

CONDENSED INTERIM CONSOLIDATED STATEMENT OF FINANCIAL POSITION (unaudited)

(Canadian \$ millions)	As at June 30, 2022	As at December 31, 2021
Net assets available for benefits		
ASSETS		
Cash	\$ 422	\$ 484
Receivable from the Province of Ontario	2,464	3,234
Receivable from brokers	295	26
Investments (note 2)	308,395	321,473
Premises and equipment	84	91
	311,660	325,308
LIABILITIES		
Accounts payable and accrued liabilities	509	693
Due to brokers	395	523
Investment-related liabilities (note 2)	68,306	82,510
	69,210	83,726
Net assets available for benefits	\$ 242,450	\$ 241,582
Accrued pension benefits and surplus/ (deficit)		
Accrued pension benefits (note 3)	\$ 192,756	\$ 257,482
Surplus/(deficit)	49,694	(15,900)
Accrued pension benefits and surplus/ (deficit)	\$ 242,450	\$ 241,582

The accompanying notes are an integral part of these Interim Financial Statements.

CONDENSED INTERIM CONSOLIDATED STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS (unaudited)

For the six-month period ended June 30	2022	2021
(Canadian \$ millions)		
Net assets available for benefits, as at January 1	\$ 241,582	\$ 221,241
Investment operations		
Net investment income (note 5)	3,154	8,589
Administrative expenses	(360)	(322)
Net investment operations	2,794	8,267
Member service operations		
Contributions (note 7)	1,705	1,682
Benefits (note 8)	(3,589)	(3,432)
Administrative expenses	(42)	(42)
Net member service operations	(1,926)	(1,792)
Increase in net assets available for benefits	868	6,475
Net assets available for benefits, as at June 30	\$ 242,450	\$ 227,716

The accompanying notes are an integral part of these Interim Financial Statements.

CONDENSED INTERIM CONSOLIDATED STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS (unaudited)

For the six-month period ended June 30 (Canadian \$ millions)	2022	2021
Accrued pension benefits, as at January 1	\$ 257,482	\$ 257,330
Increase in accrued pension benefits		
Interest on accrued pension benefits	3,226	2,581
Benefits accrued	4,795	4,891
Experience losses (note 3c)	5,331	—
	13,352	7,472
Decrease in accrued pension benefits		
Benefits paid (note 8)	3,589	3,432
Changes in actuarial assumptions and methods (note 3a)	74,489	21,064
	78,078	24,496
Net decrease in accrued pension benefits	(64,726)	(17,024)
Accrued pension benefits, as at June 30	\$ 192,756	\$ 240,306

The accompanying notes are an integral part of these Interim Financial Statements.

CONDENSED INTERIM CONSOLIDATED STATEMENT OF CHANGES IN DEFICIT (unaudited)

For the six-month period ended June 30 (Canadian \$ millions)	2022	2021
Deficit, as at January 1	\$ (15,900)	\$ (36,089)
Increase in net assets available for benefits	868	6,475
Net decrease in accrued pension benefits	64,726	17,024
Surplus/(deficit), as at June 30	\$ 49,694	\$ (12,590)

The accompanying notes are an integral part of these Interim Financial Statements.

NOTES TO CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

For the six-month period ended June 30, 2022

DESCRIPTION OF ONTARIO TEACHERS' AND THE PLAN

The following description of the Ontario Teachers' Pension Plan Board (Ontario Teachers') and Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act (Ontario)* (the TPA) as amended and other governing documents.

(a) General

The Plan is a contributory defined benefit pension plan co-sponsored by the Province of Ontario (the Province) and Ontario Teachers' Federation (OTF) (the co-sponsors). The principal terms of the Plan are set out in Schedule 1 to the TPA.

The Plan is registered with the Financial Services Regulatory Authority of Ontario (FSRA) and under the *Income Tax Act* (Canada) (the ITA) (registration number 0345785) as a Registered Pension Plan (RPP) which is exempt from income taxes in Canada. The Plan may be liable for taxes on income earned in other jurisdictions.

The Plan is administered and the investments are managed by Ontario Teachers'. Under the TPA, Ontario Teachers' is constituted as a corporation without share capital to which the *Corporations Act (Ontario)* does not apply.

Ontario Teachers' is overseen by independent, professional board members (the board). The co-sponsors each appoint five board members and they jointly select the chair.

(b) Funding

Plan benefits are funded by contributions and investment income. Contributions are made by active members of the Plan and are matched by either the Province or designated employers. The determination of the value of the accrued pension benefits and required contributions is made on the basis of periodic actuarial valuations.

(c) Retirement pensions

A retirement pension is available based on the number of years of credited service, the average of the best five annual salaries and the age of the member at retirement. A member is eligible for a reduced retirement pension from age 50. An unreduced retirement pension is available from age 65 or when the sum of a member's age and qualifying service equals 85 if earlier.

(d) Disability pensions

A disability pension is available at any age to a member with a minimum of 10 years of qualifying service, who becomes disabled while employed in education and who ceases to be employed in education as a result of the disability. The type of disability pension is determined by the extent of the disability.

(e) Death benefits

Death benefits are available on the death of an active member and may be available on the death of a retired member. The benefit may take the form of a survivor pension, lump-sum payment or both.

(f) Escalation of benefits

Pension benefits are adjusted each year for inflation, subject to an upper limit of 8% and a lower limit of 0% in any one year with any excess above or below those limits carried forward. In accordance with the plan terms, the annual adjustment is made each January and is determined as the ratio of the 12-month average of the Consumer Price Index (CPI) ending the most recent September over the 12-month average of CPI ending the prior September (the CPI ratio).

For pension credit earned up to December 31, 2009, inflation protection is 100% of the CPI ratio. Pension credit earned after December 31, 2009, is subject to conditional inflation protection. For pension credit earned between January 1, 2010, and December 31, 2013, the minimum inflation protection level is set at 50% of the CPI ratio. There is no minimum level of inflation protection for pension credit earned after 2013. Inflation protection levels stated in the most recent funding valuation filing remain in effect until a subsequent filing updates the amount. Inflation protection of up to 100% for pension credit earned after 2009 can be restored on a go-forward basis, depending on the Plan's funded status.

NOTE 1.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

These condensed interim consolidated financial statements (Interim Financial Statements) are prepared in Canadian dollars, Ontario Teachers' functional currency, in accordance with the accounting standards for pension plans in Part IV of the Chartered Professional Accountants (CPA) Canada Handbook (Section 4600). Section 4600 provides specific accounting guidance on investments and pension obligations. For accounting policies that do not relate to either investments or pension obligations, Ontario Teachers' must consistently comply with either International Financial Reporting Standards (IFRS) in Part I or Accounting Standards for Private Enterprises in Part II of the CPA Canada Handbook. Ontario Teachers' has elected to comply with IFRS in Part I of the CPA Canada Handbook. To the extent that IFRS in Part I is inconsistent with Section 4600, Section 4600 takes precedence.

The Interim Financial Statements should be read in conjunction with the annual consolidated financial statements and the accompanying notes included in the Plan's 2021 Annual Report. The Interim Financial Statements follow the same accounting policies and methods used in preparation of the audited 2021 annual consolidated financial statements except for the change in presentation for real estate described further below.

Under Section 4600, investment assets, including those over which Ontario Teachers' has control or significant influence, are measured at fair value and presented on a non-consolidated basis. Ontario Teachers' consolidates Ontario Teachers' Finance Trust (OTFT) an entity that supports Ontario Teachers' funding activities, and whose issued commercial paper and term debt Ontario Teachers' guarantees. Wholly owned investment holding companies managed by Ontario Teachers' are also consolidated. Investment holding companies that are managed by external parties are not consolidated and recognized as Ontario Teachers' investment assets.

Change in presentation for real estate

In 2022, Ontario Teachers' changed its accounting policy with respect to real estate investments. Previously Ontario Teachers' consolidated The Cadillac Fairview Corporation Limited (CFCL) as well as the Cadillac Fairview Properties Trust (CFPT). Under CPA Canada Handbook Section 4600 – Pension Plans, investments are to be presented on a non-consolidated basis even when Ontario Teachers' has effective control. Effective January 1, 2022, Ontario Teachers' real estate investment assets are presented on a non-consolidated basis. This accounting change was made to reflect updates to our investment strategy for real estate investments including how equity invested in real estate is evaluated and applies a consistent treatment of real estate liabilities to other asset classes.

There was no impact on Net Assets Available for Benefits. There was no change to the Interim Consolidated Statement of Changes in Net Assets Available for Benefits.

