



Ontario Pension Board
2023 Annual Report

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Letter from the Chair

As the administrator of one of the oldest pension plans in Canada, OPB is focused on the long term. This means ensuring that our governance, leadership and strategies position us well for success not just today but for many years to come.

Over the last year, the Board focused on several key areas to position OPB well for the future – oversight of the multi-year pension modernization program, the implementation of our carefully planned leadership succession plan and the financial health of the Plan.

2023 proved to be another challenging year with continuing market volatility and high inflation, which placed additional funding pressure on the Plan. On the investment returns side, we had a better year than last year, with a positive return of 3.1%. However, our return still fell below the discount rate required to fund the Plan over the long term.

In 2024, the Board will be providing oversight of a long-term funding study and a review of our Strategic Asset Allocation (SAA). We conduct these studies every few years, as part of our regular due diligence and to help ensure the Plan is well positioned over the long term.

IMCO has continued to mature in terms of investment expertise and scale, enabling it to pursue and secure investment opportunities that would not have been previously possible for OPB to accomplish on its own. IMCO has also built strong in-house expertise and resources to provide clients with advisory services on how to structure and optimize their strategies to deliver strong results. OPB will be partnering with IMCO on our review of both our SAA and our funding study.

In 2023, we continued to make good progress on our pension modernization initiative which will improve the client experience and generate business efficiencies. Following a comprehensive research and review phase, we concluded that choosing a commercial off-the-shelf (COTS) system will be the most effective and efficient path to modernizing our systems. We passed a key milestone this year, issuing a request for proposals (RFP) for our new pension administration system. In 2024, we will focus on selecting the right vendor and system enabling us to move forward with this important initiative.

Given the current investment and funding environment and where OPB is in its pension modernization journey, it was particularly critical to develop a robust succession plan and take our time to find the right candidate to lead the organization.

Last year, I announced that two of our key executives – Peter Shena, our Chief Pension Officer (CPO) and Mark Fuller, our President and CEO – would be retiring. The Board developed an executive transition plan and retained the executive search firm LHH Knightsbridge to conduct a Canada-wide search for a transitional position of President & Chief Pension Officer, with the intention that the successful candidate would become OPB's new President & CEO upon Mark Fuller's retirement.

Last November, after a cross-Canada search process, we announced the appointment of Darwin Bozek to the transitional position of President & Chief Pension Officer. As an experienced executive leader with extensive public sector and pension experience, Darwin's proven ability to deliver business results while supporting a positive, inclusive and values-based culture makes him the right candidate to lead OPB upon Mark's retirement.

Darwin joined OPB in February and initially worked closely with Peter to become familiar with OPB's pension team. He is now working closely with Mark in preparation for his transition to President & CEO upon Mark's retirement in 2024. Darwin will lead the selection of a permanent Chief Pension Officer in the coming months.

I want to take this opportunity to thank Peter for his decades-long contributions to OPB, his focus on protecting the pension promise for our members and stakeholders, and his strong and effective working relationships with the Board, the Plan Sponsor and our Bargaining Agents. Peter will be available to Darwin and OPB as a Chief Transition Officer (CTO) over the remainder of this year to provide his advisory expertise on key initiatives and projects as we complete the succession plan.

Another key area of focus for the Board was overseeing the advancement of Environmental, Social and Governance (ESG) issues both within our organization and within our investments. In 2023, we had a focus on climate risk and diversity, equity and inclusion (DEI), ensuring that these important topics were embedded in risk and strategy discussions. In particular:

- We launched our Diversity, Equity and Inclusion Advisory Council to support continuous improvement in building an inclusive culture.
- We surveyed employees, enabling a current view of our data on socio-demographic information and the inclusion experiences of our employees.
- Lastly, we continued the development of our ESG Communications Strategy and released OPB's first ESG Report in early 2024. It reflects both our organizational activities as well as IMCO's progress on ESG with our investment portfolio. I encourage you to read our inaugural report for more detailed information.

In a rapidly changing world, and as the oversight responsibilities of a board continue to grow, boards must be committed to continuous learning. In 2023, the Board focused on helping the organization advance its risk strategies and maturity, and participated in ongoing education sessions to further their knowledge and governance capability, including education on Responsible Investing, climate strategy and understanding the path to net-zero emissions, the post-pandemic outlook for real estate, and stewarding executive leadership change.

In 2023, we also experienced change at the Board level.

I would like to welcome Richard Nunn to the Board and as our new Chair of the Investment Committee. Richard brings not only deep expertise in finance, accounting and investments, but also significant experience in board oversight. I am confident that Richard will bring tremendous value to the Board.

I thank Rob Ritchie for his time on the Board. Rob joined the Board in 2020 and served as Chair of the Managed Plans Committee, Chair of the Investment Committee and member of the Investment and Audit committees. With his significant experience in pensions and investments, Rob brought great value to the Board during his time with us.

Lastly, I wish to thank Lynne Clark for her service on the Board. Lynne joined the Board in 2016 and, given her deep experience in finance and audit, served as Chair of the Audit Committee throughout her time. She made considerable additional contributions serving as a member of both the Investment and Pensions committees.

We are currently working closely with the Plan Sponsor to fill Board vacancies with candidates who bring the right experience and skillsets to the table in alignment with our skills matrix.

In closing, on behalf of the Board, I would like to express our thanks to management and staff for their hard work and continued dedication during another challenging year. The Board remains confident that OPB is well positioned to continue delivering on its mandate to protect the pension promise for years to come.

A handwritten signature in black ink, appearing to read "Geri Markvoort", with a stylized flourish at the end.

Geri Markvoort
Chair

Letter from the President and CEO

2023 was another particularly demanding year that required us to deliver on numerous initiatives while navigating an increased demand for services and significant planning for the future. Our staff maintained their strong focus on service excellence while also advancing our initiatives, including our pension modernization program, which will improve our client experience and business efficiencies moving forward.

We also continued with consolidation, welcoming Legal Aid Ontario and close to 6,000 other new members into the Plan. Growth in our active plan membership helps support the long-term financial health of the PSPP.

While our investment returns were positive this year at 3.1%, the volatility of the markets and high inflation continued to be a challenge and placed additional funding pressures on the Plan. As part of our regular due diligence, we will be undergoing both a long-term funding study and a Strategic Asset Allocation (SAA) review to ensure the Plan is well positioned for the future.

Investment Performance

Continued market volatility and high inflation placed funding pressures on the Plan and negatively impacted its funded status. The portfolio generated a one-year net return of 3.1% compared to a loss of 7.8% in 2022. While our return was positive, the results were below our portfolio benchmark of 5.2%.

Our Real Estate portfolio, which served us so well over the previous 25 years, was a significant drag on our performance for the second year in a row. Hybrid work arrangements and rising interest rates adversely impacted the valuations of our office properties, and the growth in online shopping driven by COVID-19, again combined with rising interest rates, impacted our retail shopping centre properties. The 3.1% net return was below the discount rate of 6.1% assumed in our Plan valuation. This, combined with losses due to continued high inflation, led to the funded status of the Plan dropping to 85% from 89% on a financial statement basis. We expect the value of our real estate holdings to recover over time.

In the coming year, we will initiate an asset/liability (A/L) study to review our SAA to determine if adjustments to our asset mix are necessary.

In addition to reviewing our SAA over the next year, we plan to conduct a long-term funding study. We conduct these reviews periodically to ensure that the Plan's funding structure is robust and capable of withstanding challenges over the long term. The Plan Sponsor is making additional contributions to the Plan to support returning it to a fully funded status.

Environmental, Social & Governance (ESG) and Diversity, Equity and Inclusion (DEI)

As discussed in last year's report, OPB built upon our ESG Communications Strategy in 2023 with the production of our first ESG Report, which was released this spring. Our report covers both OPB and IMCO's progress on addressing ESG within our portfolio, as well as the work our organization has undertaken to advance DEI initiatives. If you haven't yet had the opportunity to read our first report, please visit [OPB.ca/esg](https://www.opb.ca/esg) to learn more.

People and Culture

A strong culture and a clear purpose have been defining strengths of OPB for many years. To build on that foundation and to ensure we are ready for the challenges of the future, in 2023 OPB developed a new purpose statement and defined an employee value proposition (EVP) for our employees.

I am pleased with the dedication and commitment of our staff this year to deliver the pension promise for our members, in an increasingly demanding service environment with many competing projects and priorities. In addition, the shift to a three-days-per-week in the office work model towards the end of 2023 has supported our people to connect, bond, collaborate and better serve our clients.

Pension Modernization

2023 was a pivotal point in our multi-year pension modernization program. In 2023, we achieved a key milestone by issuing a request for proposals (RFP) for a new pension administration system. We received eight qualified vendor responses, and following product demonstrations and evaluations by a cross-section of our subject matter experts within the organization, a final vendor will be selected in the spring. We will then immediately begin planning for implementation.

Our current pension administration systems were built in the mid-1990s. We expect a modernized system to provide features and functionality that will support more responsive and efficient service to our clients. This is a major program that will require significant investment and will be implemented over several years. The program is being closely monitored by our Board of Directors with the support of an external, expert consultant.

We also envision this pension administration system to lay the groundwork for more client experience improvements, including our communications and engagement capabilities with members, and the ability for us to provide more personalized and tailored services and decision-making support as they navigate their life and financial circumstances within their unique pension journeys.

This important initiative will be the focus of our business plan for the years ahead and has the full support of our leadership team, staff and Board.

Client Service

I'm very proud of the work accomplished by our Client Services team in 2023, balancing the operational demand of members with a record year of handling nearly 19,000 transactions and over 58,000 calls from our clients requesting service.

A large portion of this service increase was due to the continued growth in our membership. We enrolled close to 7,000 new members through organic membership growth and the addition of the Legal Aid Ontario plan into the PSPP. This is the second year in a row in which we've enrolled close to 7,000 members. Continued growth in the active membership of the Plan improves the ratio of contributing members to pensioners, which supports the long-term financial health of the PSPP. A further reason for the increased service demand was a substantial 26% increase of buyback transactions from new members looking to purchase prior service periods in the Plan.

In the CEM Benchmarking survey for 2022, reported in mid-2023, OPB was ranked second for client service amongst 10 national peers and eighth globally among the 61 plans that participate in the CEM Benchmarking survey. While our client satisfaction survey scores continued to be strong, they did drop slightly in 2023 due to high service demands and sustained higher employee turnover due to a competitive talent market, which resulted in inconsistent staffing availability, particularly in our Client Care Centre.

Cost Effectiveness

We closely manage and monitor our expenses. In 2023, our expense ratio, including all internal and external pension administration and investment expenses including IMCO was 0.62% (or 62 cents per \$100 of average net assets available for benefits). This compares to an expense ratio of 0.53% in 2022.

Succession and My Retirement

2023 was also marked by a carefully orchestrated succession plan to ensure strong leadership and accountability into the future. This culminated in the hiring of Darwin Bozek, who joined OPB early in 2024. Darwin will spend most of 2024 in the transitional role of President & Chief Pension Officer, before his eventual appointment as my successor as CEO later in the year. As our Board Chair, Geri Markvoort, speaks to in her letter this year, I'm very pleased with the rigour and process that went into this executive recruitment and I believe that Darwin will be an excellent leader for OPB and the Plan. He has all the skills and experience necessary for the role and values that make him a great fit with OPB and our culture.

Darwin has spent most of the first part of this year working with Peter Shena to transition the pension administration function and learn about our organization and operations.

I look forward to working closely with Darwin to support his transition to President and CEO.

I would like to take the opportunity to thank Peter, our Chief Pension Officer, for his substantial contributions to OPB over the last 20 years. Peter's pension expertise and his dedication to outstanding client service and stakeholder relations are second to none.

I also want to thank our staff for their excellent work and dedication as well as our Board of Directors for their continued support.



Mark Fuller
President and CEO

Management's Discussion & Analysis

Our Mission: Advise and Protect for the future of the Public Service Pension Plan (PSPP) and its stakeholders.

Our Vision: OPB is a premier pension delivery organization and a trusted advisor to all our stakeholders, and our effectiveness delivers sustainability for the PSPP.

At OPB, we updated our purpose statement in 2023 and are embedding it throughout the organization. While our objectives have not fundamentally changed, we refreshed the way we articulate and think about our purpose, as follows:

Our Purpose

Reassuring things happen when we look after each other and work together for a common cause. Over the course of their working lives, our public-servant clients support strong and sustainable communities across Ontario. We understand the importance of helping others build toward a strong and sustainable future.

Through our Advise and Protect mission, we assist our clients to effectively plan for a retirement with security and dignity – a retirement in which they can thrive and continue contributing to their communities. Our team of diverse professionals supports every stage of our clients' careers, ensuring the pensions they have earned are protected along the way through strategic and prudent fiscal oversight.

Our commitment is to be there.

There for life.

Introduction

We are focused on protecting the long-term financial health of the Plan, not just for our 99,200 active, deferred, retired members and survivors, but for those members who may join well into the future. We are vigilant in managing the key risks facing the Plan, and we incorporate risk management in our pension administration activities and the oversight of our investments.

Pensions are funded through a combination of investment income and contributions made by members, employers and the Plan Sponsor.

The Investment Management Corporation of Ontario (IMCO) manages Plan assets on a cost-recovery basis. As the administrator of the PSPP, and in line with our fiduciary duties, OPB continues to:

- own PSPP assets and be responsible for PSPP liabilities;
- set our Strategic Asset Allocation (SAA) policy, which IMCO implements; and
- set our Statement of Investment Policies and Procedures (SIP&P), with which IMCO must comply.

As an agency of the Government of Ontario, OPB has an obligation to effectively manage costs. We operate within the objectives and guidelines on transparency established by the government.

This MD&A provides management's analysis of how the Plan performed in the past year, its financial condition and its prospects. It supplements the information provided in the financial statements.

Overview

This table presents 2023 highlights. See the relevant performance sections in this annual report for detailed discussion of the factors affecting our performance.

Performance Area	2023 Results	Why It Matters
Executive succession planning	- Announced the planned retirements of two senior leaders (Chief Pension Officer and CEO). - Retained executive search firm to seek qualified candidates. - Announced a new President & Chief Pension Officer, who will ultimately step into the CEO role.	The OPB board and executive team took a thoughtful and deliberate approach to planning and communicating leadership changes, to ensure a successful transition.
Plan funding	- OPB filed the December 31, 2022 actuarial valuation with the Financial Services Regulatory Authority. The next required filing will be as of December 31, 2025. - Under the filed funding valuation, the Plan was 94% funded at December 31, 2022, which includes asset smoothing.	A funding valuation is a snapshot of projected assets and liabilities at a point in time. We are required to file a funding valuation with the regulator at least once every three years. If the Plan is underfunded at the time, we are also required to submit a plan to restore the Plan to a fully funded status. OPB has three years before we must file another funding valuation.

Performance Area	2023 Results	Why It Matters
Investments	• 2023 net return of 3.1%. • Underperformed the benchmark return of 5.2%. • Net assets grew to \$31.7 billion.	2023 saw continued volatility due to a rising interest rate environment. Public Equities and Fixed Income strategies generated positive returns while the Global Real Estate strategy produced a negative return due to a challenging economic environment for this asset class. As a result, many of our real estate holdings were marked down to reflect the current environment. This had a significant impact on our overall performance for 2023.
Client service	• Enrolled 7,000 new members (including Legal Aid Ontario). • Earned a service score of 85/100 from CEM Benchmarking. • Received client satisfaction rating of 8.6/10.	Continued to focus on delivering quality service to clients. We met high demand for complex transactions such as enrolments and buybacks.
Modernization	• Issued a request for proposals from vendors for a new pension administration system. • Documented the current state of our key day-to-day processes.	We must transform our pension administration processes and systems to keep up with evolving technology and client expectations.

Performance Area	2023 Results	Why It Matters
Workplace culture	- Launched new purpose statement and employee value proposition, and refreshed our values. - Advanced diversity, equity and inclusion through our DEI Advisory Council, employee survey, education and training.	Our purpose and values distinguish OPB in the competitive market for talent. We support an inclusive work environment for our employees, clients and stakeholders. We encourage, include and respect diverse voices in our business.
Financial management	Overall expense ratio was 62 basis points (or 62 cents per \$100 of average net assets available for benefits) excluding expenses netted against investment returns.	Through disciplined cost management, we met our objective of keeping the ratio at or below 66 basis points.

PLAN FUNDING

The funded status of a pension plan, in simple terms, compares the value of assets on one side with the present value of projected pension benefit payments, or liabilities, on the other. If assets exceed liabilities, the plan is in a surplus position. If liabilities exceed assets, it is in a shortfall position.

In 2023, the funded status of the Plan was impacted by continuing volatility in the financial markets and continuing high inflation.

The impacts of high inflation, including higher-than-expected salary growth, have placed additional cost pressures on the Plan. These pressures increased more than our liabilities decreased due to higher interest rates.

Additionally, while our investment portfolio had a 3.1% return, compared to a loss of 7.8% in 2022, our returns fell below the discount rate of 6.1% required to fund the Plan.

As a result of the above factors, the Plan's year-end funded ratio decreased to 85% compared to 89% at the end of 2022 on a financial statement basis.

The *Pension Benefits Act* (PBA) requires pension plan administrators to file a funding valuation report at least once every three years, and a filed valuation that contains a shortfall must include a plan to discharge that shortfall. OPB filed the December 31, 2022 funding valuation with the provincial pension regulator in 2023. The next required filing will be as of December 31, 2025.

The Plan Sponsor is making additional contributions to the Plan to return the Plan to fully funded status over time based on our last filed valuation.

We regularly assess risks as part of our disciplined, long-term approach to managing the financial health of the Plan. In addition to reviewing our SAA, we regularly conduct funding studies, which help us to ensure that the Plan's funding structure is robust, capable of withstanding challenges and designed to provide consistent support for the long term. We plan to conduct a long-term funding study in 2024.

Key Assumptions

OPB adheres to a robust funding policy, which guides decisions around Plan design, funding and valuation assumptions.

In conducting funding valuations, some of the key analyses and assumptions we make in consultation with our actuaries include:

- expected investment return;
- expected rate of inflation;
- expected salary increases and increases in government limits and benefits;
- the projected number of member retirements;
- members' age at retirement; and
- member life expectancy.

