# 2021 ANNUAL REPORT


HOOPP
Healthcare of Ontario
Pension Plan

See your future. Now.

# Contents



This document was updated on April 28, 2022.

# Chairs' message

**Adrian Foster**
Board Chair

**Dan Anderson**
Vice Chair

Through the course of 2021, HOOPP members and employers continued to navigate an incredibly difficult healthcare environment. We are grateful for their courage, leadership and commitment in these unprecedented times. As HOOPP's Board of Trustees, it is our privilege to serve those who care for us by ensuring that HOOPP can deliver on its pension promise, today and in the years to come.

This promise is grounded in HOOPP's deep connection to Ontario's healthcare sector. For members, the Plan provides an opportunity to build a secure retirement – and enjoy peace of mind – for the future. It also creates both stability and mobility across the sector, allowing those who decide to change employers the ability to keep building their pension. For employers, offering the Plan boosts engagement and retention among staff, and serves as a significant competitive advantage in the area of compensation. In this way, the Plan plays an important role in effective healthcare planning and management in the province. For all these reasons, ensuring the Plan remains healthy and resilient is paramount.

## Achieving strong results

We are pleased that, through another turbulent year, HOOPP further strengthened its funded status, which rose to 120% as of December 31, 2021. This is the best indicator of the overall health of the Plan, and its ability to continue to deliver on the pension promise to members. Similarly, HOOPP's investment return of 11.28% in 2021 continues its long history of delivering strong returns, which also contributes to the health of the Fund.

Supported by this strong backdrop, our Board approved the following:

**Benefit improvement for members:** Effective April 1, 2021, eligible members received an increase in their annual lifetime pension, building on a similar improvement to the benefit formula that HOOPP announced in 2017. The previous change applied to service before 2018 and the latest enhancement extends the increase to service through 2020. We are proud to be able to provide active members, particularly frontline healthcare workers, with this enhancement during this extremely difficult time.

**Cost of living adjustment (COLA):** We granted COLA at 100% as reflected in the consumer price index (CPI).

Retired and deferred members received an increase of 0.73% to their pension effective April 1, 2021, and will receive another increase of 4.8%, effective April 1, 2022, to help their HOOPP pension keep up with rising consumer costs. We understand the importance of providing COLA to members and we are proud that, since 2014, we have been able to grant annual increases at a rate of 100% of the increase in the CPI.

**Stable contribution rates:** At the same time, we are keeping contribution rates stable until at least the end of 2023. Holding these rates steady – they have been unchanged since 2004 – helps keep the pension affordable for healthcare workers and their employers.

> We are proud of the work that was done last year, especially given the exceptional circumstances.

## Strategic planning

HOOPP has a remarkable track record as a private, independent trust. Over the years, it has maintained a strong funded status supported by consistently solid investment returns. To help support HOOPP's continued success well into the future, our Board works with HOOPP's management team to engage regularly in strategic planning.

HOOPP's *2021-2024 Strategic Plan* is a refinement of its previous *2019-2023 Strategic Plan*. In the regular cadence of this work, the next plan would have been developed starting in 2022. However, in light of the COVID pandemic and the resulting impact on the global economy, our Board and HOOPP management decided to review and revise the plan sooner to ensure it continues to meet the needs of our members in this changing environment.

The planning process began with a broad look at some of the key factors that are shaping our current landscape with respect to our investments, key stakeholders, employers and members. In consultation with our Board, HOOPP leadership and staff also explored emerging issues and trends, including workforce expectations and technology-driven change.

While its focus now, and always, is on members and employers, this plan represents HOOPP's organizational priorities with a view to this evolving environment. There are three key imperatives: Plan resilience, Plan delivery and Plan excellence. Having a strong Strategic Plan in place helps ensure clear priorities are set across HOOPP to drive the organization forward. For example, the continued expansion of our sustainable investing program is a key area of focus for our Board and HOOPP's senior management team. We continue to build out the strategy in this area and are committed to communicating our progress.

There were a number of key organizational changes made in 2021. This includes the appointment of Michael Wissell to the role of Chief Investment Officer (CIO). As well, the creation of the Risk division centralized our risk functions from across the organization and expanded our overall risk capabilities. While HOOPP has always managed risk effectively, this change helps bring new levels of governance and enterprise risk management to the organization, ensuring continued success in an increasingly complex world.

Progress in applying the Strategic Plan will be regularly monitored, reported and reviewed with our Board. More details, including key current and future initiatives, are included in the *Strategic Planning* section of this Annual Report.

Alongside these ongoing responsibilities and activities, our Board has been working very hard to ensure we continue to provide strong governance to the Plan and Fund. For example, in 2021 we completed a year-long review, in consultation with Deloitte, as to how the Board may strengthen its governance framework to enhance oversight, leadership and effectiveness. We also strengthened our team by welcoming William Moriarty (OHA) and Giselle Branget (OHA) to the Board.

We are proud of the work that was done last year, especially given the exceptional circumstances. We would like to thank HOOPP staff and management for their ongoing commitment and dedication. Through their efforts, HOOPP continues to deliver on the pension promise for Ontario's healthcare workers.

Dan Anderson

**Adrian Foster**
Board Chair

**Dan Anderson**
Vice Chair

## A special note from the Board

We would like to extend a special note of thanks to Adrian Foster, who completed his term and, with a heavy heart, stepped down from the Board, effective December 31, 2021.

First appointed by the OHA in 2008, Adrian has served on and chaired various committees since that time, serving alternately as Chair and Vice Chair in recent years. We have benefited greatly from his leadership, extensive knowledge and service. It is not surprising that Adrian's tenure coincided with a period of tremendous progress in the areas of governance and Board effectiveness, enterprise risk management and compensation. Improvements and modernization in these areas have helped strengthen the foundation of this organization, ensuring that generations of healthcare workers will have the peace of mind that comes from being able to count on their HOOPP pension.

We would also like to congratulate Dan Anderson on his appointment as Chair of the HOOPP Board, and Trustee Gerry Rocchi on his appointment as Vice Chair of the HOOPP Board, effective January 1, 2022.

# President & CEO's message

As the world continues to feel the effects of COVID-19, it's clear that 2021 was another profoundly challenging year for so many of our members. On behalf of HOOPP, I want to thank them for everything they have done and continue to do for our communities. We are inspired by their commitment as we remain dedicated to delivering on our pension promise.

**We are pleased to report that our funded status was 120% as at December 31, 2021. In other words, the Plan has $1.20 in assets for every $1 that is owed in pensions.**

That promise is to provide each Plan member with a secure pension that starts at retirement and is paid for the rest of their life. Ensuring that we can deliver on our pension promise starts with the Plan's funded status, one of the most important measures of a plan's overall health. We are pleased to report that our funded status was 120% as at December 31, 2021. In other words, the Plan has $1.20 in assets for every $1 that is owed in pensions.

We also saw the Fund's net assets grow to $114.4 billion, representing an annual rate of return of 11.28%. Our investment team achieved this strong investment return despite volatility in the financial markets and a challenging economic environment resulting from the ongoing effects of the pandemic.

These strong results demonstrate the effective application and evolution of our liability driven investing (LDI) strategy. Although bonds have traditionally played a key role in our LDI strategy, as interest rates continued declining in 2021, we added new assets and strategies to our portfolio. Over the course of the year, we realized gains from across our investment portfolio, including real estate, and public and private equities, which offset modest losses in our bond portfolio. We also saw early success in innovation economy investments, along with our infrastructure portfolio, which continues to ramp up.

As we refined our investment strategy, we were also evolving our Investment Management team. In addition to adding new depth and talent to the team, I announced the appointment of Michael Wissell as my successor in the role of Chief Investment Officer in September. Michael joined HOOPP in 2018 and had served as our Senior Vice President, Capital Markets & Total Portfolio. With his extensive knowledge of HOOPP, combined with more than 30 years of investment experience, he is the right person to lead HOOPP's investment team, as we explore new investment assets and geographies in order to further diversify and complement our existing investment strategies.

## Continuing to strengthen and enhance our organization

To ensure that we can keep delivering on the pension promise, it's vital that HOOPP continues to grow and evolve. That's why in 2021, we also took steps to enhance and improve many important aspects of our organization. One of those priorities has been risk management, which is critical to ensuring that future returns and asset growth will be sufficient to pay pensions in the years ahead. This year we centralized many of our risk functions in a new Risk division. We added talent, expanded our capabilities, and enhanced our technology to ensure our practices and processes will continue to evolve to meet future needs.

> While 2021 posed many challenges, it was another successful year for HOOPP. None of our accomplishments would be possible without the dedication and hard work of HOOPP staff, driven by their unwavering commitment to our members.

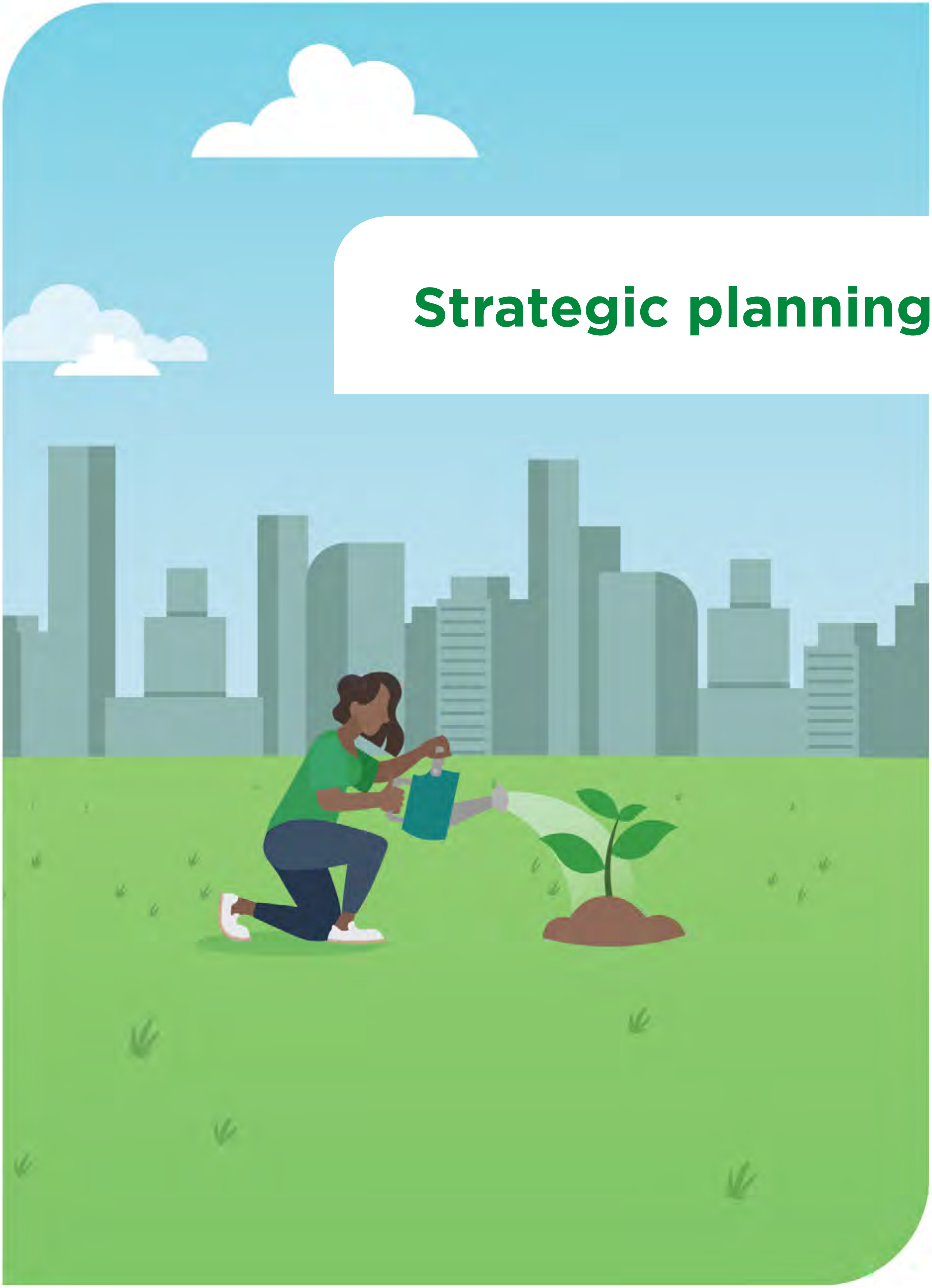
We also continue to build out our sustainable investing program. A key component of that is the creation of a senior management committee, including our Chief Investment Officer and our Chief Risk Officer, dedicated to sustainable investing and ensuring that environmental, social and governance (ESG) factors are fully integrated into our analysis, strategy and asset management practices. We know that this is an important topic for our members, and we are committed to ensuring that our investments reflect our sustainable investing beliefs and to communicating our progress on this front. You can read more in this report and on **hoopp.com**.

At a cultural level, equity, diversity and inclusion (EDI) principles serve as a cornerstone in our efforts to strengthen our organization for the future. We believe that attracting and retaining the best talent, who reflect the diversity of our communities, is essential to our success and is beneficial to our members. Our journey in this area reached an important milestone in 2021 with the launch of our five-year EDI strategy, which will help us broaden our talent pool, use metrics to track our progress, and educate our employees. We are committed to shaping our systems and processes to promote fair treatment, access, opportunity and outcomes for all HOOPP employees.

While 2021 posed many challenges, it was another successful year for HOOPP. None of our accomplishments would be possible without the dedication and hard work of HOOPP staff, driven by their unwavering commitment to our members. I thank them for their efforts through these difficult times. I would also like to thank our Executive Team for its leadership and our Board for its support. As our organization continues to adapt and evolve, the core of our mission – delivering on the pension promise for our members – remains the same and inspires us every day.

**Jeff Wendling**
President & Chief Executive Officer

# Strategic planning



# Strategic planning

> Everything we do as an organization is guided by a single purpose: to provide our members with the secure pension they have earned, for life. From our investment strategies and Plan administration to the service and support we provide, our commitment to our members is at the heart of it all.

To ensure that we remain a leading pension plan provider, HOOPP's senior leadership team engages in strategic planning in consultation with our Board of Trustees. We also regularly monitor, measure, and review our progress in relation to this planning to guide our decision-making and help gauge our performance.

## 2021-2024 Strategic Plan

Informed by the rapidly shifting global economy and challenges in the healthcare sector stemming from the COVID-19 pandemic, HOOPP's *2021-2024 Strategic Plan* represents an evolution in our approach to delivering on the pension promise through this period and beyond. Building on our previous Strategic Plan, it was developed during a time of profound change. While our focus now, and always, is on our members and employers, the plan reflects our strategy and organizational priorities with a view to the changing environment.

Our strategy focuses on three key imperatives:

In 2021, we were able to make meaningful progress on our objectives within all three imperatives and help drive our plan forward. Here are a few key examples:

# Plan delivery

## Evolution of Plan delivery

We believe it is our responsibility to help members understand their pension benefits in pursuing their retirement goals. With a focus on retirement security, we strive to educate members on the value of their HOOPP pension and guide them in making well-informed decisions throughout their time in the Plan.

### Providing pension education and guidance to our members and employers

HOOPP's service model has evolved to deliver pension expertise through personal service that reflects both an understanding of each member's personal circumstances and their history in the Plan.

In 2021, we continued that evolution with initiatives designed to provide additional guidance and support on member decision-making through life events such as job or employer changes and transitioning into retirement. This includes offering more comprehensive information about the implications of factors like government benefits and taxation of retirement income.

We also have strong relationships with our employers and work closely with them to ensure they can fulfil their obligations in Plan administration. The education and resources we provide will continue to evolve and leverage digital capabilities to enable employer success. As well, we will continue to emphasize the value the Plan provides employers as part of their compensation package and their strategy for attracting and retaining talent.

### Enhancing our digital service capabilities

Our service model is enabled by technology that supports online communication, services and processes to give members the opportunity to interact and transact with HOOPP from any device or location through their service channel of choice. As Plan membership continues to grow, HOOPP's digital channels, communications and services are continuing to evolve to provide proactive, cost-effective support to our guided interactions with members.

In 2021, we introduced a range of expanded digital services for members including:

- **Online retirement elections**, to simplify the activity and provide an intuitive alternative to downloading, printing, signing, and returning paper forms.
- **Expanded access for digital transactions**, including the ability to make electronic payments for buybacks and certain types of transfers.

With more of our members using our digital platforms, we plan on adding new channels and features, while continuing to enhance our electronic communication offerings, to better support their evolving needs.

### Safeguarding member information

Data security is fundamental to the confidence and trust that members and employers have in HOOPP. We will continue to prioritize the security of our data systems and evolve our security programs to enhance the integrity of our members' information.

In 2021, we continued to enhance our robust information security program, with several layers of protection, including:

- a dedicated Information Security team that conducts 24/7 monitoring for unusual activity
- artificial intelligence (AI), to detect emerging threats
- internal privacy and information security awareness training for employees, as technology and cyber threats become more sophisticated

## Advocating on behalf of HOOPP and our members

The inequity of pension coverage across different sectors is significant. While the conversation has shifted towards increasing access to secure sources of retirement income, it is important that we continue in promoting the attributes of Canada-model plans, like HOOPP, for all Canadians.

To differentiate HOOPP from non-Canada-model defined benefit plans and promote better access to a secure retirement for all Canadians, we are taking an approach that illustrates how individuals, employers, and governments can all take reasonable steps to improve the efficiency of retirement savings.

In 2021, we released *The Value of a Good Pension: The business case for good workplace retirement plans* research findings, which highlights the value employers get by offering Canada-model pension plans in the workplace. This builds on our previous report, *The Value of a Good Pension: How to improve the efficiency of retirement savings in Canada*, which calculated the value of a typical individual's participation in a Canada-model retirement plan to be nearly $1 million over their lifetime.


Shifting the perspective from the Plan member to the employer, our latest report presents a business case for employers to offer good workplace retirement plans. It aims to spark a conversation about how Canadian businesses can offer and enhance workplace retirement plans to create business value, while strengthening retirement security for workers.

In addition to our research, we monitor the public policy environment, build relationships with key government officials and work with aligned stakeholder organizations to protect the interests of Plan members across a host of public policy and regulatory issues. HOOPP has historically enjoyed a positive relationship with government stakeholders by taking a cooperative and policy-based approach, focused on maintaining our financial independence from government and in supporting the evolution of healthcare in Ontario.

In 2021, we engaged numerous senior provincial representatives to ensure their awareness of HOOPP's independence from government as a private trust not sponsored or guaranteed by the Province of Ontario. The value of HOOPP and its independence continues to be underscored as seminal to the attraction and retention of Ontario's healthcare talent as well as a cost-effective and sustainable way of providing retirement security in the province.

Similarly, we actively participated in the Public Sector Accounting Board's (PSAB's) Employee Benefits project by submitting a comment letter in response to the *Exposure Draft - Employee Benefits, Proposed Section 3251*, the first of several phases of PSAB's revised Employee Benefits standard. Participation in this project is another opportunity to provide important information regarding HOOPP's independence. Thought leadership research findings contribute to our dialogue with key stakeholders. Recognizing that education supports our advocacy efforts, we will continue sharing the findings of our research with members, employers and stakeholders.

# Plan resilience

## Sustainable investing

Sustainable investing practices are critical to our long-term investment strategy. Environmental, social and governance (ESG) factors can affect investment risks and returns, so integrating those factors into our decision-making can enhance investment performance. As we evolve our investment strategies and risk management, we continue to refine, expand, and embed our sustainable investing practices.

### Climate change

Climate change is one key area of our ESG effort and it is an urgent issue that requires action from every area of society, government and business, including institutional investors like HOOPP. It is a priority for our management team and Board of Trustees, and they are working together to strengthen HOOPP's climate change risk management approach.

Some of our areas of focus over the past year were:

- **Managing climate risk,** which included testing a leading-edge analytics tool that models climate change impacts on companies and their peers.
- **Investing in climate solutions** such as green bonds, carbon-efficient companies, and clean energy infrastructure.
- **Driving change through stewardship**, including engaging companies to reduce emissions in the real economy, and becoming a founding member of Climate Engagement Canada.

Doing our part to address the climate crisis will require consistent and sustained effort. Looking ahead, we will be taking more steps on this important journey:

- We are expanding the scope of measurement of our portfolio carbon footprint to include additional asset classes and cover more of our total portfolio.
- As global standards for climate scenario analysis continue to be established, we will continue to monitor these important developments to ensure our Plan is best positioned for a low-carbon future.
- We are ramping up our dialogue with companies on how to improve their climate resilience and enhance their long-term value to investors, including HOOPP.
- We are exploring how our Fund can align with a net-zero pathway as we continue to deliver on the pension promise.

The *Sustainable investing* area of the *Management's discussion & analysis* section in this report includes more information on our overall program and highlights some of our other accomplishments for the year.

### Focusing on membership in the healthcare sector in Ontario

Our goal is to provide high-quality retirement income to employees in Ontario's healthcare sector. We aim to remain flexible in pursuing opportunities to expand coverage of HOOPP as healthcare in the province continues to evolve. Based on membership growth projections, Plan sustainability is not dependent on new employer enrolment, as is the case with many peer plans. In fact, the majority of HOOPP's active membership growth comes from our largest participating employers. However, we will continue seeking opportunities to expand and broaden pension coverage where it is beneficial to our members, and those in areas of healthcare who may not currently have access to the Plan, while facilitating mobility across Ontario's healthcare system.

For example, in 2021, we entered into an agreement to merge the pension plan of Carefor Health & Community Services into HOOPP. Carefor is Eastern Ontario's largest and oldest home healthcare and community support charity, whose offerings include home care, retirement living, and assisted living. The transaction remains subject to Carefor member and regulatory approval.

## Plan excellence

### Equity, diversity and inclusion

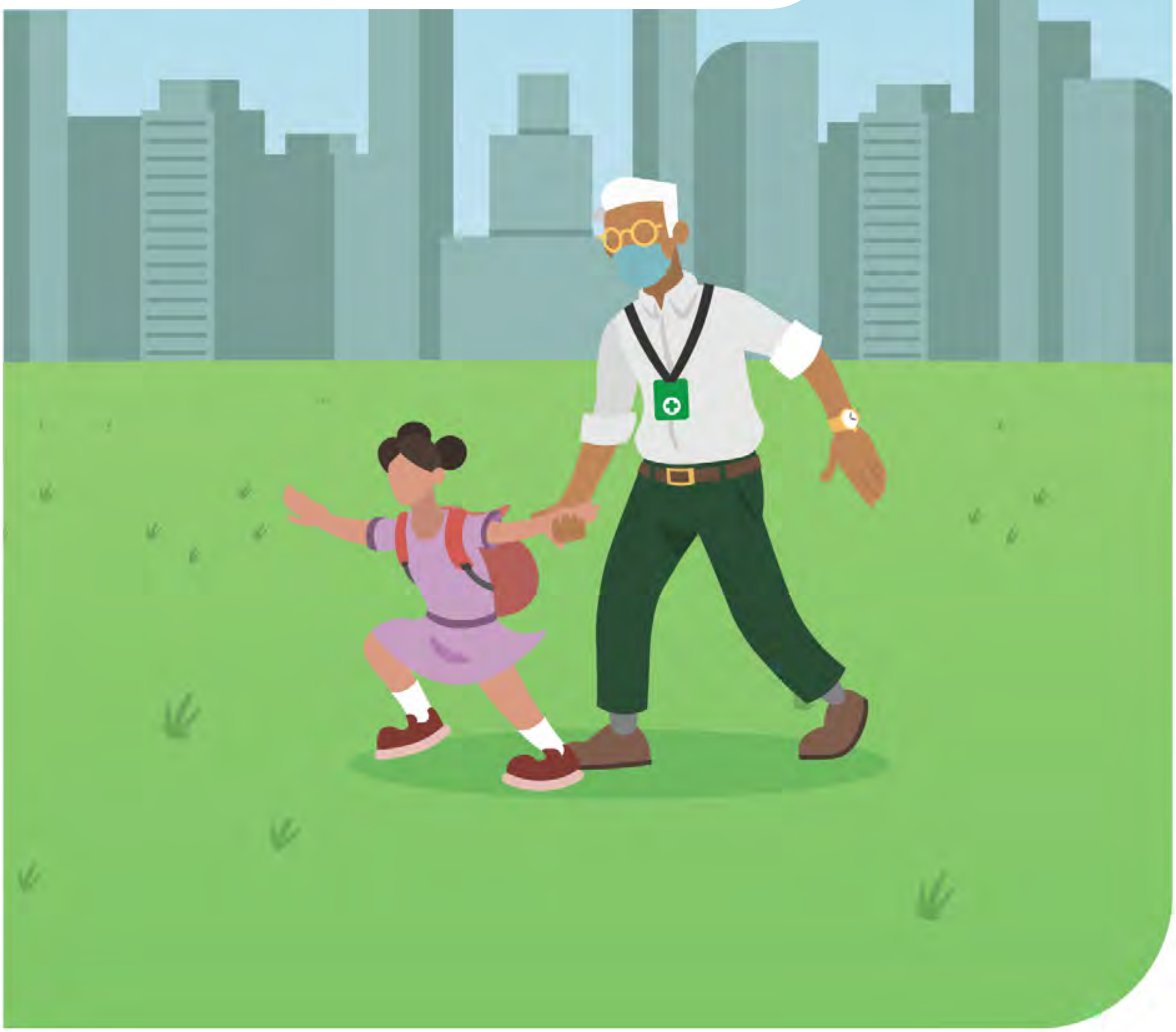
HOOPP strives to provide a culture founded upon equity, diversity and inclusion (EDI) through intentional and proactive commitment and continuous improvement. We believe that attracting and retaining the best talent, who reflect the diversity of our communities, is essential to our success and is beneficial to our members. We are also committed to creating an inclusive and equitable culture, where we embrace our differences, enabling us to deliver on our pension promise.

To help direct our efforts, in 2021, we launched our five-year EDI strategy. The strategy has five main areas of focus.

- **Consolidate our pipeline for diverse talent:**
  - We are broadening the talent pool by expanding partnerships across equity-seeking groups and ensuring we have an equitable recruitment process. We are also reviewing internal career development and promotion processes to help continue developing our employees and promoting from within.
- **Promote and foster EDI by leveraging the diversity of HOOPP employees:**
  - We are providing our employees with channels and opportunities to speak up and raise concerns. As an example, in 2021 we hosted Listening Sessions, where our senior leadership sat in on a series of meetings where employees candidly shared their experiences (in HOOPP and outside the organization) as members of equity-seeking groups.
  - We are also working closely with our leaders to help them model and reinforce inclusive behaviours in all aspects of their leadership.
- **Build EDI metrics capability to track progress, identify barriers and inform decisions:**
  - We are working to include EDI as a lens to all organization-wide analyses.
- **Design and deploy EDI structure and governance:**
  - In 2021 we hired an EDI director to lead our efforts, while also serving as the head of our new EDI Council, which will be launched in 2022. The Council will have representation from across the organization and will play a critical role in helping develop EDI action plans and track our organizational progress.
- **Communicate and educate to build buy-in throughout our organization and externally:**
  - On a regular basis we are communicating internally (focusing on educating leaders and employees) and externally (focusing on influencing broader change).
  - Throughout 2021 we also continued to raise the profile and activity level of our Employee Resource Groups, which play an important role in helping broaden our messaging, reinforce the part all employees have in our program and increase overall employee engagement.