The Interim Financial Statements were authorized for issue through a resolution of the board on August 11, 2022.

(b) Current and future changes in accounting policies

There were no new accounting policies that have been adopted for the six-month period ended June 30, 2022.

Future changes in accounting policies

Developments and changes in accounting standards from the International Accounting Standards Board are actively monitored. There were no issued IFRS standards, changes in existing standards or new interpretations during the six-month period ended June 30, 2022 that had a material impact on the Interim Financial Statements. There are no issued IFRS standards, changes in existing standards or new interpretations with effective dates on or after January 1, 2022 that are expected to have a significant impact on the Interim Financial Statements.

(c) Investments

Valuation of investments

Details of investments and investment-related liabilities are presented in note 2a and are stated at fair value. Fair value is the price that would either be received to sell an asset or be paid to transfer a liability in an orderly transaction (i.e., an exit price) between market participants at the measurement date. In an active market, fair value is best evidenced by an independent quoted market price. In the absence of an active market, fair value is determined by valuation techniques that make maximum use of inputs observed from markets.

Details of the valuation methodologies are disclosed in the most recent audited annual consolidated financial statements. There have been no changes to the valuation methodologies since December 31, 2021.

The war in the Ukraine and continued COVID-19 related supply chain impacts have created an uncertain and challenging economic environment, resulting in higher inflation, increasing interest rates, higher oil prices and volatility in public markets. Notwithstanding, Ontario Teachers' has continued to follow a comprehensive valuation process that includes consideration of the impact that these challenges and changes in macroeconomic factors have on the valuations of its investments and investment-related liabilities as of the date of these Interim Financial Statements. However, these valuations are sensitive to key assumptions and drivers that are subject to material changes. Please see note 2b for sensitivity analysis. We continue to monitor developments including changes in macroeconomic factors and their implications on Ontario Teachers' investments.

Fair value hierarchy

Investment assets and investment-related liabilities are classified and disclosed in one of the following categories reflecting the significance of inputs used in making the fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included within Level 1 that are observable for the assets or liabilities, either directly or indirectly; and
- Level 3 – unobservable inputs.

If different levels of inputs are used to measure the fair value of an investment, the classification within the hierarchy is based on the lowest level input that is significant to the fair value measurement.

Trade-date reporting

Purchases and sales of investments and derivative contracts are recorded as of the trade date.

Net investment income

Dividend income is recognized based on the ex-dividend date and interest income is recognized on the accrual basis as earned. Net investment income also includes both realized and unrealized gains and losses. Unrealized gains and losses are recognized only when the fair value of the investment is based on a quoted market price in an active market or a valuation using appropriate valuation techniques is performed and approved by management.

Transaction costs

Transaction costs are incremental costs directly attributable to the acquisition, issue or disposal of a financial asset or financial liability. Transaction costs are expensed as incurred. Any transaction amounts received by Ontario Teachers' that are directly attributable to the acquisition of an investment are netted against transaction costs paid.

Management fees

Management and performance fees for external investment managers and administrators are either expensed as incurred when directly invoiced or information is otherwise available from capital notices or other manager communications or are offset against investment income. Management fees include incremental costs incurred with external parties that are directly attributable to existing investments and are not related to acquisition or disposal.

Interest rate benchmark reform

Our enterprise-wide program continues to support interbank offered rate (IBOR) transition to alternative risk-free rates (RFRs) including identification and mitigation of related risks. As part of interest rate benchmark reform, the publication of all non-USD Interbank Offered Rate (IBOR) settings ceased on December 31, 2021. As at June 30, 2022, we have transitioned all non-USD IBOR based contracts with a previously announced cessation date and are in the process of transitioning USD LIBOR based contracts before the June 30, 2023 cessation date.

On May 16, 2022, Refinitiv Benchmark Services (UK) Limited ("RBSL"), the administrator of the Canadian Dollar Offered Rate (CDOR), an interest rate benchmark subject to the UK Benchmark Regulation ("BMR") announced that the calculation and publication of all tenors of CDOR will permanently cease on June 28, 2024. We have incorporated this development into our enterprise-wide program.

The following table outlines Ontario Teachers' derivative and non-derivative exposures to significant IBORs subject to reform that have yet to transition to alternative benchmark rates.

Exposures to interest rate benchmarks subject to IBOR reform¹

(Canadian \$ millions)	As at June 30, 2022	
	USD LIBOR	CDOR
Non-derivative financial assets	5,968	713
Non-derivative financial liabilities	375	750
Derivative notional amounts	34,410	26,088

¹USD LIBOR transitioning to SOFR (Secured Overnight Financing Rate) and CDOR transitioning to CORRA (Canadian Overnight Repo Rate Average)

Further details regarding Ontario Teachers' enterprise-wide program for IBOR reform are available in note 1b to the most recent audited annual consolidated financial statements.

(d) Foreign currency translation

Assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rates prevailing on the period end date. Income and expenses are translated into Canadian dollars at the exchange rates prevailing on the dates of the transactions. The realized and unrealized gains and losses arising from these translations are included within net realized and unrealized gains on investments in investment income.

(e) Accrued pension benefits

The value of accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by Mercer (Canada) Limited (the external actuary), an independent firm of actuaries. The valuation is performed annually as at August 31 and then extrapolated to year end and to June 30 of the following year. It uses the projected benefit method pro-rated on service and management's best estimate, as at the valuation date, of various economic and non-economic assumptions.

As described in paragraph (f) of the Description of Plan note, the inflation protection level for pension credit earned after December 31, 2009 is conditional, depending on the Plan's funded status. For financial statement valuations, future pension payments are indexed at the levels stated in the most recent funding valuation filing.

(f) Contributions

Contributions from the members, the Province and designated employers are recorded on an accrual basis. Cash received from members for credited service and cash transfers from other pension plans are recorded when received.

(g) Benefits

Benefit payments to members and others, commuted value payments and refunds to former members, and transfer payments to other plans are recorded in the period in which they are paid. Any benefit payment accruals not paid are reflected in accrued pension benefits.

(h) Premises and equipment

Premises and equipment are recorded at cost and amortized on a straight-line basis over their estimated useful lives. Premises and equipment also include the right-of-use asset recognized under IFRS 16, Leases.

(i) Use of estimates

In preparing these Interim Financial Statements, management uses estimates and assumptions that primarily affect the reported values of assets and liabilities, and related income and expenses. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable and relevant under the circumstances. The effect of a change in an estimate or assumption is recognized in the period in which the estimate or assumption is revised. Significant estimates and assumptions are used primarily in the determination of accrued pension benefits and the fair value of investments and investment-related receivables and liabilities. Note 3 explains how estimates and assumptions are used in determining accrued pension benefits and note 1c explains how estimates and assumptions are used to derive the fair value of investments and investment-related receivables and liabilities.

(j) Contingencies

A contingent liability is a possible obligation that depends on the occurrence or non-occurrence of one or more future events not controlled by Ontario Teachers'. Contingent liabilities are not recognized but the nature and extent are disclosed in the notes to the Interim Financial Statements. A provision for a present obligation is recognized when a reliable estimate can be determined and the settlement of the obligation is probable.

NOTE 2.
INVESTMENTS

Ontario Teachers' invests, directly or through derivatives, in equities, fixed income, alternative investments, inflation sensitive and real asset investments.

