

2020 Annual Report

Strong. Resilient. Ambitious.



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331,000

Active members
and pensioners

Strong.

\$221.2B

Net assets

PENSION FUNDING SOURCES SINCE 1990

79%

Net investment
income

10%

Member
contributions

11%

Government/
designated employer
contributions¹

¹ The additional 1% includes original plan deficit funding and contributions related to conditional inflation protection.

93/100

Service score in
CEM Benchmarking Inc.
(#2 internationally)



Fully funded

for the eighth year
in a row

Seamlessly moved to remote work

to avoid service
disruption during
COVID-19

Resilient.

8.6%

Total-fund net return

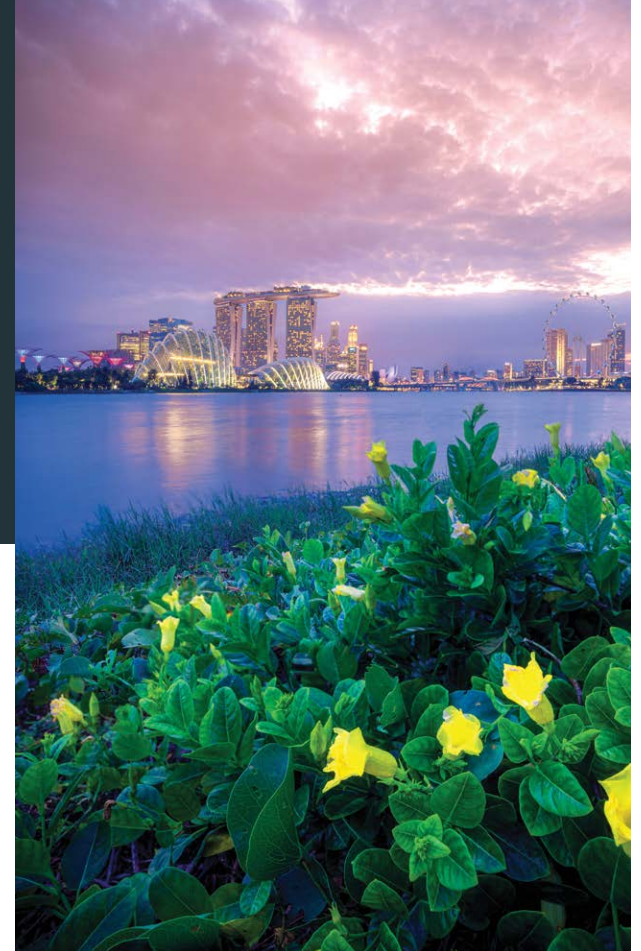
Supported portfolio companies

to help them manage
through the pandemic

Net zero

Committed to achieving net-zero greenhouse gas emissions by 2050

Targeting
\$300B
in net assets by 2030



Ambitious.

Seeking

50%

of future private investments outside of North America

Enhancing our presence in Asia-Pacific with the opening of a

new office in Singapore

Globally diversified investor with assets in

more than 50 countries

Who we are

We are Ontario Teachers' Pension Plan Board (Ontario Teachers'), the administrator of Canada's largest single-profession pension plan.

We actively invest on behalf of 331,000 active and retired Ontario teachers, and provide outstanding service and retirement security for our members – today and tomorrow.

Ontario Teachers' is a global, independent organization with offices in Toronto, Hong Kong, London and Singapore.

The pension plan is governed by the *Teachers' Pension Act* (Ontario), the *Pension Benefits Act* (Ontario), the *Income Tax Act* (Canada), and laws in the various jurisdictions in which it invests and operates.



Sponsors' role

Ontario Teachers' Federation (OTF) and the Ontario government are the plan's joint sponsors. Together, OTF and the government ensure the plan remains appropriately funded to pay pension benefits, and decide:

- the contribution rate paid by working teachers (and matched by the government and designated employers);
- the benefits that members will receive, including inflation protection; and
- how to address any funding shortfall or apply any surplus.

Board's role

Our board, appointed by OTF and the government, oversees the management of Ontario Teachers'. Board members are required to:

- act independently of both the plan sponsors and management; and
- make decisions in the best interests of all plan beneficiaries.

Management's role

Management has three main responsibilities:

- invest plan assets to help pay pensions;
- administer the plan and pay pension benefits to members and their survivors; and
- report and advise on the plan's funding status and regulatory requirements.

Management sets long-term investment and service strategies that take member demographics and economic, investment and market risks into account.

Report from the Chair

These are extraordinary times. A public health emergency has prompted a social, economic and financial crisis the likes of which have not been seen in some time.

Despite the unprecedented challenges of the COVID-19 global pandemic, Ontario Teachers' showed tremendous resiliency and delivered strong results in 2020.

Board practices and priorities during a pandemic

Our experienced board is active and engaged. Meeting with portfolio companies, investment partners, governments and other stakeholders helps us fulfill our governance responsibility by giving us a better understanding of the risks and strategic opportunities the plan faces. In 2020, this work was virtual.

COVID-19 presented many challenges, including for governance. In the early months of the year, the priorities of the board pivoted to pandemic response. We participated in weekly updates with the executive team to review changing financial markets, the needs of our portfolio companies, the migration to remote work, the condition of our business operations and, importantly, the health and well-being of employees.

While the board readjusted its priorities to navigate through the choppy waters of 2020, our focus did not waver from the post-pandemic world on the horizon. Defined benefit pension plans like Ontario Teachers' are, by design, lifetime benefits, so we need to have a long-term mindset even when dealing with immediate crises. Considerable time at the board and management tables was spent on strategy and vision for the future.

Foremost is the diversification challenge. In a "lower for longer" interest rate environment, we need to innovate and keep a steady focus on generating returns to pay pensions.

Increasingly, this will mean being creative, going further afield and investing more in private assets. Doing so is made even more complicated by the fact that many asset classes are at sky-high valuations and competition is more intense than ever.

As we are stewards entrusted with ensuring the plan's sustainability, environmental, social and governance issues are at the top of the agenda. To this end, the board supported a new climate change policy which commits Ontario Teachers' to achieve net-zero greenhouse gas emissions by 2050. Social issues like gender and racial equality are also increasingly prominent in boardroom discussions.

The plan is secure

2020 showed that you must have a proven team at the helm in challenging times. Under Jo Taylor's ambitious leadership, the organization successfully managed the short-term crisis of a global pandemic and remains focused on the long-term growth needs of the plan in a post-COVID world.

The plan remains on a sound financial footing. It ended the year with a healthy funding surplus, which provides a cushion and allows us to conserve assets for uncertain times. With our strong funding status, members can look forward to stability in benefits and contribution rates over the next few years.

“Despite the unprecedented challenges of the COVID-19 global pandemic, Ontario Teachers' showed tremendous resiliency and delivered strong results in 2020.”



We as a board remain committed to being strong stewards of the plan, with the right priorities to manage through complex conditions today and the challenges we may face in the years to come.

SR MCGIRR

Steve McGirr
Chair

Report from the CEO

2020 was quite a year! It tested all of us as individuals, as companies and as a society. Our members – Ontario’s teachers – were able to rise to the challenge admirably, and we were also able to play our part.

I am incredibly proud of what we accomplished and how the Ontario Teachers’ team worked with conviction and agility. When COVID-19 took hold around the globe, our team was able to seamlessly transition to a remote work model without interruption to our key investing and member service activities.

This was my first full year as CEO, and it is safe to say it did not go quite as I anticipated. That said, in trying circumstances we demonstrated financial resilience while delivering outstanding service for our members.

Delivering strong results in 2020

Despite the tumultuous year, we delivered strong results in 2020. We achieved a total-fund net return of 8.6% for the year, exceeding the annual rate of return that is required to keep the plan sustainable over the long term. The returns were achieved by skillfully managing risk and return across a broad portfolio of assets.

Our portfolio proved to be very resilient, with many of our companies rebounding significantly from a dip earlier in the year. Our fixed income and equity asset classes performed particularly well amid ultra-low interest rates and strong global equity markets. Ample liquidity gave us the flexibility to support our companies through the toughest part of the pandemic and pursue attractive opportunities when public markets tumbled.

“On the strength of our financial results, we ended 2020 fully funded for an eighth straight year.”

On the strength of our financial results, we ended 2020 fully funded for an eighth straight year. Our preliminary funding surplus totaled \$8.5 billion and our funding ratio equaled 103% as at January 1, 2021. This is a strong achievement for a defined benefit plan like Ontario Teachers’.

Our Member Services team continued to deliver brilliant service levels again this year, achieving a service score of 93/100. This places us as the second-best pension plan globally. It is a remarkable achievement that we have been ranked first or second in a group of leading global pension plans for service over the past 10 years.



A clear plan for the future

As we look to the future, we expect many of the key macro trends to continue in a post-COVID world. Plan demographics, “lower for longer” returns, a more crowded and competitive global marketplace and growing expectations around environmental, social and governance (ESG) issues are just some of the challenges that we will face. In fact, the global pandemic has made these key trends even more acute. Despite this changing environment, we have a clear plan for the future.

BUILDING A CULTURE OF EXPERIMENTATION

It starts with unlocking a culture of experimentation and entrepreneurship at Ontario Teachers’ to adapt to these challenging market conditions. We have a proud legacy of leading the industry and taking measured risks. To achieve our targets, we need to be bold, ambitious and global.

How we go to market around the world will be key. More than ever, we need to pick the right partners, hire the right people and invest in the right countries. Last year, we opened an office in Singapore and made key senior strategic hires in our international offices. Moving forward, we will look to expand our international footprint in the markets where we need to grow.

Attracting and retaining top talent and becoming a truly inclusive organization remain significant priorities for Ontario Teachers’. We have a real focus on building and embracing diversity of thought and experience, as this will invariably lead to better decision making.

DELIVERING LONG-TERM GLOBAL GROWTH

Of course, we have to keep delivering the investment returns and long-term growth needed to keep the plan fully funded. Last year, I set out an ambitious goal of reaching \$300 billion in net assets by 2030. In 2020, we grew our net assets to over \$220 billion, so we are making good progress toward that goal.

To get there, we expect 50% of our private investments to be made outside North America. To do this, we aim to build focused, distinctive partnerships in our selected markets, and continue to build world-class talent in all of our locations. We also plan to pursue bold investment strategies to build new sources of returns.

INVESTING WITH PURPOSE

Beyond returns, I believe we also have a responsibility to create a lasting, positive impact on the people, companies and communities that we touch around the world. It is my view that investment returns and purpose go hand in hand, and this means delivering on our pension promise and investing to shape a better future.

Earlier this year, we made the commitment to reach net-zero greenhouse gas emissions by 2050, leveraging our scale and influence to transition to a low-carbon economy and create a sustainable climate future. We also increased our focus on “social” elements of ESG, recognizing that we have a responsibility to be part of meaningful, systemic change.

Ultimately, these efforts serve multiple goals: they can lead to better long-term returns, they will attract the right talent, and they will have a positive impact on the world.

Operating from a position of strength

We entered 2021 with many enviable advantages: a funding surplus, plentiful liquidity, top-notch portfolio companies, a respected brand, best-in-class partners and an experienced, dedicated global workforce. We also have the good fortune to represent Ontario’s educators on the world stage.

These strengths, along with the right leadership and the right strategy, position us very well for the future. While 2021 will undoubtedly continue to bring many challenges, I remain very confident in our team and our ability to provide outstanding service and retirement security to our members over the long term.



Jo Taylor
President and CEO

Shaping a better future

Our actions have the potential to create lasting benefits for our members, our partners and the communities where we operate.

The competitive global investment markets have been impacted by “lower for longer” returns, geopolitical instability and global trade tensions, social inequality and the long-term challenges of climate change, all of which have been exacerbated by the COVID-19 pandemic.

The complex regulatory environment, changes in technology, evolving member demographics and increased service demands are influencing how we administer pensions. In a rapidly changing business environment, it’s critical that we have a clear focus and build from our strengths to prepare for the future.

Key strengths for Ontario Teachers’ include:

Global presence

With our international locations, local talent and global partners, we can effectively access the best opportunities in key global markets.

Members first

We deliver a seamless and secure service experience to our members with faster, more efficient technology across service channels.

Strategic relationships

Our strength and success depend on working with world-class partners. We will continue nurturing focused and differentiated partnerships in priority areas and jurisdictions.

In-house talent

Our talented team builds expertise and insights to deliver higher net returns at a lower cost. Finding and retaining great people and developing their potential will position us for continued success.

Responsible investing

Our approach is rooted in sustainability. By continuously enhancing our ESG expertise, we can deliver on our pension promise while having a positive impact for our members, for our partners and in our communities.

Total-fund approach

Our investing approach broadly balances investment risks and returns by effectively allocating capital across asset classes and departments, managing volatility and spurring innovation.

Empowering our people

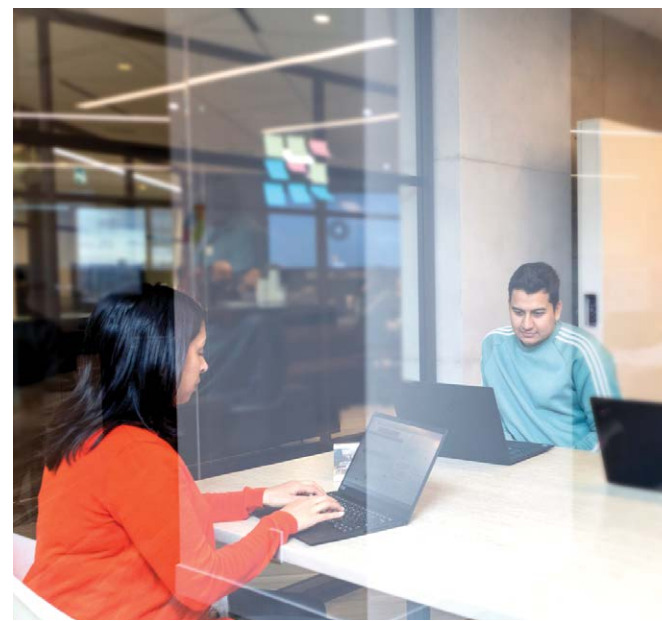
This year was unlike any other. The nature of the global pandemic brought unprecedented change, as we adapted to a new way of working while remaining focused on our top priority: the health and safety of our employees.

Drawing strength from inclusion and diversity

2020 was a year when social justice protests turned the spotlight on the importance of inclusion and diversity. This created an opportunity to bring the dialogue internally and openly discuss issues around race in the workplace, providing a chance for colleagues to share, listen and learn about where we can do more.

From our grassroots initiatives to enhancements to enterprise talent practices, processes and policies, we are committed to advancing inclusion and diversity at Ontario Teachers' and in the communities where we operate. We recognize that inclusion and diversity are key to our long-term success.

In 2020, we increased our efforts to attract talent from broader pools and to address issues that matter in order to create a sense of belonging at Ontario Teachers'. This included establishing new industry partnerships with organizations committed to advancing diversity and inclusion in corporate workplaces and hosting our own events and discussions on steps we can all take to become better allies and ensure an inclusive workplace.



Joined
#100blackinterns
and the
**BlackNorth
Initiative**

to drive change within our
organization and support
collective industry action

Celebrated
**National Coming
Out Day**
and
**Mental Health
Awareness Day**

by hosting an online discussion
with industry peers and
having an open dialogue with
employees

Held
**International
Women's Day**
and
Pride

events across all our offices

FUTURE-FOCUSED ON GENDER DIVERSITY

Engaging for positive, long-term change is a significant part of our organizational strategy. We are encouraging and promoting diversity within boards and senior leadership of our companies to think holistically about inclusion and diversity. We do this through a thoughtful approach to voting practices and engagement. We are also working with a variety of industry organizations to drive collective progress across the industry.

WCM's Return to Bay Street program

We're proud to support Women in Capital Markets' (WCM) Return to Bay Street (RTBS) program, which seeks to accelerate equality in the Canadian finance industry. RTBS enables women who have taken time away from their professional roles to relaunch their careers in capital markets.




Bringing in global talent and developing our people

As we build our global capabilities, we're focused on hiring the right people to support this growth. Our goal is to attract, retain and develop diverse, high-calibre talent for all markets in which we operate internationally.

During the pandemic, we succeeded in virtually recruiting and onboarding premier senior talent around the world, including Karen Frank, Senior Managing Director, Equities (London); Nick Jansa, Senior Managing Director for Europe, Middle East and Africa (London); and Bruce Crane, Managing Director, Infrastructure & Natural Resources (Singapore).

We also filled several senior roles through internal promotions, showing the deep bench strength available at Ontario Teachers'. Examples include Tracy Abel as Chief Operations and Pension Officer, Charley Butler as Senior Managing Director of Member Services, and Michelle Joliat as Senior Managing Director of Product and Delivery for Enterprise Operations.



Management's Discussion & Analysis

Plan funding report

A look at the health of the pension

This section provides information on recent funding valuations, assumptions and related demographic and economic considerations that play a role in plan funding discussions. A funding valuation is an assessment of the financial health of a pension plan on a defined date. It determines whether the plan's projected assets are reasonably sufficient to pay all promised pensions in the future.

FUNDING STATUS AS AT JANUARY 1, 2021

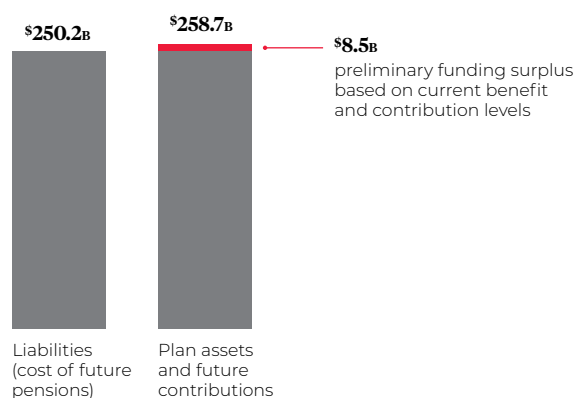
As at January 1, 2021, the plan had a preliminary surplus of \$8.5 billion based on an average contribution rate of 11% and 100% inflation protection being provided on all pensions. A preliminary funding valuation is one that is not finalized or filed with the regulators. The January 1, 2021 valuation is not required to be filed; however, the sponsors may choose to do so, in which case the report would be filed prior to the end of September 2021. If the sponsors choose to file this valuation, they will decide how to allocate the surplus.

The next required funding valuation filing is as at January 1, 2023.

Details are provided in the Funding Valuation Summary table on the right.

FUNDING VALUATION

As at January 1, 2021



2020 FILED VALUATION

In 2020, OTF and the Ontario government decided to file the funding valuation with the regulators, which is detailed in the Funding Valuation Summary table below. The \$6.1 billion preliminary surplus as at January 1, 2020 increased to \$11.7 billion after reflecting wage agreements ratified as part of the collective bargaining process. The wage agreements reduced the present value of future contributions by \$2.6 billion and reduced the liabilities by \$8.2 billion, resulting in a net increase in surplus of \$5.6 billion.

The surplus was classified as a contingency reserve to help facilitate stability in members' contributions and benefits in case a future valuation shows a decline in assets and/or an increase in pension costs. Classifying the surplus as a contingency reserve can be thought of as a way of "saving for a rainy day."

FUNDING VALUATION SUMMARY

As at January 1 (Canadian \$ billions)

	2021 (prelim.)	2020 (filed)	2020 (prelim.)
Net assets available for benefits	\$221.2	\$207.4	\$207.4
Smoothing adjustment	(8.6)	(5.5)	(5.5)
Value of assets	\$212.6	\$201.9	\$201.9
Future basic contributions	46.1	43.9	46.5
Total assets	\$258.7	\$245.8	\$248.4
Liabilities (cost of future pensions)	(250.2)	(234.1)	(242.3)
Surplus/contingency reserve¹	\$8.5	\$11.7	\$6.1
Assumptions (percent)			
Inflation rate	2.00	2.00	2.00
Real discount rate ²	2.45	2.60	2.60
Discount rate	4.50	4.65	4.65

¹ If the sponsors choose to file the valuation as at January 1, 2021, they will decide how to allocate the surplus, including whether or not to classify the surplus as a contingency reserve. The January 1, 2020 surplus was classified as a contingency reserve.

² Real rate shown as the geometric difference between the discount rate and the inflation rate.

SMOOTHING ADJUSTMENT

Smoothing is a common practice in funding valuations that is used to reduce short-term volatility. The plan's funding valuations smooth asset gains and losses over a three-year period, with one-third of gains and losses being recognized immediately and the remaining two-thirds being recognized in equal installments over the following two years. Gains and losses are determined by comparing the fund's actual total-fund return against the discount rate used for funding valuation purposes. By deferring recognition of gains and losses, the plan's funding ratio, contribution rates and benefit levels are less volatile. Without the use of smoothing, the sponsors might have to change contributions and benefits more frequently to achieve funding stability.

There were \$8.6 billion in unrecognized gains in the January 1, 2021 valuation, compared to \$5.5 billion of unrecognized gains in the January 1, 2020 valuation. Unrecognized gains that are held back act as a positive margin in the valuation results.

DISCOUNT RATE

A funding valuation uses several actuarial assumptions to project the value of future pension plan liabilities and contributions. Assumptions, using professional judgment, are made about future inflation, salary increases, retirement ages, life expectancy and other variables.

One of the most important assumptions is the discount rate, which plays a key role in assessing whether the pension plan has enough assets to meet its future pension obligations. The discount rate is used to calculate the present value of future pension benefits that the plan expects to pay to members as well as contributions it anticipates receiving. Plan liabilities are sensitive to changes in the discount rate, with a lower rate resulting in increased liabilities. The discount rate is derived from the expected rate of return on investments and takes into consideration the cost of running the plan and provisions for plan maturity as well as major adverse events, such as the 2008 financial crisis and the volatile effects of COVID-19 on the markets.

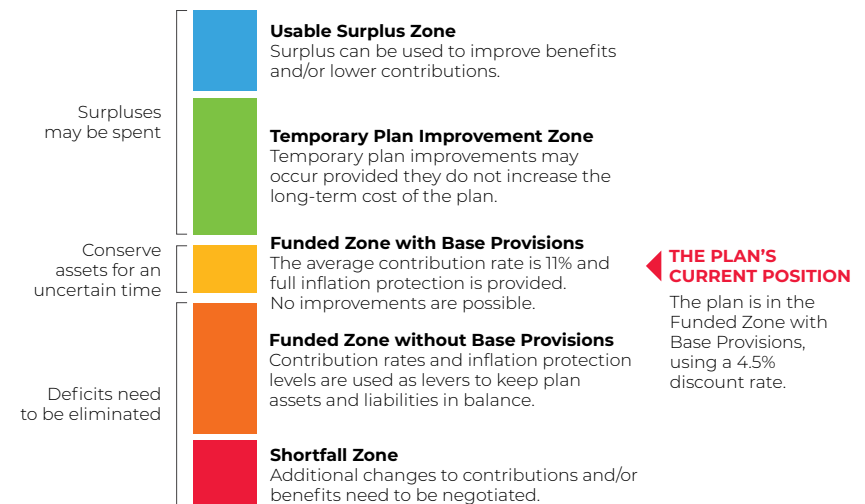
Ontario Teachers' is facing imposing headwinds and an uncertain and unpredictable investment and geopolitical environment. In addition, there has been a sustained decline in long-term interest rates, reflecting a continuing "lower for longer" expectation. With these factors in mind, the board decided to lower the real discount rate from 2.6% to 2.45%. This is a prudent decision, particularly given the maturing demographics of the plan's membership.

FUNDING MANAGEMENT POLICY

In 2003, the sponsors adopted the Funding Management Policy (FMP). The FMP is an important document that provides the sponsors with a guidance framework for decision making when there is a funding surplus or shortfall. A key component in the FMP is the concept of funding zones, each defined by a range. The funding zones provide a point of reference for whether action is required by the sponsors and, if so, guidance is provided on how to use any surplus funds or resolve any shortfall. Specifically, it is used to answer questions of when it is prudent to increase or decrease benefits, raise or lower contribution rates, or simply conserve assets for an uncertain time. The FMP outlines preferred mechanisms associated with its various funding zones, and it is ultimately the sponsors' responsibility to decide what actions to take.

The FMP has important implications from an investment perspective, adding clarity to our strategic asset allocation decisions with a key focus being on the plan's ability to absorb risk. In the absence of the FMP, this level of clarity would be difficult to achieve.

FUNDING MANAGEMENT POLICY ZONES



INTERGENERATIONAL EQUITY

The design and implementation of an innovative funding risk mitigant, conditional inflation protection (CIP), adds flexibility to the plan and promotes intergenerational equity. It recognizes and virtually neutralizes the impact of the changing ratio of active to retired plan members on the plan's funded status.

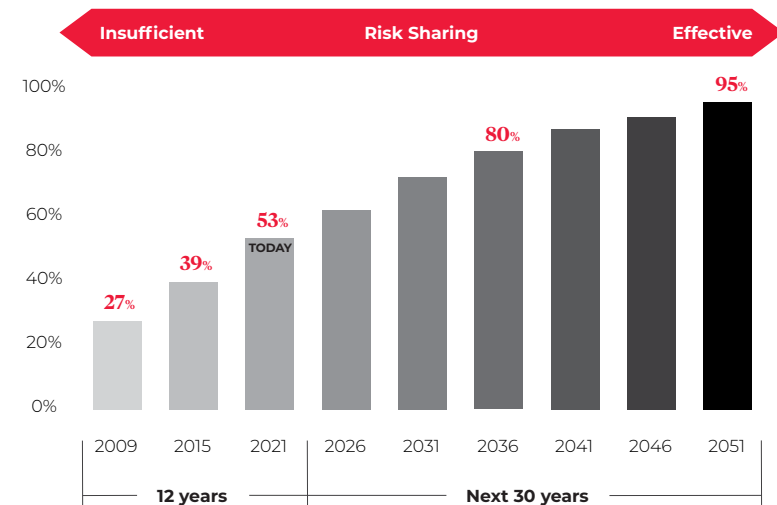
The plan sponsors prudently and proactively introduced CIP in 2008, recognizing that if significant investment losses or a funding shortfall occurred, an increase in contribution rates alone was unlikely to be sufficient and increases would be borne solely by active plan members.

CIP allows flexibility in the amount of inflation increase provided to pensioners for benefits earned after 2009. The level of increase is a sponsor decision and is conditional based on the funded status of the plan. Pension credit that members earned before 2010 remains fully indexed to inflation. For more details on how CIP works, please view note 4b to the Financial Statements.

While promoting intergenerational equity, CIP is also an effective lever for mitigating funding risks. Over time, as the proportion of service that members have earned after 2009 continues to grow, the risk of significant investment losses or a funding shortfall is distributed more broadly among the membership – that is, risk is shared by more retired members.

The graphic on this page illustrates the increasing impact of CIP risk sharing over time. Over the next 15 years, the percentage of the plan's total liability that is subject to CIP will increase from 53% to 80%.

PERCENTAGE OF TOTAL LIABILITY SUBJECT TO CIP ON POST-2009 SERVICE



STRESS RESISTANT

As CIP applies to more pension beneficiaries, it will be able to absorb a greater loss, making it a more effective risk management tool.

	1990	2020	2030
Increase in contributions required for 10% loss in assets	1.9%	5.4%	5.7%
Decrease in level of CIP required for 10% loss in assets	n/a	29%	20%
Asset loss capable of being absorbed by fully invoked CIP (Canadian \$ billions)	n/a	\$47	\$96

As an example, a 10% asset loss in 2030 could be absorbed by lowering inflation protection increases for benefits earned after 2009 from 100% to 80%. As another example, in the most extreme case, if CIP were fully invoked, this funding lever would be powerful enough to absorb a 2030 asset loss of \$96 billion.

Plan funding considerations

When making decisions on behalf of all beneficiaries, management and the sponsors consider demographic and economic factors and risks.