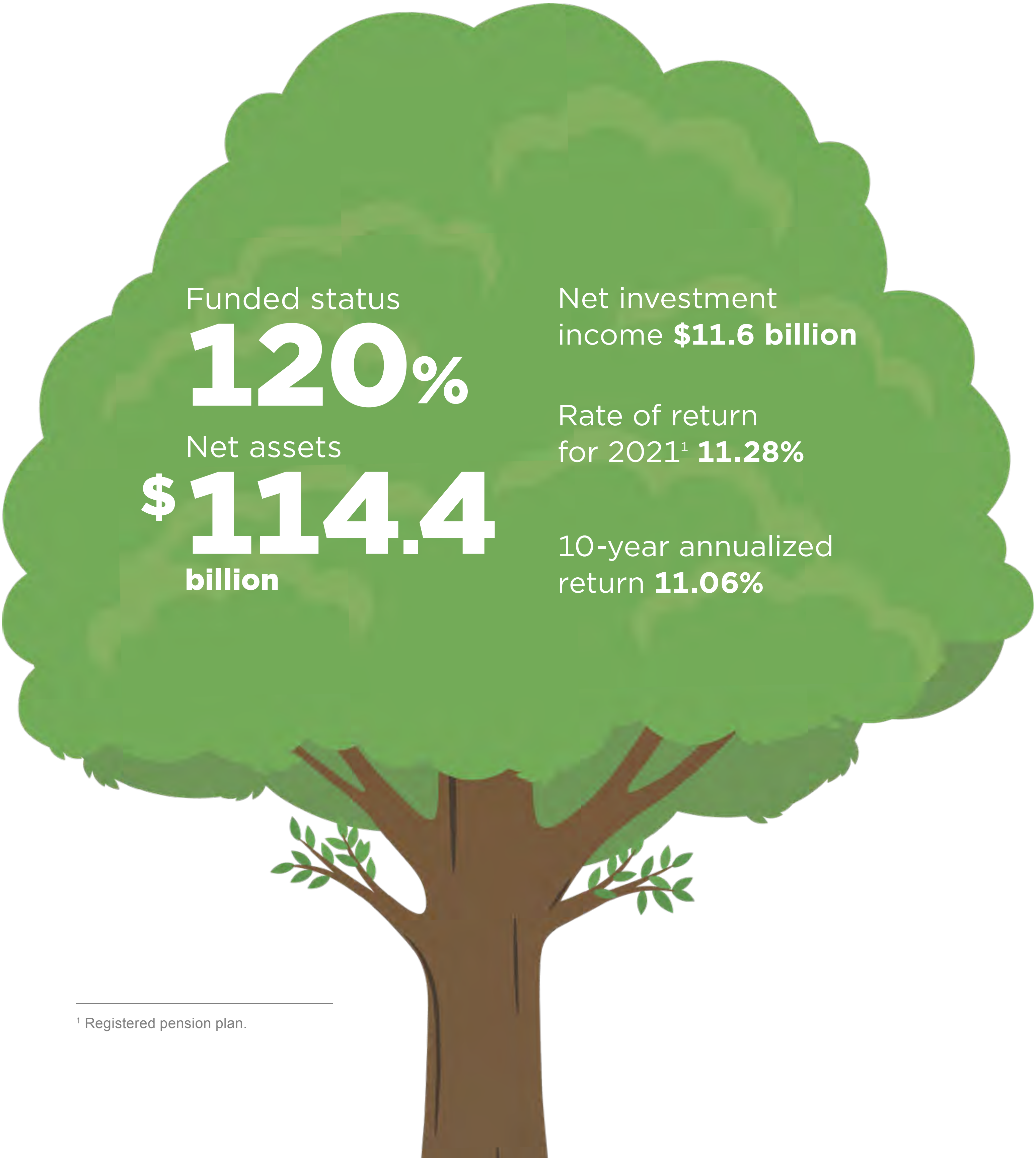
These are just a few examples of the progress we made on our Strategic Plan in 2021. The plan, and the key imperatives featured within it, will help us drive our organization forward and continue to deliver on our pension promise.

# Management's discussion & analysis
(MD&A)



# 2021 Plan performance

as at December 31, 2021



Funded status
**120%**

Net assets
**$114.4 billion**

Net investment income **$11.6 billion**

Rate of return for 2021[1] **11.28%**

10-year annualized return **11.06%**

[1] Registered pension plan.

# Plan overview and governance

> The Healthcare of Ontario Pension Plan (HOOPP or "the Plan") has been serving Ontario healthcare workers and their employers since it was first formed in 1960. Across the province, 624 employers participate in HOOPP and offer the Plan to their employees. HOOPP had 419,627 members, including 119,711 retired members, as at December 31, 2021.

In 1993, HOOPP was settled as a trust with a jointly governed Board of Trustees ("the Board") by its original sponsor, the Ontario Hospital Association (OHA), and by four unions ("the Settlor Unions"):

- Ontario Nurses' Association (ONA)
- Canadian Union of Public Employees (CUPE)
- Ontario Public Service Employees Union (OPSEU)
- Service Employees International Union (SEIU)

The Plan is a contributory, defined benefit, multi-employer pension plan registered under the *Pension Benefits Act* (Ontario) and the *Income Tax Act* (Canada). The Plan is regulated under the *Pension Benefits Act* as a jointly sponsored pension plan.

## Mission

HOOPP's governance is based on our mission to deliver on the pension promise. This is our commitment to provide each member with a secure pension that starts at retirement and is paid for the rest of their life. The Board and management team administer the Plan and manage and invest the trust fund ("the Fund") with a focus on, and dedication to, meeting this mission in the best interests of HOOPP members. This shared focus and dedication are also consistent with the fiduciary duties owed to all Plan beneficiaries by our Trustees and staff.

The Agreement & Declaration of Trust (ADT) is the foundation for the governance of the HOOPP Plan and Fund. It is the trust document entered into by the OHA, Settlor Unions and initial Board members that, among other things, constitutes and empowers the current Board.

## The Board of Trustees

The Board's focus is on the administration of the HOOPP Plan and the investment and management of the assets of the Fund. Its duties include:

- approving changes to the Plan and benefits
- setting contribution levels
- establishing investment policy
- overseeing investment performance
- approving annual operating budgets

Members of the Board also serve on five specialized committees* that are responsible for making recommendations to the Board within the scope of their mandates.

They are as follows:

- Asset-Liability Management Committee
- Audit & Finance Committee
- Governance Committee
- Human Resources & Compensation Committee
- Plan Committee

More information about the committees and their mandates can be found in the *About HOOPP* section on **hoopp.com**.

* Prior to January 1, 2022, there were four committees: Asset-Liability Management, Audit & Finance, Governance & Human Resources, and Plan.

## Delegations of authority

Authority for the day-to-day administration of the Plan and management of the Fund is delegated by the Board to the Plan Manager, who holds the title of President & Chief Executive Officer (CEO). This delegation is reviewed and approved by the Board at least once each year. In turn, the President & CEO delegates authority to select designated employee roles within HOOPP for a variety of investment and operational purposes. These delegations are also regularly reviewed and kept current and appropriate.

In addition, the roles, responsibilities and accountabilities of HOOPP's agents, advisors and other service providers are set out in agreements with each party. The Board's key agents and advisors include:

- Plan actuary
- external auditors
- custodian
- independent legal counsel
- investment advisors
- compensation advisor

## Governance review processes

Good governance requires periodic reviews of an organization's structures, mandates, policies, practices and procedures to determine whether they should be updated or changed. Both our Board and management team conduct such periodic reviews to ensure this information is kept up to date and responsive to organizational changes and HOOPP's operating environment.

# Funded status

The funded status compares the Plan's assets to its liabilities (i.e., pension obligations), and is a key measure of the current financial health of the Plan.

At the end of 2021, the Plan reported a surplus (i.e., more assets than liabilities) for the 12th consecutive year, with a funded status of 133% on a net asset basis. Our 11.28% fund return drove a net increase to the funded status. More information on the discount rate assumption and pension obligations can be found in the *Plan liabilities* section on page 21.

For regulatory filing purposes, we report our funded status on a smoothed asset value basis. The asset smoothing approach we use gradually recognizes the Fund's investment returns over five years, meaning our 2021 return of 11.28% is partially recognized, with the rest deferred to future years. This approach minimizes the impact of market volatility in any one year and helps the Plan avoid making decisions based on short-term market fluctuations.

The following table shows the Plan's funded status for 2021 and 2020, both on a net asset basis and on a smoothed asset value basis. The *Investments* section includes a graph on page 23 that illustrates the Plan's net and smoothed assets against its liabilities over time.

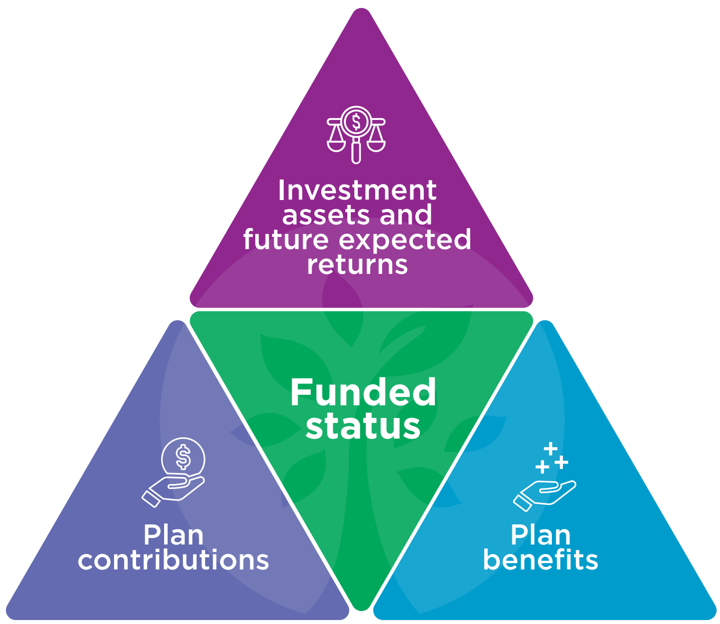
| Funded status | 2021 | 2020 | Year-over-year change |
|---|---|---|---|
| **Net assets to regulatory pension obligations** | **133%** | 130% | 3% |
| **Smoothed asset value to regulatory pension obligations** | **120%** | 119% | 1% |

# Pension plan funding management

Fluctuations in the financial market environment have the potential to affect our Plan's funded status. Delivering on the pension promise is a complex challenge that involves prudently managing risks to ensure our funded status remains at acceptable levels.

We balance three main components to meet our promise to members:

- **the level of pension benefits provided at retirement**
- **contribution rates from both Plan members and their employers**
- **total investment assets and future expected investment returns**




Our objective in managing benefit levels is to provide a stable and predictable level of pension income that, together with income from other sources, contributes to a secure retirement for our members. Benefit levels are determined with thoughtful consideration of contribution rates. Our Board strives to keep contribution rates stable: those rates have not changed since 2004, and will remain at the current level until at least the end of 2023.

We also consider elements related to investments, including asset allocation, current and future expected returns, and risk. Investment returns play an essential role in our mission to deliver on the pension promise, because we estimate approximately 80% of pension benefits come from investment returns. As such, HOOPP's approach to expected investment returns and risk is the component most actively managed by our management team with oversight by our Board.

Prudently and effectively balancing these three components will ultimately ensure the long-term sustainability of our Plan.

# Future funding sustainability

Funding risk, which is the risk that future investment returns (and to a lesser extent, contributions) are not able to fund Plan liabilities, is the greatest threat to our Plan's long-term sustainability. Funding risk is discussed further in Note 6 of the Financial Statements. In general, the two broad categories of risks that contribute to total funding risk are investment risk and demographic risk.

## Investment risk

Prudently managing investment risk is key to mitigating funding risk. We take investment risk to earn sufficient returns to meet our pension obligations and to keep contribution rates stable, reasonable and affordable. Our Board's risk tolerance is an important consideration in determining how much investment risk can be taken.

Investment returns are the most significant source of funding for pension benefits paid to members and are a critical determinant of how benefit levels and contribution rates are managed. Positive and stable returns over time from Fund investment strategies are essential to the Plan's long-term sustainability, because investment returns that consistently exceed expectations provide flexibility in managing benefit levels and contribution rates. In establishing an appropriate investment strategy, we strive to generate sufficient returns to meet our pension obligations, while accepting a level of risk that does not jeopardize our ability to meet those obligations.

The three investment risks that have the greatest impact on our Plan are related to:

**Interest rates:** interest rates affect the prices of many investments, as well as their expected future rates of return. If they lead to a change in the discount rate assumption, interest rate changes can also affect Plan liabilities. More information about the discount rate can be found on pages 21-22.

**Inflation:** increases in inflation could lead to higher wages, which form the basis of the pension benefits paid to our members. Moreover, because many members' accrued benefits include some cost-of-living enhancement, an increase in inflation will increase our Plan's pension obligation.

**Equity markets:** investment returns may fall short of the levels necessary to pay future pension benefits if equities and other return seeking strategies fail to generate sufficient returns. Extreme investment losses may cause substantial declines in our funded ratio.

## Demographic risk

Demographic risk to our Plan is important to consider, though its magnitude is difficult to anticipate because the changes associated with demographic risk occur gradually over long periods of time.

These changes include:

- life expectancy of members (i.e., longevity risk)
- changing retirement trends (e.g., earlier retirements)
- aging of members

Both the longer-term trend and year-over-year changes in demographic changes must be duly considered. Demographic trends are part of our Board's annual review of all actuarial assumptions, with the support of the Board's Plan actuary. For large pension plans like HOOPP, year-over-year changes are usually minor. An increase in members' life expectancy, for example, would increase the amount of pension benefits to be paid.

# Plan maturity

The proportion of active to retired members in a pension plan naturally changes over time. This is often referred to as plan maturity. Plan maturity is important to monitor because it can affect our Plan's ability to recover from a severe decline in assets.

Newer plans have a greater proportion of working or active members contributing to the plan, relative to retired members drawing benefits from the plan. Among other factors, one key determinant of how quickly a plan matures is the rate at which new and younger members join the plan and replace newly retired members. Over longer time periods, the average age of plan participants can rise, as can the proportion of retired members. With consistent membership growth, HOOPP continues to be a relatively young pension plan, and the average age of HOOPP's active participants is virtually unchanged from 25 years ago.

Plan maturity is often measured by the ratio of active to retired members. As shown below, this ratio has declined from 3.0 in 1996 to 2.1 at the end of 2021, illustrating how our Plan is gradually maturing. It is projected to decline further to 1.9 by 2031.

**Ratio of active members to retired members over time**

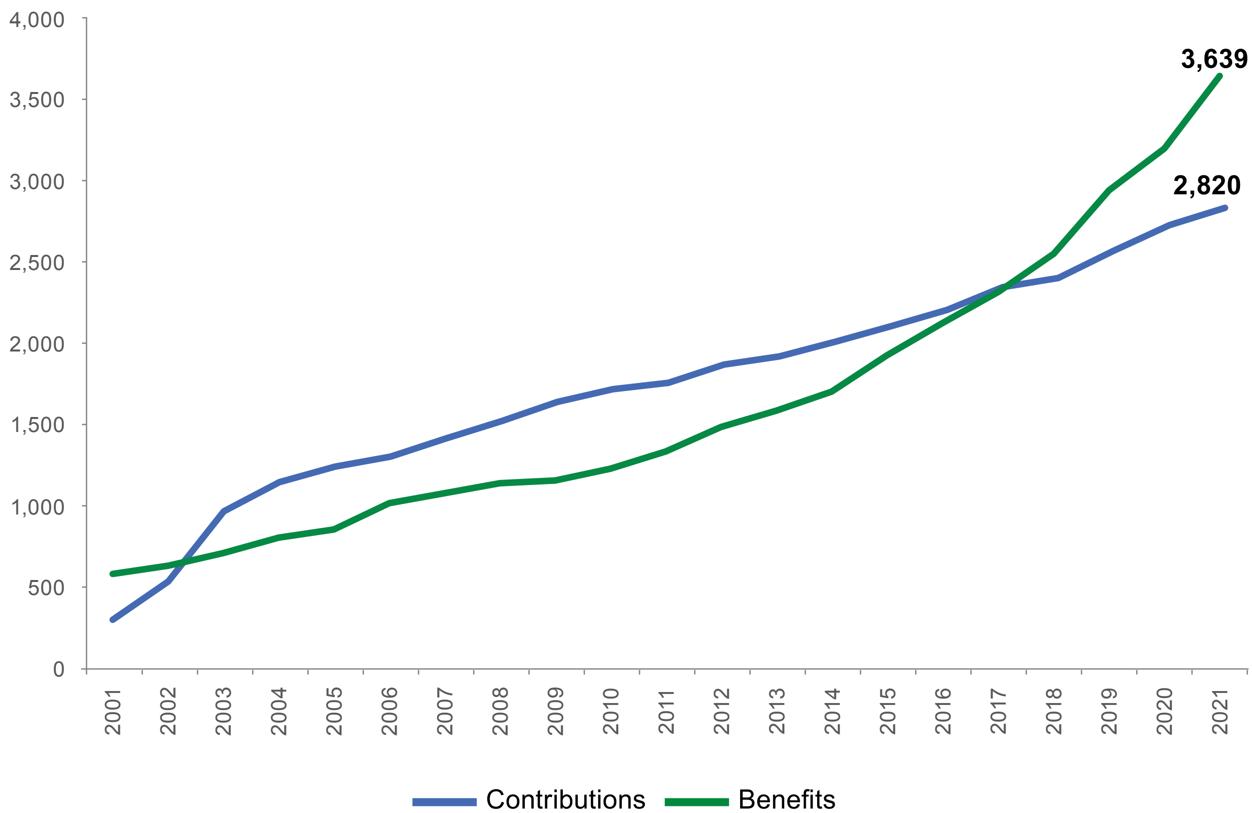
| | 1996 | 2011 | 2021 | 2031 (projected) |
|---|---|---|---|---|
| **Ratio as at December 31** | 3.0 | 2.4 | 2.1 | 1.9 |

Net cash flow, which is the difference between contributions received and pension benefits paid, is another measure of a pension plan's maturity. More mature plans pay out much more in benefits to retired members than they receive in contributions from active members. This increases a plan's sensitivity to investment market declines, because the remaining asset base with which to recover from investment losses is further reduced. Funding deficiencies are also more difficult to address, because a smaller proportion of active members means that contribution rate increases will have a diminished impact.

The chart below reflects the ongoing maturation of the Plan: while both contributions and benefits have increased, total benefits paid have exceeded total contributions since 2018, producing a negative cash flow on this basis. Though this trend is likely to continue, it does not mean that HOOPP is unable to pay its promised benefits; we estimate that contributions account for only approximately 20% of benefits. However, it is an aspect of plan maturity we must monitor and manage over time.

## Contributions vs. benefits

($ millions)*




Note: This chart reflects a contribution rate reduction that was in place from 1999 to 2002 to help ensure compliance with legislation that limited the maximum surplus permitted for a registered pension plan.

The chart above illustrates net cash flow using total contributions and total benefits, which include past service purchases, transfers to and from other plans, and lump-sum transfers on termination or death. Further details of all these amounts can be found in Notes 8 and 9 of the Financial Statements.

* This label was corrected on April 28, 2022.

# Plan liabilities

> The estimation of our Plan's liabilities is based on current and future benefit payments and relies on several economic and demographic assumptions.

**Economic assumptions include:**

- inflation expectations
- future growth rate of employee wages
- future expected rate of return of our investment strategies

**Key demographic assumptions include:**

- retirement age of our members
- member life expectancy

In estimating our Plan's total pension obligation, all assumptions are made based on the principle that the Plan will operate as a going concern for the foreseeable future. Using these and other assumptions, together with actual member data, benefits owed to our Plan members are projected for each future year, over almost 100 years.

The Plan's pension liabilities change for a number of reasons.

First, as our members contribute to the Plan throughout the year, they accrue or earn future benefits. In addition, the value of previously earned benefits grows at the rate of expected return of the Fund. Pension benefits paid out during the year offset this growth, reducing the Plan's total pension obligation.

Second, changes in economic or demographic assumptions, such as changes in the future expected inflation rate, estimated life expectancy or retirement age, affect the calculation of our pension obligation. Based on minor assumption changes, the Plan's pension obligation decreased by a total of $347 million in 2021. Our Board approved an increase to the Plan's benefit formula in respect of active members' service from 2018 to 2020, effective April 1, 2021, increasing our pension obligation by $704 million. Further details can be found in Note 11 of the Financial Statements.

One of the most important assumptions underlying the estimation of the Plan's liabilities is the Fund's long-term expected return (i.e., the discount rate assumption). To calculate the total value of future pension benefits today (i.e., the Plan's liabilities or pension obligation), these estimated future payments are discounted by the expected return of the Fund's investment portfolio.

Expected returns are significantly affected by interest rates, because expected returns are mostly composed of a theoretical risk-free interest rate and risk premiums (i.e., incremental returns in addition to the risk-free rate). A change in the discount rate assumption causes a corresponding change in pension liability value in the opposite direction (i.e., a decrease in the discount rate assumption causes a corresponding increase in the pension liability value, and vice versa). This volatility in the discount rate assumption and the sensitivity of the Plan's pension obligations to changes in the discount rate assumption were a primary reason for HOOPP's adoption of a liability-driven investing approach, which is discussed further in the *Investments* section.

Actual future economic and demographic outcomes will differ from the assumptions made. The difference between the actual outcomes and the assumptions made is a source of funding risk, as previously discussed in the *Future funding sustainability* section on page 18.

At the end of 2021, the discount rate assumption remained unchanged from 2020, at 4.65%, meaning our Plan's estimated pension obligation did not change with respect to this assumption.

The table below shows, at a high level, what factors contributed to changes in the Plan's pension obligation in both 2020 and 2021.

| | 2021 | 2020 |
|---|---|---|
| ($ millions) | | |
| **Pension obligation at the start of the year** | **79,852** | **73,547** |
| Increases in benefits due to members | 5,693 | 3,258 |
| Benefit improvement | 704 | |
| Changes in assumptions | (347) | (1,443) |
| Change in discount rate assumption (expected return) | | 4,490 |
| **Pension obligation at year end** | **85,902** | **79,852** |

## Key economic assumptions

The sum of the inflation rate assumption and the real discount rate assumption is the discount rate assumption.

| | 2021 | 2020 |
|---|---|---|
| **Assumption** | | |
| Inflation rate | 2.00% | 2.00% |
| Real discount rate | 2.65% | 2.65% |
| Discount rate | 4.65% | 4.65% |

Financial results are sensitive to changes in assumptions. The table below shows how an increase or decrease of 1% in the discount rate assumption would affect pension obligations. Even with a relatively large 1% decrease in the assumption and a corresponding increase of 17% in pension obligations, HOOPP would still be fully funded at the end of 2021, all else being equal.

| Change in assumption | Discount rate assumption | Pension obligations ($ millions) | Change in pension obligations (as a %) |
|---|---|---|---|
| **+1.00%** | 5.65% | 74,425 | -13% |
| | **4.65%** | 85,902 | |
| **-1.00%** | 3.65% | 100,591 | 17% |

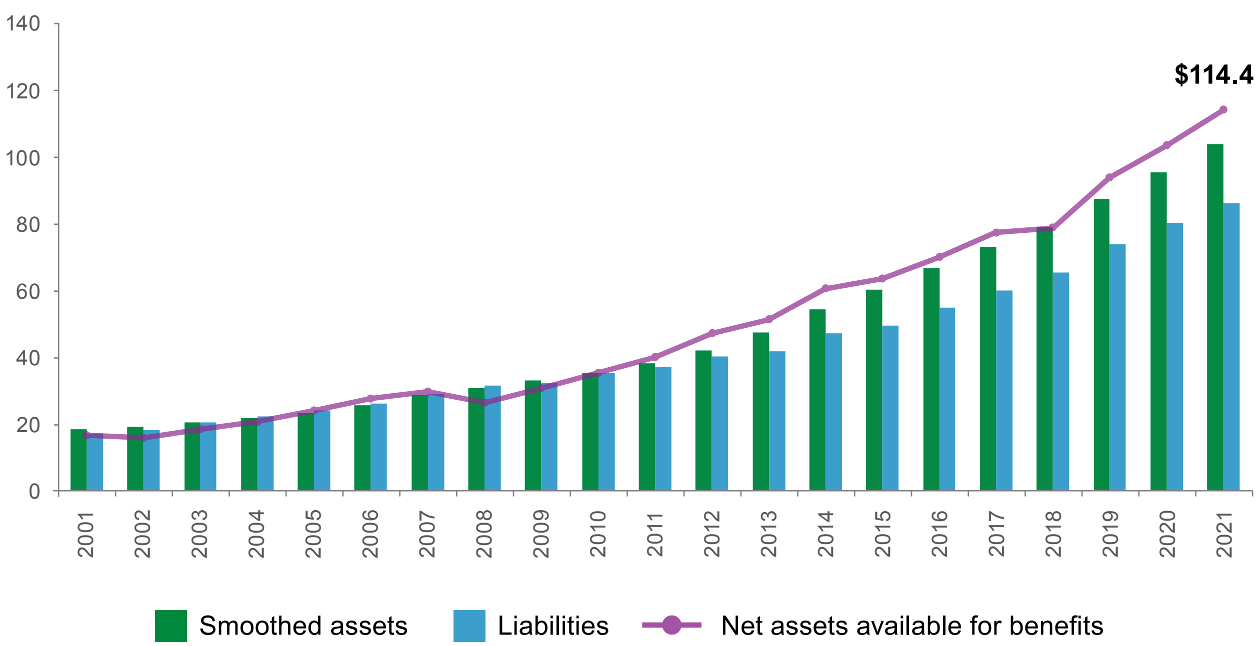
# Investments

Our primary approach to managing funding risk is through a liability-driven investing (LDI) strategy, where our Plan's liabilities are closely considered when investing Fund assets. This approach focuses on ensuring that the growth of our investment portfolio meets or exceeds the growth in our pension obligation to members. This differs from more traditional investment approaches that primarily focus on asset growth beating asset-based benchmarks.

In the graph below, the Plan's net and smoothed assets have been charted against its pension liabilities over time.

## 20-year history - assets and liabilities

($ billions)




LDI at HOOPP involves allocating our Fund's assets between the two broad portfolios: the liability hedge portfolio and the return seeking portfolio.

The liability hedge portfolio is designed to offset most of the risks associated with inflation and interest rates, which are the major risks that can increase the pension benefits paid to members. It contains investment assets that perform in a manner similar to those of the Plan's liabilities.

The return seeking portfolio is designed for controlled risk-taking in investment assets and strategies to generate incremental returns to the Fund to help ensure the Plan remains affordable, while providing diversification benefits for the entire portfolio.

More detail on the performance of these portfolios can be found later in this section, starting on page 28.

# 2021 results

HOOPP's investment results were strong in 2021:

- net investment income of $11.6 billion
- growth in net assets to $114.4 billion from $104.0 billion in 2020

The table below shows investment performance for 2021 and 2020, as well as the 10-year and 20-year performance of the Fund (registered pension plan).

| | 2021 | 2020 | 10-year | 20-year |
|---|---|---|---|---|
| **Total return** | **11.28%** | 11.42% | 11.06% | 9.52% |
| **Benchmark*** | **8.59%** | 9.80% | 8.67% | 7.74% |
| **Value-added return** | **2.69%** | 1.62% | 2.39% | 1.78% |

* Benchmarks are established to measure the performance of investment strategies relative to the risk taken.