(a) Investments

The schedule below summarizes Ontario Teachers' investments and investment-related liabilities, including net accrued interest and dividends of \$717 million (December 31, 2021 - \$519 million):

(Canadian \$ millions)	As at June 30, 2022		As at December 31, 2021	
	Fair Value	Cost	Fair Value	Cost
Equity				
Publicly traded				
Canadian	\$ 130	\$ 133	\$ 1,187	\$ 1,012
Non-Canadian	16,037	17,349	23,782	18,977
Non-publicly traded				
Canadian	9,218	5,117	8,826	4,318
Non-Canadian	54,913	37,670	53,006	35,735
	80,298	60,269	86,801	60,042
Fixed income				
Bonds	56,348	59,767	60,645	60,900
Short-term investments	25,130	25,099	27,534	27,527
Canadian real-rate products	9,480	7,072	11,312	7,076
Non-Canadian real-rate products	2,344	2,423	4,579	4,377
	93,302	94,361	104,070	99,880
Alternative investments	26,156	22,111	23,409	20,171
Inflation sensitive				
Commodities	1,175	853	1,143	853
Timberland	2,237	1,382	2,236	1,364
Natural resources	8,124	6,928	7,196	6,823
	11,536	9,163	10,575	9,040
Real assets				
Real estate	28,713	20,520	31,856	23,417
Infrastructure	30,678	23,521	26,118	18,919
	59,391	44,041	57,974	42,336
	270,683	229,945	282,829	231,469

(Canadian \$ millions)	As at June 30, 2022		As at December 31, 2021	
	Fair Value	Cost	Fair Value	Cost
Investment-related receivables				
Securities purchased under agreements to resell	\$ 26,337	\$ 26,385	\$ 29,943	\$ 30,017
Cash collateral deposited under securities borrowing arrangements	1,499	1,499	2,076	2,076
Cash collateral paid under credit support annexes	1,511	1,511	9	9
Derivative-related, net	8,365	1,895	6,616	2,700
	37,712	31,290	38,644	34,802
Total investments	308,395	261,235	321,473	266,271
Investment-related liabilities				
Securities sold under agreements to repurchase	(16,346)	(16,397)	(25,529)	(25,690)
Securities sold but not yet purchased				
Equities	(1,502)	(1,611)	(2,071)	(2,027)
Fixed income	(13,425)	(15,025)	(17,103)	(17,024)
Real estate ¹	—	—	(5,489)	(5,186)
Commercial paper	(2,532)	(2,499)	(2,501)	(2,488)
Term debt	(24,538)	(27,766)	(23,409)	(24,185)
Cash collateral received under credit support annexes	(2,359)	(2,359)	(1,723)	(1,723)
Derivative-related, net	(7,604)	(1,387)	(4,685)	(1,780)
	(68,306)	(67,044)	(82,510)	(80,103)
Net investments	\$ 240,089	\$ 194,191	\$ 238,963	\$ 186,168

¹ As at December 31, 2021, real estate liabilities include the liabilities of real estate subsidiaries. See note 1a Change in presentation for real estate.

(b) Fair value hierarchy

The schedule below presents Ontario Teachers' investments and investment-related liabilities within the fair value hierarchy as outlined in note 1c:

(Canadian \$ millions)	As at June 30, 2022			
	Level 1	Level 2	Level 3	Total
Equity	\$ 16,169	\$ 1,530	\$ 62,599	\$ 80,298
Fixed income	75,563	16,830	909	93,302
Alternative investments	—	—	26,156	26,156
Inflation sensitive	1,175	—	10,361	11,536
Real assets	718	198	58,475	59,391
Investment-related receivables	3,056	34,612	44	37,712
Investment-related liabilities	(16,428)	(51,862)	(16)	(68,306)
Net investments	\$ 80,253	\$ 1,308	\$ 158,528	\$ 240,089

		As at December 31, 2021				
(Canadian \$ millions)		Level 1	Level 2	Level 3	Total	
Equity	\$	24,613	\$ 2,590	\$ 59,598	\$ 86,801	
Fixed income		86,863	16,383	824	104,070	
Alternative investments		—	—	23,409	23,409	
Inflation sensitive		1,143	—	9,432	10,575	
Real assets		559	154	57,261	57,974	
Investment-related receivables		2,164	36,428	52	38,644	
Investment-related liabilities		(18,651)	(61,842)	(2,017)	(82,510)	
Net investments	\$	96,691	\$ (6,287)	\$ 148,559	\$ 238,963	

There were transfers of \$379 million between Level 2 and Level 1 during the six-month period ended June 30, 2022 (2021 - \$nil).

The schedule below presents a reconciliation of investments and investment-related receivables/(liabilities) measured at fair value using significant unobservable inputs (Level 3) for the six-month period ended June 30. Realized and unrealized gains/(losses) are included in investment income.

		For the six-month period ended June 30, 2022								
(Canadian \$ millions)		Equity	Fixed Income	Alternative Investments	Inflation Sensitive	Real Assets	Investment-Related Receivables	Investment-Related Liabilities	Total	
Balance as at January 1	\$	59,598	\$ 824	\$ 23,409	\$ 9,432	\$ 57,261	\$ 52	\$ (2,017)	\$ 148,559	
Purchases		5,088	2,014	3,359	497	8,508	2	3	19,471	
Sales		(3,244)	(1,896)	(1,832)	(430)	(1,796)	(6)	—	(9,204)	
Transfers in ²		—	—	—	—	(5,489)	(1)	(3,495)	(8,985)	
Transfers out ²		—	—	—	—	—	(1)	5,490	5,489	
Gains/(losses) included in investment income ³		1,157	(33)	1,220	862	(9)	(2)	3	3,198	
Balance as at June 30	\$	62,599	\$ 909	\$ 26,156	\$ 10,361	\$ 58,475	\$ 44	\$ (16)	\$ 158,528	

² Transfers in and transfers out of Level 3 are due to the change in the availability of observable inputs used for fair value measurement of investment assets or related liabilities. See note 1c Fair Value Hierarchy. Transfers into real assets and transfers in and out of investment-related liabilities reflect the impact of a change in presentation for real estate.

³ Includes realized gains from investments of \$1,389 million and change in unrealized gains from investments of \$1,809 million.

For the six-month period ended June 30, 2021

(Canadian \$ millions)	Equity	Fixed Income	Alternative Investments	Inflation Sensitive	Real Assets	Investment-Related Receivables	Investment-Related Liabilities	Total
Balance as at January 1	\$ 45,087	\$ 577	\$ 18,818	\$ 7,439	\$ 47,319	\$ 119	\$ (2,440)	\$ 116,919
Purchases	5,771	906	4,407	151	5,103	6	172	16,516
Sales	(3,852)	(827)	(3,106)	(52)	(815)	(4)	(77)	(8,733)
Transfers in ⁴	—	—	—	—	—	27	(49)	(22)
Transfers out ⁴	(1,152)	—	—	—	(94)	(1)	4	(1,243)
Gains/(losses) included in investment income ⁵	4,289	(13)	567	606	(717)	24	13	4,769
Balance as at June 30	\$ 50,143	\$ 643	\$ 20,686	\$ 8,144	\$ 50,796	\$ 171	\$ (2,377)	\$ 128,206

⁴ Transfers in and transfers out of Level 3 are due to the change in the availability of observable inputs used for fair value measurement of investment assets or related liabilities. See note 1c Fair Value Hierarchy.

⁵ Includes realized gains from investments of \$1,629 million and change in unrealized gains from investments of \$3,140 million.

Sensitivity to changes in assumptions for investments in Level 3

The following table illustrates the impact to fair value for certain investments in Level 3 when changing the significant inputs to reasonable alternative assumptions.

(Canadian \$ millions)	Significant Inputs	Change in Significant Inputs	As at June 30, 2022 Increase / (Decrease) to Fair Value	As at December 31, 2021 Increase / (Decrease) to Fair Value
Non-publicly traded equity	Multiple ⁶	+ / - 10%	\$ 7,368 / (7,308)	\$ 6,907 / (6,881)
Infrastructure and Natural resources				
	Discount Rate	+ / - 0.50%	2,966 / (2,719)	2,514 / (2,340)
Real estate	Capitalization Rate	+ / - 0.50%	3,110 / (2,522)	3,219 / (2,583)

⁶ Primarily reflects enterprise value / EBITDA (earnings before interest, taxes, depreciation and amortization) multiples. However, in certain cases, other metrics were used where they were determined to be more appropriate (e.g., revenue multiples or asset based multiples).

The above analysis excludes (i) investments of \$43.9 billion (December 31, 2021 - \$40.5 billion) where fair values are based on information provided by the external funds' administrators or funds' managers as Ontario Teachers' does not have access to the assumptions and methodologies used to determine the fair value of these underlying

investments and ii) investments of \$7.8 billion (December 31, 2021 - \$5.4 billion) where, in management's judgement, changing one or more of the inputs to a reasonable alternative assumption would not change the fair value significantly.

(c) Derivative contracts

Derivative contracts are financial contracts, the value of which is derived from the value of underlying assets, commodities, indices, interest rates or currency rates. Derivative contracts are transacted either in the over-the-counter (OTC) market or on regulated exchanges.

Notional amounts of derivative contracts represent the contractual amount to which a rate or price is applied for computing the cash to be paid or received. Notional amounts are the basis upon which the returns from, and the fair value of, the contracts are determined. They do not necessarily indicate the amounts of future cash flow involved or the current fair value of the derivative contracts and, therefore, do not necessarily indicate Ontario Teachers' exposure to credit or market risks. The derivative contracts become favourable (assets) or unfavourable (liabilities) as a result of fluctuations in either market rates or prices relative to their terms. The aggregate notional amounts and fair values of derivative contracts can fluctuate significantly.