The Funding Variables table shows how some important variables have changed since Ontario Teachers' inception in 1990. It is followed by brief discussions of some key funding considerations. Ontario Teachers' has identified four main funding risks – longevity, interest rates, inflation and asset volatility – and seeks to manage intergenerational equity, given these risks.

FUNDING VARIABLES – PAST AND PRESENT

	2020	1990
Average retirement age	59	58
Average starting pension	\$47,500	\$29,000
Average contributory years at retirement	26	29
Expected years on pension	32	25
Number of pensioners aged 100 or more	147	13
Ratio of active teachers to pensioners	1.2 to 1	4 to 1
Average contribution rate	11.0%	8.0%

LONGEVITY RISK

Teachers in Ontario live longer than the general Canadian population and their life expectancy continues to increase. It costs more to pay lifetime pensions when members live longer. At the same time, members are contributing to the plan for fewer years than in the 1990s, and their retirement periods are longer. Given the longevity of the plan members, Ontario Teachers' uses custom mortality tables as well as assumptions regarding how longevity will improve in the future. These custom, plan-specific assumptions were recently updated and have been used in the January 1, 2020 and January 1, 2021 valuations.

INFLATION RISK

The plan seeks to provide retired members with annual pension increases to offset the impact of an increased cost of living (inflation). Inflation that is higher than assumed in the valuation increases the plan's liabilities, given the plan's inflation protection feature, while inflation that is lower than assumed reduces the plan's liabilities. The annual increase received by retirees on the portion of their pensions earned after 2009 is conditional on the plan's funded status.

ASSET RISK

The record-long economic expansion and equity bull market ended in 2020 as the COVID-19 pandemic brought on the deepest economic crisis and fastest equity market drawdown since the Great Depression. The economic downturn and financial market correction, however, were short-lived as the unprecedented level of policy support provided the impetus for the equally impressive equity market rebound during the second half of the year. In that regard, 2020 has been marked by a period of heightened asset market volatility, reflecting the uncertainty surrounding the pandemic.

While some semblance of stability has returned, as the economic recovery begins to take shape and the markets have priced in a more favourable outlook, the potential for future setbacks remains. This is particularly true in the near term as the economic scars from the pandemic begin to emerge. A material drop in asset prices will negatively impact asset values. Currency volatility also has an impact on assets. Volatile asset markets can present opportunities for long-term investors such as Ontario Teachers', but they can also lead to investment losses that affect the plan's funded status.

Managing risk during COVID-19

Operating strategically through enterprise risk management

Ontario Teachers' exists to provide lifelong pension benefits to its members. To deliver on our pension promise, we must effectively manage risks and be adequately compensated for taking them.

Risk management is an important capability at Ontario Teachers' and plays a key role in all our activities. The board, with the support of the executive team, helps establish a strong risk culture and sets the appetite for risk, including how much risk the organization is willing to accept in order to achieve our strategic objectives. Risk management is a responsibility shared by all of Ontario Teachers' employees.

Through enterprise risk management (ERM), management can understand important enterprise risks and how these risks are being managed against the established board risk appetite. Given the value and forward-looking, longer-term insight it provides, ERM has been further integrated into our strategic and operational planning decisions.

Key goals of ERM provide management with the tools to:

- establish a consistent framework to better understand and assess the broad range of enterprise risks we face, while also considering opportunities;
- manage rapid changes to our business environment, including identifying emerging risks; and
- create a competitive advantage through a strong and agile risk-conscious culture and create value through a longer time horizon lens.

We consider risks in four categories: governance, strategic, investment and operational. We also consider reputational risk, which is seen as a consequence of one of the four risk categories occurring, which is equally important.

Ontario Teachers' enterprise risk categories

Governance risk

Associated with the structure and functioning of Ontario Teachers', including the policies, laws and regulations affecting the plan.

Strategic risk

Associated with decision making for the long-term strategic direction of Ontario Teachers'.

Investment risk

Risk associated with effective management of the plan's assets, including market, credit, liquidity and geopolitical risk.

Operational risk

The risk of direct or indirect loss resulting from inadequate or failed internal processes, people or systems, or from external events. Cybersecurity is an example of this type of risk.

Reputational risk

The risk associated with a change in perception of Ontario Teachers' or its public image.

On the next page, you'll find examples of key risk areas particularly impacted by the COVID-19 pandemic that management focused on during 2020 to support the long-term success of Ontario Teachers'.

LIQUIDITY RISK

Our fund has always prioritized maintaining a strong liquidity position. Over the course of 2020, our liquidity position further improved as a result of proactive actions taken by management. This strong liquidity position enabled us to seamlessly navigate market volatility, provide the support needed by our portfolio companies and take advantage of market opportunities.

PHYSICAL AND MENTAL WELL-BEING

Recruiting, retaining and developing great people is critical to delivering our strategy. The prolonged work-from-home situation and isolation caused by the pandemic demonstrated that employee health and well-being are key strategic risks. Fostering a culture of well-being, normalizing mental health and maintaining a holistic approach to employee work-life balance helps us manage these risks.

Staying focused on wellness

At Ontario Teachers', prioritizing employee wellness means helping our people feel healthy and supported. A broad range of resources are available to employees, in addition to new resources introduced during the pandemic, including regular webcasts with medical practitioners, expanded medical benefit coverage, 24/7 virtual healthcare through the telehealth app Akira and virtual wellness sessions on topics such as mental health, fitness and nutrition.

GEOPOLITICAL RISK

As a global investor, Ontario Teachers' carefully monitors and manages the potential impacts of country-wide and regional economic, political and social shifts on our activities. In 2020, the pandemic accelerated global shifts such as deglobalization, regionalization, market politicization and global power relationships. Developing global capabilities, strong relationships and local operations to anticipate and manage these shifts is crucial to maintaining our competitiveness in a post-COVID environment.

OPERATIONAL RESILIENCY

Our response to the pandemic demonstrated the maturity of our business continuity capabilities and our ability to manage operational risks with agility in highly fluid situations. Given the global scope of our business, we were well positioned to securely support remote work from the onset of the pandemic. In addition, we continuously focus on protecting our organization against evolving cybersecurity threats with around-the-clock monitoring, alerting and investigation of potentially suspicious security events.

Serving members shapes everything we do

Every day, we strive to meet expectations. This means always looking ahead to anticipate our members' needs and finding better ways to serve them at every stage of their pension journey. We are listening, analyzing, and acting on the insights they provide us to create outstanding omnichannel experiences.

Our service philosophy focuses on three guiding principles: simple, personal and insightful. These principles help us meet the growing demand for easy, personalized services and information.

We aim to deliver a seamless, customized experience that lets our members engage with us how, when and where they want. This focus also enables us to reduce employee effort and increase employee engagement, which ultimately leads to better service for our members.

As the world changes, we adjust. Investing in the right people, strategies and technology ensures we can continue to meet our members' needs, regardless of what is happening around us.

Member profile

183,000

Active members

148,000

Pensioners

331,000

Total number of active members and pensioners

26

Typical years of credit at retirement

32

Average years retirees are expected to collect a pension

59

Average retirement age

147

Pensioners over 100

3-108

Age range of pensioners

24

Pensions in pay for more than 50 years

4,975

New retirement pensioners in 2020

73

Average age of pensioner

5,698

New members in 2020

43

Average age of active member

MOVING FORWARD TOGETHER

The positive spirit and effort of our teams and partners during the pandemic were nothing short of phenomenal. Together, we unlocked the flexibility and creativity needed to continue serving our members' daily needs and to continue delivering the reliable service our members expect from us. We thank our members for their patience and support during these challenging times.

DIGITAL-FIRST STRATEGY

Members are spending more time online than ever before. As we faced uncertainty throughout 2020, we enhanced our digital capabilities to meet shifting demands, improve business operations and build for the future. Digital strategy and online self-service technologies will continue to simplify information and improve experiences in 2021 and beyond.

“The website was easy to navigate, and I was able to find the information I wanted quickly. The ability to compare different options was extremely beneficial and made it easy for me to understand how different choices could impact my retirement plans.”

ACTIVE MEMBER

ADVANCING OUR DIGITAL STRATEGY DURING COVID-19

Years of investing strategically in modernizing technology and adopting systems that better position us for the future paid off during the pandemic. Here are a few ways our teams quickly pivoted to carry out their duties when our office closed:

- We stopped mailing non-essential documents to members and digitized most documents, including tax forms, making them available in our members' secure online accounts. This ensured members always had easy and convenient access.
- To ensure the privacy of our members is protected in a fully digital service experience, we implemented an email encryption process to securely send and receive confidential information.
- We transformed our previously in-person retirement workshops into virtual presentations. By going digital, we were able to engage with more members since they could easily participate from anywhere. We'll continue to build on our virtual presentations and find new ways to connect with even more members.
- We created an inclusive digital service experience, making our public member website fully accessible to members with disabilities. According to the Web Content Accessibility Guidelines (WCAG) under the *Accessibility for Ontarians with Disabilities Act*, we're proud to have level AA compliance.
- While navigating unprecedented change, we improvised and collaborated with our partners to resolve issues without disrupting service. We continued to work closely with school boards and designated employers to ensure the accuracy of employment data.

In addition, we completed a five-year plan to upgrade our pension administrative systems. This transformation helped us improve operations by reducing risk, in addition to making us more agile and able to quickly adapt to internal and external changes.

“Despite folks working remotely, my calls were returned promptly. I was also contacted about an issue – something I didn’t even know about. They were on it and resolved the issue immediately.”

PENSIONER

PROUDLY DELIVERING OUTSTANDING, UNINTERRUPTED SERVICE

In 2020, Ontario Teachers' commitment to service excellence was clear as members continued to give us high marks. We received a Quality Service Index (QSI) score of 8.8 out of 10, which is consistent with scores in recent years. QSI, our primary performance measurement, evaluates the quality of our member experience, service and communications. It involves an independent survey of a sample of members throughout the year by email and telephone.

The percentage of our members satisfied with our service in 2020 was 94%, which is also consistent with high scores over the last few years.

Quality Service Index

	2020	2019
Total QSI (on a scale of 0 to 10)	8.8	8.8
Percentage satisfied	94	94

CEM Benchmarking

Ontario Teachers' service is also measured against leading pension plans in a global benchmarking assessment, conducted by CEM Benchmarking Inc., an independent research company that ranks plan performance in various categories.

In 2019 (the latest year where results were available), Ontario Teachers' had an exceptional service score of 93/100, compared to a Canadian average of 76/100 and a peer group average of 81/100. We are proud to have been ranked first or second internationally for the past 10 years and to have achieved a service score among the top five in the CEM universe for 20 consecutive years.

	2019	2018
Ontario Teachers' Pension Plan	93	94
Global participants average	77	77
Peer group average	81	82
Canadian participants average	76	77

Note: 2019 is the latest year where results are available. Scores are based on fiscal year data using current survey weights. They may not match the results from prior years.

#2

**internationally
in 2019**

93/100

**Service score
CEM Benchmarking**

Pension Obligation and Performance Index

As administrators of one of Canada's largest payrolls, with pension and benefit payments of \$6.7 billion in 2020, we pride ourselves on providing pensioners with timely, reliable payments. Our Pension Obligation and Performance Index result for 2020 was 98.6. This means that approximately 99% of our pension payments were made accurately and on time.

Q&A with the CIO

How did Ontario Teachers' portfolio perform this year?

Our portfolio had strong performance in 2020. Despite headwinds from the global pandemic and a volatile investment landscape, we achieved a total-fund net return of 8.6%.

In the first half of the year, COVID-19 wreaked havoc in global financial markets, severely impacting a number of our investments. Strong returns generated by our fixed income asset class and an equity hedge to protect downside risk helped us offset losses in most other areas of the portfolio.

The prompt and unprecedented monetary and fiscal support from governments around the world helped jumpstart the global economy. Many of our portfolio companies showed incredible resilience and were able to bounce back quickly. This, combined with robust returns from public markets, helped fuel this year's returns.

The pandemic highlighted the importance of effective portfolio diversification across different assets, geographies and sectors. While we could not have anticipated the pandemic, we had already set up the portfolio to be resilient in difficult conditions, and that has served us and our members well.

Crucially, we were able to achieve this as a result of the tireless efforts of the investment professionals and support staff at Ontario Teachers'. In the early stages of the pandemic, they provided vital support to our portfolio companies through the toughest period. As businesses adapted, the team pivoted seamlessly into looking for new value creation and investment opportunities.

Why did Ontario Teachers' reduce allocation to fixed income in the second half of the year?

Fixed income has traditionally been a great source of returns and diversification. In fact, we were able to generate over \$10 billion in investment income through this asset class in 2020 as interest rates declined drastically, with the majority of this coming in the first half of the year.



Ziad Hindo
Chief Investment Officer

With a persistent low interest rate environment expected in the coming years, fixed income will be a less effective source of diversification and returns in the immediate future. Consequently, we've reduced our exposure to this asset class and are seeking new sources of return and risk management through more diversification and increased allocation to other asset classes.

What is Ontario Teachers' doing to show leadership on climate change?

Recently, we made an ambitious commitment to achieve net-zero greenhouse gas emissions by 2050. As we are a long-term and global investor, our performance depends on widespread global growth and prosperity, which are inextricably tied to climate change. It is imperative that we act as a responsible and engaged owner of businesses. You can read more on our net-zero commitment on page 28.

Moving forward, we will increase our focus on financing climate solutions that replace fossil fuels and reduce emissions. Our investment in Equis, a leading developer of renewable energy and biomass generation assets in Asia, is a perfect example of this.

More broadly, we continue to examine our investments in the context of the UN Sustainable Development Goals, which include numerous environmental and social factors.

Given ongoing trade tensions, is it prudent for Ontario Teachers' to be investing internationally?

We face a significant challenge to achieve the risk-adjusted returns needed to keep the plan fully funded over the long term. To do this, we will need to further diversify our investments in regions where economic growth is higher. Even though there are risks to going farther afield with our investments, being active in high-growth markets like China and India is vital.

When we invest in global markets, we do so in a prudent, responsible manner. We nurture relationships with trusted partners with local expertise. We have also been growing our international workforce in Hong Kong, London and Singapore. By enhancing our partnerships and talent, we are better able to source the best opportunities and more effectively manage our assets once we have invested.

Where do you see investment opportunities in a post-COVID world?

When we look past the present pandemic, we see an altered investment environment. We believe this will be a period of increased disruption, bringing some new risks, but also significant opportunities. These include taking advantage of the digitization tipping point that the pandemic has accelerated through increasing our exposure to sectors that benefit from this trend, especially in the consumer area, as well as looking for opportunities in areas of the credit market that have experienced stress but have good longer-term prospects.

What would you want to tell members about their plan?

We are operating from a position of strength. We entered 2021 with a well-diversified portfolio and ample liquidity to pursue attractive opportunities. Events of the year demonstrated the durability of our portfolio.

We have the right strategy, expertise and ambition to continue generating the long-term returns needed to keep contribution and benefit levels stable, and the plan fully funded.

A look at our portfolio

Maintaining growth through an unprecedented year

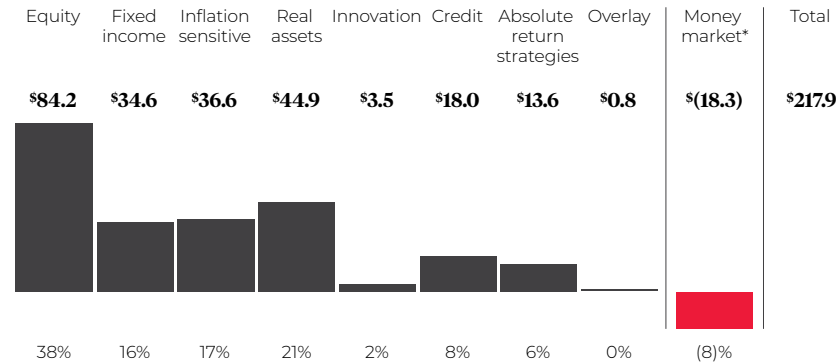
Ontario Teachers' investment program is tailored to generate strong risk-adjusted returns to pay members' pensions at stable benefit levels and contribution rates over generations. Since Ontario Teachers' inception in 1990, almost 80% of the plan's pension funding sources have come from investment returns, with the remainder from member and government/designated employer contributions.

Ontario Teachers' is an active global investor with investments in more than 50 countries. Our investment departments invest across seven different asset classes that provide diversification and volatility management and help us focus on both total-fund net returns and generating value above our performance benchmarks.

Ontario Teachers' investment portfolio earned an 8.6% total-fund net return in 2020, compared to the fund's benchmark return of 10.7%.

NET INVESTMENTS

As at December 31, 2020 (Canadian \$ billions)



* Money market provides funding for investments in other asset classes, including the LDI program.

ONTARIO TEACHERS' 2020 RESULTS HIGHLIGHTS

\$221.2B

Net assets

(2.1)%

Return below benchmark

8.6%

Total-fund net return

\$18.0B

Net investment income

9.3%

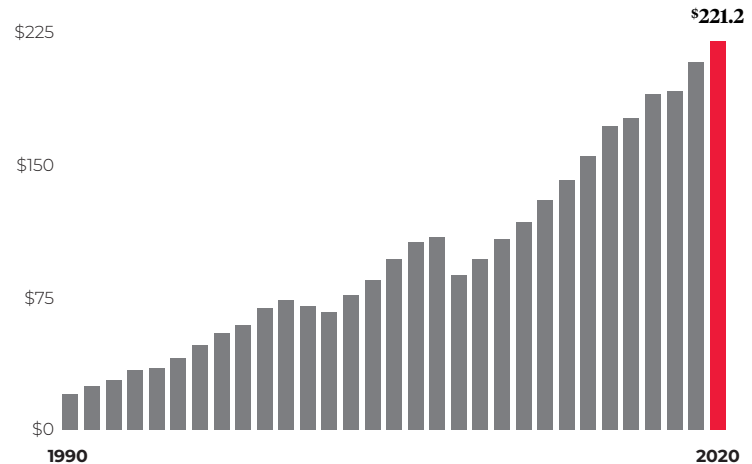
10-year total-fund net return per annum

79%

Pension funding sources from investment returns

NET ASSETS¹

As at December 31 (Canadian \$ billions)



¹ Net assets include investment assets less investment liabilities (net investments), plus the receivable from the Province of Ontario, and other assets less other liabilities.

Investment strategy

Our investment strategy considers our risk profile, our plan assets and our liabilities. Our long investment time horizon supports our primary goal of generating the returns required to fund our members' current and future pensions. We combine our expertise in bottom-up asset selection with a top-down approach to risk and portfolio construction.

In doing so, we aim to deliver on the three objectives:

1. achieve stable total-fund returns;
2. maintain value-add above our benchmarks;
3. manage volatility to promote stability in the funding status.

Proactive risk management underpins our investment strategies, including our asset-mix selection, active management of our portfolio to add value, diversification and balance, and our approach to liquidity management including our investment funding strategy.

Ontario Teachers' investment strategy employs a unified, total-fund approach. This approach looks at both sides of the balance sheet – the assets and the liabilities – to effectively and efficiently allocate both capital and risk. Our focus is on strategic risk balance.

PROACTIVE RISK MANAGEMENT

Ontario Teachers' needs to take an appropriate amount of risk to achieve the required rate of return to meet our liabilities. Ontario Teachers' actively manages plan funding and investment risk together. Our Risk department, which reports to the CEO, provides guidance on appropriate risk levels and an overall total risk budget that allows the plan to meet its investment objectives. The Total Fund Management department allocates this risk budget across investment teams and regions based on where they see the best risk-adjusted opportunities.

The Investment Committee of the board reviews and approves the risk budget annually, monitors overall investment risk exposure, and reviews and approves risk management policies that affect the total portfolio, as well as new investments that result in significant risk exposure.

Management oversees investment and risk decisions through various committees. The CEO-Led Risk Committee (Investments) oversees the alignment of the investment program with the board's Enterprise Risk Appetite Statement and Ontario Teachers' Mission, Vision and

Values. Management's Investment Committee is composed of senior investment professionals who oversee investment, risk and oversight decisions across the investment portfolio.

Ontario Teachers' has continually advanced its risk culture with sophisticated tools and processes to support risk measurement and management on a coordinated basis across the organization, all asset classes and departments, as well as within each portfolio. Longer-term impacts of the pandemic are being considered to ensure risk insights are incorporated into investment decisions.

In 2020, an upgrade to our comprehensive risk platform was launched to provide further insights and tools for investment teams including an asset risk estimation tool, which enables proactive portfolio management in a timely manner. This complements a real-time and interactive scenario analysis tool that supports data-driven portfolio decisions and funding planning activities under various economic themes including market disruptions.

Extraordinary efforts

It was challenging to maintain business as usual in 2020 because of COVID-19 and its widespread impact. Despite that, the dedication and focus seen from our Investment Division and supporting staff were truly inspiring.

As the pandemic's effects took hold in the early spring, Ontario Teachers' focused on managing the overall portfolio, with the invaluable assistance of the Total Fund Management and Capital Markets teams. We had ample liquidity to deploy opportunistically when needed.

Extraordinary efforts also went into protecting our portfolio companies and their employees. Ontario Teachers' employees in Equities, Infrastructure & Natural Resources and Teachers' Innovation Platform, along with staff in international offices, proactively and effectively supported our portfolio companies by identifying near-term business continuity issues, analyzing the crisis impact and developing plans to preserve and create value.

RESPONSIBLE INVESTING

Responsible investing practices are embedded in our strategy and throughout our organization. We believe strong environmental, social and governance (ESG) practices enable us to make good investments today, while also having a positive impact on future generations.

Starting at the board level, and with the leadership and support of our Responsible Investing team, our responsible investing approach systematically reaches every area of our organization. The board oversees and receives regular reports on our responsible investing practices, approves ESG-related policies and is accountable for setting the enterprise risk appetite, including climate-related risk. Our Chief Executive Officer approves and oversees our responsible investing strategy, chairs our Investor Stewardship Committee and oversees management's execution of the strategy.

From sourcing opportunities to making initial investments or managing existing ones, our Investment Executive Team oversees ESG integration at all stages of our investment process. For each direct investment, our investment professionals analyze the implications of ESG factors in addition to the approach used by our external managers and partners.

“Responsible investing creates healthier communities and a more resilient fund. Our future, and the future of our members, depends on it.”

DEBORAH NG, Director, Responsible Investing

As of 2020, our Responsible Investing and Corporate Governance teams within the Investment Division are now part of the Total Fund Management team. Making this move was a natural next step as we continue to firmly embed ESG matters in our investment processes.

Four principles for more informed decisions

Integrate

We integrate ESG considerations into our investment process to manage risk and add value.

Engage

We engage with the companies we invest in to promote change and nurture success.

Influence

We use our influence as a global investor to create a supportive and sustainable business environment.

Evolve

We evolve to build our institutional knowledge and to keep ahead of the curve.

See our latest [Responsible Investing Report](#) for more details.

Our commitment to net zero by 2050

Delivering value as we face one of the world's greatest challenges.



The actions we take now regarding climate change will have impacts on our members, partners and communities for generations to come. Over the last decade, Ontario Teachers' has built expertise, allocated capital and engaged with companies and policymakers to address this urgent and complex challenge. We are committed to doing our part alongside other organizations and governments to help create a lower carbon, more sustainable future for all.

Meaningful and significant positive impacts

Early in 2021, Ontario Teachers' committed to achieving net-zero greenhouse gas emissions by 2050. Our organizational roadmap to net zero seeks real-world impacts that support the transition to a low-carbon economy. We will hold ourselves accountable by establishing concrete targets for portfolio emissions and our investments in climate solutions and will report on our progress annually.



For the latest information about our climate change strategy, please visit otpp.com.

ASSET-MIX SELECTION

Recognizing that asset-mix selection is an important driver of long-term performance, we devote considerable attention to choosing our asset mix and the emphasis we place on each asset class and geography.

With board oversight, the management team manages the asset mix under our total-fund strategy. Management determines exposure to each asset class within ranges approved by the board.

As our investment departments overlap with several asset classes, we have provided a matrix illustrating their relationship in 2020 followed by a chart showing our detailed asset mix.

MAPPING DEPARTMENTS TO ASSET CLASSES

INVESTING DEPARTMENTS					
Asset classes	Equities	Capital Markets	Infrastructure & Natural Resources	Real Estate	Teachers' Innovation Platform (TIP)
Equity	●	●	●		
Fixed income		●			
Inflation sensitive		●	●		
Real assets		●	●	●	
Innovation					●
Credit	●	●			
Absolute return strategies	●	●			

DETAILED ASSET MIX

As at December 31

	2020		2019	
	Effective Net Investments at Fair Value (Canadian \$ billions)	Asset Mix %	Effective Net Investments at Fair Value (Canadian \$ billions)	Asset Mix %
Equity				
Publicly traded	\$42.4	19%	\$35.8	18%
Non-publicly traded	41.8	19	39.3	19
	84.2	38	75.1	37
Fixed income				
Bonds	17.2	8	72.7	36
Real-rate products	17.4	8	20.4	10
	34.6	16	93.1	46
Inflation sensitive				
Commodities	17.7	8	17.6	9
Natural resources	7.4	4	8.2	4
Inflation hedge	11.5	5	10.3	5
	36.6	17	36.1	18
Real assets				
Real estate	25.2	12	28.7	14
Infrastructure	17.8	8	17.0	8
Real-rate products	1.9	1	–	–
	44.9	21	45.7	22
Innovation	3.5	2	–	–
Credit	18.0	8	16.3	8
Absolute return strategies	13.6	6	16.5	8
Overlay	0.8	–	0.3	–
Money market	(18.3)	(8)	(79.1)	(39)
Net investments¹	\$217.9	100%	\$204.0	100%

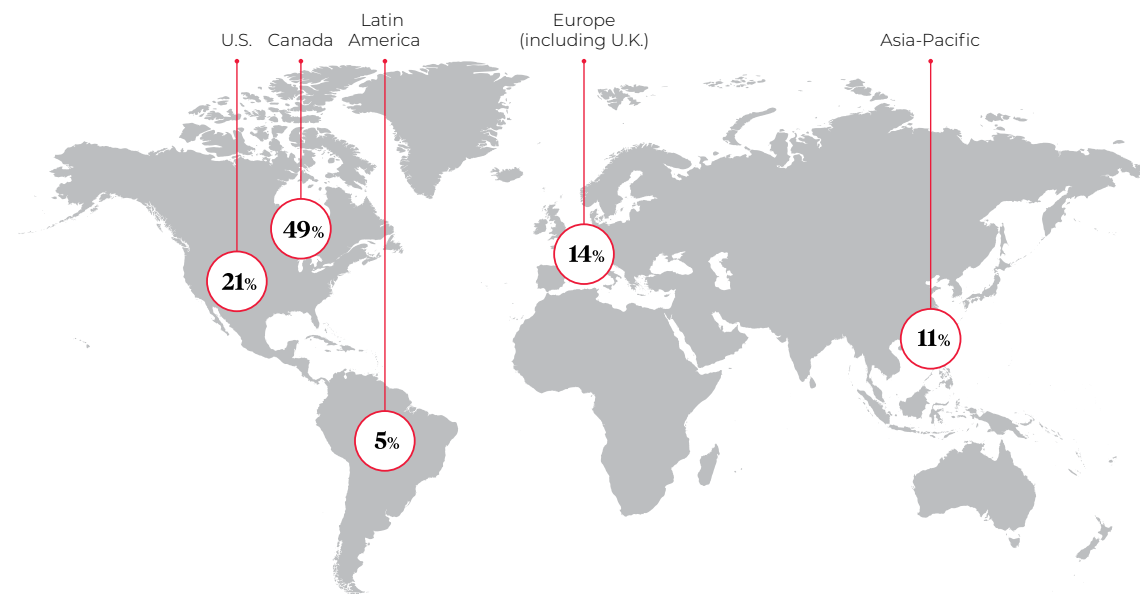
¹ Net investments, which comprise investments less investment-related liabilities per the December 31, 2020 Consolidated Statement of Financial Position, exclude all other assets and liabilities.

