b>	
12. Approval of the 14 May 2021 2021 Minutes (Open Session)* and Business Arising	Decision
13. Continued Discussion – Services Review	Discussion
<u>Next Meeting:</u> Friday 10 September 2021, 9:30 a.m. – 12:00 noon	

\*attached  
\*\* to be distributed  
+ distributed separately

14 June 2021

Mike Grivicic  
Associate University Secretary

**Please convey regrets to Melissa Holst at 519-888-4567 x36125 or [mjholst@uwaterloo.ca](mailto:mjholst@uwaterloo.ca)**

Future Agenda Items

- a. Pension Contribution for Members of LTD
- b. Level of LTD coverage vs. practical requirements

**University of Waterloo**  
**Board of Governors**  
**PENSION & BENEFITS COMMITTEE**  
**Minutes of the 14 May 2021 Meeting**  
**[in agenda order]**

**Present:** Peter Barr, Terrence Birmingham, Ted Bleaney, Mike Grivicic (secretary), Michael Herz, Dennis Huber, Ranjini Jha, Jim Rush, David Saunders, Michael Steinmann, Marilyn Thompson, Mary Thompson, Ken Vetzal

**Regrets:** Tony Giovinazzo

**Consultant:** Linda Byron, Allan Shapira

**Resources:** Sarah Hadley, Lee Hornberger, Joan Kennedy

**Guests:** Carson Brett (7,8), Blaine Hertzberger (7,8), Sheryl Kennedy (2,3)

**Organization of Meeting:** Peter Barr took the chair, and Mike Grivicic acted as secretary. The secretary advised that a quorum was present. The meeting was held via videoconference.

The committee exited confidential session.

## **2. DRAFT REPORT – ADVISORY GROUP ON RESPONSIBLE INVESTMENT**

Kennedy provided an overview: report represents a consensus from the multistakeholder group's membership, with support from expert advisors; terms of reference were specific to address climate change considerations in the university's investment activities; emphasis on primacy of fiduciary duty and achieving the financial obligations of the various funds; reports reflects progress to date on incorporating environmental, social and governance (ESG) factors, and climate change considerations reside within the 'environmental' category; report focuses on both the risks and potential opportunities connected to climate change; targets are set for 2040, with disclosure and reporting in the interim; scenario analysis is expected to develop as time passes and more information is made available; engagement strategy would include engagement of Canadian companies with other Canadian investors; recommendations allow for investment in companies with credible transition plans; no recommendation to divest of fossil fuel companies, based on the view that such an action would not be most effective; endorsement of report and recommendations was obtained from the Finance & Investment Committee, and the group's members also consulted with their various constituencies in preparing this final report. Members discussed: scorecard approach in assessing progress against carbon reductions; some pooled funds do carbon tracking but not all funds use the same metrics/currency basis; targets are science-based and align with the ambition of the university, and are comparable to similar commitments at other institutions; the report places primacy on fiduciary duty within the existing approved ESG framework, with focus on risk-adjusted returns; other universities that moved sooner on this file focused on endowments, and there have been increasing numbers of pension fund examples more recently; clarification that these recommendations are not in direct response to the Board petition from students/faculty/staff, but rather reflect the efforts of the work of the working group towards its stated terms of reference; legal advice was obtained as part of the drafting process; the working group's membership included members with significant experience in managing large pools of capital for endowments and pensions.

## **3. REPORT FROM PENSION INVESTMENT COMMITTEE**

This item was received for information.

## **4. APPROVAL OF THE 12 MARCH 2021 MINUTES (OPEN SESSION) AND BUSINESS ARISING**

A motion was heard to approve the minutes as distributed. Jha and Bleaney. Carried.

## **5. EXECUTION AGAINST THE WORK PLAN**

This item was received for information.

## **6. UPDATE ON GOVERNMENT PENSION PLAN INITIATIVES**

Shapira observed that the provincial budget contained a provision to identify pension benefits guarantee fund calculations in regulatory filings.

## **7. ANNUAL AUDIT OF THE PENSION PLAN FUND FINANCIAL STATEMENTS**

Hadley provided an overview of the process of preparation of statements and audit by EY, observing that the content of the notes are highly prescribed and are prepared to meet FISRA requirements. Hertzberger indicated that the audit approach was consistent with the previous year, the financial statements report on pension assets, an unqualified opinion is provided on the statements, and that no evidence of fraud or illegal acts arose in the course of the audit. Brett indicated that the approval of the financial statements would be sought based on the presentation, and reaffirmed the firm's independence. Members noted the negative financial situation at another Ontario university and Hertzberger commented on Waterloo's strong balance sheet and absence of external debt, as well as the institution's handling to date of the financial impacts of the pandemic. Hadley observed that the pension is a separate legal entity and that investments are held by an independent custodian. A motion was heard to approve the financial statements as presented. Bleaney and Saunders. Carried.

## **8. PREVIOUS YEARS' FEES AND EXPENSES**

This item was received for information.

## **9. DRAFT ANNUAL VALUATION – 1 JANUARY 2021**

Byron provided an overview and noted minor changes to update asset figures since the March meeting. Shapira noted that interest rates have risen ~90 basis points since the beginning of 2021, and Huber recalled the general objective of achieving 50:50 sharing of current service cost in 2023 though that may not be achieved on the planned timeline. A motion was heard to recommend that the Board of Governors approve the filing of the valuation with the regulator as presented. Huber and Jha. Carried.

## **10. UPDATE FROM WORKING GROUP ON DEFINITIONS IN POLICY 23, 59**

The secretary provided a short overview on behalf of the working group, and highlighted that the working group does not view the recommendations as new compensation, though the group is mindful of the potential impacts of Bill 124 in this interpretation which requires a legal opinion (as included in the recommendation). Members observed that the recommendation would act as a stop gap to updates practices, and to allow time for eventual policy amendments. A motion was heard to approve the recommendation, subject to the receipt of a satisfactory legal opinion. Bleaney and Thompson. Carried. Members will receive follow-up communication on the legal opinion in due course following the meeting.

## **11. UPDATE RE: BENEFITS PLAN IMPLEMENTATION**

Byron discussed: design changes became effective on 1 May; Aon and procurement staff have begun preparations for the marketing of the benefits; the group has discussed LTD benefits and will examine as part of the larger marketing activity; Bill 124 has placed a hold on retiree eligibility discussions. Members noted that employee representatives are to take the issue of LTD back to their constituencies to glean impressions.

## **12. BOARD-APPROVED 2021-22 OPERATING BUDGET**

Rush spoke to the approved budget: aim for overall balanced budget, with sustainable unit budgets; resourcing for priority activities; budget needs to be able to navigate uncertainty in overall operations arising from the ongoing pandemic and volatility in governmental approaches toward postsecondary sector. Members discussed: geographic breakdown of international students, with aim to diversify through strategic enrollment management; no changes to tuition rates due to pandemic, though relief was provided for certain student fees; difficult to predict enrollment, and university's efforts are focused on removing potential barriers to enrollment.

## **13. OTHER BUSINESS**

**a.** Vetzal conveyed two matters from concern from FAUW: whether employee contributions were increased as a result of the addition of eye exams, and that some FAUW members may not receive the new eye exam coverage. Huber noted that the university pays 100% of the extended health premiums, and faculty members on a reduced load pay a portion of the premium.

## **NEXT MEETING**

The next regular meeting is scheduled for Friday 18 June 2021, 9:30 a.m. – 12:00 noon.

11 June 2021

Mike Grivicic  
Associate University Secretary

## Execution against Work Plan

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

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

Task	Frequency (Target month)	12 June 2020	18 Sept 2020	16 Oct 2020	20 Nov 2020	15 Dec 2020	15 Jan 2021	11 Feb 2021	12 Mar 2021	14 May 2021	18 June 2021
Approval of Actuarial Valuation Assumptions	Annual (Jan)						✓				
Investment Status of PPP	Annual (Feb)							✓			
Cost-of-living Increase for Pensioners	Annual (Feb)							✓			
Pensions for Deferred Members	Annual (Feb)							✓			
Salaries for Pension Purposes for Individuals on Long-term Disability	Annual (Feb)							✓			
Actuarial Valuations (RPP and PPP), with posting to website once approved	Annual (Mar)								✓		
Review of Contribution and Protocol Caps (RPP and PPP)	Annual (Mar)								✓		
Benefits Plan Premium Renewals	Annual (Mar)								✓		
Indexing of Long-term Disability Plan Benefits and Maxima	Annual (Mar)								✓		
Annual Committee Self-Assessment	Annual (Mar)								✓		
Budget Overview	Annual (May)									✓	
Previous Years' Fees and Expenses	Annual (May)									✓	
Annual Audit of the Pension Plan Fund Financial Statements	Annual (May)									✓	

D = deferred

Task	Frequency	12 June 2020	18 Sept 2020	16 Oct 2020	20 Nov 2020	15 Dec 2020	15 Jan 2021	11 Feb 2021	12 Mar 2021	14 May 2021	18 June 2021
Benefits Utilization Report	Annual (June)	✓									✓
Annual review re: benefits added/removed from insured plans in the market	Annual (June)	✓									✓
Review of Committee Terms of Reference	Annual (June)	✓									✓
Indexing of Plan Maxima – Health, Dental, Retiree Life Insurance	Annual (Nov)				✓						
Employee and Family Assistance Program – report on utilization	Annual (Nov)			✓							
Maximum pension limits and caps adjustments, based on average industrial wage increase (AIW)	Annual (Dec)					✓					
Total Fund Overview	Quarterly	✓			✓				✓		✓
Investment Manager Review	Semi-annually										
Approval of the Statement of Investment Policies and Procedures (SIPP)	Annual										
Annual Report to the Community	Annual							✓			
Actuarial Filing - Minimum every three years Most recent filings: 2017, 2018, 2020, 2021											



# Pension Risk Management Dashboard

**University of Waterloo**  
As of March 31, 2021

To protect the confidential and proprietary information included in this material, it may not be disclosed or provided to any third parties without the approval of Aon.



# About This Material

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

**Risk-Free Benchmark Basis** – This liability is calculated using best estimate assumptions for retirement, termination and other demographic experience, and a discount rate and inflation assumption determined with reference to the risk-free environment. For this report, the liability has been determined at the real return bond yield plus a 40 basis point credit spread to reflect 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 Provision of Adverse Deviation as prescribed by the *Pension Benefits Act* (Ontario).

**Solvency/Hypothetical Wind Up Basis** – This liability is calculated using assumptions determined in accordance with the Canadian Institute of Actuaries Annuity Purchase guidance and Commuted Value standards in effect at each measurement date shown in this report. A summary of these assumptions is included on page 16.

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

On both bases the following information is shown:

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

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

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

# Highlights

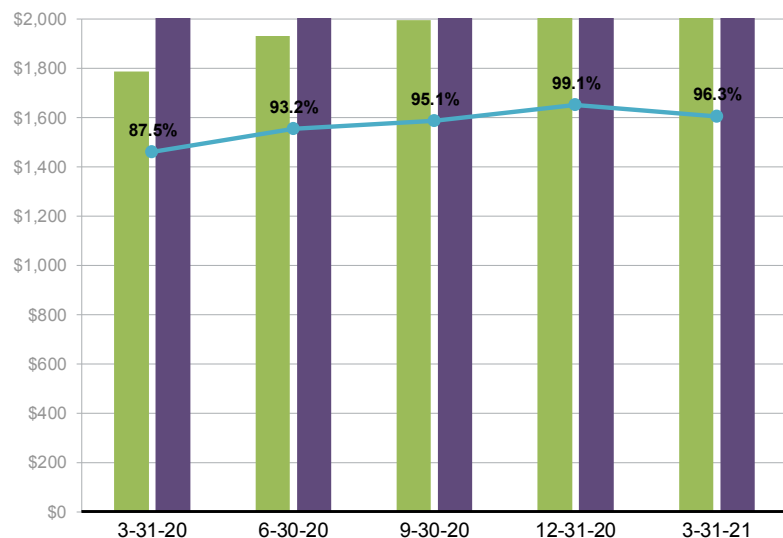
- The going concern deficit increased from \$19.5 million to \$82.2 million over the quarter due to the impact of a new valuation as at January 1, 2021 determined at new assumptions (lower discount rate and salary increase assumption) that resulted in an increase in liabilities.
- The risk-free deficit decreased from \$1,482.8 million to \$1,094.9 million over the quarter due to an increase in risk-free rates.
- The solvency deficit decreased from \$316.1 million to \$89.3 million over the quarter primarily due to an increase in solvency interest rates.
- The total fund had a rate of return after all fees of 1.3% for last quarter, about in line with expectations.
- The estimated March 31, 2021 liabilities are projected based on the most recent actuarial valuation, with membership data as at January 1, 2021.
- The annuity purchase guidance educational note for valuations as of March 31, 2021 and April 1, 2021 (published as of May 3, 2021) has been reflected in the interest rates used to calculate the March 31, 2021 Solvency and Hypothetical Wind Up liabilities.
- The transfer ratio as at March 31, 2021 is 68.8%. Compared to the transfer ratio of 66.7% in the last filed valuation on January 1, 2020, this represents an increase of 3%. Since the transfer ratio did not decrease 10% over that period no Regulation 19 filing is required. See slide 11 for more details.
- The most recent actuarial valuation was performed as at January 1, 2021 (to be filed).
- 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 3/31/21

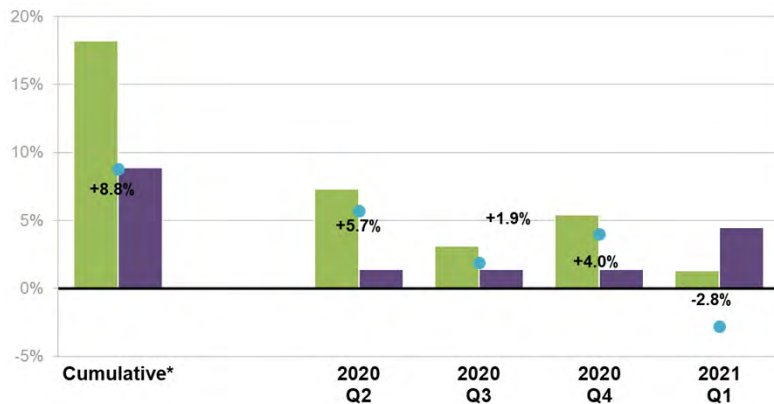
The plan's funded ratio decreased to 96.3% at 3/31/21. This result was primarily due to the combined effects of:

- Asset performance about in line with expectations,
- Contributions of \$25.6 million which exceeded new benefit accruals, offset by
- Impact of a new valuation as at January 1, 2021 and changes in discount rate, salary increase assumption, and demographic experience which increased liabilities.

	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets	\$ 1,785.8	\$ 1,929.8	\$ 1,993.9	\$ 2,108.2	\$ 2,140.1
Going Concern Liability	2,040.6 <sup>1</sup>	2,070.3 <sup>1</sup>	2,097.6 <sup>1</sup>	2,127.7 <sup>1</sup>	2,222.3 <sup>1</sup>
Surplus/(Deficit)	\$ (254.8)	\$ (140.5)	\$ (103.7)	\$ (19.5)	\$ (82.2)
Periodic Contributions	\$ 16.2	\$ 33.2	\$ 25.8	\$ 25.6	\$ 25.6
Effective Interest Rate	5.60%	5.60%	5.60%	5.60%	5.30%
Funded Ratio (Market):	87.5%	93.2%	95.1%	99.1%	96.3%
Asset Duration:	1.9	2.1	2.1	2.1	1.9
Going Concern Liability Duration:	14.5	14.5	14.5	14.5	14.4

<sup>1</sup>After application of the PfAD at 9.00%

## Asset-Liability Return



### Asset Liability Return for Quarter-Ending 3/31/21

Assets returned 1.3% during the quarter while liabilities returned 4.5%, resulting in a funded status decrease of 2.8%.

	Periodic Return/Change	Cumulative	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets Return		18.2%	7.3%	3.1%	5.4%	1.3%
Going Concern Return		8.9%	1.4%	1.4%	1.4%	4.5%
Funded Ratio Change		8.8%	5.7%	1.9%	4.0%	-2.8%

## Executive Summary – Going Concern (PfAD Impact)

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

### Funded Status

	6/30/20	9/30/20	12/31/20	3/31/21
Going Concern Liability with 9.00% PfAD	\$ 2,070.3	\$ 2,097.7	\$ 2,127.7	\$ 2,222.3
New PfAD Impact	84.3 <sup>1</sup>	63.0 <sup>2</sup>	36.6 <sup>3</sup>	0.00 <sup>4</sup>
Market Value of Assets	\$ 1,929.8	\$ 1,993.9	\$ 2,108.2	\$ 2,140.1
Going Concern Liability with New PfAD	<u>2,154.6</u>	<u>2,160.7</u>	<u>2,164.3</u>	<u>2,222.3</u>
Surplus/(Deficit)	\$ (224.8)	\$ (166.8)	\$ (56.1)	\$ (82.2)
PfAD	14.05%	12.75%	11.15%	9.00%

<sup>1</sup>Impact of change in PfAD from 9.00% to 14.05%

<sup>2</sup>Impact of change in PfAD from 9.00% to 12.75%

<sup>3</sup>Impact of change in PfAD from 9.00% to 11.15%

<sup>4</sup>Impact of change in PfAD from 9.00% to 9.00%

The going concern deficit increased from \$56.1 million to \$82.2 million over the quarter due to a decrease in valuation interest rate from 5.60% to 5.30%, offset by decrease in salary rate assumption.

# Asset-Liability Performance Attribution – Going Concern

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

## Assets



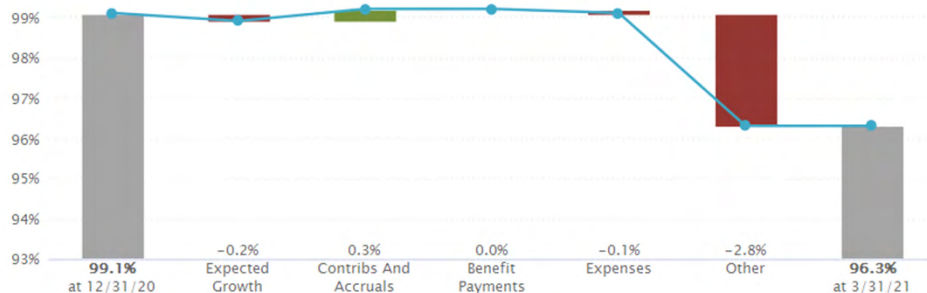
- Overall, assets returned 1.3% during this quarter, as opposed to an expected growth assumption of about 1.2% per quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by shrinking credit spreads.
- The University and members made \$25.6 million in contributions during the quarter and the trust paid \$20.6 million in benefits to the participants.
- “Other” includes the impact of active management, and differences between benchmark and actual investment allocations.