Description of the derivative contracts, transacted either in the OTC market or on regulated exchanges, is disclosed in the most recent audited annual consolidated financial statements.

The following schedule summarizes the notional amounts and fair value of Ontario Teachers' derivative contracts held:

As at June 30, 2022

As at December 31, 2021

	As at June 30, 2022		As at December 31, 2021			
	Notional	Fair Value	Notional	Fair Value		
(Canadian \$ millions)		Assets	Liabilities	Assets	Liabilities	
Equity and commodity derivatives						
Swaps	\$ 39,313	\$ 727	\$ (1,301)	\$ 44,637	\$ 1,028	\$ (213)
Futures	19,665	2	(55)	15,596	2	(73)
Options: OTC						
– purchased	28,483	2,976	—	25,866	644	—
– written	23,419	—	(613)	21,294	17	(287)
	110,880	3,705	(1,969)	107,393	1,691	(573)
Interest rate derivatives						
Swaps	116,550	3,408	(4,045)	114,945	2,248	(1,327)
Futures	62,003	132	—	230,787	—	(178)
Options: Listed						
– purchased	5,034	1	—	12,395	12	—
– written	5,034	—	(1)	12,363	—	(5)
OTC						
– purchased	19,704	137	—	12,864	84	(5)
– written	32,048	1	(155)	33,391	17	(91)
	240,373	3,679	(4,201)	416,745	2,361	(1,606)
Currency derivatives						
Swaps	727	8	(4)	792	16	(1)
Forwards	75,658	610	(748)	73,912	391	(1,060)
Options: OTC						
– purchased	25,519	173	—	34,987	181	—
– written	—	—	—	10,366	—	(37)
	101,904	791	(752)	120,057	588	(1,098)
Credit derivatives						
Credit default swaps						
– purchased	48,050	182	(140)	40,435	41	(1,460)
– written	52,181	140	(527)	45,058	1,900	(164)
Swaps	—	—	—	82	3	—
	100,231	322	(667)	85,575	1,944	(1,624)
	553,388	8,497	(7,589)	729,770	6,584	(4,901)
Net cash collateral (received)/paid under derivative contracts		(132)	(15)		32	216
Notional and fair value of derivative contracts	\$ 553,388	\$ 8,365	\$ (7,604)	\$ 729,770	\$ 6,616	\$ (4,685)

(d) Investment asset mix

Direct investments, derivative contracts, and investment-related receivables and liabilities are classified by asset mix category based on the intent of the investment strategies of the underlying portfolios of Ontario Teachers'. Net investments reflecting these classifications are summarized in Canadian dollars below:

	As at June 30, 2022		As at December 31, 2021	
	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %
Equity				
Public equity	\$ 20,532	9 %	\$ 27,218	11 %
Private equity	55,317	23	55,056	23
	75,849	32	82,274	34
Fixed income				
Bonds	43,559	18	33,324	14
Real-rate products	9,819	4	11,867	5
	53,378	22	45,191	19
Inflation sensitive				
Commodities	27,941	12	26,455	11
Natural resources	9,808	4	9,405	4
Inflation hedge	12,396	5	12,099	5
	50,145	21	47,959	20
Real assets				
Real estate	28,615	12	26,262	11
Infrastructure	30,626	13	26,075	11
	59,241	25	52,337	22
Innovation	8,218	3	7,103	3
Credit	24,917	10	24,294	10
Absolute return strategies	17,712	7	14,938	6
Overlay	(26)	—	(452)	—
Funding for investments	(49,345)	(20)	(34,681)	(14)
Net investments	\$ 240,089	100 %	\$ 238,963	100 %

(e) Risk management

Ontario Teachers' primary long-term risk is that Ontario Teachers' assets will fall short of its liabilities (i.e., benefits owed to members). Therefore, Ontario Teachers' follows an approach of asset diversification. The objective is to achieve a diversification of risks and returns in a fashion that minimizes the likelihood of an overall reduction in total fund value and maximizes the opportunity for gains over the entire portfolio.

Ontario Teachers' also manages its liquidity risk so that there is sufficient liquidity to enable Ontario Teachers' to meet all of its future obligations as they become payable, which include pension payments, meeting short-term mark-to-market payments resulting from Ontario Teachers' derivative exposure and to give Ontario Teachers' the ability to adjust the asset mix in response to the changes in market conditions.

There have been no significant changes to the risk management policies and processes for credit, market and liquidity risk as presented in the most recent audited annual consolidated financial statements, except the following:

- **Statement of Investment Policies and Procedures** - The statement addresses the manner in which the fund shall be invested. The statement is subject to the board's review at least annually. Ontario Teachers' investments are selected and held in accordance with the criteria and limitations set forth in the statement and in accordance with all relevant legislation. The statement effective for the period ended June 30, 2022 was last amended June 16, 2022 and includes the following asset class exposure limits:

	Asset Mix % Minimum	Asset Mix % Maximum
Equities	30%	40%
Fixed income	0%	67%
Inflation sensitive	15%	25%
Real assets	20%	30%
Innovation	0%	7%
Credit	5%	15%
Absolute return strategies	4%	14%
Funding for Investments ⁷	(98)%	10%

⁷ Includes term debt, bond repurchase agreements, implied funding from derivatives, unsecured funding, and liquidity reserves.

- **Board Investment Policy** - This policy applies to the total-fund and aggregate asset classes. The policy addresses the risks that are relevant and material at the total-fund level. The policy sets ranges for allocations to the asset classes and foreign currency. Management determines exposure within these approved ranges. The policy also specifies the risk budget allocation and lists investment constraints such as maximum exposures permitted for different types of investments and liquidity requirements. The board approves this policy and reviews it regularly.
- In 2022, certain management committees chaired by the CEO, including the CEO-Led Risk Committee (Investments), the CEO-Led Risk Committee (Member Services), and the Enterprise Risk Management Committee have been amalgamated with the Enterprise Risk & Governance Committee, which has been established as management's senior governance committee interpreting the Board's risk appetite and providing governance on factors that may have a significant impact on OTPP's strategy, performance and/or reputation.

(f) Credit risk

Ontario Teachers' is exposed to the risk that a counterparty defaults or becomes insolvent. Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. Credit risk may arise directly from an obligor, an issuer of securities, or indirectly from a guarantor of a credit obligation.

Maximum exposure to credit risk before collateral held

The credit risk exposure of debt investments and OTC derivatives, by credit rating category, without taking account of any collateral held or other credit enhancements is as follows:

(Canadian \$ millions)						As at June 30, 2022
Credit rating	Bonds and Short-term investments	Real-rate products	Securities purchased under agreements to resell	Loans and Private debt	OTC Derivatives	
AAA/R-1 (high)	\$ 60,106	\$ 7,923	\$ —	\$ —	\$ —	
AA/R-1 (mid)	1,800	2,270	3,295	—	—	
A/R-1 (low)	7,428	1,613	9,478	—	2,265	
BBB/R-2	1,329	—	—	—	—	
Below BBB/R-2	8,732	—	—	—	—	
Unrated ⁸	2,083	18	13,564	13,934	—	
	\$ 81,478	\$ 11,824	\$ 26,337	\$ 13,934	\$ 2,265	

⁸ Unrated comprises securities that are either privately held, managed externally, or not rated by the rating agencies.

(Canadian \$ millions) As at December 31, 2021

Credit rating	Bonds and Short-term investments	Real-rate products	Securities purchased under agreements to resell	Loans and Private debt	OTC Derivatives
AAA/R-1 (high)	\$ 67,002	\$ 12,691	\$ —	\$ —	\$ —
AA/R-1 (mid)	1,883	1,317	4,424	—	75
A/R-1 (low)	8,065	1,860	10,167	—	902
BBB/R-2	902	—	—	—	—
Below BBB/R-2	8,394	—	—	—	—
Unrated ⁹	1,933	23	15,352	13,127	—
	\$ 88,179	\$ 15,891	\$ 29,943	\$ 13,127	\$ 977

⁹ Unrated comprises securities that are either privately held, managed externally, or not rated by the rating agencies.

Ontario Teachers' is also exposed to credit risk through off-balance sheet arrangements as shown in the table below. For off-balance sheet guarantees, the maximum exposure to credit risk is the maximum amount that Ontario Teachers' would have to pay if the guarantees were to be called upon. For loan commitments, the maximum exposure is the committed amount under the agreements. For credit derivatives, the maximum exposure is the notional amount of written credit derivatives (as presented in note 2c).