DIVERSIFICATION

Total-fund diversification, through effective portfolio construction, is fundamental to our success. Diversification allows us to spread risk across key factors such as time periods, asset classes, geography and economic outcomes, which reduces volatility and the adverse impact of any one investment loss on the fund overall.

GEOGRAPHIC EXPOSURE¹

As at December 31, 2020



¹ Based on country of primary listing, location of head office or location of property.

CURRENCY

We manage currency from a total-fund perspective and consider the currency risk as part of our overall portfolio construction. In certain circumstances, we will hedge to reduce our exposure to the currency risk that comes from investing globally.

CURRENCY EXPOSURE²

As at December 31, 2020 (Canadian \$ billions)

Canadian Dollar	139.6
United States Dollar	35.4
Euro	8.8
Chinese Renminbi	7.0
British Pound Sterling	4.6
Japanese Yen	4.0
Chilean Peso	3.7
Mexican Peso	2.2
Australian Dollar	1.9
Danish Krone	1.8
Brazilian Real	1.7
Other	7.7

² Includes foreign currency exposure from investments, net receivable from brokers and investment-related cash.

Our global ambition: Asia-Pacific

Despite the challenges posed by COVID-19, we delivered on our strategy of expanding our international footprint and deepening our investments in the Asia-Pacific region.



“Asia-Pacific offers numerous emerging and developed markets across two continents. Enhancing our local capabilities will allow us to further generate returns to deliver on our pension promise.”

BEN CHAN, Senior Managing Director, Asia-Pacific

BOLD EXECUTION DURING A CHALLENGING YEAR

We opened a new office in Singapore during the global pandemic with the entire process managed remotely from Toronto and Hong Kong. The Singapore office targets investments in India, Australia, New Zealand and Southeast Asia.

Having recruited new talent, we now have close to 40 team members in Asia.

We secured seven major direct investments in the region in 2020.

SELECT TRANSACTIONS

Invested in Asian renewable energy, biomass generation and waste infrastructure through Equis Development

Established a partnership with Edelweiss Group to invest in Indian private credit

Became an investor in BHC Group, a quick-service restaurant franchisor in South Korea

Invested in Princeton Digital Group, Asia’s leading data centre company

Increased our existing ownership in the Sydney Desalination Plant

2020 PERFORMANCE

NET INVESTMENTS AND RATES OF RETURN BY ASSET CLASS

As at December 31

	Net Investments (Canadian \$ billions)	Rates of Return (percent)			
		1-Year		4-Year	
		Actual	Benchmark	Actual	Benchmark
Equity	2020				
	\$84.2				
Publicly traded	42.4	13.2%	12.1%	12.6%	10.8%
Non-publicly traded	41.8	15.2	11.2	10.4	9.6
Fixed income	34.6	13.5	12.3	15.2	11.8
Bonds	17.2	20.7	20.6	7.8	7.8
Real-rate products	17.4	24.6	24.5	9.1	9.1
Inflation sensitive	36.6	12.8	12.8	5.1	5.1
Commodities	17.7	(2.4)	(1.6)	(0.1)	(0.3)
Natural resources	7.4	4.3	4.2	1.3	1.3
Inflation hedge	11.5	(11.2)	(8.5)	(0.3)	(1.0)
Real assets	44.9	(4.4)	(4.4)	(2.5)	(2.5)
Real estate	25.2	(7.6)	(0.1)	3.8	4.9
Infrastructure	17.8	(13.7)	(4.7)	0.9	4.3
Real-rate products	1.9	2.6	7.5	8.3	5.8
Innovation	3.5			–	–
Credit	18.0	16.3	16.3	–	–
Absolute return strategies	13.6	2.6	1.5	4.4	3.8
Overlay	0.8				
Money market	(18.3)				
Total	\$217.9	8.6%	10.7%	7.8%	7.9%

The total-fund net return is calculated after deducting transaction costs, management fees and investment administrative costs, and is reported in Canadian dollars for five periods: one, four, five and 10 years, and since the current investment program began in 1990. Asset-class and local returns are before deducting investment administrative costs. Local returns are also before the translation to Canadian currency.

Ontario Teachers' produced a solid one-year total-fund net return of 8.6%, which was largely driven by strong results in fixed income and public and private equities, along with strategic allocations to gold and an equity hedge.

Ontario Teachers' compares its performance to a Canadian dollar-denominated composite benchmark, which is calculated by aggregating results from each of the asset-class benchmarks. This year, Ontario Teachers' trailed its benchmark return by 2.1% as a number of investments, in particular retail real estate and airports, were hit hard by the COVID-19 pandemic.

INVESTMENT PERFORMANCE

(percent)

	2020	2019	4-Year	5-Year	10-Year	Since Inception
Total-fund net return	8.6	10.4	7.8	7.0	9.3	9.6
Benchmark return	10.7	12.2	7.9	7.0	8.5	7.9
Return above (below) benchmark	(2.1)	(1.8)	(0.1)	0.0	0.8	1.7

BENCHMARKS

Benchmarking is important because it allows board members, plan members and other stakeholders to evaluate the effectiveness of our strategies and activities relative to the risks taken. Appropriate benchmarks are established by a committee, chaired by the CEO. Any material or non-technical changes to total plan benchmarks must be approved by the Ontario Teachers' board.

Ontario Teachers' seeks to outperform its respective benchmark rates of return on a total-fund and asset-class basis. This outperformance is described as value-add. A complete list of benchmarks is available at otpp.com/benchmarks.

Investment cost management

Ontario Teachers' is committed to cost effectiveness and believes costs should be managed and linked to the investment value creation process. The board and management employ various tools to ensure that costs are appropriate and well managed.

Costs are also evaluated against peer plans by CEM Benchmarking Inc., an independent research company. Ontario Teachers' continues to be low cost compared to our peers, primarily due to greater internal asset management.

The amount of invested capital, asset-class weightings and investing style are factors that affect asset management costs. Generally, the absolute costs of management increase as more capital is invested, which can be partly offset by economies of scale.

Managing assets in-house, combined with our strategic partnership model with external managers, is a cost-effective means to implement our investment strategies. However, our substantial investments in private assets and commitment to active management result in higher costs than if assets were deployed in lower-cost public securities and passive mandates. Ontario Teachers' also incurs costs to maintain our international offices, which are an integral factor in our ability to identify and participate in investment opportunities globally.

The strategic planning process aligns costs with strategy. Annual budgets are reviewed by the Audit & Actuarial Committee of the board. Expense policies are in place to ensure costs incurred are appropriate, and opportunities to improve asset management efficiency are regularly sought out.

INVESTMENT COSTS

In 2020, investment costs, including administrative expenses, management fees and transaction costs, were 70 cents per \$100 of average net assets, compared with 76 cents per \$100 in 2019.

What's included in administrative expenses?

Investment administrative expenses include staff salaries, incentives and benefits, premises and equipment, professional and consulting services, information services, communication and travel, and custodial, audit and board fees. Ontario Teachers' believes that certain investment programs can be most efficiently delivered using in-house talent. The costs related to employing in-house investment teams and associated supporting functions such as legal, operations and finance represent the majority of administrative expenses.

Administrative expenses were \$631 million or 31 cents per \$100 of average net assets in 2020, compared to \$615 million or 31 cents per \$100 in 2019. Administrative expenses increased by 2.7% due to higher salaries and benefits, driven by employee growth including strategic hires in international offices, as well as upgraded premises and equipment, partially offset by lower travel expenses.

What are transaction costs?

Transaction costs are those directly attributable to the acquisition or sale of investments. Due diligence and advisory services, in areas such as financial, legal, tax, regulatory and ESG, are the most significant transaction costs that support private asset transactions. In the case of public securities, transaction costs primarily consist of commissions.

Transaction costs were \$340 million in 2020, compared to \$314 million in 2019.

Can you define management fees?

Ontario Teachers' selectively allocates capital to key external managers to access specialized talent and investment opportunities where it isn't cost-efficient or practical to do it in-house. Through these relationships, Ontario Teachers' incurs both traditional management fees, which are typically based on the amount of capital allocated, and performance-based fees, which are based on returns above a predetermined threshold and can vary significantly from year to year. Management fees also include incremental costs incurred with external parties that are directly attributable to existing investments and are not related to acquisition or sale. We attempt to strike the right balance by negotiating so that these fees encourage alignment between the interests of Ontario Teachers' and the external managers.

In some cases, management and performance fees are incurred by entities in which Ontario Teachers' has invested, rather than directly by Ontario Teachers'. All such fees are reflected in the plan's net investment income. When directly invoiced, or when information is otherwise available from capital notices or other manager communications, management and performance fees are reported as such in Ontario Teachers' financial statements.

In 2020, management fees were \$481 million, down from \$571 million in 2019.

Asset-class review

The board approves ranges for allocations to various asset classes. Management determines exposure within the board-approved bands, based on the underlying risk factors in each asset class, expected returns, and the risk balance and other limits in the total-fund portfolio.

There are seven asset classes:



EQUITY

Public and private equities aim to deliver long-term investment growth and value-added performance



FIXED INCOME

Provides security and steady income, hedges against interest rate risks inherent in the plan's liabilities and stabilizes total returns



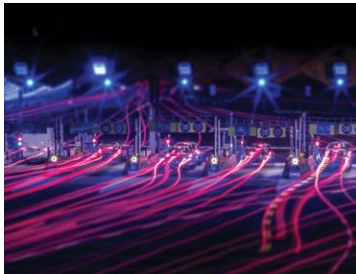
CREDIT

Corporate and emerging market debt investments that capture a set of risk premiums



INFLATION SENSITIVE

Contributes to both diversification and protection against unexpectedly high inflation



REAL ASSETS

Real estate and infrastructure investments provide a hedge against inflation



INNOVATION

Late-stage venture capital and growth equity investments in rapidly growing, high-potential technology companies



ABSOLUTE RETURN STRATEGIES

Internal and external strategies that seek to capitalize on market inefficiencies and have a low correlation to markets

EQUITY

This asset class comprises public and private equities. Investment activities have been carried out either by the Capital Markets or the Equities investment departments.

This year, most global equity markets posted strong returns despite the global pandemic. The Canadian S&P TSX 60 was up 5.6%, while the U.S. S&P 500 was up 18.4%. Technology stocks were particularly strong performers in 2020, with the tech-heavy NASDAQ finishing the year up 44.9%.

The Equity asset class, which includes public equity and private equity, had a total return of 13.2% (12.2% local return), compared to its benchmark of 12.1% (local benchmark 11.0%). The total value of the Equity asset class increased to \$84.2 billion at the end of 2020 from \$75.1 billion a year earlier. The four-year annualized rate of return is 12.6%, exceeding the benchmark of 10.8%.

Returns for our public equity and private equity are separated and described below.

Public equity

Public equity net investments totaled \$42.4 billion at December 31, 2020, compared to \$35.8 billion at the end of 2019. The portfolio produced a return of 15.2% (local return 12.9%), above its benchmark return of 11.2% (9.0% local benchmark). The four-year annualized rate of return is 10.4%, compared to a benchmark of 9.6%.

PUBLIC EQUITY PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$42.4B	15.2%	12.9%
Net investments	Return	Local return
	11.2%	9.0%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

16%	Financials	6%	Materials
16%	Consumer Discretionary	2%	Energy
14%	Information Technology	2%	Utilities
13%	Industrials	1%	Real Estate
11%	Consumer Staples		
11%	Healthcare		
8%	Communication Services		

Private equity

The Private Capital team invests directly in private companies, either on its own or with partners, and indirectly through private equity funds. It seeks to add value to its portfolio companies by assisting in long-term strategic planning, creating and encouraging high-performing management teams and boards, and ensuring good governance practices.

Private equity net investments totaled \$41.8 billion at December 31, 2020, compared to \$39.3 billion at the end of 2019. Assets increased primarily because of acquisitions and higher asset valuations, strong performance of the long-term equity program and value creation activities at portfolio companies, which were partially offset by several dispositions during the year. In the first half of the year, the majority of private equity holdings were negatively impacted by COVID-19. However, several investments demonstrated resiliency and a strong recovery from the pandemic, including storage, insurance, healthcare and technology businesses. Others benefitted from the COVID-19 lockdown, including wine companies, medical labs, home/consumer product companies and packaged foods companies.

The four-year annualized rate of return is 15.2%, compared to a benchmark of 11.8%.

PRIVATE EQUITY PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$41.8B	13.5%	13.8%
Net investments	Return	Local return
	12.3%	12.6%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

24%	Industrials	12%	Healthcare
21%	Consumer and Retail	8%	Energy and Power
20%	Telecom, Media and Technology		
15%	Financial Services		

Safeguarding pensions with impactful healthcare investing

We support innovation, growth and long-term value in healthcare businesses.



Citizens, policymakers and investors alike were faced with the crucial importance of effective healthcare and pathology solutions this year. In 2020, we pursued investments that help safeguard the future of our pensioners, our communities and of global healthcare.



We acquired businesses that have strong reputations, sector specialization and exceptional patient outcomes. Their services and technologies support vulnerable populations, enable healthcare access, and contribute to community resilience and quality of life.

Asia Pacific Healthcare Group (APHG)

We acquired a significant stake in APHG, a pathology and laboratory services provider to 75% of New Zealand's population.

Abano Healthcare Group

Strengthening our expertise in this space, we completed a take-private transaction for Abano, which owns and operates one of the largest groups of dental practices across Australia and New Zealand.

NVISION Eye Centers

We invested in NVISION, an outstanding vision care provider responding to increasing age-related demand and key vision health trends in the United States.

FIXED INCOME

Ontario Teachers' uses fixed income investments to provide security and steady income, hedge against interest rate risks and stabilize total returns. Given the significant rally in fixed income markets in the first half of 2020 and the further decline in yields, we made the decision to reduce our exposure to fixed income. We did this by eliminating exposure to all sovereign markets with negative interest rates, reducing exposure to other low-yielding markets and establishing an overlay in foreign developed sovereign bonds.

Ontario Teachers' owns a diversified portfolio of Canadian government bonds, provincial bonds and real-return bonds. Real-return bonds provide returns that are indexed to inflation, as measured by the Consumer Price Index, and include debt issued primarily by the Canadian federal government and other high-quality Canadian issuers.

Fixed income assets totaled \$34.6 billion at the end of 2020, compared to \$93.1 billion a year earlier. The change in fixed income assets year over year is primarily due to a sell-down of sovereign bonds. The diversified bond portfolio had a return of 20.7%, slightly exceeding the benchmark return. This was driven by strong returns in sovereign fixed income and Canadian government bonds during the early part of the year. The local return for fixed income was 14.2% (local benchmark 14.1%).

The four-year annualized rate of return was 7.8%, matching the benchmark return.

Liability Driven Investment program

Ontario Teachers' employs a Liability Driven Investment (LDI) program to mitigate the risk of changes in the real discount rate. As long-term real interest rates are an important input in the discount rate decision, an allocation to real-rate products is maintained, and reviewed annually, with the purpose of hedging against changes to the discount rate. This funded program is risk-reducing and supports our objective of managing the plan's funding ratio volatility through a reduction in the plan's exposure to changes in interest rates inherent in the plan's pension liabilities.

The LDI program is mainly funded using bond repurchase agreements. This allows Ontario Teachers' to retain economic exposure to the underlying real-rate bonds in a cost-effective manner.

FIXED INCOME PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$34.6B	20.7%	14.2%
Net investments	Return	Local return
	20.6%	14.1%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

92%	Canadian Government	(75)%	Foreign Developed Sovereign
50%	Real-Rate Products		
33%	Provincial Bonds		

CREDIT

This asset class includes corporate and emerging market debt. Credit is a component of a company's capital structure that contains characteristics of both equities and fixed income. Investing in credit allows Ontario Teachers' to capture default, liquidity and funding risk premiums.

Given the significant economic impact from COVID-19, we believe there will be attractive opportunities in the credit asset class over the course of the cycle. Thus, we have taken the decision to increase our internal allocation to U.S. high yield, while at the same time partnering with reputable private credit funds.

At December 31, 2020, the total value of credit assets was \$18.0 billion, compared to \$16.3 billion a year earlier. Total return for the year was 2.6% (local return 9.8%). The return for 2020 exceeded the benchmark of 1.5% (local benchmark 8.9%).

INFLATION SENSITIVE

The inflation sensitive asset class includes natural resources (oil and gas, timberland, agriculture and aquaculture, and mining), commodities and inflation hedge. These types of assets have been grouped together due to the positive relationship they exhibit with inflation fluctuations: they can provide stable risk-adjusted returns, diversification and protection against unexpectedly high inflation. This is important because, when the plan is fully funded, members' pension benefits increase with inflation.

Inflation sensitive net assets totaled \$36.6 billion at the end of 2020, compared to \$36.1 billion a year earlier. The loss of 2.4% (0.8% local loss) was slightly below the benchmark loss of 1.6% (local benchmark 0.0%). The four-year annualized rate of loss of 0.1% exceeds the benchmark loss of 0.3%.

CREDIT PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$18.0B	2.6%	9.8%
Net investments	Return	Local return
	1.5%	8.9%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

55%	High Yield	8%	Emerging Market Sovereign
21%	Investment Grade		
16%	Levered Loans		

INFLATION SENSITIVE PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$36.6B	(2.4)%	(0.8)%
Net investments	Return	Local return
	(1.6)%	0.0%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

34%	Gold	Natural Resources:
31%	Inflation Hedge	9% Oil and Gas
14%	Commodities	6% Timberland
		4% Agriculture and Aquaculture
		2% Mining

REAL ASSETS

Real assets include real estate and infrastructure investments. Strategically, these assets provide returns that are often linked to inflation and therefore are an effective hedge against the cost of paying inflation-protected pensions.

At December 31, 2020, the total value of Ontario Teachers' real assets was \$44.9 billion, compared to \$45.7 billion at year-end 2019. Total loss for 2020 was 7.6% with a local loss of 7.8%, compared to a benchmark loss of 0.1% and a local benchmark loss of 0.2%. The four-year annualized rate of return is 3.8%, below the benchmark of 4.9%.

Returns for our real estate and infrastructure assets are separated and described below.

Real estate

The real estate portfolio is managed by Ontario Teachers' wholly owned subsidiary, The Cadillac Fairview Corporation Limited (Cadillac Fairview), which maintains a diversified portfolio of high-quality properties that provide dependable cash flows.

The net asset value of real estate holdings was \$25.2 billion at year-end 2020, compared to \$28.7 billion the previous year. The decrease in net real estate assets resulted from write downs of private assets and investment losses on international assets. Since real estate returns were significantly negatively impacted in 2020, the four-year annualized rate of return for the portfolio was 0.9% compared to the four-year average benchmark of 4.3%, with the underperformance due to write downs on the Canadian retail portfolio and U.S. investment losses.

Operating income was \$0.8 billion, 30% lower than 2019 due to rent abatements and lower occupancy, particularly for Canadian retail, which was significantly impacted by mandatory COVID-19 shutdowns causing extended mall closures, lower tenant sales revenues, tenant bankruptcies and a worsened outlook over the short term. Net real estate loss of \$4.1 billion for 2020 was \$5.6 billion lower than 2019 due to significant valuation losses for Canadian retail, a decline in Macerich and Multiplan shares and a substantially weaker Brazilian Real.

REAL ESTATE PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$25.2B	(13.7)%	(12.3)%
Net investments	Return	Local return
	(4.7)%	(3.2)%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

55%	Canadian Retail	2%	U.S. Investments
30%	Canadian Office	1%	U.K. Investments
7%	Emerging Markets	5%	Other

At year end, the retail occupancy rate (spaces less than 15,000 square feet and for lease terms greater than one year) was 85% (91% in 2019), while the office occupancy rate was 94% (93% in 2019). Decline in retail occupancy was partially offset by short-term occupancy (lease terms of less than one year) of 6% in response to challenges and uncertainty created by COVID-19. Canadian office properties were not significantly impacted by pandemic shutdowns since tenants continued to honour their rent obligations and the positive view on the long-term value of office markets has persisted.

The construction of two major office projects was completed in 2020: 16 York Street and 33 Dundas Street West, both in Toronto. Development of a third major office complex, 160 Front Street West in Toronto, continued with minor pandemic-related delays. In line with Cadillac Fairview's focus on scaling and diversifying its global real estate platform, it acquired White City Place in London, U.K.

Infrastructure

Ontario Teachers' seeks to build an infrastructure portfolio that will steadily increase in value, provide predictable cash flow and correlate to inflation. Our infrastructure assets include investments in toll roads, airports, seaports, renewable and conventional energy, water distribution and wastewater plants and are distributed globally on five continents.

The net value of the infrastructure portfolio increased to \$17.8 billion at the end of 2020, compared to \$17.0 billion a year earlier. Infrastructure assets delivered a one-year return of 2.6% with a local loss of 0.6%, underperforming the benchmark return of 7.5% (local benchmark return of 4.2%). The majority of assets in the infrastructure portfolio had a flat to slightly positive change in value year over year. Certain assets were disproportionately affected by the COVID-19 pandemic, particularly Ontario Teachers' portfolio of five airports, which resulted in underperformance compared to the benchmark.

The four-year annualized rate of return is 8.3%, exceeding the benchmark of 5.8%.

INNOVATION

The innovation asset class comprises investments made by Teachers' Innovation Platform (TIP), including direct investments and co-investments, funds and strategic partnerships, and platforms. TIP focuses on late-stage venture and growth equity investments in companies that use technology to disrupt incumbents and create new sectors. They seek to access significant global opportunities for investment in new businesses and sectors that are emerging as a result of unprecedented technological change.

Innovation net assets totaled \$3.5 billion at the end of 2020. This is the first year that innovation is a distinct asset class so there are no comparable figures for 2019. The asset class had a one-year return of 16.3%, or 17.8% local return. Given the uniqueness of the TIP investment program, we will not report a benchmark during the incubation period, after which it will be measured against an active benchmark like the other asset classes.

Four-year annualized rate of return figures are not available for the innovation asset class as TIP was founded in 2019.

INFRASTRUCTURE PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$17.8B	2.6%	(0.6)%
Net investments	Return	Local return
	7.5%	4.2%
	Benchmark	Local return benchmark

PORTFOLIO SPLIT BY SECTOR

38%	Airports	6%	Electricity Distribution and Transmission
17%	Water and Wastewater Treatment	6%	Power Generation
14%	Toll Roads	6%	Container Terminals
11%	Gas Distribution and Transmission	2%	Other

INNOVATION PORTFOLIO HIGHLIGHTS

As at December 31, 2020 (based on total assets)

\$3.5B	16.3%	17.8%
Net investments	Return	Local return

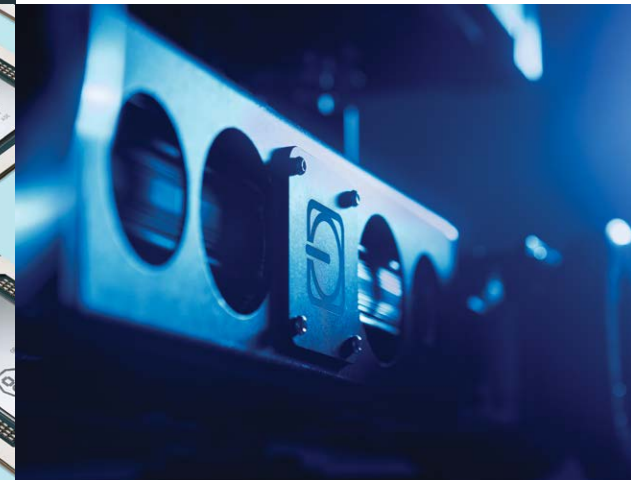
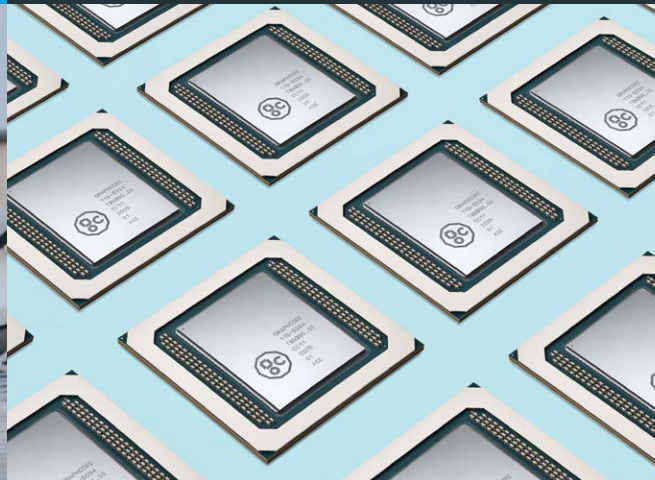
PORTFOLIO SPLIT BY INVESTMENT TYPE

42%	Funds	6%	Direct Investments – Europe, Middle East and Africa
37%	Direct Investments – North America		
15%	Direct Investments – Asia-Pacific		

Innovation is a driving force at Ontario Teachers'

By working closely with our portfolio companies, Teachers' Innovation Platform (TIP) creates ecosystems that produce unique solutions for today's world.

This year, the TIP team experienced significant global growth and completed several exciting, high-profile investments. With new talent in the U.S., Europe and Hong Kong, we pursued opportunities in artificial intelligence (AI), infrastructure and transportation, and formed new partnerships with industry disruptors along the way.



FUELING THE FUTURE OF MOBILITY

Pony.ai, a driverless vehicle leader, is tackling the world's greatest mobility challenges by helping to build safer and more reliable mobility solutions. Autonomous taxis and long-haul logistics rigs are two examples of how Pony.ai is revolutionizing transport.

ACCELERATING MACHINE LEARNING

Graphcore invented the world's most sophisticated microprocessor. Its technology is helping companies scale up their AI infrastructure to meet the accelerating and complex needs of current and next-generation systems.

ENVIRONMENTALLY FRIENDLY ROBOTICS

Canadian company **Attabotics** created the world's first 3D robotics supply chain system. Inspired by ant colonies, it condenses a traditional warehouse into a vertical storage structure. It also reduces carbon emissions and packaging waste.

ABSOLUTE RETURN STRATEGIES

Ontario Teachers' uses absolute return strategies to generate positive returns that have low correlation to other asset returns. Internally managed absolute return strategies generally look to capitalize on market inefficiencies. Ontario Teachers' also uses external hedge fund managers to earn uncorrelated returns, to access unique strategies that augment returns and to diversify risk.

In 2020, assets employed in absolute return strategies totaled \$13.6 billion at year end, compared to \$16.5 billion in 2019.

OVERLAY

Overlay includes strategies that manage the foreign exchange risk for the total fund.

MONEY MARKET

The money market allocation represents the net implicit funding for the overall asset mix. Money market includes exposures such as bond repurchase agreements used for managing day-to-day liquidity, implied funding from derivatives used to efficiently gain passive exposure to global equity and commodity indices, short-dated and term unsecured funding guaranteed by Ontario Teachers', and liquidity reserves. These activities result in a negative net money market exposure in the overall asset mix, and the amount is expected to vary from year to year based on the implementation of the asset mix.

The change in money market in 2020 is consistent with the reduction in the fixed income asset class.

The funding of the money market investment program allows Ontario Teachers' to:

- hedge the interest rate risk associated with our pension liabilities;
- achieve the optimal overall risk-return profile for the investment portfolio;
- obtain exposure to certain markets more efficiently;
- increase our holdings of lower-risk asset classes that generate attractive risk-adjusted returns;
- maintain sufficient liquidity.

LIQUIDITY MANAGEMENT AND INVESTMENT FUNDING STRATEGY

Liquidity and funding management is overseen by the Total Fund Management (TFM) department. With a holistic view of the overall portfolio, TFM develops a perspective for how resources can be effectively utilized to support the investment portfolio.