HOOPP's net returns and net value-added returns have been consistently strong over the years. In its latest report for 2020, external consulting firm CEM Benchmarking found that, in its global dataset of 218 pension funds, HOOPP's 10-year net returns were in the top 10%, and our 10-year net value-added was the second highest.

HOOPP's pension promise to our members is foundational to our investment strategy, which has produced another strong result for 2021. Our diversified portfolio and culture of innovation, combined with the identification and management of key risks, contributed to successfully navigating the volatile investment environment described below.

# 2021 Investment environment

The COVID-19 pandemic continued to influence economic activity, policy, and capital markets in 2021. Repeated waves of the pandemic resulted in varying levels of social and economic restrictions throughout the year. Inflation rose sharply in several developed economies to levels not seen in decades, a development which reflects pandemic-related supply constraints in goods, services and labour. The Canadian headline consumer price index (CPI) ended 2021 at 4.8%, up from 0.7% at the end of 2020 and at its highest level since 1991. The debate continues among policy makers and in financial markets about how much of this price increase is due to relatively short-term, pandemic-related factors. The period from 2010 to early 2020 was marked by stable and very low inflation, so a sustained change to higher inflation would be a significant development in capital markets.

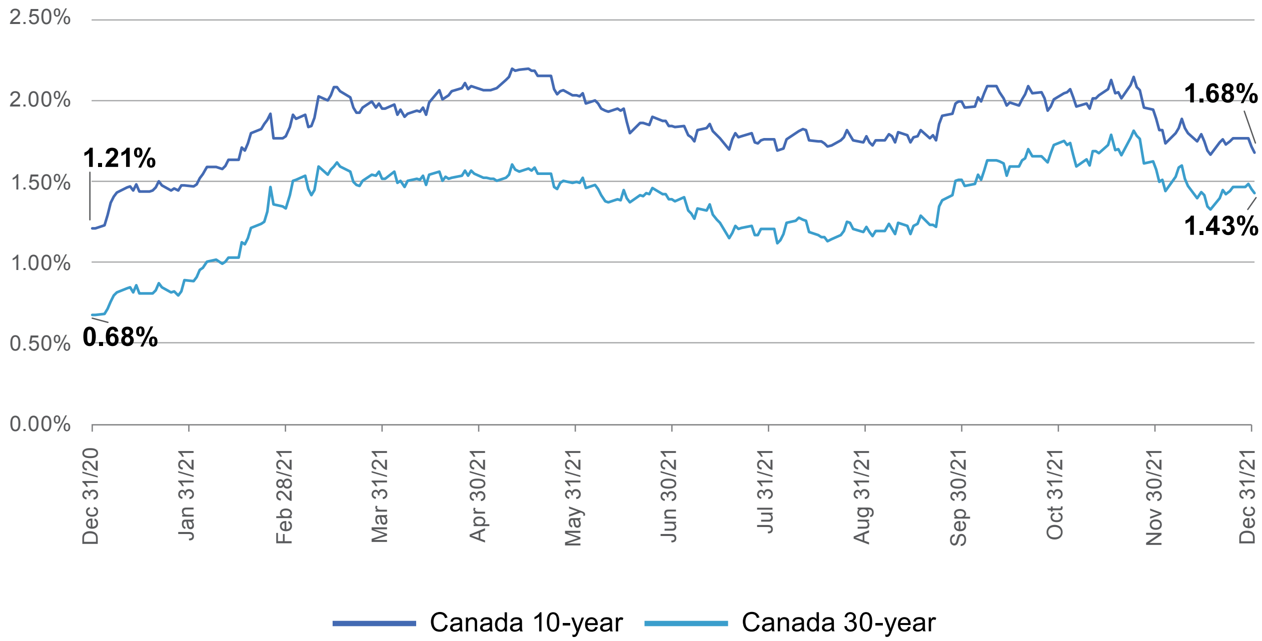
As the year progressed, central banks started to move away from the extremely stimulative policies implemented in 2020 in the wake of the first stage of the pandemic. In the fourth quarter, the Bank of Canada ended quantitative easing, under which the bank bought bonds from the market. Similarly, in December, the Bank of England was the first major central bank to raise interest rates. The U.S. Federal Reserve started the process of reducing their security purchases, or tapering, in November, accelerating in December. The Federal Reserve also clearly signaled persistent inflation as a concern. As a result, capital market participants have assumed and started to price in multiple rate increases in 2022 by the U.S. Federal Reserve and some major central banks.

Government bond markets lost money as yields rose from the extremely low levels recorded in 2020, with the year-over-year changes summarized in the next table. Looking at asset classes broadly, gains in commodity prices were particularly strong in 2021, reflecting inflationary pressures (e.g., caused by supply chain disruptions) and that economies reopened to varying degrees compared to 2020. Stock markets also posted strong returns.

The chart below illustrates how Canadian bond yields changed over the course of the year.

| Bond | End of 2021 | End of 2020 |
|---|---|---|
| U.S. Treasury 10-year | **1.52%** | 0.93% |
| U.S. Treasury 30-year | **1.90%** | 1.65% |
| Government of Canada 10-year | **1.43%** | 0.68% |
| Government of Canada 30-year | **1.68%** | 1.21% |

## Canadian interest rates - 1 year (2021)



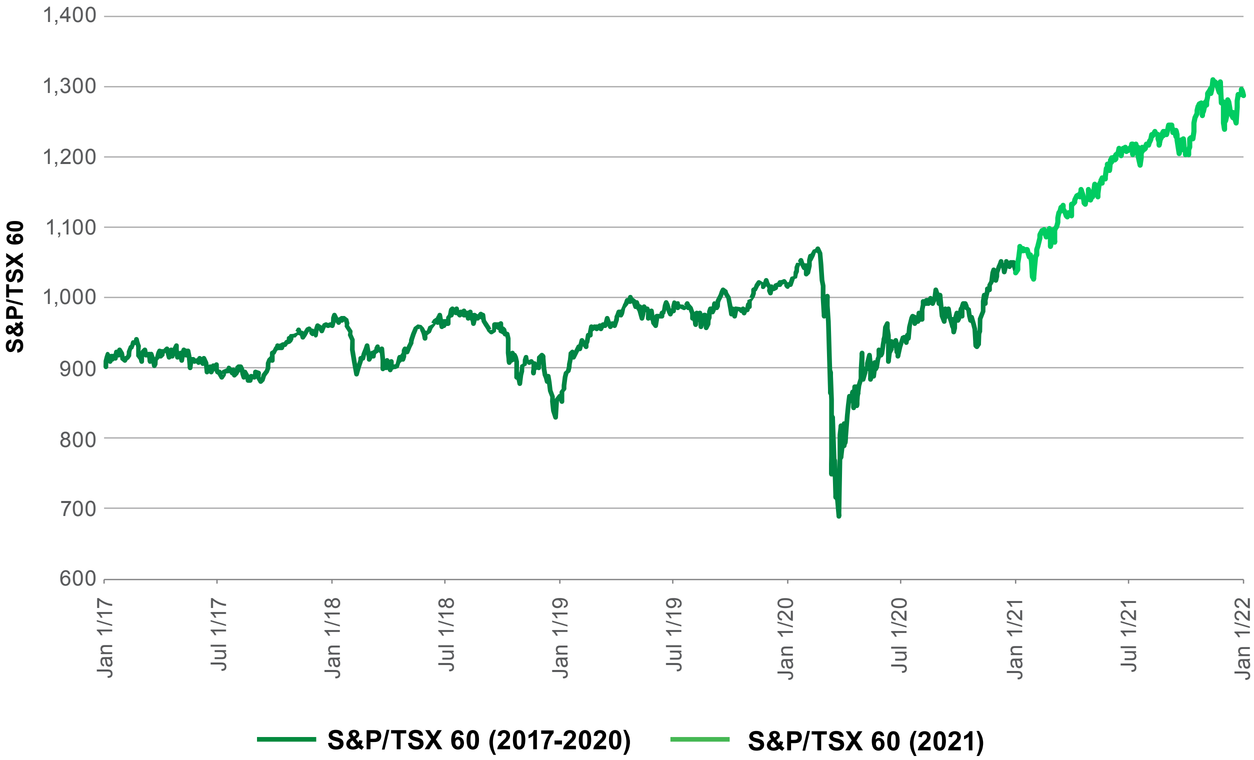

For the full year, equity market returns were very strong. Stronger economic activity translated into positive news on earnings growth which helped stock markets. Low interest rates also enabled corporations to finance merger and acquisition activity, which rose to an all-time high in 2021. A total return summary of equity market indices is provided below.

| Index | Total returns (2021) | Annual total returns (2012-2021) |
|---|---|---|
| S&P/TSX 60 | 28.0% | 9.9% |
| U.S. S&P 500 | 28.7%[2] | 16.5%[2] |
| MSCI EAFE[3] | 11.9%[2] | 8.6%[2] |
| MSCI Emerging Markets | -2.2%[2] | 5.9%[2] |

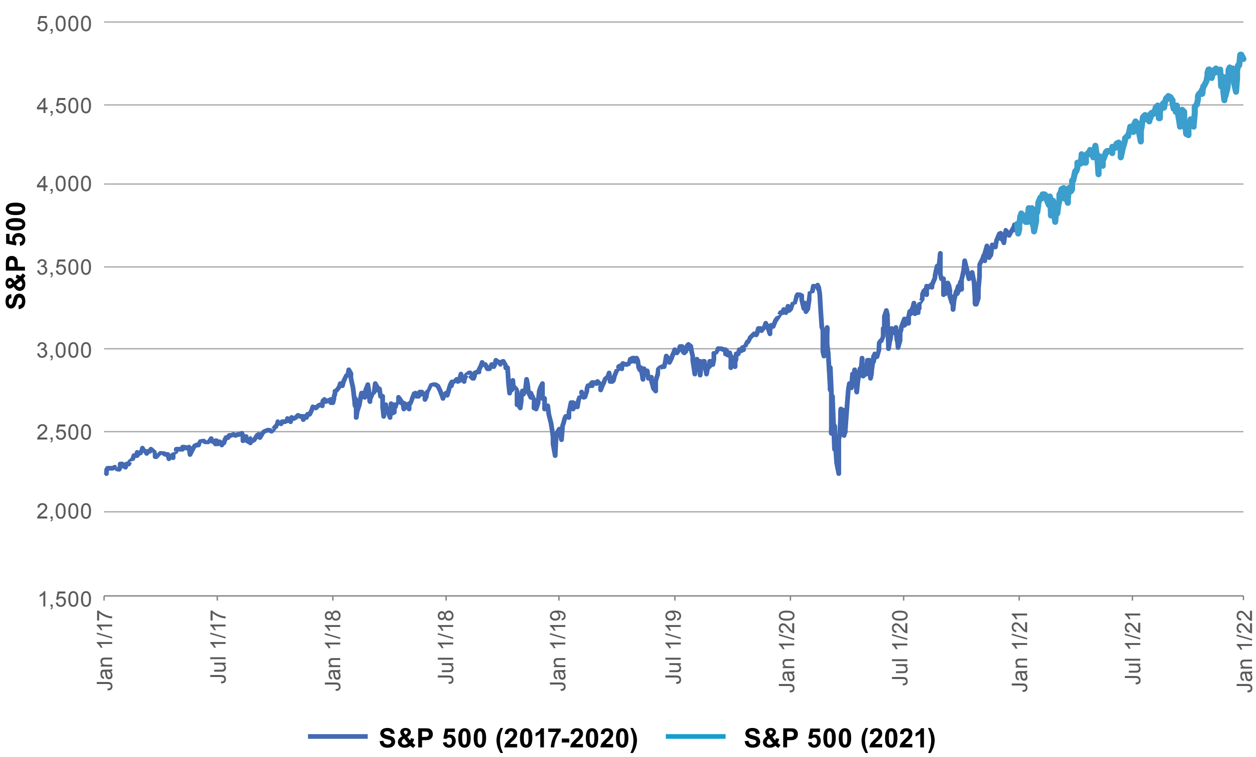
[2] U.S. dollars
[3] Developed equity markets excluding U.S. and Canada

Price levels of the Canadian S&P/TSX 60 and the U.S. S&P 500 indices are charted below. The precipitous declines in March 2020 are very clear, as is the steady and strong recovery since the pandemic lows.

## S&P/TSX 60 (Canadian) 5-year history




## S&P 500 (U.S.) 5-year history



In the next section, we discuss the major drivers behind our funded position, followed by investment portfolio commentary.

## Major drivers in the change in funded position

The table below summarizes the change in the Plan's funded status compared to last year, based on changes in net assets and pension obligation as well as the smoothing adjustment for each year.

| | **2021** | **2020** |
|---|---|---|
| ($ millions) | | |
| **Net investment income** | **11,595** | 10,661 |
| **Changes due to operations** | | |
| Contributions | **2,820** | 2,715 |
| Benefit payments | **(3,639)** | (3,192) |
| Operating expenses | **(345)** | (303) |
| ***Total changes due to operations*** | **(1,164)** | (780) |
| **Total change in net assets available for benefits** | **10,431** | 9,881 |
| **Change in pension obligation** | **(6,050)** | (6,305) |
| **Net change in surplus on a net assets basis** | **4,381** | 3,576 |
| **Funded ratio on a net assets basis** | **133%** | 130% |
| Change in smoothing adjustment* | **(2,159)** | (1,865) |
| **Regulatory funded ratio** | **120%** | 119% |

* Change in the average of the current net assets and the net assets for the four preceding years brought forward with interest at the asset valuation rate and adjusted for contributions, benefit payments and administrative expenses.

As seen in the table, net investment income is the largest driver in the change in net assets. The Liability Hedge Portfolio produced a return of $928 million in 2021 while the Return Seeking Portfolio posted a gain of $10,667 million, for a total net investment income of $11,595 million. In contrast, of the $10,661 million in total net investment income in 2020, the Liability Hedge Portfolio generated a return of $7,538 million and the Return Seeking Portfolio a gain of $3,123 million.

The effects of the pandemic continue to be felt through the sustained volatility in the economic environment in which we operate. As such, we have exercised appropriate judgment when determining the pandemic's impact on the estimated fair value of the Fund's investments. While the fair values of certain investments reflect our best estimates and assumptions, actual results could differ from those estimates. We are closely monitoring ongoing developments and related impacts, and will continue to review judgments, estimates and assumptions periodically. Further information on our use of estimates and judgments can be found in Note 1 of the Financial Statements.

Details of the performance of individual strategies within the Liability Hedge Portfolio and the Return Seeking Portfolio follow in subsequent sections. The table below shows how much each investment strategy contributed to net investment income in 2021 and 2020.

| ($ millions) | Net interest and dividend income | Net gain (loss)* | 2021 net investment income | 2020 net investment income |
|---|---|---|---|---|
| **Liability hedge portfolio** | | | | |
| Short-term | 670 | (584) | **86** | 363 |
| Nominal bonds | 1,267 | (2,852) | **(1,585)** | 5,858 |
| Real return bonds | 157 | 618 | **775** | 1,285 |
| Real estate | 426 | 1,226 | **1,652** | 32 |
| ***Total liability hedge portfolio*** | 2,520 | (1,592) | **928** | 7,538 |
| **Return seeking portfolio** | | | | |
| Public equities | 26 | 6,084 | **6,110** | 2,165 |
| Private equity | 154 | 2,481 | **2,635** | 1,066 |
| Infrastructure | 22 | 161 | **183** | 31 |
| Corporate credit | 195 | 455 | **650** | 351 |
| Long-term option strategy | 0 | 0 | **0** | (31) |
| Other return seeking strategies | 652 | 437 | **1,089** | (459) |
| ***Total return seeking portfolio*** | 1,049 | 9,618 | **10,667** | 3,123 |
| **Total** | **3,569** | **8,026** | **11,595** | **10,661** |

* Net of management fees and transaction costs.

The net investment income generated by the above-mentioned strategies is presented in the financial statements later in this document, in accordance with the requirements of accounting standards.

## Active management and relative performance

The total Fund return of 11.28% exceeded the benchmark return of 8.59% by 2.69% or $2,756 million. This active management return, or value added, came from a variety of sources during the year within the Liability Hedge Portfolio and Return Seeking Portfolio. The Liability Hedge Portfolio generated $810 million or 0.79% of the active management return, with a significant contribution coming from real estate. The Return Seeking Portfolio generated the remaining $1,946 million or 1.90%, with large contributions from credit and other return seeking strategies.

## Liability hedge portfolio discussion

### Short-term

This portfolio provides general funding for investment strategies employed by the Fund, investing in highly rated liquid securities to maintain the Fund’s liquidity and enhance returns. In contrast with the previous year, there were fewer opportunities to enhance returns over the course of 2021, and this portfolio was positioned more defensively. In 2021, the portfolio generated a return of $86 million, compared with $363 million in 2020.

## Nominal bonds: mid-term and long-term bonds

Our bond portfolios help to offset our Plan's long-term liabilities and our sensitivity to long maturity interest rate changes. In our mid-term and long-term bond portfolios, we employ strategies that reflect our outlook on the direction of interest rates over various time horizons. Among other things, these strategies may alter the portfolio's duration, and capitalize on changing inflation expectations or spread differentials between government fixed income products. North American bond markets were particularly volatile over the course of the year, reflecting changing economic data due to re-openings, rising inflation expectations, and reduced monetary policy accommodation. With an increase in bond yields, this resulted in a negative return of $1,585 million, or -4.1%. In 2020, this portfolio produced a gain of $5,858 million, or 12.3%.

## Real return bonds (RRB)

Real return bonds pay a rate of return equal to the rate of inflation plus their real yield. This portfolio helps provide a hedge against increases related to the Canadian consumer price index in our Plan's pension liabilities. In 2021, this portfolio generated a 7.8% return of $775 million, compared to 15.2% or $1,285 million in 2020.

## Real estate

At year-end, our real estate portfolio had a gross market value of $20.1 billion versus $15.5 billion at the end of 2020. Real estate markets continued to recover through 2021 from the negative pandemic impacts of 2020. Our 2021 transaction activity was more than double than of the previous year, with approximately $4.4 billion in new investments and commitments.

In 2021, the portfolio produced a return of 12.5% on a currency-hedged basis, and $654 million in value added. The key factors impacting returns were:

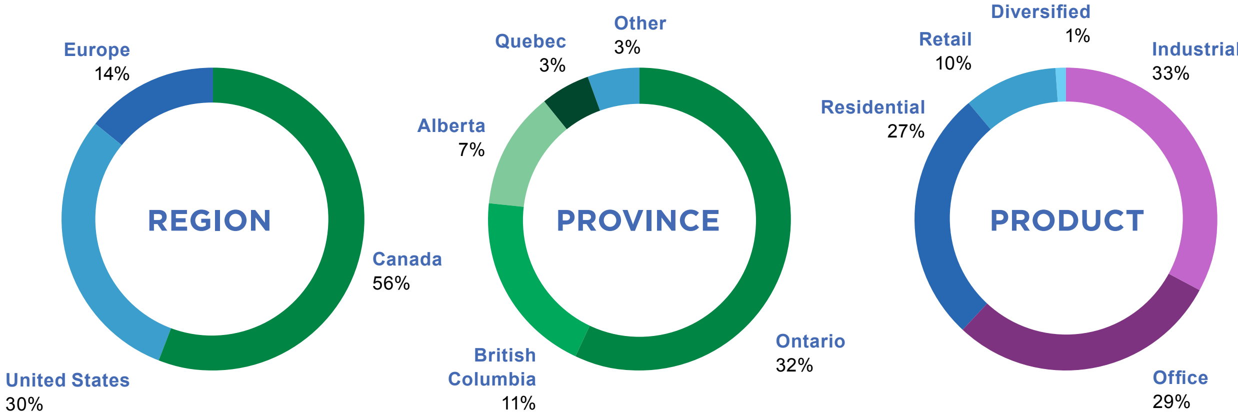
- **Significant strength in our industrial and logistics program:** Markets across North America, the United Kingdom and Europe reached new highs in leasing volumes, rental growth, and transaction activity.
- **Strong performance from our increasingly larger residential portfolio:** Our residential assets in the U.S. sunbelt were particularly strong given demographic shifts and the broad economic rebound.
- **Continued pressure on our Canadian retail holdings:** While traffic and sales at our enclosed malls continued to improve, the physical retail environment continues to be challenged given pandemic restriction waves and increased e-commerce activity.
- **Muted growth in our office portfolio:** With return-to-office plans continuing to be delayed, our office portfolio saw flat to negative capital values given the uncertainty surrounding the sector. However, leasing activity in many core markets has recovered with increasing transaction evidence that is supporting investor interest in the asset class.

In 2021 we made meaningful advances in positioning the portfolio in line with our long-term capital allocation objectives. This included:

- Investing or committing to $3.3 billion in residential assets in Canada, U.S. and Europe, moving our portfolio from 16% at year-end 2020 to 25% at year-end 2021.
- Continued investment in our industrial development program with the commencement of 2.4 million square feet of new development projects (representing $530 million of estimated completion value) and the purchase of 1,405 acres for future development.
- Further expanding our investment program in alternative asset classes, including student housing and cold storage, with near-term closings in life science opportunities.
- Significant progress in growing our portfolio outside of Canada, which now represents 44% of our portfolio compared to 35% at year-end 2020.

The following charts illustrate the global diversification and property type mix of HOOPP's real estate portfolio as at the end of 2021.

### Real estate asset mix by region and product




# Return seeking portfolio discussion

## Public equities

World stock markets posted a third year of double-digit gains supported by highly accommodative monetary policy, strong earnings, and significant retail fund flows. The MSCI All Country World Index (ACWI) return was 19.0%[2]. As noted in the *2021 Investment environment* section on page 24, North American markets posted particularly strong returns. The S&P/TSX60 in Canada returned 28.0% while the S&P 500 in the United States returned 28.7%[2]. The MSCI Europe Index return was 17.2%[2]. The MSCI Emerging Market index, which covers 25 countries, had a modest loss in 2021 with a return of -2.2%[2]. Overall, our public equities portfolio generated a 2021 return of $6,110 million or 20.1%, versus $2,165 million or 6.4% in 2020.

In the second half of 2021, we shifted part of our equity exposure to include indices holding companies that benefit from or facilitate energy transition to a lower carbon economy. This is an initial step in a multi-year journey to adapt our equity portfolios to reflect both climate change as a systemic risk factor and the associated energy transition as a long-term investment theme.

### Canadian equities

The Fund's Canadian equity portfolios returned 30.0% in 2021, versus a 2020 return of 8.0%.

After a 27% decline in 2020, the Energy sector rebounded with a 49% return in 2021, reflecting the strong rally in energy prices as economies reopened to some degree in 2021. The Financial sector, the largest in the TSX, was up 37% after very modest gains in 2020, helped by the quick reversal of credit provisions taken by banks early in the pandemic. The Health Care sector, which is a small part of the Canadian index, was the only sector with a negative return.

### U.S. equities

The Fund's U.S. equity portfolios posted a return of 29.6%[2] in 2021, after a return of 18.6%[2] in 2020.

The largest sector in the U.S. market is Information Technology, which again delivered very strong returns, up 35%. This marks the 13th year in a row of positive returns for Information Technology, which now has a trailing 10-year return of 24% per year. As in Canada, the Energy sector was the strongest sector in the U.S. market, though the weight of Energy in the U.S. is modest. The Financial sector return was 35% for similar reasons as its Canadian counterpart. The equity market strength in the U.S. was broad-based across sectors and styles, with no sector posting returns below 15%.

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[2] U.S. dollars

### International Equities

The 2021 return for the Fund's International Equity Portfolio was 11.1%, compared to 2.9% in 2020.

Returns were generally strong in Europe (MSCI Europe index return was 17.2%[2]), with more modest gains in developed Asian markets such as Japan (MSCI Japan index returned 2.0%[2]). Reflecting its more restrictive policy environment, China's losses (MSCI China index lost 21.7%[2]) largely offset its 2020 gains and were a significant drag on emerging market stocks.

## Private equity

HOOPP Capital Partners (HCP) selectively invests globally in:

- privately held businesses that offer the potential for equity returns,
- private equity and private debt funds, and
- other private capital opportunities, including structured equity and private debt across the risk/return spectrum.

Private capital can provide an opportunity for HOOPP to earn attractive risk-adjusted returns due to the nature of the investment process. This process involves detailed due diligence of the underlying companies, better alignment of management teams to investment outcomes, and the ability to create securities with features not available in the public markets, including protections mitigating downside risk and providing for asset management rights in certain circumstances.

At the end of 2021, HCP had $13.7 billion invested, with a further $7.0 billion committed to private investments. The portfolio generated a currency-hedged return of 23.7% for the year compared to 10.5% in 2020 (the return on an unhedged basis was 21.1% in 2021 compared to 10.3% in 2020), exceeding its benchmark by $47 million.

## Infrastructure

HOOPP Infrastructure (HI) was created in June 2019 to evolve and execute the Fund's infrastructure investing strategy. HI will invest globally in:

- privately held infrastructure assets that offer the potential for strong risk-adjusted returns,
- a small number of private infrastructure funds, and
- other opportunities in infrastructure such as preferred equity and private debt.

HI is executing its mandate through a combination of direct deals, funds and related co-investments.

During the year, HI grew its portfolio from $0.7 billion to $2.7 billion, with a further $0.8 billion committed to an investment that is expected to close in early 2022, as further described below.

Through its co-investing and direct activity, HI held $2.1 billion of investments in:

- U.S. renewable power generation assets
- European fibre optic communications and data infrastructure
- a U.S. broadband communications and data company
- Highway 407, a provincially owned tolled highway in Ontario
- a large container terminals company with operations in several ports in North, Central and South America

A further $0.6 billion of assets were held through private infrastructure funds to which HI also has $0.7 billion of unfunded capital commitments. More than $0.4 billion of these investments were in North

[2] U.S. dollars

America and Europe, with the remainder in several other geographies. Assets held through these funds represented positions in a wide variety of infrastructure sectors.

At year end, in partnership with other Canadian and Australian institutions, HI had also committed to acquire and take private a large Australian utility primarily involved in electricity transmission and distribution.

HI delivered very strong performance in 2021, generating a return of 14.2% for the year, compared to 7.3% in 2020.

## Corporate credit

The Fund gains exposure to corporate credit through a combination of corporate bonds, structured products, and derivatives. Active strategies in this portfolio delivered outsized results in 2021. Overall, the credit portfolio produced a 4.7% return of $650 million in 2021, versus a 2.7% return of $351 million in 2020.

## Other return seeking strategies

### Asset allocation strategies

HOOPP engages in strategic reweighting of equities, fixed income, and corporate credit to manage the risk and enhance the return of the Fund. In 2021, this program generated a return of $545 million, largely due to gains in Canadian and European equity positions. These strategies had a combined loss of $95 million in 2020.

### Absolute return strategies

HOOPP runs a portfolio of absolute return strategies designed to enhance the Fund's return. For example, some strategies may seek to capitalize on structural pricing discrepancies between similar investments, while others look to seize more transient market opportunities. These strategies gained $542 million in 2021, compared to a loss of $487 million in 2020.

# Investment outlook

The investment environment continues to evolve as pandemic-related effects play out in global economies and financial markets. The duration and magnitude of increased inflation continues to be a point of debate, in the face of supply chain disruptions and tightening labor markets. Accommodative measures have begun to roll back, bond markets have started to price in multiple interest rate hikes, and stocks are likely to post lower returns and higher volatility as emergency support from central banks is removed. HOOPP's investing approach will adapt to this shifting environment, while continuing to focus on delivering the returns needed to protect our members' pensions for many years to come.