DISCOUNT RATE

The discount rate is a key assumption used to calculate the present value of the future pensions expected to be paid by the Plan (the liabilities). A pension payment that is expected to be made in 20 years is "discounted" back to today's dollars at the discount rate. Over the long term, investment returns on the Plan's assets must equal or exceed the discount rate – otherwise, pension costs will grow faster than the value of the assets, which produces a shortfall.

Setting a realistic discount rate is a critical aspect of managing the long-term financial health of a defined benefit pension plan.

Changes to the discount rate impact the Plan's projected liabilities: a lower discount rate means higher Plan liabilities, and vice versa. The discount rate therefore affects the Plan's funded status and can influence decisions about contribution rates and pension benefits.

We use a rigorous process to establish our best estimate of the discount rate, by considering reasonable expectations for investment returns, the current economic environment and outlook, plus a cushion for unanticipated events (known as a margin).

We made a slight adjustment to the nominal discount rate, increasing it to 6.20% from 6.10% (before accounting for the Provision for Adverse Deviations (PfAD)) to reflect the SAA we adopted in November 2023 and current market conditions. Based on the impact inflation has had on salary experience over the past few years, we also eliminated the short select period for salary increases. We have now moved the projected salary increases for this period back to the higher long-term assumption.

The effective nominal discount rate in calculating the Plan's liabilities, after considering the impact of the PfAD, was 5.75%, resulting in an effective real discount rate (the effective nominal discount rate, less our inflation assumption) of 3.75%. This compares to 3.64% for the 2022 financial statements.

MEMBER LONGEVITY

The most significant demographic challenge facing the Plan is that members are living longer and collecting pensions for longer periods.

For example, a 62-year-old member who retired in 2002 would be expected to receive their pension for 21.4 years. However, by December 2023, a member retiring at the same age would be expected to receive their pension for 26.2 years – an increase of almost five years.

We closely monitor demographic trends in our membership and may adjust our funding assumptions, or recommend changes to Plan design and funding, to ensure that the Plan remains financially healthy.

Managing Funding Risk

We must ensure the Plan can withstand periodic downturns in investment returns as well as the demographic challenge noted above (members collecting benefits for longer periods).

OPB regularly updates our assumptions to reflect actual experience.

We work to minimize funding risk by:

- performing funding scenario and data analysis, including stress testing;
- regularly reviewing the strategic asset mix to potentially improve investment returns, manage investment risk and achieve an appropriate matching of our investments and liabilities;
- pooling assets through IMCO, our investment manager, to reduce costs, improve net investment returns, gain the benefits of scale and enhance risk management; and
- implementing the Plan Sponsor's consolidation strategy to maintain or improve Plan demographics and achieve economies of scale.

We regularly conduct studies, which help us to ensure that the Plan's funding structure is robust, capable of withstanding challenges and designed to provide consistent support for the long term. As stated earlier, we plan to conduct a long-term funding study in 2024.

While we believe special payments from the Plan Sponsor will contribute significantly to restoring the Plan's funded status over time, given inflation levels and the investment outlook, there is a risk of further deterioration in the funded status.

Asset mix is a critical driver of investment returns and risk. At OPB, our SAA sets out the Board's target investment allocations (weights) to each major asset class. The SAA is intended to provide the best chance of earning the risk-adjusted returns needed for the long-term health of the Plan. Our investment manager, IMCO, implements the SAA.

Our role as the administrator of the Plan is to focus on the long term. We have weathered challenging situations in the past and expect to do so again in the future.

FINANCIAL POSITION

There are two ways to value the Plan's assets and liabilities, each with a distinct purpose – both performed by an independent actuary appointed by OPB's Board of Directors.

Funding Valuation

OPB conducts actuarial valuations of the Plan on a regular basis. The actuarial valuation for funding purposes is to ensure there are sufficient assets to meet the Plan's pension obligations. It is also used to determine contributions to the Plan. A funding valuation provides a best estimate of the Plan's accrued pension liabilities. OPB uses a smoothed value of assets for the funding valuation. The combination of an investment return that fell below the discount rate and an increase in liabilities due to inflation resulted in a deterioration of the Plan's funded status from 2022 to 2023.

Financial Reporting

In determining the surplus or deficit position of the Plan for financial reporting purposes, OPB uses the latest actuarial funding valuation and extrapolates the pension obligations to the financial statement date. We then compare the extrapolated liabilities to the market value of assets on the financial statement date.

Valuation Type	Purpose and Description
Funding basis	Pension plans are legally required to file a funding valuation with the Financial Services Regulatory Authority once every three years. A funding valuation is used by the Plan Sponsor to make decisions about contribution rates and benefit levels. In 2023, OPB filed an actuarial valuation of the Plan as at December 31, 2022. For purposes of the funding valuation, asset gains and losses relative to the discount rate are smoothed over a three-year period. The funding shortfall of \$2.33 billion that existed at the end of 2022 is being amortized by special payments by the Plan Sponsor. The December 31, 2022 actuarial valuation for funding purposes assumed an inflation rate of 2.00% with an indexation reserve included for short-term inflationary impacts. The nominal discount rate used in the funding valuation was 6.10%, and after considering the impact of the PfAD, the effective nominal discount rate was 5.64%.
Financial statements	For the purpose of the financial statements, the Plan's liabilities were calculated as at December 31, 2022 and extrapolated to December 31, 2023. The extrapolated liabilities were compared with the market value of assets as of December 31, 2023. By this calculation, the financial statements funding ratio decreased to an estimated 85% compared to 89% in 2022. The estimated shortfall was \$5.62 billion, compared to \$3.96 billion at the end of 2022. The smoothing method used in the actuarial funding valuation is not applied in financial reporting.

The Retirement Compensation Arrangement (RCA) is a separate trust; as a result, the net assets available for benefits and accrued benefits and deficit of the RCA are not included in this annual report.

INVESTMENTS

Our long-term pension obligations drive OPB's investment strategy and decisions.

Since 1990, approximately 70% of pension payments have come from investment income, so strong investment returns are critical to the long-term health of the Plan.

OPB's strategic long-term approach to investing is shaped by two key objectives:

- Securing and maintaining the pension benefits promised to members; and
- Maintaining affordable contribution rates for members and participating employers.

Starting in 2017, IMCO assumed responsibility for managing OPB's investment portfolio in accordance with OPB's overarching investment policies, including our SIP&P and our SAA.

Working with IMCO

Outsourcing investment management to IMCO provides us with advice around portfolio construction, cost-efficient access to a diverse range of asset classes, and superior reporting on investment risks and returns.

IMCO is executing strategies that OPB would not have been able to do on its own, and this allows OPB to sharpen our focus on service to existing and new Plan members.

An Investment Management Agreement (IMA) between OPB and IMCO governs our relationship and focuses largely on investment-related matters. A Service Level Agreement (SLA) sets out a framework for dealing with matters such as reporting and expected service levels. An Implementation and Support Agreement (ISA) covers operating and governance matters such as IMCO corporate policies, asset pool development, budgeting and cost management.

OPB has a monitoring program to assure that IMCO is prudently managing Plan assets and investment risk on behalf of OPB and our members, in accordance with all relevant investment strategies and policies. To ensure we are receiving good value for money, we regularly assess the fees we pay to IMCO in multiple contexts, such as year-over-year changes and long-term trends, as well as costs compared to relevant peers.

COLLABORATION

We have developed a strong relationship with IMCO and maintain open dialogue with IMCO executives. OPB's Investment Committee also receives regular updates on key investment and operational developments.

We have worked closely with IMCO on asset/liability (A/L) studies, which are conducted every three to five years and project the Plan's assets and liabilities under numerous economic and capital markets scenarios. This cooperative process ensures we understand the range of investment strategies available to the Plan and their expected returns and risks.

IMCO continues to invest for the long term, in line with the needs of OPB, which has long-term liabilities.

KEY DEVELOPMENTS IN 2023

IMCO made notable progress in 2023 on pooling client assets. The organization launched two investment pools in 2023: global credit and private equity. Together with increased internalization of investment management, the pooling of assets will help deliver lower costs to IMCO's clients over the long term. This is important to OPB and Plan members because, all else being equal, lower costs improve net returns.

In addition, IMCO announced in 2023 that it will be adding four new clients for investment management services, which will add \$2.6 billion to its total assets under management. By spreading its costs across a wider asset base, incorporating new clients contributes positively to IMCO's cost efficiency over time.

IMCO'S STRATEGIC PLAN

IMCO's five-year strategic plan for the period 2023-2027 builds on the progress it has made since inception in 2017. What has not changed is IMCO's fundamental purpose: To provide compelling investment management solutions and advisory services to clients such as OPB, so we can meet our financial obligations to Plan members on a long-term and sustainable basis.

IMCO's strategic plan contains four elements:

1. **INVESTMENT EXCELLENCE:** enhancing investment capabilities, especially in areas where it has real advantages and can generate outperformance.
2. **CLIENT SUCCESS:** being a trusted advisor, providing clients with the counsel they need to fulfill their roles as fiduciaries for long-term liabilities.
3. **CULTURE EVOLUTION:** building a purpose-driven culture that is nimble, empowered, innovative and caring.
4. **COST-EFFICIENT OPERATIONS:** evolving its operational capabilities to achieve investment excellence and high levels of client service, in a cost-effective manner.

Also included in IMCO's strategic plan are focus areas that include: enhancing its strategic asset allocation capabilities; increasing internal asset management in private markets; establishing environmental, social and governance (ESG) leadership in strategic areas such as the global energy transition; and pursuing greater investment innovation.

RESPONSIBLE INVESTING

We believe that companies and investment managers that effectively address ESG issues, including climate change, are more likely to improve shareholder value over the long term – which helps pension plan members. What's more, failure to identify and mitigate ESG issues may hurt long-term investment performance.

IMCO considers ESG matters in the investment process to better manage risks and generate sustainable returns. IMCO's 2022 ESG report discusses its ESG activities and progress on its Climate Action Plan objectives and portfolio targets. Read the report at [IMCOInvest.com](https://www.imcoinvest.com).

OPB's inaugural ESG report, released earlier in 2024, discusses our views and actions on ESG and climate matters. Read our report and periodic updates at [OPB.ca](https://www.opb.ca).

Responsible Investing Governance

The *Ontario Pension Benefits Act* requires OPB and other pension plan administrators to establish a SIP&P that contains information about whether ESG factors are incorporated into the Plan's investment policies and procedures and, if so, how those factors are incorporated.

OPB's SIP&P contains our investment beliefs, which includes a statement that ESG factors should be integrated into the evaluation of an individual security, asset or external investment manager.

Our Policy for ESG Investment Issues, established by the OPB Board in 2021, further articulates our expectations with respect to ESG, provides structure around governance at OPB, and articulates our investment beliefs around ESG issues, including climate change.

We expect IMCO not only to integrate ESG considerations in the investment process, but also to influence investee companies through engagement and shareholder voting to improve corporate practices and to avoid investments that conflict with our ESG policy. OPB regularly monitors IMCO's performance including its progress on ESG issues and activities.

IMCO integrates ESG considerations into its investment decisions, engagement activities and selection of external managers. Its objectives are to better manage risk, capitalize on emerging sustainable investing opportunities and generate sustainable long-term returns for clients such as OPB.

OPB's Board and Investment Committee receive continuing education and information on ESG and climate risk, review progress on ESG issues and activities, and meet with IMCO about their performance.

CLIMATE ACTION

IMCO aims to deliver sustainable long-term risk-adjusted returns for clients. The climate action plan includes a commitment to reduce portfolio emissions by 50% by 2030 (as measured by tonnes of CO₂ emissions per million dollars of assets) to achieve a Net-Zero emissions portfolio by 2050 or earlier and to have 20% of IMCO's assets under management invested in climate solutions by 2030.

As part of its efforts toward the climate solutions target, IMCO continued to make new investments in renewable energy and battery storage during the year. For example, it announced a US\$400 million investment in Northvolt AB, which is focused on researching, developing, manufacturing and recycling sustainable battery cells and systems. The company's first gigafactory, in northern Sweden, produces batteries in a sustainable manner using fossil-free electricity. Northvolt intends to offer the world's greenest batteries for use in electric vehicles, industrial systems and energy storage systems. This investment was made by IMCO's Fundamental Equities and Global Infrastructure teams, which are both pursuing energy transition investment opportunities.

Strategic Asset Allocation (SAA)

Asset mix is the most important driver of investment performance. At OPB, asset mix is defined in our SAA, which sets out the Board's target investment allocations (weights) to each major asset class.

The SAA targets are developed with the intention of meeting the Plan's long-term funding objectives while managing investment risk through diversification across asset classes.

The OPB Board approved, and IMCO began to implement, a new SAA in 2021. The SAA introduced the use of portfolio leverage and investment in public market alternatives (PMA) and reduced exposure to nominal government bonds, public equities and real estate, while increasing the allocations to inflation-linked bonds, global credit, infrastructure and private equity.

At the end of 2023, IMCO was near the end of phasing in our SAA, and the Plan's asset mix was generally where we planned it to be, with the exception of our allocation to PMA, which are diverse assets that aim to deliver absolute returns. Our SAA originally had a 10% weight for PMA but, based on a recommendation from IMCO, OPB decided to pause the planned increase in this allocation at 7%. We plan to review the long-term PMA allocation, as well as the other components of the SAA, through a comprehensive asset/liability (A/L) study in 2024.

The table below illustrates the Plan's actual asset mix at December 31, 2023, alongside the long-term policy weights according to the updated SAA.

SAA IMPLEMENTATION PLAN

Asset Class	December 31, 2023 Actual	December 31, 2023 Target
Portfolio Leverage	(7.9%)	(10.0%)
Money Market	0.2%	1.0%
Long Government Bonds	13.3%	12.5%
Inflation-Linked Bonds	10.6%	12.5%
Global Credit	11.7%	13.0%
Canadian Public Equities	2.5%	2.5%
Global Public Equities	11.6%	14.0%
Emerging Markets Public Equities	6.0%	5.5%
Real Estate (Net of Debt)	15.8%	15.0%
Infrastructure	13.5%	14.5%
Private Equity	15.9%	12.5%
Public Market Alternatives	6.8%	7.0%
Total	100.0%	100.0%

INVESTMENT PERFORMANCE

In 2023, the Plan's investments produced a one-year net return of 3.1% (net of external investment management and custodial fees and OPB's operating expenses). This compared to a loss of 7.8% in 2022.

The portfolio return underperformed our benchmark, which had a return of 5.2%.

The 2023 investment return was below our discount rate, which is the long-term investment return identified by the Plan's actuary as required to keep the Plan financially healthy.

Rates of Return

OPB's compounded annual rates of net investment return for the one-year, five-year, 10-year and since-inception periods ending December 31, 2023 are as follows:

	1-year	5-year	10-year	Since Inception
Total Fund return	3.1%	4.2%	5.3%	7.5%
Benchmark return	5.2%	4.5%	5.6%	7.3%

Note: Returns are net of all Plan administration and investment management expenses.

Since pensions are accrued and paid out over decades, pension plans need to take a long-term perspective. The PSPP is a mature plan, which means we have a lower risk appetite than some other pension plans in Canada. Our objective is to generate stable, long-term investment returns within an acceptable risk framework. To achieve this, our investment manager minimizes unrewarded risk, reduces total risk, uses fundamental research and analysis to make investment decisions, and sources diversified investment opportunities that provide predictable cash flow.

On a 10-year basis, our compounded annualized return of 5.3% has underperformed the portfolio benchmark return by 24 basis points.

Highlights of Investment Results

OPB's investment portfolio earned a one-year net return of 3.1%, compared to a loss of 7.8% in 2022.

Similar to 2022, 2023 saw heightened volatility in a rising interest rate environment. However, public markets rebounded in performance in 2023 due to the increasing investor optimism of a smooth economic recovery and the heightened possibility of interest rate cuts in the near term. As a result, the performance of the Public Equities and Fixed Income strategies – which both generated positive returns for the year – made the most significant positive impact on the Total Fund returns.

Amidst this volatile backdrop, while private asset classes largely held their value in 2023, the Global Real Estate strategy was the lone strategy to produce a negative return as the asset class faced a challenged economic environment.

Asset Class Returns and Benchmarks

The aggregate performance of all asset classes determines our overall Plan return.

We provide a comparison of the 2023 versus 2022 asset class returns below. For public markets, the returns provided are before the inclusion of external investment management fees, custody costs and IMCO's management fees. For private markets, the returns provided are after the inclusion of external investment management fees but before custody costs and IMCO's management fees.

At the total Plan level, the impact of public markets external investment management fees, custody costs, IMCO's management fees and OPB's pension administration expenses equated to 0.62% in 2023, compared to 0.53% in 2022.

The benchmarks are defined in the Plan's SIP&P and IMCO's Investment Policy Statements (IPS). Benchmarks enable us to determine the relative performance ("value add") for each asset class. Cash and equivalents, government fixed income and inflation-linked bonds are passively managed with the objective to closely track their respective benchmarks. All other asset classes are actively managed.

Asset Categories	Benchmark	2023		2022	
		Actual	Benchmark	Actual	Benchmark
Cash and Equivalents	FTSE Canada 91-Day T-Bill	4.5%	4.7%	1.9%	1.8%
Total Portfolio Leverage	Custom Benchmark	(4.8%)	(4.8%)	-	-
Gov't Long-Term Fixed Income	FTSE Canada Long Government Bond	9.0%	8.8%	(22.6%)	(22.6%)
Inflation-Linked Bonds	Custom Benchmark	1.5%	1.2%	(13.7%)	(13.4%)
Global Credit	Custom Benchmark	8.5%	8.8%	(5.2%)	(12.8%)
Canadian Equities	S&P/TSX Composite Index	14.2%	11.8%	(4.2%)	(5.8%)
Global Equities	MSCI World Index (C\$)	21.6%	20.8%	(13.6%)	(12.4%)
Emerging Markets Equities	MSCI Emerging Equity Index (C\$)	7.8%	6.9%	(17.2%)	(14.3%)
Public Market Alternatives	Custom Benchmark	1.8%	6.5%	3.1%	3.6%
Real Estate	Custom Benchmark	(15.8%)	(12.4%)	(0.2%)	14.4%
Infrastructure	Custom Benchmark	7.0%	2.4%	7.9%	(3.7%)
Private Equity	Custom Benchmark	3.5%	12.7%	8.3%	(12.9%)

Fixed Income

GOVERNMENT FIXED INCOME

Plan assets are invested in government bonds to diversify the overall portfolio, provide liquidity and offset changes in the value of the Plan's liabilities. The portfolio, which includes nominal and inflation-linked bonds, provided a one-year return of 9.0% for long-term fixed income (compared to a loss of 22.6% in 2022) and 1.5% for inflation-linked bonds (compared to a loss of 13.7% in 2022). The year-end market value at December 31, 2023 was \$7.6 billion, versus \$7.0 billion at the end of 2022.