This includes having sufficient cash on hand to meet current liabilities and liquidity in place in the event of disruptive markets. This also seeks to take advantage of investment opportunities. The liquidity position and funding risk are therefore managed carefully.

Ontario Teachers' has an established liquidity governance framework and reporting requirements. We test our liquidity position regularly through simulations of major market events, and the board's Investment Committee receives regular updates on Ontario Teachers' liquidity position.

Changing rules and regulations affecting banks may indirectly impact Ontario Teachers', so we continue to adapt and enhance the way that we manage, oversee, measure and report on liquidity and funding risks.

Ontario Teachers' investment funding strategy is focused on diversifying the sources of investment funding, managing the cost and maturity profile, maintaining a presence in key funding markets, and supporting the overall management of the currency exposure of our global investment program.

The investment funding strategy contains both short- and long-term funding sources, which collectively diversify and mitigate risk. Examples of short-term funding include bond repurchase agreements, commercial paper and securities lending agreements, while long-term funding includes unsecured term-debt issuance (as described below).

Ontario Teachers' Finance Trust (OTFT), an independent entity, plays an important role in our overall strategy. OTFT issues commercial paper and term debt that is fully, unconditionally and irrevocably guaranteed by Ontario Teachers'.

In addition to OTFT, Ontario Teachers' Cadillac Fairview Properties Trust (OT-CFPT) provides further investment funding diversity through its issuance of term debt. OT-CFPT is backed by a high-quality Canadian real estate portfolio and is non-recourse to Ontario Teachers'.

More information on Ontario Teachers' investment funding strategy is available in note 2h to the financial statements and on the Investor Relations section of otpp.com.

Governing with excellence



Governing with excellence

Stewardship and leadership

Ontario Teachers' believes good governance is good business because it helps companies deliver long-term value. We measure ourselves against best practices for governance, internal controls, risk management and stewardship because this helps us deliver long-term value to members.

Since its inception, Ontario Teachers' has been overseen by independent, professional board members who are required to make decisions in the best interest of all beneficiaries of the plan. The plan sponsors, the Ontario government and OTF, each appoint five board members and they jointly select the chair. This governance structure plays a crucial role in the plan's success.

Role of the board

The board is independent and oversees management of the pension fund and administration of the pension plan. Board members are professionals with financial and governance expertise and are typically drawn from the fields of accounting, actuarial science, banking, business, economics, education, information technology and investment management.

The board is responsible for administering the pension plan and managing pension funds in accordance with the *Teachers' Pension Act* (Ontario), the *Pension Benefits Act* (Ontario) and the *Income Tax Act* (Canada) as well as all other matters set out in the Partners' Agreement. Day-to-day investment management and plan administration is delegated to the President and CEO and his executive team. No member of management is a board member.

Board members approve strategic plans, budgets, risk appetite, the acceptable range of risk, investment policies, benchmarks, performance, compensation planning and succession plans recommended by management. They monitor investment, operational, strategic and governance risks and ensure appropriate mitigation plans are in place. They review and approve the unaudited, mid-year consolidated financial statements and the audited consolidated financial statements.

The board conducts regular preliminary funding valuations to assess the pension plan's long-term financial health. The results of the preliminary funding valuations are reported to the plan sponsors. The board works closely with the independent actuary in setting actuarial assumptions for these valuations, including the discount rate, with input from management. The Canadian Institute of Actuaries Standards of Practice require that each assumption is independently reasonable and that assumptions are appropriate in aggregate.

2020 board highlights

One new board member – Cindy Forbes – joined the board in 2020. Cindy had a 40-year career at Manulife where she held several senior roles, including Chief Actuary and Global Chief Analytics Officer. Cindy is a member of the Audit & Actuarial, Human Resources & Compensation, Investment and Operational Risk Committees.

The board had to adapt in 2020 to deal with COVID-19, and in the early part of the year the board focused significant energy on Ontario Teachers' pandemic response. The board participated in video calls with members of the executive team during the acute phases of the pandemic.

Board members met 14 times in 2020 for full board meetings and 10 times for Investment Committee meetings. In addition, the Human Resources & Compensation Committee met nine times, the Audit & Actuarial Committee met eight times, the Governance Committee met three times, the Operational Risk Committee met three times and the Benefits Adjudication Committee held two general meetings.

Board committees

Through six standing committees, board members review progress against management's stated objectives and confirm that management's strategies and decisions are in the best interests of all plan beneficiaries.

AUDIT & ACTUARIAL COMMITTEE

Responsible for oversight of financial reporting, accounting systems, internal controls over financial reporting, and certain corporate governance-related matters.

BENEFITS ADJUDICATION COMMITTEE

Considers and determines appeals, as provided in Section 87 of Schedule 1 of the *Teachers' Pension Act*, from the decisions of Ontario Teachers' staff concerning a person's entitlement to, or the amount of, a pension benefit.

GOVERNANCE COMMITTEE

Assists Ontario Teachers' in fulfilling its governance responsibilities, which involves reviewing and reporting to the board on Ontario Teachers' system of governance, including changes to the Partners' Agreement, the Corporate Governance Principles and Proxy Voting Guidelines, the Code of Conduct and the Anti-Bribery/Anti-Corruption Policy.

HUMAN RESOURCES & COMPENSATION COMMITTEE

Provides oversight and recommendations on succession, compensation, performance results, employee relations and overall human resource matters, focusing on issues pertaining to the CEO, and executives reporting directly to the CEO and the Chief Investment Officer.

INVESTMENT COMMITTEE

Assists Ontario Teachers' in fulfilling its responsibilities as manager of the pension fund, including overseeing the investment of assets, investment-related liabilities and management of surplus (or deficit) of the plan.

OPERATIONAL RISK COMMITTEE

Assists the board in fulfilling its strategic oversight responsibilities in relation to information technology, data governance, procurement and vendor risk management, enterprise project management, operations including the trade lifecycle, continuity management, and security, both IT and physical.

Board members

Board and committee meeting attendance was 99% in 2020. Please visit otpp.com for full biographies of board members and committee mandates.



STEVE MCGIRR, CHAIR, 65

Appointed 2015
Chair since 2019
Attendance 100%

Former Senior Executive Vice-President and Chief Risk Officer, CIBC; Senior Advisor, Lazard Canada Inc.; Member, Queen's University Cabinet; Former director and Investment Committee chair of Wellspring Cancer Support Network



BILL CHINERY, 66

Appointed 2015
Attendance 100%

Former CEO, BlackRock Asset Management; Member, Advisory Committee of GreenSky Capital Inc.

Chair, Investment Committee; Member, Audit & Actuarial and Governance Committees



CATHY CRANSTON, 61

Appointed 2019
Attendance 100%

Former Treasurer, BMO Financial Group; Director, Toromont Industries Ltd.; Former director, Bank of Montreal Mortgage Corporation, BMO Trust Company, BMO InvestorLine and BMO Harris Investment Management Inc.

Chair, Human Resources & Compensation Committee; Member, Investment and Operational Risk Committees



PATTI CROFT, 62

Appointed 2016
Attendance 100%

Former Chief Economist, RBC Global Asset Management, Sceptre Investment Counsel, TD Canada Trust, and Phillips, Hager and North; Vice-Chair, Ontario Pension Board; Former director and founding member, Women in Capital Markets; Former director, International Foundation for Employee Benefit Plans, Canadian Medical Association Holdings Inc. and the Boilermakers' National Pension Plan Canada

Chair, Governance Committee; Member, Human Resources & Compensation and Investment Committees



CINDY FORBES, 64

Appointed 2020
Attendance 85%

Former Global Chief Analytics Officer, Manulife; Former Chief Actuary and former Chief Financial Officer (Asia), Manulife; Chairperson, Board of Governors, University of Waterloo

Member, Audit & Actuarial, Human Resources & Compensation and Investment Committees



LISE FOURNEL, 67

Appointed 2016
Attendance 100%

Former Senior Vice-President and Chief Information Officer, Air Canada; Board member, Desjardins Financial Security; Member of the Technology Committee on the board of l'Université de Montréal; Former board member, l'Université de Montréal, Tourisme Montréal, CIREM, Musée Pointe-à-Callière, and Canadian Muscular Dystrophy Association

Chair, Operational Risk Committee; Member, Governance and Investment Committees



GENE LEWIS, 73

Appointed 2018
Attendance 100%

Former General Secretary, Elementary Teachers' Federation of Ontario; Former President, Ontario Public School Teachers' Federation; Former member, Ontario Teachers' Sustainability Workgroup and Partners' Consultative Committee

Chair, Benefits Adjudication Committee; Member, Audit & Actuarial, Investment and Operational Risk Committees



M. GEORGE LEWIS, 60

Appointed 2019
Attendance 100%

Former Group Head, Wealth Management and Insurance, RBC; Board member, Legal & General Group plc, the AOG Group, the Canadian Film Centre and the Anglican Diocese of Toronto Foundation; Former director, Cenovus Energy, Enbridge Income Fund Holdings, Ontario Power Generation, Operation Springboard, the Centre for Addiction and Mental Health, the Toronto Symphony Orchestra and the Holland Bloorview Foundation

Vice-Chair, Investment Committee; Member, Human Resources & Compensation and Audit & Actuarial Committees



JOHN MURRAY, 72

Appointed 2014
Attendance 100%

Former Deputy Governor, Bank of Canada; Adjunct professor, Queen's University; Senior Fellow, C. D. Howe Institute; Member, Investment Committee, Canadian Medical Protective Association; visiting scholar and adviser, International Monetary Fund

Vice-Chair, Benefits Adjudication Committee; Member, Investment, Operational Risk and Human Resources & Compensation Committees



KATHLEEN O'NEILL, 67

Appointed 2016
Attendance 100%

Former Executive Vice-President, Personal & Commercial Development, and Head of Small Business Banking, BMO Bank of Montreal; Former partner, PriceWaterhouse Coopers; Board member, ARC Resources Inc. and Finning International Inc; Former board member, Cadillac Fairview; Past chair, St. Joseph's Health Centre Foundation and St. Joseph's Health Centre, Toronto

Chair, Audit & Actuarial Committee; Member, Investment and Operational Risk Committees

Board and committee member effectiveness and remuneration

BOARD EFFECTIVENESS

Ontario Teachers' is overseen by an independent, professional board which is required to make decisions in the best interest of all beneficiaries of the plan. The plan sponsors, the Ontario government and OTF, each appoint five board members and they jointly select the chair. This governance structure plays a crucial role in the plan's success. When appointing directors, the sponsors look for a variety of attributes, skills and experience that are important to be represented on the board in order to maximize board effectiveness.

BOARD REMUNERATION

The Governance Committee of the board is responsible for making recommendations with respect to board and committee member remuneration. Board compensation remained flat in 2020.

Annual Retainer – Chair of the Board	\$194,750
Annual Retainer – Board Member	\$92,250
Additional Committee Chair Retainer	
Audit or Investment Committee	\$20,000
Other Committees	\$15,000
Additional Committee Vice-Chair Retainer	
Audit or Investment Committee	\$10,000
Other Committees	\$7,500
Committee Member Retainer (if on more than three committees)	\$5,000

Board members are reimbursed for normal expenses for travel, meals and accommodation, as required. For 2020, these expenses totaled \$33,800. In addition to the regular meeting schedule, given the global pandemic and economic impact during 2020, board members were engaged in an additional 25 ad-hoc meetings throughout the year.

Board Member	Board Meetings	Committee Meetings	2020 Total Remuneration
Steve McGirr, Chair of the Board	14	35	\$194,750
Bill Chinery, Chair, Investment Committee	14	32	112,250
Cathy Cranston, Chair, Human Resources & Compensation Committee	14	35	112,250
Patti Croft, Chair, Governance Committee	14	35	112,250
Cindy Forbes	13	28	102,250
Lise Fournel, Chair, Operational Risk Committee	14	35	112,250
Gene Lewis, Chair, Benefits Adjudication Committee	14	35	112,250
M. George Lewis, Vice-Chair, Investment Committee	14	32	103,500
John Murray, Vice-Chair, Benefits Adjudication Committee	14	35	104,750
Kathleen O'Neill, Chair, Audit & Actuarial Committee	14	34	117,250

Legislative and regulatory update

REGULATORY OVERSIGHT

The Financial Services Regulatory Authority (FSRA) regulates financial services and pensions in Ontario. Since its launch in 2019, FSRA has created several advisory committees to provide advice and feedback to FSRA on key matters related to the pension sector. Ontario Teachers' continues to engage with FSRA's management and board, including through these advisory committees, on matters such as FSRA's priorities, family law matters related to pensions, and missing members.

LEGISLATIVE UPDATES

Due to the challenges brought on by the COVID-19 pandemic, federal and provincial governments and pension regulators provided temporary relief to administrators of registered pension plans and extended deadlines for certain filings and member communications. The income tax regulations were also amended to provide temporary tax relief from various rules applicable to registered pension plans.

ADVOCACY

We interact with regulatory agencies and government officials around the world on a variety of investment and pension administrative matters, advocating for clear and consistent rules and sharing our expertise on relevant public policy issues.

TAXATION

The global tax landscape is constantly evolving. Ontario Teachers' responds to shifting tax policies and increasing scrutiny by tax authorities by taking a conservative approach to tax risk and planning. We comply with all applicable tax laws and regulations in the countries where we invest and monitor emerging trends and changes in tax laws to confirm that our investments remain in compliance.

As a global investor, we believe it is important for governments to pursue clarity and predictability in tax laws, and we welcome the opportunity to engage in consultations on tax policy matters with authorities and policymakers worldwide.

More detail on our approach to taxation is available on our website. Please see "Tax Strategy" in the Investment Performance section of otpp.com.

CANADIAN INSTITUTE OF ACTUARIES (CIA) STANDARDS

The CIA Actuarial Standards Board (ASB) publishes Standards of Practice (Standards) for the profession. The Standards set out requirements for determining the commuted values of pension benefits (i.e., lump sums payable in lieu of pensions). In 2020, the ASB published revised Standards, which came into effect on December 1, 2020. The revised Standards impact the calculation of commuted values under the plan by changing certain demographic and economic assumptions regarding interest rates, determined on a monthly basis, and retirement age.

Report from the Human Resources & Compensation Committee

The Human Resources & Compensation Committee (HRCC) is pleased to share with you an overview of our approach to assessing performance and how it aligns with the pay of our employees. Our compensation framework is designed to reward, over the long term, for performance within the bounds of our risk budget. It is primarily focused on:

- paying for performance;
- attracting and retaining top investment, corporate, and member services talent;
- delivering on our pension promise; and
- living Ontario Teachers' mission, vision and values.

ONTARIO TEACHERS' 2020 PERFORMANCE

Under our compensation framework, the overarching driver is the performance of the total fund on an absolute and relative basis. This year, in the midst of a global pandemic, we significantly exceeded our return targets but underperformed relative to our benchmark. The one-year total-fund rate of return was exceptional at 8.6%, and the four-year rate of return was very strong at 7.8%. The one-year total-fund return was \$3.51 billion below our benchmark, resulting in a four-year cumulative value-add of \$38 million.

FISCAL 2020 PAY DECISIONS

Management and the board assess Ontario Teachers' overall performance relative to a corporate scorecard. This scorecard was established in the first quarter of calendar year 2020. Despite the market volatility and disruption that followed with the pandemic, management continued with the original priorities identified for 2020 and did not adjust to reflect COVID related impacts. The Human Resources & Compensation Committee attended additional meetings virtually to monitor performance and impact to pay decisions. Based on strong combined total-fund performance measures, continued outstanding service to our members, and delivering on other operational metrics, Ontario Teachers' scorecard resulted in a multiplier of 1.55 out of 2.0.

Mr. Taylor was appointed to President and CEO effective January 1, 2020. Throughout 2020, Mr. Taylor received no adjustments to his base salary. The board assessed Mr. Taylor against his individual objectives and determined a multiplier of 1.7x target for his 2020 annual incentive. The weighted average of factors resulted in an overall annual incentive multiplier for Mr. Taylor of 1.6x target. In balancing total-fund aggregate four-year performance and Mr. Taylor's role in shaping Ontario Teachers' strategy, the board awarded him with a long-term incentive allocation of \$3.2 million. Overall, the HRCC believes the compensation paid for fiscal 2020 is appropriate and aligned with the objectives of Ontario Teachers'.

Compensation Discussion & Analysis

The Compensation Discussion & Analysis explains Ontario Teachers' approach to compensation, the various elements of our pay programs and the remuneration paid to our named executive officers (NEOs). In fiscal 2020, our NEOs were:

- Jo Taylor, President and Chief Executive Officer (CEO);
- David McGraw, Chief Financial Officer (CFO);
- Ziad Hindo, Executive Managing Director (EMD) and Chief Investment Officer (CIO);
- Jane Rowe, Vice Chair, Investments (previously EMD, Equities); and
- Ben Chan, Regional Managing Director (RMD), Asia-Pacific.

Our compensation framework

OUR COMPENSATION PHILOSOPHY AND OBJECTIVES

Ontario Teachers' compensation framework has been developed on a foundation of pay-for-performance to attract, reward, and retain top performing talent. We are committed to providing equitable compensation for all employees and developing talent with a focus on creating a global organization that is diverse and inclusive. For example, we apply equal and fair employee practices to every employee, regardless of gender identity, colour, race, ethnicity, ability or sexual orientation, ensuring all employees performing the same job have the same rewards opportunities.

Our compensation programs consist of base salary, annual incentive, and long-term incentive and are structured to ensure that there is alignment between the long-term performance of the fund and the compensation paid to senior management.

Our compensation framework is designed to:

Align the enterprise

All employees are part of the same compensation framework, with a focus on total-fund returns and risk, driven by collaboration and innovation across groups and asset classes, as well as service to our members, efficiency, and managing costs.

Motivate and reward top performance over the long-term

Incentive compensation makes up a significant portion of total compensation, particularly for more senior employees, to align with Ontario Teachers' pay-for-performance culture.

Further, to emphasize performance over the long-term, senior employees generally receive more of their incentive compensation in the form of long-term incentives relative to the market.

Ensure market competitive pay levels and mix to attract and retain high calibre employees

The compensation framework is aligned with the market, considering the various skill sets required to achieve the organization's collective goals.

At expected levels of performance, the framework aims to pay around market median, with the opportunity for employees to earn top quartile pay in years of exceptional performance.

Enhance the link between pay and employee behaviours

In measuring employees' individual performance, there is explicit focus on not only what was accomplished, but how employees' behaviours aligned with Ontario Teachers' mission, vision, and values – working in the best interest of the organization.

Balance multiple time horizons

Investment performance is measured historically over four years to ensure a longer-term focus aligned with plan beneficiaries.

On balance, individual performance, member satisfaction, and the operational and strategic initiatives required to ensure the continuous improvement and success of the organization are measured on an annual basis.

Align pay with employees' level of accountability

The compensation framework takes into account employees' potential to impact performance by ensuring evaluations emphasize the areas over which they have most control (e.g., for junior employees, the focus is on individual performance; for senior employees, more emphasis is placed on the performance of Ontario Teachers' as a whole).

Provide managers with flexibility to make the "right" pay decision

Structured discretion is embedded in the framework to ensure pay decisions are more than just formulaic outcomes.

Managers have the necessary tools to ensure a holistic assessment of performance drives the ultimate pay package for each employee.

Senior officers review pay decisions to ensure equity through multiple lenses (i.e., by level, by gender, etc.).

Align with good governance and ensure our compensation programs do not encourage excessive risk taking

The framework is embedded with a number of risk mitigating features (as outlined on the following page) and ensures employees' interests are aligned with those of the members of the Ontario Teachers' Pension Plan.

Further, the Long-Term Incentive Plan (LTIP) has an explicit measure of total-fund risk, to ensure sufficient focus on this important area.

INDEPENDENT BENCHMARKING PROCESS

Given the varied employment opportunities at Ontario Teachers', executive and non-executive positions are compared against relevant job groups in like markets. Our objective is to be competitive with those organizations with which we compete directly for talent, including Canadian pension funds, banks, insurance companies, and investment managers, depending on role function and responsibilities.

For certain positions in international markets, we also compare to investment management organizations in the U.K., Hong Kong, Singapore and the United States.

We generally target our total direct compensation at the median of our peers for expected levels of performance, and at top quartile of our peers for exceptional performance.

KEY RISK MITIGATING FEATURES AND GOVERNANCE

Governance practices used to monitor, assess, and mitigate risk in the delivery of our incentive programs include:

What we do

Align Compensation with prudent risk taking and stakeholder interests

- A significant portion of senior management pay-at-risk delivered as long-term incentive to align compensation with the risk time horizon and motivate senior management to create long-term value and remain accountable for decisions with longer-term risk exposure
- There is an upper limit on individual annual incentive awards
- Clawback provisions in place stating that employees committing willful acts of dishonesty, fraud or theft, or otherwise terminated with cause shall be required to pay back all amounts paid to the participant under the annual and/or long-term incentive plans in the preceding 12 months

Set performance targets and goals that are demonstrably linked to the interests of Ontario's teachers

- Develop comprehensive balanced scorecards that measure progress against strategic objectives at the enterprise level and division/department level, including risk management initiatives

Establish a risk budget to set value add performance goals that impact all employees' incentive pay, to varying degrees

- At the beginning of each year, board members approve the active risk allocations for the total-fund and each investment department, which in turn establish expected annual dollar value add performance goals (i.e., dollars earned versus benchmark dollars earned) for the year
- Actual investment performance at the total-fund and departmental levels (measured in dollars of value add) is compared against the expected performance goals

Compensation and performance are benchmarked against peer organizations

- Establish a peer group to allow stakeholders to make a reasonable comparison of pay and performance across the group

Align Compensation with risk management objectives

- Model and test our annual and long-term incentives under multiple performance scenarios in order to ensure that the payouts align with expected performance outcomes

What we don't do

- Set performance targets which are not sufficiently challenging, and/or provide for excessively high potential payouts
- Adjust performance targets or goals downward without justification and board approval
- Establish overall levels of compensation higher than median that is not reinforced by outstanding Total Fund and organizational performance, or set compensation targets that are oversized relative to peer group
- Award excessive variable pay or severance payments

Our compensation framework meets or exceeds the Principles for Sound Compensation Practices established by the Financial Stability Board and endorsed by the G20 nations.

Independent advisors

Ontario Teachers' management engages with Willis Towers Watson to assist with the review of program design and competitive compensation, as needed.

Elements of our compensation program – Overview

Our compensation program comprises base salary, annual incentives, and long-term incentives for non-bargaining unit employees.

Compensation structures for bargaining unit staff have been negotiated into the collective agreement. The four-year agreement runs through to December 31, 2021.

BASE SALARY

Base salaries compensate employees for fulfilling their day-to-day responsibilities and are reviewed annually. Each employee at Ontario Teachers' is assigned a job level with a corresponding salary grade that is designed to provide market-competitive pay commensurate with the employee's responsibilities, demonstrated skills, knowledge, and track record of performance.

ANNUAL INCENTIVE PLAN (AIP)

Our AIP rewards employees with cash awards based on business and individual performance results relative to goals.

Weightings for each element vary by level for Investment, Corporate, and Member Services employees.

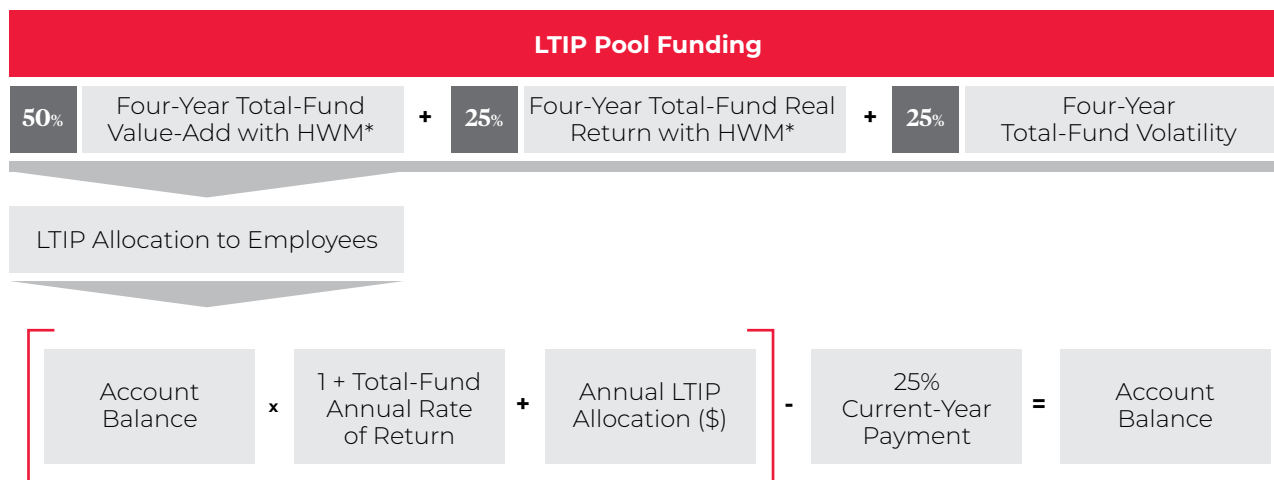
Ontario Teachers' Performance (0x–2x)		+	Division/Department Performance (0x–2x)		+	Individual Performance (0x–2.5x)	
20%	Four-Year Total-Fund Real Return		60%	Four-Year Department Value-Add (as applicable)		50%	<i>What</i> – Assessment of performance related to business outcomes
20%	Four-Year Total-Fund Value-Add						
10%	Four-Year Total-Fund Volatility						
10%	Service Excellence		40%	Annual Strategic Execution		50%	<i>How</i> – Assessment of how employees accomplished the business outcomes
40%	People, International, Climate and Operations						
AIP Payout							
Note: Employees may allocate up to 100% of AIP to the total-fund plan, private capital plan (save for the Finance Senior Leadership and Valuations Team), or a combination of the two plans for up to two years.							

Value-add is after deducting management fees, transaction costs and administrative costs allocated to the Active programs (includes annual incentives but does not include long-term incentives).

LONG-TERM INCENTIVE PLAN (LTIP)

Our LTIP rewards employees with cash awards on the basis of total-fund performance and in consideration of their personal performance and potential. The cash awards are allocated at year end to a notional account which is drawn down at a rate of 25% per year.

LTIP eligible employees include Investment employees at the principal level and above; and Corporate and Member Services employees at the director level and above.



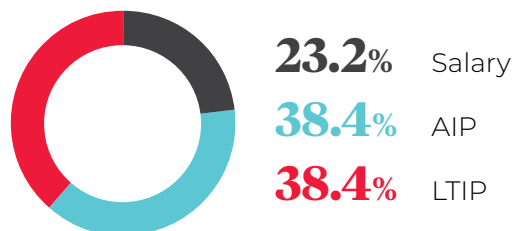
* HWM = high water mark: positive performance required to offset any negative performance.

MIX OF PAY

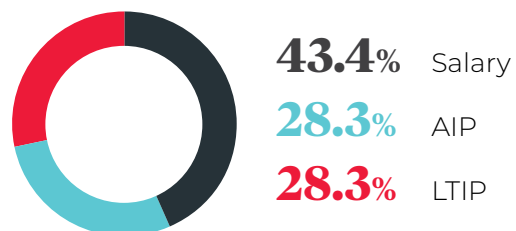
Investment, Corporate, and Member Services employees have different percentages of their compensation tied to our variable pay programs. Recognizing their direct influence on investment results and our objective of linking pay to performance, investment professionals and our CEO have a greater percentage of their total direct compensation (base salary, annual incentive, and long-term incentive) tied to our variable pay programs. Detailed below is the target total direct compensation mix for our NEOs. The actual pay mix realized may be different depending upon Ontario Teachers', divisional, and investment performance and the NEOs' individual performance.