Our goal is to improve the Fund's resilience to a variety of outcomes. HOOPP will continue to purposefully diversify our portfolio across geographies and through allocations to a wide array of strategies at an appropriate scale for our Fund's size. This includes expanding our organizational capability through technology and thoughtful staffing, building on our successes in private investments, and continuing to invest in the innovation economy. Our strong performance record puts us in a position of relative advantage to safeguard our members' interests and pensions, now and into the future.

# Sustainable investing

> Sustainable investing means investing in a way that uses insights from environmental, social and governance (ESG) factors to enhance investment performance. ESG factors can take the form of risks or opportunities and can be relevant to an individual investment or a broader investment strategy throughout the investment life cycle.

HOOPP's sustainable investing approach is a growing part of our investing strategy that will help us improve the resilience of our Fund's portfolio in a way that is aligned with our values and promotes strong relationships with our stakeholders. In 2020, we articulated our refreshed approach through a three-pillar framework, based on HOOPP's sustainable investing beliefs. More information on our sustainable investing beliefs and three-pillar framework can be found in the *Sustainable investing* section on **hoopp.com**.


Integrating ESG factors into our investment decision-making process and post-investment ownership practices is consistent with the prudent management of HOOPP's investment assets. We support disclosures aligned with the Sustainability Accounting Standards Board (SASB) standards and the Taskforce on Climate-related Financial Disclosures (TCFD) framework, because disclosure of relevant ESG information by companies enables us to evaluate ESG risks and opportunities.

Active stewardship is our preferred approach to advancing positive change. Remaining invested in companies that achieve real-world impact can enhance long-term value for our members and help us deliver on our pension promise. However, there may be instances where engagement is ineffective and exclusions on specific companies or an entire industry may be considered.

Highlights of how we have advanced our stewardship, integration, and other sustainable investing activities in 2021 are presented below.

## 2021 highlights

### Embedding sustainable investing into our structures

- We established a senior management committee dedicated to sustainable investing, with members that include our Chief Investment Officer and our Chief Risk Officer. More information on how our related governance structures have been enhanced can be found on **hoopp.com/TCFD**.
- Successful implementation of our three-pillar framework was formally tied to organizational performance measures, reflecting sustainable investing as a strategic priority for HOOPP.
- We expanded the coverage of our portfolio carbon footprint and enhanced our TCFD disclosure, both of which can be found on **hoopp.com/TCFD**.

### Fostering sustainability

- HOOPP is a proud member of the 30% Club Canada Investor Group, which has been promoting greater diversity on company boards and management teams in Canada since 2016. After years of collective engagement, the percentage of women on boards on TSX Composite-listed companies exceeded 30% for the first time in 2021, achieving the goal of reaching this milestone by 2022.
- We supported Canada's successful bid to host one of the offices for the global headquarters of the new International Sustainability Standards Board (ISSB), a group focused on establishing global sustainability-related disclosure standards. Broadly accepted disclosure standards would make better quality ESG information more widely available to investors, including HOOPP.
- As a large institutional investor, HOOPP plays a leadership role in several organizations focused on advancing key ESG initiatives, particularly as they affect financial markets. For example, our Chief Risk Officer is on the Sustainable Finance Action Council launched by the Government of Canada in 2021. More information about our partnerships with other organizations is available on **hoopp.com/sustainableinvesting**.

We also made progress in 2021 on our approach to managing climate change, a complex and systemic issue of pressing importance. This includes managing climate risk, investing in climate solutions, and driving change through stewardship and commitments, all discussed below. We will continue to thoughtfully expand our climate-related activities to both enhance our Fund's resilience and do our part to address the climate crisis.

## Climate change

Climate change is distinct from other risks we face, in that it impacts us all and requires concerted action from governments, companies, individuals, and institutional investors like HOOPP.

The impacts of and responses to climate change create risks and opportunities relevant to HOOPP and how we manage the Fund. Climate change affects an investment portfolio through physical impacts like increased flood risk, and transition impacts, such as policy intervention or technological innovation. These impacts may positively or negatively affect individual companies, or entire sectors, geographies, and economies.

### Managing climate risk

- We began a top-down, Fund-level scenario analysis to consider three climate scenarios: an orderly, disorderly, and failed transition. The practice of climate scenario analysis is still evolving globally, so we will continue to monitor the development of standardized scenarios and methodologies as we build on this initial phase of work.
- Partnering with other global institutional investors, we participated in a pilot project for a climate analytics tool that models climate change impacts on companies and their peers, providing feedback on future improvements.

### Investing in climate solutions

- As a first step in a multi-year journey, we introduced an initial $1 billion allocation to climate change equities through indices aligned with The Paris Agreement on climate change.
- We continued to invest in climate-resilient and clean energy infrastructure, with $398 million currently invested.
- We continued our investment in green and sustainable development bonds, which fund projects such as clean energy and climate adaptation, with approximately $550 million invested at the end of 2021.

## Driving change through stewardship and commitments

Responsible stewardship of our investment portfolio is a key pillar of our sustainable investing approach and an important tool to drive real-world change. As an investor, we influence change by engaging companies to improve their climate resilience and reduce emissions in the real economy. For example, we encourage management to develop credible decarbonization plans and vote to support climate-related proposals.

We advanced our engagement activities with respect to climate change in 2021:

- HOOPP became a founding member of Climate Engagement Canada (CEC), a collaborative engagement initiative focused on driving climate action at Canadian companies to deliver real-world emission reductions and improved resilience. Our Head of Sustainable Investing is on the Steering Committee of CEC, which is expected to start engaging Canadian companies with high emissions in 2022.
- HOOPP signed the Global Investor Statement to Governments on the Climate Crisis, a call to action for governments to raise their climate ambition. As an investor, we value clear, consistent climate policy as a crucial element in being able to decrease climate risk exposure and benefit from climate-related opportunities.

CLIMATE ENGAGEMENT CANADA

# Member and employer services

As our province's healthcare system continued to deal with the impact of the COVID-19 pandemic in 2021, HOOPP stayed focused on serving the needs of members and employers. Through the course of the year, we made enhancements to the Plan and improvements to the ways in which we provide service and support. Our goal is to always provide our members with peace of mind about the future of their pension and the Plan, so they can live their lives today, without the financial worry of tomorrow.

## Benefit improvement

Early in the year, our Board of Trustees approved a pension benefit increase for active members, who continue to courageously support our communities during the pandemic. Eligible members who were active in the Plan as of April 1, 2021 received an increase in their annual lifetime pension for service in 2018, 2019 and/or 2020. These changes were made possible by the overall strength of the Plan. They were done prudently to ensure the financial impact on the Plan was affordable, while still allowing us to provide eligible members with a significant increase to their pension benefit that they will be able to enjoy in retirement.

That strength, as demonstrated by our very healthy funded status, also played an important role in our Board's decisions to provide retired and deferred members with a cost-of-living adjustment to their pension, while also keeping member and employer contribution rates unchanged until at least the end of 2023. Taken together, these measures to improve benefits, increase monthly pensions and provide stability, help reinforce the security of the Plan in uncertain times.

On the service side, we focused on strengthening pension education and guidance, while enhancing digital capabilities and continuing to prioritize information and data security for members and employers. These initiatives, explained in greater detail in the *Strategic planning* section of this report, are aligned with our strategic imperative to advance and evolve Plan delivery to continue meeting the needs of our members and employers.

## A snapshot of the Plan and our membership

The number of HOOPP members and employers continued to increase in 2021. The following key metrics offer a snapshot of the Plan and our membership as at December 31, 2021.

**419,627**
Total members

| 257,647 | 119,711 | 42,269 |
|---|---|---|
| Active members | Retired members | Deferred members |

**$29,800**
Average annual pension for newly retired members in 2021

**0.73%**
Cost-of-living adjustment (COLA) for retired and deferred members
(effective April 1, 2021)

### Plan demographics

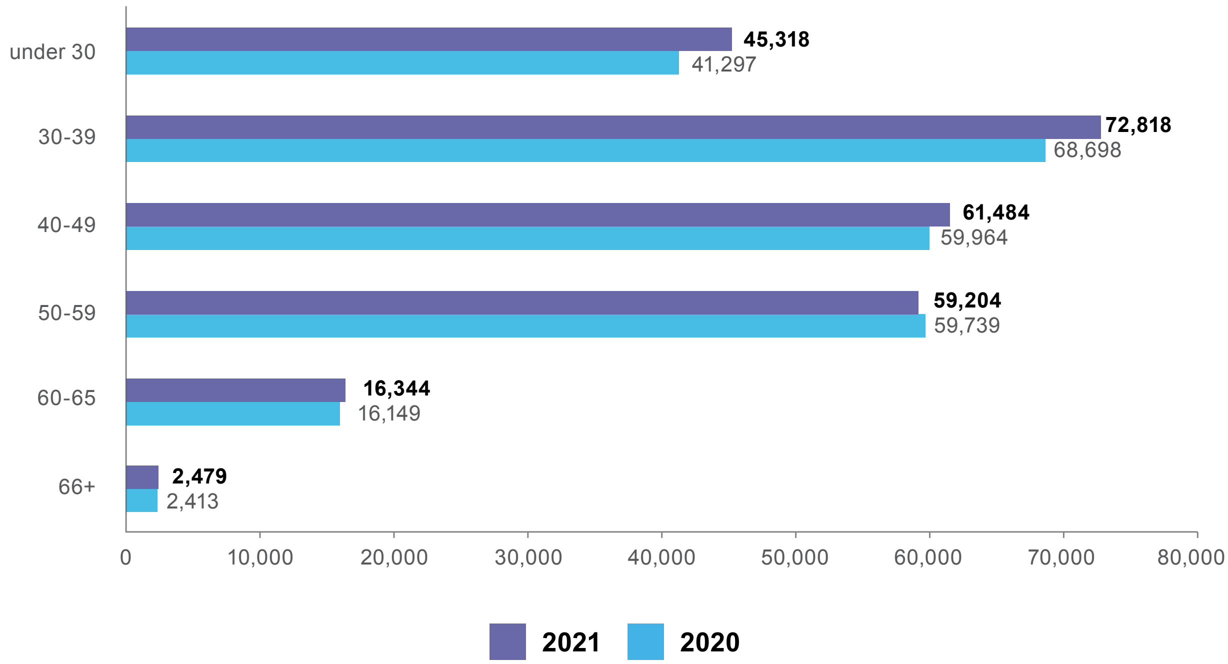
**66%**
of active members work full-time

**34%**
of active members work part-time

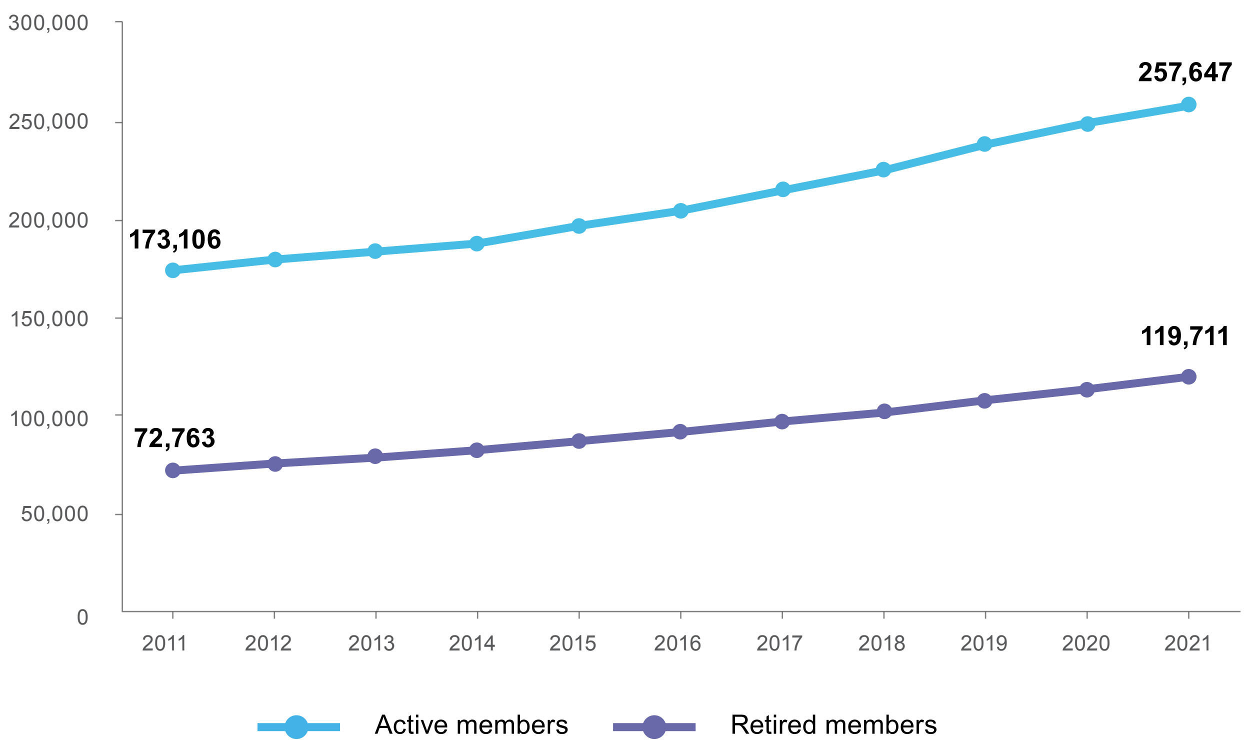
**624**
Total employers

| 169 | 140 | 87 | 87 | 74 | 67 |
|---|---|---|---|---|---|
| Small healthcare organizations | Hospitals | Service providers | Family health teams | Foundations | Community health centres |

## Active members by age group (2021 vs. 2020)




## Active and retired member growth



# Our people

> HOOPP's success is a reflection of our staff's dedication and commitment to providing members with long-term retirement security. As our Plan's net assets, membership and employer base continued to grow in 2021, we added new functions and hired additional staff to ensure that this growth was managed responsibly, with strong governance and oversight.

Over the course of 2021, HOOPP's permanent workforce grew by 10%, which equated to 132 new hires, 87 of which were net new positions. Many of the roles were in our newly created Risk division. With the hiring of a Chief Risk Officer and the centralization of our risk oversight in the new division, we further strengthened this area and our overall capability by adding key roles that emphasized specialized knowledge and expertise.

We also saw significant growth in our Plan Operations and Information Technology & Facilities Services teams. Lastly, in the face of an increasingly complex and volatile investment environment, we expanded our Investment Management team, adding more expertise in private markets and alternative investment strategies such as insurance-linked securities and quantitative investing. This growth was required to help position our organization to continue delivering on our pension promise to members.

With continued growth in our overall workforce, we remained focused on fostering a high-performance culture that is inclusive, engaging, builds trust, and supports our employees. Our efforts over the past year included important investments in new tools, and an expansion of our training and development activities to ensure our employees have the skills they need today, and in the future, to help us serve our members and employers. We have also added more continuous learning opportunities and a variety of health and wellness benefits to help foster a more resilient and productive work environment for our staff.

As the global pandemic continued, we kept employee health and safety top of mind while showing support for our members, frontline healthcare workers, with an ongoing work-from-home mandate. In support of our employees, we continued to enhance our online resources and provide additional support focused on their mental and physical health. In the fall, we were able to temporarily welcome a small number of employees back to the office on a voluntary basis, with strict protocols and protective measures in place. We hope for a broader return to the office in 2022 with a hybrid work model that will support a mix of office and remote work.

As mentioned in the *Strategic planning* section of this report, we also made very significant and important progress on our Equity, Diversity, and Inclusion (EDI) program at HOOPP in 2021. Paramount to that was the launch of our five-year EDI strategy and roadmap, which now serves as the cornerstone of our work in this area. In support of the strategy, we embarked on several new relationships with equity-seeking groups, successfully expanded our employee resource group programming and created opportunities for our leaders to learn from our employees' EDI-related experiences at HOOPP and beyond.

We are confident that all these efforts will help us continue to retain and attract the best employees, amid growing demands on our workforce.

GREATER TORONTO'S TOP 2022 EMPLOYERS

**As a reflection of our healthy culture along with our diverse, collaborative and high-performance work environment, HOOPP was named one of *Greater Toronto's Top Employers (2022)*. This is the second year in a row that we have received this prestigious recognition.**

# Risk management and internal controls

> Risk management is a critical element in HOOPP's ability to provide members with a secure retirement pension for life. Managing risks ensures that future returns and asset growth will be sufficient to fund Plan liabilities.

In 2021, our new independent Risk division was formalized with the creation of a leadership team covering investment risk, enterprise and operational risk, and compliance mandates. Additionally, the internal audit team began reporting to the Chief Risk Officer (CRO) from an administrative perspective, while maintaining its functional independence and direct reporting to the Board of Trustees' Audit & Finance Committee. The internal audit team provides independent assurance to management, the Audit & Finance Committee and the Board relating to the effectiveness of operational controls.

Reporting to the CEO, the CRO is responsible for further development and execution of risk management activities at HOOPP, in support of the delivery of HOOPP's strategic imperatives and pension promise. Risk management activities have historically been conducted in various units across the organization. These activities within the business units remain in place and will evolve as the Risk division's programs take shape, creating additional layers of risk review. The Risk division will ensure our risk management and compliance systems, practices and monitoring continue to evolve to meet our future needs, while providing expertise and comprehensive risk reporting to the Board.

At the HOOPP management committee level, our Operations Committee is mandated with oversight responsibility for operational and compliance risks, and our Investment Risk Committee has oversight over all matters pertinent to investment and financial risks.

As part of its oversight role, our Board is responsible for ensuring that an effective risk management program is in place. The accountability for enterprise risk management (ERM) and compliance is delegated to the Audit & Finance Committee, and the Board's other committees have oversight of risks related to their respective mandates. The Board and its Committees can also appoint professional advisors for their expert advice and assistance in support of their mandates, including in relation to the fulfillment of their responsibilities for oversight of risk management.

In 2021, our Board approved HOOPP's 2022 Risk Appetite Framework (RAF) covering financial, reputational, operational, and compliance risks. This builds on the existing investment policies and guidelines and the Statement of Investment Policies & Procedures. In accordance with the RAF, HOOPP sets its Board-approved risk appetite annually covering risk statements, metrics, and limits as well as reporting requirements relative to major risk categories.

## Risk, responsibilities, programs and processes

To achieve our objectives, we must effectively manage several risks:

- **Funding risk** that HOOPP cannot generate sufficient return on investment to meet the pension promise
- **Liquidity risk** that could result in HOOPP not meeting its short-term debt obligations or not being able to access markets when needed to sell or buy assets
- **Operational risk** including the potential disruption or loss resulting from people, processes, systems, or external events
- **Compliance risk** caused by the failure to abide by laws, rules, regulations, and internal governance processes and policies
- **Reputational risk** results from negative changes in perceptions of stakeholders (including members, employers, employees, market counterparties, regulators and government bodies, media, peers, and third-party vendors/suppliers), and/or ineffectively managed financial, operational, and compliance risks

All these risks are identified and managed within our firm-wide ERM capabilities. ERM is the establishment of common risk management practices and tools applicable to all risk categories enterprise-wide. It is intended to increase positive outcomes and reduce negative surprises. Practices and tools are designed to facilitate the consistent and systematic identification, assessment, monitoring and reporting of key risks in a timely and complete manner.

To manage the risks affecting the Plan and the Fund, we also maintain governance and risk management programs and processes outside of the Risk division that include:

- **Code of Business Conduct, Respect in the Workplace (Harassment and Violence) Policy and supporting policies** that emphasize:
    - our commitment to members and other beneficiaries
    - the roles and responsibilities of Board members, staff and HOOPP's agents and advisors in helping to fulfill the commitment
    - the responsibilities and core values expected of our staff in the workplace
- **Efficient and effective Board and Committee reporting and decision-making process.**
- **Programs and processes** for managing the recruitment, retention, performance and development of HOOPP staff, our most critical resource.
- **Robust stress testing tools** that are custom designed to:
    - measure the impact of potential future economic scenarios on both Fund assets and Plan liabilities
    - best manage the risks relating to investment assets, pension obligations payable in the future, and the investment strategies employed to achieve the required risk-adjusted returns
- **Separate risk and governance functions** in the Finance, Plan Operations, and IT and Facilities Services divisions that bolster our internal capabilities as we continue to navigate an increasingly complex regulatory and investment environment.
- **Privacy Office** that works with HOOPP staff members to develop and maintain appropriate policies and procedures to protect the personal information of our members and staff.
- **Data security and ongoing maintenance of records and data retention schedules** in accordance with both Board and organization-level policies.
- **Disaster recovery and business continuity programs** that are mature and tested to help maintain and, where needed, improve the resiliency of our core operations and processes in the event of disruption.

## Internal controls over financial reporting

As part of our commitment to good governance, we follow the standards outlined in National Instrument 52-109 published by the Canadian Securities Administrators for reporting issuers, though these rules and policies are not binding on HOOPP.

Our President & CEO and Senior Vice President, Finance & Chief Financial Officer are responsible for ensuring that procedures are in place to maintain appropriate internal controls over financial reporting (ICFR) and financial statement note disclosures. These controls are designed to provide reasonable assurance regarding the reliability of financial reporting, including the preparation of financial statements for external purposes in accordance with Canadian generally accepted accounting principles (GAAP).

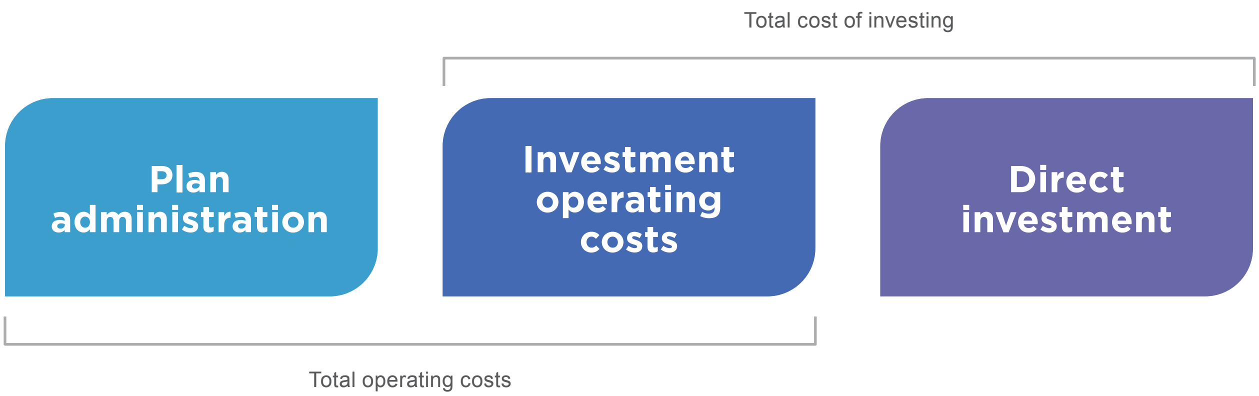
In 2021, we leveraged the framework and criteria set out in the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to conduct a comprehensive evaluation of our internal controls over financial reporting.

The results of our evaluation of the effectiveness of our ICFR confirm they are properly designed and operating effectively to provide reasonable assurance regarding the reliability of financial reporting as at December 31, 2021.

# Cost management

HOOPP incurs costs to invest Fund assets and to administer Plan benefits on behalf of our membership. We ensure that we are cost-effective by:

- linking planned spending to our strategic priorities through an annual planning process
- having our budgets reviewed and approved by both our management team and our Board
- monitoring our spending continuously




## Total operating costs

HOOPP incurs operating costs for staff compensation, technology, facilities, and other items to support the administration of the Plan and the investment of Fund assets. In 2021, our total operating costs were $345 million or 32 basis points of our average net assets available for benefits, compared to 31 basis points in 2020. Based on publicly available information, HOOPP's operating costs compare favourably to similar Canadian pension plans.

## Plan administration costs

HOOPP incurred $118 million or $311 per member to administer the Plan in 2021, compared to $299 per member in the previous year. The increase reflects continued investments in our staff and technology to support our growing membership and enhance the quality of our service. HOOPP remains focused on spending prudently to deliver the pension promise in a cost-effective way.

## Investment operating costs

In 2021, HOOPP incurred $227 million in investment operating costs, compared to $195 million in 2020. The increase was a result of strategic investments in staffing and technology to support new income-generating opportunities and to manage risk.

## Total cost of investing

Our total cost of investing is made up of the investment operating costs described above and direct cost of investing including management fees related to external third-party managers, and transaction costs that are directly attributable to the acquisition or sale of investments. These direct investing costs are expensed as incurred and are reflected in our net investment income. In 2021, HOOPP incurred $217 million in direct investment costs, compared to $202 million in 2020.

Our total cost of investing represented 41 basis points of our average net assets available for benefits in 2021, compared to 40 basis points in 2020. Controlled cost growth is expected to continue over the coming years as we seek new opportunities for fund returns and mature as an organization.

# Financial statements

as at December 31, 2021

# Management's responsibility for financial reporting

The financial statements of the Healthcare of Ontario Pension Plan (the Plan) and the accompanying notes, which are an integral part of the financial statements, have been prepared by management and approved by the Board of Trustees (the Board).

Management is responsible for the integrity and fairness of the information presented, including amounts that are based on best estimates and judgments. These financial statements have been prepared in accordance with the Canadian accounting standards for pension plans and are compliant with the requirements of Part IV of the CPA Canada Handbook - Accounting, specifically Section 4600, *Pension Plans*, and the relevant sections of the Canadian accounting standards for private enterprises (ASPE) in Part II of the CPA Canada Handbook - Accounting. The financial statements also comply with the financial reporting requirements of the *Pension Benefits Act* (Ontario) and *Regulations* (PBA). The significant accounting policies are disclosed in note 1 to the financial statements and the financial information presented throughout the annual report is consistent with that found in the financial statements.

Systems of internal control and supporting procedures have been established and maintained to provide assurance that transactions are authorized, assets safeguarded and proper records maintained. These controls include an organizational structure that provides a well-defined division of responsibilities, a corporate code of conduct, accountability for performance and the timely communication of policies and guidelines throughout the organization.

The financial statements have been prepared by management and approved by the Board. The Audit & Finance Committee, consisting of four members who are not officers or employees of the Plan, reviews the financial statements and recommends them to the Board for approval. The Audit & Finance Committee also assists the Board in its responsibilities by reviewing recommendations from the external and internal auditors, and management's action plans to respond to recommendations for improvements in internal control over financial reporting arising from their audits. The Audit & Finance Committee meets regularly with management and the external and internal auditors to review the scope and timing of their audits, findings, and recommendations for improvement, and to satisfy itself that it has appropriately discharged its responsibilities.