Our allocation to inflation-linked bonds is evolving after the Government of Canada's decision to stop issuing real-return bonds (RRBs) in 2022. We expect to gradually shift away from a previous target of 50% RRBs and 50% Treasury inflation-protected securities (TIPS) to eventually become 100% TIPS. This will happen as new investments are made in TIPS, rather than via a planned sale of RRBs.

Both the nominal and inflation-linked strategies are managed passively, with the objective of matching the benchmark return. They did so effectively in 2023.

GLOBAL CREDIT

Plan assets are invested in a globally diversified portfolio of public and private credit securities to capitalize on market opportunities and gain exposure to a range of credit strategies. In 2023, the Global Credit portfolio returned 8.5% (compared to a loss of 5.2% in 2022), with a year-end market value of \$3.6 billion (compared to \$3.1 billion in 2022). However, this return was slightly below the benchmark return of 8.8%.

The Global Credit portfolio was led by strong performance of the strategy's expanded investments in private markets amid the increase in base rates and the continued privatization of credit markets.

In 2023, IMCO made a notable investment in the Ares Pathfinder II fund, a flagship global alternative credit fund focused on providing tailored financial solutions for owners of large, diversified portfolios. IMCO also invested in Blackstone Tactical Opportunities, a fund focused on private investment opportunities outside of traditional private equity and private credit.

Public Equities

Plan assets are invested in public equities to enhance long-term returns, and these investments are expected to generate higher returns than the Fund benchmark return over the long term. Our public equities holdings rebounded from a difficult 2022 as technology companies led markets higher, and stock market participants anticipated a soft economic landing.

There are three components to the portfolio.

- The **Canadian equity portfolio** returned 14.2% in 2023, compared to a loss of 4.2% in 2022. The year-end market value of the portfolio was \$0.8 billion, compared to \$1.0 billion at the end of 2022.
- The **Global equity portfolio** generated a return of 21.6% in 2023, compared to a loss of 13.6% in 2022. The year-end market value of this portfolio was \$3.6 billion, compared to \$3.8 billion at the end of 2022.
- The **Emerging Markets equity portfolio** return was 7.8%, compared to a loss of 17.2% in 2022. This portfolio's year-end market value was \$1.7 billion, compared to \$2.3 billion at the end of 2022.

The Public Equity portfolios were able to outperform their respective benchmark returns in 2023 through capitalizing on relative value opportunities, cross-asset-class prospects, structured deals and thematic opportunities. This outperformance was achieved amidst a turbulent macroeconomic environment characterized by geopolitical tension and a slower than anticipated recovery.

IMCO invested US\$400 million in Northvolt, a leading battery platform specializing in sustainable battery cells and systems. This cross-asset-class transaction by Public Equities and Infrastructure asset classes reflects a commitment to enabling the global transition to a net-zero emissions economy.

During the year, IMCO invested in CoreWeave, a specialized cloud provider. Its technology portfolio delivers a broad range of capabilities for machine learning and artificial intelligence, graphics and rendering, life sciences, real-time streaming and other uses. The company's specialized cloud infrastructure is well positioned to meet the rising demand for next-generation cloud computing. The investment was made through IMCO's Fundamental Equities strategy, which invests in select companies and works with management teams over the long term to unlock shareholder value.

Public Market Alternatives

IMCO's actively managed PMA strategy provides exposure to a range of alternative risk premiums and mandates that offer low correlation with public market equities. This portfolio produced a 2023 return of 1.8% (versus 3.1% in 2022), and the year-end market value was \$2.2 billion (versus \$1.4 billion in 2022). This was a disappointing result compared to the benchmark return of 6.5% and contributed to the Total Fund underperformance versus the benchmark.

The PMA portfolio was negatively impacted by unexpected resiliency of global economies. Macro managers who were pessimistic on the outlook of consumer spending, the labour market and overleveraged companies in a high-interest environment took less risk and adopted defensive positions, detracting from performance.

Real Estate

Plan assets are invested in real estate to generate cash flows, deliver relatively stable returns and obtain a partial hedge against inflation. These characteristics are a good match for the Plan's long-term pension liabilities.

OPB's Real Estate portfolio comprises:

- direct and indirect holdings in quality Canadian office and retail properties;
- direct and indirect holdings in international real estate; and
- a modest investment in mortgages.

The Real Estate portfolio returned a loss of 15.8% in 2023 compared to a loss of 0.2% in 2022. Real estate results are presented net of financing. OPB previously issued private bonds to finance the addition of high-quality real estate assets.

This asset class was a significant contributor to the Total Fund's weak result in comparison to the benchmark return, given the return was 3.4% below that of the benchmark.

The Real Estate portfolio faced a challenging environment in 2023 that was defined by high and rising interest rates, tightening debt markets, economic headwinds and uncertainty of employees returning to the office. These conditions were particularly challenging for the office sector, which makes up a large component of the portfolio and, to a lesser extent, the retail properties. As a result, a number of our legacy real estate holdings were revalued at lower amounts.

Within this challenging market, IMCO has decreased its target allocations to the office and retail sectors due to their expected underperformance. Parallel to this change, IMCO intends to increase the portfolio's allocation to the multi-residential and industrial sectors to deliver more consistent performance. Multi-residential properties have consistently performed in all economic periods given their needs-based diversified tenant base and consistent cash flow characteristics. The industrial warehouse sector continued to present attractive investment and development opportunities as e-commerce logistics demand held strong and global supply chains evolved. These planned changes to the portfolio will be enabled by future improvements in market conditions as they continued to exhibit very limited transaction activity in 2023.

Select real estate investments made in 2023 include Trinity House (alongside Breakthrough Properties), an advanced life science laboratory in Oxford, England - IMCO's first direct real estate investment outside of North America. Additionally, IMCO invested in Alpine Village, a 14.2-acre industrial outdoor storage site in Los Angeles, California.

The market value of the Real Estate portfolio at year-end 2023, net of the market value of the bonds issued by OPB, was \$5.0 billion, compared to \$5.8 billion in 2022.

Infrastructure

The Fund's diversified Infrastructure portfolio owns assets that provide essential services such as telecommunications, transportation and utility assets. These holdings tend to provide predictable and ongoing cash flow, stable returns during periods of equity market volatility and some degree of inflation protection. Over the long term, these characteristics provide a good hedge against the Plan's pension liabilities.

The Infrastructure portfolio generated a 2023 return of 7.0%, compared to 7.9% in 2022. Both results were well above the strategy benchmark return and positively contributed to the total fund's return versus the benchmark. The portfolio had a year-end market value of \$4.3 billion (\$3.8 billion at the end of 2022).

The Infrastructure portfolio return was driven by results from direct investments in sectors such as energy and digital assets. The challenges of high interest rates faced by the portfolio were offset by high inflation levels as the portfolio's assets were able to generate higher revenue.

In 2023, IMCO invested US\$400 million in Northvolt, a leading battery platform focused on sustainable battery cells, alongside the Public Equities team. Northvolt has over \$55 billion in long-term revenue contracts and is involved in research, development, manufacturing and recycling of battery cells.

During the year, IMCO and partners agreed to acquire NeXtWind Capital Ltd., a German renewable energy company specializing in onshore wind farms. With a significantly strengthened balance sheet after the transaction, NeXtWind is well positioned to execute on its strategy of acquiring and repowering German wind assets and becoming a leading renewable energy company. Germany is the largest onshore wind market in Europe.

Asset management is a core tenet to unlocking value in the Infrastructure portfolio, and IMCO supported several important initiatives in 2023, including leading a £175 million debt issuance for Pulse Clean Energy to build out its 500 MW energy storage projects and supporting DataBank in raising over \$1.6 billion for new data centers.

Private Equity

Private equity consists of investments in private companies or entities that are not publicly traded on a stock exchange targeting capital appreciation over the mid to long term. Private equity is not as liquid as public equities, and returns are expected to be higher to compensate for the added liquidity risk. With OPB's long-term investing horizon, private equity is an important source of diversification.

Our Private Equity portfolio returned 3.5% in 2023 compared to 8.3% in 2022. The portfolio had a year-end value of \$5.0 billion (\$4.1 billion in 2022). While the annual return was positive, it was well below the benchmark return (which is based on public equities) and contributed to the Total Fund's underperformance. By contrast, in 2022 this strategy outperformed its benchmark by over 21%.

The portfolio growth over the year was led by growth in revenue and earnings in portfolio companies.

Private equity activity in 2023 was negatively impacted by rising interest rates, inflation, a looming recession and geopolitical uncertainty. Market activity overall slowed down, but IMCO observed high-quality assets still trading at fair valuations and selectively deployed capital in transactions alongside its strategic partners while prioritizing add-on opportunities in the portfolio.

IMCO made a number of direct private equity transactions as well as commitments to private equity funds during the year. For example, IMCO and private equity firm EagleTree Capital, along with several co-investors, acquired integrated travel and hospitality marketing firm MMGY Global. EagleTree has decades of experience investing in marketing and travel-related businesses and said it would work with the MMGY Global management team to help expand the business.

In 2023, IMCO also made co-investments with Kohlberg in Worldwide Clinical Trials, a specialty contract research organization based in the U.S., and with Morgan Stanley Capital Partners in Apex Companies, a prominent provider of comprehensive environmental consulting and engineering solutions.

Investment Risk Management

Our agreement with IMCO states that IMCO will manage investment risk in accordance with the *Pension Benefits Act's* standard of care and best practices for Canadian public sector managers.

As such, investment risk management is integrated into all investment activities and decision making at IMCO. Our investment manager has governing rules, risk committees, structures and processes to effectively manage risk. It assesses investment risk from several perspectives, including liquidity risk, counterparty credit risk, concentration risk and stress scenario risk.

OPB's Chief Investment Officer and other executives, and OPB's Investment Committee, have regular dialogue with IMCO about the investment risks pertaining to OPB's investment portfolio. These include traditional portfolio risks (market, liquidity, credit, etc.) as well as material ESG risks, including climate-related risks.

IMCO manages climate risk through capital deployment (by emphasizing lower-emission investments and supporting assets preparing for the net-zero transition); portfolio management (by integrating climate risk assessments in its decisions and monitoring risk across the portfolio); asset management (by engaging with portfolio companies, external managers and policymakers); and climate guardrails (which limit exposure to investments incompatible with a net-zero-emissions future).

Investment Outlook

While inflation declined steadily throughout 2023 and international equity indexes posted double-digit gains, many important elements of the investment and economic outlook remain challenging.

- Bond yields remain higher than they have been for much of the past decade and are weighing on some segments of the economy, particularly those that are sensitive to increases in borrowing costs, such as highly leveraged real estate. While yields may see some respite from the rapid rise in the near term, they are not likely to drop to the lows seen in 2020.
- Inflation moved lower in 2023 but continues to run above central banks' targets. We believe it is likely to remain above the 2% level in the near term.
- There is potential for persistent elevated geopolitical risk, headlined by the Israel-Hamas conflict, ongoing war in Ukraine and strained U.S.-China relations.
- The U.S. general election is likely to increasingly dominate headlines through November and may have a spillover effect in the capital markets.

These dynamics set the stage for what we expect to be a more challenging environment for investment returns over the next five to 10 years and for inflation in the next couple of years. These factors could negatively impact the Plan's funded status.

Additionally, the Plan has not yet fully recognized the impact of 2022's investment losses in our funding valuation because we use asset smoothing over a three-year period. The unrealized losses from 2022 will act as a drag on the funded status as they are recognized.

The Plan Sponsor is making special payments that will move the Plan toward a fully funded status. These special payments help cover the cost of prior government programs and strategies to manage the workforce, such as Surplus Factor 80 and the Transition Exit Initiative. However, given current inflation levels and the economic outlook, there is a risk of further deterioration in the Plan's funded status.

As part of our disciplined, long-term approach to managing the financial health of the Plan, we regularly conduct studies that help assess whether current contribution rates are adequate to fund the Plan's benefits and whether our economic and demographic assumptions are still appropriate. We expect to initiate new studies during 2024 and, in conjunction with these studies, will do a comprehensive review of our strategic asset mix.

SERVICE EXCELLENCE

We believe that delivering on the pension promise goes beyond simply paying pensions and processing transactions. With our *Advise and Protect* model, we offer the expertise, information, services and tools our members need to make sound pension decisions in the context of their unique financial needs and retirement goals.

We met the challenge of dramatically increased service demands over the past several years and the impact of transitioning to a hybrid work model. Membership in the Plan has grown by 11% in the past two years, through regular membership growth and plan consolidations.

In 2023, we enrolled approximately 7,000 new members, including the integration of 600 new members from Legal Aid Ontario, which previously had a defined contribution plan. It marked the second year in a row in which we have enrolled close to 7,000 new members. (In previous years, annual enrolment of new members typically ranged from 3,000 to 4,000 people). The recent surge in enrolments has been coupled with high demand for other services and a temporary shortage of experienced client services staff. This led to longer wait times for service in 2023. Our most recent benchmark ranking from CEM declined slightly, and our yearly client satisfaction scores – while strong at 8.6 – are tracking lower than we aim for and have achieved in the past.

To maintain OPB's high level of pension and retirement expertise, all Client Service Advisors have the Certified Financial Planner® designation and our Client Care Centre staff are required to maintain either a Registered Retirement Consultant® (RRC) or a Registered Retirement Analyst® (RRA) designation. This effort aligns with OPB's *Advise and Protect* model.

To support the onboarding of new staff, we also enhanced our pension fundamentals program, a comprehensive four-day educational program about the key elements and complexities of the Plan. In 2023, 30 client services staff participated in this critically important foundational learning program.

Client Service Performance

At OPB, we offer a wide array of proactive services to support clients through life and career changes. We also provide personalized advisory services tailored to each member's unique financial needs and retirement goals.

We successfully completed 18,733 client transactions in 2023, compared to 17,000 in 2022, and responded to almost 58,000 incoming client calls.

In 2023, we completed 26% more buybacks (total of 3,220 compared to 2,560 in 2022), including processing the final applications for members to buy back service for eligible past periods of approved temporary reduction. This important initiative was in response to a federal court ruling in 2021. We responded quickly to provide an option for active, deferred and retired members to buy back eligible full-time pension credit for a period of active PSPP membership, during which a member temporarily reduced their working hours. We undertook an information and awareness campaign to educate members about this entitlement and provided a special 18-month window to allow eligible retired members and active members to buy back prior periods, on a contributions-plus-interest basis.

METRICS

We measure our service by two key metrics: our CEM Benchmarking service score and ranking, and our client satisfaction survey score.

In the CEM Benchmarking survey for 2022, reported in mid-2023, OPB was ranked second for client service among its 10 national peers, compared to first in the previous year, and eighth globally among the 61 plans that participate in the CEM Benchmarking survey, compared to fourth in the previous survey.

Our overall client satisfaction score, as measured by an independent external survey firm, remained strong at 8.6 in 2023, even with higher transaction levels (up 8% compared to 2022). Notable increases in completed transaction levels include buybacks, which were up 26%, and incoming transfers, which were up 58% from 2022 levels.

Incoming call response times remain very strong given exceptionally high call volumes (the second year in a row we are up 19% compared to historical norms) and continued challenges maintaining consistent full staffing availability in the Client Care Centre.

Our employer satisfaction score stood at 8.4, compared to 8.8 in 2022. While employers' satisfaction with OPB remained positive, the softening of satisfaction scores can be attributed to longer wait times with staffing changes.

What We Did	Why It Matters
Earned a total service score of 85 out of 100 from CEM Benchmarking, ranking OPB second among Canadian peer pension plans.	We are consistently recognized as a world-class service leader.
Met online and in person with over 2,800 members to help them navigate key pension and retirement decisions.	We provide expert, unbiased advice on how pension benefits fit into members' larger financial picture.
Answered 90% of Client Care Centre calls within 30 seconds (92% in 2022). Average call response time was 14 seconds (11 seconds in 2022).	We are committed to maintaining excellent service to members, even as Plan membership grows and demand for our service increases.

ADVISORY SERVICES

At OPB, we feel strongly about the importance of retirement and financial literacy. We have provided advisory services for our members since 2015. These services are very popular with members and attractive to prospective and current provincial employees.

We lead the industry in being the only defined benefit (DB) pension plan that employs in-house experts with the Certified Financial Planner® (CFP®) designation. Our CFPs help inform decision making and provide retirement planning advice to members. In 2023, they helped almost 2,800 members understand how pension decisions can complement their broader financial and life circumstances.

Feedback from members who have used our Advisory Services and tools continues to be very positive, with 73% of clients surveyed rating their satisfaction with their OPB Advisor a 9 or 10 out of 10.

We also have Registered Retirement Consultant® (RRC) and Registered Retirement Analyst® (RRA) certified staff in our Client Care Centre providing front-line support for incoming calls and general inquiries. RRC and RRA programs are offered by the Canadian Institute of Financial Planning.

EDUCATING OUR MEMBERS

OPB's client education sessions have evolved in recent years, from providing basic information about the Plan and its benefit to helping members improve their retirement knowledge and financial literacy.

We provide tailored financial and retirement planning sessions designed to get members engaged earlier in retirement planning. Our broader education efforts include comprehensive financial advisory workshops for members in the early, middle and late stages of their career.

We enhanced members' access to pension education sessions in November 2023, by launching regular online webinars. Previously, members could only access these sessions through their employer or bargaining agent. We offered two webinars: a Pension Overview webinar for early and mid-career members, about the main features and benefits of the PSPP, and a Pre-retirement Overview webinar for late-career members about benefits, how the PSPP fits into the overall retirement picture, and the retirement process.

In 2023, we hosted a total of 79 presentations (webinars and in-person events) that reached 5,785 members, up from 52 presentations that reached 3,095 members in 2022. The sessions were rated "very good" or "excellent" by 92% of participants.