TARGET PAY MIX

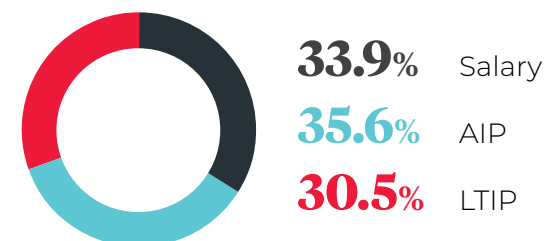
President and CEO; Chief Investment Officer; and Executive Managing Director, Equities



Chief Financial Officer



Regional Managing Director, Asia-Pacific



BENEFITS AND OTHER COMPENSATION

Ontario Teachers' provides a competitive benefits program that includes life insurance, disability, health and dental benefits, vacation and other leave policies, wellness programs and an Employee-Family Assistance Program. Ontario Teachers' retirement benefit for Canadian employees is a defined benefit pension plan described on page 62. Employees based outside of Canada are eligible to participate in local contributory pension plans based on local regulations and market practices.

TERMINATION ARRANGEMENTS FOR THE NEOs

There are no named executive officers with open-ended termination arrangements. In the event of termination without cause, Ontario Teachers' would offer a severance package commensurate with those offered to others of similar seniority who may have similarly been terminated without cause, in exchange for a full and final release.

In the event of termination with cause or resignation, the employee forfeits all incentives, unvested awards, and benefits.

For Jane Rowe specifically, in the event she is terminated without cause on or before September 30, 2022, Jane Rowe will receive a payment equal to the value of any remaining compensation and benefits that would have been provided in her Vice Chair role up to September 30, 2022.

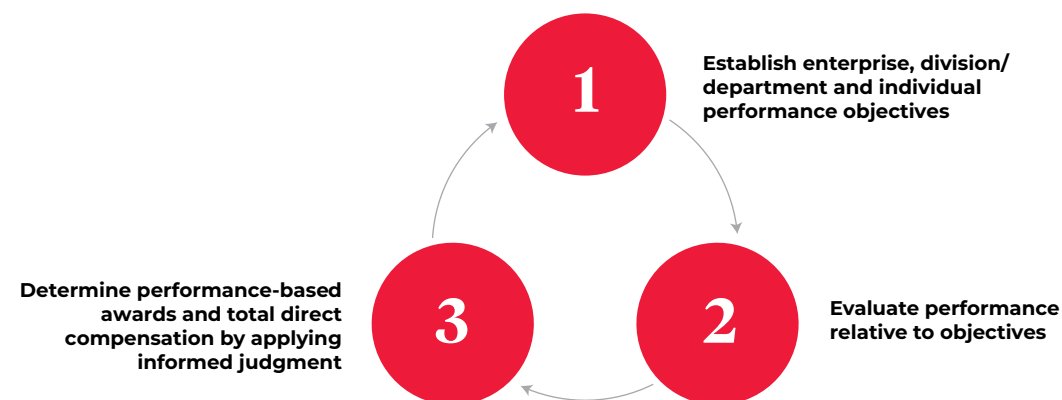
The treatment under each of the termination scenarios is governed by the Annual and Long-Term Incentive Plan documents.

	Annual Incentive Plan	Long-term Incentive Plan
Resignation	Forfeiture	Forfeiture
Retirement (as defined by the compensation plan)	Pro-rated award reflecting the period of active employment during the calendar year	Notional account balance vests progressively over four years following retirement
Termination without Cause	Forfeiture	Forfeiture
Termination with Cause	Forfeiture	Forfeiture

Compensation decisions made in 2021 reflecting 2020

HOW DECISIONS ARE MADE

At Ontario Teachers' compensation decisions are guided by our compensation philosophy and business outcomes. The following illustration provides an overview of the annual process for determining compensation for the CEO and senior officers:



Annually, the board members and the CEO agree on the key objectives for Teachers' overall performance scorecard and the CEO's individual performance goals. At the end of the year, the board members evaluate the CEO's performance relative to the annual objectives and assign an overall performance rating. The CEO's individual performance rating, Ontario Teachers' overall performance and total-fund performance are all considered when the board determines the CEO's total direct compensation.

Similar to the CEO, senior officers establish individual performance goals annually and at year-end they are evaluated relative to these goals. The outcome of individual goals and other performance measures, as previously noted, informs the total direct compensation recommendations for senior officers which are presented to board members for approval.

Enterprise objectives are cascaded down from the CEO and senior officers to all employees annually. Check-ins between employees and respective managers are ongoing throughout the year. During the annual review cycle, guiding principles are communicated to leaders to maximize fair and equitable decisions across levels, gender, etc., as they relate to stated objectives and performance outcomes. Analysis of pay recommendations for employees is conducted and reviewed over multiple dimensions at various levels of senior leadership, prior to overall approval.

ONTARIO TEACHERS' PERFORMANCE

To ensure we stay focused on our mission to provide outstanding service and retirement security to our members today and tomorrow, we prepare an enterprise scorecard comprising goals and measures for four categories (total-fund performance, service excellence, operational performance, and employee engagement). The scorecard ensures a balanced view of key areas that will drive employees to achieve our short, medium, and long-term goals.

At the end of the year, the scorecard is evaluated, and the results are presented to board members for approval. In 2020, employees delivered combined strong performance with a multiplier of 1.55 out of 2.0.

TOTAL-FUND PERFORMANCE

The table below summarizes at the total-fund level, the performance for 2017 through to 2020 relative to the targets as approved by the board. Over the four-year cumulative period, staff outperformed relative to real return and volatility goals however was unsuccessful in meeting our value-add performance target.

Year	Total-Fund Value Add	Total-Fund Real Return	Total-Fund Volatility
2017 to 2020	Below Target	Exceptional	Exceptional

DIVISION/DEPARTMENT PERFORMANCE

We also assess the strategic execution of each of our divisions across the organization against their respective annual objectives. Overall, employees delivered performance above target, with an average divisional/departamental multiplier of 1.64 out of 2.0.

For our Investment departments, a portion of their annual objectives include four-year value add performance relative to the return on risk allocation.

Year	Equities	Infrastructure and Natural Resources	Capital Markets
2017 to 2020	Exceptional	Exceptional	Below Target

Executive compensation

SALARY FREEZE

Following the annual compensation review cycle in March 2020 and the onset of the global pandemic, Ontario Teachers' elected to freeze salaries on a go-forward basis for the named executive officers and other senior executives reporting to either the President and CEO or the Chief Investment Officer.

Name	January 2020	March 2020	March 2021
Jo Taylor	\$550,000	\$550,000	\$550,000
David McGraw	\$425,000	\$425,000	\$425,000
Ziad Hindo	\$445,000	\$475,000	\$475,000
Jane Rowe	\$400,000	\$400,000	\$300,000
Ben Chan	5,350,000HKD	5,500,000HKD	5,500,000HKD

The compensation table represents disclosure of base salary, annual incentive, long-term incentive and other compensation earned in 2018, 2019 and 2020 by the CEO, the CFO and the three other most highly compensated executives, excluding subsidiary companies.

Name and Principal Position	Year	Base Salary ¹ A	Annual Incentive B	Long-Term Incentive Allocation C	Total Direct Compensation ² A+B+C	Long-Term Incentive Paid D	Other ³ E	Change in Pension Value F	Total Compensation ⁴ A+B+D+E
Jo Taylor President and CEO ⁵ 2019 and 2018 amounts are in GBP	2020	\$556,346	\$1,461,100	\$3,200,000	\$5,217,446	\$3,060,920	\$1,077	\$201,400	\$5,079,444
	2019	355,741	1,014,800	2,280,000	3,650,541	1,597,000			2,967,541
	2018	326,308	901,700	1,600,000	2,828,008	1,240,100			2,468,108
David McGraw CFO	2020	425,000	471,600	800,000	1,696,600	883,000	833	469,300	1,780,433
	2019	440,423	487,000	700,000 100,000 ⁶	1,727,423	838,500	815		1,766,738
	2018	382,692	422,300	800,000	1,604,992	767,800	809		1,573,601
Ziad Hindo EMD and CIO	2020	469,231	1,181,100	2,700,000	4,350,331	2,658,600	921	942,500	4,309,852
	2019	457,500	1,378,200	2,700,000 700,000 ⁶	5,235,700	2,435,400	861		4,271,961
	2018	381,538	1,101,600	2,300,000	3,783,138	1,892,200	805		3,376,143
Jane Rowe ⁷ Vice Chair	2020	374,231	994,700	2,000,000	3,368,931	2,157,500	726	348,300	3,527,157
	2019	414,292	1,137,000	2,050,000	3,601,292	2,035,000	780		3,587,072
	2018	370,077	947,600	2,300,000	3,617,677	1,838,300	782		3,156,759
Ben Chan RMD, Asia-Pacific ⁸ All amounts are reported in HKD	2020	5,468,952	8,183,200	10,600,000	24,252,152	7,078,500	1,050,000		21,780,652
	2019	5,328,763	9,869,900	13,000,000	28,198,663	5,437,100	2,100,000		22,735,763
	2018	3,018,750	5,115,600	8,000,000	16,134,350	2,640,700	2,343,750		13,118,800

1 Bi-weekly payroll resulted in 27 payments for 2019 versus the typical 26 bi-weekly payments.

2 When making compensation decisions, the board and management focus on Total Direct Compensation (TDC) which reflects base salary, annual incentive and long-term incentive allocation.

3 Other compensation includes group term life insurance and accidental death & dismemberment. Ben Chan joined Ontario Teachers' in June 2018 and received a signing bonus of 5,250,000 HKD paid in five installments during his first three years and a relocation allowance of 243,750 HKD.

4 Change in pension value and long-term incentive allocation are not included in total compensation.

5 Effective January 1, 2020 Jo Taylor was appointed as President and CEO as Ron Mock retired from the organization December 31, 2019.

6 Received a discretionary Long-Term Incentive allocation in December 2019.

7 Jane Rowe transitioned to her role as Vice Chair, Investments effective October 1, 2020.

8 Effective January 1, 2021 Ben Chan was promoted to Senior Managing Director, Asia-Pacific.

NOTIONAL ACCOUNT BALANCES

The table below outlines the notional account balances for each NEO.

Name and Principal Position	Opening Balance	2020 Rate of Return	Long-Term Incentive Allocation	2021 Payment	Balance
Jo Taylor ¹ President and CEO	\$8,327,486	8.60%	\$3,200,000	\$3,060,920	\$9,182,729
David McGraw CFO	2,515,645	8.60%	800,000	883,000	2,648,990
Ziad Hindo EMD and CIO	7,306,131	8.60%	2,700,000	2,658,600	7,975,858
Jane Rowe Vice Chair, Investments	6,105,153	8.60%	2,000,000	2,157,500	6,472,696
Ben Chan RMD, Asia-Pacific	16,311,220	8.60%	10,600,000	7,078,500	21,235,485

All amounts are reported in HKD

¹ Notional account for Jo Taylor reflects prior account in GBP before transferring to Canada, all represented in Canadian dollars.

RETIREMENT BENEFITS

Ontario Teachers' Canadian employees participate in the Public Service Pension Plan (PSPP) and Public Service Supplementary Plan (PSSP), or the OPSEU Pension Plan, all of which are defined benefit plans. Employees with pensionable earnings in excess of Income Tax Act (ITA) regulations also participate in a non-registered, unfunded Supplemental Employee Retirement Plan (SERP).

Employees based outside of Canada are eligible to participate in local contributory pension plans based on local regulations and market practices.

The table below outlines the estimated present value of the total Canadian pension from all sources (PSPP, PSSP and SERP) and estimated annual Canadian pension benefits at age 65 for the CEO, the CFO, the CIO and the Vice Chair, Investments.

Name and Principal Position	Projected Years of Service at Age 65	Estimated Total Annual Pension Benefit at Age 65	Present Value of Total Pension January 1, 2020	2020 Compensatory Annual Change in Pension Value	2020 Non-Compensatory ² Annual Change in Pension Value	Present Value of Total Pension December 31, 2020
Jo Taylor ³ President and CEO	6	\$69,800	\$-	\$179,900	\$21,500	\$201,400
David McGraw CFO	17	185,800	3,034,900	199,100	270,200	3,504,200
Ziad Hindo EMD and CIO	38	619,500	3,346,000	277,100	665,400	4,288,500
Jane Rowe Vice Chair, Investments	13	172,000	2,157,200	234,500	113,800	2,505,500

² Includes interest on liabilities and the impact of any assumption changes.

³ Represents Jo Taylor's participation in the Canadian retirement benefits beginning January 1, 2020.

The values shown above are estimated based on assumptions and represent entitlements that may change over time.

Financial reporting

The Financial reporting section highlights sections of the financial statements that management views as key to understanding the financial position of Ontario Teachers'.

Included in the pages preceding the consolidated financial statements are three letters that describe the responsibility of management, the auditors and the actuaries:

- Management's Responsibility for Financial Reporting – identifies that management is responsible for preparation of the financial statements. The financial statements are prepared according to Canadian accounting standards for pension plans. The board, which is independent from management, has ultimate responsibility for the financial statements and is assisted in its responsibility by the Audit & Actuarial Committee.
- Independent Auditor's Report – the formal opinion issued by an external auditor on the consolidated financial statements.
- Actuaries' Opinion – identifies that valuation methods are appropriate, data are sufficient and reliable and the assumptions are in accordance with accepted actuarial practices. The actuarial valuation is based on membership data, actuarial and accounting standards, and long-term interest rates.

Financial statement valuation

The financial statement valuation measures the fair value of the plan's net assets available for benefits and pension liabilities at a point in time. The financial statement valuation provides a snapshot of the financial health of the plan as it does not assume any future contributions and does not project the cost of benefits that current members have not yet earned. The financial statement valuation is therefore not considered an indicator of the long-term sustainability of the plan and not used by the plan sponsors to set contribution rates and benefit levels.

METHODS AND ASSUMPTIONS USED FOR THE FINANCIAL STATEMENT VALUATION

The financial statement valuation is prepared in accordance with guidance from Chartered Professional Accountants of Canada (CPA Canada). The pension liabilities, prepared by an independent actuary, take into account pension credit earned to date by all plan members and contributions already received by the plan. Valuation techniques, estimates and pension liabilities are described further in the notes to the consolidated financial statements.

The actuarial assumptions used in determining the pension liabilities reflect best estimates of future economic and non-economic factors proposed by management and approved by the board. Actual experience typically differs from these assumptions, and the differences are recognized as experience gains and losses in future years.

The discount rate for the financial statements is based on market rates, as at the valuation date, of bonds issued by the Province of Ontario, which have characteristics similar to Ontario Teachers' liabilities. The discount rate is determined by using a cash flow-based estimation methodology which applies a weighted average discount rate that reflects the estimated timing and amount of benefit payments. The discount rate used is 2.00% (2.50% in 2019). Further details on the methods and assumptions used can be found in note 4 to the consolidated financial statements.

Financial position as at December 31, 2020

Ontario Teachers' ended 2020 with a financial statement deficit of \$36.1 billion, up from the deficit of \$17.3 billion at the end of 2019. The deficit represents the difference between net assets available for benefits of \$221.2 billion and accrued pension benefits of \$257.3 billion at year end.

YEAR-END FINANCIAL POSITION

As at December 31 (Canadian \$ millions)	2020	2019
Net assets available for benefits	\$ 221,241	\$ 207,412
Accrued pension benefits	257,330	224,669
Deficit	\$ (36,089)	\$ (17,257)

During 2020, net assets available for benefits increased by \$13.8 billion. Net investment income of \$18.0 billion and contributions of \$3.2 billion increased net assets available for benefits, while benefits paid of \$6.7 billion and administrative expenses of \$0.7 billion decreased the net assets available. See Investments section of the Management's Discussion & Analysis for details of investment returns.

NET ASSETS AVAILABLE FOR BENEFITS

For the year ended December 31 (Canadian \$ millions)	2020	2019
Net assets available for benefits, beginning of year	\$ 207,412	\$ 191,112
Net investment income	18,011	20,185
Contributions	3,232	3,223
Benefits	(6,700)	(6,415)
Administrative expenses	(714)	(693)
Increase in net assets available for benefits	13,829	16,300
Net assets available for benefits, end of year	\$ 221,241	\$ 207,412

Accrued pension benefits increased by \$32.6 billion during the year to \$257.3 billion. Changes in actuarial assumptions increased the accrued pension benefits amount by \$27.1 billion. Benefits paid during 2020 of \$6.7 billion include the addition of 4,990 retirement and disability pensions and 1,220 survivor pensions during 2020, as well as a 2.0% cost-of-living increase.

ACCRUED PENSION BENEFITS

For the year ended December 31 (Canadian \$ millions)	2020	2019
Accrued pension benefits, beginning of year	\$ 224,669	\$ 192,281
Interest on accrued pension benefits	5,629	6,151
Benefits accrued	7,690	6,281
Benefits paid	(6,699)	(6,412)
Changes in actuarial assumptions and methods	27,138	25,515
Experience (gains)/losses	(1,097)	853
Net increase in accrued pension benefits	32,661	32,388
Accrued pension benefits, end of year	\$ 257,330	\$ 224,669

Fair value hierarchy

Ontario Teachers' investments and investment-related liabilities are stated at fair value. The objective of fair value determination is to estimate an exit price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants. Valuation techniques are employed in order to measure fair value. As described in note 1c to the consolidated financial statements, these techniques utilize inputs such as prices for market transactions, discount rates, contractual or expected future cash flows and other relevant factors that impact the assessment of fair value.

As required under Canadian accounting standards, Ontario Teachers' has classified and disclosed its fair value measurements into one of three categories based upon the degree of observable inputs used in their determination. Level 1 inputs consist of quoted prices in active markets for identical assets or liabilities; Level 2 inputs are derived from observable prices but do not meet the Level 1 criteria, while Level 3 inputs are unobservable. If different levels of inputs are used to measure the fair value of an investment, the classification within the hierarchy is based upon the lowest level input that is significant to the fair value measurement.

Level 1 net investments comprise government bonds and publicly traded equities, including those securities that are sold but not yet purchased, which are valued using quoted prices. Examples of Level 2 net investments include marketable corporate bonds that are valued using quoted prices from less actively traded markets and securities purchased under agreements to resell and securities sold under agreements to repurchase, which are valued using discounted cash flows and observable market yields. Examples of Level 3 investments include real assets such as real estate and infrastructure, non-publicly traded equities, and natural resource investments, which are valued using appropriate techniques that involve the use of significant unobservable inputs such as forecasted cash flows or other information that is specific to the entity. Management's assessment of the sensitivity to changes in assumptions for investments in Level 3 is also presented.

The table below shows Ontario Teachers' net investments based on the fair value hierarchy. Further details of each category can be found in note 2a to the consolidated financial statements.

As at
December 31, 2020
(Canadian \$ millions)

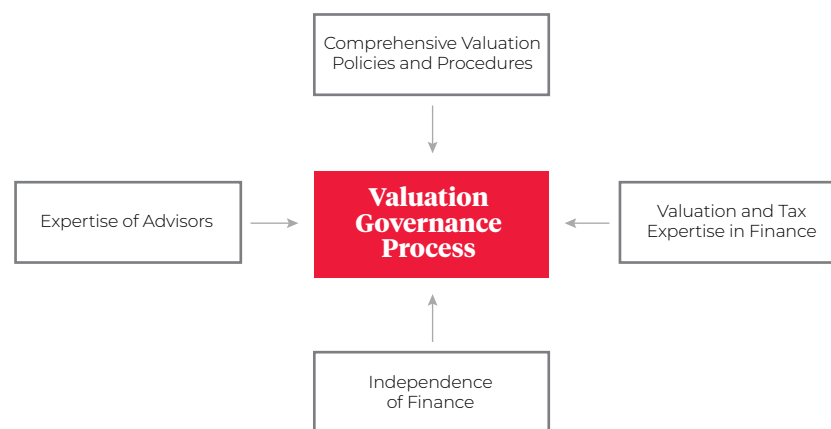
	Level 1	Level 2	Level 3	Total
Equity	\$ 25,671	\$ 1,760	\$ 45,087	\$ 72,518
Fixed income	93,416	12,441	577	106,434
Alternative investments	-	-	18,818	18,818
Inflation sensitive	1,205	-	7,439	8,644
Real assets	1,090	236	47,319	48,645
Investment-related receivables	1,127	18,401	119	19,647
Investment-related liabilities	(11,988)	(42,352)	(2,440)	(56,780)
Net investments	\$ 110,521	\$ (9,514)	\$ 116,919	\$ 217,926

VALUATION OF LEVEL 3 INVESTMENTS

The valuation of our investments is guided by IFRS 13: Fair Value Measurement. This standard provides guidance on fair value measurements including the definition of fair value. The valuation of Ontario Teachers' Level 3 investments is subject to a strong governance process which includes:

- Comprehensive valuation policies and procedures for all asset classes
- In-house valuation and tax expertise within our Finance team
- Independence of our Finance team from the Investments team. We also maintain appropriate segregation of duties, with most Level 3 valuations requiring three levels of Finance sign off
- Use of independent external valuation experts and real estate appraisers provide expertise, knowledge and familiarity with local market conditions, market transactions and industry trends
- Semi-annual reporting to the Audit & Actuarial Committee on Level 3 investment valuations
- Year-end valuations are subject to audit by external auditor valuation specialists
- Additionally the valuation of Level 3 investments is subject to periodic internal audits.

VALUATION GOVERNANCE PROCESS



See note 1c to the consolidated financial statements for further details regarding the valuation of investments.

Effective oversight and controls

DISCLOSURE AND FINANCIAL REPORTING CONTROLS

We take guidance from National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings, issued by the Canadian Securities Administrators, as part of our commitment to good governance practices. The President and CEO, and the Chief Financial Officer are responsible for establishing and maintaining disclosure controls and procedures, and internal control over financial reporting.

We have designed disclosure controls and procedures to provide reasonable assurance that material information related to the plan is gathered and reported to management in order to allow timely decisions regarding public disclosure. We evaluated our disclosure controls and procedures and concluded as at December 31, 2020, that they are effective.

We have also designed internal control over financial reporting, using the Integrated Framework issued in 2013 by the Treadway Commission's Committee of Sponsoring Organizations (the COSO Framework), to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with Canadian Generally Accepted Accounting Principles. We have evaluated the effectiveness of the plan's internal controls over financial reporting and concluded they are effective as at year-end.

PROTECTING AUDIT QUALITY AND INTEGRITY

A key oversight activity of audit committees is annually assessing the effectiveness of the external auditor. This helps audit committees meet their responsibility to make informed recommendations to the board on whether or not to reappoint the external auditor. Ontario Teachers' has conducted assessments annually. Ontario Teachers' Audit & Actuarial Committee recommended, and the board approved, the reappointment of the external auditor for 2020.

Ontario Teachers' and other corporate governance advocates have expressed concern over the years about accounting firms that audit public companies and also earn substantial revenue from those companies for non-audit consulting services. We believe that such consulting fees can compromise, or appear to compromise, the integrity of the audit function.

We strive to minimize our own use of consulting services involving the plan's auditor and we disclose the total amount paid for such services. In 2020, fees paid to Deloitte Touche Tohmatsu Limited (Deloitte), of which the Canadian firm is Ontario Teachers' auditor, totaled \$16.1 million (\$15.0 million in 2019), of which \$15.0 million was for audit activities and \$1.1 million was for non-audit services. Of the \$1,105,000 paid for non-audit services, approximately \$340,000 related to the plan, \$30,000 related to subsidiaries audited by Deloitte and the balance of \$735,000 was for subsidiaries not audited by Deloitte. Of the \$30,000 for non-audit services paid by subsidiaries audited by Deloitte, \$25,000 was paid to Deloitte (Canada), and \$5,000 was paid to Deloitte firms outside of Canada, which are considered to have lower risk of impairing the independence of Ontario Teachers' auditor.

Management's responsibility for financial reporting

The consolidated financial statements of the Ontario Teachers' Pension Plan Board (Ontario Teachers') have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must, of necessity, be based on estimates and judgments. The accounting policies followed in the preparation of these consolidated financial statements conform to Canadian accounting standards for pension plans. Financial information presented throughout the annual report is consistent with the consolidated financial statements.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization.

Ultimate responsibility for the consolidated financial statements rests with the members of Ontario Teachers' board of directors (the board). The board is assisted in its responsibilities by the Audit & Actuarial Committee (the Committee), consisting of five board members who are not officers or employees of the Ontario Teachers'. In addition, the Committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the Committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This Committee reviews the consolidated financial statements and recommends them for approval by the board.

Ontario Teachers' external auditor, Deloitte LLP, is directly accountable to the Audit & Actuarial Committee and has full and unrestricted access to the Committee. They discuss with the Committee their audit and related findings as to the integrity of the Ontario Teachers' financial reporting and the adequacy of internal control systems. Ontario Teachers' external auditor has conducted an independent examination of the consolidated financial statements in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express the opinion in their Independent Auditor's Report.



Jo Taylor

President and Chief Executive Officer

March 4, 2021



David McGraw

Chief Financial Officer

Independent auditor's report

To the Administrator of
Ontario Teachers' Pension Plan

Opinion

We have audited the consolidated financial statements of Ontario Teachers' Pension Plan Board ("Ontario Teachers'"), which comprise the consolidated statement of financial position as at December 31, 2020, and the consolidated statements of changes in net assets available for benefits, changes in accrued pension benefits, and changes in deficit for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Ontario Teachers' as at December 31, 2020, and the changes in its net assets available for benefits and changes in its accrued pension benefits for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of Ontario Teachers' in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Ontario Teachers' ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate Ontario Teachers' or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Ontario Teachers' financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Ontario Teachers' internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Ontario Teachers' ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause Ontario Teachers' to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within Ontario Teachers' to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants
Toronto, Ontario

March 4, 2021

Actuaries' opinion

Mercer (Canada) Limited was retained by the Ontario Teachers' Pension Plan Board (Ontario Teachers') to perform an actuarial valuation of the going concern liabilities in respect of Ontario Teachers' Pension Plan (the Plan) as at December 31, 2020, for inclusion in Ontario Teachers' consolidated financial statements. As part of the valuation, we examined the Plan's recent experience with respect to economic and demographic assumptions and presented our findings to the board members of Ontario Teachers' (the board).

The valuation of actuarial liabilities in respect of the Plan was based on:

- membership data provided by Ontario Teachers' as at August 31, 2020;
- methods prescribed by Section 4600 of the Chartered Professional Accountants Canada Handbook for pension plan financial statements;
- real and nominal interest rates on long-term bonds at the end of 2020;
- assumptions about future events (for example, future rates of inflation and future retirement rates) which have been communicated to us as the board's best estimate of these events; and
- information obtained from the Ontario Ministry of Labour and other published data, where applicable, on wage rate changes.

The objective of the consolidated financial statements is to fairly present Ontario Teachers' financial position on December 31, 2020, as a going concern. This is different from the funding valuation (the actuarial valuation required by the Pension Benefits Act (Ontario)), which establishes a prudent level for future contributions.

While the actuarial assumptions used to estimate liabilities for Ontario Teachers' consolidated financial statements represent the board's best estimate of future events and market conditions at the end of 2020, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations and will affect the financial position of the Plan at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation are appropriate for the purposes of the valuation, and that the assumptions used in the valuation are in accordance with accepted actuarial practice in Canada. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice in Canada.



Scott Clausen, F.C.I.A., F.S.A.
March 4, 2021



Lise Houle, F.C.I.A., F.S.A.