The Plan's external auditor, PricewaterhouseCoopers LLP, was appointed by the Board and is directly responsible to the Audit & Finance Committee. The Plan's external auditor has conducted an independent examination of the financial statements in accordance with Canadian generally accepted auditing standards, performing such tests and procedures as they consider necessary to express an opinion in their Independent Auditor's Report. The external auditor has full and unrestricted access to management and the Audit & Finance Committee to discuss their audit approach and any findings arising from their audits of the financial statements that relate to the integrity of the Plan's financial reporting and the adequacy of the systems of internal control.

| | |
|---|---|
| Jeff Wendling | Barbara Thomson |
| President & Chief Executive Officer | Senior Vice President, Finance & Chief Financial Officer |

March 10, 2022

# Actuaries' opinion

Mercer (Canada) Limited (Mercer) was retained by the Board of Trustees of the Healthcare of Ontario Pension Plan (the Board) to perform an actuarial valuation of the Plan as at December 31, 2021. The purpose of this valuation is to determine pension obligations of the Plan as at December 31, 2021, for inclusion in the Plan's financial statements in accordance with Section 4600, *Pension Plans*, of the Chartered Professional Accountants of Canada (CPA Canada) Handbook - Accounting.

We have undertaken such a valuation and provided the Board with our related report. As this valuation was undertaken for purposes of the Plan's financial statements under the CPA Canada Handbook Section 4600, *Pension Plans*, it might not be appropriate for other purposes and should not be relied upon or used for any other purpose.

The results of the valuation disclosed total going concern pension obligations of $85,902 million in respect of service accrued to December 31, 2021 and a smoothed value of net assets of $103,469 million determined at the same date.

The valuation of the Plan's going concern pension obligations was based on:

- members' demographic data provided by HOOPP management as at October 1, 2021 and members' pay data provided as at December 31, 2020, all of which was projected to December 31, 2021, using management's estimates of experience for the intervening periods;
- the benefits specified by the terms of the Plan including the 2021 CPI adjustment which will become effective April 1, 2022 in respect of all pensioners' and deferred vested members' benefits;
- subsequent events, if any, that were known by February 14, 2022, the date when our related report was completed, and that materially impacted the valuation; and
- assumptions about future events (for example, economic factors such as future rates of inflation and returns on the pension fund, as well as demographic factors) which were developed by Plan management in consultation with Mercer and have been adopted by Plan management and approved by the Board.

Changes have been made to the actuarial assumptions affecting the pension obligations since the previous valuation for the purpose of the Plan's financial statements at December 31, 2021, as described in the notes to the financial statements.

The smoothed value of the Plan's net assets was based on financial information provided by HOOPP management and the asset smoothing method adopted by Plan management which smoothes out short-term market fluctuations.

We have reviewed the data used for the valuation and have performed tests of reasonableness and consistency.

*In our opinion,*

- *the membership data are sufficient and reliable for the purpose of the valuation;*
- *the assumptions adopted are appropriate for the purpose of the valuation;*
- *the methods employed in the valuation are appropriate for the purpose of the valuation; and*
- *this valuation has been completed in accordance with our understanding of the requirements of the Chartered Professional Accountants of Canada (CPA Canada) Handbook Section 4600, Pension Plans.*

Nonetheless, differences between future experience and our assumptions about such future events will result in gains or losses which will be revealed in future valuations.

Our valuation was prepared and our opinions given in accordance with accepted actuarial practice in Canada.

**Mercer (Canada) Limited**

Scott Clausen

Fellow, Canadian Institute of Actuaries

Joseph Fung

Fellow, Canadian Institute of Actuaries

March 10, 2022

# Independent auditor's report

To the Board of Trustees of Healthcare of Ontario Pension Plan

## Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Healthcare of Ontario Pension Plan (HOOPP) as at December 31, 2021 and 2020 and the changes in its net assets available for benefits and changes in its pension obligations for the years then ended in accordance with Canadian accounting standards for pension plans.

### *What we have audited*

HOOPP's financial statements comprise:

- the statements of financial position as at December 31, 2021 and 2020;
- the statements of changes in net assets available for benefits for the years then ended;
- the statements of changes in pension obligations for the years then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

## Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### *Independence*

We are independent of HOOPP in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada. We have fulfilled our other ethical responsibilities in accordance with these requirements.

## Other information

Management is responsible for the other information. The other information comprises the information, other than the financial statements and our auditor's report thereon, included in the annual report.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## 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 HOOPP's 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 HOOPP or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing HOOPP's 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 generally accepted auditing standards 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 generally accepted auditing standards, 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 HOOPP's 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 HOOPP's 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 HOOPP 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.

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.

PricewaterhouseCoopers LLP

**Chartered Professional Accountants, Licensed Public Accountants**

Toronto, Ontario

March 10, 2022

# Statements of financial position

| As at December 31 | 2021 | 2020 |
|---|---|---|
| ($ millions) | | |
| **Assets** | | |
| Investment assets (note 2) | **$ 216,730** | $ 191,386 |
| Contributions receivable | | |
| Employers | **118** | 131 |
| Members | **92** | 98 |
| Other assets (note 7) | **213** | 153 |
| | **217,153** | 191,768 |
| **Liabilities** | | |
| Investment liabilities (note 2) | **102,551** | 87,638 |
| Other liabilities | **188** | 147 |
| | **102,739** | 87,785 |
| **Net assets available for benefits** | **114,414** | 103,983 |
| **Pension obligations** (note 11) | **85,902** | 79,852 |
| **Surplus** (note 11) | **$ 28,512** | $ 24,131 |

*See accompanying Notes to the Financial Statements.*

**ON BEHALF OF THE BOARD OF TRUSTEES**

| Dan Anderson | Gerry Rocchi | Nick Zelenczuk |
|---|---|---|
| Chair of the Board | Vice Chair of the Board | Chair, Audit & Finance Committee |

March 10, 2022

# Statements of changes in net assets available for benefits

| For the years ended December 31 | 2021 | 2020 |
|---|---|---|
| ($ millions) | | |
| **Net assets available for benefits, beginning of year** | **$ 103,983** | $ 94,102 |
| **Investment operations** | | |
| Net investment income (note 4) | **11,595** | 10,661 |
| Investment operating expenses (note 10) | **(227)** | (195) |
| | **11,368** | 10,466 |
| **Plan operations** | | |
| Contributions (note 8) | | |
| Employers | **1,502** | 1,458 |
| Members | **1,318** | 1,257 |
| Benefits paid (note 9) | **(3,639)** | (3,192) |
| Plan operating expenses (note 10) | **(118)** | (108) |
| | **(937)** | (585) |
| **Change in net assets available for benefits** | **10,431** | 9,881 |
| **Net assets available for benefits, end of year** | **$ 114,414** | $ 103,983 |

*See accompanying Notes to the Financial Statements.*

# Statements of changes in pension obligations

| For the years ended December 31 | 2021 | 2020 |
|---|---|---|
| ($ millions) | | |
| **Pension obligations, beginning of year** | **$ 79,852** | $ 73,547 |
| **Changes in pension obligations** | | |
| Interest accrued on benefits | **3,742** | 3,679 |
| Benefits accrued | **3,463** | 3,255 |
| Amendments to the plan (note 11) | **1,529** | 54 |
| Changes in actuarial assumptions (note 11) | **(347)** | 3,047 |
| Estimated experience losses/(gains) (note 11) | **1,302** | (538) |
| Benefits paid (note 9) | **(3,639)** | (3,192) |
| | **6,050** | 6,305 |
| **Pension obligations, end of year** | **$ 85,902** | $ 79,852 |

*See accompanying Notes to the Financial Statements.*

# Notes to the financial statements

For the years ended December 31, 2021 and 2020

## Description of the Plan

The following description of the Healthcare of Ontario Pension Plan (HOOPP or the Plan) is a summary only. A complete description of the Plan provisions can be found in the *HOOPP Plan Text*, the official Plan document.

### General

The Plan is a contributory defined benefit jointly sponsored pension plan, where factors, such as earnings and years of service, define members' benefits. The Plan was established under an *Agreement and Declaration of Trust* (as amended) for the benefit of eligible employees of participating employers.

The Board, consisting of 16 voting members, governs HOOPP. The Ontario Hospital Association (OHA) appoints eight Trustees, while four unions, namely the Ontario Nurses' Association (ONA), the Canadian Union of Public Employees (CUPE), the Ontario Public Service Employees Union (OPSEU) and the Service Employees International Union (SEIU), each appoints two Trustees. Each Trustee has a legal obligation to administer the Plan in the best interests of all its members, regardless of their union or other affiliation.

HOOPP is registered with the Financial Services Regulatory Authority of Ontario (FSRA), and with the Canada Revenue Agency (CRA) under Registration Number 0346007. HOOPP is a Registered Pension Plan (RPP), which is generally exempt from income taxes for contributions and investment income earned in Canada. The Plan may be subject to taxes as a result of income earned in other jurisdictions.

The Board is responsible for administering the Plan in accordance with the PBA, the *Income Tax Act* (Canada) and *Regulations* (ITA), the *Plan Text* and HOOPP's policies and procedures.

### Funding

Plan benefits are funded by contributions and investment earnings. The Board's Funding Decision Framework aims to secure the pension promise and achieve long-term stability in contribution rates for both employers and members. Actuarial funding valuations are conducted annually to determine pension obligations, the funded position, and contribution requirements of the Plan.

Under the terms of the Plan, contributions are set by the Board to cover the total annual cost of benefits. This includes the current service cost of benefits plus special payments required to amortize unfunded pension obligations less any surplus amortization amounts, if applicable.

### Retirement Pensions

A retirement pension is based on the member's contributory service, the highest average annualized earnings during any consecutive five-year period, and the most recent five-year average year's maximum pensionable earnings (YMPE).

Members can receive an unreduced pension at the earlier of age 60 or as soon as they have completed 30 years of eligibility service, provided they have attained at least 55 years of age. Members are eligible to retire at age 55, usually with a reduced pension.

Members who retire early will receive a bridge benefit until age 65 or death, whichever occurs first. The bridge benefit supplements a member's basic HOOPP pension until age 65 when Canada Pension Plan benefits normally begin.

Members who choose to work beyond age 65 can continue to earn benefits until November 30 of the calendar year in which the member turns age 71, when they must begin to receive their pension.

## Disability Benefits

A disability pension is available to disabled members who meet the eligibility requirements. A disability pension is based on the member's contributory service and average annualized earnings earned to the date of disability retirement with no reduction for early pension commencement and no entitlement to a bridge benefit.

Alternatively, disabled members who may not qualify for an immediate disability pension may instead be eligible for a waiver of contributions and continuation of service accrual until the earlier of age 65 or 35 years of contributory service.

## Death Benefits

A death benefit may be available to a surviving spouse or designated beneficiary upon the death of a member. Depending on eligibility requirements, the benefit may be paid in the form of a survivor pension or lump-sum payment.

## Portability

Members who terminate employment shall be entitled to receive a deferred pension. They may also opt to transfer the commuted value of the benefit out of HOOPP to another pension plan or registered retirement vehicle, subject to locking-in provisions and certain age restrictions.

Members wanting to transfer their contributions or the value of their benefits from another registered pension plan to HOOPP can do so, provided the transfer meets all eligibility requirements and the other plan agrees to transfer the funds.

## Inflation Protection

Retirement pensions and deferred pensions are adjusted annually by an amount equal to 75% of the previous year's increase in the Canadian Consumer Price Index (CPI) for all contributory service earned through to the end of 2005. Depending on the Plan's financial status and other factors, the Board can approve an annual increase above the guaranteed level up to 100% of the increase in the previous year's CPI.

For retirements and deferred retirements occurring after 2005, the Board may approve an annual increase of up to 100% of the increase in CPI in respect of pensions earned for service after 2005. In all cases, the increases in CPI are limited to an annual maximum of 10%.

## Retirement Compensation Arrangement

In conjunction with its RPP, HOOPP operates a Retirement Compensation Arrangement (RCA). The RCA provides supplementary pension benefits to members whose earnings result in a pension that exceeds the maximum pension permitted under the ITA for RPPs. The RCA is funded by member and employer contributions, as well as investment earnings, and is administered as part of the overall Plan; however, its assets are held in a segregated account. The allocation of contributions to the RCA and RPP are driven by the requirements of the ITA in a manner that is expected to be sufficient to pay the benefits as they come due. Additional information on the RCA is disclosed in note 13.

Contributions received and income earned in the RCA are taxable. Depending on the contributions received, benefit payments made, and investment income earned through the RCA, a portion of taxes may be refundable and is disclosed in note 7 as refundable withholding tax on contributions.

# Note 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Basis of Presentation

The financial statements of the RPP and RCA plans are combined for purposes of presenting HOOPP's financial statements. These financial statements have been prepared in accordance with the Canadian accounting standards for pension plans and are compliant with the requirements of Part IV of the CPA Canada Handbook - Accounting (referred to herein as the "Handbook"), specifically Section 4600, *Pension Plans*, and the relevant sections of the Canadian accounting standards for private enterprises (ASPE) in Part II of the Handbook.

The financial statements comply with the financial reporting requirements of the PBA and address certain disclosure requirements issued by FSCO[1] in 2013 and amended in 2014. The requirements are addressed by disclosures within certain notes to the financial statements.

The significant accounting policies used in the preparation of these financial statements are summarized below.

## Investments

### *Valuation*

All investment transactions are recorded when the risks and rewards of ownership are transferred. Investment transactions relating to marketable securities and derivatives are recorded as of the trade date. Investments are recorded at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market between market participants at the measurement date under current market conditions, regardless of whether that price is directly observable or estimated using another valuation technique.

The quoted market price, when available, is used to measure fair value. When the quoted market price is not available, management uses appropriate valuation techniques to determine fair value. The valuation techniques include discounted cash flows, earnings multiples, prevailing market rates for comparable instruments with similar characteristics and/or in similar industries, pricing models and management's best estimates. Inputs used to determine fair values include contractual cash flows and interest rates, interest rate discount curves, credit spreads and volatilities. The output of any pricing model is an approximation of a fair value that cannot be determined with certainty and valuation techniques employed may not fully reflect all factors relevant to the investments held. Other factors, including liquidity and redemption restrictions or lock up periods, may also be taken into consideration in the determination of fair value for both quoted and unquoted investments where applicable.

The fair values of investments are determined as follows:

i. Cash is recorded at cost, which is equivalent to fair value.

ii. Securities purchased under resell agreements and securities sold under repurchase agreements are accounted for as collateralized lending and collateralized borrowing transactions, respectively, and are recorded at cost, which together with accrued interest approximates fair value due to their short-term nature.

[1] Prior to June 8, 2019, HOOPP was registered with the Financial Services Commission of Ontario (FSCO). As a result of the Ontario Minister of Finance's decision to establish a new regulatory body, namely the Financial Services Regulatory Authority of Ontario (FSRA), HOOPP is now registered with FSRA. Until FSRA issues new regulatory direction, all existing regulatory guidance issued by FSCO remains in force.

iii. Short-term securities are generally valued at quoted market prices if they exist. Otherwise, they are recorded at cost or amortized cost, which together with accrued interest approximates fair value due to their short-term nature.

iv. Bonds are generally valued based on quoted mid-market prices obtained from independent, multi-contributor third party pricing sources. Where quoted prices are not available, fair values are calculated using either discounted cash flows based on current market yields on comparable securities, or prices provided by independent third parties.

v. Commercial loans are valued at quoted market prices if they exist. Where quoted prices are not available, fair values are calculated using discounted cash flows based on current market yields on comparable securities or prices provided by independent third parties. In some instances, certain loans may be valued at cost plus accrued interest, which approximate fair value, where appropriate.

vi. Public equities are valued at quoted closing market prices. When quoted closing market prices are not available, appropriate valuation techniques and pricing models are used to estimate fair value.

vii. Investments in private equities and special situations include investments held directly, through ownership in limited partnership funds and co-investments with limited partnership funds. Directly held equity investments are valued at estimated fair value using appropriate valuation techniques such as capitalized earnings or discounted cash flow methodologies. In the year of acquisition, cost is used as an approximation for fair value, unless there is evidence of a significant change in value. Investments in limited partnership funds and co-investments are valued at estimated fair value based on financial information provided by the funds' General Partners under limited partnership agreements (unless a specific and conclusive reason exists to vary from the value provided by the General Partners). Debt investments are valued using discounted cash flows based on current market yields on comparable securities.

viii. Investments in real estate include investments held directly and through ownership in limited partnership funds. Direct investments are valued at estimated fair values based on external appraisals, which are completed by independent appraisers accredited under the locally prevailing professional governing bodies. HOOPP's semi-annual appraisal process is completed mid-year (effective June 30) and at year-end (effective October 31, November 30 and December 31). HOOPP requires external appraisers to provide a reaffirmation letter for any year-end appraisal with an effective date before December 31. The reaffirmation letter will either confirm that the value has not changed or provide an updated value at December 31. In the year of acquisition, cost is used as an approximation for fair value, unless there is evidence of a significant change in value. Investments in limited partnership funds are valued based on financial information provided by the funds' General Partners under limited partnership agreements (unless a specific and conclusive reason exists to vary from the value provided by the General Partners). Mortgages held on real estate investments are valued using discounted cash flows based on current market yields on comparable securities.

ix. Investments in infrastructure include investments held directly, through ownership in limited partnership funds and co-investments with limited partnership funds. Directly held infrastructure investments are valued at estimated fair value using appropriate valuation techniques such as discounted cash flow methodology where future cash flows generated by the investments are discounted using a risk-adjusted discount rate. In the year of acquisition, cost is used as an approximation for fair value, unless there is evidence of a significant change in value. Investments in limited partnership funds and co-investments are valued at estimated fair value based on financial information provided by the funds' General Partners under limited partnership agreements (unless a specific and conclusive reason exists to vary from the value provided by the General Partners).

x. Alternative investments include investments in hedge funds, insurance funds and reinsurance funds and are recorded at fair value based on net asset values reported by the funds' administrators.

xi. Exchange-traded derivatives are valued based on quoted closing market prices. For over-the-counter derivatives, where quoted closing prices are not available, appropriate valuation techniques, primarily pricing models, are used to estimate fair value. These pricing models are based on generally accepted valuation models, use readily observable market prices and inputs that are actively quoted and can be validated with external sources, including industry data and pricing services. Depending on the types and contractual terms of derivatives, fair value can be modeled using a series of techniques that are consistently applied. The valuation techniques used by HOOPP require one or more of the following key inputs:

- bond prices – quoted prices are generally available from pricing services for government bonds and most corporate bonds;
- credit spreads – obtained from independent pricing services or derived based on other credit-based instruments;
- foreign currency exchange rates – forward and spot exchange rates are obtained from an independent data service;
- implied volatilities – obtained or derived from independent data services;
- interest rates – quoted rates obtained from central banks and from swap, bond and futures markets; and
- public equity and equity indices prices – based on quoted closing market prices.

xii. Investment receivables and investment payables also include cash collateral pledged or received, pending trades, accrued investment income and accrued investment liabilities. These investments are recorded at cost or amortized cost, which approximates fair value due to their short-term nature.

*Net Investment Income (Loss)*

Investment income (loss) generally consists of net interest and net dividend income, which includes net operating income (loss) from investments in real estate, private equity and special situations, and infrastructure, as well as realized gains (losses) and cash settlements on investments, and unrealized gains (losses) resulting from changes in fair value.

Net interest income is recognized on an accrual basis and net dividend income is recognized on the ex-dividend date. Realized gains and losses on investments are recognized upon disposition and are calculated based on average cost. The change in unrealized gains and losses on investments represents the year-over-year change in the difference between the cost and the fair value of investments.

*Management Fees and Performance Fees*

Management fees and performance fees related to investments in real estate, private equity, infrastructure and alternative investments are expensed as incurred and reported as a component of net investment income.

*Transaction Costs*

Transaction costs, which are incremental costs directly attributable to the acquisition, issue or disposal of investments are expensed as incurred and reported as a component of net investment income.

*Foreign Currency Translation*

Investment assets and investment liabilities denominated in foreign currencies are translated into Canadian dollars at the rate of exchange prevailing at the year-end date. Investment income and expenses are translated into Canadian dollars at the rate of exchange prevailing on the date of the transaction. The realized gains and losses arising from these investment transactions are included in realized gains and losses on the sale and settlement of investments. Unrealized gains and losses on translation of investment assets and investment liabilities are included in the change in unrealized gains and losses on investments.

## Pension Obligations

Pension obligations are determined based on an actuarial valuation prepared by an independent actuarial consulting firm. These pension obligations are measured in accordance with accepted actuarial practice using actuarial assumptions and methods adopted by HOOPP for the purpose of establishing the long-term funding requirements of the Plan. The year-end valuation of pension obligations is based on data extrapolated to the current valuation date of December 31, 2021. The valuation uses the projected accrued benefit actuarial cost method and management's estimate of certain future events.

The pension obligations included in these financial statements are consistent with the results that would be used for a December 31, 2021 regulatory filing valuation if one were to be completed.

## Contributions

Contributions from members and employers are recorded on an accrual basis. Contributions for past service purchases and transfers from other plans are recorded when received.

## Benefits Paid

Benefits paid consist of retirement pensions, bridge benefits, commuted value transfers, disability benefits, death benefits and transfers to other plans and refunds. These are payments to members and pensioners, which are recorded in the period in which they are paid. Any benefit payment amounts accrued and not yet paid are reflected in the pension obligations.

## Fixed Assets and Intangible Assets

Fixed assets and intangible assets are recorded at cost and amortized on a straight-line basis over their estimated useful lives, as disclosed in note 7.

## Use of Estimates and Judgments

The preparation of the financial statements requires management to make judgments, estimates and assumptions based on information available as at the date of the financial statements. Such judgments, estimates and assumptions may affect the reported amounts of assets and liabilities, income and expenses, pension obligations and related disclosures. Significant estimates are used primarily in the determination of pension obligations (note 11) and the fair value of certain investments (note 2).

In March 2020, COVID-19 was declared a global pandemic by the World Health Organization. The COVID-19 pandemic continues to evolve and the economic environment in which HOOPP operates continues to be subject to sustained volatility. As a result, management exercised judgment when determining the impact of COVID-19 on the fair value estimates of its investments. Management is closely monitoring the changing conditions and their impacts. While management makes its best estimates and assumptions, actual results could differ from those estimates. Judgments, estimates and assumptions are reviewed periodically and revisions to accounting estimates are recognized prospectively.

## Related Party Transactions

HOOPP's Board, management, and unconsolidated subsidiaries are considered related parties according to the Handbook. Any transactions between these related parties and HOOPP are not significant for the purposes of these financial statements, except for those disclosed in note 14.

# Note 2 – INVESTMENTS

## a. Investment fair value and cost

The Plan's investment assets and investment liabilities are presented in the table below.

| | 2021 | | 2020 | |
|---|---|---|---|---|
| ($ millions) | Fair Value | Cost | Fair Value | Cost |
| **INVESTMENT ASSETS** | | | | |
| **Cash** | $ 92 | $ 92 | $ 24 | $ 24 |
| **Securities purchased under resell agreements** (note 5) | 11,714 | 11,684 | 9,464 | 9,483 |
| **Fixed income** | | | | |
| Short-term securities | 2,106 | 2,121 | 3,245 | 3,245 |
| Bonds | | | | |
| Canadian | 87,801 | 83,646 | 89,172 | 81,881 |
| Non-Canadian | 9,922 | 9,646 | 7,038 | 6,722 |
| Commercial loans | | | | |
| Non-Canadian | 465 | 494 | 353 | 394 |
| | 100,294 | 95,907 | 99,808 | 92,242 |
| **Equities** | | | | |
| Public equities | | | | |
| Canadian | 2,327 | 2,102 | 2,613 | 2,405 |
| Non-Canadian | 55,015 | 50,437 | 43,934 | 41,185 |
| Private equities and special situations | | | | |
| Canadian | 1,892 | 652 | 1,462 | 615 |
| Non-Canadian | 13,471 | 10,293 | 11,556 | 9,238 |
| | 72,705 | 63,484 | 59,565 | 53,443 |
| **Real assets** | | | | |
| Real estate | 17,916 | 13,432 | 14,477 | 11,733 |
| Infrastructure | 2,662 | 2,465 | 756 | 735 |
| | 20,578 | 15,897 | 15,233 | 12,468 |
| **Alternative investments** | 2,886 | 2,880 | 1,623 | 1,628 |
| **Derivative instruments** (notes 3 & 5) | 4,077 | 1,438 | 2,837 | 1,189 |
| **Investment receivables** | | | | |
| Cash collateral pledged (note 5) | 2,244 | 2,244 | 1,640 | 1,640 |
| Pending trades | 1,591 | 1,597 | 640 | 641 |
| Accrued investment income | 549 | 549 | 552 | 552 |
| | 4,384 | 4,390 | 2,832 | 2,833 |
| **Total investment assets** | 216,730 | 195,772 | 191,386 | 173,310 |
| **INVESTMENT LIABILITIES** | | | | |
| **Securities sold under repurchase agreements** (note 5) | (29,292) | (29,235) | (29,857) | (30,035) |
| **Bonds sold short** (note 5) | (19,814) | (19,795) | (10,441) | (9,906) |
| **Equities sold short** (note 5) | (24,151) | (26,966) | (22,905) | (17,767) |
| **Derivative instruments** (notes 3 & 5) | (3,745) | (2,127) | (4,039) | (2,214) |
| **Investment payables** | | | | |
| Cash collateral received (note 5) | (24,052) | (24,052) | (18,910) | (18,910) |
| Pending trades | (1,114) | (1,118) | (1,129) | (1,132) |
| Accrued investment liabilities | (383) | (405) | (357) | (357) |
| | (25,549) | (25,575) | (20,396) | (20,399) |
| **Total investment liabilities** | (102,551) | (103,698) | (87,638) | (80,321) |
| **NET INVESTMENTS** | $ 114,179 | $ 92,074 | $ 103,748 | $ 92,989 |

## b. Fair value hierarchy

Investment assets and investment liabilities are measured at fair value and classified using a fair value hierarchy that is based on the methods and assumptions used to determine their fair values. The fair value hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and lowest priority to unobservable inputs. The fair value hierarchy has the following three levels:

- *Level 1* – unadjusted quoted prices in active markets for identical assets or liabilities;
- *Level 2* – inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- *Level 3* – inputs for the asset or liability that are not based on observable market data (i.e., unobservable inputs).

In some cases the inputs used to measure the fair value of an investment asset or investment liability might be categorized within different levels of the fair value hierarchy. In those cases, the classification for each asset or liability is determined based on the lowest level input that is significant to the entire assessment. For this purpose, the significance of an input is assessed against the fair value measurement in its entirety. Assessing the significance of a particular input to the fair value measurement requires judgment and evaluation of factors specific to the investment asset or investment liability being considered. Determining whether an input is observable also requires considerable judgment. Observable data is considered to be market data that is readily available, regularly distributed and updated, easily corroborated and obtained from independent sources that are actively involved in that particular market.

Investments that are classified as Level 1 include actively traded equity investments and exchange traded derivatives. These investments are valued at quoted, unadjusted, closing market prices. Cash and cash collateral are also included as Level 1.

Investments that are classified as Level 2 include securities purchased under resell agreements, securities sold under repurchase agreements, short-term securities, equity investments not actively traded, most bonds, over-the-counter derivatives, some investment receivables and some investment payables. For most of these investments, fair values are either derived from a number of prices that are provided by independent price sources or from pricing models that use observable market data such as swap curves, credit spreads and volatilities.

There were no significant transfers between Level 1 and Level 2 during 2021 or 2020.

Investments that are classified as Level 3 include investments in private equity and special situations, real estate, infrastructure, alternative investments, commercial loans, some over-the-counter derivatives and some marketable securities. For these investments, trading activity is infrequent and fair values are derived using valuation techniques. The significant inputs used in the pricing models are either not observable or assumptions are made about significant inputs.