We continued to offer advisory articles in our newsletters and website to help active and retired members better understand personal finance topics such as savings tips, tax considerations, debt and budgeting.

DIGITAL AND ONLINE SERVICES

We made advances in information security in 2023, as our security program continued to grow and mature. In addition to preventing security problems through multifactor authentication and improved ability to hunt and detect threats, we are able to constantly improve our response approach to minimize the impact of any issues.

Our online member portal allows members to choose their communication preference for Retired Member Statements and Annual Pension Statements (APS). In 2023, we delivered 93% of APS digitally, compared to 87% in 2022. Over time, we plan to expand the number of documents available for paperless delivery.

Our modernized member portal has made our online services more secure, accessible, user friendly and efficient.

In late 2021, we launched our new member portal. As part of that launch, members had to re-register for the portal. We are still in the process of getting our registration numbers back up to pre-2022 levels. In 2023, we were pleased to see continued growth in the number of members registering for e-services. Among active Plan members, 52% were registered for e-services in 2023, up from 40% in 2022. Among retired members, 39% were registered, up from 28% in 2022. We expect these rates to continue growing as we add new functionality, tools and features and promote the benefits of registration to our members.

Members continued to use our digital and online services to seek information and conduct self-service transactions. Our e-services traffic rose 13% from the previous year to 127,200 logins in 2023. Enhancing our online service applications will increase the use of this service channel, making OPB's operations more cost-effective and freeing up resources to meet the demand for our decision-support services.

STAKEHOLDER ENGAGEMENT

OPB works closely with the Plan Sponsor to ensure that it has the information needed on issues to make decisions that impact the Plan. We also conduct regular and ongoing discussions with bargaining agent groups to keep them informed about the health of the Plan and emerging trends and issues, and to ensure they understand the value of the Plan.

We believe defined benefit plans are the most effective approach in achieving retirement income while still being affordable to both employers and employees. We also believe that, as an attractive part of a total compensation package, defined benefit plans can help public sector employers attract and retain key talent.

OPB's third-party administration responsibilities have grown in recent years. We have enrolled Ontario Health employees into the PSPP (our largest defined contribution plan conversion to date) and we have taken on full administration for the Provincial Judges Pension Plan (PJPP) and the RCA as well as pension administration responsibilities for Agricorp, TVO and Ontario Northland pensioners.

We undertake advocacy efforts through:

- direct OPB submissions to government, regulators and employee groups;
- partnerships with our peer plans on matters of mutual concern; and
- collaboration with industry organizations such as the Association of Canadian Pension Management and the Ontario Bar Association.

OPB recognizes the value that a strong retirement system has for all Canadians. In 2023, we:

- delivered 79 member webinars to 5,785 participants around Ontario;
- continued to provide members with information about the value of their pension, Plan provisions and key decision points, through our website, newsletters and interactions;
- held our annual Agency Forum online (roundtable meeting with employer representatives), where we discussed pension-related topics; and
- facilitated 16 employer training sessions.

Overall transactions through the employer portal rose 8% from 2022, to a total of 15,055 transactions.

PENSION MODERNIZATION

Modernization is OPB's multi-year program designed to improve client and stakeholder experiences and generate business efficiencies. The COVID-19 pandemic accelerated what was already a priority transition toward digital services.

Our multi-year roadmap identifies and prioritizes the parts of our pension business processes and systems that must be modernized to support critical business priorities and our hybrid workplace. We monitor the business and IT needs that need to be addressed in our modernization program and adjust the roadmap accordingly.

We invested a great deal of time and effort creating a pension modernization strategy that would position OPB for a successful pension modernization program. Before starting our first major project, we created our Client Engagement & Experience Strategy to guide our modernization journey. We also mapped our current state business processes, identified the systems in need of replacement, determined the right architectural approach for our transformation and developed a high-level roadmap.

RECENT TIMELINE

2021: launched the modernization program and new member and employer portals.

2022: made enhancements to the member portal and refreshed our retirement planner.

2023: collected requirements for the second phase of our retirement planner and the first package of modernization projects (POP1), which is about our core pension administration system (PAS); issued a request for proposals (RFP) for a new PAS.

2024 (planned): review proposals from vendors for POP1 and the retirement planner; select the vendors for our core PAS and retirement planner; and work with the vendors to begin building the new systems.

REPLACING OUR CORE APPLICATIONS

OPB went through an extensive research and due diligence process in 2022, including a request for information (RFI) in the marketplace, to test our planned approach to replacing our legacy pension applications, which are becoming outdated and inefficient.

Based on this research, we decided to procure and implement a commercial off-the-shelf (COTS) solution for the core pension administration system functionality and implement this solution in a phased approach. This represents a revised approach, because product offerings have evolved since we originally began planning the business modernization, and we have a better understanding of our needs. Originally, we intended to take a component-based assembly approach, using various vendors, but the RFI determined that this would involve higher risk and there was less interest in the market.

Our revised approach is to procure a COTS solution with a prime vendor. We will start with the core functions – the tools and methods that are foundational to pension administration services – and improving the current and future needs of our clients.

Our initial focus on core operations and applications means doing what we do today, in a more modern way. An updated system will have several advances that will make the experience, for both OPB employees and our clients, more efficient and effective. Modern tools will not require manual workarounds and spreadsheets, for example.

Once we have implemented the core capabilities, we will then focus on implementing enhancements that will help us achieve OPB's visionary strategy and significantly advance our digital service and the client experience.

PACKAGE OF PROJECTS (POP) 1

In 2023, there were two workstreams supporting the first package of modernization projects, known as POP1. The first stream focused on developing and issuing the RFP, which went to the market in August, seeking a long-term partner for our pension administration system. The second stream of work involved business process workshops with an external partner, Fuse, in which we documented the current state of our key day-to-day processes.

We issued the RFP in 2023 and were pleased that it has received a high level of interest from the vendor community.

We selected 26 people from across OPB to participate on the proposal evaluation team and have ensured they are prepared for the comprehensive evaluation process in 2024. The team will help review the responses to find the best vendor to meet OPB's long-term needs. We aim to select a vendor that can meet the needs outlined in the RFP and provide us with flexibility to continue to improve our client experience as their needs and the pension industry changes. With a project of this scope, we expect implementation to be multi-year.

RETIREMENT PLANNER, PHASE 2

OPB's Retirement Planner helps members create an effective plan for their retirement by helping them understand how their pension fits into their overall financial picture, including their projected retirement expenses so they can make well-informed decisions about their pension throughout their career. Members can use the tool on their own through the e-services member portal or book a 1-on-1 session with one of our Advisors, who can use the Retirement Planner to build a robust retirement plan that reflects a member's financial and personal circumstances and goals.

While the current planner is comprehensive, it requires considerable manual effort to capture the necessary information required to produce a retirement plan. This is why OPB made the decision to issue an RFP for a long-term strategic partner who offers a retirement planning tool that will support improving member engagement with retirement planning and making it easier for our Advisors to build effective retirement plans for members.

OPB's Certified Financial Planners® use the tool for their advisory interactions with members. To help us identify which features and functionality would be the most valuable to clients, we focused on member research, including client journey mapping, to help us better understand how members move through their retirement planning journey. We examined their pain points and identified opportunities for us to enhance their retirement planning experience, including our retirement planning tool. Our member research helped us identify 12 requirements that we added, updated or prioritized in the RFP. One of the main takeaways from our research was that members want a simple retirement planning experience.

This work fed into our RFP, which was issued in early 2024.

PENSION MODERNIZATION: LOOKING AHEAD

We continue to manage risk in our modernization program by thoughtfully pacing and sequencing our projects and rollout in manageable phases. Once the vendor is selected, we will have more information on the delivery approach and timelines.

After selecting a vendor in 2024, we will focus on our core pension administration needs. These "must-haves" include:

- A Business Rules engine that stores our Plan provisions and assumptions, to enable us to improve process consistency and efficiency.
- Calculator functionality that will consolidate the capabilities of many legacy tools and enable staff and members to easily calculate available pension options, and position us to provide more digital services in the future.

- More agile document creation capabilities to capture and present entitlement information and options to members.
- Business process management capabilities (workflow systems) that support staff in managing client inquiries and enhance timely service delivery.

WORKPLACE CULTURE

We spent significant time in 2023 developing an organizational purpose statement, along with refreshed values and a well-articulated employee value proposition to distinguish OPB in the marketplace, demonstrate our strong culture, and inspire current and future employees.

The new purpose statement and values, below, have been widely promoted internally, reaffirming for staff the “how and why” of our work. Our purpose is also embedded in our outward-facing activities, through our website, [OPB.ca](https://www.opb.ca), and on our LinkedIn page. We want job candidates to understand the type of organization we are, and we want clients – individual public servants and their employers – to understand that everything we do is meant to support them.

Our Purpose

Reassuring things happen when we look after each other and work together for a common cause. Over the course of their working lives, our public-servant clients support strong and sustainable communities across Ontario. We understand the importance of helping others build toward a strong and sustainable future.

Through our Advise and Protect mission, we assist our clients to effectively plan for a retirement with security and dignity – a retirement in which they can thrive and continue contributing to their communities. Our team of diverse professionals supports every stage of our clients’ careers, ensuring the pensions they have earned are protected along the way through strategic and prudent fiscal oversight.

Our commitment is to be there. There for life.

Our Values

Client & Stakeholder Commitment: We are committed to delivering exceptional client and stakeholder experiences.

Diversity, Equity and Inclusion: We value our differences, creating safe spaces for all as we work in collaboration, leveraging everyone’s unique talents and life experiences, and interacting with respect, empathy and compassion.

Innovation & Continuous Learning: We are a high-performing organization with a can-do attitude that pursues continuous improvement, learning, growth and achievement.

Trust & Transparency: We act with integrity, communicating with honesty and transparency to have meaningful interactions and foster trust.

Accountability: We each take accountability. Together, we protect the pension promise through advocacy and the effective and efficient delivery of services that support and protect the financial well-being of our clients.

Diversity, Equity and Inclusion

Diversity, equity and inclusion (DEI) are integral values for OPB, and we strive to meet the evolving expectations of our employees, clients and stakeholders.

We believe that having a diverse, equitable and inclusive workplace is fundamental to achieving our mission and vision. It makes us a stronger, more agile organization, helps us attract and retain employees, and positions us to better serve our diverse membership. We continued to advance DEI through a variety of actions that support an inclusive work environment for our employees, clients and stakeholders. For example, in 2023, our Diversity, Equity and Inclusion Advisory Council, made up of a diverse cross-section of OPB employees, held meetings and developed OPB's first DEI action plan. With the support of an external advisor, the Council reviewed historical survey feedback, as well as input from a dedicated anonymous focus group, to gather input on the DEI experiences of OPB employees. Through facilitated dialogues, this informed and shaped the Council's action plan. Highlights of the plan include continued opportunities for education and training, opportunities to develop greater awareness and cultural appreciation, and ongoing commitment to sharing progress and information.

We developed etiquette guidelines to encourage inclusive, respectful online interactions and provided employee training on respectful interactions and responding to microaggressions. We also re-engaged The 519, a Toronto-based community centre that focuses on 2SLGBTQ+ communities, to offer gender and sexual diversity training for new employees, and co-ordinated two virtual tours of the former Mohawk Institute Indian Residential School (through the Woodland Cultural Centre) for all OPB employees and our Board of Directors. Learning about reconciliation with Indigenous Peoples is an important part of our broader journey as we continue to learn together and share information and resources.

The OPB Board receives regular updates from management on our ESG progress, including DEI initiatives and an overview of the Council's new action plan.

We prepared our inaugural ESG report in 2023 with an extensive discussion of our DEI Advisory Council, our internal activities and how we are making our services more inclusive for clients. The report, covering the year 2022, is available on [OPB.ca](https://www.opb.ca). It notes the many partnerships and pledges we have made to support our commitment to DEI, and it discusses how our investment manager, IMCO, supports DEI through proxy voting and engagement with companies.

Attracting and Retaining Talent

In today's competitive talent market, OPB, along with other organizations, continues to identify ways to face the challenges of an increasingly competitive labour market in order to attract and retain the skilled talent we need to most effectively manage the Plan and serve our members.

In addition to the development of a new purpose statement described above, we took several actions in 2023 to continue to elevate OPB's reputation and brand in the market.

With employee input, we developed and introduced a new employee value proposition to support our recruitment and retention efforts and contribute to the ongoing development of our workplace culture.

While we have strong staff engagement levels, we are – like many organizations – seeing higher levels of turnover post-pandemic than we did previously. In addition to filling a small number of new positions which were identified in our 2023 Business Plan, we also hired a number of staff to fill existing vacancies. To support the onboarding experience, and ensure our new staff have the comprehensive knowledge required to meet the needs of Plan members, we revamped our pension fundamentals program. This four-day onboarding program educates new employees on the various features of the PSPP. We also completed the procurement process for an e-learning partner to support the development of pension fundamentals e-learning modules. This initiative is a key element of modernizing our onboarding program and supporting OPB as a high-performing organization.

Leveraging the development of a newly formed purpose statement and employee value proposition (EVP), we also began work on redesigning and refreshing the Careers page of [OPB.ca](https://www.opb.ca) to attract new talent.

OPB continues to operate in a hybrid model with all staff working in the office at least three days a week. Some roles are required to be on-site more frequently, depending on position requirements. In 2023, we provided staff with improved technology to support effective hybrid work. For example, we introduced more audio and video conferencing capabilities at the office. We also continued to emphasize the importance of employee health and wellness, offering access to various programs and supports.

RISK MANAGEMENT

OPB's risk framework is set out in our Governance, Risk and Compliance Policy, which establishes core functions and responsibilities for managing risk.

Our approach to risk management is to assess strategic and operational mission-critical risks and to take actions that mitigate or limit downside risk exposures. In a rapidly changing environment characterized by technological disruption, geopolitical instability, cyber-threats and changing societal demands, risk management is critical in enabling OPB to meet its responsibilities to Plan members and other stakeholders.

Enterprise Risk Management

The goal of Enterprise Risk Management (ERM) is to enable OPB to make good decisions in the face of uncertainty, evolving external information or circumstances, and competing demands.

While OPB tries to anticipate material risks, unforeseen and unprecedented events will occur. We maintain a robust ERM framework to ensure significant current and emerging risks and opportunities are identified and managed; appropriate risk mitigations are developed and implemented; regular monitoring is conducted to evaluate the mitigation measures; and risk activities are reported on a regular basis.

OPB adopts a holistic enterprise-wide approach that involves all areas of our organization and all levels of staff. Our goal is to ensure key risks are identified in a timely manner and managed within acceptable levels.

CATEGORIES OF ENTERPRISE RISK

Our ERM program provides a consistent framework to evaluate and manage the uncertainty that will naturally arise from administering a major defined benefit pension plan.

We segment enterprise risks into three principal categories:

1. **Strategic** – These are risks taken to pursue and capture long-term value for the Plan. They generally represent the risks with the highest overall potential to affect achievement of OPB's objectives. These risks are actively managed by ensuring that the development of corporate strategy is aligned with OPB's risk profile.
2. **Operational** – These are risks that arise from day-to-day business, emergency planning and project processes. In the normal course of service delivery, we face threats and vulnerabilities. To manage these risks, operational risk management is embedded at the business unit level through awareness training and targeted assessments.
3. **Emergent** – These are primarily external and uncontrollable trends that may impact OPB over a long-term horizon. Routine surveillance of emerging trends allows us to assess the business impact of threats and opportunities presented by changes in the external environment.

2023 DEVELOPMENTS

In 2023, we continued to work on advancing a strong risk culture within the organization. We had a particular focus on strengthening our operational resilience and business continuity plans; further maturing our cyber and information security; and strengthening our business continuity plans, cyber and information security, and employee health, safety and well-being.

We made progress integrating risk management with business operations, particularly with program/project management and internal audit, with the objective of creating a more mature ERM framework and becoming an organization with a resilient, informed and risk-aware mindset.

To build a stronger ERM foundation, we took the following steps in 2023:

1. Implemented a cloud-based ERM tool that captures our various risk registries in one location, providing greater visibility of risks from across the organization;
2. Advanced our capability to build key risk controls and risk indicator libraries which will further define and enhance our risk appetite framework;
3. Continued to work closely with colleagues in IT and Finance to improve procurement processes by advancing a risk-based framework for onboarding new vendors and maintaining relationships with existing vendors, which helps to mitigate third-party concentration and other risks;
4. Continued to evolve the pension modernization risk program to ensure that risks are identified, assessed, mitigated, monitored and reported in a timely manner;
5. Met quarterly with various teams, people managers and project managers to identify and assess risks and strategies, and discuss systemic or new issues; and
6. Continued to evolve our emerging trends scan to better understand and prepare for any impacts on either current or future business needs.

Throughout the year our ERM team focuses its effort on building a risk-aware culture by creating opportunities to learn about risk management and key emerging trends, both global and local in nature. We do this by utilizing our Global Risk Institute's membership to conduct bespoke sessions and risk workshops. October is Risk Awareness Month. During this time, all OPB staff are given access to virtual risk workshops, where they can learn about topics including risk identification, risk assessment and mitigation, project risk management, decision making, strategy planning and psychology of risk. We also share curated materials on risk management to help elevate their knowledge on this topic.

Key Risks and Mitigation Activities

Our top three risks and mitigation activities are as follows.

1. **Plan sustainability.** Defined benefit pension plans face the risk that they may be unable to meet all current and future obligations while remaining affordable over the long term. We conduct various studies and analyses to better understand the funding risks facing the Plan and to develop recommendations to mitigate these risks.
2. **Investment performance.** We rely on our investment manager, IMCO, to execute OPB's SAA with the objective of achieving performance that can meet or exceed our target returns. We have a monitoring program to oversee our relationship with IMCO. We receive regular reporting on requirements under the Investment Management Agreement, IMCO's risk management activities and detailed fund performance reports. See the Investments section for more information on investment risk management.
3. **Modernization of core systems.** Pension modernization presents a significant opportunity while at the same time introducing enterprise-wide, program-level risks such as unexpected program costs or delays, breakdowns in change management and data governance processes or failure to deliver expected outcomes. Our pension modernization program will update our service offerings, introduce efficiencies and address at-risk legacy technology. We address potential risks by using a combination of our enterprise program management framework and a deliberate, incremental and modular approach to pension modernization.