## Liabilities



- Liabilities as of 3/31/21 are based on 5.30% discount rate compared to 5.60% at January 1, 2021
- Liabilities were expected to grow by \$28.8 million due to interest cost during the quarter.
- New benefit accruals increased the liability by \$19.5 million during the quarter.
- Plan liabilities decreased by \$20.6 million during the quarter as benefits were paid.
- “Other” includes the impact of a new valuation as at January 1, 2021 and changes in discount rate, salary increase assumption, and demographic experience.

## Funded Ratio

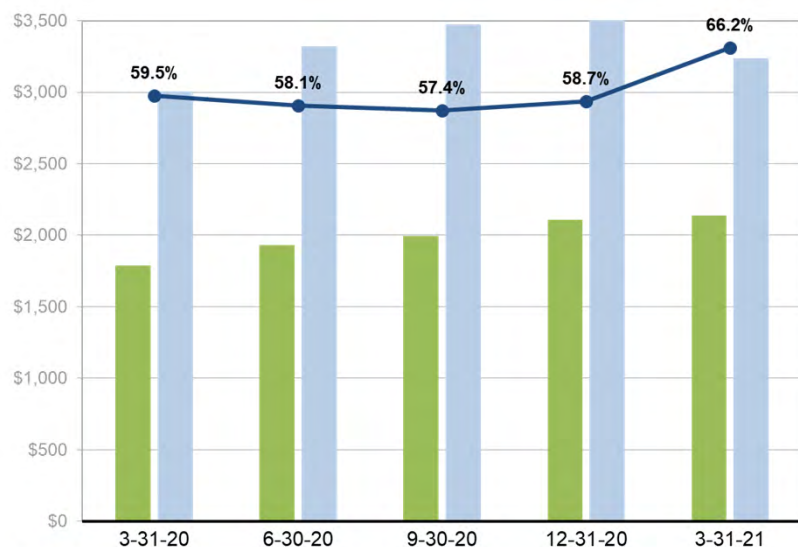


- Assets returned 1.3% during the quarter while liabilities returned 4.5%, resulting in a funded status decrease of -2.8%.

# Executive Summary – Risk Free

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

## Funded Status



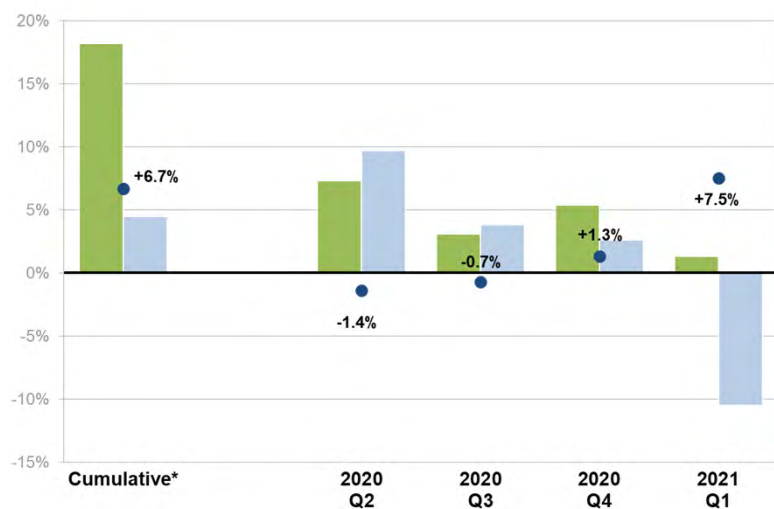
### Highlights for the Quarter-Ending 3/31/21

The plan's funded ratio increased to 66.2% at 3/31/21. This result was primarily due to the combined effects of:

- Asset performance about in line with expectations,
- New benefit accruals which exceeded contributions, offset by
- Impact of a new funding valuation at January 1, 2021, and
- A decrease in liabilities due to an increase in risk-free rates.

	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets	\$ 1,785.8	\$ 1,929.8	\$ 1,993.9	\$ 2,108.2	\$ 2,140.1
Risk-Free Liability	3,003.5	3,319.7	3,471.8	3,591.0	3,235.0
Surplus/(Deficit)	\$ (1,217.7)	\$ (1,389.9)	\$ (1,477.9)	\$ (1,482.8)	\$ (1,094.9)
Periodic Contributions	\$ 16.2	\$ 33.2	\$ 25.8	\$ 25.6	\$ 25.6
Discount Rate	0.83%	0.38%	0.22%	0.12%	0.65%
Funded Ratio:					
Assets/Risk-Free Liability	59.5%	58.1%	57.4%	58.7%	66.2%
Asset Duration:	1.9	2.1	2.1	2.1	1.9
Risk-Free Liability Duration:	18.7	19.5	19.8	20.0	18.8

## Asset-Liability Return



### Asset Liability Return for Quarter-Ending 3/31/21

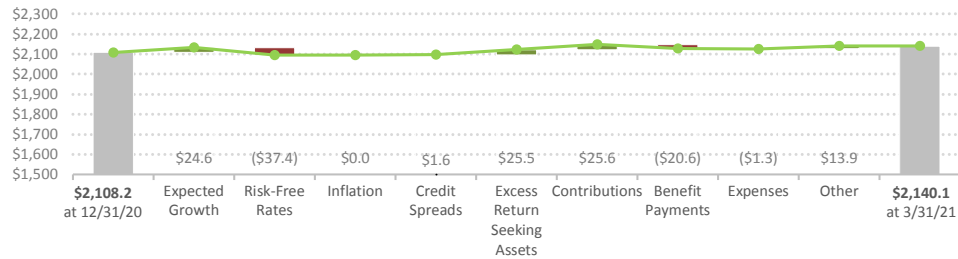
Assets returned 1.3% during the quarter while liabilities returned -10.5%, resulting in a funded status increase of 7.5%.

Periodic Return/Change	Cumulative	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets Return	18.2%	7.3%	3.1%	5.4%	1.3%
Risk Free Return	4.5%	9.7%	3.8%	2.6%	-10.5%
Funded Ratio Change	6.7%	-1.4%	-0.7%	1.3%	7.5%

# Asset-Liability Performance Attribution – Risk Free

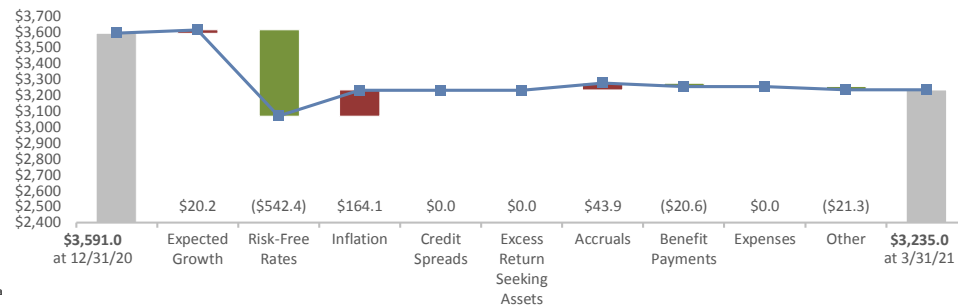
Values in \$1,000,000 (CAD)

## Assets



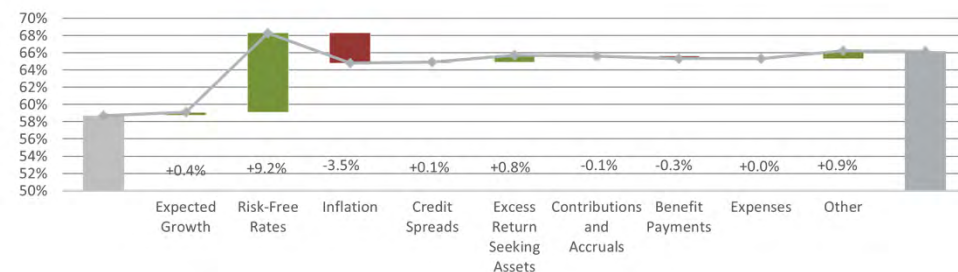
- Assets returned 1.3% during this quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by shrinking credit spreads.
- The plan's return-seeking assets (Alternatives and International Equities) were a significant contributor to the performance of the portfolio.
- \$25.6 million in contributions was made during the quarter and the trust paid \$20.6 million in benefits to the participants.
- "Other" includes the impact of active management, and differences between benchmark and actual investment allocations.

## Liabilities



- Liabilities were expected to grow by \$20.2 million due to interest cost during the quarter.
- Risk-free rates increased resulting in a decrease in liabilities of \$542.4 million.
- Expected inflation rates increased resulting in an increase in liabilities of \$164.1 million
- New benefit accruals increased the liability by \$43.9 million during the quarter.
- Plan liabilities decreased by \$20.6 million during the quarter as benefits were paid.
- "Other" includes the impact of a new valuation at January 1, 2021.

## Funded Ratio

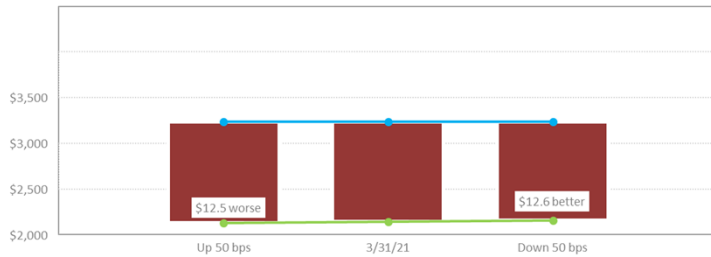


- The difference in exposure to risk-free rates between assets and liabilities combined with changes in risk-free rates resulted in an increase in funded status of 9.2%.
- Changes in credit spreads resulted in an increase in funded status of 0.1%.
- Increase in inflation expectation resulted in a decrease in funded status of 3.5%.
- Return-seeking assets experienced gains during the quarter in excess of expected, adding 0.8% to the plan's funded status during the period.

# Sensitivity Analysis – Risk-Free Benchmark

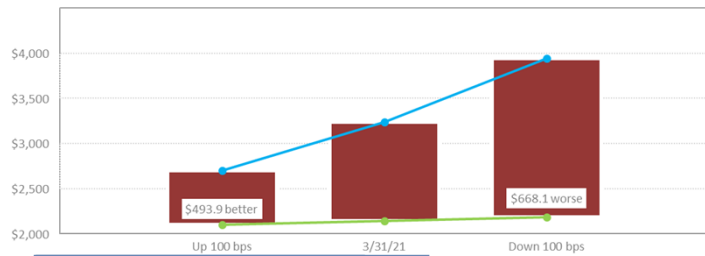
Values in \$1,000,000 (CAD)

## Credit Spreads



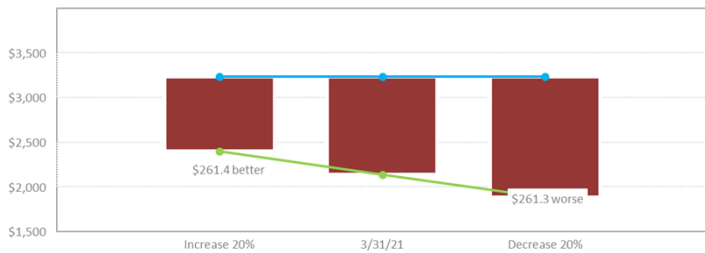
	Up 50bps	Current	Down 50bps
Market Value of Assets	\$2,127.6	\$2,140.1	\$2,152.7
Risk-Free	\$3,235.0	\$3,235.0	\$3,235.0
Surplus/(Deficit)	(\$1,107.4)	(\$1,094.9)	(\$1,082.3)
Change		(\$12.5)	\$12.6

## Risk-Free Rates



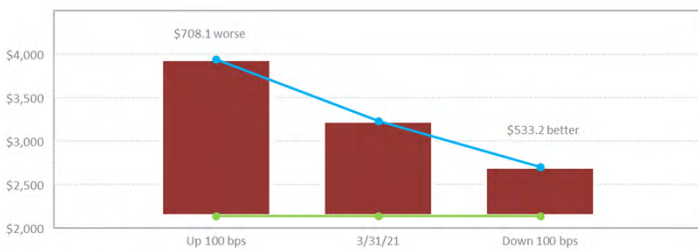
	Up 100bps	Current	Down 100bps
Market Value of Assets	\$2,100.8	\$2,140.1	\$2,180.1
Risk-Free	\$2,701.8	\$3,235.0	\$3,943.1
Surplus/(Deficit)	(\$601.0)	(\$1,094.9)	(\$1,763.0)
Change		\$493.9	(\$668.1)

## Return-Seeking Assets



	Increase 20%	Current	Decrease 20%
Market Value of Assets	\$2,401.5	\$2,140.1	\$1,878.8
Risk-Free	\$3,235.0	\$3,235.0	\$3,235.0
Surplus/(Deficit)	(\$833.5)	(\$1,094.9)	(\$1,356.2)
Change		\$261.4	(\$261.3)

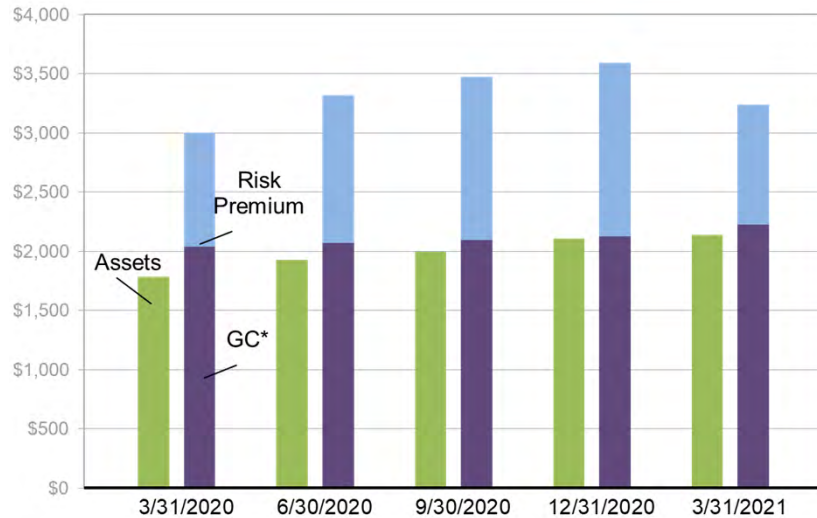
## Inflation



	Up 100bps	Inflation	Down 100bps
Market Value of Assets	\$2,140.1	\$2,140.1	\$2,140.1
Risk-Free	\$3,943.1	\$3,235.0	\$2,701.8
Surplus/(Deficit)	(\$1,803.0)	(\$1,094.9)	(\$561.7)
Change		(\$708.1)	\$533.2

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

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



	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets	\$ 1,785.8	\$ 1,929.8	\$ 1,993.9	\$ 2,108.2	\$ 2,140.1
Going Concern Liability	\$ 2,040.6	\$ 2,070.3	\$ 2,097.6	\$ 2,127.7	\$ 2,222.3
Risk Premium	<u>962.9</u>	<u>1,249.4</u>	<u>1,374.2</u>	<u>1,463.3</u>	<u>1,012.7</u>
Risk-Free Liability	\$ 3,003.5	\$ 3,319.7	\$ 3,471.8	\$ 3,591.0	\$ 3,235.0

\*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.

# Hypothetical Wind Up (HWU) and Transfer Ratio

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

	1/1/2020 (Last Filed)		1/1/2021		4/1/2021
■ HWU Assets *	\$	1,940.3	\$	2,107.7	\$ 2,139.6
■ HWU Liability		2,909.7		3,259.8	3,111.8
Surplus/(Deficit)	\$	(969.4)	\$	(1,152.1)	\$ (972.2)
Transfer Ratio:					
■ Market Value of Assets/HWU Liability		66.7%		64.7%	68.8%

\* Net of estimated wind up expenses

■ Restrictions on commuted values may come into effect if the administrator of the pension plan knows or ought to know that since the valuation date of the last filed report, events have taken place that may result in the reduction of the transfer ratio by 10% or more of the most recently determined transfer ratio. In such case, the administrator shall not transfer any part of the commuted value without prior approval of the Superintendent.

■ If the transfer ratio (the hypothetical wind up assets divided by the hypothetical wind up liabilities including indexation) drops by 10% or more since the last filed valuation, the administrator must stop paying commuted values and seek approval from the regulators to restart paying commuted values. The application is made in a prescribed format. This is generally referred to as a “Regulation 19 Filing”.

■ During Q1 2021, the financial position of the Pension Plan as measured on a wind-up basis did not drop by more than 10% since January 1, 2020 (the last filed valuation). Therefore, no Regulation 19 Filing is required as of April 1, 2021.

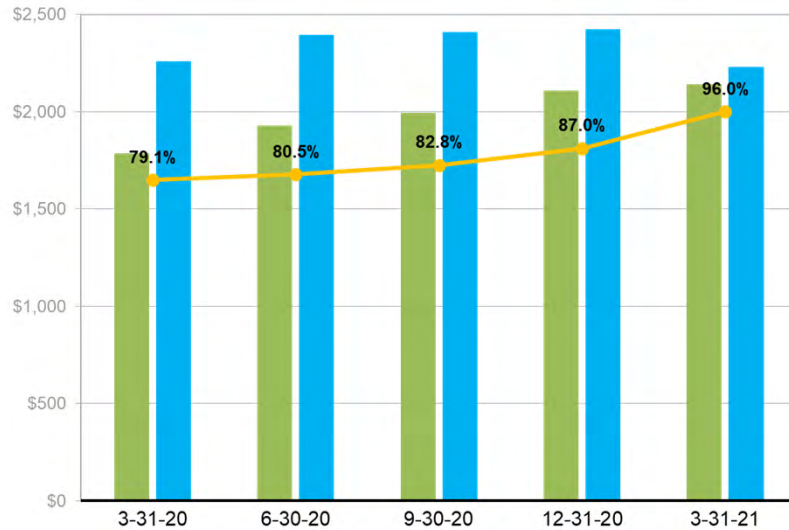
■ The Regulation 19 filing requirements will be monitored throughout 2021 on a quarterly basis.