Transfers from Level 2 to Level 3 occur when an investment asset's or investment liability's fair value, which was determined previously through the use of a valuation technique with significant observable inputs, is now determined using a valuation technique with significant unobservable inputs. Transfers from Level 3 to Level 2 occur when techniques used for valuing the investment involve significant observable inputs that were previously unobservable. Transfers from Level 1 to Level 3 occur when an investment asset's or investment liability's fair value, which was determined previously through unadjusted quoted prices in active markets is now determined using a valuation technique with significant unobservable inputs. Transfers from Level 3 to Level 1 occur when unadjusted quoted market prices are used for valuing an investment asset or investment liability that was previously valued using a valuation technique with significant unobservable inputs.

Transfers between Level 2 and Level 3, and/or between Level 1 and Level 3, if any, are disclosed in note 2c.

The table below presents the Plan's investment assets and investment liabilities within the fair value hierarchy described in note 2a:

| ($ millions) | 2021 Level 1 | 2021 Level 2 | 2021 Level 3 | 2021 Total |
|---|---|---|---|---|
| **Investment assets** | | | | |
| Cash | $ 92 | $ — | $ — | **$ 92** |
| Securities purchased under resell agreements | — | 11,714 | — | **11,714** |
| Short-term securities | — | 2,106 | — | **2,106** |
| Bonds | — | 97,675 | 48 | **97,723** |
| Commercial loans | — | — | 465 | **465** |
| Public equities | 56,329 | 1,013 | — | **57,342** |
| Private equities and special situations | — | — | 15,363 | **15,363** |
| Real estate | — | — | 17,916 | **17,916** |
| Infrastructure | — | — | 2,662 | **2,662** |
| Alternative investments | — | — | 2,886 | **2,886** |
| Derivative instruments | 61 | 3,916 | 100 | **4,077** |
| Investment receivables | 2,244 | 2,140 | — | **4,384** |
| | 58,726 | 118,564 | 39,440 | **216,730** |
| **Investment liabilities** | | | | |
| Securities sold under repurchase agreements | — | (29,292) | — | **(29,292)** |
| Bonds sold short | — | (19,814) | — | **(19,814)** |
| Equities sold short | (24,151) | — | — | **(24,151)** |
| Derivative instruments | (42) | (3,602) | (101) | **(3,745)** |
| Investment payables | (24,052) | (1,497) | — | **(25,549)** |
| | (48,245) | (54,205) | (101) | **(102,551)** |
| **Net Investments** | **$ 10,481** | **$ 64,359** | **$ 39,339** | **$ 114,179** |

| ($ millions) | 2020 Level 1 | 2020 Level 2 | 2020 Level 3 | 2020 Total |
|---|---|---|---|---|
| **Investment assets** | | | | |
| Cash | $ 24 | $ — | $ — | $ 24 |
| Securities purchased under resell agreements | — | 9,464 | — | 9,464 |
| Short-term securities | — | 3,245 | — | 3,245 |
| Bonds | — | 96,210 | — | 96,210 |
| Commercial loans | — | — | 353 | 353 |
| Public equities | 46,309 | 238 | — | 46,547 |
| Private equities and special situations | — | — | 13,018 | 13,018 |
| Real estate | — | — | 14,477 | 14,477 |
| Infrastructure | — | — | 756 | 756 |
| Alternative investments | — | — | 1,623 | 1,623 |
| Derivative instruments | 66 | 2,688 | 83 | 2,837 |
| Investment receivables | 1,640 | 1,192 | — | 2,832 |
| | 48,039 | 113,037 | 30,310 | 191,386 |
| **Investment liabilities** | | | | |
| Securities sold under repurchase agreements | — | (29,857) | — | (29,857) |
| Bonds sold short | — | (10,441) | — | (10,441) |
| Equities sold short | (22,905) | — | — | (22,905) |
| Derivative instruments | (37) | (3,946) | (56) | (4,039) |
| Investment payables | (18,910) | (1,486) | — | (20,396) |
| | (41,852) | (45,730) | (56) | (87,638) |
| **Net Investments** | $ 6,187 | $ 67,307 | $ 30,254 | $ 103,748 |

## c. Changes in fair value measurement for investments in Level 3

The following table presents the changes in fair value measurement for investments included in Level 3 during the years ended December 31.

| 2021 | | | | | | | |
|---|---|---|---|---|---|---|---|
| ($ millions) | Fair Value Dec 31, 2020 | Total Gains (Losses) Included in Net Income [(1)] | Purchases and Issues | Sales and Settlements | Transfers In[(2)] | Transfers Out[(2)] | Fair Value Dec 31, 2021 |
| Bonds | $ — | $ (1) | $ 27 | $ — | $ 22 | $ — | **$ 48** |
| Commercial loans | 353 | 1 | 364 | (253) | — | — | **465** |
| Public equities | — | — | — | — | — | — | **—** |
| Private equities and special situations | 13,018 | 2,696 | 3,450 | (3,436) | — | (365) | **15,363** |
| Real estate[(3)] | 14,477 | 1,066 | 2,700 | (327) | — | — | **17,916** |
| Infrastructure | 756 | 176 | 1,794 | (64) | — | — | **2,662** |
| Alternative investments | 1,623 | 44 | 2,279 | (1,060) | — | — | **2,886** |
| Derivative instruments – assets | 83 | 18 | 56 | (57) | — | — | **100** |
| Derivative instruments – liabilities | (56) | (7) | (59) | 21 | — | — | **(101)** |
| **Total** | **$ 30,254** | **$ 3,993** | **$ 10,611** | **$ (5,176)** | **$ 22** | **$ (365)** | **$ 39,339** |

*(1) For those investment assets and investment liabilities held at the end of the year, the total gains were $2,847 million.*
*(2) Transfers into and transfers out of Level 3 are assumed to occur at the end of the year.*
*(3) For real estate, additional mortgage debt borrowings of $489 million are netted in Purchases and Issues and mortgage debt repayments of $201 million are netted in Sales and Settlements.*

| 2020 | | | | | | | |
|---|---|---|---|---|---|---|---|
| ($ millions) | Fair Value Dec 31, 2019 | Total Gains (Losses) Included in Net Income [(1)] | Purchases and Issues | Sales and Settlements | Transfers In[(2)] | Transfers Out[(2)] | Fair Value Dec 31, 2020 |
| Bonds | $ 376 | $ — | $ — | $ (376) | $ — | $ — | $ — |
| Commercial loans | 388 | (32) | 93 | (96) | — | — | 353 |
| Public equities | 603 | (3) | — | (600) | — | — | — |
| Private equities and special situations | 10,813 | 1,092 | 2,771 | (1,619) | 55 | (94) | 13,018 |
| Real estate[(3)] | 13,601 | (248) | 1,057 | 67 | — | — | 14,477 |
| Infrastructure | 114 | 24 | 678 | (60) | — | — | 756 |
| Alternative investments | 753 | 2 | 1,339 | (471) | — | — | 1,623 |
| Derivative instruments – assets | 60 | 194 | (49) | (122) | — | — | 83 |
| Derivative instruments – liabilities | (22) | (79) | 4 | 41 | — | — | (56) |
| **Total** | $ 26,686 | $ 950 | $ 5,893 | $ (3,236) | $ 55 | $ (94) | $ 30,254 |

*(1) For those investment assets and investment liabilities held at the end of the year, the total gains were $84 million.*
*(2) Transfers into and transfers out of Level 3 are assumed to occur at the end of the year.*
*(3) For real estate, additional mortgage debt borrowings of $72 million are netted in Purchases and Issues and mortgage debt repayments of $347 million are netted in Sales and Settlements.*

## d. 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.

| | | 2021 | | 2020 | | |
|---|---|---|---|---|---|---|
| ($ millions) | Significant Inputs | Change in Significant Inputs | Increase (Decrease) to Fair Value | Change in Significant Inputs | | Increase (Decrease) to Fair Value |
| Private equity | **EBITDA multiple** | **+/- 10%** | **204 / (204)** | +/- 10% | $ | 164 / (164) |
| Private debt[1] | **Discount rate** | **+/- 1%** | **(19) / 20** | +/- 1% | | (12) / 13 |
| Infrastructure | **Discount rate** | **+/- 0.25%** | **(29) / 32** | n/a | | n/a |
| Real estate | **Capitalization rate** | **+/- 0.25%** | **(619) / 709** | +/- 0.25% | | (481) / 533 |

*(1) Included within private equity and special situations in note 2a.*

The above sensitivity analysis excludes investments where cost is used as an approximation for fair value (e.g., newly acquired real estate properties, private equity and infrastructure investments). In addition, it excludes investments where fair values are based on information provided by the general partners or the external fund administrators as the Plan does not have access to the assumptions and methodologies used to determine the fair value of the underlying investments. For other investments included in Level 3, management's judgment is that changing one or more of the inputs to a reasonable alternative assumption would not change the fair value of the Plan significantly.

## e. Offsetting financial assets and financial liabilities

The following financial instruments are subject to enforceable master netting arrangements or similar agreements and/or may require the transfer of collateral. HOOPP presents these financial instruments as gross amounts in the statements of financial position, since the netting provisions contained in the respective agreements apply in limited circumstances. However, where HOOPP has a legally enforceable right to set-off the recognized amounts and intends to settle on a net basis, HOOPP offsets financial assets and financial liabilities and presents the net amount in the statements of financial position. If the effect of these arrangements, together with the collateral pledged or received were taken into consideration, the potential impact on HOOPP's financial position would be as follows:

| | 2021 | | | | | |
|---|---|---|---|---|---|---|
| ($ millions) | Gross Amounts of Recognized Financial Instruments | Amounts Set Off in the Statements of Financial Position | Net Amounts of Financial Instruments Presented (note 2a) | Amounts Subject to Enforceable Master Netting Arrangements or Similar Agreements[1] | Cash and Securities Collateral Pledged (Received)[2] | Net Amount |
| **Financial assets** | | | | | | |
| Securities purchased under resell agreements[3] | $ 12,460 | $ (713) | $ 11,747 | $ (11,184) | $ (562) | $ 1 |
| Securities on loan[4] | 34,494 | — | 34,494 | — | (34,138) | 356 |
| Derivative instruments[5] | 4,753 | — | 4,753 | (3,052) | (1,308) | 393 |
| **Total financial assets** | **51,707** | **(713)** | **50,994** | **(14,236)** | **(36,008)** | **750** |
| **Financial liabilities** | | | | | | |
| Securities sold under repurchase agreements | (30,005) | 713 | (29,292) | 11,184 | 18,106 | (2) |
| Derivative instruments[5] | (4,119) | — | (4,119) | 3,052 | 1,046 | (21) |
| **Total financial liabilities** | **$ (34,124)** | **$ 713** | **$ (33,411)** | **$ 14,236** | **$ 19,152** | **$ (23)** |

*(1) Refer to note 6 for additional information on master netting arrangements.*
*(2) Refer to note 5 for additional information on cash and securities collateral.*
*(3) Includes pending trade receivables of $33 million.*
*(4) Included within fixed income and public equity investment assets in note 2a.*
*(5) Includes pending trade receivables and payables of $676 million and $374 million, respectively.*

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| ($ millions) | Gross Amounts of Recognized Financial Instruments | Amounts Set Off in the Statements of Financial Position | Net Amounts of Financial Instruments Presented (note 2a) | Amounts Subject to Enforceable Master Netting Arrangements or Similar Agreements[(1)] | Cash and Securities Collateral Pledged (Received)[(2)] | Net Amount |
| **Financial assets** | | | | | | |
| Securities purchased under resell agreements | $ 10,602 | $ (1,138) | $ 9,464 | $ (8,787) | $ (677) | $ — |
| Securities on loan[(3)] | 20,722 | — | 20,722 | — | (20,690) | 32 |
| Derivative instruments[(4)] | 3,151 | — | 3,151 | (2,381) | (588) | 182 |
| **Total financial assets** | 34,475 | (1,138) | 33,337 | (11,168) | (21,955) | 214 |
| **Financial liabilities** | | | | | | |
| Securities sold under repurchase agreements | (30,995) | 1,138 | (29,857) | 8,787 | 21,042 | (28) |
| Derivative instruments[(4)] | (4,226) | — | (4,226) | 2,381 | 1,782 | (63) |
| **Total financial liabilities** | $ (35,221) | $ 1,138 | $ (34,083) | $ 11,168 | $ 22,824 | $ (91) |

*(1) Refer to note 6 for additional information on master netting arrangements.*
*(2) Refer to note 5 for additional information on cash and securities collateral.*
*(3) Included within fixed income and public equity investment assets in note 2a.*
*(4) Includes pending trade receivables and payables of $314 million and $187 million, respectively.*

## f. Significant investments

Investments, excluding short sales and derivative exposures, where the cost or fair value exceeds 1% of the cost or fair value of the Plan, being approximately $920 million and $1,140 million respectively, as at December 31, 2021, are as follows:

| ($ millions) | Fair Value | Cost |
|---|---|---|
| **Fixed income** | | |
| Canadian bonds[(1)] | **$ 19,703** | **$ 17,416** |
| **Equities** | | |
| Non-Canadian public equities[(2)] | **20,093** | **16,927** |
| Canadian private equity | **1,309** | **7** |

*(1) Includes Canadian government and real return bonds.*
*(2) Includes shares of exchange-traded funds.*

# Note 3 – DERIVATIVE FINANCIAL INSTRUMENTS

Derivatives are financial contracts, the value of which is derived from changes in the underlying asset, index of prices or rates, interest rate or foreign exchange rate.

The Plan's investment objectives for the use of derivatives are to enhance returns by facilitating changes in the investment asset mix, to enhance equity and fixed income portfolio returns, and to manage financial risk. Derivatives may be used in all of HOOPP's permitted asset classes. The Plan utilizes the following derivative financial instruments:

## Forwards

Forwards are contractual agreements between two parties to either buy or sell an asset at a predetermined price on a specified future date. HOOPP invests in currency forwards and bond forwards. Currency forwards are used to modify the Plan's exposure to currency risk. Bond forwards are used to manage the Plan's exposure to market risk and to enhance returns.

## Futures

Futures are standardized agreements, which can be purchased or sold on a futures exchange market at a predetermined future date and price, in accordance with terms specified by the regulated futures exchange, and they are subject to daily cash margining. HOOPP invests in equity futures and interest rate futures. Equity futures relate to a specific equity, a basket of equities or index of equities. Interest rate futures, including bond futures, relate to interest rate-sensitive instruments. These types of derivatives are used to modify exposures efficiently without actually purchasing or selling the underlying asset.

## Options

Options are contractual agreements under which the seller grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option) a financial instrument at a predetermined price on or before a specified future date. The seller receives a premium from the purchaser for this right. HOOPP invests in interest rate options, swaptions, foreign currency options, equity options, options on futures and options on credit default swaps. Options are used to manage the exposures to market risks and to enhance returns.

## Swaps

Swaps are contractual agreements between two counterparties to exchange a series of cash flows. HOOPP utilizes the following swap instruments:

- Equity swaps are agreements between two parties to exchange a series of cash flows based on the return of an equity, a basket of equities or an equity index. One party typically agrees to pay a floating interest rate in return for receiving the equity return. HOOPP also invests in equity-based swaps such as variance, volatility, and dividend swaps. These equity-based swaps are used for yield enhancement purposes and to adjust exposures to particular indices without directly purchasing or selling the securities that comprise the index.

- Interest rate swaps and cross-currency swaps are agreements between two parties to exchange a series of fixed or floating cash flows in the same currency or different currencies based on the notional amount. Interest rate swaps are used to manage interest rate exposures and cross-currency swaps are used to manage both interest rate and currency exposures.

- Credit default swaps are agreements between two parties where the buyer of the credit protection pays a premium to the seller in exchange for payment of the notional amount from the seller against delivery of the related/relevant debt securities if a credit event such as a default occurs. Instead of physical settlement, credit default swaps can also be cash settled. Credit default swaps are used to promote credit diversification and for risk mitigation.

## Warrants

Warrant certificates give the holder the right, but not the obligation, to buy shares in a company at a certain price on or before a specified future date. The key difference between warrants and options is that warrants are issued by the company itself as a way to raise capital.

## a. Derivative notional and fair values

The following table summarizes the notional and fair values of the Plan's derivative positions.

| | 2021 | | |
|---|---|---|---|
| | | Fair Value[(2)] | |
| ($ millions) | Notional value[(1)] | Assets | Liabilities |
| **Credit derivatives** | | | |
| Credit default swap options | $ 23,378 | $ 7 | $ (22) |
| Credit default swaps[(3)] | 13,906 | 116 | (141) |
| **Currency derivatives** | | | |
| Forwards | 28,877 | 120 | (224) |
| Options | 995 | 31 | (17) |
| Swaps | 1,656 | 23 | (94) |
| **Equity derivatives** | | | |
| Futures | 7,963 | 5 | (33) |
| Options | 32,291 | 2,027 | (1,489) |
| Swaps | 116,453 | 1,295 | (1,261) |
| Warrants | 462 | 58 | — |
| **Interest rate derivatives** | | | |
| Forwards | 1,042 | 36 | — |
| Futures | 6,843 | — | (1) |
| Options | 7,039 | 1 | — |
| Swaps | 16,158 | 214 | (434) |
| Swaptions | 7,707 | 144 | (29) |
| **Total** | **$ 264,770** | **$ 4,077** | **$ (3,745)** |

*(1) Notional values represent the contractual amounts to which a rate or price is applied for computing the cash flows to be exchanged, and are therefore not recorded as assets or liabilities in these financial statements. Notional values are also the basis on which the fair values of the contracts and the returns are determined. Notional values do not necessarily represent the future cash flows to be exchanged, nor do they indicate the Plan's exposure to market or credit risk.*

*(2) Contracts with a positive fair value are recorded as investment assets while contracts with a negative fair value are recorded as investment liabilities in note 2.*

*(3) HOOPP, through the sale of credit protection, indirectly guarantees the underlying reference obligations. The notional amount of the credit protection sold is $10,003 million and the fair values of related assets and liabilities are $64 million and $57 million respectively. The majority of these contracts mature within 5 years.*

| | 2020 | | |
|---|---|---|---|
| | | Fair Value[2] | |
| ($ millions) | Notional value[1] | Assets | Liabilities |
| **Credit derivatives** | | | |
| Credit default swap options | $ 21,009 | $ 14 | $ (15) |
| Credit default swaps[3] | 12,118 | 79 | (136) |
| **Currency derivatives** | | | |
| Forwards | 21,770 | 209 | (129) |
| Options | 1,222 | 26 | (14) |
| Swaps | 1,275 | 5 | (231) |
| **Equity derivatives** | | | |
| Futures | 9,863 | — | (32) |
| Options | 19,132 | 1,140 | (918) |
| Swaps | 97,110 | 850 | (1,581) |
| Warrants | 394 | 69 | — |
| **Interest rate derivatives** | | | |
| Forwards | — | — | — |
| Futures | 1,979 | — | (1) |
| Options | 5,692 | 16 | — |
| Swaps | 18,897 | 311 | (953) |
| Swaptions | 3,898 | 118 | (29) |
| **Total** | $ 214,359 | $ 2,837 | $ (4,039) |

*(1) Notional values represent the contractual amounts to which a rate or price is applied for computing the cash flows to be exchanged, and are therefore not recorded as assets or liabilities in these financial statements. Notional values are also the basis on which the fair values of the contracts and the returns are determined. Notional values do not necessarily represent the future cash flows to be exchanged, nor do they indicate the Plan's exposure to market or credit risk.*

*(2) Contracts with a positive fair value are recorded as investment assets while contracts with a negative fair value are recorded as investment liabilities in note 2.*

*(3) HOOPP, through the sale of credit protection, indirectly guarantees the underlying reference obligations. The notional amount of the credit protection sold is $8,279 million and the fair values of related assets and liabilities are $63 million and $19 million respectively. All of these contracts mature within 5 years.*

## b. Derivative notional values by term to maturity

The following table summarizes the notional values for the Plan's derivative positions by term to maturity.

| | 2021 | | | |
|---|---|---|---|---|
| ($ millions) | Within 1 Year | 1 to 5 Years | Over 5 Years | Total |
| **Credit derivatives** | | | | |
| Credit default swap options | $ 23,378 | $ — | $ — | $ 23,378 |
| Credit default swaps | 330 | 13,450 | 126 | 13,906 |
| **Currency derivatives** | | | | |
| Forwards | 28,876 | 1 | — | 28,877 |
| Options | 284 | 648 | 63 | 995 |
| Swaps | 168 | 879 | 609 | 1,656 |
| **Equity derivatives** | | | | |
| Futures | 7,963 | — | — | 7,963 |
| Options | 20,996 | 5,587 | 5,708 | 32,291 |
| Swaps | 64,764 | 45,632 | 6,057 | 116,453 |
| Warrants | 1 | 230 | 231 | 462 |
| **Interest rate derivatives** | | | | |
| Forwards | 1,042 | — | — | 1,042 |
| Futures | 6,274 | 569 | — | 6,843 |
| Options | 4,138 | 2,901 | — | 7,039 |
| Swaps | 6,591 | 7,908 | 1,659 | 16,158 |
| Swaptions | 3,397 | 2,361 | 1,949 | 7,707 |
| **Total** | **$ 168,202** | **$ 80,166** | **$ 16,402** | **$ 264,770** |

| | 2020 | | | |
|---|---|---|---|---|
| ($ millions) | Within 1 Year | 1 to 5 Years | Over 5 Years | Total |
| **Credit derivatives** | | | | |
| Credit default swap options | $ 21,009 | $ — | $ — | $ 21,009 |
| Credit default swaps | 555 | 11,563 | — | 12,118 |
| **Currency derivatives** | | | | |
| Forwards | 21,770 | — | — | 21,770 |
| Options | 522 | 191 | 509 | 1,222 |
| Swaps | 586 | 689 | — | 1,275 |
| **Equity derivatives** | | | | |
| Futures | 9,863 | — | — | 9,863 |
| Options | 5,934 | 4,916 | 8,282 | 19,132 |
| Swaps | 81,319 | 15,791 | — | 97,110 |
| Warrants | — | 269 | 125 | 394 |
| **Interest rate derivatives** | | | | |
| Forwards | — | — | — | — |
| Futures | 971 | 1,008 | — | 1,979 |
| Options | 1,272 | 4,420 | — | 5,692 |
| Swaps | 8,471 | 8,997 | 1,429 | 18,897 |
| Swaptions | 500 | 1,218 | 2,180 | 3,898 |
| **Total** | $ 152,772 | $ 49,062 | $ 12,525 | $ 214,359 |

# Note 4 – NET INVESTMENT INCOME

## Net investment income based on investment assets and investment liabilities

The Plan's net investment income for the years ended December 31, presented by investment assets and investment liabilities, is as follows:

| ($ millions) | Net Interest and Dividend Income[1] | Net Gain (Loss) on Investments[2][3] | Investment Income[4] | Management Fees | Transaction Costs | Net Investment Income |
|---|---|---|---|---|---|---|
| | 2021 | | | | | |
| **Cash and pending trades** | $ (33) | $ (31) | **$ (64)** | $ — | $ — | **$ (64)** |
| **Net repurchase agreements** | (34) | (13) | **(47)** | — | — | **(47)** |
| **Fixed income** | | | | | | |
| Short-term securities | 8 | (15) | **(7)** | — | — | **(7)** |
| Bonds | | | | | | |
| Canadian | 2,163 | (2,949) | **(786)** | — | — | **(786)** |
| Non-Canadian | 180 | 55 | **235** | — | — | **235** |
| Commercial loans | | | | | | |
| Non-Canadian | 27 | 1 | **28** | — | (1) | **27** |
| | 2,378 | (2,908) | **(530)** | — | (1) | **(531)** |
| **Equities** | | | | | | |
| Public equities | | | | | | |
| Canadian | 147 | (85) | **62** | — | (12) | **50** |
| Non-Canadian | 468 | 7,291 | **7,759** | — | (11) | **7,748** |
| Private equities and special situations | | | | | | |
| Canadian | 87 | 424 | **511** | (1) | — | **510** |
| Non-Canadian | 71 | 2,272 | **2,343** | (107) | — | **2,236** |
| | 773 | 9,902 | **10,675** | (108) | (23) | **10,544** |
| **Real assets** | | | | | | |
| Real estate | 463 | 1,066 | **1,529** | (18) | (23) | **1,488** |
| Infrastructure | 22 | 176 | **198** | (8) | (6) | **184** |
| | 485 | 1,242 | **1,727** | (26) | (29) | **1,672** |
| **Alternative investments** | — | 66 | **66** | (22) | — | **44** |
| **Derivative instruments** | — | (15) | **(15)** | — | (8) | **(23)** |
| **Total** | **$ 3,569** | **$ 8,243** | **$ 11,812** | **$ (156)** | **$ (61)** | **$ 11,595** |

*(1) Includes net operating income (loss) from investments in private equity, real estate and infrastructure.*
*(2) Includes net realized losses from investments of $3,127 million and change in unrealized gains from investments of $11,370 million.*
*(3) Includes gain (loss) from foreign exchange.*
*(4) Net of performance fees.*

| ($ millions) | Net Interest and Dividend Income(1) | Net Gain (Loss) on Investments (2)(3) | Investment Income(4) | Management Fees | Transaction Costs | Net Investment Income |
|---|---|---|---|---|---|---|
| | | | 2020 | | | |
| **Cash and pending trades** | $ (39) | $ 674 | $ 635 | $ — | $ — | $ 635 |
| **Net repurchase agreements** | (104) | 218 | 114 | — | — | 114 |
| **Fixed income** | | | | | | |
| Short-term securities | 78 | (17) | 61 | — | — | 61 |
| Bonds | | | | | | |
| Canadian | 2,512 | 3,996 | 6,508 | — | — | 6,508 |
| Non-Canadian | 308 | 1,867 | 2,175 | — | — | 2,175 |
| Commercial loans | | | | | | |
| Non-Canadian | 20 | (32) | (12) | — | — | (12) |
| | 2,918 | 5,814 | 8,732 | — | — | 8,732 |
| **Equities** | | | | | | |
| Public equities | | | | | | |
| Canadian | 145 | (1) | 144 | — | (1) | 143 |
| Non-Canadian | (254) | (2,160) | (2,414) | — | (10) | (2,424) |
| Private equities and special situations | | | | | | |
| Canadian | 57 | 95 | 152 | (3) | (1) | 148 |
| Non-Canadian | 171 | 997 | 1,168 | (128) | — | 1,040 |
| | 119 | (1,069) | (950) | (131) | (12) | (1,093) |
| **Real assets** | | | | | | |
| Real estate | 397 | (248) | 149 | (17) | (3) | 129 |
| Infrastructure | 4 | 24 | 28 | (7) | (7) | 14 |
| | 401 | (224) | 177 | (24) | (10) | 143 |
| **Alternative investments** | — | 17 | 17 | (16) | — | 1 |
| **Derivative instruments** | — | 2,138 | 2,138 | — | (9) | 2,129 |
| **Total** | $ 3,295 | $ 7,568 | $ 10,863 | $ (171) | $ (31) | $ 10,661 |

*(1) Includes net operating income (loss) from investments in private equity, real estate and infrastructure.*
*(2) Includes net realized losses from investments of $2,465 million and change in unrealized gains from investments of $10,033 million.*
*(3) Includes gain (loss) from foreign exchange.*
*(4) Net of performance fees.*

# Note 5 – TRANSFERS OF FINANCIAL ASSETS

## Financial assets transferred to HOOPP's counterparties

Transfers of financial assets result from HOOPP's arrangements with its counterparties, whereby the Plan:

- transfers the contractual rights to receive the cash flows of the financial assets; or
- retains the contractual rights to receive the cash flows of the financial assets, but assumes a contractual obligation to pay the cash flows to one or more recipients in an arrangement.