OPERATIONAL RISK MANAGEMENT

Operational risk management (ORM) provides a practical, business objective-based approach to identifying, assessing, mitigating and continuously reporting on risk inherent in OPB's day-to-day operations. ORM focuses on how we apply management controls in areas such as compliance and conduct, business continuity, project delivery and service quality.

SYSTEMS RISK

We regularly review our IT systems for operational performance and scalability to meet future requirements. We also work very closely with our managed service providers, IT advisors and independent research firms.

OPB's information technology and security infrastructure remained strong and digital enhancements are ongoing. Security education and awareness measures continued with organization-wide phishing exercises and online information security training on a regular basis.

LEGAL RISK

Occasionally, OPB is involved in legal actions arising from the ordinary course of business. All significant legal matters are reported to the Audit Committee of the Board of Directors.

INTERNAL AUDIT

We routinely conduct internal audits of key business functions and operational processes. The internal audit function reports to the Board of Directors through the Audit Committee. The annual internal audit plan is approved by the Audit Committee.

PRIVACY PROTECTION

OPB recognizes the importance of protecting the privacy of its members, stakeholders and employees. Safeguarding personal information in our care is core to the trusted delivery of our mandate. In 2023, we continued to update and revise key internal controls to support ongoing transparency, risk mitigation and efficiency in the collection and use of personal information in increasingly complex digital environments. Our Privacy Office maintains an organization-wide program to ensure ongoing training, awareness and vigilance in the handling and use of personal information.

INFORMATION SECURITY AND COMPLIANCE

Like other public institutions and financial services organizations, OPB carefully manages risks related to information/cybersecurity and compliance. We continue to invest in and monitor controls and maintain an enterprise-wide compliance program, using a combination of policy training and ongoing review of reputational reporting and attestations.

PROJECT DELIVERY

A large program or individual projects can introduce both business and financial risks. We monitor projects using governance processes and regular reporting. This helps provide assurance that internal controls and project procedures are being followed. We also conduct project-specific risk assessments throughout a project's life cycle to identify and mitigate potential uncertainties, threats and vulnerabilities.

In 2023, we continued to expand our program management capabilities in support of the pension modernization program.

FINANCIAL MANAGEMENT

OPB is committed to efficient management and to offering value-added service at a cost-effective price. As an agency of the Province of Ontario, we operate in an environment of cost constraint, and we judiciously manage the Plan's expenses. In recent years, we have expanded our range of member services and added new members by consolidating other pension plans, yet our overall expense ratio remains very competitive in the industry.

To efficiently manage the Plan, we routinely:

- focus on priorities and work smart;
- re-engineer and redeploy resources where it makes sense to do so;
- enhance our abilities, through staffing and training, to perform more value-added services in-house rather than pay premiums in the open markets; and
- increase our digital offerings.

Our overall consolidated (investments and pension administration) expense ratio for 2023 was 0.62% (or 62 cents per \$100 of average net assets available for benefits). This compares to 0.53% in 2022.

Our objective is to keep our consolidated expense ratio at or below 66 basis points, with OPB's operating expenses at or below 16 basis points and IMCO costs at or below 50 basis points, which we accomplished in 2023.

Managing Costs

At OPB, we are committed to disciplined cost management, and we strive to stay within budgeted expenses each year.

Our goal is to ensure we spend strategically where it is in the best interests of our members and stakeholders. The Plan's expenses are a combination of investment management costs and operating costs for pension administration.

INVESTMENT FEES

IMCO incurs investment management and custodial fees on OPB's behalf. In addition, a share of the cost of IMCO's operations is charged to OPB on a cost-recovery basis. In 2023, these two costs were 0.46% (or 46 cents per \$100 of average net assets available for benefits), compared to 0.38% (38 cents per \$100 of average net assets available for benefits) in 2022. These fees are deducted from total investment income.

OPERATING EXPENSES

OPB has direct operating expenses, which are the internal costs associated with managing the pension plan, pension administration and investment monitoring/oversight activities. These costs were 0.16% (or 16 cents per \$100 of average net assets available for benefits) in 2023, compared to 0.15% (15 cents per \$100 of average net assets available for benefits) in 2022.

The above sets of costs add up to a 0.62% expense ratio in 2023, compared to 0.53% in 2022.

CONTRIBUTIONS

Contribution rates for the PSPP are set by the *Public Service Pension Act, 1990* (PSP Act). They are adjusted as needed to keep pension benefits affordable and sustainable over the long term.

As of April 1, 2021, members contributed 7.4% of their salary below the Year's Maximum Pensionable Earnings (YMPE) and 10.5% of their salary above the YMPE (which was \$66,600 for 2023 and is \$68,500 for 2024). Employers contribute a matching amount.

Ontario Provincial Police (OPP) officers in the PSPP are required to contribute additional amounts to fund the 50/30 unreduced early retirement provision and the enhanced earnings component of the benefit formula (average annual earnings based on highest 36 consecutive months for officers and highest 48 consecutive months for civilians). The contribution rates for OPP officers are 9.7% of salary up to the YMPE and 12.8% of salary above the YMPE. For OPP civilians, the contribution rates are 8.545% of salary up to the YMPE and 11.645% of salary above the YMPE. These contribution rates are matched by the employer.

During 2023, contributions for all OPB members and employers totalled \$1.325 billion, compared to \$1.245 billion in 2022.

PENSIONS PAID

OPB made pension payments totalling \$1.62 billion in 2023, up from \$1.495 billion in 2022.

The increase is partly attributable to a 6.3% inflation protection adjustment (Escalation Factor) that was applied to pensions on January 1, 2023. The remainder is attributable to increases in the average pension amounts and the number of new retired members.

Executive Compensation

OPB recognizes compensation as a key component in achieving its long-term strategies and organizational effectiveness. As an agency of the Government of Ontario, OPB is committed to providing excellent service and value for money to our clients and stakeholders while operating in a public sector fiscal environment.

Executive compensation is carefully overseen and approved by the Board’s Human Resources Committee and follows the Province’s direction on broader public sector wages. Effective February 28, 2018, OPB implemented its Executive Compensation Program, which is compliant with Ontario regulation 3014/16: Executive Compensation Framework, introduced in September 2016. The regulation sets out how all employers designated under the *Broader Public Sector Executive Compensation Act, 2014*, including OPB, must establish and publish compensation programs for executives. The program must include the compensation philosophy, salary and performance-related pay caps, comparative analysis details and a description of other elements of compensation.

Executives receive an annual base salary that is within the salary range assigned for the corresponding classification. In addition to base salary, executives are eligible to participate in the annual compensation plan (short-term incentive). OPB conducts annual performance and salary reviews for executives, and the rate of salary adjustment for performance-based incentives is in line with appropriate market-based ranges. OPB regularly participates in third-party external compensation surveys and typically trends below market average.

Base salaries and incentive pay for executives in designated positions are within OPB’s approved Executive Compensation Program. A regulation, 406/18: Compensation Framework, was introduced on August 13, 2018 and sets out new requirements for compensation for those in designated executive positions. OPB is in compliance with the regulation.

As part of OPB’s succession planning, OPB reviewed its executive structure to ensure the organization has the leadership skills and talent required to ensure the success of the organization in the future. This was key to providing stability and the required bench strength for OPB.

The table on the next page sets out the compensation for the CEO and the four senior executives who report directly to the CEO. The figures in the table include the components of compensation and the total compensation (excluding only retirement benefits) paid to the listed executives.

For the year ended December 31	Year	Base Salary ¹	Short-Term Incentive ²	Taxable Benefits & Allowances ³	Total
Mark Fuller, President & CEO	2023	\$ 526,165	\$ 289,889	\$ 572	\$ 816,626
	2022	\$ 526,165	\$ 300,284	\$ 572	\$ 827,021
Valerie Adamo, Chief Technology Officer	2023	\$ 323,093	\$ 121,576 ⁴	\$ 373	\$ 445,042
	2022	\$ 323,093	\$ 121,576	\$ 373	\$ 445,042
Armand de Kemp, ⁵ Chief Financial Officer	2023	\$ 224,919	\$ 82,066	\$ 266	\$ 307,251
	2022	\$ 205,912	\$ 72,317	\$ 259	\$ 278,488
Christian Kautzky, Chief Investment Officer	2023	\$ 338,836	\$ 133,344	\$ 389	\$ 472,569
	2022	\$ 338,836	\$ 138,125	\$ 389	\$ 477,350
Peter Shena, Executive Vice-President & Chief Pension Officer	2023	\$ 362,237 ⁶	\$ 134,777	\$ 392	\$ 497,406
	2022	\$ 342,479	\$ 139,610	\$ 392	\$ 482,481

1 Base salary is based upon amounts paid during the year. In 2022 and 2023, there were 26 bi-weekly pays.

2 Short-term incentive earned is paid in March of the following year and is within the established Executive Compensation Envelope as per Regulation 406/18: Compensation Framework.

3 Includes life insurance. There are no car allowances or other perquisites.

4 The total compensation is capped for the Chief Technology Officer as per the Executive Compensation Framework. As a result, Ms. Adamo's incentive is capped accordingly.

5 Mr. de Kemp was appointed to Chief Financial Officer in 2023. Amounts shown reflect part of the year as Vice-President, Finance and part of the year as CFO.

6 As part of the transition plan for Mr. Shena's upcoming retirement, part of his vacation accrual was paid out in 2023.

The above-noted individuals are entitled to pension benefits on their base salary from both the PSPP and the RCA. Having the executives as members of the same pension plans as the clients that they serve builds strong alignment.

Three existing executives (President & CEO, EVP & CPO, and CTO) currently participate in a Supplementary Executive Retirement Plan (SERP) that provides retirement benefits equal to 2% of the best five-year average annual award of short-term incentive plan (STIP) compensation for a year of service with OPB. There is no service accrued in the SERP for years other than during their employment time with OPB. The maximum inflation protection adjustment to the SERP benefit in any year is limited to 2.5%. All the other provisions of the SERP mirror the provisions of the PSPP. The SERP is an unregistered arrangement that is non-contributory and not funded.

In accordance with Government of Ontario directives, OPB executives do not receive any perquisites, such as automobile entitlements or allowances, club memberships, personal use equipment or personal services.

GOVERNANCE

A robust governance structure keeps OPB strong and is the foundation of our continued success. OPB's governance structure meets – and in many cases exceeds – industry standards and best practices. Our steadfast commitment to industry-leading governance practices ensures full accountability, effective decision making, prudent oversight of investment management, fiscal responsibility, legal compliance and smart risk-taking. In short, it ensures that we are – at all times – protecting and promoting the best interests of the Plan and its beneficiaries.

A series of documents define our organizational structure, roles and responsibilities, and governance practices. Collectively referred to as the governance documents, these documents include a Statement of Governance Principles, a General By-law, Statements of Mandate and Authority, and a Code of Conduct & Ethics.

Our governance documents draw a clear link between responsibility and accountability, set expectations for ethical behaviour and entrench conflict-of-interest guidelines. They also establish a well-defined system of checks and balances on all power and authority.

Role of the Board

OPB's Board of Directors holds the ultimate responsibility for the Plan's stewardship. The Board has delegated to management the responsibility for the day-to-day operations required to administer the Plan and manage the Fund.

The Board has also delegated specific responsibilities to six committees of the Board: the Governance, Investment, Audit, Pensions, Managed Plans and Human Resources committees.

The Board retains overall responsibility for supervision of OPB's business affairs. For example, it:

- approves OPB's strategic plan, business plan and budget;
- ensures that management has identified and is managing risks;
- approves any recommendations made to the Plan Sponsor regarding Plan amendments and funding;
- conducts performance and compensation reviews for the President & CEO;
- oversees and monitors the performance of IMCO;
- approves the SAA, which drives investment management asset mix decisions;
- conducts an annual review of OPB's Statement of Investment Policies & Procedures;
- approves non-ministerial appointments to the IMCO board of directors;
- approves material amendments to investment management and service agreements;
- supervises and approves all audit and risk management matters;

- ensures that management maintains a culture of integrity;
- is accountable for leadership succession;
- monitors talent management and employee engagement;
- monitors client service; and
- monitors compliance with OPB's governance documents, including government directives and policies.

In fulfilling their duties, members of the Board are directly accountable to:

- the Plan's beneficiaries (i.e., active and retired members);
- the Financial Services Regulatory Authority (the organization that oversees registered pension plans in Ontario); and
- the Government of Ontario (the Plan Sponsor).

IMCO is OPB's sole and exclusive investment manager, managing the investment and reinvestment of the Fund. It also acts as OPB's non-exclusive investment advisor. The Board has delegated to management (primarily to the Chief Investment Officer) the responsibility to monitor, assess and report on IMCO in respect of its investment products, returns and risk management, and its performance in fulfilling its duties, responsibilities and obligations.

ESG matters are a strong focus for the Board and management as OPB continues to strengthen practices and collaborate with peers. A Board-approved policy for ESG investment issues articulates how OPB addresses ESG issues, including climate risk. IMCO has committed to reach net-zero greenhouse gas emissions by 2050 or sooner, has published interim targets to reach this goal and is disclosing climate risks in alignment with the Task Force on Climate-related Financial Disclosures (TCFD). OPB published its first ESG report in early 2024, available at [OPB.ca](https://www.opb.ca).

OPB is consistently recognized as an example of good governance within Ontario's public service. The Board is committed to maintaining a best-in-class governance model and ensuring OPB can continue to drive innovation and build a strong future for all PSPP stakeholders.

The Board and its committees met a total of 33 times in 2023.

LEADERSHIP SUCCESSION

A top priority during the year was ensuring that the prudent leadership succession plan developed in recent years was implemented smoothly.

In spring 2023, OPB announced the pending retirement of the Chief Pension Officer in early 2024 and the Chief Executive Officer at the end of 2024. Understanding how critical these roles are, OPB's Board had created a Board Succession Working Group to guide the transition and oversee the recruitment of these two senior positions. The Board was committed to finding leaders who would not only bring the right skills but would continue to advance OPB's thriving culture and unique advisory services model.

The Board retained executive search firm LHH Knightsbridge to recruit for a transitional position of President & Chief Pension Officer, with the intent that the successful candidate would take over as the new President and CEO at the end of 2024 when current CEO Mark Fuller retires.

After an extensive search process, OPB appointed Darwin Bozek to the transitional position of President & Chief Pension Officer. Darwin has extensive public sector and pension experience, a passion for the defined benefit model and a strong commitment to delivering excellent client service. Since 2017, he has served as President & CEO of Alberta Pensions Services Corporation. Darwin joined OPB on February 1, 2024 as the first step in our phased leadership transition and will step into the President and CEO role toward the end of 2024.

Darwin will work closely with former Chief Pension Officer Peter Shena and the Pensions group to understand all facets of the PSPP. He will also work closely with Mark to ensure effective transfer of knowledge about investments oversight, governance, technology, finance, and human resources and corporate services.

Board of Directors

Effective governance and oversight demand a committed board with the right mix of skills and expertise to govern effectively.

In addition, Board members must continue to develop skills to ensure that the Board collectively is well equipped to govern in a rapidly changing world. The Board invites external experts to present education sessions throughout the year. In 2023, the Board invited subject matter experts to provide sessions on topics including reframing retirement for pension plans, the post-pandemic outlook for real estate, stewarding executive leadership change, net-zero and climate strategy, and the hallmarks of successful projects.

OPB board members are appointed by the Ontario Lieutenant Governor in Council.

There were several changes to the board in 2023, including:

- Patti Croft – departed June 30, 2023
- Richard Nunn – appointed July 13, 2023
- Robert Ritchie – appointment ended July 15, 2023
- Lynne Clark – appointment ended December 8, 2023

Richard Nunn assumed the role of Investment Committee Chair.

Biographies of all board members who served during 2023 are below.

BOARD MEMBERS

Geri Markvoort (Chair)

Geri Markvoort is a retired senior human resources executive, with more than 40 years' experience in large, complex organizations. She has aligned the delivery of human resources with the needs of business in various sectors (natural resources, manufacturing, banking and professional services). Significant organizational change, global service models, total rewards delivery, effective client relationships and the evolution of the human resources function have challenged and engaged her throughout her career. A passionate champion for change and strong human resources leadership, Geri's board experience has included governance roles as Chair of the Board of Governors, George Brown College; Chair of the Board, Dress for Success Toronto; and board member of Lawn Summer Nights and the Cystic Fibrosis Toronto Chapter. Geri holds an ICD.D designation from the Institute of Corporate Directors.

Patti Croft (Vice-Chair)

Patti Croft was Vice Chair of the Ontario Pension Board as well as Chair of the Investment Committee and a member of the Human Resources and Governance committees until her exit from the Board on June 30, 2023. She is a member of the Ontario Teachers' Pension Plan Board, where she is Chair of the Governance Committee, and is a member of the Human Resources and Compensation Committee and the Investment Committee. She was the former Chief Economist of RBC Global Asset Management. Her community involvement has included the Oakville Humane Society and the Oakville Fairshare Food Bank. She is a member in good standing of the pet therapy program through St. John Ambulance. She holds a Bachelor of Arts degree in Economics from the University of Toronto as well as an ICD.D designation from the Institute of Corporate Directors.

Dave Bulmer

Dave Bulmer is the President and Chief Executive Officer of AMAPCEO – Ontario's Professional Employees (15,000 members) and has been since 2015. He previously held the offices of Chief Financial Officer, Board Chair, Director-at-Large, Finance Committee Chair and Pension Committee Chair. His home position in the Ontario Public Service is within the Emergency Health Services Branch of the Ministry of Health & Long-Term Care. Dave has attained his ICD.D designation from the Institute of Corporate Directors at Rotman's School of Management, and he has completed SHARE's Pension Investment and Governance certification and Trustee Master Class certification. Dave lectures on labour relations at several Ontario universities and is a long-time community activist who has volunteered his time as a coach in elite-level sports and as a volunteer with PFLAG and Crohn's & Colitis Canada. Dave holds an ICD.D designation from the Institute of Corporate Directors.

Lynne Clark

Lynne Clark was the Chair of OPB's Audit Committee and a member of the Pensions and Investment committees until her term on the Board ended December 8, 2023. She is a retired senior Deloitte partner with over 35 years of public accounting experience and a former leader of the Deloitte National Financial Services Industry. She is the 2012 recipient of the Queen Elizabeth II Diamond Jubilee Medal for community service, is a former Treasurer of the Junior Achievement Foundation (Canadian Business Hall of Fame) and is past chair of Junior Achievement of Canada. She was also a Director of The Easter Seals Society of Ontario. Lynne is a Fellow Chartered Professional Accountant of Ontario and received her ICD.D designation from the Institute of Corporate Directors. She also holds a Master of Business Administration from the Schulich School of Business and a Bachelor of Science from the University of Toronto.