# Executive Summary – Solvency

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

## Funded Status



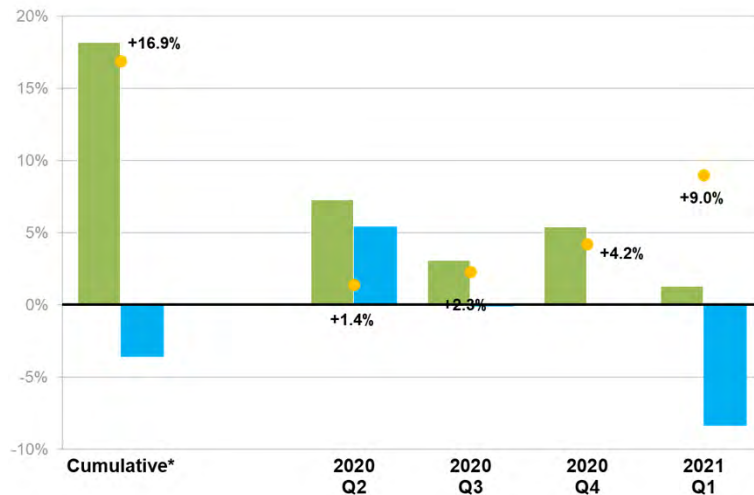
### Highlights for the Quarter-Ending 3/31/21

The plan's funded ratio increased to 96.0% at 3/31/21. This result was primarily due to the combined effects of:

- Asset performance about in line with expectations,
- New benefit accruals which exceeded contributions, and
- A decrease in liabilities due to an increase in effective interest rate and the impact of a new valuation at 1/1/2021.

	3/31/2020	6/30/2020	9/30/2020	12/31/2020	3/31/2021
Market Value of Assets	\$ 1,785.8	\$ 1,929.8	\$ 1,993.9	\$ 2,108.2	\$ 2,140.1
Solvency Liability	2,257.7	2,395.8	2,409.0	2,424.3	2,229.4
Surplus/(Deficit)	\$ (471.9)	\$ (466.0)	\$ (415.1)	\$ (316.1)	\$ (89.3)
Periodic Contributions	\$ 16.2	\$ 33.2	\$ 25.8	\$ 25.6	\$ 25.6
Effective Interest Rate	2.64%	2.35%	2.37%	2.43%	3.06%
Funded Ratio:					
Assets/Solvency Liability	79.1%	80.5%	82.8%	87.0%	96.0%
Assets Duration:	1.9	2.1	2.1	2.1	1.9
Solvency Liability Duration:	14.5	14.9	14.9	14.9	14.4

## Asset-Liability Return



### Asset Liability Return for Quarter-Ending 3/31/21

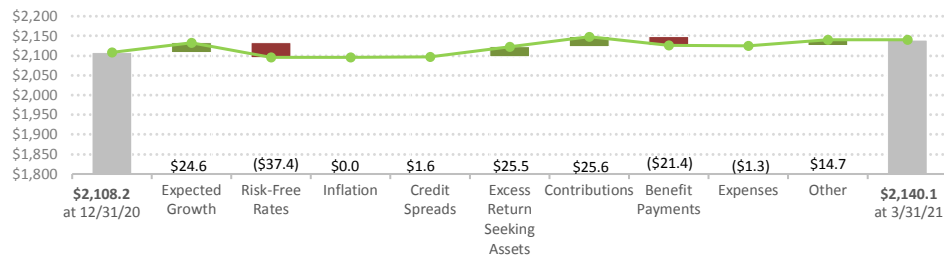
Assets returned 1.3% during the quarter while liabilities returned -8.4%, resulting in a funded status increase of 9.0%.

	Periodic Return/Change	Cumulative	6/30/20	9/30/20	12/31/20	3/31/21
Market Value of Assets						
Return		18.2%	7.3%	3.1%	5.4%	1.3%
Solvency						
Return		-3.6%	5.4%	-0.1%	0.0%	-8.4%
Funded Ratio Change		16.9%	1.4%	2.3%	4.2%	9.0%

# Asset-Liability Performance Attribution - Solvency

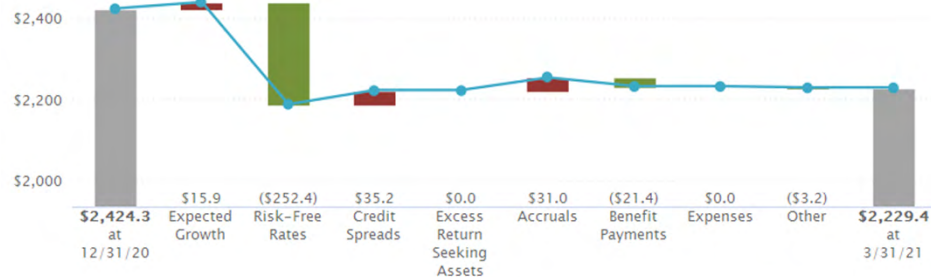
Values in \$1,000,000 (CAD)

## Assets



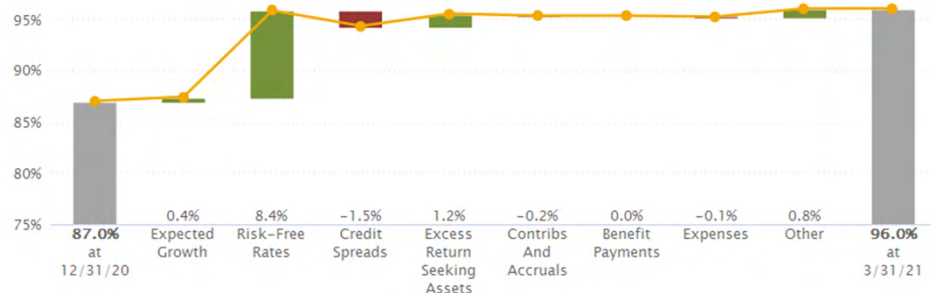
- Assets returned 1.3% during this quarter, as opposed to an expected growth assumption of about 1.2% per quarter.
- The fixed income assets lost value due to an increase in the underlying risk-free rates, partially offset by shrinking credit spreads.
- The plan's return-seeking assets (Alternatives and International Equities) performed better than expected during the quarter.
- \$25.6 million in contributions was made during the quarter and the trust paid \$21.4 million in benefits to the participants.
- "Other" includes the impact of active management, and differences between benchmark and actual investment allocations.

## Liabilities



- Liabilities were expected to grow by \$15.9 million due to interest cost during the quarter.
- Risk-free rates increased, and credit spreads narrowed, resulting in a net decrease of \$217.2 million (\$252.4 million - \$35.2 million).
- New benefit accruals increased the liability by \$31.0 million during the quarter.
- Plan liabilities decreased by \$21.4 million during the quarter as benefits were paid.
- "Other" includes the impact of a new valuation at January 1, 2021.

## Funded Ratio

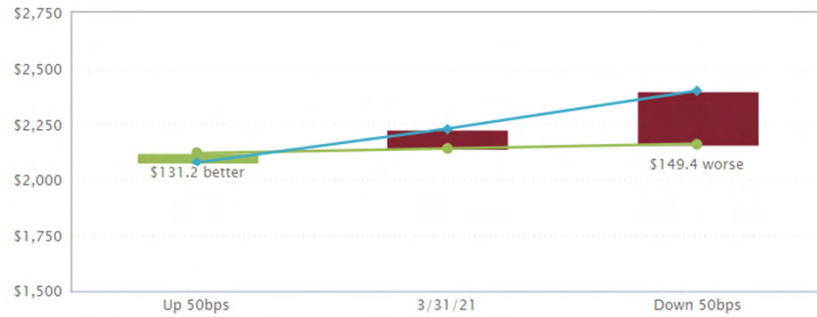


- The difference in exposure to risk-free rates between assets and liabilities combined with changes in risk-free rates resulted in an increase in funded status of 8.4%.
- The difference in exposure to credit spreads between assets and liabilities combined with changes in credit spreads resulted in a decrease in funded status of 1.5%.
- Return-seeking assets experienced gains during the quarter in excess of expected, adding 1.2% to the plan's funded status during the period.

# Sensitivity Analysis – Solvency

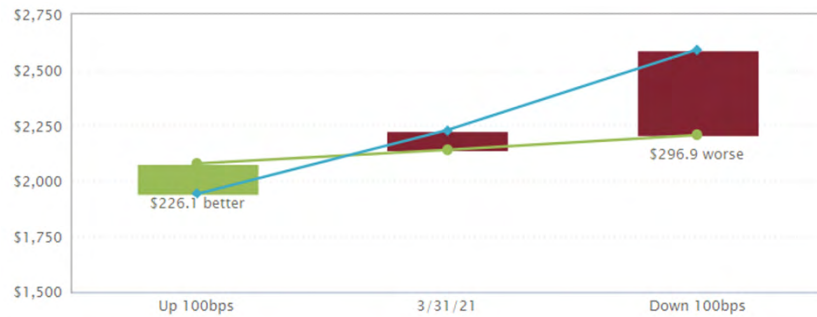
Values in \$1,000,000 (CAD)

## Credit Spreads



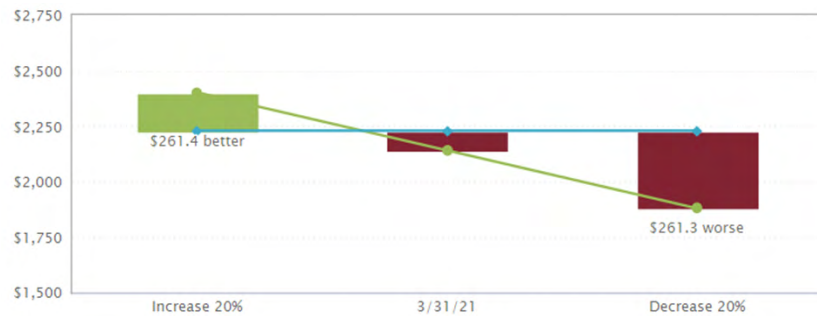
	Up 50bps	Current	Down 50bps
Market Value of Assets	\$2,119.3	\$2,140.1	\$2,161.5
Funding Target	\$2,077.4	\$2,229.4	\$2,400.2
Surplus/(Deficit)	\$41.9	(\$89.3)	(\$238.7)
Change		\$131.2	(\$149.4)

## Risk-Free Rates



	Up 100bps	Current	Down 100bps
Market Value of Assets	\$2,078.5	\$2,140.1	\$2,206.7
Funding Target	\$1,941.7	\$2,229.4	\$2,592.9
Surplus/(Deficit)	\$136.8	(\$89.3)	(\$386.2)
Change		\$226.1	(\$296.9)

## Return-Seeking Assets



	Increase 20%	Current	Decrease 20%
Market Value of Assets	\$2,401.5	\$2,140.1	\$1,878.8
Funding Target	\$2,229.4	\$2,229.4	\$2,229.4
Surplus/(Deficit)	\$172.1	(\$89.3)	(\$350.6)
Change		\$261.4	(\$261.3)



# Appendix

# Plan Provisions & Membership Data

Same as in the Actuarial Valuation Report as of January 1, 2020.

## Actuarial Methods & Assumptions

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

	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21
<b>Going Concern</b>					
Discount Rate	5.60%	5.60%	5.60%	5.60%	5.30%
Inflation	2.00%	2.00%	2.00%	2.00%	2.00%
Salary Increase	4.00%	4.00%	4.00%	4.00%	3.00%/4.00% <sup>1</sup>
PfAD	9.55%	14.05%	12.75%	11.15%	9.00%
Mortality	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public	CPM2014Public
<b>Risk-Free Benchmark</b>					
Discount Rate	0.83%	0.38%	0.22%	0.12%	0.65%
<b>Solvency</b>					
Annuity Purchase Interest Rate	2.78%	2.52%	2.49%	2.50%	3.10%
Effective Date of Annuity Purchase Guidance Used	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21
Lump Sum Value Interest Rate (Years 1-10) <sup>2</sup>	1.70%	1.30%	1.30%	1.20%	1.90%
Lump Sum Value Interest Rate (Years 10+) <sup>2</sup>	2.50%	2.20%	2.40%	2.80%	3.50%
Mortality <sup>3</sup>	CPM2014	CPM2014	CPM2014	CPM2014	CPM2014
<b>Hypothetical Wind Up</b>					
Annuity Purchase Interest Rate (100% Indexed)	-0.27%	-0.52%	-0.68%	-0.78%	-0.22%
Annuity Purchase Interest Rate (75% Indexed)	0.49%	0.24%	0.11%	0.04%	0.61%
Effective Date of Annuity Purchase Guidance Used	3/31/20	6/30/20	9/30/20	12/31/20	5/3/21
Lump Sum Value Interest Rate (100% Indexed) (Years 1-10) <sup>2</sup>	1.20%	0.90%	0.80%	0.60%	0.80%
Lump Sum Value Interest Rate (100% Indexed) (Years 10+) <sup>2</sup>	1.60%	0.90%	0.70%	0.80%	1.40%
Lump Sum Value Interest Rate (75% Indexed) (Years 1-10) <sup>2</sup>	1.40%	1.00%	0.90%	0.80%	1.10%
Lump Sum Value Interest Rate (75% Indexed) (Years 10+) <sup>2</sup>	1.80%	1.20%	1.10%	1.30%	1.90%
Mortality <sup>3</sup>	CPM2014	CPM2014	CPM2014	CPM2014	CPM2014
<b>Underlying Canadian Reference Data</b>					
CANSIM v39054 (7 Year)	0.64%	0.41%	0.39%	0.46%	1.26%
CANSIM v39056 (30 Year Long Term)	1.32%	0.99%	1.11%	1.21%	1.97%
CANSIM v39057 (30 Year Real Return)	0.43%	-0.02%	-0.18%	-0.28%	0.22%
CANSIM v39062 (Over 10 Years)	1.18%	0.91%	0.99%	1.10%	1.90%

<sup>1</sup> 3.00% per year for 3 years; 4.00% year thereafter

<sup>2</sup> Lump Sum Value Interest Rates are based on rates in effective 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 draft Actuarial Valuation Report as of January 1, 2021. For the Risk-Free Benchmark basis, all other assumptions and methods are the same as those used for the Going Concern basis.

# Actuarial Attestation

**This document is intended to provide to the University of Waterloo a summary of the performance of the Pension Plan as of March 31, 2021.**

This analysis is intended to assist 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 University of Waterloo. Any further dissemination of this report is not allowed without the written consent of Aon.

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

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

Aon  
May 2021

# Asset Allocation and Benchmarking

Asset Class	12/31/20
Alternatives	
■ FTSE EPRA NAREIT DEVELOPED Total Return Index USD	2.7%
■ MSCI USA Infrastructure Index	5.9%
Fixed Income	
■ FTSE TMX Universe Bond Index	39.0%
International Equities	
■ MSCI World Index	45.2%
■ S&P TSX	7.2%
Total	100.0%

# Glossary of Terms

## ■ Funded Status and Asset-Liability Return

– **Liability Return** reflects the growth in liability due solely to interest rate movements and excludes the impact of Accruals and Benefit Payments.

## ■ Asset Liability Performance Attribution

– **Expected Growth** reflects assets growing at the expected annual return and liabilities increasing at the interest rate<sup>1</sup>.

– **Risk-Free Rates** splits out the expected movement in assets and liabilities based on movements in federal bond yields.

– **Inflation** splits out the expected movement in assets and liabilities based on movements in implied inflation, determined based on real and nominal federal bond yields.

– **Credit Spreads** splits out the expected movements in corporate and provincial bond yields in excess of federal bond yields.

– **Excess Return-Seeking Assets** defines the movement in the Return-Seeking assets based on benchmark returns in excess of expectations. The expectations are defined by the long-term capital market assumptions of the plan and are reflected in "expected growth".

– **Benefit Payments** displays the expected decrease in assets and liabilities due to benefit payments during the period.

– **Contributions/Accruals** displays the expected increase in assets and liabilities due to employer contributions and new benefit accruals, respectively.

– **Other** includes fixed income returns due to coupons and other active management effects, from the asset perspective. From a liability perspective, this bucket includes all liability changes not explained by financial movements during the period.

<sup>1</sup> On the Risk Free basis, the expected growth of liabilities is based on the net interest rate, and the expected growth due to inflation is included in the benefit accrual.





*University of Waterloo Pension Plan | Quarterly Period Ending 31 March 2021*

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## Detailed Investment Review

Visit the Aon Retirement and Investment Website (<https://retirement-investment-insights.aon.com/canada>); sharing our best thinking.



Performance Summary<sup>1</sup>

As of 31 March 2021

	Allocation		Performance (%)								
	Market Value (\$000)	%	1 Quarter	Year To Date	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
<b>Total Fund</b>	<b>2,140,149</b>	<b>100.0</b>	<b>1.31</b>	<b>1.31</b>	<b>18.13</b>	<b>7.47</b>	<b>7.23</b>	<b>6.82</b>	<b>7.76</b>	<b>7.88</b>	<b>6.09</b>
CPI+3.6% <sup>2</sup>			2.50	2.50	5.88	5.19	5.31	5.48	5.43	5.23	5.35
Value Added			-1.19	-1.19	12.25	2.28	1.92	1.34	2.33	2.65	0.74
<b>Canadian Equities<sup>3</sup></b>											
TD Emerald Canadian Equity Index <sup>4</sup>	56,970	2.7	8.12 (66)	8.12 (66)	44.22 (47)	11.25 (40)	10.19 (34)	8.00 (33)	10.03 (33)	5.99 (86)	6.03 (86)
S&P/TSX Composite Index			8.05 (68)	8.05 (68)	44.25 (47)	11.24 (40)	10.19 (34)	8.01 (32)	10.05 (32)	6.00 (85)	6.01 (88)
Value Added			0.07	0.07	-0.03	0.01	0.00	-0.01	-0.02	-0.01	0.02
Sionna <sup>5</sup>	120,962	5.7	9.02 (44)	9.02 (44)	38.71 (75)	6.31 (98)	5.73 (94)	5.17 (86)	8.20 (78)	5.95 (86)	6.00 (89)
S&P/TSX Composite			8.05 (68)	8.05 (68)	44.25 (47)	11.24 (40)	10.19 (34)	8.01 (32)	10.05 (32)	6.00 (85)	6.01 (88)
Value Added			0.97	0.97	-5.54	-4.93	-4.46	-2.84	-1.85	-0.05	-0.01
<b>Global Equities<sup>6</sup></b>											
MSCI World Index (Net) (CAD)	390,719	18.3	-0.38 (92)	-0.38 (92)	25.18 (86)	8.68 (81)	9.45 (61)	10.04 (58)	12.29 (52)	12.24 (66)	6.26 (94)
Value Added			-3.96	-3.96	-11.52	-5.29	-2.43	-1.32	-0.44	-0.50	-1.50
Walter Scott <sup>5</sup>	390,597	18.3	-0.38 (92)	-0.38 (92)	28.55 (82)	13.74 (49)	14.68 (22)	14.68 (23)	14.99 (27)	14.73 (25)	10.31 (19)
MSCI World Index (Net) (CAD)			3.58 (58)	3.58 (58)	36.70 (64)	13.97 (47)	11.88 (43)	11.36 (48)	12.73 (49)	12.74 (56)	7.76 (70)
Value Added			-3.96	-3.96	-8.15	-0.23	2.80	3.32	2.26	1.99	2.55
<b>U.S. Equities</b>											
TD Emerald U.S. Pooled Fund <sup>7</sup>	388,094	18.1	4.74 (59)	4.74 (59)	37.93 (65)	16.92 (49)	15.74 (42)	14.32 (44)	15.57 (44)	-	-
S&P 500 (CAD)			4.75 (59)	4.75 (59)	38.06 (65)	16.97 (49)	15.79 (42)	14.37 (43)	15.63 (42)	16.87 (44)	10.57 (60)
Value Added			-0.01	-0.01	-0.13	-0.05	-0.05	-0.05	-0.06	-	-
<b>International Equities</b>											
TD Emerald International Equity Index <sup>7</sup>	234,703	11.0	2.12 (58)	2.12 (58)	27.62 (72)	7.99 (64)	5.28 (57)	6.65 (64)	8.31 (64)	8.37 (82)	4.72 (87)
MSCI EAFE (Net)			2.09 (58)	2.09 (58)	27.66 (72)	7.91 (66)	5.13 (59)	6.56 (66)	8.23 (65)	8.26 (86)	4.61 (89)
Value Added			0.03	0.03	-0.04	0.08	0.15	0.09	0.08	0.11	0.11

<sup>1</sup>Parentheses contain percentile rankings. (1st percentile is the best performing). All returns are reported gross of fees.<sup>2</sup> CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.<sup>4</sup>TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.<sup>5</sup>Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.<sup>7</sup>In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.<sup>8</sup>The Currency Overlay was discontinued on 20 November 2017.