For HOOPP, transfers of financial assets to counterparties occur directly through securities lending arrangements. HOOPP also transfers financial assets indirectly through collateral pledged to counterparties as a result of investment strategies such as repurchase agreements, securities borrowing arrangements and derivatives. Transferred financial assets continue to be recognized as HOOPP's assets on the statements of financial position if the risks and rewards of ownership remain with HOOPP.

The following describes HOOPP's transactions that may result in the direct or indirect transfer of financial assets:

### *Securities lending program and other transfers of financial assets (direct)*

The Plan participates in a securities lending program where it lends securities that it owns directly to third parties in exchange for a fee. The borrower provides cash or marketable securities of higher value as collateral which mitigates the credit risk associated with the program. The Plan also lends securities through a third party, in accordance with a securities lending agreement, in exchange for a fee.

The Plan also transfers financial assets received from HOOPP's counterparties as a result of various transactions. These financial assets have not been recognized on HOOPP's statements of financial position as the risks and rewards remain with the counterparty.

### *Collateral pledged (indirect)*

#### *i. Repurchase agreements*

The Plan enters into repurchase agreements, whereby the Plan effectively sells securities and simultaneously agrees to buy them back at a specified price at a future date. The net position represents the fair value of collateral pledged, as a result of the change in value of the securities sold under repurchase agreements.

#### *ii. Securities borrowing arrangements*

The Plan enters into short positions, where it agrees to sell securities that it does not already own, to reduce or eliminate economic exposures as part of certain active management strategies and as an offset to long positions in some derivative strategies. The Plan borrows securities, or uses securities received through other strategies, to facilitate the taking of short positions. For securities borrowed, the Plan is required to pledge cash or marketable securities of higher value as collateral, which mitigates the counterparty's credit risk associated with the program.

#### *iii. Derivatives*

A transfer of financial assets only occurs when the Plan pledges collateral, typically in the form of cash, fixed income or equities, for obligations incurred in the ordinary course of trading in derivatives.

When the Plan pledges cash collateral for any of the above investment strategies, this cash is derecognized from the statements of financial position. A receivable for the equivalent amount is then recognized to reflect this cash collateral due from the Plan's counterparties.

For any collateral pledged, the counterparty has the right to re-pledge, loan or use it under repurchase agreements in the absence of default by the owner of the collateral.

## Financial assets received from HOOPP's counterparties

Securities are received from HOOPP's counterparties directly through securities borrowing arrangements, or indirectly through investment strategies such as securities lending arrangements, resell agreements, and derivatives, which give rise to the counterparty transferring or pledging collateral with HOOPP. These securities are only recognized as HOOPP's assets on the statements of financial position if the risks and rewards of ownership are transferred to HOOPP.

The following describes HOOPP's transactions that may result in financial assets received from its counterparties:

### *Securities borrowing arrangements (direct)*

The Plan borrows securities, or uses securities received through other strategies, to facilitate the taking of short positions. For securities borrowed, the Plan is required to pledge cash or marketable securities of higher value as collateral which mitigates the counterparty's credit risk associated with the program.

### *Collateral received (indirect)*

#### *i. Resell agreements*

The Plan enters into resell agreements, whereby the Plan effectively purchases securities and simultaneously agrees to sell them back at a specified price at a future date. The net position represents the fair value of collateral received, as a result of the change in value of the securities under resell agreements.

#### *ii. Securities lending program*

For securities lent, the borrower provides cash or marketable securities of higher value as collateral which mitigates the credit risk to the Plan, associated with the program.

#### *iii. Derivatives*

The Plan receives collateral, typically in the form of cash, fixed income or equities, for receivables recognized in the ordinary course of trading in derivatives.

When the Plan receives cash collateral for any of the above investment strategies, this cash is recognized on the statements of financial position. A liability for the equivalent amount is recognized to reflect this cash collateral due to the Plan's counterparties.

For any collateral received, the Plan has the right to re-pledge, loan or use it under repurchase agreements in the absence of default by the owner of the collateral. On termination of the agreement, the Plan is obligated to return the collateral received to the owner. As at December 31, 2021, the fair value of total collateral rehypothecated by the Plan is $314 million (2020: $38 million).

## Net position of financial assets transferred to and received from HOOPP's counterparties

As at December 31, the fair values and carrying amounts of HOOPP's direct and indirect transferred financial assets, their associated liabilities and receivables and the financial assets received from counterparties were as follows:

| | 2021 | | |
|---|---|---|---|
| ($ millions) | Repurchase Agreements | Securities Lending/Borrowing and Other Transfers | Derivatives |
| Fair value/carrying amount of financial assets transferred out[1] | $ — | $ 52,146 | $ — |
| Fair value/carrying amount of collateral pledged[2] | 30,566 | 49,492 | 4,578 |
| Fair value/carrying amount of financial assets received[3] | — | (28,174) | — |
| Fair value/carrying amount of collateral received[4] | (12,757) | (26,844) | (3,524) |
| Fair value/carrying amount of associated receivables (note 2) | 11,714 | — | 4,077 |
| Fair value/carrying amount of associated liabilities[5] | (29,292) | (44,039) | (3,745) |
| **Net position** | **$ 231** | **$ 2,581** | **$ 1,386** |

*(1) Includes securities lent, both directly and through a third party, of $34,494 million, which have not been derecognized from HOOPP' s statements of financial position as the risks and rewards remain with HOOPP. The remaining amount of $17,652 million represents other transfers of financial assets received from various transactions, which have not been recognized on HOOPP's statements of financial position as the risks and rewards remain with the counterparty.*
*(2) Includes cash collateral pledged of $2,244 million. The remaining amount represents securities that have not been derecognized from HOOPP's statements of financial position, as the risks and rewards remain with HOOPP.*
*(3) These securities have not been recognized on HOOPP's statements of financial position as the risks and rewards remain with the counterparty.*
*(4) Includes cash collateral received of $24,052 million. The remaining amount represents securities that have not been recognized on HOOPP's statements of financial position, as the risks and rewards remain with HOOPP's counterparty, or the third party's counterparty in accordance with the securities lending agreement.*
*(5) Includes $74 million of accrued investment liabilities relating to investments sold short. Amounts for repurchase agreements and derivatives are presented in note 2.*

| | 2020 | | |
|---|---|---|---|
| ($ millions) | Repurchase Agreements | Securities Lending/Borrowing and Other Transfers | Derivatives |
| Fair value/carrying amount of financial assets transferred out[1] | $ — | $ 34,952 | $ — |
| Fair value/carrying amount of collateral pledged[2] | 31,303 | 45,604 | 3,072 |
| Fair value/carrying amount of financial assets received[3] | — | (25,022) | — |
| Fair value/carrying amount of collateral received[4] | (11,259) | (19,840) | (626) |
| Fair value/carrying amount of associated receivables (note 2) | 9,464 | — | 2,837 |
| Fair value/carrying amount of associated liabilities[5] | (29,857) | (33,378) | (4,039) |
| **Net position** | $ (349) | $ 2,316 | $ 1,244 |

*(1) Includes securities lent, both directly and through a third party, of $20,722 million, which have not been derecognized from HOOPP's statements of financial position as the risks and rewards remain with HOOPP. The remaining amount of $14,230 million represents other transfers of financial assets received from various transactions, which have not been recognized on HOOPP's statements of financial position as the risks and rewards remain with the counterparty.*
*(2) Includes cash collateral pledged of $1,640 million. The remaining amount represents securities that have not been derecognized from HOOPP's statements of financial position, as the risks and rewards remain with HOOPP.*
*(3) These securities have not been recognized on HOOPP's statements of financial position as the risks and rewards remain with the counterparty.*
*(4) Includes cash collateral received of $18,910 million. The remaining amount represents securities that have not been recognized on HOOPP's statements of financial position, as the risks and rewards remain with HOOPP's counterparty, or the third party's counterparty in accordance with the securities lending agreement.*
*(5) Includes $32 million of accrued investment liabilities relating to investments sold short. Amounts for repurchase agreements and derivatives are presented in note 2.*

## Note 6 – RISK MANAGEMENT

HOOPP's primary mission is to secure the pension promise for all of its members, pensioners and beneficiaries (HOOPP members). In order to accomplish this, the Plan must actively manage its net funded position (i.e., surplus or deficit). There are two major components to the net funded position, the Plan's going concern pension obligations and the Plan's net investments, which HOOPP manages and measures in concert. The risk that the imbalance between the net investments and pension obligations becomes a deficit is referred to as funding risk.

The Plan's investments are exposed to financial risks (i.e., market risk, credit risk and liquidity risk) through its investment activities.

HOOPP's Board is responsible, with the assistance of management, agents and advisors, for prudently managing, investing and administering the Plan in order to secure the pension promise for HOOPP's members. This requires Board oversight of the investments and pension obligations to ensure they are being managed in the best interests of HOOPP members. The Board has established a policy framework, which outlines the Board's risk tolerances, and which guides the development of investment strategies to meet HOOPP's overall objectives.

The cornerstone of the policy framework is the Funding Decision Framework. The Funding Decision Framework sets out criteria to be considered when contemplating changes to contribution rates and/or benefits levels, and establishes a target range for the Plan's funded ratio, which is the ratio of the Plan's net investments to its pension obligations. HOOPP's investment policy and strategic asset mix will also impact the Plan's funded ratio and can be altered to support the management of HOOPP's funded position.

Broadly, the Plan manages funding risk by:

- utilizing a liability driven investment (LDI) approach, an investment strategy that aligns the Plan's investments to the Plan's pension obligations, which helps determine appropriate investments and reduces funding risk;
- setting and managing to a minimum and a target expected range for the Plan's funded ratio;
- annually reviewing the actuarial assumptions underlying the Plan's pension obligations to ensure continued appropriateness; and
- complying with the PBA, the ITA, the Plan's *Agreement and Declaration of Trust*, and the *Plan Text*.

The Board provides a framework for the investment of the Plan's investments through the following key documents, which collectively form HOOPP's policy framework, and which the Board reviews and approves at least annually:

- Investment Risk Framework – the Board's view of the Plan's risk tolerance;
- Statement of Investment Policies and Procedures (SIP&P) – investment guidelines for the management of the Plan, including objectives and how they will be reached; and
- Investment Policies and Guidelines (IP&G) – the Plan's policy benchmark, policy asset mix and detailed investment limits.

The Investment Management Division provides advice and recommendations to the Board about the investing of Plan investments to meet the Plan's target funding ratio and they design and execute investment strategies, in compliance with HOOPP's policy framework. The Finance Division, which is independent from the Investment Management Division, monitors the limits set out in the IP&G. Compliance reporting is provided quarterly to the Board's Asset Liability Management Committee (ALM Committee) and the Board.

The Board's ALM Committee oversees the management and investment of the Plan's investments and pension obligations. It monitors and evaluates the investment management process and performance of the Plan and reviews and recommends to the Board asset liability management policies. The ALM Committee also reviews, monitors and makes recommendations to the Board on matters such as actuarial valuations and the appointment and performance of the Board's external actuarial advisors.

The Board's Plan Committee (Plan Committee) oversees the Plan's benefits design and administration. It reviews, monitors and makes recommendations to the Board on matters such as proposed changes to benefits, Plan amendments, and contribution rates, as well as benefit administration. The Plan Committee also monitors compliance with legislative and regulatory requirements and the Board's policies.

## Funding Risk

The primary risk that HOOPP faces is funding risk - the risk that the Plan's net investment growth and contribution rates will not be sufficient to cover the Plan's pension obligations resulting in an unfunded liability (i.e., a funding deficit). If the funding deficit reaches a certain level, or persists, it may need to be eliminated by reducing benefits, raising contributions, or a combination of both.

The Plan's net funded position can change relatively quickly if there are changes in the value of the Plan's net investments or pension obligations, which may result in a mismatch between the Plan's net investments and its pension obligations. The most significant economic contributors to funding risk are as follows:

- declines in interest rates;
- equity markets failing to achieve expected returns; and
- unexpected increases in inflation.

In addition to the economic contributors to funding risk listed above and further described in the Financial Risk Management section below, the Plan's pension obligations are also affected by non-economic factors such as changes in member demographics.

As at December 31, 2021, the Plan had a surplus for financial statement purposes of $28,512 million (2020: $24,131 million) based on the difference between the fair value of net assets available for benefits and the pension obligations. On a regulatory filing basis at December 31, 2021, the Plan had a regulatory filing surplus of $17,567 million, compared to $15,345 million as at December 31, 2020 (based on the smoothed asset value of net assets described in note 11).

The Board manages funding risk by monitoring and reviewing the funded ratio on an ongoing basis, relying on the results of various scenarios, to ensure it remains in the targeted range. If and when the future funded ratio falls outside the range, the Board determines whether changes to the investment policy, strategic asset mix, and contribution rates and/or benefits may be required.

When formulating the investment policy to effectively manage both risk and the net funded position, HOOPP must consider investment strategies that are suitable for the Plan's pension obligations. Failing to do this would result in greater volatility in the Plan's funded status, leading to a greater risk of making changes to benefits and/or contribution rates.

The Board's external actuary performs an annual valuation to determine the Plan's funded status and also forecasts future results.

HOOPP is registered with FSRA and is required to file a regulatory filing valuation periodically. It last filed a regulatory filing valuation for the year ended December 31, 2020. See note 12 for more information on HOOPP's regulatory filing valuation.

## Financial Risk Management

The Plan's investment activities expose it to financial risks, which include:

- market risk (including interest rate risk, foreign currency risk and other price risk);
- credit risk; and
- liquidity risk.

### *Market risk*

Market risk is the risk that the fair value of a financial instrument will fluctuate due to changes in market prices, whether those changes are caused by factors specific to the individual investment or its issuer or factors affecting all securities traded in the market.

#### *i. Interest rate risk*

Interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates.

The Plan is exposed to interest rate risk as a result of the policy decision to invest in interest rate sensitive instruments as part of the LDI approach to investing. The Plan's interest rate sensitive instruments and the remaining term to maturity or repricing dates, whichever is earlier as at December 31, are summarized below by class of financial instrument.

| 2021 | | | | | |
|---|---|---|---|---|---|
| ($ millions) | Within 1 Year | 1 to 5 Years | 5 to 10 Years | Over 10 Years | Total |
| Short-term securities | $ 2,106 | $ — | $ — | $ — | **$ 2,106** |
| Bonds(1)(2) | 19,841 | 16,491 | (227) | 42,068 | **78,173** |
| Commercial loans(3) | 192 | 121 | 154 | — | **467** |
| Preferred shares(4) | — | — | — | 355 | **355** |
| Exchange-traded funds(4) | — | 734 | 471 | 298 | **1,503** |
| Derivative instruments | 9,637 | (6,893) | (706) | 34 | **2,072** |
| Net repurchase agreements | (17,578) | — | — | — | **(17,578)** |
| **Total** | **$ 14,198** | **$ 10,453** | **$ (308)** | **$ 42,755** | **$ 67,098** |

*(1) Net of bonds sold short of $19,814 million.*
*(2) Includes accrued interest of $391 million.*
*(3) Includes accrued interest of $2 million.*
*(4) These financial instruments are interest rate sensitive and are classified as public equities in note 2.*

| 2020 | | | | | |
|---|---|---|---|---|---|
| ($ millions) | Within 1 Year | 1 to 5 Years | 5 to 10 Years | Over 10 Years | Total |
| Short-term securities | $ 3,245 | $ — | $ — | $ — | $ 3,245 |
| Bonds(1)(2) | 21,085 | 18,394 | 7,002 | 39,652 | 86,133 |
| Commercial loans(3) | 254 | 44 | 56 | — | 354 |
| Preferred shares(4) | — | — | — | 144 | 144 |
| Exchange-traded funds(4) | — | 603 | 1,669 | 999 | 3,271 |
| Derivative instruments | 9,133 | (9,495) | (1,878) | (1,317) | (3,557) |
| Net repurchase agreements | (20,393) | — | — | — | (20,393) |
| **Total** | $ 13,324 | $ 9,546 | $ 6,849 | $ 39,478 | $ 69,197 |

*(1) Net of bonds sold short of $10,441 million.*
*(2) Includes accrued interest of $442 million.*
*(3) Includes accrued interest of $1 million.*
*(4) These financial instruments are interest rate sensitive and are classified as public equities in note 2.*

***Risk measurement***

The Plan's interest rate sensitive portfolio is reviewed to ensure compliance to policy. The ALM Committee receives quarterly reports, which include interest rate exposure for the interest rate sensitive portfolio. As at December 31, 2021, a 1% increase/decrease in interest rates would have decreased/increased the Plan's net assets available for benefits by $7,316 million (2020: $6,961 million). While the increase/decrease in interest rates would have decreased/increased the value of the Plan's assets, longer-term trends in increases/decreases in interest rates would have also decreased/increased the value of the Plan's pension obligations.

***Risk management***

While the Plan's interest rate sensitive products are exposed to interest rate risk, this risk has been assumed purposefully as part of the LDI approach to offset the interest rate risk inherent in the Plan's pension obligations. HOOPP uses duration to measure the sensitivity of the fair value of fixed income investments to changes in market interest rates. HOOPP manages its exposure to investment interest rate risk by ensuring the modified duration of the fixed income mandates remains within the approved ranges of the respective benchmarks as stipulated in the IP&G and the overall asset mix remains within the approved policy weights specified in the IP&G. This is accomplished by rebalancing the portfolio on a regular basis and through the use of derivatives, including interest rate swaps, cross-currency swaps and interest rate futures.

### *ii. Foreign currency risk*

Foreign currency risk is the risk that the fair value of a financial instrument denominated in a foreign currency will fluctuate due to changes in applicable foreign exchange rates. While HOOPP pension benefits are paid in Canadian dollars, some of the Plan's financial instruments are denominated in other currencies. The Plan's significant foreign currency exposure (including through derivatives) as at December 31 is presented below. The table also includes the Canadian dollar equivalent impact of a 5% increase/decrease in the applicable foreign exchange rate on the Plan's net assets available for benefits.

| | 2021 | | | 2020 | | |
|---|---|---|---|---|---|---|
| ($ millions) | **Local Currency** | **Canadian Dollar Equivalent** | **Impact of +/- 5% Change** | **Local Currency** | **Canadian Dollar Equivalent** | **Impact of +/- 5% Change** |
| Euros | **172** | **$ 248** | **$ 12 / (12)** | 32 | $ 48 | $ 2 / (2) |
| United States Dollars | **747** | **944** | **47 / (47)** | 738 | 939 | 47 / (47) |
| Other(1) | | **27** | **2 / (2)** | | (10) | - / - |
| **Total** | | **$ 1,219** | **$ 61 / (61)** | | $ 977 | $ 49 / (49) |

*(1) Comprised of insignificant exposures to other foreign currencies not separately disclosed.*

***Risk measurement***

The exposures to foreign currency are measured daily and reported monthly for compliance purposes. Each quarter, management provides the Board with reports and analysis, illustrating the impact on assets of foreign currency rate changes.

***Risk management***

While certain limited risk-taking activities are permitted, HOOPP manages its exposure to foreign currency risk by ensuring the exposures are effectively hedged in accordance with the limits stipulated in the IP&G. These limits generally require the Plan's foreign currency exposure to be hedged within a 10% tolerance of the Plan's net asset value. This is accomplished through the use of derivatives, which include foreign exchange forward contracts and cross-currency swaps.

### *iii. Other price risk*

The Plan is also exposed to other price risk, which is the risk that the fair value of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or foreign currency risk). HOOPP is exposed to other price risk, which includes primarily equity price risk through its investment in public equities and derivative instruments. In addition, HOOPP has exposure to other equity-based price risk of $622 million (2020: $967 million) through its investments in dividend derivatives. HOOPP also invests in funds and securities linked to insurance contracts and is exposed to losses stemming from higher than expected insurance claims. The total fair value of these investments is $721 million (2020: $549 million).

The Plan's total exposure to equity price risk (including through derivatives) as at December 31 is presented below. The table also includes the impact of a 10% increase/decrease in the equity markets benchmark price index on the Plan's net assets available for benefits.

| | 2021 | | | |
|---|---|---|---|---|
| ($ millions) | **Effective Equity Exposure** | **% of Net Assets Available for Benefits** | **Benchmark** | **Impact of a 10% Increase/ (Decrease)** |
| **Canadian** | $ 5,788 | 5.1 % | S&P/TSX 60 Total Return Index | $ 582 / (578) |
| **United States** | 13,013 | 11.4 % | S&P 500 Total Return Index | 1,388 / (1,296) |
| **International** | 18,696 | 16.3 % | Blend of International Indices[(1)] | 1,889 / (1,870) |
| | **$ 37,497** | | | **$3,859 / (3,744)** |

*(1) The blended benchmark is composed of the following international stock market indices: Dow Jones Euro Stoxx 50 Index, Tokyo Stock Price Index (Topix), FTSE 100, Swiss Market Index (SMI), Deutscher Aktien Index (DAX), Cotation Assistee en Continu (CAC) 40 and Australian Securities Exchange (ASX) 200.*

| | 2020 | | | |
|---|---|---|---|---|
| ($ millions) | **Effective Equity Exposure** | **% of Net Assets Available for Benefits** | **Benchmark** | **Impact of a 10% Increase/ (Decrease)** |
| **Canadian** | $ 5,096 | 4.9 % | S&P/TSX 60 Total Return Index | $ 510 / (510) |
| **United States** | 13,129 | 12.6 % | S&P 500 Total Return Index | 1,319 / (1,308) |
| **International** | 14,668 | 14.1 % | Blend of International Indices[(1)] | 1,487 / (1,471) |
| | $ 32,893 | | | $3,316 / (3,289) |

*(1) The blended benchmark is composed of the following international stock market indices: Dow Jones Euro Stoxx 50 Index, Tokyo Stock Price Index (Topix), FTSE 100, Swiss Market Index (SMI), Hang Seng Index (HSI) and Australian Securities Exchange (ASX) 200.*

***Risk measurement***

HOOPP measures risk daily by monitoring exposure levels to Board approved limits, which include total equity exposure and single-name limits. Compliance limit reporting is provided to the Board on a quarterly basis. Sensitivity analysis is performed to measure the impact of public equity market changes, to quantify the underlying risk and to ensure risk mitigation strategies are effective.

***Risk management***

HOOPP manages equity risk through diversification, by investing in major equity markets with benchmarks approved by the Board, and through physical and derivative markets in order to minimize non-systemic risk. Rebalancing occurs regularly to ensure the weighting of the equity investments, in respect to the overall value of the Plan, remains within the limits established by the Board.

### *Credit risk*

Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfill its contractual obligations.

Counterparty credit risk is the risk of loss in the event the counterparty (excluding clearing houses) defaults on a transaction, or otherwise fails to perform under the terms of a contract.

The Plan assumes credit risk exposure through its investment in fixed income instruments and the underlying reference bond of credit derivatives. Counterparty credit risk is introduced through the Plan's securities lent/borrowed, repurchase agreements and derivatives.

HOOPP has investment policies and procedures in place, which specify the requirements for using collateral to reduce the total net credit risk exposure to individual corporate entities. Only collateral of a certain quality is considered acceptable. Contracts with various counterparties are in place and define the terms under which collateral is transferred. Terms may include minimum transfer amounts or thresholds, eligible securities, and rules for the settlement of disputes. The collateral pledged and received is the only recourse available to the counterparties of these transactions.

The Plan's total credit risk exposure as at December 31 was as follows:

| | 2021 | | 2020 | |
|---|---|---|---|---|
| ($ millions) | Total Credit Exposure | % of Total | Total Credit Exposure | % of Total |
| **Sovereign securities AAA**[(1)] | **$ 8,303** | **6.3 %** | $ 15,644 | 12.0 % |
| **Fixed income instruments** | | | | |
| AAA | **16,768** | **12.6 %** | 20,238 | 15.5 % |
| AA | **35,640** | **26.9 %** | 40,358 | 31.0 % |
| A | **14,749** | **11.1 %** | 7,183 | 5.5 % |
| BBB | **2,973** | **2.2 %** | 3,537 | 2.7 % |
| BB or below | **3,025** | **2.3 %** | 2,237 | 1.7 % |
| **Credit derivatives** | **22,662** | **17.1 %** | 16,801 | 12.9 % |
| **Counterparty credit risk exposure** | | | | |
| Derivative instruments | **1,700** | **1.3 %** | 770 | 0.6 % |
| Repurchase agreements | **796** | **0.6 %** | 920 | 0.7 % |
| Securities lending program | **26,055** | **19.6 %** | 22,706 | 17.4 % |
| **Maximum credit risk exposure** | **132,671** | **100.0 %** | 130,394 | 100.0 % |
| Credit risk protection (credit derivatives) | **(14,226)** | | (13,801) | |
| Collateral received | **(23,674)** | | (18,325) | |
| **Total** | **$ 94,771** | | $ 98,268 | |

*(1) As at December 31, 2021, includes securities issued by the governments of Canada, Germany, Australia and the United States (2020: Canada, Germany, Australia and the United States).*

***Risk measurement***

HOOPP measures the risk by monitoring the Plan’s exposure each day to credit based on Board-approved credit limits, which include overall exposure limits, single-name limits, and counterparty exposure to determine whether collateral should be requested. Counterparty credit risk exposure for financial contracts is measured by the positive fair value of the contractual obligations with the counterparties, less any collateral or margin received, as at the reporting date. Compliance reporting is provided quarterly to the ALM Committee and the Board. Investments in any one issuer are limited to 5% of the total net assets of the Plan.

***Risk management***

HOOPP’s policy is to manage credit risk by placing limits on investments in below-investment grade debt, diversifying credit holdings, and limiting investments based on single-name issuer limits as stipulated by the Board in the IP&G. HOOPP assigns credit ratings to its sovereign securities and fixed income instruments as determined by recognized credit rating agencies, where available. For fixed income instruments that are not rated by a recognized credit ratings agency, HOOPP assigns credit ratings based on an internal rating process. HOOPP will also employ the use of credit derivatives to achieve its objective of managing credit risk. HOOPP has a long-term focus on credit risk; therefore, changes in the market value of securities due to fluctuations in credit spreads are not of primary concern.

HOOPP mitigates counterparty credit risk by transacting exchange-traded derivative contracts and, when required, by dealing primarily with over-the-counter derivatives counterparties with a minimum credit rating of A, as determined by a recognized credit rating agency. HOOPP also uses an internal credit-limit monitoring process and has master netting arrangements in place and the right to obtain collateral, all of which mitigate counterparty credit risk. Exposure to any counterparty with whom the Plan has non-exchange traded derivative contracts shall not exceed the limits specified and approved by the Board in the IP&G. Counterparty exposure is determined daily and collateral is either requested or delivered in accordance with the agreements in place. Note 5 provides more information on collateral.

*Liquidity risk*

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

***Risk measurement***

On a daily basis, HOOPP forecasts cash flow requirements for up to one week to ensure sufficient cash is made available to meet short-term requirements.

Also, the ratio of assets available to cover potential margin calls is determined daily. When calculating the assets available for liquidity, factors such as market value, collateral pledged and received, securities purchased under resell agreements and securities sold under repurchase agreements, and securities lending and borrowing positions are considered. The potential margin call is based on the Plan's exposure to various derivatives and their potential daily market movement.