(Canadian \$ millions)	As at June 30, 2022	As at December 31, 2021
Guarantees	\$ 677	\$ 505
Loan commitments	491	262
Notional amount of written credit derivatives	52,181	45,058
Total off balance sheet credit risk exposure	\$ 53,349	\$ 45,825

While Ontario Teachers' maximum exposure to credit risk is the carrying value of the assets, or, in the case of off-balance sheet items, the amount guaranteed or committed, in most cases the likely exposure is far less due to collateral, credit enhancements (e.g., guarantees in favour of Ontario Teachers') and other actions taken to mitigate Ontario Teachers' exposure, as described previously.

Credit risk concentrations

As at June 30, 2022, Ontario Teachers' has a significant concentration of credit risk with the Government of Canada, the Province of Ontario and the U.S Treasury. This concentration relates primarily to holding Government of Canada issued securities of \$53.1 billion (December 31, 2021 – \$59.3 billion), U.S. Treasury issued securities of \$5.4 billion (December 31, 2021 – \$8.2 billion), Province of Ontario bonds of \$2.9 billion (December 31, 2021 – \$3.8 billion), and receivable from the Province of Ontario of \$2.5 billion (December 31, 2021 – \$3.2 billion).

(g) Market risk

Market risk is the risk of loss that results from fluctuations in various market factors such as equity and commodity prices, interest and foreign exchange rates, and credit spreads. Ontario Teachers' is exposed to market risk through its investing activities. The level of market risk to which Ontario Teachers' is exposed varies depending on considerations such as market conditions, expectations of future price movements, the occurrence of certain catastrophic events (e.g., hurricanes and earthquakes) affecting the prices of insurance linked securities, expectations of future yield movements and the composition of the asset mix.

The current economic environment reflects the challenges arising from a war in Europe and strained supply chains driven by Covid-19 impacts. These conditions have produced higher inflation, a higher expectation for interest rates, higher oil prices and lower global equity prices which contributed to exceptional volatility in financial markets in the first half of 2022 and continues to contribute to global economic uncertainty. As of June 30th, 2022, Ontario Teachers' exposures across all risk parameters including market, credit, liquidity and leverage, have remained within all risk limits set by the board.

Market and credit risk measurement

Ontario Teachers' uses a statistical Value-at-Risk (VaR)-type approach that measures an expected tail loss (ETL) from investment risk comprising of market and credit risk over a one-year horizon at a 99% confidence level. The ETL methodology captures more of the effect of extreme loss events than VaR for the same confidence level as it is an average of all estimated losses in the tail.

Total Asset Risk is prepared using the ETL methodology which captures the investment risk exposure by asset class and reflects the risk of potential losses in net assets due to both market and credit risk factors. Statistically, Ontario Teachers' would expect to see losses approximate to the risk exposure only 1% of the time over a one year period, subject to certain assumptions and limitations. Further details of the ETL methodology are disclosed in the most recent audited annual consolidated financial statements.

The table below shows Total Asset Risk ETL of Ontario Teachers'.

(Canadian \$ billions) ¹⁰	As at June 30, 2022	As at December 31, 2021
Equity		
Public equity	\$ 5.5	\$ 7.5
Private equity	23.5	22.5
Fixed income		
Bonds	3.5	1.0
Real-rate products	3.0	3.5
Inflation sensitive		
Commodities	6.5	6.0
Natural resources	2.0	2.0
Inflation hedge	2.5	2.5
Real assets		
Real estate	4.0	4.0
Infrastructure	6.0	5.0
Innovation	4.0	3.0
Credit	4.5	3.5
Absolute return strategies	2.5	2.0
Overlay	11.0	10.0
Funding for Investments	18.0	17.5
Total Asset Risk ETL Exposure¹¹	\$ 58.0	\$ 58.0

¹⁰ Rounded to the nearest \$0.5 billion.

¹¹ Total Asset Risk ETL Exposure does not equal the sum of ETL exposure for each asset class because diversification reduces total risk exposure.

Interest rate risk

Interest rate risk refers to the effect on the market value of Ontario Teachers' assets and liabilities due to fluctuations in interest rates. The value of Ontario Teachers' assets is affected by short-term changes in nominal and real interest rates. Pension liabilities are exposed to fluctuations in long-term interest rates as well as expectations for salary escalation (note 3).

Ontario Teachers' measures interest rate risk and inflation risk of relevant asset classes in its asset mix (note 2d):

- The sensitivity to changes in nominal interest rates of bonds and derivative contracts included in its Fixed Income, Credit, Real Asset and Funding for Investments asset classes - a 1% increase in nominal interest rates would result

in a decline in the value of these investments of \$1.9 billion (December 31, 2021 – \$0.8 billion).

- The sensitivity to changes in real interest rates of real-rate products and derivative contracts included in its Fixed Income and Real Assets asset classes - a 1% increase in real interest rates would result in a decline in the value of these investments of \$0.2 billion (December 31, 2021 – \$0.2 billion).
- The sensitivity of nominal and real-rate securities and derivative contracts that are intended to protect against inflation included in the Fixed Income asset class and the Inflation hedge category of Ontario Teachers' Inflation sensitive asset class to changes in market-implied inflation a 1% decrease in the market-implied rate of inflation would result in a decline in the value of these securities and contracts of \$1.7 billion (December 31, 2021 – \$2.1 billion).

Foreign currency risk

Foreign currency exposure arises from Ontario Teachers' holdings of foreign currency-denominated investments and related derivative contracts.

Ontario Teachers' has investments exposed to foreign currency. In Canadian dollars this exposure is as follows:

(Canadian \$ millions)	As at June 30, 2022	As at December 31, 2021
Currency	Net Exposure	Net Exposure
United States Dollar	\$ 47,014	\$ 44,983
Euro	8,612	10,276
British Pound Sterling	5,202	4,389
Chinese Renminbi	5,192	6,372
Mexican Peso	3,817	2,787
Brazilian Real	2,799	1,992
Australian Dollar	2,455	2,046
Chilean Peso	2,261	3,242
Indian Rupee	1,889	1,255
Danish Krone	1,867	1,840
Other	6,095	7,207
	\$ 87,203	\$ 86,389

With all other variables and underlying values held constant, a 5% increase/decrease in the value of the Canadian dollar against major foreign currencies would result in an approximate decrease/increase in the value of net investments as follows:

(Canadian \$ millions)	As at June 30, 2022	As at December 31, 2021
Currency	Change in Net Investment Value	Change in Net Investment Value
United States Dollar	\$ 2,351	\$ 2,249
Euro	431	514
British Pound Sterling	260	219
Chinese Renminbi	259	319
Other	1,059	1,018
	\$ 4,360	\$ 4,319

(h) Liquidity risk

Liquidity risk is the risk of being unable to obtain sufficient cash or cash equivalents at a reasonable cost to meet Ontario Teachers' financial obligations in a timely manner, or to support new investment opportunities, under a range of stressed conditions. By maintaining a structurally sound liquidity profile, Ontario Teachers' seeks to ensure sufficient liquidity is available to cover potential cash and collateral outflows under stressed conditions without adversely impacting Ontario Teachers' asset mix while allowing for opportunistic investments.

Liquid assets

Available liquid assets primarily consist of sovereign, provincial or territorial government debt, other liquid investment grade debt, publicly traded equity securities, and physical gold after considering the impact of collateral pledged and received, repurchase agreements and securities lending and borrowing arrangements. As at June 30, 2022, Ontario Teachers' maintains \$76.6 billion of available liquid assets (December 31, 2021 - \$79.0 billion).

Contractual maturity

Ontario Teachers' liabilities include accrued pension benefits, investment-related liabilities, due to brokers, accounts payable and accrued liabilities. Due to brokers, accounts payable and accrued liabilities are all due within one year. As Ontario Teachers' may settle securities sold but not yet purchased, cash collateral received under credit support annexes and derivatives at fair value before contractual maturity, they are considered to mature within one year.