Performance Summary<sup>1</sup>

As of 31 March 2021

	Allocation		Performance (%)								
	Market Value (\$000)	%	1 Quarter	Year To Date	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
<b>Fixed Income</b>											
TDAM Universe Bond Index	347,990	16.3	-5.10 (90)	-5.10 (90)	1.10 (98)	2.85 (98)	3.63 (96)	3.05 (95)	2.71 (97)	3.88 (93)	4.33 (99)
FTSE Canada Universe Bond			-5.04 (89)	-5.04 (89)	1.62 (92)	3.03 (94)	3.77 (95)	3.16 (94)	2.83 (94)	3.98 (90)	4.42 (93)
Value Added			-0.06	-0.06	-0.52	-0.18	-0.14	-0.11	-0.12	-0.10	-0.09
TDAM Active Short Term Corporate	370,067	17.3	-0.55	-0.55	6.51	3.95	3.91	2.97	2.92	-	-
FTSE Canada Short Term Corporate Bond			-0.48	-0.48	6.46	4.02	3.96	3.00	2.96	3.22	3.99
Value Added			-0.07	-0.07	0.05	-0.07	-0.05	-0.03	-0.04	-	-
<b>Alternatives</b>											
XRE ETF (Real Estate)	61,542	2.9	9.07	9.07	28.18	-0.27	6.26	6.49	7.16	-	-
BIP.UN (Infrastructure)	131,115	6.1	7.20	7.20	43.18	23.17	18.69	16.07	21.81	-	-
<b>Operating Account</b>											
	37,989	1.8									
BAs/U.S. and CDN Cash	20,658	1.0	0.03	0.03	0.22	0.95	1.19	1.17	1.07	-	-
Operating Account	17,331	0.8	0.30	0.30	0.31	0.42	0.38	0.33	0.30	0.32	0.59
<b>Currency Overlay Effect (Historical)<sup>8</sup></b>											
Total Fund & CO	2,140,149	100.0	1.31	1.31	18.13	7.47	7.23	6.83	7.59	7.69	5.76
Total Fund ex CO			1.31	1.31	18.13	7.47	7.23	6.82	7.76	7.88	6.09
Value Added			0.00	0.00	0.00	0.00	0.00	0.01	-0.17	-0.19	-0.33

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

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

<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.

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

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

<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.

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

<sup>8</sup>The Currency Overlay was discontinued on 20 November 2017.

Executive Summary

Rolling Year Performance<sup>1</sup>

As of 31 March

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
<b>Total Fund</b>	<b>18.13</b>	<b>-2.23</b>	<b>6.74</b>	<b>5.60</b>	<b>11.59</b>	<b>-0.22</b>	<b>15.07</b>	<b>9.70</b>	<b>8.53</b>	<b>7.52</b>
CPI+3.6% <sup>2</sup>	5.88	4.52	5.55	5.99	5.22	4.91	4.85	5.20	4.62	5.60
Value Added	12.25	-6.75	1.19	-0.39	6.37	-5.13	10.22	4.50	3.91	1.92
<b>Canadian Equities<sup>3</sup></b>										
TD Emerald Canadian Equity Index <sup>4</sup>	44.22 (47)	-14.18 (50)	8.11 (29)	1.69 (65)	18.51 (38)	-6.53 (83)	6.93 (60)	15.94 (91)	6.08 (81)	-9.72 (60)
S&P/TSX Composite Index	44.25 (47)	-14.21 (50)	8.11 (29)	1.71 (64)	18.62 (37)	-6.57 (83)	6.93 (60)	15.97 (91)	6.11 (80)	-9.76 (60)
Value Added	-0.03	0.03	0.00	-0.02	-0.11	0.04	0.00	-0.03	-0.03	0.04
Sionna <sup>5</sup>	38.71 (75)	-18.52 (82)	4.59 (71)	3.50 (31)	21.20 (16)	-4.89 (64)	6.08 (67)	15.71 (91)	10.23 (44)	-6.59 (34)
S&P/TSX Composite	44.25 (47)	-14.21 (50)	8.11 (29)	1.71 (64)	18.62 (37)	-6.57 (83)	6.93 (60)	15.97 (91)	6.11 (80)	-9.76 (60)
Value Added	-5.54	-4.31	-3.52	1.79	2.58	1.68	-0.85	-0.26	4.12	3.17
<b>Global Equities<sup>6</sup></b>										
MSCI World Index (Net) (CAD)	36.70 (64)	-4.97 (47)	7.80 (36)	9.83 (64)	18.38 (44)	-1.43 (53)	21.66 (54)	29.18 (56)	13.85 (62)	3.33 (55)
Value Added	-11.52	-0.68	3.19	2.02	3.39	-0.63	-2.11	-2.14	-2.94	4.36
Walter Scott <sup>5</sup>	28.55 (82)	0.63 (17)	16.60 (3)	14.66 (28)	16.23 (66)	4.17 (15)	22.14 (50)	22.65 (90)	14.21 (59)	10.26 (14)
MSCI World Index (Net) (CAD)	36.70 (64)	-4.97 (47)	7.80 (36)	9.83 (64)	18.38 (44)	-1.43 (53)	21.66 (54)	29.18 (56)	13.85 (62)	3.33 (55)
Value Added	-8.15	5.60	8.80	4.83	-2.15	5.60	0.48	-6.53	0.36	6.93
<b>U.S. Equities</b>										
TD Emerald U.S. Pooled Fund <sup>7</sup>	37.93 (65)	-0.88 (39)	13.41 (39)	10.16 (52)	20.69 (47)	3.93 (22)	-	-	-	-
S&P 500 (CAD)	38.06 (65)	-0.89 (39)	13.46 (38)	10.20 (51)	20.81 (45)	3.95 (22)	29.35 (49)	32.39 (70)	15.84 (50)	11.52 (43)
Value Added	-0.13	0.01	-0.05	-0.04	-0.12	-0.02	-	-	-	-
<b>International Equities</b>										
TD Emerald International Equity Index <sup>7</sup>	27.62 (72)	-8.62 (49)	0.06 (38)	10.87 (72)	15.22 (50)	-6.28 (76)	13.86 (63)	27.86 (63)	13.36 (56)	-3.09 (66)
MSCI EAFE (Net)	27.66 (72)	-8.78 (51)	-0.23 (41)	10.98 (70)	15.15 (51)	-6.32 (77)	13.69 (66)	27.72 (64)	13.09 (58)	-3.18 (68)
Value Added	-0.04	0.16	0.29	-0.11	0.07	0.04	0.17	0.14	0.27	0.09

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

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

<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.

<sup>4</sup>TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are presentative only.

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

<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.

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

<sup>8</sup>The Currency Overlay was discontinued on 20 November 2017.

Executive Summary

Rolling Year Performance<sup>1</sup>

As of 31 March

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>										
TDAM Universe Bond Index	1.10 (98)	4.63 (22)	5.21 (73)	1.33 (74)	1.34 (94)	0.72 (71)	10.30 (27)	0.71 (83)	4.38 (93)	9.69 (37)
FTSE TMX Canada Bond Universe	1.62 (92)	4.46 (27)	5.27 (63)	1.36 (74)	1.51 (88)	0.78 (68)	10.26 (32)	0.84 (74)	4.54 (90)	9.74 (34)
Value Added	-0.52	0.17	-0.06	-0.03	-0.17	-0.06	0.04	-0.13	-0.16	-0.05
TDAM Active Short Term Corporate	6.51	1.45	3.84	0.18	2.75	1.35	-	-	-	-
FTSE Canada Short Term Corporate Bond	6.46	1.63	3.84	0.19	2.79	1.28	4.24	2.50	4.38	5.10
Value Added	0.05	-0.18	0.00	-0.01	-0.04	0.07	-	-	-	-
<b>Alternatives</b>										
XRE ETF (Real Estate)	28.18	-22.41	20.64	7.17	9.92	-2.58	11.61	-3.68	-	-
BIP.UN (Infrastructure)	43.18	5.96	10.22	8.52	47.76	0.01	38.87	17.70	28.70	-

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

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

<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.

<sup>4</sup>TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are presentative only.

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

<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.

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

<sup>8</sup>The Currency Overlay was discontinued on 20 November 2017.

Performance Summary (Net of Fees)<sup>1</sup>

As of 31 March 2021

	Performance (%)								
	1 Quarter	Year To Date	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
<b>Total Fund</b>	<b>1.27</b>	<b>1.27</b>	<b>17.95</b>	<b>7.28</b>	<b>7.00</b>	<b>6.56</b>	<b>7.49</b>	<b>7.61</b>	<b>5.83</b>
CPI+3.6% <sup>2</sup>	2.50	2.50	5.88	5.19	5.31	5.48	5.43	5.23	5.35
Value Added	-1.23	-1.23	12.07	2.09	1.69	1.08	2.06	2.38	0.48
<b>Canadian Equities<sup>3</sup></b>									
TD Emerald Canadian Equity Index <sup>4</sup>	8.12	8.12	44.22	11.25	10.19	8.00	10.03	5.99	6.03
S&P/TSX Composite Index	8.05	8.05	44.25	11.24	10.19	8.01	10.05	6.00	6.01
Value Added	0.07	0.07	-0.03	0.01	0.00	-0.01	-0.02	-0.01	0.02
Sionna <sup>5</sup>	8.93	8.93	38.24	5.94	5.36	4.80	7.81	5.55	5.56
S&P/TSX Composite	8.05	8.05	44.25	11.24	10.19	8.01	10.05	6.00	6.01
Value Added	0.88	0.88	-6.01	-5.30	-4.83	-3.21	-2.24	-0.45	-0.45
<b>Global Equities<sup>6</sup></b>									
MSCI World Index (Net) (CAD)	3.58	3.58	36.70	13.97	11.88	11.36	12.73	12.74	7.76
Value Added	-4.12	-4.12	-12.75	-6.20	-3.29	-2.12	-1.24	-1.26	-2.22
Walter Scott <sup>5</sup>	-0.54	-0.54	27.75	13.02	13.94	13.92	14.22	13.91	9.50
MSCI World Index (Net) (CAD)	3.58	3.58	36.70	13.97	11.88	11.36	12.73	12.74	7.76
Value Added	-4.12	-4.12	-8.95	-0.95	2.06	2.56	1.49	1.17	1.74
<b>U.S. Equities</b>									
TD Emerald Pooled U.S. Fund <sup>7</sup>	4.73	4.73	37.89	16.89	15.71	14.29	15.53	-	-
S&P 500 (CAD)	4.75	4.75	38.06	16.97	15.79	14.37	15.63	16.87	10.57
Value Added	-0.02	-0.02	-0.17	-0.08	-0.08	-0.08	-0.10	-	-
<b>International Equities</b>									
TD Emerald International Equity Index <sup>7</sup>	2.11	2.11	27.59	7.96	5.25	6.62	8.28	8.34	4.68
MSCI EAFE (Net)	2.09	2.09	27.66	7.91	5.13	6.56	8.23	8.26	4.61
Value Added	0.02	0.02	-0.07	0.05	0.12	0.06	0.05	0.08	0.07

<sup>1</sup>Parentheses contain percentile rankings. (1st percentile is the best performing). Reported net returns are based on estimated fees.<sup>2</sup> CPI+3.6% benchmark has been implemented retrospectively since 1 November 2018. From 1 January 2017 to 31 October 2018, CPI+3.5% benchmark was used. From 1 January 2016 to 31 December 2016, CPI + 3.7% benchmark was used. From 1 January 2014 to 31 December 2016, CPI+3.75% benchmark was used. Prior to 1 January 2014, CPI+3.85% benchmark was used.<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.<sup>4</sup>TD Emerald Canadian Equity Index added July 2020. Returns prior to these dates are representative only.<sup>5</sup>Returns for Sionna before May 2012, Oldfield before July 2011, Trilogy before April 2008 and Walter Scott before July 2009 are based on composite returns.<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.<sup>7</sup>In November 2016, TD Emerald U.S. pooled and International Index funds were added. Returns prior to these dates are representative only.

Performance Summary (Net of Fees)<sup>1</sup>

As of 31 March 2021

	Performance (%)								
	1 Quarter	Year To Date	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
<b>Fixed Income</b>									
TDAM Universe Bond Index	-5.11	-5.11	1.09	2.83	3.61	3.01	2.66	3.85	4.29
FTSE Canada Universe Bond	-5.04	-5.04	1.62	3.03	3.77	3.16	2.83	3.98	4.42
Value Added	-0.07	-0.07	-0.53	-0.20	-0.16	-0.15	-0.17	-0.13	-0.13
TDAM Active Short Term Corporate	-0.57	-0.57	6.40	3.86	3.81	2.87	2.82	-	-
FTSE Canada Short Term Corporate Bond	-0.48	-0.48	6.46	4.02	3.96	3.00	2.96	3.22	3.99
Value Added	-0.09	-0.09	-0.06	-0.16	-0.15	-0.13	-0.14	-	-

<sup>1</sup>Parentheses contain percentile rankings. (1st percentile is the best performing). Reported net returns are based on estimated fees.

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

<sup>3</sup>There was no exposure to Canadian Equities from January 2012 to April 2012.

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

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

<sup>6</sup>The global equities return prior to August 2018 includes Trilogy.

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

Performance Relative to Investment Policy Objectives

4-Year Performance vs. Market Index Benchmark

As at 31 March 2021

Manager	4-Year Manager Return	Market Index	4-Year Index Return	4-Year Tracking / Value Added	Target Objective	Performance Objective	Achieved Objective	IMF <sup>3</sup>
<b>Passive Mandates:</b>								
TD Emerald Canadian Equity Index <sup>4</sup>	n/a	S&P/TSX Composite Index	n/a	n/a	n/a	n/a	n/a	0.025%
TDAM - Universe Bond Index	3.05%	FTSE Canada Bond Universe	3.16%	-0.11%	+/-0.06%	3.1% to 3.22%	No	0.025%
TD Emerald U.S. Pooled Fund <sup>1</sup>	14.32%	S&P 500	14.37%	-0.05%	+/-0.08%	14.29% to 14.45%	Yes	0.025%
TD Emerald International Equity Index <sup>1</sup>	6.65%	MSCI EAFE (Net)	6.56%	0.09%	+/-0.20%	6.36% to 6.76%	Yes	0.025%
<b>Active Mandates:</b>								
Sionna - Canadian Equities	5.17%	S&P/TSX Composite	8.01%	-2.84%	+1.0%	9.01%	No	0.337%
Walter Scott - Global Equities	14.68%	MSCI World (Net)	11.36%	3.32%	+2.0%	13.36%	Yes	0.635%
TDAM Short Term Corporate Bonds	2.97%	FTSE Canada Short Term Corporate	3.00%	-0.03%	+0.5%	3.50%	No	0.097%
Total Fund ex. Currency Overlay	6.82%	CPI + 3.6% <sup>2</sup>	5.48%	1.34%			Yes	0.164%

<sup>1</sup> Invested on 18 November 2016

<sup>2</sup> CPI + 3.6% benchmark has been implemented retrospectively since 1 November 2018. Prior to that, CPI + 3.5% benchmark was implemented since 1 January 2017. CPI + 3.7% benchmark was implemented since 1 January 2016, CPI + 3.75% benchmark was implemented since 1 January 2014 and CPI + 3.85% prior to that.