Earl Dumitru

Earl Dumitru has been a legal and policy advisor with the Government of Ontario for more than 20 years. He brings breadth and depth in legal practice attained in increasingly complex and senior portfolios under five governments with diverse missions. Some notable files include liability reform, amendments to the *Class Proceedings Act*, developing a new *Legal Aid Services Act*, agency and industry governance, and oversight of capital projects. Earl has also served on the Board of the Association of Law Officers of the Crown (ALOC) for over 10 years and was President of ALOC from 2014–2018. As President, his responsibilities included collective bargaining, managing staff, budgets and audits, day-to-day operations, and developing a sustainable organization capable of meeting its fiduciary responsibilities to its members.

Shawn Leis

Shawn Leis is the Executive Officer – Finance at Ontario Provincial Police Association. His career spans more than 25 years, including senior financial and operational leadership roles at several manufacturing companies, a sawmill distribution company and a sub-prime automotive financing company. Shawn is a part-time finance instructor at Georgian College and serves as Treasurer on the Georgian Bay Cancer Support Centre. Past board experience includes Penetang Minor Hockey (four years), School Board Trustee (eight years), Church Trustee (eight years) and Church Stewardship (14 years). He attended the University of Waterloo to obtain an Honours Degree in Co-op Accountancy Studies and subsequently earned a CPA designation, as well as a master's degree in management. Shawn also completed four modules of the Director's College at DeGroote School of Business.

Geoffrey Melbourne

Geoffrey Melbourne is Chair of OPB's Pensions Committee and a member of the Managed Plans Committee. He is a seasoned actuary and client relationship manager, with experience leading strategic initiatives and articulating complex subject matter to stakeholder groups. Geoffrey is a Partner and Wealth Growth Leader at Mercer Canada. His career highlights include driving the multi-year process of the first Ontario jointly sponsored pension plan conversion under the new regulatory framework. Geoffrey currently chairs the Project Oversight Group for an update of the Canadian Pensioners' Mortality report and is a member of the Actuarial Profession Oversight Board. A graduate of the University of West Indies, Geoffrey has attained the ICD.D from the Institute of Corporate Directors, in addition to his actuarial designations.

Richard B. Nunn

Richard Nunn is Chair of OPB's Investment Committee and joined the Board in July 2023. He has been involved in senior governance roles in the public sector for over 20 years, serving as a Governor at the University of Toronto from 2004-2013 and as Chair of the Governing Council between 2011-2013. He is currently a director of Halton Health Care and served as Chair of the Board between 2019-2023. He is currently Chair of UTAM, which manages assets on behalf of the University of Toronto. He is also a Council member of ICAEW, an international accounting organization based in London. Richard retired as a partner from Deloitte in 2023, having completed a 34-year career in professional accounting. He led the Financial Services Audit and Assurance practice for Canada and served on the Global Financial Services Audit leadership team. He specialized in banking, asset management and pension industries while at Deloitte, serving some of the largest organizations including RBC, Ontario Teachers' Pension Plan and the Public Sector Pension Plan Investment Board. Richard holds a degree in Banking and Finance from Loughborough University in the U.K. He is a Fellow of the Institute of Chartered Professional Accountants of Ontario, a Fellow of the Institute of Chartered Accountants in England and Wales, and a member of the Chartered Institute of Taxation, U.K., and he holds the Institute of Corporate Directors designation.

Suzann Pennington

Suzann Pennington is Chair of OPB's Human Resources Committee and a member of the Audit and Investment committees. She is a retired senior finance executive with over 30 years' experience in strategic planning, complex investments, M&A, risk management and ESG in public and private companies. As Managing Director and Chief Investment Officer of CIBC Global Asset Management, Suzann was responsible for over \$110 billion in financial assets. She has held a number of senior finance positions including Vice President of Mackenzie Financial, and was a founding partner of a mutual fund company. Suzann holds a Bachelor of Mathematics degree from the University of Waterloo, a Chartered Financial Analyst designation, and the ICD.D designation from the Institute of Corporate Directors.

Rob Ritchie

Rob Ritchie was the Chair of OPB's Investment Committee and a member of the Managed Plans and Audit committees until the end of his term on July 15, 2023. He was the Chief Executive Officer of a defined benefit plan, with over 35 years of experience in the insurance, pension and financial services industries. He spent 27 years with a major Canadian life insurance group with both domestic and international assignments, and has extensive experience in investment management and delivering total return and liability-oriented investment solutions. He also has a strong track record of building and operating successful business units and recruiting and developing high-performing teams. Rob holds a Bachelor of Business Administration from Wilfrid Laurier University and a Master of Business Administration from the University of Toronto.

BOARD TERMS AND REMUNERATION

Appointee Name	Appointment Start Date	Appointment End Date	Position	2023 Total Remuneration
Geri Markvoort	1/5/2015	1/2/2026	Chair of the Board	\$91,884
Patti Croft	5/1/2013	6/30/2023	Vice-Chair	\$25,943
Suzann Pennington	6/25/2020	8/16/2025	Member	\$45,548
Dave Bulmer	11/16/2016	11/15/2025	Member	-
Shawn Leis	3/4/2022	3/3/2025	Member	-
Geoffrey Melbourne	12/22/2021	12/21/2024	Member	\$44,876
Richard Nunn	7/13/2023	7/12/2026	Member	\$22,420
Earl Dumitru	7/9/2020	8/16/2025	Member	-
Lynne Clark	6/22/2016	12/8/2023	Member	\$43,424
Rob Ritchie	7/16/2020	7/15/2023	Member	\$28,171

The Management Board of Cabinet Agencies & Appointments Directive (the "Directive") sets out the principles and high-level criteria for the compensation of Board members. By Order in Council 1150/2007, the per diem compensation rates payable to OPB Board members are set at the rates payable to appointees to Regulatory and Adjudicative Agencies specified in the Directive, as may be amended from time to time. The current per diem compensation rates payable to the Chair, the Vice-Chair and members are:

Chair: \$744

Vice-Chair: \$583

Member: \$472

The number of days compensated is based upon attendance at Board and management meetings as well as preparation, training and debriefing activities.

Members employed by the Ontario Government or employed by bargaining agents who receive their normal salaries while participating as an OPB Board member do not receive any additional compensation.

Five-Year Review

(in millions of dollars)	2023	2022	2021	2020	2019
Opening net assets	\$ 31,031	\$ 33,834	\$ 31,000	\$ 29,338	\$ 26,561
Investment income (loss)	955	(2,560)	2,871	2,052	2,723
Contributions	1,325	1,245	1,496	1,106	889
Transfers from other plans	265	254	134	90	644
	2,545	(1,061)	4,501	3,248	4,256
Pension payments	1,625	1,496	1,427	1,368	1,275
Terminations	162	200	196	177	166
Operating expenses	51	46	44	41	39
	1,838	1,742	1,667	1,586	1,480
Closing net assets	\$ 31,738	\$ 31,031	\$ 33,834	\$ 31,000	\$ 29,337
Annual net rate of return	3.1%	(7.8%)	9.4%	7.0%	10.2%

Key Performance Indicators and Metrics

OPB has adopted a number of key performance indicators (KPIs) to measure progress as we execute our strategies. The KPIs represent the outcomes relating to the Plan that are most important to the Plan stakeholders. The KPIs are set forth in the following table.

Business Objective	Defined Output	Performance Metric	2023 Outcome	Discussion of Outcome
Investment execution	OPB's investment return versus the Strategic Asset Allocation benchmark	Outperform the benchmark	Investment return fell below the benchmark return	Regular performance monitoring and investment strategy reviews occurred throughout 2023. An asset/liability study is planned in 2024 to review the SAA.
Investment risk management	OPB's active risk	Ex-post tracking error at the Total Fund level for the past five years within the limit and consistent with the target level as stated in the Client Account Mandate with IMCO	Active risk was below the limit stated in the Client Account Mandate	Risk was regularly monitored and was below the agreed limit during 2023
Member and pensioner service	Overall satisfaction with client services	8.7 or higher	8.6	Slightly below performance benchmark target
Employer service	Employer satisfaction scores	8.1 or higher	8.4	Exceeded performance benchmark target
Business Plan achievement	Advancement of strategies and initiatives (both planned and emergent)	Substantial delivery/achievement of Business Plan initiatives	Substantial achievement of initiatives outlined in the 2023 Business Plan, including many emergent initiatives	Completion of some in-progress initiatives have carried over to early 2024. Five new or carry-over initiatives from 2022 were added to 27 proposed in the 2023 Business Plan in addition to one recoverable initiative.
Managing to budget	Actual versus budgeted expenses	Within budget	2023 actual operating expenses were 1.2% under budget	Achieved performance target

Business Objective	Defined Output	Performance Metric	2023 Outcome	Discussion of Outcome
Cost-efficiency	Expense management ratios (cost per net assets available for benefits): 1. OPB operating expenses 2. IMCO costs 3. Consolidated	1. 16 basis points or lower 2. 50 basis points or lower 3. 66 basis points or lower	1. 16 basis points for operating expenses 2. 46 basis points for IMCO costs 3. 62 basis points for consolidated expenses	Expense management ratios are within acceptable target ranges
Financial health of PSPP	Level of, and year-over-year change in, going-concern funded status	Plan to remain 90% or more funded on a going-concern basis	In 2023, the funded status of the Plan is estimated to be 85%	The 10-year funding plan in place means that the PSPP remains well funded

Actuaries' Opinion to the Directors of the Ontario Pension Board

Aon was retained by the Ontario Pension Board ("OPB") to prepare the following actuarial valuations of the Public Service Pension Plan ("PSPP"):

- An actuarial valuation prepared on a funding basis as at December 31, 2022, as described in Note 11 of these financial statements, prepared in accordance with the *Public Service Pension Act* and applicable pension legislation.
- The actuarial valuation prepared on a funding basis as at December 31, 2022 was then rolled forward to December 31, 2023 to determine the pension obligations as at December 31, 2023 for financial statement purposes.

The actuarial valuation of the PSPP prepared on a funding basis as at December 31, 2022 was based on membership data provided by OPB as at December 31, 2022.

We have prepared a valuation of the liabilities as of December 31, 2022 on the basis of the accounting methodology required by the CPA Canada Handbook, Section 4600, as disclosed in Note 11, and extrapolated the liabilities to December 31, 2023. The valuation and extrapolation were based on assumptions that reflect OPB's best estimates of future events as of December 31, 2023 such as future rates of inflation, future retirement rates and future rates of return on the pension fund. The valuation reflects Ontario Regulation 250/18 that requires the funding of a reserve in the plan, referred to as a Provision for Adverse Deviation ("PfAD"). The amounts are set out in the statement of changes in pension obligations.

We hereby certify that, in our opinion:

- The data provided to us by OPB as of December 31, 2022 is sufficient and reliable;
- The actuarial assumptions used are appropriate for the purposes of each valuation; emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations; and
- The methods used are appropriate for purposes of each valuation and are consistent with the applicable regulatory requirements.

Our valuations have been prepared, and our opinions given, in accordance with accepted actuarial practice.

AON



Allan H. Shapira

Fellow of the Canadian Institute of Actuaries

March 12, 2024



Andrew Hamilton

Fellow of the Canadian Institute of Actuaries

Management's Responsibility for Financial Reporting

The financial statements of the Ontario Pension Board ("OPB") have been prepared by management, which is responsible for the integrity and fairness of the data presented. The accounting policies followed in the preparation of these financial statements are in accordance with Canadian accounting standards for pension plans. Of necessity, many amounts in the financial statements must be based on the best estimates and judgment of management with appropriate consideration as to materiality. Financial information presented throughout this annual report is consistent with the financial statements.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded against unauthorized use or disposition, and proper records are maintained. The system includes careful hiring and training of staff, the establishment of an organizational structure that provides for a well-defined division of responsibilities and the communication of policies and guidelines of business conduct throughout OPB.

The Board of Directors (the "Board") is ultimately responsible for the financial statements of OPB. OPB's Audit Committee assists in this responsibility by reviewing the financial statements in detail with management and the external auditors before such statements are recommended to the Board for approval. The Audit Committee meets regularly with management and the external auditors to review the scope and timing of audits, to review their findings and suggestions for improvements in internal control, and to satisfy themselves that their responsibilities and those of management have been properly discharged.



Mark J. Fuller
President & Chief Executive Officer

March 12, 2024



Armand de Kemp
Chief Financial Officer

Independent Auditor's Report

To the Directors of Ontario Pension Board

Opinion

We have audited the financial statements of Ontario Pension Board ("OPB"), which comprise the statement of financial position as at December 31, 2023, the statement of changes in net assets available for benefits and statement of changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of OPB as at December 31, 2023, and the changes in its net assets available for benefits and the changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

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

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

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

In preparing the financial statements, management is responsible for assessing OPB'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 OPB or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing OPB'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 OPB'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 OPB'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 OPB 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.

Toronto, Canada
March 12, 2024

Ernst & Young LLP

Chartered Professional Accountants
Licensed Public Accountants

Statements of Financial Position

As at December 31
(in thousands of dollars)

	2023	2022
Assets		
Cash	\$ 4,503	\$ 5,237
Investments (Note 4)	34,002,798	32,592,758
Investment-related assets (Note 4)	298,466	45,243
Contributions receivable		
Members	37,732	34,511
Employers	52,568	49,270
Accounts receivable and prepaid expenses (Note 16)	9,752	10,014
Capital assets, net (Note 10)	218	317
Total assets	34,406,037	32,737,350
Liabilities		
Investment-related liabilities (Note 4)	2,609,154	1,615,621
Accounts payable and accrued charges	58,789	90,482
Total liabilities	2,667,943	1,706,103
Net assets available for benefits	31,738,094	31,031,247
Pension obligations, excluding PfAD	35,211,893	32,902,978
Provision for Adverse Deviation (PfAD)	2,150,576	2,089,710
Pension obligations (Note 11)	37,362,469	34,992,688
Deficit	\$ (5,624,375)	\$ (3,961,441)

See accompanying notes

On behalf of the Board:



Geri Markvoort
Chair, Board of Directors



Richard Nunn
Chair, Audit Committee

Statements of Changes in Net Assets Available for Benefits

For the year ended December 31
(in thousands of dollars)

	2023	2022
Net assets available for benefits, beginning of year	\$ 31,031,247	\$ 33,833,743
Increase in net assets		
Net investment income (Note 6)	955,392	-
Contributions (Note 12)		
Members	509,178	472,972
Employers and sponsor	815,426	771,888
Transfer of service from other plans (Note 15)	265,151	254,407
Increase in net assets	2,545,147	1,499,267
Decrease in net assets		
Net investment loss (Note 6)	-	2,560,164
Retirement pension benefits	1,624,965	1,495,279
Termination and other benefits (Note 14)	162,109	200,256
Operating expenses (Note 13)	51,226	46,064
Decrease in net assets	1,838,300	4,301,763
Change in net assets available for the year	706,847	(2,802,496)
Net assets available for benefits, end of year	\$ 31,738,094	\$ 31,031,247

See accompanying notes

Statements of Changes in Pension Obligations

For the year ended December 31
(in thousands of dollars)

	2023	2022
Pension obligations, beginning of year	\$ 34,992,688	\$ 34,685,656
Increase in pension obligations		
Interest on pension obligations (including PfAD)	2,117,413	1,892,245
Benefits accrued		
Service accrual (mid-year including PfAD)	875,846	894,674
Transfer of service from Agricorp	-	79,196
Transfer of service from other plans (Note 15)	265,151	164,758
Prior service buybacks	84,082	73,703
Indexation loss (Note 11)	571,975	592,786
Reserve for future inflation and salary escalation	250,000	-
Other experience losses (Note 11)	312,174	151,183
Total increase	4,476,641	3,848,545
Decrease in pension obligations		
Benefits paid	1,787,072	1,695,535
Net assumption gains (Note 11)	199,662	1,690,752
Net change in Provision for Adverse Deviation	120,126	155,226
Total decrease	2,106,860	3,541,513
Net increase in pension obligations	2,369,781	307,032
Pension obligations, end of year	\$ 37,362,469	\$ 34,992,688

See accompanying notes

Notes to the Financial Statements

Note 1: Public Service Pension Act

Effective January 1, 1990, the Province of Ontario (the "Province") enacted the *Public Service Pension Act R.S.O., 1990* ("PSP Act") to continue the pension plan for the employees of the Province and certain of its agencies. The terms of the Public Service Pension Plan ("PSPP" or the "Plan") are stated in Schedule 1 to the PSP Act. Ontario Pension Board ("OPB") is the administrator of the PSPP. The Government of Ontario is the sponsor of the PSPP (the "Plan Sponsor"), acting through the member of the Executive Council to whom the responsibility for the administration of the PSP Act is assigned under the *Executive Council Act, R.S.O., 1990*.

Note 2: Description of the Plan

The following is a brief description of the PSPP. For more complete information, reference should be made to the PSP Act.

GENERAL

The PSPP is a contributory defined benefit pension plan. Membership is mandatory for persons or classes of persons who satisfy the eligibility requirements provided in the PSP Act. Persons who are entitled, but not required, to join the Plan, including Deputy Ministers and contract employees, may elect to participate. Under the PSPP, both the members and the employers make contributions. The PSPP is registered with the Financial Services Regulatory Authority of Ontario ("FSRA"), and the Canada Revenue Agency (Registration Number 0208777) as a registered pension plan not subject to income taxes.

In 2015, the *Investment Management Corporation of Ontario Act* was proclaimed by the Province, creating the Investment Management Corporation of Ontario ("IMCO"), a new investment management entity providing investment management and advisory services to participating organizations in Ontario's broader public sector, with the ownership of the investment assets remaining with the participants. IMCO has responsibility for OPB's day-to-day investment management functions. OPB retains responsibility for setting its Strategic Asset Allocation ("SAA") of the Plan's investments and for oversight of IMCO.