Ontario Teachers' investment-related liabilities by maturity are as follows:

(Canadian \$ millions)

As at June 30, 2022

		Within One Year		One to Five Years		Over Five Years		Total
Securities sold under agreements to repurchase	\$	(12,341)	\$	(4,005)	\$	—	\$	(16,346)
Securities sold but not yet purchased								
Equities		(1,502)		—		—		(1,502)
Fixed income		(13,425)		—		—		(13,425)
Commercial paper		(2,532)		—		—		(2,532)
Term debt		(2,273)		(12,240)		(10,025)		(24,538)
Cash collateral received under credit support annexes		(2,359)		—		—		(2,359)
Derivative-related, net		(7,604)		—		—		(7,604)
	\$	(42,036)	\$	(16,245)	\$	(10,025)	\$	(68,306)

(Canadian \$ millions)

As at December 31, 2021

		Within One Year		One to Five Years		Over Five Years		Total
Securities sold under agreements to repurchase	\$	(21,527)	\$	(4,002)	\$	—	\$	(25,529)
Securities sold but not yet purchased								
Equities		(2,071)		—		—		(2,071)
Fixed income		(17,103)		—		—		(17,103)
Real estate		(1,307)		(509)		(3,673)		(5,489)
Commercial paper		(2,501)		—		—		(2,501)
Term debt		(2,251)		(10,932)		(10,226)		(23,409)
Cash collateral received under credit support annexes		(1,723)		—		—		(1,723)
Derivative-related, net		(4,685)		—		—		(4,685)
	\$	(53,168)	\$	(15,443)	\$	(13,899)	\$	(82,510)

(i) Collateral pledged and received

Ontario Teachers' pledges and receives cash and security collateral in the ordinary course of managing net investments. Security collateral consists primarily of Canadian and U.S. government securities. Generally, additional collateral is provided if the value of the securities falls below a predetermined level. The securities transferred are recognized as assets when Ontario Teachers' retains substantially all risks and rewards, including credit risk, settlement risk and market risk. Ontario Teachers' is not allowed to either pledge the same securities with other financial institutions or to sell them to another entity unless Ontario Teachers' substitutes such securities with other eligible securities. Ontario Teachers' holds the collateral received as long as Ontario Teachers' is not a defaulting party or an affected party in connection with a specified condition listed in the contractual agreement and there is no early termination of the contractual agreement. With the exception of initial margin collateral held in third party custodial accounts, Ontario Teachers' is permitted to either sell or repledge the collateral in the absence of default by

the owner of the collateral. The fair value of collateral sold or repledged as at June 30, 2022 is \$nil (December 31, 2021 - \$nil).

Ontario Teachers' engages in securities borrowing and lending transactions and pledges and receives associated collateral. Ontario Teachers' does not recognize any securities borrowed as its investment assets or derecognize securities lent because the risks and rewards of the borrowed securities remain with the lenders.

The fair value of collateral pledged and received, as well as the securities purchased under agreements to resell and sold under agreements to repurchase and securities borrowed and lent are as follows:

(Canadian \$ millions)	As at June 30, 2022	As at December 31, 2021
Securities purchased under agreements to resell and sold under agreements to repurchase		
Gross amounts of securities purchased under agreements to resell ¹²	\$ 35,312	\$ 37,618
Collateral held	35,589	37,908
Gross amounts of securities sold under agreements to repurchase ¹²	25,322	33,204
Collateral pledged	26,609	33,973
Securities borrowing and lending		
Securities borrowed	1,502	2,259
Collateral pledged ¹³	1,675	2,562
Derivative-related		
Collateral received ¹⁴	6,163	3,079
Collateral pledged ¹⁵	7,161	4,469

¹² See note 2j for reconciliation of total gross amount to net amounts presented in note 2a.

¹³ Includes cash collateral of \$1,499 (December 31, 2021 - \$2,076).

¹⁴ Includes cash collateral of \$2,359 (December 31, 2021 - \$1,723) and initial margin collateral of \$2,642 (December 31, 2021 - \$944).

¹⁵ Includes cash collateral of \$1,511 (December 31, 2021 - \$9) and initial margin collateral of \$1,913 (December 31, 2021 - \$1,015).

(j) Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is reported in the Condensed Interim Consolidated Statement of Financial Position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously. Certain repurchase agreement transactions settled through a central clearing counterparty satisfy the offsetting criteria. Ontario Teachers' enters into agreements with counterparties such as ISDA Master Agreements and Global Master Repurchase Agreements (GMRA's) in order to mitigate its exposure to credit losses (see note 2f). These agreements provide rights to allow the parties to settle obligations on a net basis when certain predetermined events occur. When these rights of offset are conditional, the related amounts are not netted in the Condensed Interim Consolidated Statement of Financial Position.

The impact of these arrangements is presented in the following table:

(Canadian \$ millions)

As at June 30, 2022

	Gross amounts	Less: Amounts offset	Net amount presented in note 2a	Amounts subject to netting agreements	Securities and cash collateral ¹⁶	Net Exposure
Financial assets						
Securities purchased under agreements to resell	\$ 35,312	\$ (8,976)	\$ 26,337	\$ (15,533)	\$ (9,779)	\$ 1,025
Derivative-related receivables	8,365	—	8,365	(2,726)	(2,977)	2,660
	\$ 43,677	\$ (8,976)	\$ 34,702	\$ (18,259)	\$ (12,756)	\$ 3,685
Financial liabilities						
Securities sold under agreements to repurchase	\$ (25,322)	\$ 8,976	\$ (16,346)	\$ 15,533	\$ 807	\$ (7)
Derivative-related liabilities	(7,604)	—	(7,604)	2,726	4,841	(36)
	\$ (32,926)	\$ 8,976	\$ (23,950)	\$ 18,259	\$ 5,648	\$ (43)

(Canadian \$ millions)

As at December 31, 2021

	Gross amounts	Less: Amounts offset	Net amount presented in note 2a	Amounts subject to netting agreements	Securities and cash collateral ¹⁶	Net Exposure
Financial assets						
Securities purchased under agreements to resell	\$ 37,618	\$ (7,675)	\$ 29,943	\$ (19,775)	\$ (9,674)	\$ 494
Derivative-related receivables	6,616	—	6,616	(1,812)	(2,036)	2,768
	\$ 44,234	\$ (7,675)	\$ 36,559	\$ (21,587)	\$ (11,710)	\$ 3,262
Financial liabilities						
Securities sold under agreements to repurchase	\$ (33,204)	\$ 7,675	\$ (25,529)	\$ 19,775	\$ 5,739	\$ (15)
Derivative-related liabilities	(4,685)	—	(4,685)	1,812	2,871	(2)
	\$ (37,889)	\$ 7,675	\$ (30,214)	\$ 21,587	\$ 8,610	\$ (17)

¹⁶ Securities and cash collateral exclude over-collateralization and collateral in transit. See note 2i for the total amount of collateral.

NOTE 3. ACCRUED PENSION BENEFITS

(a) Actuarial assumptions

The actuarial assumptions used in determining the value of accrued pension benefits of \$192,756 million (December 31, 2021 – \$257,482 million, June 30, 2021 – \$240,306 million) reflect management’s best estimate of future economic events and involve both economic and non-economic assumptions. The non-economic assumptions include considerations such as mortality as well as withdrawal and retirement rates. The primary economic assumptions include the discount rate, the salary escalation rate and the inflation rate. The discount rate is based on market rates, as at the valuation date, of bonds issued by the Province of Ontario, which have characteristics similar to obligations under the Plan. The discount rate was determined by applying a weighted average discount rate that reflects the estimated timing and amount of benefit payments. The inflation rate is the geometric difference between the yield on Government of Canada long-term nominal bonds and Government of Canada real-return bonds. The salary escalation rate incorporates the inflation rate assumption and long-term expectation of growth in real wages.

A summary of the primary economic assumptions is as follows:

	As at June 30, 2022	As at December 31, 2021	As at June 30, 2021
Discount rate ¹	4.25%	2.50%	2.65%
Salary escalation rate ²	2.80%	2.85%	2.75%
Inflation rate	1.80%	1.85%	1.75%
YMPE / ITA limit growth ³	2.55% / 2.80%	2.60% / 2.85%	2.50% / 2.75%
Real rate ⁴	2.40%	0.65%	0.90%

¹ As at June 30, 2022, holding all other assumptions constant, a 1% decrease in the discount rate would result in an increase in pension liabilities of approximately \$36.5 billion (December 31, 2021 - \$60.3 billion, June 30, 2021 - \$54.9 billion).

² Represents the estimated salary escalation rate per year commencing September 1, 2022. For the period from September 1, 2020 through to August 31, 2022, the salary escalation is 1% per year as stated in the 2020 collective agreements.

³ YMPE / ITA limit growth is the sum of the inflation rate and the Average Industrial Wage (AIW) real wage growth rate of 0.75% until 2024 and 1.0% thereafter.

⁴ Real rate shown as the geometric difference between the discount rate and the inflation rate.