<sup>3</sup> IMF: Investment management fees

<sup>4</sup> Invested in July 2020



# BENEFITS UTILIZATION REPORT

06/18/2021

Joan Kennedy  
Manager, Benefits | Human Resources



UNIVERSITY OF  
**WATERLOO**

# Content

- Overview
  - External Arrangements
  - Cost Summary
  - Participation Levels (Canada Life)
- Life Insurance
- Long Term Disability
- Healthcare Benefits

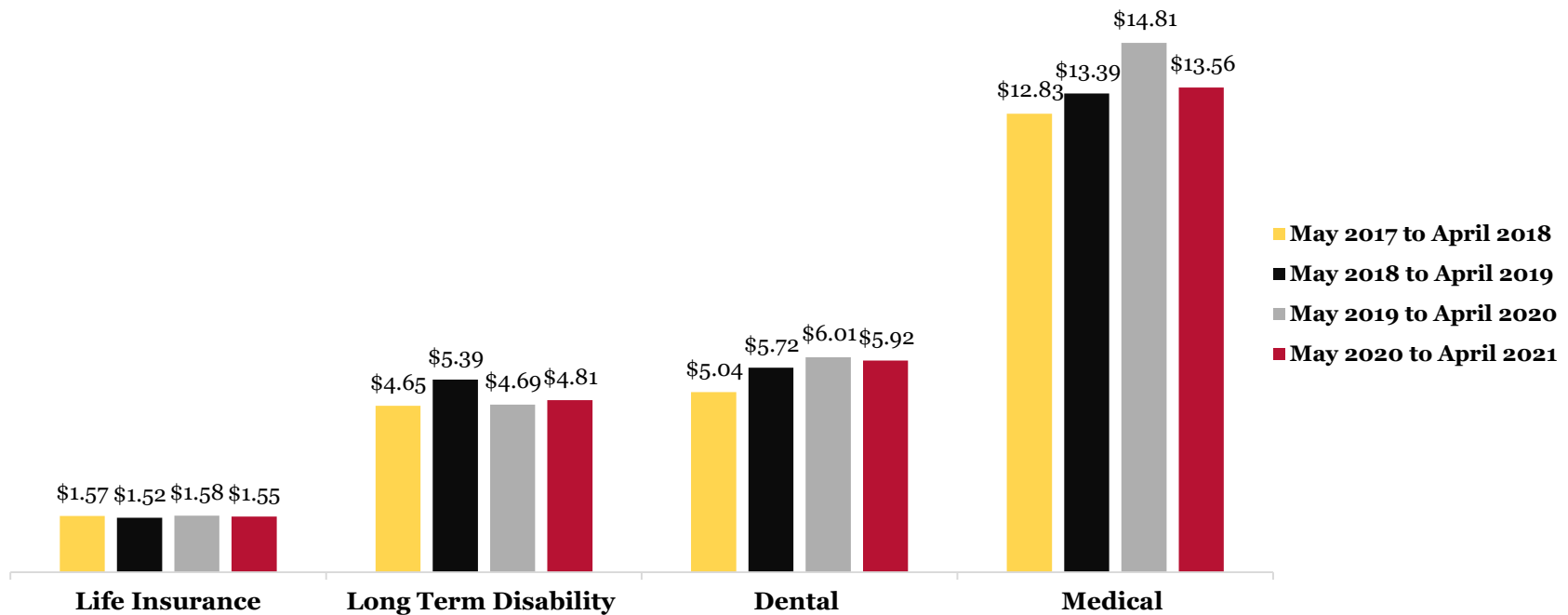
# External Arrangements

<b>Benefit</b>	<b>Vendor</b>	<b>Underwriting Arrangement</b>
Life Insurance	Sun Life Financial	Experience-rated, Retention
Long Term Disability	Canada Life	Experience-rated, Non-refund
Healthcare Benefits	Canada Life	Administrative Services Only (ASO) with large claims pooling (\$50,000 per individual per year)

# Cost Summary

The cost of the benefits program was \$25.84 million in the 2020/21 fiscal year which represents a decrease of 4.7% over the 2019/20 fiscal year ...

**Benefits Program - Cost Breakdown**  
(figures in millions)

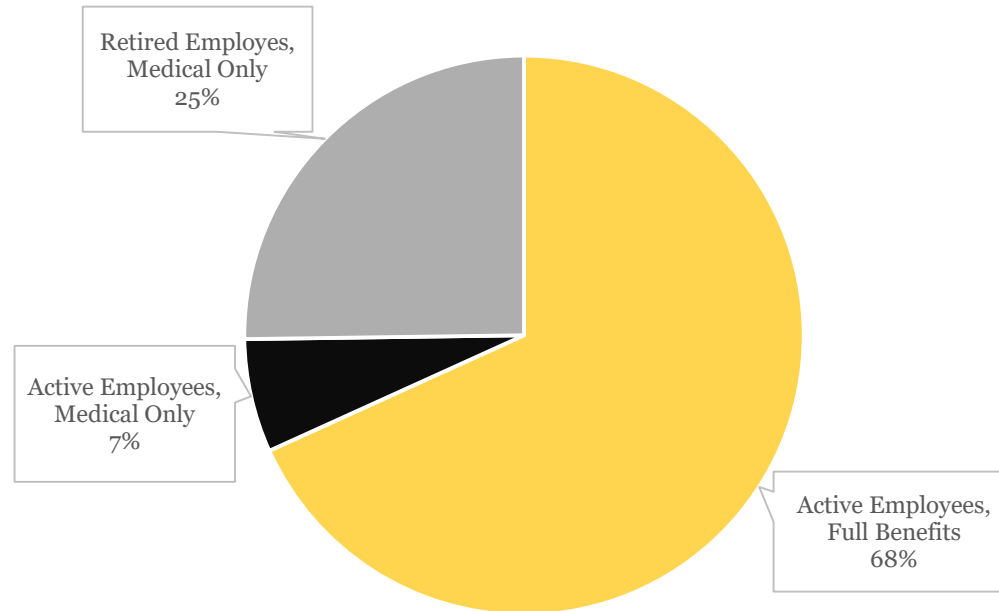


For the 2020/21 fiscal year, 52% of the overall cost pertains to medical benefits, followed by dental at 23%, long term disability at 19%, and life insurance at 6%

# Participation - Overall

Of the 7,525 active and retired employees participating in the benefits provided by Canada Life, 32% have access to the medical benefit only

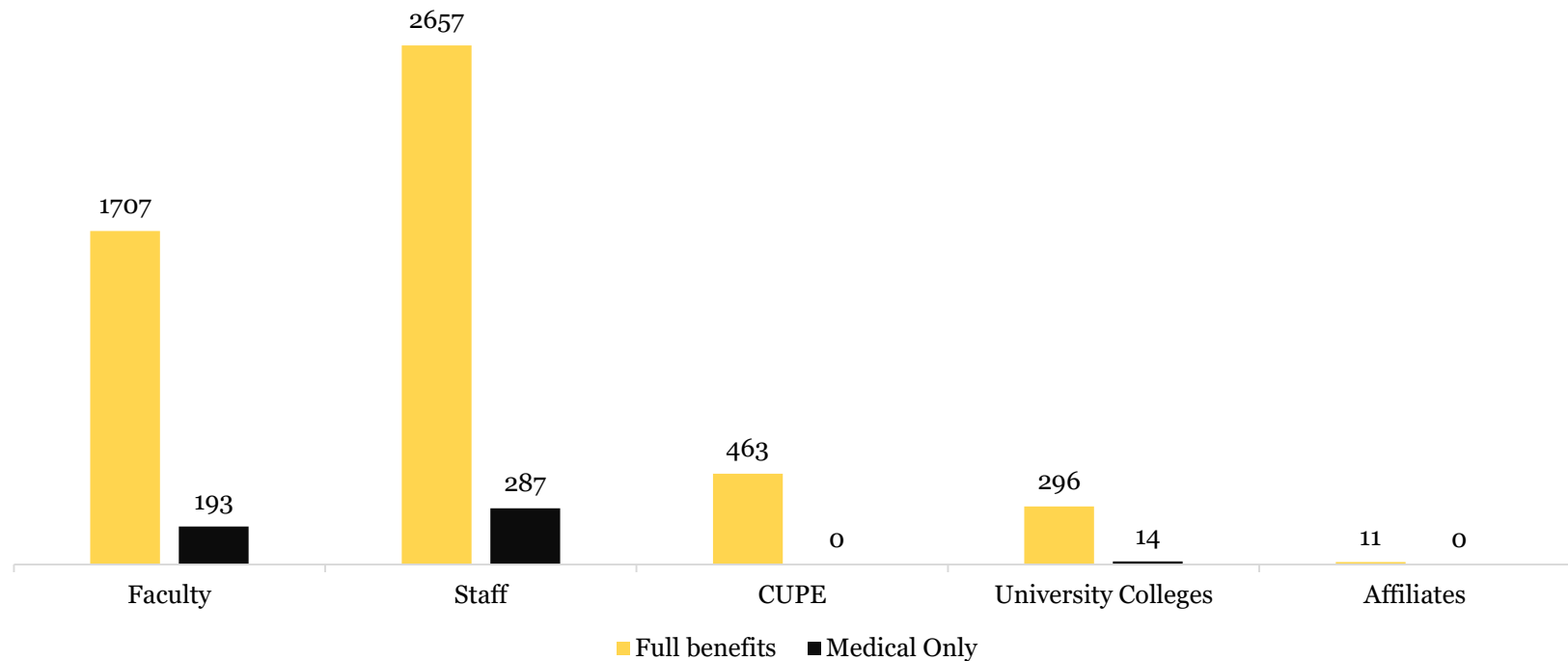
**Active and Retired Employees**  
Participation in Canada Life Benefits as of December 31, 2020



# Participation - Active Employees

Of the 5,628 active employees participating in the benefits provided by Canada Life, 8.7% have access to medical only

**Active Employees**  
*Participation in Canada Life Benefits as of December 31, 2020*



Source: Canada Life, June 3, 2021

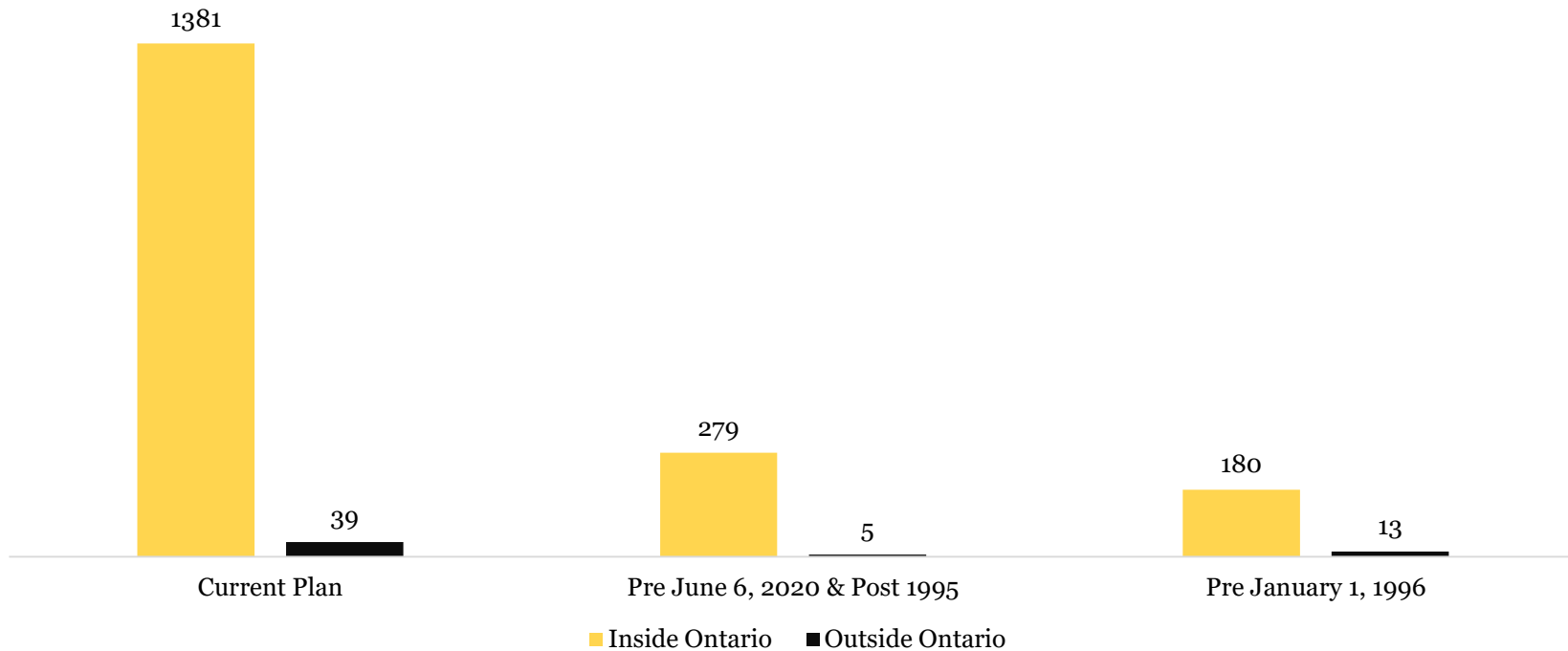
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# Participation - Retired Employees

Of the 1,897 retired employees participating in the medical benefit, 75% are enrolled in the current plan and 25% are enrolled in closed plans

**Retired Employees**  
*Participation in Canada Life Benefits as of December 31, 2020*

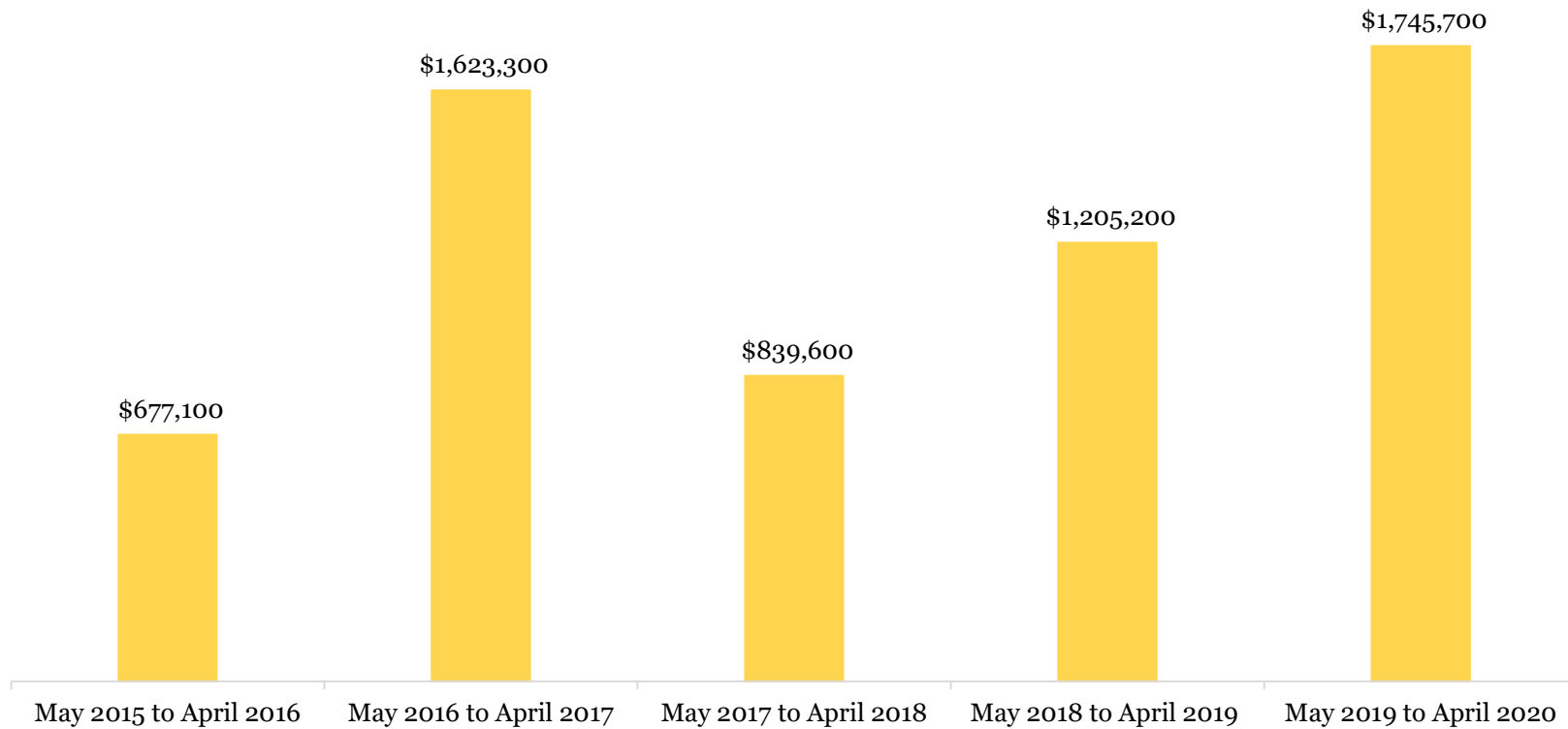


Source: Canada Life, June 3, 2021



# Life Insurance

## Total Paid Claims *5-year Summary*



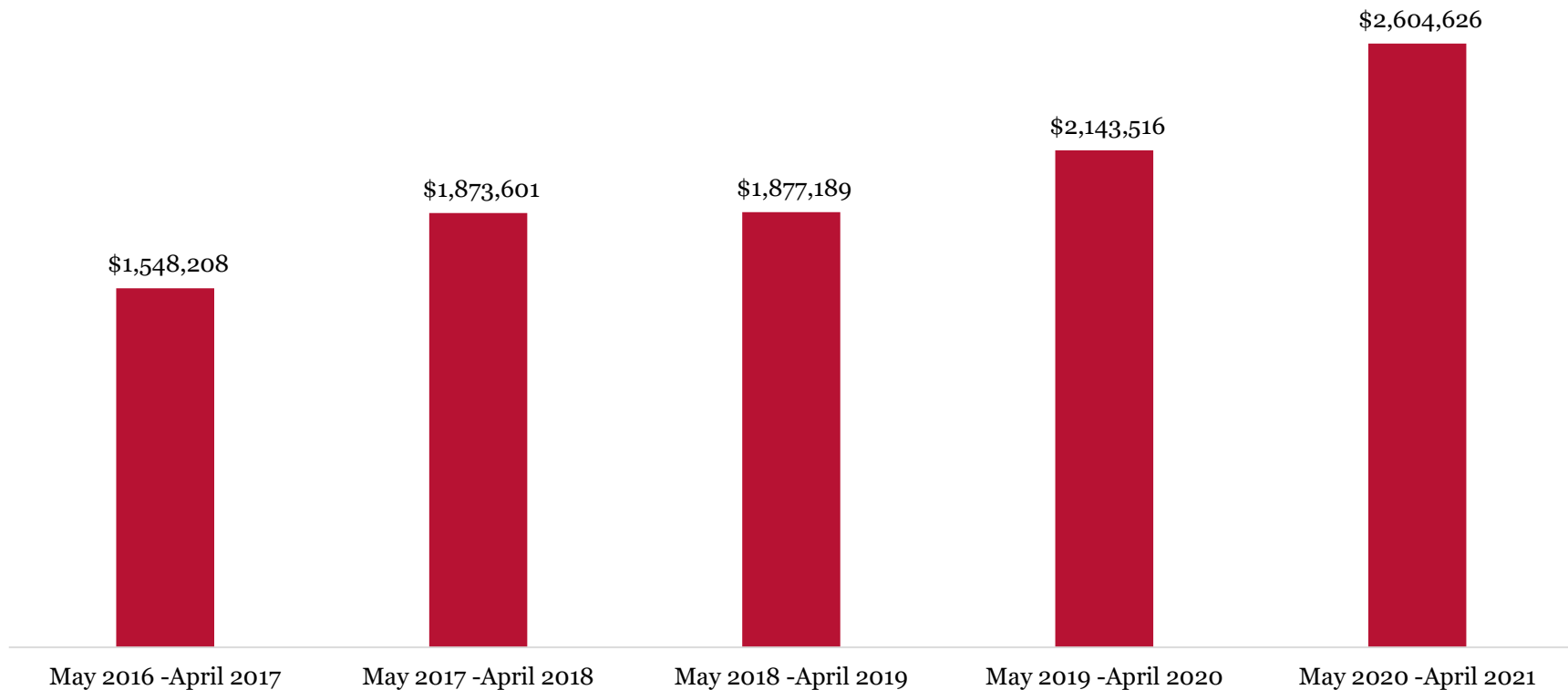
Note: University Colleges and Affiliates included in above data