Consolidated statement of financial position

As at December 31 (Canadian \$ millions)	2020	2019
Net assets available for benefits		
ASSETS		
Cash	\$ 283	\$ 643
Receivable from the Province of Ontario (note 3)	3,179	3,146
Receivable from brokers	655	205
Investments (note 2)	274,706	259,763
Premises and equipment	122	130
	278,945	263,887
LIABILITIES		
Accounts payable and accrued liabilities	584	563
Due to brokers	340	195
Investment-related liabilities (note 2)	56,780	55,717
	57,704	56,475
Net assets available for benefits	\$ 221,241	\$ 207,412
Accrued pension benefits and deficit		
Accrued pension benefits (note 4)	\$ 257,330	\$ 224,669
Deficit	(36,089)	(17,257)
Accrued pension benefits and deficit	\$ 221,241	\$ 207,412

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

On behalf of the Plan administrator:

SR McCURR

Chair

K. O'Leary

Board member

Consolidated statement of changes in net assets available for benefits

For the year ended December 31 (Canadian \$ millions)	2020	2019
Net assets available for benefits, beginning of year	\$ 207,412	\$ 191,112
Investment operations		
Net investment income (note 6)	18,011	20,185
Administrative expenses (note 11a)	(631)	(615)
Net investment operations	17,380	19,570
Member service operations		
Contributions (note 9)	3,232	3,223
Benefits (note 10)	(6,700)	(6,415)
Administrative expenses (note 11b)	(83)	(78)
Net member service operations	(3,551)	(3,270)
Increase in net assets available for benefits	13,829	16,300
Net assets available for benefits, end of year	\$ 221,241	\$ 207,412

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

Consolidated statement of changes in accrued pension benefits

For the year ended December 31 (Canadian \$ millions)	2020	2019
Accrued pension benefits, beginning of year	\$ 224,669	\$ 192,281
Increase in accrued pension benefits		
Interest on accrued pension benefits	5,629	6,151
Benefits accrued	7,690	6,281
Changes in actuarial assumptions and methods (note 4a)	27,138	25,515
Experience losses (note 4c)	–	853
	40,457	38,800
Decrease in accrued pension benefits		
Benefits paid (note 10)	6,699	6,412
Experience gains (note 4c)	1,097	–
	7,796	6,412
Net increase in accrued pension benefits	32,661	32,388
Accrued pension benefits, end of year	\$ 257,330	\$ 224,669

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

Consolidated statement of changes in deficit

For the year ended December 31 (Canadian \$ millions)	2020	2019
Deficit, beginning of year	\$ (17,257)	\$ (1,169)
Increase in net assets available for benefits	13,829	16,300
Net increase in accrued pension benefits	(32,661)	(32,388)
Deficit, end of year	\$ (36,089)	\$ (17,257)

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

Notes to consolidated financial statements

For the year ended December 31, 2020

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 earnings. 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 in January 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. For pension credit earned up to December 31, 2009, inflation protection is 100% of the change in the Consumer Price Index. 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 indexation level is set at 50% of the change in the Consumer Price Index. There is no minimum level of inflation protection for pension credit earned after 2013. The indexation level stated in the most recent funding valuation filing remains 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.

(G) RETIREMENT COMPENSATION ARRANGEMENT

Restrictions in the ITA and its regulations on the payment of certain benefits from the RPP for periods of service after 1991 may impact some Plan members. To address affected members, the Retirement Compensation Arrangement (the RCA) was established by agreement between the co-sponsors as a supplementary plan to provide for these benefits. Examples of these benefits include: (1) members of the Plan who retired with average earnings above \$167,310 (CPP-exempt members \$154,611) in 2020 and \$163,748 (CPP-exempt members \$151,278) in 2019; and (2) members whose pensions would require a larger reduction for early retirement to comply with the ITA limitations than the Plan would impose. Because the RCA is a separate trust, the net assets available for benefits and accrued benefits and deficit of the RCA are not included in these consolidated financial statements.

Note 1. Summary of significant accounting policies

(A) BASIS OF PRESENTATION

These consolidated 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.

Ontario Teachers' real estate investments are either owned or managed on behalf of Ontario Teachers' by The Cadillac Fairview Corporation Limited (CFCL), a wholly owned subsidiary that is consolidated. Ontario Teachers' also consolidates Ontario Teachers' Finance Trust (OTFT) and Ontario Teachers' Cadillac Fairview Properties Trust (CFPT), two entities that support Ontario Teachers' investing and funding strategies, and wholly owned investment holding companies managed by either Ontario Teachers' or CFCL. Investment holding companies that are managed by external parties are recognized as Ontario Teachers' investment assets. 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.

The consolidated financial statements for the year ended December 31, 2020 were authorized for issue through a resolution of the board on March 4, 2021.

(B) FUTURE CHANGES IN ACCOUNTING POLICIES

Developments and changes in accounting standards from the International Accounting Standards Board are actively monitored. There were no adoptions of issued IFRS standards, changes in existing standards or new interpretations during the year ended December 31, 2020 that had a material impact on the consolidated financial statements. There are no issued IFRS standards, changes in existing standards or new interpretations with effective dates on or after January 1, 2021 that are expected to have a significant impact on the consolidated 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.

Fair values of investments are determined as follows:

- a. Short-term investments and commercial paper are valued using either quoted closing mid-market prices or discounted cash flows based on current market yields, when quoted closing mid-market prices are unavailable.
- b. Bonds, including both nominal and real return, are valued on the basis of quoted closing mid-market prices. If quoted closing mid-market prices are not available, estimated values are calculated using discounted cash flows based on current market yields and comparable securities, as appropriate.
- c. Securities sold under agreements to repurchase and securities purchased under agreements to resell are valued using discounted cash flows based on current market yields.

- d. Public equities are valued at quoted closing mid-market prices. When the market for a public equity is not active, management assesses whether the quoted prices represent fair value. If not, management adjusts the quoted prices or estimates the fair value by using appropriate techniques including valuation models.
- e. Real estate, private equities, infrastructure, timberland, and natural resources are valued based on estimated fair values determined by using appropriate valuation techniques. Where external valuation advisors are engaged by management in the valuation process, management ensures the advisors are independent and assesses whether the assumptions used by the valuation advisors are reasonable and supportable based on current market conditions and industry practice to ensure the valuation captures the business and economic conditions specific to the investment.

At least 70% of the value of the rental property portfolio covering all product types and geographic regions is independently appraised annually. Real estate properties with a value of over \$250 million will be valued independently every year. Private equity funds are recorded at fair value based on net asset values obtained from each of the funds' administrators or funds' managers. These net asset values are reviewed by management.

- f. Derivative financial instruments are recorded at fair value using market prices where available. Where quoted market values are not readily available, appropriate alternative valuation techniques are used to determine fair value. In determining fair value, consideration is also given to the credit risk of the counterparty through the calculation of a credit valuation adjustment.
- g. Alternative investments, comprised primarily of hedge funds and public equity funds are recorded at fair value based on net asset values obtained from each of the funds' administrators or funds' managers. These net asset values are reviewed by management.

Ontario Teachers' uses a number of valuation techniques to determine the fair value of investments for which observable prices in active markets for identical investments are not available. These techniques include: valuation methodologies based on observable prices for similar investments; present-value approaches where future cash flows generated by the investment are estimated and then discounted using a risk-adjusted discount rate; and option-pricing

models. The principal inputs to these valuation techniques are listed below. Values between and beyond available data points may be obtained by interpolation and extrapolation.

- Bond prices – quoted prices are generally available for government bonds, certain corporate bonds and some other debt-related products.
- Credit spreads – where available, credit spreads are derived from prices of credit default swaps or other credit-based instruments, such as debt securities. For others, credit spreads are obtained from pricing services.
- Interest rates – principally derived from benchmark interest rates such as quoted interest rates from central banks and in swap, bond and futures markets. Benchmark interest rates are considered when determining discount rates used in the present-value approaches.
- Foreign currency exchange rates – there are observable markets, both spot and forward, and in futures in all major currencies.
- Public equity and equity index prices – quoted prices are generally readily available for equity shares listed on the stock exchanges and for indices on such shares.
- Commodity prices – many commodities are actively traded in spot, forward and futures markets.
- Price volatilities and correlations – volatility is a measure of the tendency of a specific price to change over time. Correlation measures the degree to which two or more prices or other variables are observed to have moved together historically. Volatility is an input in valuing options and certain products such as derivatives with more than one underlying variable that is correlation-dependent. Volatility and correlation values are either obtained from broker quotations, from pricing services, or are derived from quoted option prices.
- Forecasts on operating cash flows of real estate, private equities, infrastructure, and natural resources – forecasts include assumptions on revenue, revenue growth, expenses, capital expenditures, and capital structure. They are generally provided by either management of the companies in which Ontario Teachers' invests or external managers. Additional assumptions from external parties, for example, external appraisers, may also be used in the forecast.

Ontario Teachers' refines and modifies its valuation techniques as markets and products develop and the pricing for individual products becomes more transparent.

While Ontario Teachers' believes its valuation techniques are appropriate and consistent with other market participants, the use of different techniques or assumptions could result in different estimates of fair value at the balance sheet date. Management's assessment of the sensitivity to changes in assumptions for investments in Level 3 is presented in note 2b. This excludes externally managed fund investments where the underlying assumptions are not available to Ontario Teachers'.

COVID-19, the novel coronavirus, has created global economic disruption and uncertainty. Despite the uncertainty as to the outcome and ultimate effects of the pandemic, Ontario Teachers' has continued to follow its strong valuation governance process. This comprehensive process used extensive sources of available information in providing its best estimate of the impact that the COVID-19 pandemic has had on the valuations of its investments and investment liabilities as of the date of these consolidated financial statements. However, these estimates are sensitive to key assumptions and drivers that are subject to material changes. Please see note 2b for sensitivity analysis. We are monitoring developments relating to COVID-19 and continuing to assess the ongoing impact 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 and real estate income are 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 expensed as incurred when directly invoiced or information is otherwise available from capital notices or other manager communications. Fees related to other externally managed investments 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.

(D) FOREIGN CURRENCY TRANSLATION

Assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rates prevailing on the year-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, an independent firm of actuaries. The valuation is performed annually as at August 31 and then extrapolated to year end. 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 consolidated 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 4 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 consolidated 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, inflation sensitive and real asset investments.

(A) INVESTMENTS BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

The schedule below summarizes Ontario Teachers' investments and investment-related liabilities, including net accrued interest and dividends of \$487 million (2019 – \$656 million), before allocating the effect of derivative contracts:

As at December 31 (Canadian \$ millions)	2020		2019	
	Fair Value	Cost	Fair Value	Cost
Equity				
Publicly traded				
Canadian	\$ 1,260	\$ 1,089	\$ 1,725	\$ 1,573
Non-Canadian ¹	24,411	17,835	25,361	21,948
Non-publicly traded				
Canadian	7,540	4,278	5,641	3,642
Non-Canadian	39,307	30,528	34,573	26,050
	72,518	53,730	67,300	53,213
Fixed income¹				
Bonds	57,262	51,859	54,501	51,552
Short-term investments	25,287	25,311	8,622	8,616
Canadian real-rate products	17,499	11,696	20,248	14,932
Non-Canadian real-rate products	6,386	6,552	13,939	11,618
	106,434	95,418	97,310	86,718
Alternative investments¹	18,818	15,975	18,475	16,101
Inflation sensitive				
Commodities	1,205	853	985	853
Timberland	2,256	1,300	2,340	1,300
Natural resources	5,183	6,553	5,859	5,985
	8,644	8,706	9,184	8,138
Real assets				
Real estate (note 5)	30,742	23,326	33,768	21,442
Infrastructure	17,903	12,200	17,044	10,419
	48,645	35,526	50,812	31,861
	\$ 255,059	\$ 209,355	\$ 243,081	\$ 196,031

¹ Alternative investments have been re-classified out of Fixed Income to more appropriately reflect the nature of these assets. Additionally, Non-Canadian publicly traded equity has been re-stated to re-classify some fund assets to Alternative investments. Alternative Investments is comprised primarily of hedge funds and public equity funds.

As at December 31 (Canadian \$ millions)	2020		2019	
	Fair Value	Cost	Fair Value	Cost
Investment-related receivables				
Securities purchased under agreements to resell	\$ 10,862	\$ 10,838	\$ 11,230	\$ 11,293
Cash collateral deposited under securities borrowing arrangements	1,081	1,081	901	901
Cash collateral paid under credit support annexes	–	–	56	56
Derivative-related, net	7,704	2,137	4,495	2,251
	19,647	14,056	16,682	14,501
Total investments	\$ 274,706	\$ 223,411	\$ 259,763	\$ 210,532
Investment-related liabilities				
Securities sold under agreements to repurchase	(14,185)	(14,172)	(19,821)	(19,983)
Securities sold but not yet purchased				
Equities	(1,083)	(913)	(900)	(866)
Fixed income	(7,155)	(7,177)	(9,917)	(8,990)
Real estate (note 5) ¹	(5,491)	(5,073)	(5,228)	(4,723)
Commercial paper	(3,637)	(3,761)	(8,490)	(8,576)
Term debt	(17,212)	(17,084)	(7,187)	(6,986)
Cash collateral received under credit support annexes	(3,356)	(3,356)	(988)	(988)
Derivative-related, net	(4,661)	(2,141)	(3,186)	(1,232)
	(56,780)	(53,677)	(55,717)	(52,344)
Net investments² (note 2d)	\$ 217,926	\$ 169,734	\$ 204,046	\$ 158,188

¹ Real estate liabilities include the liabilities of real estate subsidiaries and trusts. These include \$766 million fair value and \$764 million cost (December 31, 2019 – \$783 million fair value and \$764 million cost) of the 4.31% Series B Debenture with principal amount of \$750 million which is guaranteed by Ontario Teachers' as described in note 15. The remaining liabilities held in real estate entities are not guaranteed by Ontario Teachers'.

² For additional details, refer to the Major Investments on page 106.

(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:

	December 31, 2020			
(Canadian \$ millions)	Level 1	Level 2	Level 3	Total
Equity	\$ 25,671	\$ 1,760	\$ 45,087	\$ 72,518
Fixed income	93,416	12,441	577	106,434
Alternative investments	–	–	18,818	18,818
Inflation sensitive	1,205	–	7,439	8,644
Real assets	1,090	236	47,319	48,645
Investment-related receivables	1,127	18,401	119	19,647
Investment-related liabilities	(11,988)	(42,352)	(2,440)	(56,780)
Net investments	\$ 110,521	\$ (9,514)	\$ 116,919	\$ 217,926

	December 31, 2019			
(Canadian \$ millions)	Level 1	Level 2	Level 3	Total
Equity ¹	\$ 27,086	\$ 220	\$ 39,994	\$ 67,300
Fixed income ¹	84,801	11,934	575	97,310
Alternative investments ¹	–	–	18,475	18,475
Inflation sensitive	985	–	8,199	9,184
Real assets	2,192	385	48,235	50,812
Investment-related receivables	1,033	15,506	143	16,682
Investment-related liabilities	(12,030)	(41,449)	(2,238)	(55,717)
Net investments	\$ 104,067	\$ (13,404)	\$ 113,383	\$ 204,046

¹ Alternative investments have been re-classified out of Fixed Income to more appropriately reflect the nature of these assets. Additionally, Non-Canadian publicly traded equity has been re-stated to re-classify some fund assets to Alternative investments. Alternative Investments is comprised primarily of hedge funds and public equity funds.

There were no transfers between Level 2 and Level 1 in 2020 and 2019.

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

	2020							
(Canadian \$ millions)	Equity	Fixed Income	Alternative Investments	Inflation Sensitive	Real Assets	Investment-Related Receivables	Investment-Related Liabilities	Total
Balance, beginning of year	\$ 39,994	\$ 575	\$ 18,475	\$ 8,199	\$ 48,235	\$ 143	\$ (2,238)	\$ 113,383
Purchases	7,790	1,471	5,994	590	5,389	76	697	22,007
Sales	(4,027)	(1,473)	(6,114)	(34)	(2,804)	(94)	(1,383)	(15,929)
Transfers in ¹	-	-	-	-	-	(20)	13	(7)
Transfers out ¹	(1,768)	-	-	-	-	(28)	81	(1,715)
Gains/(losses) included in investment income								
Realized	1,583	3	(6)	-	1,029	14	365	2,988
Unrealized	1,515	1	469	(1,316)	(4,530)	28	25	(3,808)
Balance, end of year	\$ 45,087	\$ 577	\$ 18,818	\$ 7,439	\$ 47,319	\$ 119	\$ (2,440)	\$ 116,919

	2019							
(Canadian \$ millions)	Equity²	Fixed Income²	Alternative Investments²	Inflation Sensitive	Real Assets	Investment-Related Receivables	Investment-Related Liabilities	Total
Balance, beginning of year	\$ 36,870	\$ 551	\$ 16,389	\$ 8,117	\$ 46,349	\$ 189	\$ (2,076)	\$ 106,389
Purchases	9,133	1,568	8,052	305	5,665	39	113	24,875
Sales	(8,808)	(1,542)	(6,080)	(33)	(4,695)	(41)	(443)	(21,642)
Transfers in ¹	-	-	-	-	-	(5)	7	2
Transfers out ¹	(152)	-	-	-	-	(9)	96	(65)
Gains/(losses) included in investment income								
Realized	2,474	7	1,133	-	(1,233)	(31)	129	2,479
Unrealized	477	(9)	(1,019)	(190)	2,149	1	(64)	1,345
Balance, end of year	\$ 39,994	\$ 575	\$ 18,475	\$ 8,199	\$ 48,235	\$ 143	\$ (2,238)	\$ 113,383

1 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.

2 Alternative investments have been re-classified out of Fixed Income to more appropriately reflect the nature of these assets. Additionally, Non-Canadian publicly traded equity has been re-stated to re-classify some fund assets to Alternative investments. Alternative Investments is comprised primarily of hedge funds and public equity funds.

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. While Ontario Teachers' has used all available information in providing its best estimate of the magnitude of the potential impact on Level 3 investments from the COVID-19 pandemic, the ranges noted below are based on alternate assumptions that are subject to material change.

			2020
(Canadian \$ millions)	Significant Inputs	Change in Significant Inputs	Increase/ (Decrease) to Fair Value
Non-publicly traded equity	Multiple ^{1,2}	+/- 10%	\$5,547/(5,547)
Infrastructure and Natural resources	Discount Rate	+/- 0.50%	1,743/(1,560)
Real estate	Capitalization Rate	+/- 0.25%	1,495/(1,338)

1 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).

2 Equity values of recently acquired investments held at cost at December 31, 2020 were sensitized by +/- 10%.

The above analysis excludes investments 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 fair value the underlying investments. For all other investments included in Level 3 that were not sensitized, management's judgement is that 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 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.

Derivative contracts, transacted either in the OTC market or on regulated exchanges, include:

Swaps

Swaps are OTC contracts in which two counterparties exchange a series of cash flows based on agreed upon rates to a notional amount. The various swap agreements that Ontario Teachers' enters into are as follows:

Equity and commodity swaps are contracts in which one counterparty agrees to either pay or receive from the other cash flows based on changes in the value of either an equity or commodity index, a basket of stocks or commodities, or a single stock or commodity.

Interest rate swaps are agreements where two counterparties exchange a series of payments based on different interest rates applied to a notional amount. Certain interest rate swaps traded with U.S. counterparties in the OTC market are centrally cleared at regulated clearing houses.

Currency swaps involve the exchange of fixed payments in one currency for the receipt of fixed payments in another currency.

Forwards and futures

Futures are standardized contracts traded on regulated future exchanges, whereas forward contracts are negotiated agreements that are transacted between counterparties in the OTC market. Examples of futures and forwards are described below:

Equity and commodity futures are contractual obligations to either buy or sell at a fixed value (the contracted price) of an equity or commodity index, a basket of stocks, a single stock or commodities at a predetermined future date.

Interest rate futures are contractual obligations to either buy or sell an interest rate sensitive financial instrument on a predetermined future date at a specified price.

Currency forwards and futures are contractual obligations to exchange one currency for another at a specified price or settlement at a predetermined future date.

Options

Options may be either acquired in standardized amounts on regulated exchanges or customized and acquired in the OTC market. They are contractual agreements under which the seller (writer) grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option), a security, exchange rate, interest rate, or other financial instrument or commodity at a predetermined price, at or by a specified future date. The seller (writer) of an option can also settle the contract by paying the cash settlement value of the purchaser's right. The seller (writer) receives a premium from the purchaser for this right. The various option agreements that Ontario Teachers' enters into include equity and commodity options, interest rate options, and foreign currency options.

Credit derivatives

Credit derivatives are OTC contracts that transfer credit risk related to an underlying financial instrument (referenced asset) from one counterparty to another. Examples of credit derivatives include credit default swaps, total return swaps, and loan participations.

Credit default swaps provide protection against the decline in value of the referenced asset as a result of specified events such as payment default or insolvency. These swaps are similar in structure to an option whereby the purchaser pays a premium to the seller of the credit default swap in return for payment related to the deterioration in the value of the referenced asset. The referenced asset for credit default swaps is a debt instrument. Certain credit default swaps traded with U.S. counterparties in the OTC market are centrally cleared at regulated clearing houses.

Total return swaps are contracts in which one counterparty agrees to pay or receive from the other cash flows based on changes in the value of the referenced asset.

Other derivative products

Ontario Teachers' also transacts in other derivative products including statistic swaps and dividend swaps in the OTC market. An investor may trade the statistic swaps with the objective of adding value or hedging for risks associated with the magnitude of movement, i.e., volatility, variance, correlation, covariance of some underlying products, such as exchange rates, or stock indexes. Dividend swaps are OTC contracts where an investor agrees to match all dividends paid out by an underlying stock or index over a specified time period. In return, the dividend payer receives a fixed amount at expiry called the dividend swap rate.

The following schedule summarizes the notional amounts and fair value of Ontario Teachers' derivative contracts held as at December 31:

(Canadian \$ millions)	2020						2019	
	Notional	Fair Value		Notional	Fair Value		Assets	Liabilities
		Assets	Liabilities		Assets	Liabilities		
Equity and commodity derivatives								
Swaps	\$ 39,990	\$ 1,984	\$ (537)	\$ 41,173	\$ 924	\$ (316)		
Futures	8,126	67	-	16,499	28	(19)		
Options: Listed								
– purchased	97	-	-	3,666	76	-		
– written	65	-	(138)	2,643	-	(69)		
OTC								
– purchased	23,605	600	-	41,410	918	-		
– written	25,409	23	(447)	39,001	18	(453)		
	97,292	2,674	(1,122)	144,392	1,964	(857)		
Interest rate derivatives								
Swaps	189,831	1,892	(1,376)	140,847	925	(678)		
Futures	54,283	-	(36)	65,830	-	(305)		
Options: Listed								
– purchased	-	-	-	5,683	-	-		
– written	-	-	-	6,501	-	(3)		
OTC								
– purchased	20,163	40	(1)	30,077	26	(13)		
– written	47,981	2	(36)	50,324	4	(24)		
	312,258	1,934	(1,449)	299,262	955	(1,023)		
Currency derivatives								
Swaps	630	13	-	3,814	8	(12)		
Forwards ¹	63,492	1,428	(724)	78,201	1,011	(642)		
Options: OTC								
– purchased	3,498	53	-	4,366	40	-		
– written	1,643	-	(35)	3,699	-	(22)		
	69,263	1,494	(759)	90,080	1,059	(676)		
Credit derivatives								
Credit default swaps – purchased	30,971	41	(1,218)	24,955	37	(690)		
– written	40,865	1,582	(134)	17,364	508	(169)		
	71,836	1,623	(1,352)	42,319	545	(859)		
	550,649	7,725	(4,682)	576,053	4,523	(3,415)		
Net cash collateral (received)/paid under derivative contracts		(21)	21		(28)	229		
Notional and fair value of derivative contracts	\$ 550,649	\$ 7,704	\$ (4,661)	\$ 576,053	\$ 4,495	\$ (3,186)		

¹ Excludes currency forwards related to Real Estate assets as disclosed in note 5.

(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'. Ontario Teachers' effective net investments reflecting these classifications are summarized in Canadian dollars below as at December 31:

	2020		2019	
	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %
Equity				
Publicly traded	\$ 42,471	19%	\$ 35,844	18%
Non-publicly traded	41,773	19	39,344	19
	84,244	38	75,188	37
Fixed income				
Bonds	17,148	8	72,668	36
Real-rate products	17,399	8	20,440	10
	34,547	16	93,108	46
Inflation sensitive				
Commodities	17,649	8	17,588	9
Natural resources	7,439	4	8,199	4
Inflation hedge	11,536	5	10,277	5
	36,624	17	36,064	18
Real assets				
Real estate	25,200	12	28,692	14
Infrastructure	17,786	8	16,984	8
Real-rate products	1,919	1	–	–
	44,905	21	45,676	22
Innovation	3,474	2	–	–
Credit	17,977	8	16,305	8
Absolute return strategies	13,596	6	16,561	8
Overlay	828	–	272	–
Money market¹	(18,269)	(8)	(79,128)	(39)
Net investments	\$ 217,926	100%	\$ 204,046	100%

¹ Includes term debt.

(E) RISK MANAGEMENT

Objectives

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 includes 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.

Policies

To apply risk management to investments in a consistent manner, Ontario Teachers' has a number of policies, for example:

- 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 year ended December 31, 2020 was last amended March 18, 2020 and includes the following asset class exposure limits:

	Asset Mix % Minimum	Asset Mix % Maximum
Equities	30%	40%
Fixed income	4%	67%
Inflation sensitive	12%	22%
Real assets	19%	29%
Innovation	0%	7%
Credit	3%	13%
Absolute return strategies	4%	14%
Money market ¹	(92)%	0%

¹ The money market asset class provides funding for investments in other asset classes and includes term debt.

- 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.
- CEO Investment Risk Policy – This policy supports the operationalization of the board's risk appetite into the day-to-day management of some key investment risks and articulates the associated roles and responsibilities of the Investment Division, Risk and other functional partners.
- Investment Division Policy – This policy addresses the manner in which the Investment Division is organized under the CIO's oversight for the purpose of undertaking the investment and risk management of the fund and for day-to-day operations management.
- Portfolio policies for each investment department – These policies are developed to apply to the individual portfolios within each asset class managed by the Investment Division. Portfolio policies include the departments' investment strategies, operating procedures, investment constraints, key risks and a description of how the risks will be managed and reporting requirements for each investment department.
- Trading Operations Policy – This policy specifies operational requirements to be followed within the Investment Division to trade on regulated exchanges and in OTC markets.
- Investment Division Counterparty Credit Policy – This policy applies to investments with credit risk exposure that arises from entering into certain counterparty agreements. The policy provides constraints on counterparty credit exposure and procedures for obtaining authorization to trade with a new counterparty.

- Pre-Investment Approval Policy – This policy formalizes the procedures to ensure the data needed for trade capture, pricing, risk management, and accounting is accurate, complete, and can be entered into Ontario Teachers' systems of record on a timely basis prior to commencement of trading.

Processes

Ontario Teachers' uses risk budgeting to allocate active risk across the investment asset classes. The active risk budget is presented to the board annually for review and approval. Each investment department is responsible for managing the investment risks associated with the investments they manage within the active risk budget allocated to them. Each department is subject to compliance with the Statement of Investment Policies and Procedures, the Board Investment Policy (which includes the active risk budget allocated to them), Investment Division Policy, Trading Operations Policy, Pre-Investment Approval Policy and the applicable portfolio policies. In addition, the Total Fund Management department is responsible for maintaining the liquidity positions in accordance with Ontario Teachers' policies on liquidity, and the Total Fund Management and Capital Markets departments are responsible for compliance with the Investment Division Counterparty Credit Policy. The Finance Division independently measures the investment risk exposure and the liquidity position of Ontario Teachers' and provides the information to the Investment Division and the Investment Committee of the board.