The primary economic assumptions were updated due to rising bond yields and a decreased break-even inflation rate during 2022. These changes in economic assumptions resulted in a net decrease in the value of accrued pension benefits of \$74,489 million as at

June 30, 2022 (December 31, 2021 – \$9,256 million decrease, June 30, 2021 – \$21,064 million decrease).

The non-economic assumptions were last updated in 2020 to reflect recent experience of Plan members related to the experience-related salary scale increases. Higher increases are assumed in the first 13 years and slightly lower increases are assumed from year 17 onwards. In addition, a separate scale for Vice-Principals, Principals and Administrators was introduced. There have been no changes to the non-economic assumptions since then.

The changes in economic and non-economic assumptions resulted in a net decrease in the value of accrued pension benefits of \$74,489 million (December 31, 2021 – \$9,256 million net decrease, June 30, 2021 – \$21,064 million net decrease).

(b) Inflation protection levels

As described in paragraph (f) of the Description of Plan note, pension benefits are adjusted annually by the CPI ratio with pension credit earned after December 31, 2009 subject to conditional inflation protection. Inflation protection levels vary between 50% and 100% of the CPI ratio for pension credit earned between January 1, 2010, and December 31, 2013, and vary between 0% and 100% of the CPI ratio for pension credit earned after 2013. Conditional inflation protection can only be invoked and changes to inflation protection levels can only be made when a funding valuation is filed. The Ontario government and designated employers participating in the Plan will make extra contributions to match the inflation protection benefits members forego up to a maximum foregone inflation of 50% of CPI.

For financial statement valuations, future pension payments are indexed at the inflation protection levels stated in the most recent funding valuation filing. As a result, the June 30, 2022 accrued pension benefits reflect the inflation protection levels as stated in the January 1, 2022 funding valuation report.

As noted in the filed January 1, 2022 funding valuation, inflation protection levels are 100% of the CPI ratio for pension credit earned after 2009. This level will remain in effect until the next actuarial valuation is filed with the regulatory authorities at which time the level may be reduced depending on the funded status of the Plan.

The inflation protection levels reflected in accrued pension benefits as at June 30, 2022 and June 30, 2021 are as follows:

Pension credit	Inflation protection level ⁵
Earned before 2010	100% of the CPI ratio
Earned during 2010 – 2013	100% of the CPI ratio
Earned after 2013	100% of the CPI ratio

⁵ Inflation protection levels per the January 1, 2022 and January 1, 2021 funding valuations.

(c) Experience gains and losses

Experience losses on the accrued pension benefits of \$5,331 million (December 31, 2021 - \$1,313 million gain, June 30, 2021 - nil) arose from differences between the actuarial assumptions and actual results. Accrued pension benefits at June 30, 2022 reflect known CPI data through to May 2022 in determining the expected indexation adjustment at January 1, 2023. Using known CPI data and applying the assumed inflation rate thereafter to September 30, 2022, produces an expected adjustment of 6.2% at January 1, 2023.

NOTE 4. INVESTMENT IN REAL ESTATE

Ontario Teachers' real estate portfolio is comprised of real estate-related investments that are either owned or managed on behalf of Ontario Teachers' by CFCL, a wholly owned subsidiary.

The table below provides additional information on the real estate portfolio.

(Canadian \$ millions)	As at June 30, 2022		As at December 31, 2021	
	Fair Value	Cost	Fair Value	Cost
Assets				
Real estate properties ¹	23,852	16,304	27,560	18,943
Investments	4,861	4,216	3,405	3,583
Other assets	—	—	891	891
Total assets	28,713	20,520	31,856	23,417
Liabilities¹	—	—	5,489	5,186
Net investment in real estate	28,713	20,520	26,367	18,231

¹ Real estate properties as at June 30, 2022 are presented net of liabilities of \$4,474, which include issued debt with fair value of \$2,605. As at December 31, 2021 issued debt with fair value of \$3,494 was included in real estate liabilities. None of the outstanding liabilities at June 30, 2022 or December 31, 2021 were guaranteed by Ontario Teachers'.

NOTE 5.
NET INVESTMENT INCOME

Net investment income is reported net of management fees, transaction costs, and is grouped by asset class. Net investment income for the six-month period ended June 30, is as follows:

	For the six-month period ended June 30, 2022					
(Canadian \$ millions)	Income ¹	Net Gain (Loss) on Investments ²	Investment Income ³	Management Fees	Transaction Costs	Net Investment Income
Equity						
Publicly traded						
Canadian	\$ 24	236	\$ 260	\$ —	\$ (1)	\$ 259
Non-Canadian	168	(3,548)	(3,380)	(16)	(19)	(3,415)
Non-publicly traded						
Canadian	200	(390)	(190)	(11)	(25)	(226)
Non-Canadian	311	790	1,101	(233)	(38)	830
	703	(2,912)	(2,209)	(260)	(83)	(2,552)
Fixed income						
Bonds	270	447	717	—	(13)	704
Short-term investments	—	30	30	(1)	—	29
Canadian real-rate products	117	(1,828)	(1,711)	—	—	(1,711)
Non-Canadian real-rate products	5	(41)	(36)	—	—	(36)
	392	(1,392)	(1,000)	(1)	(13)	(1,014)
Alternative investments	58	1,232	1,290	(13)	(1)	1,276
Inflation sensitive						
Commodities	(60)	4,361	4,301	—	—	4,301
Timberland	57	(17)	40	—	—	40
Natural resources	544	823	1,367	(2)	(7)	1,358
	541	5,167	5,708	(2)	(7)	5,699
Real assets						
Real estate	293	131	424	(1)	(5)	418
Infrastructure	403	25	428	(21)	(19)	388
	696	156	852	(22)	(24)	806
Overlay	(2)	(1,059)	(1,061)	—	—	(1,061)
Total	\$ 2,388	\$ 1,192	\$ 3,580	\$ (298)	\$ (128)	\$ 3,154

¹ Income includes interest, dividends, and other investment-related income and expenses.

² Includes realized gain from investments of \$8,089 million and change in unrealized losses from investments of \$6,897 million.

³ Net of certain management and performance fees.

For the six-month period ended June 30, 2021

(Canadian \$ millions)	Income ⁴	Net Gain (Loss) on Investments ⁵	Investment Income ⁶	Management Fees	Transaction Costs	Net Investment Income
Equity						
Publicly traded						
Canadian	\$ 23	(196)	\$ (173)	\$ —	\$ (1)	\$ (174)
Non-Canadian	220	3,416	3,636	(39)	(34)	3,563
Non-publicly traded						
Canadian	83	370	453	(4)	(18)	431
Non-Canadian	960	3,591	4,551	(219)	(112)	4,220
	1,286	7,181	8,467	(262)	(165)	8,040
Fixed income						
Bonds	415	(1,650)	(1,235)	—	(26)	(1,261)
Short-term investments	—	34	34	(1)	—	33
Canadian real-rate products	154	(728)	(574)	—	—	(574)
Non-Canadian real-rate products	3	(77)	(74)	—	—	(74)
	572	(2,421)	(1,849)	(1)	(26)	(1,876)
Alternative investments	54	598	652	(14)	(1)	637
Inflation sensitive						
Commodities	(5)	615	610	—	(1)	609
Timberland	25	(49)	(24)	(1)	(1)	(26)
Natural resources	142	589	731	(19)	(3)	709
	162	1,155	1,317	(20)	(5)	1,292
Real assets						
Real estate	347	47	394	(1)	(1)	392
Infrastructure	246	(308)	(62)	(3)	(86)	(151)
	593	(261)	332	(4)	(87)	241
Overlay	(3)	258	255	—	—	255
Total	\$ 2,664	\$ 6,510	\$ 9,174	\$ (301)	\$ (284)	\$ 8,589

⁴ Income includes interest, dividends, real estate operating income (net of interest expense), and other investment-related income and expenses.

⁵ Includes realized gain from investments of \$11,419 million and change in unrealized losses from investments of \$4,909 million.

⁶ Net of certain management and performance fees.

NOTE 6. FUNDING VALUATIONS

Funding valuations are prepared annually and must be filed at least once every three years with the regulatory authorities. Once filed, these valuations are used to determine the funding requirements of the Plan. The Funding Management Policy established by the co-sponsors provides guidance for the co-sponsors in determining contributions and benefit levels.

The actuarial methods used to prepare funding valuations are different than those used to prepare a financial statement actuarial valuation and the amounts included in these Interim Financial Statements. The funding valuations use an actuarial valuation method which takes into account future benefits to be earned by Plan members and future contributions to be made by Plan members, the Province and designated employers as at the valuation date, whereas the accrued pension benefits recognized in the financial statements represent the actuarial present value of pension obligations in respect of service accrued to date for all members.