Source (May 2019 to April 2020 data): Mercer, July 15, 2020



# Long Term Disability

## Paid LTD Claims *5-year Summary*

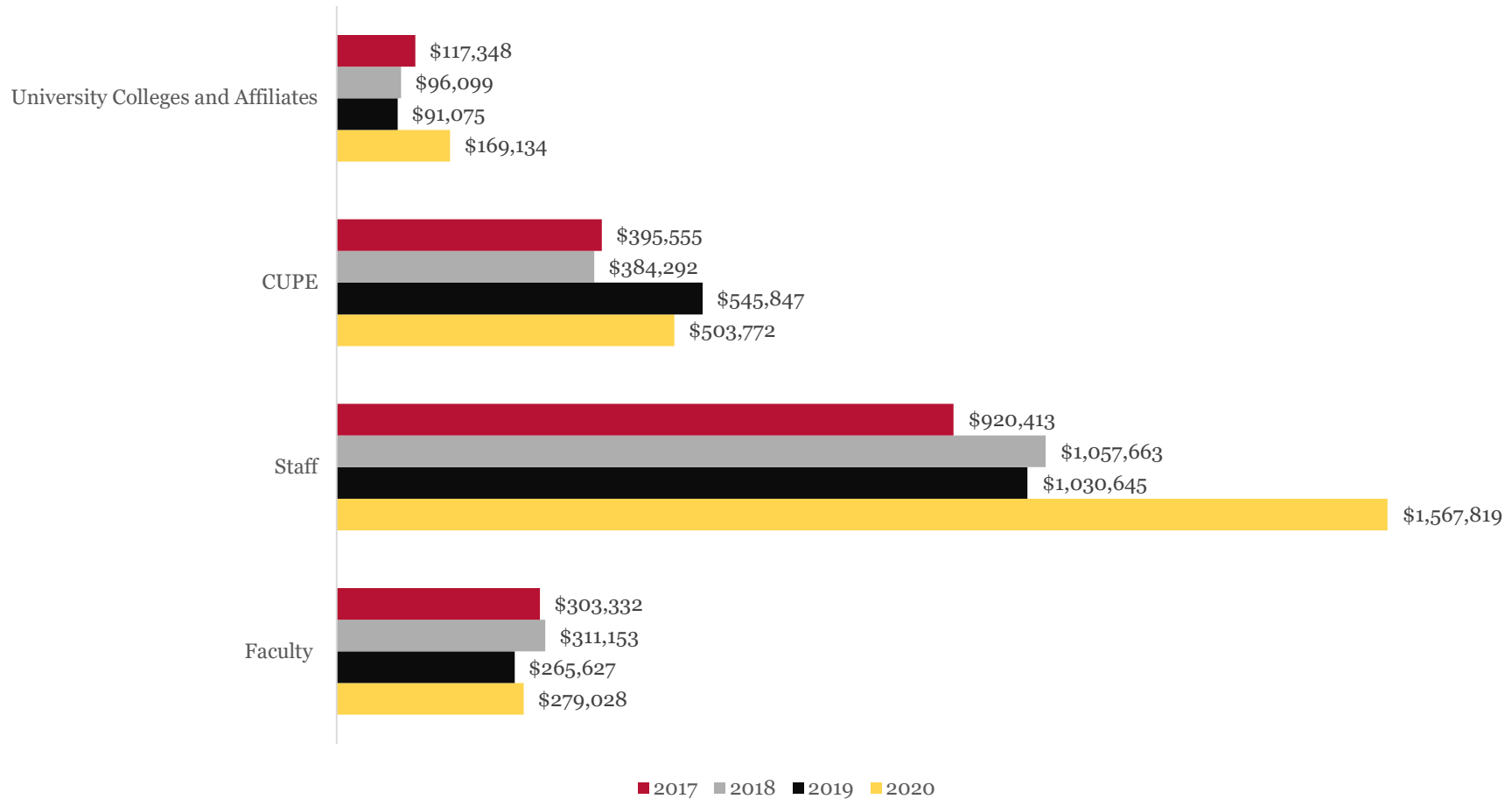


Note: University Colleges and Affiliates included in above data

Source (May 2020 to April 2021 data): Canada Life, May 29, 2021

# Long Term Disability (cont.)

Paid LTD Claims by Employee Group

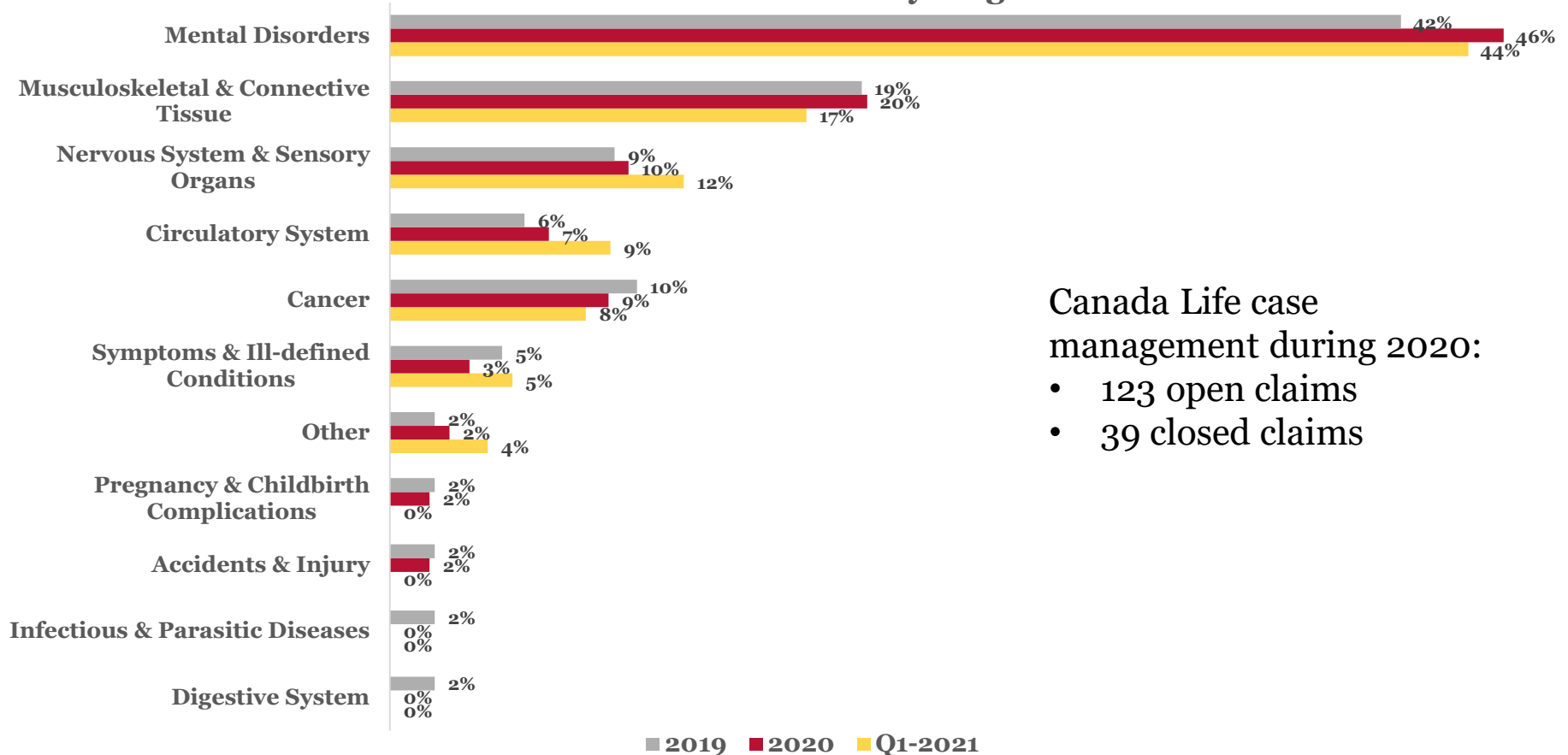


Source: Canada Life, May 29, 2021



# Long Term Disability (cont.)

LTD claims Incidence by diagnosis



Canada Life case management during 2020:

- 123 open claims
- 39 closed claims

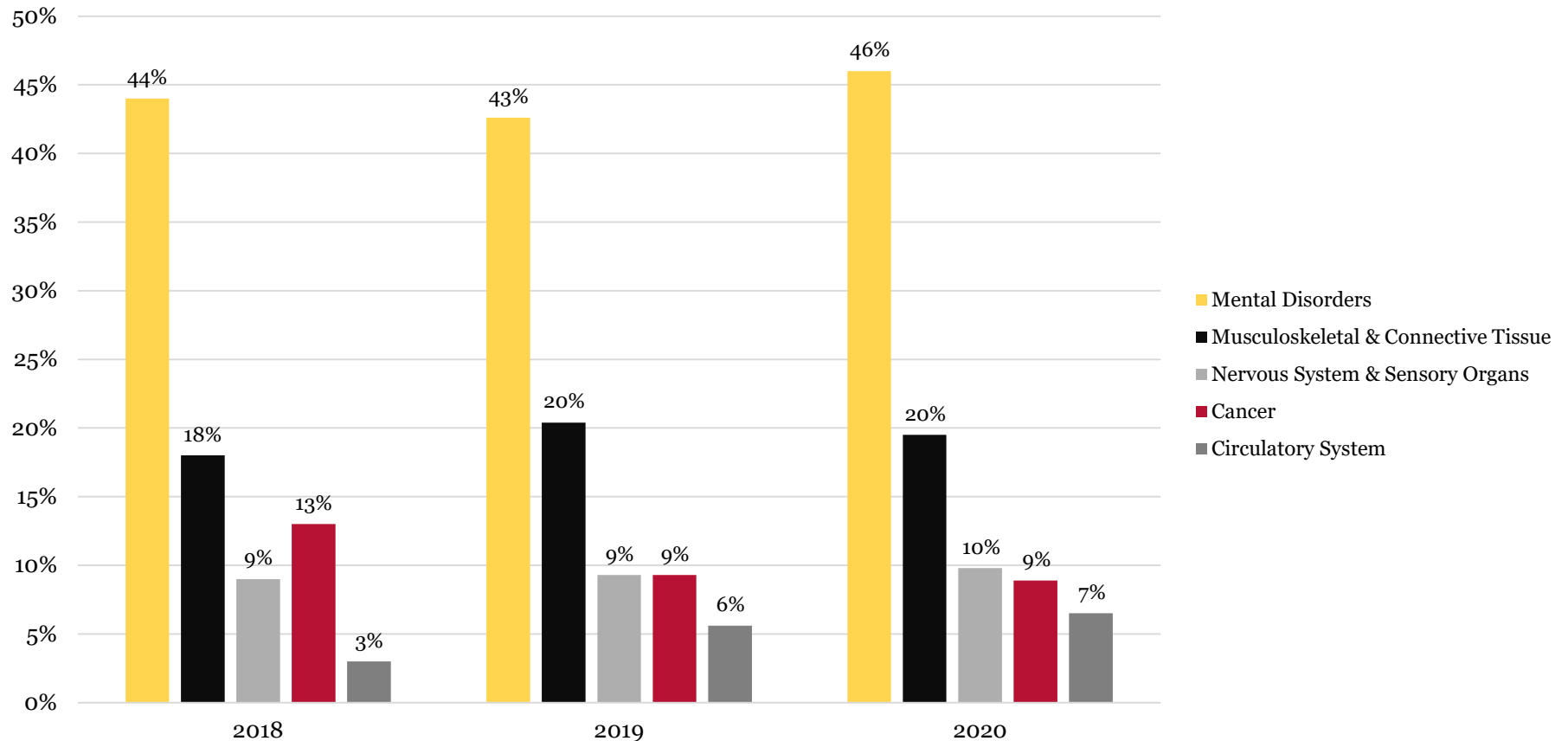
Note: Other ++ Some diagnosis categories may have been combined to ensure employee rights to confidentiality

Source: Canada Life, June 2, 2021



# Long Term Disability (cont.)

## Open LTD Claims - Top 5 Diagnosis



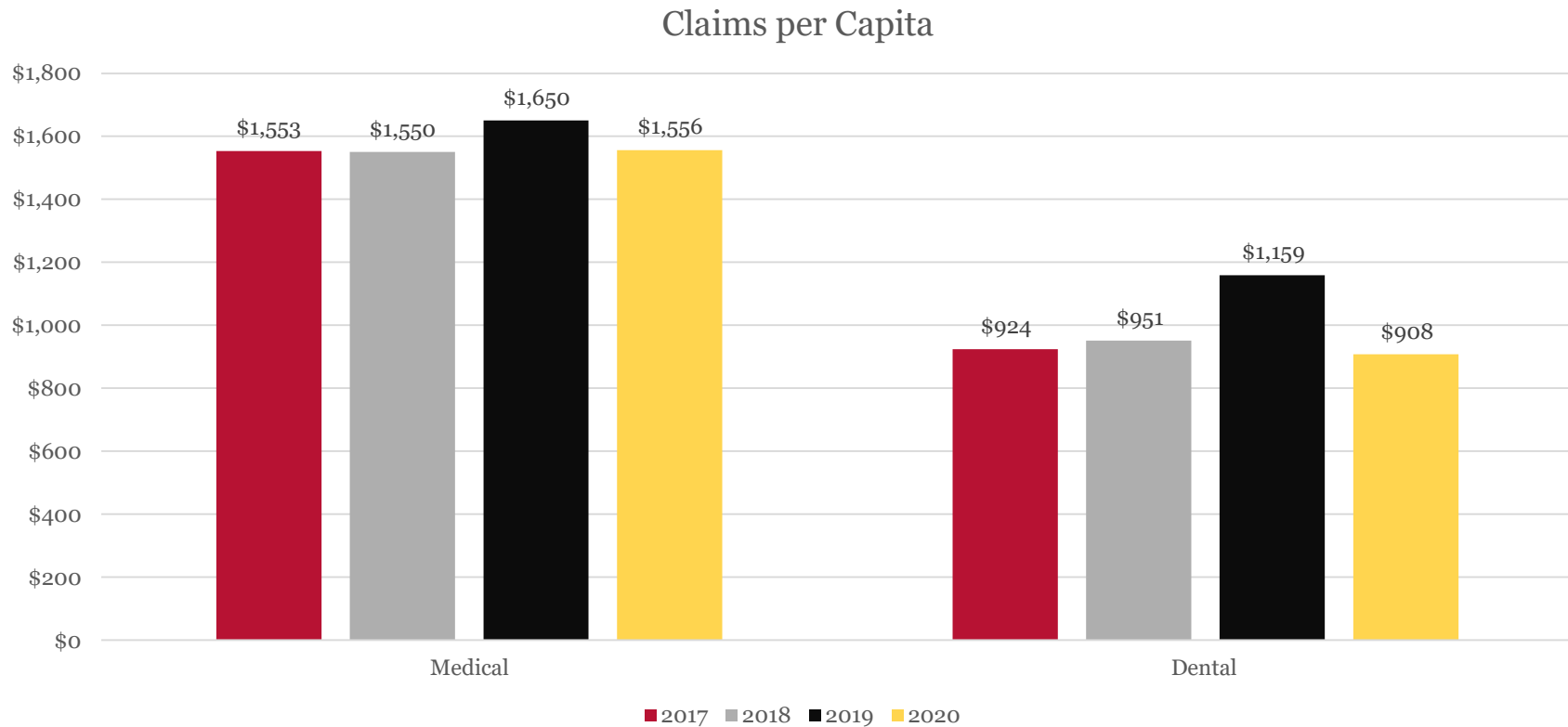
Source: Canada Life, June 1, 2021

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# Healthcare

On a per capita basis, claims reduced in 2020 (-5.7% for Medical and -21.7% for Dental) and were lower than expected, driven primarily by the COVID-19 pandemic ...



Source: Aon 2020 Renewal Report, March 23, 2021

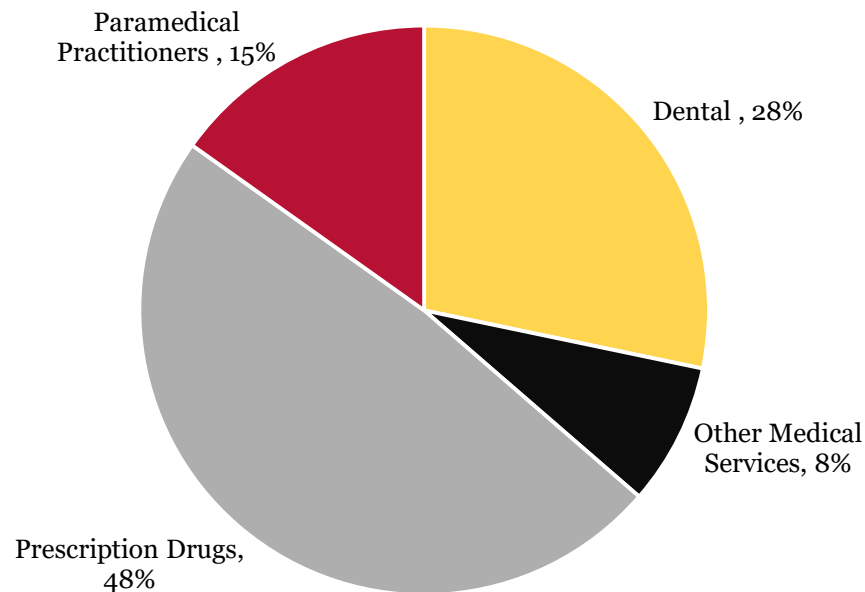
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# Healthcare (cont.)