RETIREMENT COMPENSATION ARRANGEMENT

Effective January 1, 2022, OPB was appointed the trustee of the Retirement Compensation Arrangement Trust Fund ("RCA"), which continues the Public Service Supplementary Benefits Account ("PSSBA"). The purpose of the RCA is to provide additional pension benefits to members and former members whose contributions and benefits under the PSPP are limited by the *Income Tax Act (Canada) R.S.C., 1985* ("ITA") and regulations under that Act. The right to Supplementary Benefits is effective January 1, 1992. The RCA is a separate trust arrangement

and is not governed by the *Pension Benefits Act* ("PBA") or the Financial Services Regulatory Authority of Ontario ("FSRA") and is not a registered pension plan under the ITA. The RCA is governed by the Public Service Pension Act, the ITA and other applicable legislation.

As trustee, OPB acts as administrator of the RCA, trustee of the RCA assets and oversees the investments of the RCA. IMCO was appointed by OPB as investment manager for the RCA.

Governed by the RCA Plan Text, as set out in *Order in Council 1298/2021*, the RCA Trust Fund Agreement and the federal ITA, the RCA is supported by a trust agreement that is separate from the PSPP Fund. As a result, the RCA is therefore not included in these financial statements of the PSPP. The RCA assets are invested and accounted for separately from the PSPP, and the accrued pension obligation of the RCA is valued separately from the PSPP accrued pension obligations. Expenses for the RCA are paid from the RCA assets.

The Government of Ontario is the sponsor of the RCA and must, along with other employers of members, remit required contributions in respect of the RCA. A PSPP member must contribute to the RCA for that portion of their annual salary that exceeds the annual threshold that corresponds to the ITA benefit limit for that year.

FUNDING POLICY

The PSPP is a contributory defined benefit pension plan covering eligible employees of the Ontario Public Service and other designated employers. It is funded by contributions from members, deducted from their salaries and remitted by their employers, and by matching contributions from employers. The benefits and contribution rates of the PSPP are set, and may be amended, by the Plan Sponsor through an Order-in-Council.

CONTRIBUTIONS

The PSPP is integrated with the Canada Pension Plan ("CPP"). Contribution rates are 7.4% of the salary on which contributions are made up to the Year's Maximum Pensionable Earnings ("YMPE") and 10.5% of the salary above the YMPE. Employers contribute matching amounts.

Ontario Provincial Police ("OPP") officers are required to contribute an additional 2.3% of salary, which is matched by the employer. These additional contributions are used to fund an unreduced early retirement provision available to OPP officers meeting a minimum 50 years of age and 30 years of service and to fund the change in the final average salary to the best consecutive 36-month period. The contribution rates for OPP officers, inclusive of the additional 2.3% of salary, are 9.7% of the salary on which contributions are made up to the YMPE, and 12.8% of the salary above the YMPE. The contribution rates for OPP civilians ("OPPC") are 8.545% of the salary on which contributions are made up to the YMPE, and 11.645% of the salary above the YMPE. These additional contributions are used to fund a Factor 85 unreduced early retirement benefit, as described in Pensions below.

Contributions from members and employers, which are required contributions, are remitted to OPB. The portion of these contributions that exceeds the ITA limits is remitted to the RCA, separately administered by OPB and funds benefits previously paid from the PSSBA.

PRIOR SERVICE

When a member joins the PSPP, they may be able to transfer credit from a pension plan that has a transfer agreement with the PSPP or buy additional pension credit for an eligible period of prior service. The PSPP allows members to continue, if they choose, to earn pension credit when they go on an authorized leave of absence or qualify for long term income protection if contributions are continued.

PENSIONS

A pension is payable at age 65, based on the number of years of credit in the PSPP multiplied by 2% of the average annual salary during the best consecutive 60-month period, less an offset for integration with the CPP at age 65. An unreduced pension can be received before age 65 if the member's age and years of credit total 90 ("Factor 90") or when the member reaches age 60 and has 20 or more years of credit. If a pensioner does not qualify for an unreduced retirement, they can still retire as early as age 55 however their pension will be reduced to reflect the fact that they are starting it early and therefore likely to collect it longer. They can continue to work and contribute to the Plan after they turn 65 and build pension credit however must stop contributing to the Plan as of November 30th in the year in which they turn 71 and they must start collecting their pension no later than December of that year.

OPP officers are eligible for a pension payable based on the average salary during the best 36-month period. OPP officers are eligible for a 50/30 unreduced early retirement benefit if they reach at least 50 years of age with at least 30 years of pension credit. OPPC are eligible for a pension payable based on the average annual salary during the best 48-month period. Effective January 1, 2020, OPPC are eligible for a Factor 85 unreduced early retirement benefit if they reach an age-plus-pension credit totaling 85 years or more and retire as an OPP civilian.

DEATH BENEFITS

Upon the death of a member or pensioner, benefits may be payable to a surviving eligible spouse, eligible children, a designated beneficiary or the member's or retired member's estate.

DISABILITY PENSIONS

Based on meeting all eligibility criteria, a disability pension may be available to members with a minimum of 10 years of credit in the PSPP. The amount of the disability pension is dependent on years of credit and average annual salary.

TERMINATION PAYMENTS

Members terminating employment before age 55 who are eligible for a deferred pension may be entitled to transfer the commuted value of the pension to a locked-in registered retirement savings arrangement, to a life income fund, to another registered pension plan, or to purchase a life annuity.

TRANSFERS

Members joining the Plan may also be eligible to transfer their entitlement to/from another pension plan. OPB participates in transfer agreements with several public and private sector pension plans. Transfer agreements allow eligible members to move their pension credit from one participating plan to another. To be eligible for a transfer, there must be a transfer agreement or provision with the former pension plan, the transfer must be applied for within the time limit and the pension credit must still be in the former plan. OPB participates in the Major Ontario Pension Plans ("MOPPs") Pension Portability Agreement, the National Public Service Pension Transfer Agreement, the Ontario Public Service Employees Union Pension Plan ("OPSEU") transfer provision, and various bilateral Reciprocal Transfer Agreements ("RTAs").

INFLATION PROTECTION

Pension amounts are protected against inflation to help pensioners maintain their purchasing power throughout retirement through a cost of living adjustment. Current pensions and deferred pension benefits are increased for inflation based on the Consumer Price Index ("CPI") to a maximum of 8% in any one year. Any inflation above 8% in any one year is applied to increase the pension in subsequent years when the adjustment is less than 8%. Should the CPI be a negative number, pension amounts will remain unchanged.

Note 3: Summary of significant accounting policies

BASIS OF PRESENTATION

The financial statements are prepared in accordance with Canadian accounting standards for pension plans and present the financial statements of the PSPP as a separate entity independent of the employers, Plan Sponsor and Plan members.

In accordance with Section 4600, Pension Plans, of the CPA Canada Handbook – Accounting, Canadian accounting standards for private enterprises in Part II of the CPA Canada Handbook – Accounting have been chosen for accounting policies that do not relate to the investment portfolio or pension obligations to the extent that those standards do not conflict with the requirements of Section 4600.

All the entities that OPB has an ownership interest in, regardless of whether OPB can control or exercise significant influence, are investment assets which are presented on a non-consolidated basis.

All amounts are expressed in thousands of Canadian dollars, unless expressed otherwise.

Certain comparative amounts have been reclassified in Note 6 – Net investment income (loss) and Note 6b – Investment management and related fees to the financial statements to conform to the current year's presentation. The total unfunded commitment for 2022 has been adjusted in Note 9 – Commitments and guarantees.

USE OF ESTIMATES

The preparation of financial statements in conformity with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts on the statements of changes in net assets available for benefits and changes in pension obligations during the reporting period. Actual results could differ from those estimates. The most significant estimates affecting the financial statements relate to the determination of the pension obligations (Note 11) and the fair values of the Plan's Level 3 investments (Note 4b).

INVESTMENTS

Valuation

Investments are stated at their fair values, including accrued income. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair value of financial instruments is determined as follows:

- i. Cash and cash in trust is recorded at cost, which approximates fair value.
- ii. Short-term money market investments such as commercial paper, T-Bills, banker's acceptances and certificate of deposits (excluding corporate bonds) are recorded at cost, with accrued interest or amortized discount or premium, which approximates fair value.
- iii. Repurchase agreements and reverse repurchase agreements are recorded at cost, which together with accrued interest or amortized discount or premium, approximates fair value.
- iv. Fixed income instruments and bonds are valued at quoted market prices where available. Where there are no quoted prices on an active market, fair value is determined using a variety of pricing methodologies including evaluated bid-ask pricing, evaluated broker pricing, discounted cash flows based on current market yields for comparable securities (e.g., similar credit ratings, duration, etc.), or calculated using discounted cash flows based on market yield curves and credit spreads of the issuer.

- v. Private debt is valued using discounted future cash flows based on year-end market yields and credit spreads of the issuer (e.g., similar credit ratings of the borrower or financial incentives associated with the instrument).

Private debt funds are valued using the most recently available financial information provided by the investment managers and adjusted for any relevant information during the interim period up to the reporting date.

- vi. Public equities are valued at quoted closing market prices in an active market where available. Where quoted market prices in an active market are not available, other industry pricing conventions that are used by market participants such as ask price are used to estimate the values.
- vii. Pooled funds are valued using the most recently available financial information including net asset values or estimates provided by IMCO.
- viii. Exchange-traded derivatives are valued at quoted closing market prices if actively traded. Over-the-counter derivative instruments for which there is no active market are valued using appropriate valuation models based on industry-recognized methodologies, including discounted cash flows, Black-Scholes pricing models and Monte Carlo simulation models. The inputs used in the valuation models depend on the type of the derivative and the nature of the underlying instrument and are specific to the instrument being valued. Inputs can include, but are not limited to, interest rate yield curves, foreign exchanges rates, dividend yield projections, commodity spot and forward prices, recovery rates, volatilities, spot prices and correlation.
- ix. Real estate investments are either wholly or partially owned, directly or indirectly.

Directly owned income-producing real estate properties and related investments are valued based on the appraisals performed by qualified independent appraisers, performed at least annually, with quarterly updates. The appraisals use industry accepted valuation methodologies, including discounted cash flows, capitalization of revenue, and other valuation techniques. Inputs can include, but are not limited to, discount rates and capitalization rates, unless in limited circumstances where an appraisal is not required in order to arrive at the fair value (e.g., assets acquired during the year where cost is determined to approximate fair value, or when an asset is in a sale process with a strong indicative price which the sale will be closed at).

Non-operating real estate investments, such as vacant land and real estate assets under construction, are carried at cost or their latest independently appraised values, plus any additional development costs incurred since the appraisal date until such time as a change in fair value can be supported by external evidence.

Real estate related investment funds are valued based on the most recent net asset values provided by investment managers and adjusted for any relevant information during the interim period up to the reporting date of these financial statements.

- x. Infrastructure and private equity investments are valued using independent valuations or the most recently available information and adjusted for any transactions during the interim period up to the reporting date based on industry accepted valuation methodologies, including discounted cash flows, market comparables, and other valuation techniques. Inputs can include, but are not limited to, discount rates, and multiples of revenue, EBITDA or earnings, unless in limited circumstances where valuation using a valuation technique is not required in order to arrive at fair value (e.g., assets acquired during the year where cost is determined to approximate fair value, or when an asset is in a sale process with a strong indicative price which the sale will be closed at).

Infrastructure and private equity related investment funds are valued based on the most recent financial information provided by investment managers and adjusted for any relevant information during the interim period up to the reporting date of these financial statements.

Net investment income (loss)

Investment transactions are recorded on the trade date. Interest is recognized on an accrual basis. Dividend income is recognized on the ex-dividend date. Distributions from investments in pooled funds and limited partnerships are recognized when declared by the fund managers and general partners. Since real estate is valued on a fair value basis, depreciation and amortization are not recorded. Interest on participating mortgages is accrued at the rate stated in the instrument, and any participation income is accrued based on an estimate of OPB's participation in the change in the estimated fair values of the properties.

Net investment income (loss) includes fair value changes. Fair value changes represent both realized and change in unrealized gains and losses. Realized gains or losses are recognized when OPB has transferred to the purchaser the significant risks and rewards of ownership of the investment, the purchaser has made a substantial commitment demonstrating its intent to honour its obligation, and the collection of any additional consideration is reasonably assured.

Investment management and related fees

Transaction costs are costs attributable to the acquisition, issue, or disposal of investments and are expensed as incurred. External investment management fees, custodial fees, and IMCO investment management fees are recognized on an accrual basis.

Transaction costs, external investment management fees and IMCO investment management fees are reported as a component of net investment income (loss).

Foreign currency translation

Foreign currency transactions impacting income and expenses are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. The fair values of investments and cash balances denominated in foreign currencies are translated at the rates in effect at year-end. Realized exchange gains and losses from investment transactions are included in realized gains and losses at the time of sale of the investments. Unrealized exchange gains and losses from investment transactions 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 firm of actuaries using an actuarial valuation report prepared for funding purposes. This valuation uses the projected benefit cost method pro-rated based on service and management’s best estimate of various economic and non-economic assumptions. The year-end valuation of pension obligations is based on data extrapolated to the current financial statement year-end date.

CASH AND CASH IN TRUST

Cash is held directly by both OPB and IMCO. Cash held by IMCO is held in their bank accounts in trust for OPB.

CONTRIBUTIONS RECEIVABLE

Contributions due to the PSPP at year-end are recorded as contributions receivable. Transfers into the Plan and purchases of prior service are recorded after cash is received and the transfer or purchase transaction is completed.

RETIREMENT PENSION, TERMINATION AND OTHER BENEFITS

Retirement pension payments, commuted value transfers, refunds to former members, and transfers to other pension plans are recorded when paid.

CAPITAL ASSETS

Capital assets are carried at cost less accumulated depreciation. Depreciation is provided on a straight-line basis over the estimated useful lives of the capital assets as follows:

Computer equipment	3 years
Leasehold improvements	Remaining term of lease
Furniture and fixtures	10 years

NEW ACCOUNTING PRONOUNCEMENTS

Amendments to Section 4600, Pension Plans were issued in December 2022 and will be effective for fiscal years beginning on or after January 1, 2024. The amendments are not expected to have any impact on OPB's financial statements.

Note 4: Investments

The Plan's investments consist of the following:

As at December 31 (in thousands of dollars)	2023 Fair Value	2022 Fair Value
Cash held in trust and short-term investments (Note 4d)		
Canada	\$ 279,441	\$ 300,542
Global	14,335	64,411
	293,776	364,953
Fixed income		
Canada	5,554,406	6,673,149
Global	2,331,551	3,358,336
	7,885,957	10,031,485
Public equities		
Canada	-	6,476
Global	3,346	45,321
	3,346	51,797
Pooled funds (Note 4h)	15,815,160	12,216,058
Real estate (net of financing, Note 4e)	4,956,160	5,789,778
Infrastructure (Note 4h)	11	7,674
Private equity (Note 19)	5,048,388	4,131,013
Total investments	34,002,798	32,592,758
Investment-related assets		
Pending trades	-	12,860
Derivatives receivable (Note 5a)	204,466	32,383
Pooled fund units receivable (Note 4h)	94,000	-
Total investment-related assets	298,466	45,243
Investment-related liabilities		
Pending trades	71,000	16,356
Repurchase agreements	2,532,878	1,575,925
Derivatives payable (Note 5a)	5,276	23,340
Total investment-related liabilities	2,609,154	1,615,621
Total net investments	\$ 31,692,110	\$ 31,022,380

a) INVESTMENT ASSET MIX

The Plan's actual and target investment asset mix is summarized below as at December 31:

	2023		2022		
	Asset Allocation %		Asset Allocation %		2023
	Total Plan ¹	Target ¹	Total Plan	Target	SIP&P Range
Asset categories¹					
Cash	0.2%	1.0%	0.7%	0.0%	0.0%–11.0%
Fixed income ²	35.6%	38.0%	32.8%	35.0%	23.0%–53.0%
Public equities ³	20.1%	22.0%	22.9%	29.0%	9.5%–37.0%
Real estate (net of financing)	15.8%	15.0%	18.8%	15.0%	10.0%–20.0%
Infrastructure ⁴	13.5%	14.5%	12.2%	11.5%	9.5%–19.5%
Private equity	15.9%	12.5%	13.3%	9.5%	7.5%–17.5%
Public market alternatives ⁵	6.8%	7.0%	4.4%	7.0%	2.0%–12.0%
Total investments	107.9%	110.0%	105.1%	107.0%	
Portfolio leverage ⁶	(7.9)%	(10.0)%	(5.1)%	(7.0)%	(5.0%–15.0%)
Net investments	100.0%	100.0%	100.0%	100.0%	

1 The asset categories and asset allocations reflect the employment of portfolio leverage and allocations of derivative positions, pooled funds, investment-related receivables and investment-related liabilities.

2 Fixed income includes government nominal and inflation-linked bonds, publicly traded corporate bonds, privately held debt, and global credit pooled funds.

3 Public equities include pooled funds primarily investing in Canadian public equities, global public equities, and emerging markets public equities.

4 Infrastructure includes directly held infrastructure investments and infrastructure pooled funds.

5 Public market alternatives include pooled fund investing in a broad range of assets, including equities, fixed income, credit, and currencies, as well as derivatives, seeking to offer low correlation to public equities.

6 Portfolio leverage is the amount of borrowed funds and synthetic financing used to increase the amount of physical and synthetic invested assets, through derivatives, borrowed cash, repurchase agreements.

OPB's Statement of Investment Policies and Procedures ("SIP&P") was amended and effective December 1, 2023. The SIP&P was updated for changes in the Strategic Asset Allocation ("SAA") and asset benchmarks. The SAA does not allocate any assets to pooled funds as an asset class, although pooled funds are used to achieve allocations to the investment categories indicated above. As at December 31, 2023, the asset mix of the Plan's investments was within the target ranges as specified in the SIP&P as at the financial statement year end date. At December 31, 2022, the allocation of public equities was outside the ranges as specified in the SIP&P effective as at December 31, 2022, although this is permitted in certain circumstances. The deviation from the target ranges was mainly driven by challenging investment conditions for investing in public markets.

b) FAIR VALUE HIERARCHY

Canadian accounting standards for pension plans require disclosure of a three-level hierarchy for fair value measurements based on the transparency of inputs to the valuation of an asset or liability as of the financial statement year-end date. The three levels are defined as follows:

Level 1: Fair value is based on quoted market prices in active markets for identical assets or liabilities. Level 1 assets and liabilities generally include equity securities traded in an active exchange market.