Each investment department has an investment committee, or an equivalent, which meets regularly to assess the investment risks associated with the portfolios it manages and determines action plans, if required. Individual managers in each investment department receive limited authority to invest from the board by sub-delegation from senior management. Investment constraints and approval requirements are set out in the portfolio policies for the department, the Investment Division Policy, the CEO Investment Risk Policy and/or the Board Investment Policy. For investments not traded on exchanges, such as alternative investments and private equity investments, the investment departments conduct due diligence before acquisition and use it as a tool to monitor the investments after acquisition. The objective is to obtain as much transparency as possible for the departments to assess the risk exposure arising from these private and alternative investments.

Senior representatives from each investment department are members of one or both of the Investment Committee – Total Fund (IC – TF) and Investment Committee – Global Privates & Illiquids (IC – GPI). The IC-TF is responsible for considerations around the overall investment program with a focus on managing investment risks at a total-fund level. This committee brings together the experience, investment and operational business judgment required for assessing and managing market, credit and liquidity risks on a regular basis. It monitors the currency positions, interest rate risk and liquidity risk at the total-fund level. Chaired by the Chief Investment Officer, the IC-GPI is responsible for the oversight of private market or illiquid transactions and the overall private portfolio composition. The Head of Risk is a member of both Committees. The Chief Legal & Corporate Affairs Officer or a delegate attends the IC-GPI meetings in an advisory capacity. The committees meet at least every other week.

The CEO chairs the Enterprise Risk Management Committee, the CEO-Led Risk Committee (Investments) and the CEO-Led Risk Committee (Member Services). The Enterprise Risk Management Committee oversees the enterprise risk management program of Ontario Teachers' and includes senior representatives from all divisions. The Enterprise Risk Management Committee meets regularly and reports to the board semi-annually and more frequently as necessary. The CEO-Led Risk Committee (Investments) oversees the alignment of the investment program with the risk appetite and mission, vision and values of Ontario Teachers' including policies, committee mandates, significant operational risks and external developments that could have a material impact on the investment program. This committee includes senior representatives from Investments, Risk, Finance, Enterprise Operations and the General Counsel's Office and meets quarterly and more frequently as necessary. The CEO-Led Risk Committee (Member Services) oversees the alignment of the Member Services division with the board's Enterprise Risk Appetite Statement and Ontario Teachers' mission, vision and values. This Committee includes senior members from Risk, Member Services, and Legal and Compliance.

(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.

Credit risk management

Ontario Teachers' actively manages its credit exposures. When over exposures are detected – either in individual exposures or in groups of exposures – Ontario Teachers' takes action to mitigate the risks. Such actions may include reducing the exposures and using credit derivatives.

Ontario Teachers' enters into agreements with counterparties to limit its exposure to credit losses. An International Swaps and Derivatives Association (ISDA) Master Agreement is executed with most OTC derivative counterparties, which allows both parties to settle obligations on a net basis when termination or other predetermined events occur. Ontario Teachers' also negotiates collateral agreements known as credit support annexes (CSAs) with key counterparties to further mitigate counterparty credit risk. A CSA gives Ontario Teachers' the power to realize collateral posted by counterparties in the event of a default by such counterparties.

Since collateral is an important mitigant of counterparty credit risk, Ontario Teachers' routinely obtains collateral from its counterparties, not only under OTC derivative contracts but also under reverse repurchase agreements. Note 2i provides further details on collateral pledged and received.

Ontario Teachers' has a credit risk assessment process to approve prospective new counterparties and to monitor authorized counterparties for derivative contracts, repurchase and reverse repurchase agreements, securities borrowing agreements, prime broker relationships and futures, options, and fixed income clearing. Ontario Teachers' deals primarily with counterparties that have an investment grade credit rating. Policies are in place to limit the maximum exposures to any individual counterparty for derivative contracts or repurchase and reverse repurchase agreements, prime broker relationships and futures and options clearing.

Maximum exposure to credit risk before collateral held

Ontario Teachers' assumes credit risk exposure through debt investments and amounts receivable from the Province of Ontario and brokers. The maximum exposure to credit risk related to these financial instruments is their value as presented in the consolidated statements of financial position and note 2a. Ontario Teachers' is also exposed to credit risk of counterparties to its OTC derivative transactions. Counterparty credit risk exposure for OTC derivatives is measured as the net positive fair value of the contractual obligations with the counterparties.

Counterparties are assigned a credit rating as determined by Ontario Teachers' internal credit risk management function. Counterparty default risk and credit exposures are monitored on a daily basis. Ratings are also compared to their external ratings as provided by recognized credit rating agencies on a daily basis.

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 as at December 31 is as follows:

	2020				
Credit rating (Canadian \$ millions)	Bonds and Short-term investments	Real-rate products	Securities purchased under agreements to resell	Loans and Private debt	OTC Derivatives
AAA/R-1 (high)	\$ 56,709	\$ 21,039	\$ -	\$ -	\$ -
AA/R-1 (mid)	6,362	981	1,811	-	659
A/R-1 (low)	11,112	1,830	2,286	-	1,947
BBB/R-2	3,130	-	204	-	3
Below BBB/R-2	3,182	-	-	-	-
Unrated ¹	2,054	35	6,561	13,302	-
	\$ 82,549	\$ 23,885	\$ 10,862	\$ 13,302	\$ 2,609
	2019				
Credit rating (Canadian \$ millions)	Bonds and Short-term investments	Real-rate products	Securities purchased under agreements to resell	Loans and Private debt	OTC Derivatives
AAA/R-1 (high)	\$ 36,196	\$ 31,159	\$ -	\$ -	\$ -
AA/R-1 (mid)	4,530	934	2,056	-	614
A/R-1 (low)	10,838	2,046	3,922	-	1,069
BBB/R-2	5,345	-	324	-	-
Below BBB/R-2	3,358	-	-	-	-
Unrated ¹	2,856	48	4,928	12,644	-
	\$ 63,123	\$ 34,187	\$ 11,230	\$ 12,644	\$ 1,683

¹ 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).

As at December 31 (Canadian \$ millions)	2020	2019
Guarantees	\$ 332	\$ 274
Loan commitments	9	11
Notional amount of written credit derivatives	40,865	17,364
Total off balance sheet credit risk exposure	\$ 41,206	\$ 17,649

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 December 31, 2020, 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 \$62.3 billion (2019 – \$44.4 billion), U.S. Treasury issued securities of \$6.6 billion (2019 – \$10.4 billion), Province of Ontario bonds of \$8.2 billion (2019 – \$7.7 billion), and receivable from the Province of Ontario (see note 3) of \$3.2 billion (2019 – \$3.1 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.

Due to the COVID-19 pandemic, financial markets experienced exceptional volatility in 2020. Ontario Teachers' exposures across all risk parameters including market, credit, liquidity and leverage, remained within all risk limits set by the board.

Market risk management

Ontario Teachers' manages market risk primarily through diversifying the investments across industry sectors, investment strategies and on a global basis. A variety of derivative contracts are also utilized to manage Ontario Teachers' market risk exposures.

Market and credit risk measurement

Ontario Teachers' uses a statistical Value-at-Risk (VaR)-type approach, the expected tail loss (ETL) methodology, to measure 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 the average of all the 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 on the report only 1% of the time over a one year period, subject to certain assumptions and limitations discussed below.

The ETL methodology is a statistical approach that accounts for market volatility and credit risk as well as risk diversification achieved by investing in various products and markets. Risks are measured consistently across all markets and products and can be aggregated to arrive at a single risk number. The one-year 99% ETL number used by Ontario Teachers' is generated using a historical simulation and bootstrap sampling approach that reflects the expected annual return on the portfolio in the worst 1% of the cases. When sufficient historical data is not available, proxies and statistical methods are used to complete the data series.

There are limitations to the ETL methodology in use. For example, historical data may not provide the best estimate of future changes. It may fail to capture the correlation in asset returns in extreme adverse market movements which have not occurred in the historical window. However, the sampling approach and long historical window mitigate this limitation to some extent by enabling the generation of a set of scenarios that include extreme adverse events. Another limitation is that Ontario Teachers' computes the risk relative to asset positions at the close of the business day. Positions may change substantially during the course of a trading day. These limitations and the nature of the ETL measure mean that Ontario Teachers' losses may exceed the risk exposure amounts indicated in any risk reports.

Ontario Teachers' continuously monitors and enhances the risk calculation methodology, striving for better estimation of risk exposure.

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

(Canadian \$ billions) ¹	2020	2019
Equity		
Publicly traded	\$ 10.5	\$ 9.5
Non-publicly traded	17.5	16.5
Fixed income		
Bonds	11.0	12.0
Real-rate products	4.0	4.5
Inflation sensitive		
Commodities	4.0	4.5
Natural resources	1.5	2.0
Inflation hedge	2.0	3.5
Real assets		
Real estate	4.0	4.5
Infrastructure	3.5	3.5
Real-rate products	0.5	–
Innovation	1.5	–
Credit	2.5	2.5
Absolute return strategies	1.5	1.5
Overlay	10.0	8.5
Money market	9.5	18.0
Total Asset Risk ETL Exposure²	\$ 53.0	\$ 47.5

¹ Rounded to the nearest \$0.5 billion

² 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.

Ontario Teachers' measures interest rate risk of relevant asset classes in its asset mix (note 2d). Ontario Teachers' measures the sensitivity to changes in nominal interest rates of bonds and derivative contracts included in its Fixed Income and Credit asset classes – a 1% increase in nominal interest rates would result in a decline in the value of these investments of \$5.3 billion (2019 – \$9.5 billion). Similarly, Ontario Teachers' measures 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 \$2.6 billion (2019 – \$2.7 billion).

Ontario Teachers' also measures the sensitivity of nominal and real-rate securities and derivative contracts that are included in the Inflation hedge category of Ontario Teachers' Inflation sensitive asset class to changes in market-implied inflation. A 1% increase in the market-implied rate of inflation would result in an increase in the value of these investments of \$0.7 billion (2019 – \$2.1 billion).

As at December 31, 2020, holding the inflation and salary escalation assumptions constant, a 1% decrease in the assumed long-term real rates of return would result in an increase in the pension liabilities of approximately 24% or \$61.9 billion (2019 – 23% or \$50.6 billion).

Foreign currency risk

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

As at December 31, Ontario Teachers' has investments exposed to foreign currency. In Canadian dollars this exposure is as follows:

(Canadian \$ millions)	2020	2019
Currency	Net Exposure	Net Exposure
United States Dollar	\$ 35,442	\$ 38,161
Euro	8,807	4,709
Chinese Renminbi	6,999	2,367
British Pound Sterling	4,549	2,361
Japanese Yen	4,001	3,056
Chilean Peso	3,644	3,347
Mexican Peso	2,247	2,023
Australian Dollar	1,853	1,925
Danish Krone	1,836	1,994
Brazilian Real	1,707	3,538
Other	7,720	10,860
	\$ 78,805	\$ 74,341

As at December 31, 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)	2020	2019
Currency	Change in Net Investment Value	Change in Net Investment Value
United States Dollar	\$ 1,772	\$ 1,908
Euro	440	236
Chinese Renminbi	350	118
British Pound Sterling	228	118
Other	1,150	1,337
	\$ 3,940	\$ 3,717

(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.

Liquidity risk management

Ontario Teachers' monitors its liquidity position daily to ensure sufficient liquid assets are available to meet potential cash and collateral requirements and other contingent payments over different time horizons. 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. In assessing Ontario Teachers' liquidity position, factors such as fair value under a market stress event and the portion of available liquid assets earmarked to meet contractual cash flows and other projected cash flows (such as pension payments) are considered. Potential collateral requirements from Ontario Teachers' positions in securities sold short, repurchase agreements, derivatives contracts, and securities lending and borrowing agreements are estimated under stress by a historical simulation of market movements. In addition, stress tests on the overall liquidity position are performed regularly using various historical and hypothetical scenarios.

Liquid assets

As of December 31, 2020, Ontario Teachers' maintains \$90.4 billion of available liquid assets (December 31, 2019 – \$78.6 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 as at December 31 are as follows:

(Canadian \$ millions)	2020			
	Within One Year	One to Five Years	Over Five Years	Total
Securities sold under agreements to repurchase	\$ (10,184)	\$ (4,001)	\$ –	\$ (14,185)
Securities sold but not yet purchased				
Equities	(1,083)	–	–	(1,083)
Fixed income	(7,155)	–	–	(7,155)
Real estate	(1,579)	(1,170)	(2,742)	(5,491)
Commercial Paper	(3,637)	–	–	(3,637)
Term debt	(2,581)	(10,302)	(4,329)	(17,212)
Cash collateral received under credit support annexes	(3,356)	–	–	(3,356)
Derivative-related, net	(4,661)	–	–	(4,661)
	\$ (34,236)	\$ (15,473)	\$ (7,071)	\$ (56,780)

(Canadian \$ millions)	2019			
	Within One Year	One to Five Years	Over Five Years	Total
Securities sold under agreements to repurchase	\$ (13,648)	\$ (6,173)	\$ –	\$ (19,821)
Securities sold but not yet purchased				
Equities	(900)	–	–	(900)
Fixed income	(9,917)	–	–	(9,917)
Real estate	(1,115)	(1,888)	(2,225)	(5,228)
Commercial Paper	(8,490)	–	–	(8,490)
Term debt	–	(7,187)	–	(7,187)
Cash collateral received under credit support annexes	(988)	–	–	(988)
Derivative-related, net	(3,186)	–	–	(3,186)
	\$ (38,244)	\$ (15,248)	\$ (2,225)	\$ (55,717)

(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 on the contractual agreements and there is no early termination of the contractual agreement. 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 December 31, 2020 is \$nil (2019 – \$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 as at December 31 are as follows:

(Canadian \$ millions)	2020	2019
Securities purchased under agreements to resell and sold under agreements to repurchase		
Gross amounts of securities purchased under agreements to resell ¹	\$ 14,944	\$ 12,204
Collateral held	15,446	12,259
Gross amounts of securities sold under agreements to repurchase ¹	18,267	20,795
Collateral pledged	18,921	20,983
Securities borrowing and lending		
Securities borrowed	1,347	2,796
Collateral pledged ²	1,496	2,965
Derivative-related		
Collateral received ³	3,744	1,842
Collateral pledged ⁴	2,584	1,587

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

2 Includes cash collateral of \$1,081 (2019 – \$901).

3 Includes cash collateral of \$3,356 (2019 – \$988).

4 Includes cash collateral of \$nil (2019 – \$56).

(J) OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

Financial assets and financial liabilities are offset and the net amount is reported in the 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 Consolidated Statement of Financial Position.

The impact of these arrangements as at December 31 is presented in the following table:

(Canadian \$ millions)

	2020					
	Gross amounts	Less: Amounts offset	Net amount presented in note 2a	Amounts subject to netting agreements	Securities and cash collateral ¹	Net Exposure
Financial assets						
Securities purchased under agreements to resell	\$ 14,944	\$ (4,082)	\$ 10,862	\$ (5,103)	\$ (5,621)	\$ 138
Derivative-related receivables	7,704	–	7,704	(1,894)	(3,320)	2,490
	\$ 22,648	\$ (4,082)	\$ 18,566	\$ (6,997)	\$ (8,941)	\$ 2,628
Financial liabilities						
Securities sold under agreements to repurchase	\$ (18,267)	\$ 4,082	\$ (14,185)	\$ 5,103	\$ 9,082	\$ –
Derivative-related liabilities	(4,661)	–	(4,661)	1,894	2,567	(200)
	\$ (22,928)	\$ 4,082	\$ (18,846)	\$ 6,997	\$ 11,649	\$ (200)

(Canadian \$ millions)

	2019					
	Gross amounts	Less: Amounts offset	Net amount presented in note 2a	Amounts subject to netting agreements	Securities and cash collateral ¹	Net Exposure
Financial assets						
Securities purchased under agreements to resell	\$ 12,204	\$ (974)	\$ 11,230	\$ (7,121)	\$ (3,918)	\$ 191
Derivative-related receivables	4,495	–	4,495	(1,608)	(1,600)	1,287
	\$ 16,699	\$ (974)	\$ 15,725	\$ (8,729)	\$ (5,518)	\$ 1,478
Financial liabilities						
Securities sold under agreements to repurchase	\$ (20,795)	\$ 974	\$ (19,821)	\$ 7,121	\$ 12,649	\$ (51)
Derivative-related liabilities	(3,186)	–	(3,186)	1,608	1,454	(124)
	\$ (23,981)	\$ 974	\$ (23,007)	\$ 8,729	\$ 14,103	\$ (175)

¹ Securities and cash collateral exclude over-collateralization and collateral in transit. See note 2i for the total amount of collateral.

Note 3. Receivable from the Province of Ontario

The receivable from the Province consists of required matching contributions and interest thereon.

As at December 31 (Canadian \$ millions)	2020	2019
Contributions receivable	\$ 3,141	\$ 3,110
Accrued interest receivable	38	36
	\$ 3,179	\$ 3,146

The receivable as at December 31, 2020, from the Province of Ontario consists of \$1,602 million, which was received in January 2021, and an estimated \$1,577 million to be received with interest in January 2022. The receivable as at December 31, 2019, from the Province consisted of \$1,565 million, which was received in January 2020, and an initial estimate of \$1,581 million which was received in January 2021. The difference between the initial estimates and the actual amount received was due to interest.

Note 4. Accrued pension benefits

(A) ACTUARIAL ASSUMPTIONS

The actuarial assumptions used in determining the value of accrued pension benefits of \$257,330 million (2019 – \$224,669 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 December 31	2020	2019
Discount rate	2.00%	2.50%
Salary escalation rate ¹	2.50%	2.35%
Inflation rate	1.50%	1.35%
YMPE/ITA limit growth ²	2.25%/2.50%	2.35%
Real rate ³	0.50%	1.15%

¹ In 2020, the salary escalation rate is revised to be 1% per year for the period from September 1, 2019 through to August 31, 2022 and 2.50% per year commencing September 1, 2022.

² YMPE/ITA limit growth is the sum of the inflation rate and the Average Industrial Wage (AIW) real wage growth rate of 0.75% (1.0% as at December 31, 2019) until 2024 and 1.0% thereafter.

³ Real rate shown as the geometric difference between the discount rate and the inflation rate.

The primary economic assumptions were changed as a result of changes in capital markets during 2020 and the new salary agreements reached in 2020 noted below. In addition, there was a change to the Average Industrial Wage (AIW) real wage growth rate assumption to reflect lower expectations over the short-term. The assumption of AIW real wage growth rate prior to 2025 has been lowered from 1.0% (as at December 31, 2019) to 0.75% (as at December 31, 2020). The assumption of AIW real wage growth rate after 2024 remains at 1.0%. This assumption, combined with the inflation rate, is used to project the ITA limit and the Year's Maximum Pensionable Earnings (YMPE). These changes in economic assumptions resulted in a net increase in the value of accrued pension benefits of \$26,410 million (2019 – \$25,855 million increase).

Under the three-year collective agreements ratified with the Province of Ontario in 2020, active teachers receive a 1% increase to salaries per year, for three school years, effective from September 1, 2019 through to August 31, 2022. The salary increase agreement resulted in a net decrease in the value of accrued pension benefits of \$4,147 million as at December 31, 2020, which is included as part of the change in primary economic assumptions.

The non-economic assumptions were 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 has been introduced. The changes in non-economic assumptions increased the accrued pension benefits by \$728 million as at December 31, 2020 (2019 – \$340 million decrease).

The changes in economic and non-economic assumptions resulted in a net increase in the value of accrued pension benefits of \$27,138 million. (2019 – \$25,515 million net increase).

(B) INDEXATION LEVELS

Pension credit earned after December 31, 2009 is subject to conditional inflation protection as described in paragraph (f) of the Description of Plan note. Indexation levels vary between 50% and 100% of the change in the Consumer Price Index (CPI) for pension credit earned between January 1, 2010, and December 31, 2013, and vary between 0% and 100% of the change in the CPI for pension credit earned after 2013. Conditional inflation protection can only be invoked and changes to indexation 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 levels stated in the most recent funding valuation filing. As a result, the December 31, 2020 accrued pension benefits reflect the indexation levels as stated in the January 1, 2020 funding valuation report.

As noted in the filed January 1, 2020 funding valuation, indexation levels are at 100% of CPI 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 indexation levels reflected in accrued pension benefits as at December 31 are as follows:

	2020¹	2019 ²
	Inflation protection level	Inflation protection level
Pension credit		
Earned before 2010	100% of CPI	100% of CPI
Earned during 2010–2013	100% of CPI	100% of CPI
Earned after 2013	100% of CPI	100% of CPI

¹ Inflation protection levels per the January 1, 2020 funding valuation.

² Inflation protection levels per the January 1, 2018 funding valuation.

(C) EXPERIENCE GAINS AND LOSSES

Experience gains on the accrued pension benefits of \$1,097 million (2019 – \$853 million losses) arose from differences between the actuarial assumptions and actual results.

Note 5. 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. Ontario Teachers' consolidates the fair value of the assets and liabilities of CFCL and the investment holding companies managed by CFCL. Investment holding companies and investment entities, including the joint ventures, managed by external parties, are recognized as Ontario Teachers' investments measured at fair value and presented on a non-consolidated basis.

The tables below provide information on the real estate portfolio. Intercompany transactions and balances are eliminated upon consolidation. The first table presents major components of the net investment in real estate. The second table presents major components of net real-estate income:

As at December 31	2020		2019	
(Canadian \$ millions)	Fair Value	Cost	Fair Value	Cost
Assets^{1,2}				
Real estate properties	\$ 27,368	\$ 18,450	\$ 29,604	\$ 17,193
Investments	2,577	4,107	3,812	3,902
Other assets	797	769	352	347
Total assets	30,742	23,326	33,768	21,442
Liabilities^{1,2}				
Long-term debt	3,571	3,442	4,057	3,937
Other liabilities	1,920	1,631	1,171	786
Total liabilities	5,491	5,073	5,228	4,723
Net investment in real estate	\$ 25,251	\$ 18,253	\$ 28,540	\$ 16,719

1 U.S. Dollar, Mexican Pesos and Colombian Pesos net assets have been hedged by way of foreign currency forward contracts for a notional amount of \$1,507 million (2019 – \$769 million) with a combined fair value of \$25 million (2019 – \$4 million).

2 Joint ventures managed by external parties hold real estate properties and have liabilities. The net asset value of these joint ventures is included in investments, representing assets of \$1,581 million (2019 – \$1,729 million) and liabilities of \$507 million (2019 – \$590 million).

(Canadian \$ millions)	2020	2019
Revenue		
Rental	\$ 1,750	\$ 2,020
Investment and other	72	115
	1,822	2,135
Expenses		
Property operating	917	831
General and administrative	58	94
Other	19	25
	994	950
Operating income	828	1,185
Interest expense	(136)	(136)
Income	692	1,049
Net investment (loss)/gain	(4,757)	475
Net real estate income (note 6)	\$ (4,065)	\$ 1,524

Note 6. Net investment income

Net investment income is reported net of management fees, transaction costs, and is grouped by asset class. Net investment income, after giving effect to derivative contracts, for the year ended December 31, is as follows:

(Canadian \$ millions)								2020
	Income ¹	Realized	Unrealized	Investment Income ²	Management Fees	Transaction Costs	Net Investment Income	
Equity								
Publicly traded								
Canadian	\$ (12)	\$ (87)	\$ 1	\$ (98)	\$ –	\$ (4)	\$ (102)	
Non-Canadian	390	4,557	3,254	8,201	(76)	(47)	8,078	
Non-publicly traded								
Canadian	160	(3)	1,263	1,420	(7)	(34)	1,379	
Non-Canadian	838	1,568	258	2,664	(351)	(105)	2,208	
	1,376	6,035	4,776	12,187	(434)	(190)	11,563	
Fixed income								
Bonds	1,230	(395)	4,978	5,813	(2)	(47)	5,764	
Short-term investments	(7)	(399)	8	(398)	(2)	–	(400)	
Canadian real-rate products	420	1,426	487	2,333	–	–	2,333	
Non-Canadian real-rate products	90	4,951	(2,487)	2,554	–	–	2,554	
	1,733	5,583	2,986	10,302	(4)	(47)	10,251	
Alternative investments	103	(56)	442	489	(27)	(2)	460	
Inflation sensitive								
Commodities	(52)	(309)	644	283	–	(6)	277	
Timberland	70	–	(84)	(14)	(2)	–	(16)	
Natural resources	286	–	(1,244)	(958)	–	(13)	(971)	
	304	(309)	(684)	(689)	(2)	(19)	(710)	
Real assets								
Real estate (note 5)	711	66	(4,823)	(4,046)	(2)	(17)	(4,065)	
Infrastructure	507	953	(922)	538	(12)	(65)	461	
	1,218	1,019	(5,745)	(3,508)	(14)	(82)	(3,604)	
Overlay	(13)	(495)	559	51	–	–	51	
Total	\$ 4,721	\$ 11,777	\$ 2,334	\$ 18,832	\$ (481)	\$ (340)	\$ 18,011	

¹ Income includes interest, dividends, real estate operating income (net of interest expense), and other investment-related income and expenses.

² Net of certain management and performance fees.

Net Investment Income								2019
(Canadian \$ millions)	Income ¹	Realized	Unrealized	Investment Income ²	Management Fees	Transaction Costs	Net Investment Income	
Equity								
Publicly traded								
Canadian	\$ 35	\$ (295)	\$ 479	\$ 219	\$ –	\$ (3)	\$ 216	
Non-Canadian ³	522	652	2,018	3,192	(68)	(35)	3,089	
Non-publicly traded								
Canadian	177	(1)	601	777	(48)	(41)	688	
Non-Canadian	846	2,490	(190)	3,146	(322)	(135)	2,689	
	1,580	2,846	2,908	7,334	(438)	(214)	6,682	
Fixed income³								
Bonds	1,286	1,884	1,690	4,860	(1)	(18)	4,841	
Short-term investments	(5)	(130)	428	293	(2)	–	291	
Canadian real-rate products	475	46	1,020	1,541	–	–	1,541	
Non-Canadian real-rate products	147	512	654	1,313	–	–	1,313	
	1,903	2,312	3,792	8,007	(3)	(18)	7,986	
Alternative investments³	127	894	(717)	304	(101)	(1)	202	
Inflation sensitive								
Commodities	(251)	128	1,417	1,294	–	(9)	1,285	
Timberland	66	–	(155)	(89)	–	–	(89)	
Natural resources	304	–	(41)	263	(4)	(3)	256	
	119	128	1,221	1,468	(4)	(12)	1,452	
Real assets								
Real estate (note 5)	1,074	213	262	1,549	(2)	(23)	1,524	
Infrastructure	550	(142)	330	738	(23)	(46)	669	
	1,624	71	592	2,287	(25)	(69)	2,193	
Overlay	(13)	1,036	647	1,670	–	–	1,670	
Total	\$ 5,340	\$ 7,287	\$ 8,443	\$ 21,070	\$ (571)	\$ (314)	\$ 20,185	

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

2 Net of certain management and performance fees.

3 Alternative investments have been re-classified out of Fixed Income to more appropriately reflect the nature of these assets. Additionally, Non-Canadian publicly traded equity has been re-stated to re-classify some fund assets to Alternative investments. Alternative Investments is comprised primarily of hedge funds and public equity funds.

Note 7. Investment returns and related benchmark returns

Investment returns and related benchmark returns by investment asset class for the year ended December 31 are as follows:

	2020		2019	
	Investment Returns	Investment Benchmark Returns	Investment Returns	Investment Benchmark Returns
Equity ¹	13.2%	12.1%	12.4%	17.0%
Fixed Income ¹	20.7	20.6	6.3	6.3
Inflation sensitive ¹	(2.4)	(1.6)	2.7	3.5
Real assets ¹	(7.6)	(0.1)	5.8	4.6
Innovation ¹	16.3	16.3	–	–
Credit ¹	2.6	1.5	7.3	8.3
Total fund net return ^{2,3}	8.6%	10.7%	10.4%	12.2%

1 Net of transaction costs and management fees but before Ontario Teachers' investment administration expenses.

2 Absolute return strategies, Overlay and Money market are included in the total fund net return and not shown separately.