The most recent funding valuation that has been filed with regulatory authorities was prepared as at January 1, 2022, by the external actuary and disclosed a funding surplus of \$17.2 billion. The co-sponsors classified the surplus as a contingency reserve.

NOTE 7. CONTRIBUTIONS

For the six-month period ended June 30 (Canadian \$ millions)	2022	2021
Members		
Current service ¹	\$ 820	\$ 805
Optional credit	23	26
	843	831
Province of Ontario		
Current service	801	788
Interest	13	15
Optional credit	20	23
	834	826
Designated employers	19	18
Transfers from other pension plans	9	7
	28	25
	\$ 1,705	\$ 1,682

¹ As at June 30, 2022, contributions past due are less than \$1 million (June 30, 2021 — \$2 million).

NOTE 8. BENEFITS

For the six-month period ended June 30 (Canadian \$ millions)	2022	2021
Retirement pensions	\$ 3,226	\$ 3,097
Death benefits	254	242
Disability pensions	12	12
Commuted value transfers	81	64
Family law transfers	12	12
Transfers to other plans	4	5
Benefits paid	\$ 3,589	\$ 3,432
Other payments ¹	—	—
	\$ 3,589	\$ 3,432

¹ Settlement or other claim-related payments to certain current and former beneficiaries determined on a case-by-case basis. Such payments do not reduce the accrued pension benefits.

NOTE 9. RELATED PARTY TRANSACTIONS

Ontario Teachers' primary related parties include its co-sponsors (the Province of Ontario and Ontario Teachers' Federation); key management personnel; subsidiaries related to the administration of the pension plan; and investment-related subsidiaries, joint ventures, and associates.

The primary transactions undertaken between Ontario Teachers' and the Province of Ontario consist of the funding contributions outlined in note 7. Amounts Receivable from the Province related to matching contributions and interest thereon are presented on the Condensed Interim Consolidated Statement of Financial Position. Ontario Teachers' investments in Province of Ontario issued bonds is disclosed in note 2f. There are no significant transactions between Ontario Teachers' and its other co-sponsor, OTF.

Related-party transactions with investment-related subsidiaries, joint ventures, associates consist primarily of investments and investment income. These transactions are measured at fair value and will, therefore, have the same impact on net assets available for benefits and net investment income as those investment transactions with unrelated parties. Guarantees made on behalf of related parties are disclosed in note 12.

NOTE 10. CAPITAL

Funding valuation surpluses or deficits as determined by an independent actuary are considered Ontario Teachers' capital for the purposes of the Interim Financial Statements. See note 6 for an explanation of the difference between the funding valuation and the financial statement valuation.

The funding valuation is used to measure the long-term health of the Plan assessing the Plan's ability to meet its obligations to all current members and their survivors. The objective of managing Ontario Teachers' capital is to ensure the Plan is sufficiently funded to pay benefits over the long term.

One of the most important assumptions in the funding valuation is the discount rate (set by the board) which is used to calculate the present value of future pension benefits the Plan expects to pay to members as well as the present value of contributions it anticipates receiving. The discount rate is derived from the expected rate of return on investments and takes into consideration the cost of running Ontario Teachers' and provisions for plan maturity as well as major adverse events, such as the 2008 financial crisis.

Preliminary funding valuation surpluses or deficits are determined annually. At least once every three years, a formal funding valuation report is required to be filed with the

regulatory authorities. As stated in the Partners' Agreement¹, the Plan cannot be in a deficit position when such reports are filed². As a result, the formal report must include adjustments to benefit and / or contribution levels as necessary to eliminate any preliminary valuation deficit. Any required adjustments are determined by the co-sponsors with guidance from the Funding Management Policy (Appendix A to the Partners' Agreement).

¹ The Partners' Agreement is the document which establishes the partnership between the co-sponsors and outlines the roles of Ontario Teachers', its board and co-sponsors.

² The formal funding valuation report must be actuarially balanced such that the sum of the funding liabilities (present value of future pension benefits), the present value of the reduction in cost due to providing inflation protection levels below 100% and any contingency reserve is equal to the sum of the Plan's market value of assets, asset smoothing adjustment, present value of future contributions and present value of future matching of foregone inflation adjustments.

NOTE 11. COMMITMENTS

Ontario Teachers' has committed to enter into investment and other transactions, which may be funded over the next several years in accordance with the terms and conditions agreed to. As at June 30, 2022, these commitments totaled \$35,060 million (December 31, 2021 – \$33,185 million).

NOTE 12. GUARANTEES AND INDEMNIFICATIONS

Guarantees

Ontario Teachers' provides guarantees to third parties related to certain investments and could be called upon to satisfy these guarantees if the investee companies fail to meet their obligations. Ontario Teachers' expects most guarantees to expire unused. No payments have been made by Ontario Teachers' in relation to these guarantees during the six-month period ended June 30, 2022, and the twelve-month period ended December 31, 2021.

Ontario Teachers' guarantees certain investee loan and credit agreements which will expire by 2026. Ontario Teachers' maximum exposure is \$488 million as at June 30, 2022 (December 31, 2021 – \$315 million). The companies have drawn \$258 million under the agreements (December 31, 2021 – \$144 million).

Ontario Teachers' guarantees a lease agreement for an investment company which will expire by 2059. Ontario Teachers' maximum exposure is \$74 million as at June 30, 2022 (December 31, 2021 – \$74 million). There were no default lease payments in either 2022 or 2021.

Ontario Teachers' also guarantees the ability of certain investee companies to settle certain financial obligations. Ontario Teachers' maximum exposure is \$115 million as at June 30, 2022 (December 31, 2021 – \$87 million).

Ontario Teachers' also guarantees commercial paper and term debt issued by Ontario Teachers' Finance Trust (OTFT) which Ontario Teachers' consolidates. The fair values of these guarantees are included in Ontario Teachers' investment-related liabilities.

The term debt issued by OTFT, as shown in the table below, is not redeemable prior to maturity at the option of the trust or Ontario Teachers' except as described in their respective Offering Memoranda. OTFT and its affiliates may at any time and from time to time purchase the senior notes in the open market or otherwise.

Issuance	Currency	Principal Amount	Maturity	Coupon
September 2017	USD	\$1.75 billion	September 2022	2.125%
September 2019	USD	\$1.75 billion	September 2024	1.625%
April 2020	USD	\$1.00 billion	April 2025	1.375%
May 2020	EUR	€1.50 billion	May 2025	0.500%
September 2020	USD	\$1.50 billion	September 2023	0.375%
September 2020	USD	\$1.50 billion	September 2030	1.250%
October 2020	CAD	\$1.25 billion	October 2027	1.100%
November 2020 ¹	EUR	€0.75 billion	November 2030	0.050%
April 2021	USD	\$1.50 billion	April 2031	2.000%
May 2021	EUR	€1.25 billion	May 2028	0.100%
May 2021	EUR	€1.25 billion	May 2041	0.900%
September 2021	USD	\$2.00 billion	September 2026	0.875%
October 2021	GBP	£500 million	May 2026	1.125%
November 2021 ¹	EUR	€500 million	November 2051	0.950%
April 2022	USD	\$1.50 billion	April 2027	3.000%
April 2022	EUR	€1.25 billion	May 2032	1.850%

¹ Green bond issuances.

The commercial paper issued by OTFT is not redeemable prior to maturity or subject to voluntary prepayment, except as described in the U.S. Commercial Paper Private Placement Memorandum dated June 2017. The maturity terms for the commercial paper outstanding as at June 30, 2022 are up to 397 days from the date of issue in the U.S. and up to 364 days in Canada. The maximum aggregate principal amounts of the commercial paper outstanding at any one time do not exceed \$10 billion. As at June 30, 2022, commercial paper issued amounted to \$2,546 million (December 31, 2021 – \$2,501 million).

Indemnifications

Ontario Teachers' board members, employees and certain others are indemnified in relation to certain proceedings that may be commenced against them. In addition, in the normal course of operations, Ontario Teachers' may, in certain circumstances, agree to indemnify a counterparty. Under these agreements, Ontario Teachers', its subsidiaries and joint ventures may be required to compensate counterparties for costs incurred as a result of various contingencies such as legal claims or changes in laws and regulations. The number of such agreements, the variety of indemnifications and their contingent character prevents Ontario Teachers' from making a reasonable estimate of the maximum amount that would be required to pay all such counterparties.