In 2020, healthcare claims amounted to \$16.2M with 277,124 occurrences which equates to an average reimbursement of \$58 per occurrence ...

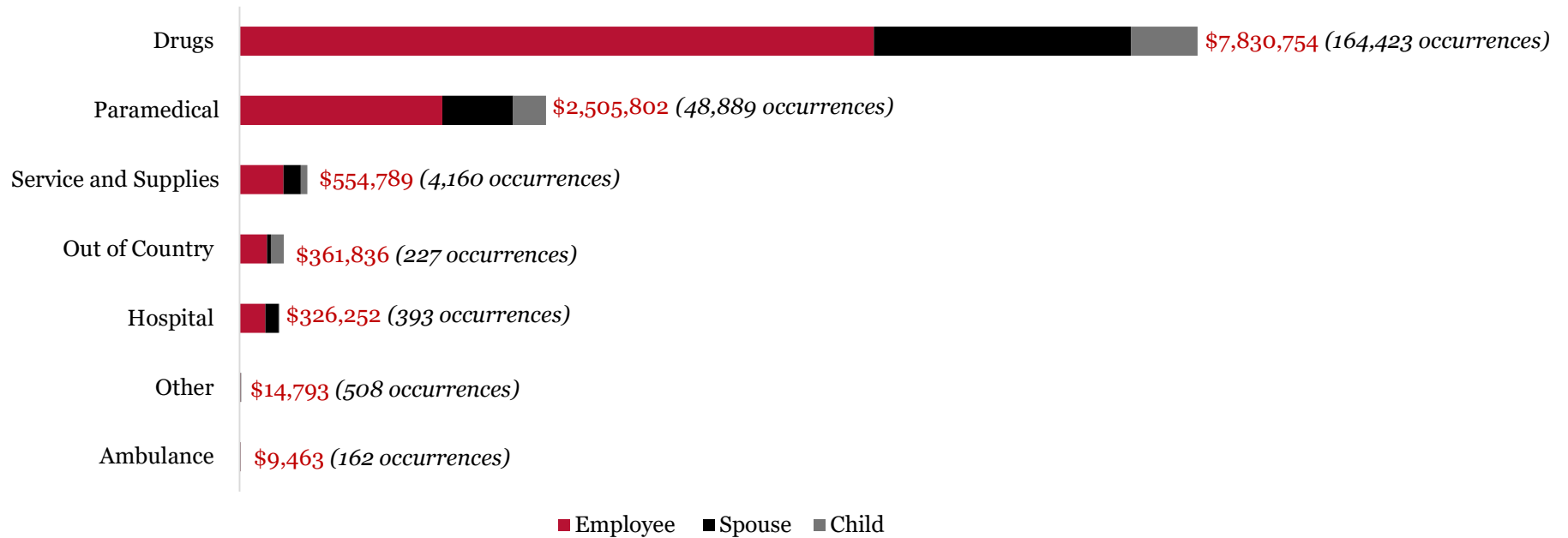
**Paid Healthcare Claims**  
*For the January 1 to December 31, 2020 period*



# Medical

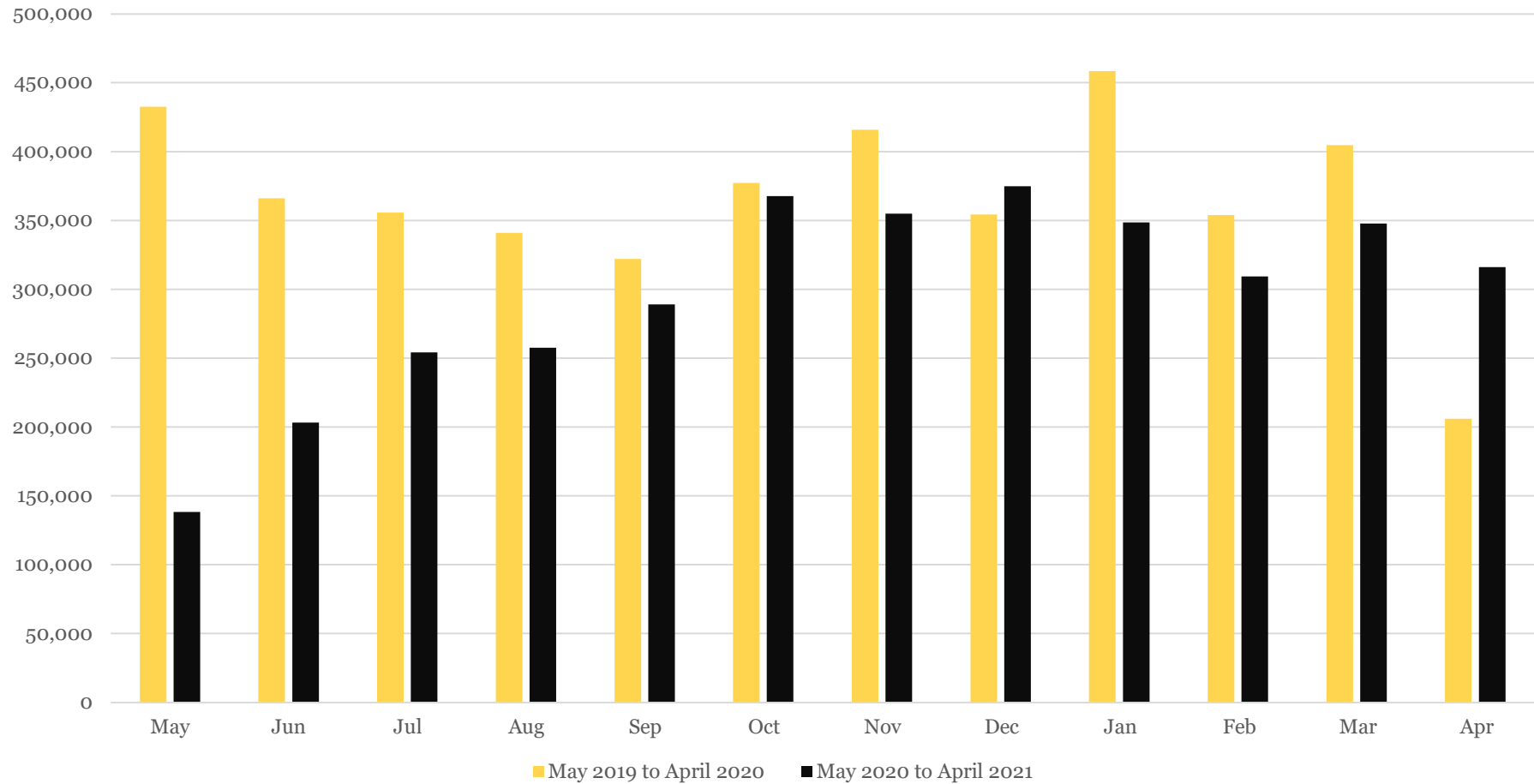
In 2020, medical claims amounted to \$11.6M with 218,762 occurrences which equates to an average reimbursement of \$53 per occurrence ...

## Breakdown of Paid Medical Claims For the January 1 to December 31, 2020 Period



# Medical (cont.)

Medical  
Paid Claims month over month



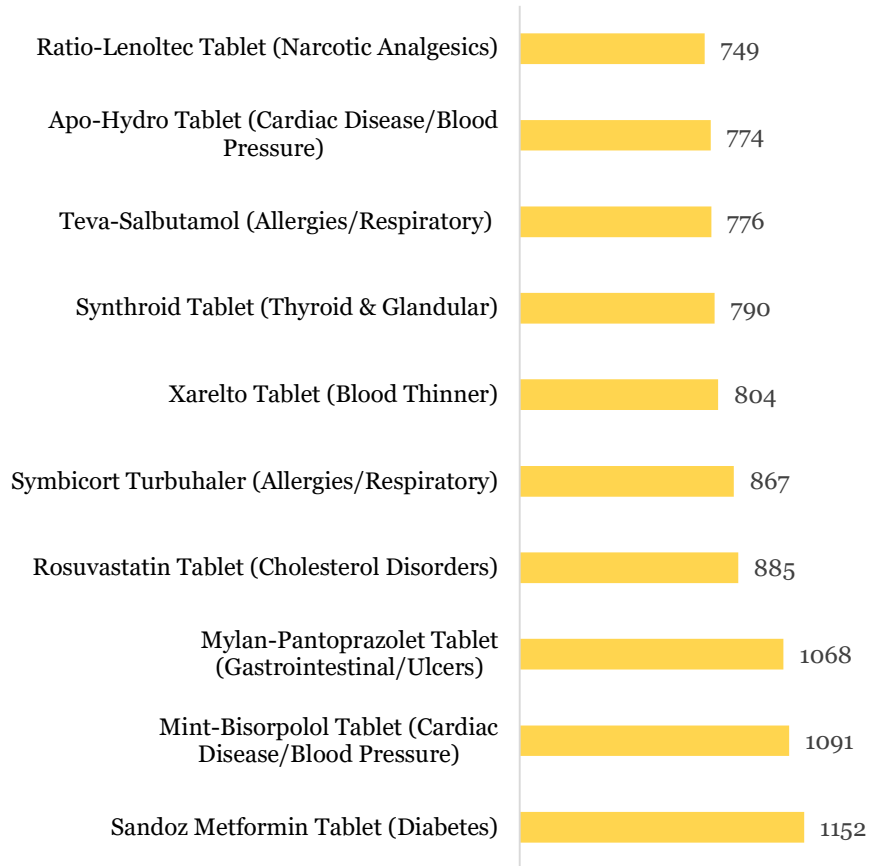
Source: Canada Life ASO Billing Statements for April (2020 and 2021)



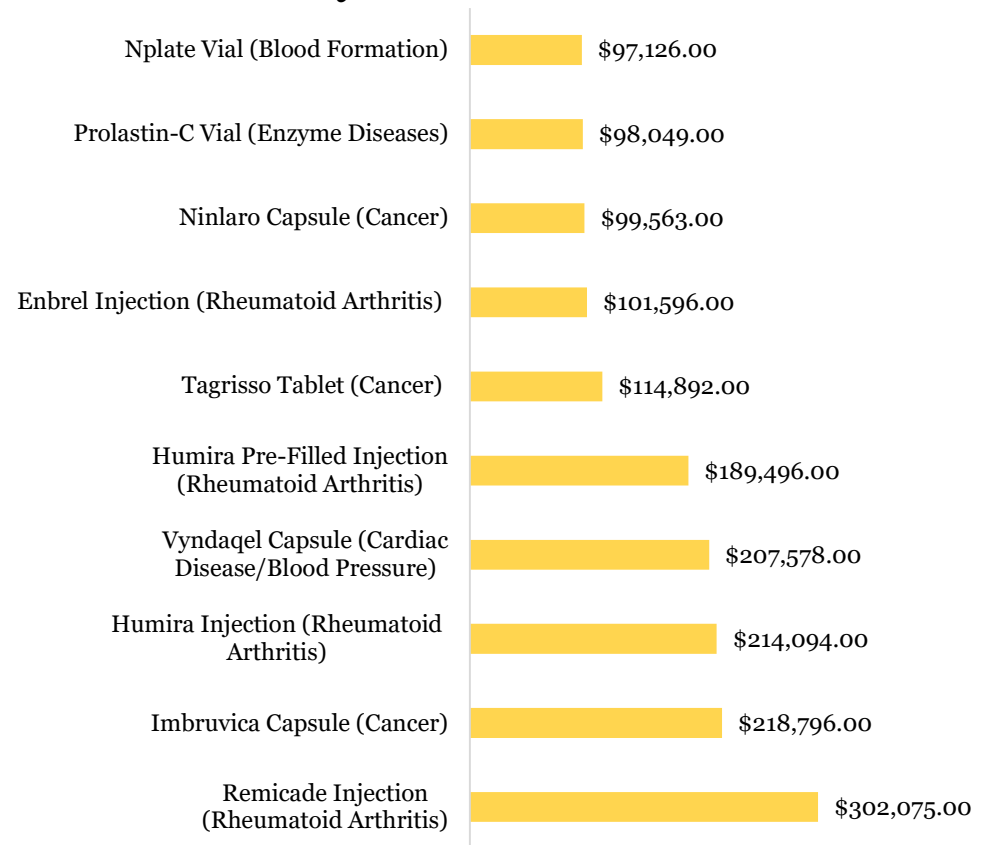
# Prescription Drugs

## Top 10 Prescription Drugs For May 2020 to April 2021 Period

### By Number of DINS Covered



### By Amount Paid



Source: Canada Life, June 3, 2021

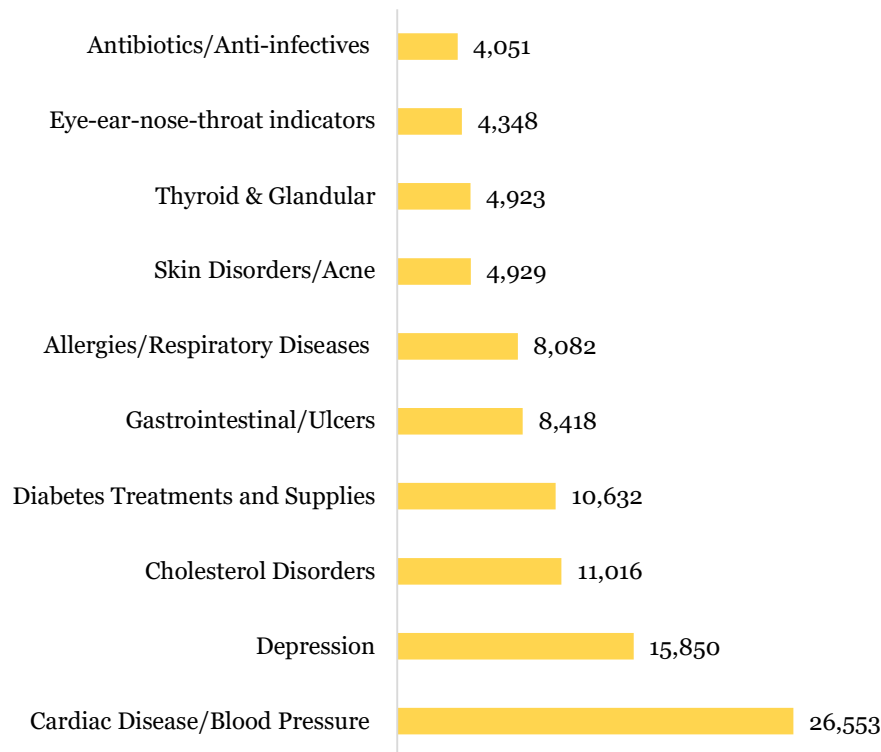
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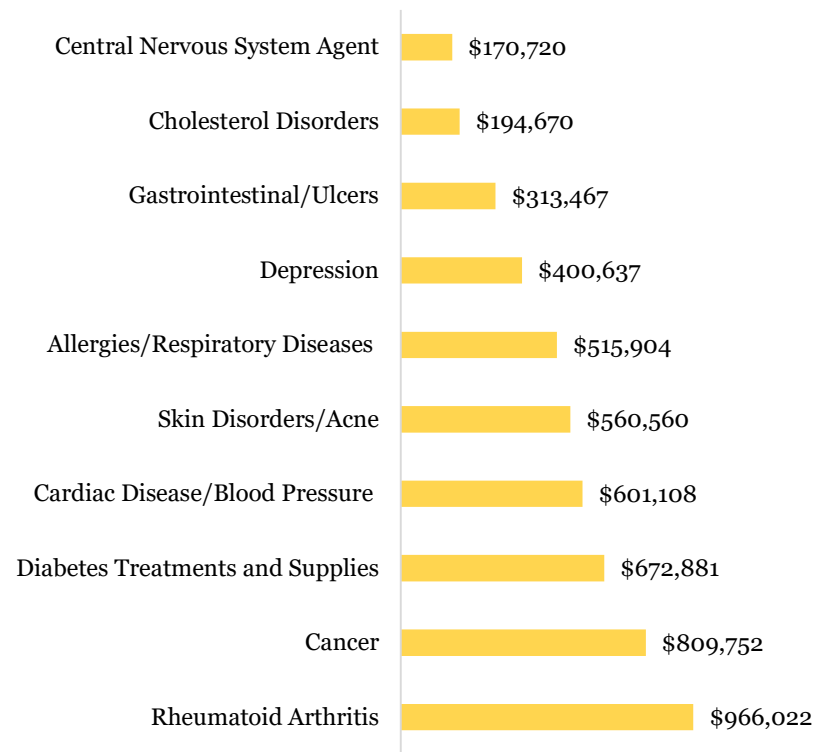
# Prescription Drugs (cont.)