In addition, consideration is given to the Plan's financial liabilities, which include investment-related liabilities (note 2), accrued pension obligations (note 11), and contracts that give rise to commitments for future payments (notes 14 and 15).

***Risk management***

HOOPP manages liquidity risk by maintaining sufficient cash and cash equivalents, investing in highly liquid securities which can be easily converted to cash, and through the use of investment income and contributions received, to meet liquidity requirements. Highly liquid securities mainly consist of sovereign, supranational and provincial debt, as well as shares of corporations listed in major equity indices. These sources of funds are used to pay pension benefits, settle financial liabilities and pay for operating expenses.

The Plan's assets available for liquidity needs, as at December 31 are as follows:

| | 2021 | 2020 |
|---|---|---|
| ($ millions) | | |
| Liquid securities | **$ 83,564** | $ 90,723 |
| Less: net liquid securities transferred[1] | **(50,582)** | (53,533) |
| **Securities available for liquidity needs** | **$ 32,982** | $ 37,190 |

*(1) Includes securities purchased under resell agreements and securities sold under repurchase agreements, securities lent and borrowed, and collateral pledged and received.*

## Interest Rate Benchmark Reform

In recent years, global regulators have prioritized the reform and replacement of benchmark interest rates such as USD LIBOR, GBP LIBOR, and other interbank offered rates (IBORs). As a result, public authorities and other market participants are selecting new benchmark interest rates in key currencies with the objective that these rates will be based on liquid underlying market transactions. On March 5, 2021, the United Kingdom's (U.K.'s) Financial Conduct Authority (FCA) announced that publication of LIBOR settings for all Euro LIBOR, all Swiss franc LIBOR, the spot next, 1-week, 2-month and 12-month Japanese yen LIBOR, the overnight, 1-week, 2-month and 12- month sterling LIBOR, and the 1-week and 2-month US dollar LIBOR will cease immediately after December 31, 2021. However, the FCA will require the continued publication of 1-month, 3-month and 6-month sterling and yen LIBOR settings until the end of 2022 on a non-representative "synthetic" basis. Additionally, the publication for the overnight and 12-month US dollar LIBOR settings will cease immediately after June 30, 2023. The FCA will continue to consider whether to also require the continued publication on a synthetic basis of the 1-month, 3-month and 6-month US dollar LIBOR settings for a further period after June 30, 2023.

*Risk measurement*

HOOPP established an enterprise-wide transition program to assess the impact of interest rate benchmark reform on its investment portfolio, operational processes, and internal controls, and to execute the transition to alternate reference rates. As at December 31, 2021, the majority of investment contracts that reference IBOR tenors ceasing immediately after December 31, 2021 have either been amended to reflect alternative reference rates or been replaced by new and /or amended contracts using alternative reference rates. As a result, HOOPP continues to be exposed to interest rate risk, albeit for different reference rates. Refer to the section above for a discussion on interest rate risk.

*Risk management*

As at December 31, 2021, the Plan held non-derivative financial assets and liabilities with a fair value of $362 million and $466 million respectively, and derivatives with a total notional value of $14,166 million referencing LIBOR tenors that have ceased after December 31, 2021 or will cease after June 30, 2023. Management's assessment is that the impact of this transition on the Plan's investments will not be significant. Management will continue to monitor benchmark rates in other jurisdictions as they continue to evaluate benchmark reform.

## Note 7 – OTHER ASSETS

As at December 31, other assets consist of the following amounts:

| ($ millions) | | 2021 | | 2020 |
|---|---|---|---|---|
| Refundable withholding tax on contributions | **$** | **164** | $ | 107 |
| Fixed assets and intangible assets | | **40** | | 40 |
| Other | | **9** | | 6 |
| **Total** | **$** | **213** | $ | 153 |

## Note 8 – CONTRIBUTIONS

Contributions received are reconciled annually, within a year, to ensure the appropriate amounts have been remitted. To perform this reconciliation, HOOPP requires each employer to verify and update HOOPP's records for each of their member's service and contributions. With this information, HOOPP performs a reconciliation for each employer to determine if the correct amount of contributions has been remitted to HOOPP. Once this reconciliation is complete, HOOPP is able to calculate the amount of any differences related to contributions. Any shortfalls are recovered from the employer and any overpayments are refunded or credited towards future remittances.

Contributions received or receivable during the years ended December 31 were comprised of the following:

| ($ millions) | | 2021 | | 2020 |
|---|---|---|---|---|
| **Employers** | | | | |
| Current service contributions | **$** | **1,502** | $ | 1,458 |
| **Members** | | | | |
| Current service contributions | | **1,192** | | 1,157 |
| Past service contributions from members | | **40** | | 39 |
| Transfers from other plans | | **86** | | 61 |
| | | **1,318** | | 1,257 |
| **Total** | **$** | **2,820** | $ | 2,715 |

# Note 9 – BENEFITS PAID

Benefits paid during the years ended December 31 were comprised of the following:

| ($ millions) | | 2021 | | 2020 |
|---|---|---|---|---|
| Retirement pension and bridge benefits | **$** | **2,442** | $ | 2,253 |
| Death benefits | | **210** | | 196 |
| Disability benefits | | **75** | | 77 |
| Commuted value transfers | | **879** | | 628 |
| Transfers to other plans | | **33** | | 38 |
| **Total**(1) | **$** | **3,639** | $ | 3,192 |

*(1) The comparative amounts have been reclassified to conform to the current year's presentation.*

# Note 10 – OPERATING EXPENSES

For the years ended December 31, HOOPP incurred operating expenses for Investment and Plan related activities as follows:

| ($ millions) | | 2021 | | 2020 |
|---|---|---|---|---|
| **Investment**(1) | | | | |
| Administration | **$** | **212** | $ | 181 |
| Legal, actuarial and other professional fees(2) | | **11** | | 11 |
| Custodial | | **4** | | 3 |
| | | **227** | | 195 |
| **Plan**(1) | | | | |
| Administration | | **108** | | 99 |
| Legal, actuarial and other professional fees(2) | | **10** | | 9 |
| | | **118** | | 108 |
| **Total** | **$** | **345** | $ | 303 |

*(1) Based on an allocation of corporate expenses that includes direct and indirect expenses associated with Investment and Plan related activities. Costs are allocated using estimates of time associated with each activity.*
*(2) Includes amounts paid or payable to the auditors pertaining to statutory audit services of $1,340,000 (2020: $1,307,000), and non-audit services of $406,000 (2020: $247,000). Also includes amounts paid or payable to the actuary pertaining to actuarial services of $443,000 (2020: $452,000).*

# Note 11 – PENSION OBLIGATIONS

## Pension Obligations

The pension obligations are based on management's assumptions and include a provision for expenses. The Plan provisions considered in the valuations were those in effect at the valuation dates.

Estimates used for financial reporting purposes reflect management's expectations of long-term economic and demographic conditions. The primary economic assumptions include the discount rate, salary escalation rate and price inflation rate. The non-economic assumptions include considerations such as mortality, withdrawal and retirement rates.

The discount rate is based on the long-term expected fund return and includes a margin for conservatism, as appropriate for a funding valuation. The price inflation rate is based on the expected CPI rate.

For the December 31, 2021 actuarial valuation, the Board approved changes to certain assumptions based on recent experience. For the December 31, 2020 actuarial valuation, the Board approved changes to the discount rate assumption, the inflation assumption impacting commuted values and certain other assumptions.

To determine the pension obligations as at December 31, 2021 and December 31, 2020, the following economic assumptions were analyzed and reviewed by management and the Plan's actuarial advisor for reasonableness and approved by the Board for financial reporting purposes:

| | 2021[3] | 2020[3] |
|---|---|---|
| Discount rate[1] | **4.65 %** | 4.65 % |
| Rate of price inflation | **2.00 %** | 2.00 % |
| Real discount rate | **2.65 %** | 2.65 % |
| Salary escalation rate[2] | **3.50 %** | 3.50 % |

*(1) Net of allowance for investment and plan expenses of 0.40% (2020: 0.40%).*
*(2) A two-tiered rate of 2.75% per annum for the first three years following the valuation date and 3.50% per annum thereafter is assumed (2020: A two-tiered rate of 2.75% per annum for the first three years following the valuation date and 3.50% per annum thereafter is assumed).*
*(3) Net impact from changes to economic and demographic assumptions resulted in an actuarial gain of $347 million, (2020: Net impact from changes to the discount rate and all other assumptions resulted in an actuarial loss of $3,047 million, including a $1,315 million gain related to the inflation assumption change impacting commuted values).*

## Actuarial Methodology for Financial Reporting

For the determination of the actuarial present value of the pension obligations as at December 31, 2021, an actuarial valuation was conducted by Mercer (Canada) Limited. The valuation uses the projected accrued benefit actuarial cost method with respect to all benefits and assumes that the Plan will continue on a going concern basis. The data used in the valuation was based on members' demographic data provided by HOOPP management as at October 1, 2021 and members' pay data provided as at December 31, 2020, all of which were projected to December 31, 2021 using management's estimates of experience for the intervening periods. The pensionable earnings estimates were determined based on 2020 experience and estimate assumptions.

Using this method and data, the pension obligations (or going concern actuarial pension obligations) as at December 31, 2021, were $85,902 million (2020: $79,852 million).

## Estimated Experience Gains and Losses

Estimated experience gains and losses represent the change in the pension obligations due to the difference between actual economic and demographic experience and expected experience. During 2021, there was an estimated experience loss of $1,302 million (2020: gain of $538 million).

## Plan Provisions

As discussed under the Description of the Plan, the Board has the authority to provide ad hoc inflation protection for retirees and deferred retirees. During 2020, the Board confirmed 100% of the 2020 CPI increase as an ad hoc increase effective April 1, 2021. As at December 31, 2020, the additional impact to the pension obligations for this ad hoc inflation protection adjustment is $54 million. During 2021, the Board confirmed 100% of the 2021 CPI increase as an ad hoc increase effective April 1, 2022. As at December 31, 2021, the additional impact to the pension obligations for this ad hoc inflation protection adjustment is $825 million.

The Board also approved an amendment to the Plan provisions effective April 1, 2021 which was an increase to the benefit formula accrual rate in respect of the years 2018, 2019 and 2020. The impact of this improvement was an increase to the pension obligations of $704 million as of January 1, 2021.

## Surplus

According to the Handbook, the surplus for financial statement presentation purposes is the difference between the market value of net assets available for benefits and the pension obligations. The surplus for financial statement purposes on December 31, 2021, was $28,512 million (2020: $24,131 million).

The net assets value used for regulatory filing purposes, referred to as the "smoothed" value of net assets, is determined in a manner that reflects long-term market trends consistent with assumptions underlying the actuarial present value of pension obligations. The smoothed value of net assets is determined by taking an average of the current market value of net assets and the market values for the four preceding years. The market values for the four preceding years are adjusted for contributions, benefit payments and operating expenses (for periods prior to 2020). They are also adjusted to include assumed investment return, which is based on long-term expected fund returns. The regulatory filing surplus on December 31, 2021, was $17,567 million (2020: $15,345 million).

The market value of net assets available for benefits exceeds the smoothed value of net assets, resulting in a difference between the surplus for financial statement purposes and that for regulatory filing purposes of $10,945 million at December 31, 2021 (2020: $8,786 million).

# Note 12 – REGULATORY FILING VALUATION

In accordance with the PBA and the ITA, an actuarial valuation is required to be filed at least every three years to estimate the Plan's surplus or deficit, and to determine the Plan's minimum funding requirements. Mercer (Canada) Limited, prepared the last actuarial valuation for regulatory filing purposes, as at December 31, 2020, and a copy of that valuation was filed with FSRA and CRA. The effective date of the next required valuation is December 31, 2023.

The funding valuation method used to determine the pension obligations is the projected accrued benefit actuarial cost method. Under this method, the pension obligations are determined by calculating the actuarial present value of benefits based on service at the valuation date and projected final average earnings. The actuarial current service cost of benefits is determined based on benefits (with projected final average earnings) in respect of service in the year following the valuation date, a portion of which is covered by member contributions.

Mercer (Canada) Limited, in consultation with management, recommended the actuarial assumptions to be used for the regulatory filing valuation. The economic assumptions used for the December 31, 2020 regulatory filing valuation were as follows:

| Economic Assumptions | Rates |
|---|---|
| Discount rate(1) | **4.65 %** |
| Rate of price inflation | **2.00 %** |
| Real discount rate | **2.65 %** |
| Salary escalation rate(2) | **3.50 %** |

*(1) Net of allowance for investment and plan expenses of 0.40%.*
*(2) A two-tiered rate of 2.75% for per annum for the first three years following the valuation date and 3.50% per annum thereafter is assumed.*

The most recent regulatory filing valuation conducted as at December 31, 2020, disclosed a smoothed value of net assets of $95,197 million with accrued going concern pension obligations of $80,556 million, resulting in a going concern regulatory filing surplus of $14,641 million. The obligations reflect the benefit improvement in respect of years of 2018, 2019 and 2020 disclosed under Plan Provisions in note 11. In accordance with the PBA, the solvency deficiency at December 31, 2020 was $nil.

## Note 13 – RETIREMENT COMPENSATION ARRANGEMENT

Under the RCA, total pension benefits are calculated using the pension formula disclosed under the Description of the Plan based on a member's total pensionable earnings. Benefits payable from the RCA are then determined as those which exceed amounts permitted under the ITA for an RPP. The net asset value available for RCA benefits at December 31, 2021 was $276 million (2020: $178 million).

## Note 14 – RELATED PARTY TRANSACTIONS

As at December 31, a wholly-owned subsidiary of the Plan held a significant ownership interest in a commercial office building. The Plan is also a tenant in this office building. The term of its lease is 15 years with two renewal options, each for 5 years. The lease payments are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties. The future minimum lease payments by year, and in aggregate, are as follows:

| ($ millions) | | 2021 |
|---|---|---|
| 2022 | $ | 7 |
| 2023 | | 7 |
| 2024 | | 7 |
| 2025 | | 7 |
| 2026 | | 7 |
| Thereafter | | 74 |
| **Total minimum lease payments** | **$** | **109** |

## Note 15 – COMMITMENTS

As part of normal business operations, the Plan has committed to enter into investment and other transactions including funding of real estate, private equity, infrastructure and alternative investments and extending credit in the form of loans. For loan commitments, the maximum exposure to credit risk is the committed undrawn amount under the agreements. These commitments will be funded over the next several years in accordance with agreed-on terms and conditions. As at December 31, the Plan's commitments, excluding those commitments that are deemed insignificant to be disclosed, are as follows:

| ($ millions) | | 2021 | | 2020 |
|---|---|---|---|---|
| Funding commitments | **$** | **10,955** | $ | 11,091 |
| Loan commitments | | **85** | | 93 |
| **Total** | **$** | **11,040** | $ | 11,184 |

## Note 16 – CAPITAL

HOOPP defines its capital as the Plan's surplus or deficit. The objective of managing the Plan's capital is to ensure that the Plan is fully funded in order to meet the pension obligations over the long term. Refer to note 6 for further disclosure on HOOPP's capital.

# Note 17 – GUARANTEES, INDEMNIFICATIONS AND CONTINGENCIES

Guarantees are contracts under which the guarantor is required to make payment to a third party where a principal obligor fails to pay or perform a stated obligation owed to that party. Indemnification agreements are similar to guarantees in that the indemnifying party may be required to make payments to the indemnified party in the event that the indemnified party incurs certain specified losses or expenses, often as a result of the act or omission of the indemnifying party.

## Guarantees

The Plan indirectly guarantees the underlying reference obligations when it sells credit protection (i.e., it commits to compensate the counterparty in the event of a default in relation to the reference obligation). The maximum potential exposure is the notional amount of the credit protection sold. However, when carefully structured and coupled with other hedging instruments, the exposure can be limited with certainty. The notional amount, fair value and the term to maturity of the credit protection sold by the Plan are disclosed in note 3. The nature of any assets held as collateral is disclosed in note 5.

## Indemnifications

According to the Agreement and Declaration of Trust, the Plan may indemnify its trustees and employees against certain claims that may be made against them. In addition, the Plan may in certain circumstances in the course of the Plan's investment activities and its normal course of operations, agree to indemnify a contractual counterparty. Under the terms of these various arrangements, the Plan may be required to compensate counterparties for costs incurred because of various contingencies such as legal claims or changes in laws and regulations. The number of such agreements, the range of indemnifications and the contingent nature of the liabilities in such agreements, prevent HOOPP from making a reasonable estimate of the maximum amount that would be required to pay all such indemnifications. As at December 31, 2021, the amount recorded as a liability for claims under these arrangements was $nil (2020: $nil).

## Contingencies

As at December 31, 2021, the Plan was involved in defending against certain claims, such as tax claims, or asserting claims against third parties. The outcome and possible impact to the Plan of such litigation or claims is inherently difficult to predict. It is the opinion of management that any impact that may result would not have a significant adverse effect on the Plan's financial statements.

# 10-year review

**(unaudited)**

For the years ended December 31

| ($ millions) | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS** | | | | | | | | | | |
| **Net assets available for benefits, beginning of the year** | **$103,983** | $ 94,102 | $ 79,019 | $ 77,755 | $ 70,359 | $ 63,924 | $ 60,848 | $ 51,626 | $ 47,414 | $ 40,321 |
| **Change in net assets available for benefits** | | | | | | | | | | |
| Net investment income | **11,595** | 10,661 | 13,662 | 1,666 | 7,598 | 6,579 | 3,103 | 9,105 | 4,046 | 6,857 |
| Contributions | | | | | | | | | | |
| Employers | **1,502** | 1,458 | 1,371 | 1,285 | 1,224 | 1,173 | 1,108 | 1,075 | 1,033 | 1,003 |
| Members | **1,318** | 1,257 | 1,190 | 1,106 | 1,112 | 1,022 | 991 | 929 | 880 | 860 |
| Transfer of assets from merged pension plans | **—** | — | 2,065 | — | — | — | — | — | — | — |
| Benefits paid | **(3,639)** | (3,192) | (2,934) | (2,547) | (2,314) | (2,127) | (1,925) | (1,702) | (1,587) | (1,486) |
| Operating expenses | **(345)** | (303) | (271) | (246) | (224) | (212) | (201) | (185) | (160) | (141) |
| Total change in net assets available for benefits | **10,431** | 9,881 | 15,083 | 1,264 | 7,396 | 6,435 | 3,076 | 9,222 | 4,212 | 7,093 |
| **Net assets available for benefits, end of the year** | **$114,414** | $103,983 | $ 94,102 | $ 79,019 | $ 77,755 | $ 70,359 | $ 63,924 | $ 60,848 | $ 51,626 | $ 47,414 |
| **NET ASSETS AVAILABLE FOR BENEFITS** | | | | | | | | | | |
| **Assets** | | | | | | | | | | |
| Investment assets | | | | | | | | | | |
| Cash | **$ 92** | $ 24 | $ 94 | $ 8 | $ 21 | $ 19 | $ 57 | $ 2 | $ 8 | $ (1) |
| Securities purchased under resell agreements | **11,714** | 9,464 | 2,179 | 10,871 | 7,797 | 6,283 | 2,498 | 3,286 | 3,046 | 3,117 |
| Fixed income | **100,294** | 99,808 | 110,099 | 104,345 | 103,177 | 115,472 | 115,930 | 106,200 | 86,694 | 74,669 |
| Public equities | **57,342** | 46,547 | 31,371 | 24,351 | 36,326 | 16,106 | 9,150 | 2,182 | 4,596 | 1,705 |
| Private equities and special situations | **15,363** | 13,018 | 10,813 | 10,126 | 7,220 | 4,969 | 4,339 | 3,275 | 2,580 | 1,999 |
| Real estate | **17,916** | 14,477 | 13,601 | 13,255 | 11,952 | 10,053 | 9,063 | 7,717 | 7,008 | 5,854 |
| Infrastructure | **2,662** | 756 | 114 | — | — | — | — | — | — | — |
| Alternative investments | **2,886** | 1,623 | 753 | — | — | — | — | — | — | — |
| Derivative instruments | **4,077** | 2,837 | 9,642 | 8,479 | 8,714 | 7,252 | 5,236 | 5,808 | 5,053 | 1,624 |
| Investment receivables | **4,384** | 2,832 | 1,772 | 1,052 | 3,103 | 3,635 | 1,063 | 934 | 1,438 | 1,276 |
| Contributions receivable | **210** | 229 | 196 | 173 | 173 | 171 | 156 | 156 | 150 | 150 |
| Other assets | **213** | 153 | 192 | 196 | 207 | 205 | 165 | 151 | 146 | 150 |
| **Total assets** | **217,153** | 191,768 | 180,826 | 172,856 | 178,690 | 164,165 | 147,657 | 129,711 | 110,719 | 90,543 |
| **Liabilities** | | | | | | | | | | |
| Investment liabilities | **(102,551)** | (87,638) | (86,581) | (93,701) | (100,803) | (93,661) | (83,616) | (68,753) | (58,999) | (43,046) |
| Other liabilities | **(188)** | (147) | (143) | (136) | (132) | (145) | (117) | (110) | (94) | (83) |
| **Total liabilities** | **(102,739)** | (87,785) | (86,724) | (93,837) | (100,935) | (93,806) | (83,733) | (68,863) | (59,093) | (43,129) |
| **Net assets available for benefits** | **114,414** | 103,983 | 94,102 | 79,019 | 77,755 | 70,359 | 63,924 | 60,848 | 51,626 | 47,414 |
| **Pension obligations** | **85,902** | 79,852 | 73,547 | 65,128 | 59,602 | 54,461 | 49,151 | 46,923 | 41,478 | 39,919 |
| **Surplus** | **$ 28,512** | $ 24,131 | $ 20,555 | $ 13,891 | $ 18,153 | $ 15,898 | $ 14,773 | $ 13,925 | $ 10,148 | $ 7,495 |
| **Investment Performance** | | | | | | | | | | |
| Investment rate of return-net | **11.28 %** | 11.42 % | 17.14 % | 2.17 % | 10.88 % | 10.35 % | 5.12 % | 17.72 % | 8.55 % | 17.10 % |
| Benchmark return | **8.59 %** | 9.80 % | 15.06 % | 0.01 % | 7.89 % | 6.12 % | 3.95 % | 15.62 % | 6.46 % | 14.29 % |
| **Value-Added return** | **2.69 %** | 1.62 % | 2.08 % | 2.16 % | 2.99 % | 4.23 % | 1.17 % | 2.10 % | 2.09 % | 2.81 % |

# Governance

# Governance

Below you will find a list of HOOPP's Chairs, Board Trustees, Observers, Executives, Senior management and Board advisors, as at December 31, 2021.

## Chairs

**Adrian Foster**
Board Chair

Ontario Hospital Association (OHA)-appointed Trustee

**Dan Anderson**
Board Vice-Chair, and Chair Governance & HR Committee

Retired Director/Chief Negotiator, Ontario Nurses' Association (ONA)

## Trustees

**Sandi Blancher**
Vice President, Ontario Public Service Employees Union (OPSEU) Local 106

**Giselle Branget**
OHA-appointed Trustee

**Jon Clark**
Service Employees International Union (SEIU) Healthcare-appointed Trustee

**Anthony Dale**
President & CEO, OHA

**Laura Dumoulin**
OPSEU Local 675 Membership Secretary / Communications Chairman

**Jim Flett**
Chair, Audit & Finance Committee

Retired President & CEO, Kingston General Hospital

**Beverly Mathers**
Chief Executive Officer, ONA

**Ian Matheson**
OHA-appointed Trustee

**Cam Nelson**
SEIU-appointed Trustee

**Sharon Richer**
Chair, Plan Committee

Secretary-Treasurer, Ontario Council of Hospital Unions (OCHU) CUPE

**Gerry Rocchi**
OHA-appointed Trustee

**Louis Rodrigues**
First Vice President, OCHU CUPE

**Barry Wainstein,**
Chair, Asset-Liability Management Committee

Retired Vice-Chairman and Deputy Head, Global Capital Markets, Scotiabank

**Nick Zelenczuk**
OHA-appointed Trustee

## Observers

**Calvin Campbell, Observer OCHU**
Vice President, OCHU CUPE

**Karli Farrow, Observer OHA**
President & CEO, Trillium Health Partners

OHA-appointed Trustee

**William Moriarty, Observer OHA**
OHA-appointed Trustee

**Cathryn Hoy, Observer ONA**
First Vice-President, ONA

**Karim Mamdani, Observer OHA**
President & CEO, Ontario Shores Centre for Mental Health Services

## Executives

**Jeff Wendling**
President & Chief Executive Officer

**Mary Abbott**
Senior Vice President & General Counsel

**Reno Bugiardini**
Senior Vice President, Information Technology & Facilities Services

**Saskia Goedhart**
Senior Vice President & Chief Risk Officer

**Steven McCormick**
Senior Vice President, Plan Operations

**Elena Palumbo-Sergnese**
Senior Vice President, Human Resources

**Tim Shortill**
Chief Operating Officer

**Barbara Thomson**
Senior Vice President, Finance & Chief Financial Officer

**Michael Wissell**
Chief Investment Officer

## Senior Management

**Stephen Anderson**
Vice President,
Equity, Derivatives
& Collateral
Management

**Shrirang Apte**
Vice President, Credit

**Rachel Arbour**
Vice President, Plan &
Policy Development

**Stephane Arvanitis**
Vice President,
Investment Risk
Analytics & Research

**Debbie Caruso**
Associate General
Counsel, Investments

**Tabitha Chinniah**
Vice President,
Product & Service
Experience

**Stephen Choi**
Vice President,
Investment Risk
Public, Capital &
Private Markets

**Juliana Duray Kikuchi**
Vice President,
Finance Governance
& Tax

**Lori Hall-Kimm**
Head of Global
Private Equity

**Lorena Gepraegs**
Vice President, IT
Security, Risk and
Governance

**Linda Halley**
Vice President,
Controller

**Janine Ho Soong**
Vice President,
Internal Audit

**Juan Jose Diz**
Vice President,
Pension Solutions
Group

**Abas Kanu**
Vice President,
HOOPP Compliance
Officer

**Paul Kirk**
Vice President,
Short-Term &
Foreign Exchange
(retired December
2021)

**Jacky Lee**
Vice President,
Total Portfolio

**Adrian Mitchell**
Vice President,
Public Equities

**Raif Murray**
Acting Vice President,
Investment Solutions
Group

**Christopher Poulo**
Vice President,
Communications &
Public Affairs

**Eric Plesman**
Head of Global
Real Estate

**Helena Przybycien**
Vice President,
Enterprise &
Operational Risk

**Jeff Rabb**
Vice President,
Investment Reporting,
Data Governance &
Valuations

**Nan Samaroo**
Vice President,
Investment Operations

**Stephen Smith**
Head of Global
Infrastructure

**Ray Tanveer**
Vice President,
Interest Rates

**Silvano Trinca**
Vice President,
Plan Operations

**Angela Waite**
Associate General
Counsel, Corporate
& Privacy

**Alicia Yetman**
Vice President,
Human Resources

**Ivana Zanardo**
Vice President,
Plan Operations

## Board advisors

**Mercer (Canada) Limited**
Actuary

**Pricewaterhouse Coopers LLP**
External Auditor

**Paul Litner, Osler, Hoskin & Harcourt LLP**
Board Legal Counsel

**Willis Towers Watson**
Board Compensation
Advisor

**Graham Pugh**
Investment Advisor