3 The total fund net return includes Ontario Teachers' investment administrative expenses.

Investment returns have been calculated using a time-weighted rate of return methodology.

Ontario Teachers' identifies benchmarks to evaluate the investment management performance. The performance of each asset class is measured against benchmarks that simulate the results based on the asset class.

The total fund net return is measured against a Canadian dollar-denominated composite benchmark produced by aggregating returns from each of the policy asset-class benchmarks.

Note 8. 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 consolidated 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, 2020, by Mercer (Canada) Limited and disclosed a funding surplus of \$11.7 billion. The co-sponsors classified the surplus as a contingency reserve.

Note 9. Contributions

(Canadian \$ millions)	2020	2019
Members		
Current service ¹	\$ 1,544	\$ 1,548
Optional credit	41	37
	1,585	1,585
Province of Ontario		
Current service	1,534	1,537
Interest	28	26
Optional credit	37	34
	1,599	1,597
Designated employers	37	34
Transfers from other pension plans	11	7
	48	41
	\$ 3,232	\$ 3,223

¹ Contributions past due are less than \$1 million in 2020 and 2019.

Note 10. Benefits

(Canadian \$ millions)	2020	2019
Retirement pensions	\$ 6,087	\$ 5,858
Death benefits	464	427
Disability pensions	24	24
Commuted value transfers	89	68
Family law transfers	30	28
Transfers to other plans	5	7
Benefits paid	\$ 6,699	\$ 6,412
Other payments ²	1	3
	\$ 6,700	\$ 6,415

² 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 11. Administrative expenses

(A) INVESTMENT EXPENSES

(Canadian \$ millions)	2020	2019
Salaries, incentives and benefits	\$ 426.6	\$ 387.2
Premises and equipment	65.5	60.8
Professional and consulting services	80.0	89.2
Information services	33.8	31.4
Communication and travel	5.3	21.4
Custodial fees	8.5	10.4
Statutory audit fees	3.8	3.1
Board and committee remuneration	1.2	1.2
Other	6.6	10.2
	\$ 631.3	\$ 614.9

(B) MEMBER SERVICES EXPENSES

(Canadian \$ millions)	2020	2019
Salaries, incentives and benefits	\$ 46.9	\$ 44.1
Premises and equipment	25.4	20.6
Professional and consulting services	9.1	10.1
Communication and travel	0.6	1.1
Statutory audit fees	–	0.1
Board and committee remuneration	0.1	0.2
Other	1.2	1.2
	\$ 83.3	\$ 77.4

(C) COMPENSATION OF KEY MANAGEMENT PERSONNEL

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of Ontario Teachers', being its board members, the executive team and the senior managing directors of the Investment Division.

The compensation of the key management personnel is included in the administrative expenses of Ontario Teachers'. There are no other related party transactions between the key management personnel and Ontario Teachers'.

The compensation of the key management personnel¹ as at December 31 is summarized below:

(Canadian \$ millions)	2020	2019
Short-term employee benefits	\$ 17.1	\$ 19.8
Post-employment benefits	2.5	5.4
Termination benefits	1.4	1.3
Other long-term benefits	19.6	19.6
	\$ 40.6	\$ 46.1

¹ The table does not include compensation of either officers or directors of The Cadillac Fairview Corporation Limited.

(D) EMPLOYEES' POST-EMPLOYMENT BENEFITS

The employees of Ontario Teachers' are members of the defined benefit plans, of either the Ontario Public Service Employees Union (OPSEU) Pension Plan or Public Service Pension Plan (PSPP). The expected contributions from Ontario Teachers' in 2021 are approximately \$16.8 million. Some employees are also members of the Public Service Supplementary Plan (PSSP). These three pension plans are sponsored by the Province of Ontario and information is available on www.optrust.com and www.opb.ca. As the employer, Ontario Teachers' matches the employees' contributions to these pension plans. Some senior management employees also participate in a non-registered, unfunded Supplemental Employee Retirement Plan (SERP) managed by Ontario Teachers' to provide the employees non-indexed retirement benefits equal to 2% of the employee's pensionable earnings times the number of years of service, less the initial annual pension to which the employee is entitled under the PSPP and PSSP, combined. The contributions expensed by Ontario Teachers' during the year were \$21.8 million (2019 – \$30.4 million). Contributions are included in the salaries, incentives and benefits expenses.

Note 12. Capital

Funding valuation surpluses or deficits as determined by an independent actuary are considered Ontario Teachers' capital for the purposes of the consolidated financial statements. See note 8 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' Agreement², the Plan cannot be in a deficit position when such reports are filed³. 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).

Note 13. Retirement compensation arrangement (RCA)

Restrictions in the ITA on the payment of certain benefits from an RPP for periods of service after 1991 may impact some Plan members. To address affected members, the RCA was established by agreement between the co-sponsors as a supplementary plan to provide these benefits.

The RCA is administered under a trust separate from the assets of the RPP. Ontario Teachers' has been appointed by the co-sponsors to act as the trustee of the RCA Trust.

² 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.

³ 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 indexation levels below 100% and any contingency reserve is equal to the sum of the Plan's market value of assets, asset smoothing adjustment (if applicable), present value of future contributions and present value of future matching of foregone inflation adjustments.

Under the terms of the RCA, its net assets available for benefits and the value of accrued benefits and deficit (referred to below) must constitute a distinct fund held separate from the RPP, and are not included in the consolidated financial statements of Ontario Teachers'.

The RCA is funded primarily on a pay-as-you-go basis from a portion of the contributions directed to Ontario Teachers' by members, the Province and designated employers. The portion is based on a limit on contributions to the RPP with contributions in excess of the limit being remitted to the RCA. The limit is determined annually by the board, after consulting the Plan's independent actuary. Since 2016, the limit has remained at \$14,500 per member. Ontario Teachers' objective is to ensure sufficient funds exist within the RCA to pay for several years (but not more than 10 years) of projected benefits following each valuation date. Due to the funding policy adopted by the co-sponsors, the net assets available for benefits will continue to be substantially less than the accrued benefits.

The RCA financial statements are in compliance with Section 4600 and IFRS. A summary of the financial statements for the RCA, is as follows:

As at December 31 (Canadian \$ thousands)	2020	2019
Statements of financial position		
NET ASSETS AVAILABLE FOR BENEFITS		
Assets	\$ 57,787	\$ 54,095
Liabilities	(3,148)	(3,298)
	\$ 54,639	\$ 50,797
ACCRUED PENSION BENEFITS AND DEFICIT		
Accrued pension benefits	\$ 485,015	\$ 463,446
Deficit	(430,376)	(412,649)
	\$ 54,639	\$ 50,797

For the year ended December 31 (Canadian \$ thousands)	2020	2019
Statements of changes in net assets available for benefits		
Contributions	\$ 14,786	\$ 14,283
Investment income	309	388
	15,095	14,671
Benefits paid	11,116	10,251
Expenses	137	246
	11,253	10,497
Increase in net assets available for benefits	\$ 3,842	\$ 4,174

The actuarial assumptions used in determining the value of accrued benefits are consistent with the Plan except that the assumed discount rate has been adjusted to reflect the impact of the 50% refundable tax applicable to the RCA.

The estimate of the value of accrued benefits is highly sensitive to salary increases, both actual and assumed. Any changes to the salary assumptions can have a material impact on the liabilities for future benefits. In addition, significant uncertainty exists in projecting the liabilities of the RCA due to changes in the number of future participants as well as changes to the income tax regulations relating to pensions.

Note 14. 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 December 31, 2020, these commitments totaled \$24,539 million (2019 – \$16,096 million).

Note 15. Guarantees and indemnifications

GUARANTEES

Ontario Teachers' provides guarantees to third parties related to certain companies Ontario Teachers' invests in and will be called upon to satisfy the guarantees if the companies fail to meet their obligations. Ontario Teachers' expects most guarantees to expire unused. No payments have been made by Ontario Teachers' in either 2020 or 2019 under these guarantees.

Ontario Teachers' guarantees loan and credit agreements which will expire by 2023. Ontario Teachers' maximum exposure is \$157 million as at December 31, 2020 (2019 – \$98 million). The companies have drawn \$41 million under the agreements (2019 – \$33 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 December 31, 2020 (2019 – \$74 million). There were no default lease payments in either 2020 or 2019.

Ontario Teachers' also guarantees the ability of certain investee companies to settle certain financial obligations. Ontario Teachers' maximum exposure is \$81 million as at December 31, 2020 (2019 – \$94 million).

The Cadillac Fairview Corporation Limited manages the real estate investments and has provided construction completion and cost overrun guarantees, for which the maximum exposure cannot be determined because the projects are not yet complete. The guarantees on the related construction loans amounted to \$20 million as at December 31, 2020 (2019 – \$8 million) and have not been recognized in the real estate liabilities. These guarantees will expire by 2023.

Ontario Teachers' also guarantees the following obligations which are consolidated. The fair values of the obligations are included in Ontario Teachers' investment-related liabilities.

Ontario Teachers' guarantees the \$750 million 4.31% Series B Debenture issued by a real estate trust. No payments have been made by Ontario Teachers' into the real estate trust or related to the debenture. The debenture, maturing on January 25, 2021 may be redeemed by the issuer at any time prior to maturity.

Ontario Teachers' also guarantees commercial paper and term debt issued by Ontario Teachers' Finance Trust (OTFT) which Ontario Teachers' consolidates.

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%
April 2018	USD	\$2.00 billion	April 2021	2.750%
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 Green Bond	EUR	€0.75 billion	November 2030	0.050%

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 December 31, 2020 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 December 31, 2020, commercial paper issued amounted to \$3,638 million (December 31, 2019 – \$8,517 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.

Major investments

Fixed income and short-term investments over \$200 million

Type (Canadian \$ millions)	Maturity	Coupon (%)	Fair Value	Cost
Government of Canada bonds	2021–2064	0.25–8.00	\$ 27,934	\$ 25,031
Canada treasury bills	2021–2021	0.00–0.00	19,724	19,712
Provincial bonds	2021–2060	0.00–6.35	13,539	11,790
Securities purchased under agreements to resell	2021–2022	(0.85)–0.42	10,862	10,838
International corporate bonds	2021–2060	0.00–15.70	7,794	7,101
Bank notes	2021–2059	0.00–0.00	4,156	4,162
International sovereign debt	2021–2050	0.00–7.00	1,528	1,507
U.S. treasury bills	2021–2021	0.00–0.00	1,019	1,046
Canadian corporate bonds	2021–2047	0.00–14.00	438	414
U.S. treasury bonds	2025–2050	0.25–1.25	(818)	(849)
Commercial paper issued	2021–2021	0.00–0.00	(3,637)	(3,761)
Securities sold under agreements to repurchase	2021–2023	(0.86)–0.49	(14,185)	(14,172)
Term debt issued	2021–2030	0.05–2.75	(17,212)	(17,084)

Real-return investments over \$200 million

Type (Canadian \$ millions)	Maturity	Coupon (%)	Fair Value	Cost
Real-return Canada bonds	2021–2047	1.25–4.25	\$ 14,652	\$ 10,123
U.S. treasury inflation protection	2021–2030	0.13–0.13	6,386	6,552
Real-return provincial bonds	2021–2036	2.00–4.50	2,092	1,222
Real-return Canadian corporate bonds	2026–2039	0.00–5.33	719	318

Corporate shares/units over \$200 million

As at December 31, 2020 (millions)

Security	Shares	Fair Value
The AZEK Company Inc.	39.2	\$ 1,921.3
Multiplan Empreendimentos Imobiliarios S.A.	164.4	948.9
Alibaba Group Holding Ltd.	10.6	739.5
Samsung Electronics Co. Ltd.	6.0	566.7
The Communication Services Select Sector SPDR® Fund	5.9	508.6
Barry Callebaut AG	0.2	477.2
Microsoft Corp	1.5	429.7
Novartis AG	3.4	409.0
The Consumer Staples Select Sector SPDR® Fund	4.7	404.6
Taiwan Semiconductor Manufacturing Company Limited	14.9	359.4
Capital One Financial Corp.	2.7	346.0
The Macerich Company	24.6	333.9
CSX Corporation	2.8	326.1
JPMorgan Chase & Co.	1.9	313.0
ServiceNow, Inc.	0.4	309.1
Cushman & Wakefield PLC	14.6	276.5
Alphabet Inc.	0.1	265.7
HDFC Bank Limited	9.3	232.7
Berry Global Group, Inc.	3.2	231.5
Safran SA	1.3	226.0
Berkshire Hathaway Inc.	0.7	213.6
Tencent Holdings Ltd	2.2	204.4

Real estate properties over \$200 million

As at December 31, 2020

Property	Total Square Footage (in thousands)	Effective % Ownership
Canadian Regional Shopping Centres		
Champlain Place, Dieppe	850	100%
Chinook Centre, Calgary	1,431	100%
Fairview Mall, Toronto	779	50%
Fairview Park Mall, Kitchener	647	100%
Fairview Pointe Claire, Montreal	964	50%
Le Carrefour Laval, Montreal	1,276	67%
Les Galeries D'Anjou, Montreal	1,141	50%
Les Promenades St. Bruno, Montreal	922	100%
Lime Ridge Mall, Hamilton	813	100%
Market Mall, Calgary	1,006	50%
Markville Shopping Centre, Markham	988	100%
Masonville Place, London	664	100%
Pacific Centre, Vancouver	1,072	50%
Polo Park Mall, Winnipeg	1,325	100%
Richmond Centre, Richmond	664	50%
Rideau Centre, Ottawa	1,607	100%
Sherway Gardens, Toronto	1,291	100%
Toronto Eaton Centre, Toronto	2,540	100%
Canadian Office Properties		
City Centre Office, Calgary	858	100%
Deloitte Tower, Montreal	513	100%
Pacific Centre Office Complex, Vancouver	1,819	50%
RBC Centre, Toronto	1,222	50%
Toronto-Dominion Centre Office Complex, Toronto	4,418	70%
Toronto Eaton Centre Office Complex, Toronto	2,192	100%
Waterfront Centre, Vancouver	401	50%
Yonge Corporate Centre, Toronto	660	100%
160 Front Street West, Toronto	1,254	50%
16 York Street, Toronto	896	70%
Canadian Hotel Properties		
Ritz Carlton, Toronto	335	100%
Land		
East Harbour Lands, Toronto	152	100%
International Office Properties		
White City Place, London, U.K.	927	100%

Private investments over \$200 million

As at December 31, 2020

24-7 Intouch Inc.	DaVinciRe Holdings Ltd.	LMAP 903 Limited	SeaCube Container Leasing Ltd.
Actera Partners II L.P.	Empresa de Servicios Sanitarios del Bio-Bio S.A.	LMAP 904 Limited	SH Old Quarry LP
ADNOC Gas Pipelines Assets LLC	Epic Games, Inc.	LMAP 909	Shearer's Foods, Inc.
AEA Investors Fund VI LP	Esval S.A.	LMAP 910	Silver Lake Partners IV, L.P.
Aethon Energy Management LLC	EWP PA Fund, LTD.	LMAP Chi Limited	Sixth Cinven Fund (No.4) Limited Partnership
Aethon III LLC	FAPS Holdings, Inc.	LMAP Epsilon Limited	Skyway Concession Company LLC
Allworth Financial Holdings, LLC	FirstFruits HoldCo, LLC	London City Airport Limited	SmartFit Escola de Ginástica e Dança S.A
Amica Senior Lifestyles	Fleet Complete	Lowell Group Limited	Sociedad Austral de Electricidad S.A.
Anthem Entertainment Group Inc.	Flexera Holdings, L.P.	LPC Multifamily Holdco LLC	Solus Offshore Opportunities Fund 5 LP
Apollo Hybrid Value Overseas Partners (Delaware 892), L.P.	Flynn Restaurant Group LLC	MBK Partners Fund IV, L.P.	Sovos Compliance, LLC
Apollo Special Situations Fund, L.P.	FMAP ACL Limited	MBK Partners III, L.P.	Space Exploration Technologies Corp.
Aroona Farms SA Pty Ltd.	FMAP EAM Limited	Memora Servicios Funerarios, S.L.U.	Stone Canyon Industries Holdings Inc.
Arterra Wines Canada, Inc.	FMAP PCM Limited	MSB Capital Limited Class A	Storapod Holding Company, Inc.
Automobile Protection Corporation	FMAP SOC Limited	Nordic Capital IX Alpha, L.P.	Sydney Desalination Plant Pty Limited
Autopista Arco Norte, S.A. de CV	FMAP WMC Limited	Nuevosur, S.A.	Synlab Limited
Baldr Fund Inc.	Fondo de Capital Privado Terranum	Oaktree European Principal Fund IV L.P.	TACF Institutional Credit Fund
BaseCore Metals LP	GCT Global Container Terminals Inc.	OGF SA	Techem GmbH
BC European Capital X - 7 LP	Goldcrest Farm Trust REIT LLC	Orbis Institutional Global Equity L.P.	The Brussels Airport Company
Bear Holdings LP (New Afton Royalty)	Hancock Timber Resources Group	Orgain, Inc.	Thoma Bravo Fund XII-A, L.P.
Birmingham Airport Holdings Limited	Heartland Dental Care, Inc.	OTPP Environmental Services Trust – GFL Environmental Inc.	Thoma Bravo Fund XIII-A, L.P.
Bristol Airport Limited	Heritage Royalty Limited Partnership	Outdoor Holdings, LLC	TierPoint, LLC
Broad Street Loan Partners III Offshore, LP	Hg Saturn A L.P.	Pacifico Sur	Traeger Pellet Grills Holdings LLC
BroadStreet Capital Partners, Inc.	HRG Royalty II LLC	PAG Asia II LP	Trivium Packaging
Busy Bees Benefits Holdings Limited	HRG Royalty LLC	Polar Multi-Strategy Fund (Legacy)	Verily Life Sciences LLC
Canada Guaranty Mortgage Insurance Company	HS Santanoni Fund Ltd.	Pony AI Inc.	VIN White Fund Limited
CeramTec GmbH	IDEAL Group	Premier Lotteries Investment UK Limited (Camelot Group)	Voloridge Fund, Ltd.
Cerberus OT Partners II, L.P.	Inmarsat Group Holdings Limited	Princeton Digital Group Limited	Warburg Pincus Private Equity XII-B, L.P.
CIBanco, S.A. CIB/477	Intact Financial Corporation	RedBird Capital Partners Platform LP	Westerleigh Group Holdings Limited
Compass Holdings LLC	Intercos S.P.A.	RedBird Series 2019, LP	Zuoyebang Education Limited
Copenhagen Airport A/S	Irish National Lottery	Resource Management Service Inc.	
CSC ServiceWorks Holdings, Inc.	Jasper Farms	RSA Security LLC	
Cubico Sustainable Investments Limited	Kedaara Capital I Limited	SCI PH Inc.	
	Kyobo Life Insurance Co., Ltd.	Scotia Gas Networks Limited	
	Lendmark Financial Services		

Eleven-year financial review

(Canadian \$ billions)	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
CHANGE IN NET ASSETS											
Income											
Net investment income	\$18.01	\$20.19	\$5.23	\$16.98	\$7.00	\$19.67	\$16.26	\$13.72	\$14.75	\$11.74	\$13.27
Contributions											
Members/transfers	1.63	1.62	1.60	1.71	1.70	1.67	1.63	1.55	1.48	1.41	1.35
Province of Ontario	1.60	1.60	1.57	1.68	1.66	1.64	1.59	1.53	1.46	1.41	1.35
Total income	21.24	23.41	8.40	20.37	10.36	22.98	19.48	16.80	17.69	14.56	15.97
Expenditures											
Benefits	6.70	6.42	6.14	5.93	5.72	5.54	5.31	5.15	4.92	4.66	4.50
Investment expenses	0.63	0.61	0.56	0.47	0.45	0.43	0.41	0.36	0.30	0.29	0.29
Member Services expenses	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.05	0.05
Total expenditures	7.41	7.11	6.77	6.46	6.23	6.02	5.77	5.56	5.26	5.00	4.84
Increase in net assets	\$13.83	\$16.30	\$1.63	\$13.91	\$4.13	\$16.96	\$13.71	\$11.24	\$12.43	\$9.56	\$11.13
NET ASSETS											
Investments											
Equity											
Publicly traded	\$42.47	\$35.84	\$31.60	\$35.13	\$38.97	\$49.85	\$48.27	\$47.62	\$48.43	\$40.35	\$36.74
Non-publicly traded	41.77	39.34	33.35	31.94	26.98	27.69	20.58	14.27	11.08	11.32	10.75
Fixed income											
Bonds	17.15	72.67	58.25	41.41	43.53	37.98	35.19	30.53	28.87	26.50	22.73
Real-rate products	17.40	20.44	19.47	19.96	31.72	31.13	30.36	26.37	31.14	29.29	23.24
Inflation sensitive											
Commodities	17.65	17.59	10.61	11.08	4.18	4.00	9.03	8.21	6.97	5.64	5.22
Natural resources	7.44	8.20	8.12	6.55	6.28	6.25	2.87	2.62	2.17	2.17	2.22
Inflation hedge	11.53	10.28	8.71	8.92	-	-	-	-	-	-	-
Real assets											
Real estate	25.20	28.69	27.45	25.51	26.47	24.86	22.09	19.24	16.86	14.96	16.86
Infrastructure	17.79	16.98	17.80	18.74	17.83	15.66	12.66	11.68	9.65	8.71	7.07
Real-rate products	1.92	-	4.33	1.45	-	-	-	-	-	-	-
Innovation	3.47	-	-	-	-	-	-	-	-	-	-
Credit	17.98	16.31	15.23	13.58	-	-	-	-	-	-	-
Absolute return strategies	13.60	16.56	12.55	10.73	13.28	17.76	15.84	12.20	12.27	12.33	11.38
Overlay	0.83	0.27	(0.38)	(0.27)	0.51	-	-	-	-	-	-
Money market	(18.27)	(79.12)	(59.51)	(39.38)	(37.67)	(46.93)	(44.50)	(33.84)	(40.18)	(35.01)	(31.49)
Net investments	217.93	204.05	187.58	185.35	172.08	168.25	152.39	138.90	127.26	116.26	104.72
Receivable from Province of Ontario	3.18	3.14	3.22	3.31	3.27	3.21	3.10	2.97	2.83	2.72	2.63
Other assets	1.06	0.98	0.79	1.59	1.21	0.44	0.22	0.14	0.50	0.51	0.57
Other liabilities	(0.93)	(0.76)	(0.48)	(0.77)	(0.99)	(0.46)	(1.23)	(1.25)	(1.07)	(2.39)	(0.39)
Net assets	221.24	207.41	191.11	189.48	175.57	171.44	154.48	140.76	129.52	117.10	107.53
Accrued pension benefits	257.33	224.67	192.28	204.32	189.40	173.27	172.73	148.57	166.01	162.59	146.89
Deficit	\$(36.09)	\$(17.26)	\$(1.17)	\$(14.84)	\$(13.83)	\$(1.83)	\$(18.25)	\$(7.81)	\$(36.49)	\$(45.49)	\$(39.36)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
PERFORMANCE (percent)											
Total-fund net return	8.6	10.4	2.5	9.7	4.0	12.7	11.5	10.6	12.7	10.9	14.0
Benchmark	10.7	12.2	0.7	8.2	3.5	10.1	10.1	9.3	11.0	9.8	9.8
ASSUMPTIONS USED FOR FINANCIAL STATEMENT VALUATION											
As at December 31 (percent)											
Discount rate	2.00	2.50	3.20	2.95	3.25	3.25	3.35	4.20	3.40	3.40	4.05
Salary escalation rate	2.50	2.35	2.40	2.70	2.80	2.50	2.70	3.00	3.00	3.05	3.40
Inflation rate	1.50	1.35	1.40	1.70	1.80	1.50	1.70	2.00	2.00	2.05	2.40
Real rate ¹	0.50	1.15	1.80	1.25	1.40	1.70	1.65	2.20	1.40	1.35	1.65

¹ Effective December 31, 2015, real rate shown as the geometric difference between the discount rate and the inflation rate. Previously, the real rate shown was based on the arithmetic difference between the discount rate and the inflation rate.

Filed funding valuation history

Funding valuations must be filed with pension regulatory authorities at least every three years. Valuation dates and voluntary filings are determined by OTF and the Ontario government. Filings must show the plan has sufficient assets to pay all future benefits to current plan members. The 10 most recent filed funding valuations and the assumptions used for each are summarized in the table below. Details on plan changes from funding decisions are available in the Plan Funding section at otpp.com.

The sponsors directed that the surplus as at January 1, 2020 be classified as a contingency reserve to help facilitate stability in contribution and benefit levels in case a future funding valuation shows a decline in assets or an increase in pension costs.

Filed funding valuations¹

As at January 1 (Canadian \$ billions)	2020	2018	2017	2016	2015	2014	2012	2011	2009	2008
Net assets available for benefits	\$207.4	\$189.5	\$175.6	\$171.4	\$154.5	\$140.8	\$117.1	\$107.5	\$87.4	\$108.5
Smoothing adjustment	(5.5)	(4.9)	(2.9)	(10.8)	(8.2)	(7.2)	(3.0)	3.3	19.5	(3.6)
Value of assets	201.9	184.6	172.7	160.6	146.3	133.6	114.1	110.8	106.9	104.9
Future basic contributions	43.9	42.9	41.1	41.5	38.8	37.5	35.4	33.8	25.9	23.6
Future special contributions	–	–	0.3	3.1	3.5	3.5	3.3	3.8	5.5	5.6
Future matching of CIP benefit reduction	–	–	–	2.3	5.9	7.4	7.3	5.1	–	–
Total assets	245.8	227.5	214.1	207.5	194.5	182.0	160.1	153.5	138.3	134.1
Cost of future pensions ²	(234.1)	(217.2)	(208.7)	(205.3)	(197.3)	(188.2)	(167.6)	(158.4)	(137.5)	(134.1)
Reduction in cost due to less than 100% indexing	–	–	–	2.3	5.9	7.4	7.7	5.1	–	–
Surplus ³	\$11.7	\$10.3	\$5.4	\$4.5	\$3.1	\$1.2	\$0.2	\$0.2	\$0.8	\$0.0

Assumptions used for filed valuations

As at January 1 (percent)	2020	2018	2017	2016	2015	2014	2012	2011	2009	2008
Inflation rate	2.00	2.00	2.00	2.00	2.00	2.10	2.20	2.15	1.35	2.20
Real discount rate ⁴	2.60	2.75	2.75	2.75	2.85	2.85	3.10	3.25	3.65	3.45
Discount rate	4.65	4.80	4.80	4.80	4.85	4.95	5.30	5.40	5.00	5.65

Contribution⁵ and indexation levels⁶

	2020	2018	2017	2016	2015	2014	2012	2011	2009	2008
Indexation level (Post-2009–Pre-2014 benefits)	100.0	100.0	100.0	90.0	70.0	60.0	50.0	60.0	100.0	n/a
Indexation level (Post-2013 benefits)	100.0	100.0	100.0	90.0	70.0	60.0	45.0	60.0	100.0	n/a
Contribution level above the YMPE	12.0	12.0	13.1	13.1	13.1	13.1	12.4	12.0	12.0	11.2
Contribution level below the YMPE	10.4	10.4	11.5	11.5	11.5	11.5	10.8	10.4	10.4	9.6

1 Valuation filing dates determined by the plan sponsors.

2 Includes value of 100% inflation protection.

3 The sponsors chose to classify the January 1, 2018 and January 1, 2020 surpluses as contingency reserves.

4 Effective January 1, 2016, real rate shown as the geometric difference between the discount rate and the inflation rate. Previously, the real rate shown was based on the arithmetic difference between the discount rate and the inflation rate.

5 Contribution levels are those that were in effect in the calendar year of the valuation.

6 Indexation levels are effective the January 1 following the valuation date.



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