## Top 10 Therapeutic Classifications For the May 2020 to April 2021 Period

### Number of DINS



### Amount Paid



Source: Canada Life, June 3, 2021

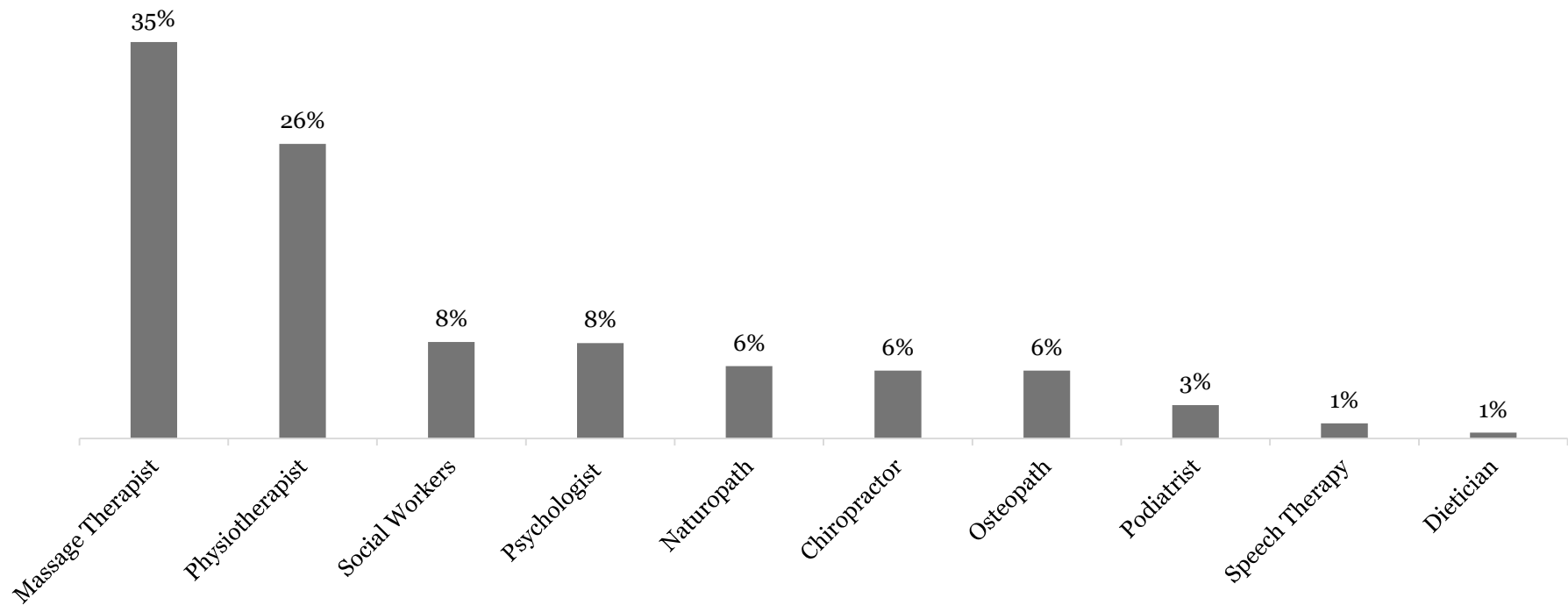
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# Paramedical Practitioners

In 2020 just over 2.5 million in paramedical claims were paid which represents a decrease of 22.5% over 2019

**Distribution of Paid Paramedical Practitioners Claims**  
*For the January 1 to December 31, 2020 Period*

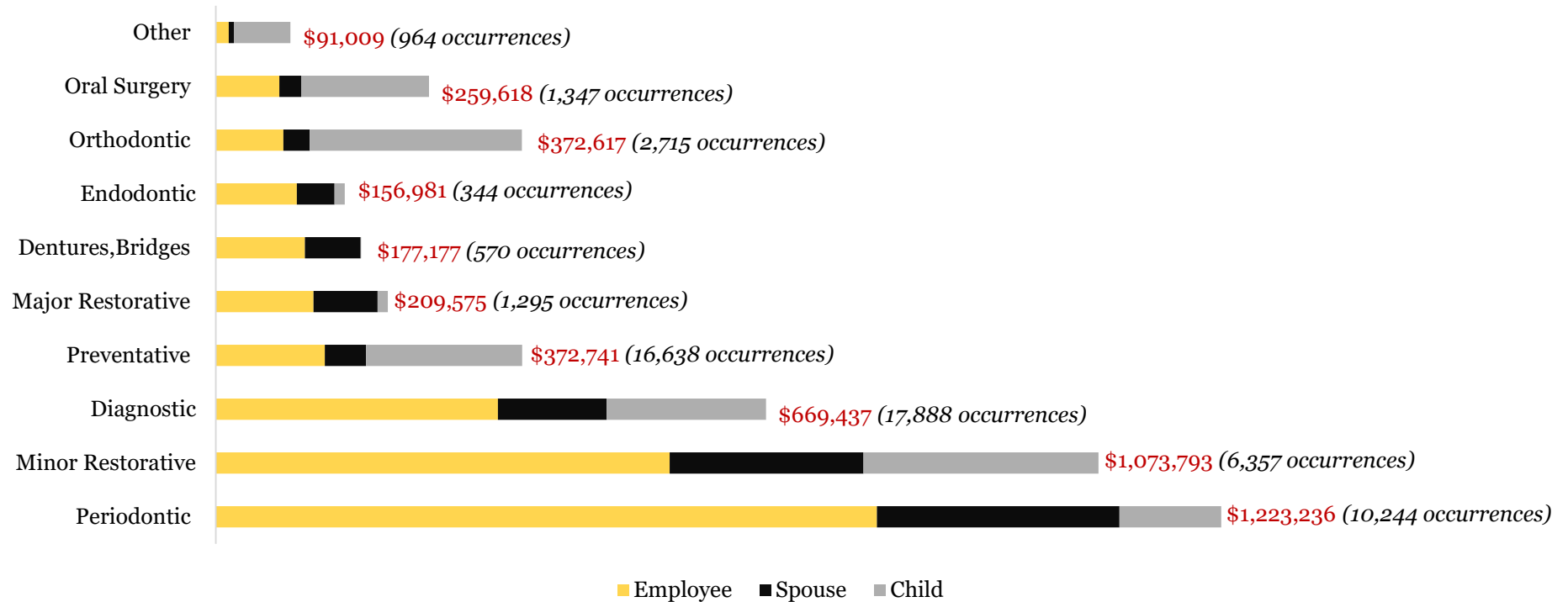


Source: Canada Life, June 1, 2021

# Dental

In 2020, dental claims amounted to \$4.6M with 58,362 occurrences which equates to an average reimbursement of \$79 per occurrence

## Breakdown of Paid Dental Claims For the January 1 to December 31, 2020 Period



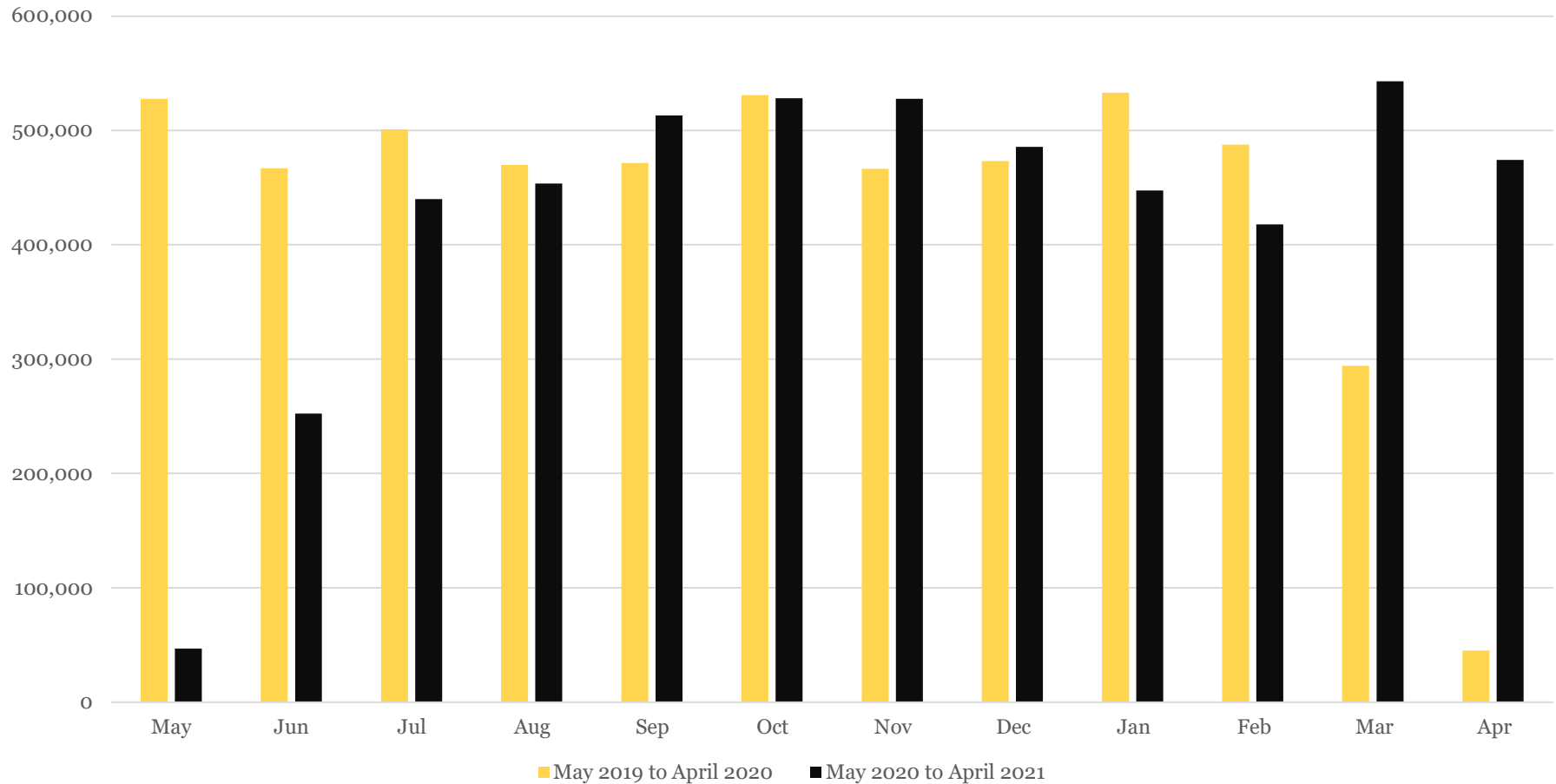
Source: Canada Life, June 3, 2021

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# Dental (cont.)

Dental  
Paid Claims month over month



Source: Canada Life ASO Billing Statements for April (2020 and 2021)

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## Mike Grivicic

---

**Subject:** FW: Responsible Investment Advisory Group

**From:** Ranjini Jha <rjha@uwaterloo.ca>

**Sent:** Thursday, June 10, 2021 3:57 PM

**To:** Mike Grivicic <mgrivicic@uwaterloo.ca>

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**Subject:** Responsible Investment Advisory Group

Hi Mike,

Here are the starting points for the discussion on June 18 at P&B of the RIAG report that was endorsed by the Board of Governors.

Discussion points:

1. Given the province has not provided specific guidelines on ESG investing, we need an opinion on the legal risks for the P&B Committee for implementing the RIAG recommendations.

We would also like clarifications on the fiduciary/legal responsibility and accountability for the Pension Fund for the PIC, F&I, and the Board of Governors vis-a-vis P&B.

2. We need more information on the operational and implementation process and the cost-benefit analysis for the RIAG recommendations.

3. We need confirmation of P&B and PIC's involvement in the operational and implementation process. We were not involved in the RIAG though we had representation on the RIWG.

4. Sheryl mentioned that RIAG's recommendations will move quicker for the endowment compared to the Pension Fund - implications for SIPP?

5. Request for rationale for RIAG's recommendations

6. Clarification that RIAG carbon reductions are soft targets subject to review

7. Request for information on the experience of other Canadian Universities that have already implemented ESG recommendations for their Endowment funds

Thanks,

Ranjini

## Pension & Benefits Committee – Resolution

### 1. MEMBERSHIP

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

- The Vice-President, Academic & Provost
- The Vice-President, Administration & Finance
- 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.
- Two members appointed on the recommendation of the President of the University of Waterloo.
- Three members of the regular faculty appointed on the recommendation of the President of the UW Faculty Association.
- Two members of the regular University Support Staff appointed on the recommendation of the President of the UW Staff Association.
- One member of the unionized staff appointed on the recommendation of the President of CUPE Local 793.
- One retiree who is receiving a University of Waterloo pension, appointed on the recommendation of the President of the UW Retirees Association.

In addition, a non-voting member representing the Colleges shall be appointed by the Board of Governors on the recommendation of the College Heads.

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

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

### 2. MEETINGS

The Committee normally meets monthly from September through June; additional meetings are called as required.

### 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:

- to make and enforce such rules and regulations as it shall deem necessary for the effective and efficient administration of the pension plan and to decide all questions concerning the pension plan, including who is eligible to participate
- to prepare accounts and records showing the detailed operation of the pension plan and to make an annual report to the Board of Governors
- to review the annual audit of the Pension Plan Fund Financial Statements
- to appoint a consulting actuary and to commission research on pension or benefits
- 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
- 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
- to recommend to the Board the appointment of custodians / trustees and fund managers
- to recommend to the Board for approval investment policy as described in the Statement of Investment Policies and Procedures



Note:

[1] The Finance & Investment Committee will assist, advise and review on matters related to the appointment of the custodians / trustees and fund managers and investment policy. When the Pension & Benefits Committee is selecting a fund manager, the Chairs of the Finance & Investment Committee and of the Pension & Benefits Committee consult and reach agreement on the selection process of the fund manager as well as the extent to which the Finance & Investment Committee will act as a resource to the Pension & Benefits Committee.

[2] The Human Resources Department has day-to-day responsibility for administering the benefits plans.

[3] The Board of Governors on 30 October 2018 approved the delegation of specific powers and responsibilities of the Pension & Benefits Committee to the Pension Investment Committee for the latter to be established as the operational locus of control for matters pertaining to the management of investment assets of the pension plan, as follows: (1) to review annually the Statement of Investments Policies and Procedures, and to recommend any amendments to the Board of Governors through the Pension & Benefits Committee; (2) to review and recommend the selection/termination of investment managers to the Pension & Benefits Committee for further recommendation to the Board of Governors; (3) to review and report on investment manager performance at least annually to the Finance Investment Committee and the Pension & Benefits Committee; (4) to approve asset mix changes and investment decisions within the list of approved investment managers where the cumulative transactions(s) represent less than 15% of the pension plans total assets at the beginning of the calendar year, and to make recommendations to the Pension and Benefits Committee on asset mix changes where the cumulative transaction(s) represent more than 15% of the pension plans' total assets at the beginning of the calendar year, for further recommendation to the Board of Governors;(5) to review reports from the Pension & Benefits Committee including but not limited to the annual valuation of the pension plan, investment-related risk/return assessments, and asset-liability studies.

#### **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 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.*

## Pension Investment Committee - Terms of Reference

The Pension Investment Committee (the "committee") is a subcommittee of the Finance & Investment Committee and Pension & Benefits Committee that oversees the investment of the assets of the University of Waterloo Pension Plan ("the Plan").

### Mandate

The committee is mandated to oversee the investments of the Plan recognizing that (a) the Plan is funded through employee and employer contributions and (b) investment decisions are based on a full understanding of the underlying liabilities, within acceptable risk tolerances, while remaining mindful of liability matching requirements and optimization of fees.

The details of the mandate are as follows:

1. To review, at least annually, the Statement of Investment Policy and Procedures (SIPP) with input from the Finance & Investment Committee, and to recommend any amendments of the SIPP through the Pension & Benefits Committee to the Board of Governors
2. To review reports provided by the Pension & Benefits Committee including the annual valuation, investment-related risk/return assessments, and asset-liability studies and to advise the Pension & Benefits Committee on those reports
3. To meet annually with the investment managers that the Plan has retained
4. To make recommendations to the Board of Governors from time to time, through the Pension & Benefits Committee, on the selection and termination of investment managers or specific investments of the Plan
5. To review at each meeting the investment returns of the Plan assets, the performance of the investment managers, the profile of the Plan assets with respect to acceptable risk tolerances and asset allocation, and the profile of the Plan assets with respect to applicable liability matching requirements
6. To provide written reports quarterly to the Pension & Benefits Committee and to the Finance & Investment Committee outlining the Pension Investment Committee's activities, decisions, recommendations, future agenda items, and any other applicable information. The Chair will meet at least annually with the Pension & Benefits Committee and the Finance & Investment Committee. A summary report will be provided quarterly to the Board of Governors through the Pension & Benefits Committee and the Finance & Investment Committee
7. To approve asset mix changes and investment decisions in compliance with the SIPP amongst the approved investment vehicles where the cumulative annual transaction(s) represents less than 15% of the Plan's total assets at the beginning of the calendar year. This activity includes allocations to newly-approved managers, or existing approved managers. The committee may at its discretion place investment managers on watch based on criteria developed by the committee. Written reports of all such investment decisions shall be provided to the Pension & Benefits Committee, the Finance & Investment Committee and the Board of Governors
8. To consult with the Finance & Investment Committee prior to recommending investment decisions and/or asset mix changes to the Board of Governors through the Pension & Benefits Committee, where the cumulative transactions in that calendar year would result in exceeding 15% of the Plan(s) total assets
9. To convene a meeting with the Pension & Benefits Committee in the event of a significant market event or shift, to discuss issues such as: specifics of significant changes in the investment environment; desirable changes to asset mix; overall risk appetite; the quality of specific investments and/or performance of investment managers during the event or shift; and market opportunities that may be presented due to the event or shift
10. To advise and/or make recommendations to the Board of Governors and/or the Pension & Benefits Committee on any matter pertaining to the management of the assets of the Plan

## Meetings

The committee normally will meet four times per year, approximately quarterly, from September to June. Additional meetings will be called as required. In person attendance at meetings is encouraged, however, members may attend meetings electronically when the university and members have appropriate alternate means at their disposal. Between meetings, at the direction of the chair, the secretary may facilitate voting on a motion or motions through email or another suitable platform, provided none of the members object on the grounds that further information or discussion is reasonably required in order to make a proper decision. Meetings are restricted to committee members and guests invited by the committee.

## Membership

The three voting constituencies among members are as follows:

1. Three (3) voting members appointed from and by the Board of Governors, with pension risk management and/or investment expertise
2. Two voting members having pension risk management and/or investment expertise, drawn from the complement of regular faculty, staff, and retirees and appointed via consensus agreement by the presidents of Faculty Association of the University of Waterloo (FAUW), the University of Waterloo Staff Association (UWSA), Canadian Union of Public Employees Local 793 (CUPE), and the University of Waterloo Retirees Association (UWRA)
3. Two voting members to be drawn from the external community with expertise in pension risk and/or investment, appointed by the Governance Committee of the Board of Governors. The prospective members in this category will be recommended by the Pension & Benefits Committee to the Governance Committee, and the Pension & Benefits Committee would be responsible to prepare a master list of potential members for the Governance Committee and update it annually to ensure that the Governance Committee has a list of members with relevant expertise for the PIC.

The committee will include four non-voting members: two from university administration appointed by the university president, and two from the employee groups appointed via consensus of the presidents of CUPE, FAUW, UWSA, and UWRA. It is intended that all of CUPE, FAUW, UWSA and UWRA would be represented through the two voting plus two non-voting members.

At least three voting members shall have investment expertise and at least three voting members shall have experience in managing pension risk. The committee may engage experts from industry or academia if specific advice is required.

Appointments are for one (1) three-year term with the option to reappoint for one (1) additional three-year term. Members may be reappointed for two (2) additional three-year terms thereafter following a two-year break from the end of their most recent term.

## Quorum

At least four voting members, with: at least two members appointed from the Board, one member from the employee/retiree constituency, and one member from the external community.

## Chair

The chair of the Committee is appointed from among the committee membership by the Board of Governors, on the recommendation of the Governance Committee.

## Voting

Where a question is to be decided with a formal vote, the result of the vote must have the support of at least one member from each of the three voting constituencies to validly carry the motion.

*approved on 30 October 2018*