Level 2: Fair value is based on observable inputs other than Level 1 prices, such as quoted market prices for similar (but not identical) assets or liabilities in active markets, quoted market prices for identical assets or liabilities in markets that are not active, and other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category generally includes pooled funds; hedge funds; Government of Canada, provincial and other government bonds; Canadian corporate bonds; and certain derivative contracts.

Level 3: Fair value is based on non-observable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This category generally includes investments in real estate properties, infrastructure, private equity, and securities that have liquidity restrictions.

The following tables present the level within the fair value hierarchy for investments and derivatives, excluding pending trades, for which a fair value hierarchy is not required.

As at December 31, 2023 (in thousands of dollars)	Level 1	Level 2	Level 3	Total Fair Value
Financial assets				
Cash in trust and short-term investments				
Canada	\$ 3,189	\$ 276,252	\$ -	\$ 279,441
Global	14,335	-	-	14,335
Fixed income				
Canada	-	5,522,118	32,288	5,554,406
Global	-	2,040,036	291,515	2,331,551
Public equities				
Global	3,346	-	-	3,346
Pooled funds	-	8,254,488	7,560,672	15,815,160
Real estate	28,565	63,114	4,864,481	4,956,160
Infrastructure	-	-	11	11
Private equity	199,490	-	4,848,898	5,048,388
Forwards	-	195,317	-	195,317
Futures	9,149	-	-	9,149
	\$ 258,074	\$ 16,351,325	\$ 17,597,865	\$ 34,207,264
Financial liabilities				
Repurchase agreements	\$ -	\$ 2,532,878	\$ -	\$ 2,532,878
Forwards	-	5,277	-	5,277
	\$ -	\$ 2,538,155	\$ -	\$ 2,538,155

As at December 31, 2022 (in thousands of dollars)	Level 1	Level 2	Level 3	Total Fair Value
Financial assets				
Cash in trust and short-term investments				
Canada	\$ 40,864	\$ 259,678	\$ -	\$ 300,542
Global	64,411	-	-	64,411
Fixed income				
Canada	408,016	6,029,598	235,535	6,673,149
Global	-	1,651,820	1,706,516	3,358,336
Public equities				
Canada	253	-	6,223	6,476
Global	45,321	-	-	45,321
Pooled funds	-	8,453,007	3,763,051	12,216,058
Real estate	-	-	5,789,778	5,789,778
Infrastructure	-	-	7,674	7,674
Private equity	197,285	-	3,933,728	4,131,013
Forwards	-	32,264	-	32,264
Futures	119	-	-	119
	\$ 756,269	\$ 16,426,367	\$ 15,442,505	\$ 32,625,141
Financial liabilities				
Repurchase agreements	\$ -	\$ 1,575,925	\$ -	\$ 1,575,925
Forwards	-	21,344	-	21,344
Futures	1,996	-	-	1,996
	\$ 1,996	\$ 1,597,269	\$ -	\$ 1,599,265

Transfers between levels of the fair value hierarchy are deemed to have occurred at the beginning of the reporting period. During the year ended December 31, 2023 and 2022, there were no transfers between Level 1 and Level 2. Transfers in and out of Level 3 are shown in the Level 3 investment reconciliation below.

c) LEVEL 3 INVESTMENT RECONCILIATION

The following tables present a reconciliation of Level 3 assets and liabilities measured at fair value.

(in thousands of dollars)	Fair Value as at January 1, 2023	Net Transfers In/(Out) ^{1,2}	Acquisitions	Dispositions	Retirement of Debt	Fair Value Changes ³	Fair Value as at December 31, 2023
Financial assets							
Fixed income							
Canada	\$ 235,535	\$ -	\$ -	\$ (192,457)	\$ -	\$ (10,790)	\$ 32,288
Global	1,706,516	-	1,062,556	(2,357,023)	-	(120,534)	291,515
Public equities	6,223	-	-	(6,249)	-	26	-
Pooled funds	3,763,051	-	3,827,082	(343,370)	-	313,909	7,560,672
Real estate	5,789,778	-	1,017,329	(1,022,766)	250,000	(1,169,860)	4,864,481
Infrastructure	7,674	-	1,166	(63,092)	-	54,263	11
Private equity	3,933,728	-	946,075	(80,235)	-	49,330	4,848,898
	\$15,442,505	\$ -	\$ 6,854,208	\$(4,065,192)	\$ 250,000	\$ (883,656)	\$17,597,865

1 Transfers between levels of the fair value hierarchy are deemed to have occurred at the beginning of the reporting period.

2 Gross transfers out of Level 3 amounted to \$nil and gross transfers in amounted to \$nil.

3 Fair value changes include realized gains (losses) and changes in unrealized gains (losses).

(in thousands of dollars)	Fair Value as at January 1, 2022	Net Transfers In/(Out) ^{4,5}	Acquisitions	Dispositions	Retirement of Debt	Fair Value Changes ⁶	Fair Value as at December 31, 2022
Financial assets							
Fixed income							
Canada	\$ 285,663	\$ -	\$ 47	\$ (16,689)	\$ -	\$ (33,486)	\$ 235,535
Global	879,597	-	827,781	(99,986)	-	99,124	1,706,516
Public equities	5,962	-	-	-	-	261	6,223
Pooled funds	-	-	3,763,051	-	-	-	3,763,051
Real estate	5,036,310	-	778,407	(375,977)	500,000	(148,962)	5,789,778
Infrastructure	2,669,431	-	972,421	(3,074,965)	-	(559,213)	7,674
Private equity	3,230,993	-	851,607	(274,099)	-	125,227	3,933,728
	\$ 12,107,956	\$ -	\$ 7,193,314	\$(3,841,716)	\$ 500,000	\$ (517,049)	\$ 15,442,505

4 Transfers between levels of the fair value hierarchy are deemed to have occurred at the beginning of the reporting period.

5 Gross transfers out of Level 3 amounted to \$nil and gross transfers in amounted to \$nil.

6 Fair value changes include realized gains (losses) and changes in unrealized gains (losses).

d) CASH IN TRUST AND SHORT-TERM INVESTMENTS

The following table provides a breakdown of the cash in trust and short-term investments.

As at December 31 (in thousands of dollars)	2023	2022
Canada		
Cash in trust	\$ 3,189	\$ 40,863
Short-term notes and treasury funds	276,095	259,263
Accrued interest	157	416
	\$ 279,441	\$ 300,542
Global		
Cash in trust	\$ 14,335	\$ 64,411
	\$ 14,335	\$ 64,411

e) REAL ESTATE

The following table provides a breakdown of the real estate portfolio by its major components.

As at December 31 (in thousands of dollars)	2023	2022
Assets		
Wholly directly owned real estate	\$ 565,600	\$ 1,404,500
Partially owned investments ¹	5,690,087	5,908,583
Participating mortgages ²	165,539	152,313
Total assets	6,421,226	7,465,396
Liabilities		
Debentures ³	1,459,107	1,663,521
Other liabilities, net ⁴	5,959	12,097
Total liabilities	1,465,066	1,675,618
Net investment in real estate	\$ 4,956,160	\$ 5,789,778

1 Investments held through partially owned non-controlling co-ownerships, funds, or similar investment vehicles consist of real estate properties and any related assets and liabilities.

2 Participating mortgages are held directly by OPB.

3 The debentures represent securities issued by OPB Finance Trust and are guaranteed by OPB. See Note 9.

4 Working capital held in wholly owned real estate investments.

f) OFFSETTING FINANCIAL ASSETS AND LIABILITIES

The following table presents the financial instruments subject to enforceable master netting arrangements and other similar agreements but not offset. The Plan presents these financial instruments as a gross amount in the investment breakdown presented in note 4. The column "net amount" shows the impact on the Plan's statement of financial position if all set-off rights were exercised.

					2023
As at December 31 (in thousands of dollars)	Gross Amounts Presented in the Statement of Financial Position	Related Amounts Not Offset			Net Amount
		Amounts Subject to Master Netting Arrangements	Financial Collateral (Received)/ (Pledged) ¹		
Financial assets					
Derivatives	\$ 204,466	\$ (798)	\$ (74,863)	\$	128,805
Securities lending ²	131,269	-	(131,269)		-
Total financial assets	\$ 335,735	\$ (798)	\$ (206,132)	\$	128,805
Financial liabilities					
Repurchase agreements	2,532,878	-	(2,530,735)		2,143
Derivatives	5,276	(798)	-		4,478
Total financial liabilities	\$ 2,538,154	\$ (798)	\$ (2,530,735)	\$	6,621

1 Refer to Note 8 for information relating to collateral received and pledged.

2 Included within fixed income investment assets in Note 4.

					2022
As at December 31 (in thousands of dollars)	Gross Amounts Presented in the Statement of Financial Position	Related Amounts Not Offset			Net Amount
		Amounts Subject to Master Netting Arrangements	Financial Collateral (Received)/ Pledged ³		
Financial assets					
Derivatives	\$ 32,383	\$ (5,460)	\$ -	\$	26,923
Securities lending ⁴	269,822	-	(269,822)		-
Total financial assets	\$ 302,205	\$ (5,460)	\$ (269,822)	\$	26,923
Financial liabilities					
Repurchase agreements	1,575,925	-	(1,571,500)		4,425
Derivatives	23,340	(5,460)	(5,212)		12,668
Total financial liabilities	\$ 1,599,265	\$ (5,460)	\$ (1,576,712)	\$	17,093

3 Refer to Note 8 for information relating to collateral received and pledged.

4 Included within fixed income and public equity investment assets in Note 4.

g) SIGNIFICANT INVESTMENTS

The following table summarizes where the fair value of an individual investment, excluding derivatives, exceeds 1% of the fair value of the Plan. As at December 31, 2023, 1% of the Plan was approximately \$317,381 and as at December 31, 2022 it was \$310,312.

As at December 31 (in thousands of dollars)	2023 Fair Value	2022 Fair Value
Fixed income		
2187427 Ontario Inc. ¹	\$ -	\$ 405,188
2742627 Ontario Inc. ¹	-	941,499
Government of Canada Bond 2.75% 12/1/2055	326,874	-
Province of Quebec Bond 3.5% 12/1/2045	325,190	-
Pooled funds (Note 4h)	15,815,160	12,216,058
Real estate, gross of financing²	3,772,402	3,877,464
Private equity¹		
OPB (PE B) Limited	730,075	-
OPB Private Equity (KBI IX) Limited	641,556	499,498
OPB Private Equity 5 Limited	609,374	676,711
OPB Private Equity 3 Limited	489,738	469,735
OPB Private Equity 6 Limited	447,187	433,415
OPB (PE A) Limited	428,565	-
OPB Private Equity 8 Limited	409,485	353,415
OPB Private Equity 9 Limited	408,253	331,770

1 Investments owned by 100% OPB owned holding companies.

2 Includes the following holding companies in 2023, which are 100% owned: OPB Realty Inc., OPB (TDC) Inc., OPB (Van Centre) Inc., OPB (155 Wellington) Inc., OPB Real Estate Investments, OPB Real Estate Investments (US) 2 Ltd. and OPB Real Estate Investments (US) Limited. The last valuation of each real estate investment was as at December 31, 2023. (2022: Includes the following holding companies, which are 100% owned: OPB Realty Inc., OPB (TDC) Inc., OPB (Van Centre) Inc., OPB (155 Wellington) Inc., OPB Real Estate Investments and OPB Real Estate Investments (US) 2 Ltd. The last valuation of each real estate investment was as at December 31, 2022).

h) POOLED FUNDS

A pooled fund unit gives its holder a proportionate share in the value of the net assets of the pooled fund. Each pooled fund has a specific mandate; however, the fund may hold cash, short-term investments, accrued interest income and pending trades of investments.

On December 30, 2022, IMCO launched the IMCO Infrastructure LP. On the execution of the pooled fund, there was an in-kind transfer of assets at fair value of cash and indirect and direct infrastructure investments held by OPB into the pooled fund. A fair value of \$3,763 million of substantially all of the infrastructure assets held by OPB was transferred into the pool and 37,630,505 units were issued to OPB in return.

On June 30, 2023, IMCO restructured the IMCO Global Credit LP into the IMCO Global Credit pooled fund. On the execution of the pooled fund, there was an in-kind transfer of assets at fair value of cash and indirect and direct global credit investments held by OPB into the pooled fund. A fair value of \$2,421 million of assets was transferred into the pool and 20,589,659 units were issued to OPB in return.

Fund	Investment Objective
IMCO Canadian Public Equity LP	To provide long-term growth through capital appreciation and dividend income by investing directly or indirectly in entities that are publicly traded in Canada and mostly based in Canada.
IMCO Global Public Equity LP	To provide long-term growth through capital appreciation and dividend income by investing directly or indirectly in entities that are publicly traded in developed market economies.
IMCO Emerging Markets Public Equity LP	To provide long-term growth through capital appreciation and dividend income by investing directly or indirectly in entities that are publicly traded in developing market economies.
IMCO Public Market Alternatives LP	To enhance risk-adjusted expected returns by providing exposure to alternative risk premiums and active investment mandates that offer low correlation with public equities.
IMCO Infrastructure LP	To generate long-term inflation linked total returns comprised of a combination of stable income yield and some capital appreciation over time by investing in a diversified portfolio of global infrastructure assets.
IMCO Global Credit LP	To invest in a globally diversified portfolio of public and private credit securities with an actively managed and return-seeking strategy adding value relative to its benchmark, while maintaining a long-term exposure to credit.

(in thousands of dollars)	December 31, 2023		December 31, 2022	
	Ownership	Market Value	Ownership	Market Value
Fund				
IMCO Canadian Public Equity LP	60.85%	\$ 804,970	63.89%	\$ 970,542
IMCO Global Public Equity LP	27.52%	3,597,032	27.99%	3,754,377
IMCO Emerging Markets Public Equity LP	59.33%	1,735,998	65.19%	2,330,043
IMCO Public Market Alternatives LP	46.13%	2,116,488	30.45%	1,398,045
IMCO Infrastructure LP	45.06%	4,259,920	44.66%	3,763,051
IMCO Global Credit LP	47.09%	3,300,752	-	-
Total pooled funds		\$ 15,815,160		\$ 12,216,058

Pooled Fund Units Receivable

The Plan has pooled fund units receivable of \$94,000 in the IMCO Infrastructure LP as at December 31, 2023, which was settled on January 2, 2024, in exchange for 907,600 units in the IMCO Infrastructure LP.

i) SENSITIVITY TO CHANGES IN ASSUMPTIONS

The following table presents the Plan's assets recognized at fair value and classified as Level 3, together with the significant inputs used in the valuation technique that are considered unobservable, and a range of values for those unobservable inputs. The range of values represents the highest and lowest inputs used in calculating the fair value. The change in significant inputs and increase or decrease to fair value illustrates the impact to fair value when the significant inputs are changed to reasonable alternative assumptions.

As at December 31, 2023 (in thousands of dollars)	Significant Unobservable Inputs	Range of Inputs	Change in Significant Inputs		(Decrease) Increase to Fair Value
Private debt	Discount rate	6.2%-7.8%	+/-	0.25%	\$ (697) / 719
Private equity	EBITDA multiple ¹	7.6x-28x	+/-	0.5x	(81,362) / 81,413
	P/E multiple ²	9.1x	+/-	0.5x	(12,035) / 12,036
Real estate	Discount rate	6.13%-10.25%	+/-	0.25%	(63,228) / 64,686

1 EBITDA is defined as earnings before interest, taxes, depreciation, and amortization.

2 P/E is defined as price-to-earnings.

As at December 31, 2022 (in thousands of dollars)	Significant Unobservable Inputs	Range of Inputs	Change in Significant Inputs		(Decrease) Increase to Fair Value
Private debt	Discount rate	6.2%–18.3%	+/-	0.25%	\$ (1,477) / 1,516
Private equity	EBITDA multiple ¹	6.3x–25.9x			
	Revenue multiple	4.2x	+/-	0.5x	(57,278) / 57,243
	P/E multiple ²	8.6x			
Real estate	Discount rate	5.5%–10.0%	+/-	0.25%	(79,248) / 80,827

1 EBITDA is defined as earnings before interest, taxes, depreciation, and amortization.

2 P/E is defined as price-to-earnings.

The above sensitivity excludes investment funds which utilize net asset values reported by the general partners or external fund managers, unless there is a specific and objectively verifiable reason to vary from the value provided. The range for net asset values per unit or price per share has not been disclosed for these investments since the valuations are not model-based. In addition, it excludes investments where cost, direct comparisons or proceeds from sale is used as an approximation for fair value.

Note 5: Derivative contracts

Derivatives are financial or commodity contracts, whose market price, value, delivery obligations, payment obligations or settlement obligations are derived from, referenced to or based on, an underlying interest that may include stocks, bonds, commodities, currencies, interest rates and market indices. Derivative strategies can be implemented using a wide range of instruments including, but not limited to, forwards, futures, swaps and options.

Derivatives may be used for various purposes including to:

- Hedge (fully or partly) any investment risk, including market, interest rate, credit, liquidity or currency risk;
- Alter the risk and return profile of investments, replicate investments in the underlying assets or groups of assets (e.g., indices) so as to achieve some advantage of lower cost, transactional ease, or market exposure;
- Improve the efficiency of achieving investment objectives;
- Create unique risk and return payoffs; or
- Implement systematic and/or active (i.e., transient) leverage.

The Plan utilizes the following types of derivative contracts:

FUTURES CONTRACTS

Futures contracts are standardized agreements that can be purchased or sold on a futures exchange market at a predetermined future date and price specified at origination of the contract, in accordance with terms specified by the regulated futures exchange, and are subject to daily cash margining. These types of derivatives are used to efficiently modify exposures without purchasing or selling the underlying assets.

FORWARD CONTRACTS

Currency forward contracts are negotiated agreements between two parties to exchange a notional amount of one currency for another at an exchange rate specified at origination of the contract, with settlement at a specified future date. Currency forward contracts are used by OPB to modify currency exposure for both passive and active hedging.

SWAPS

In an interest rate swap, the parties exchange cash flows based on a notional principal amount (this amount is not actually exchanged) in order to hedge against interest rate risk.

In a total return swap, the total return from an asset is exchanged for another defined asset or portfolio of assets. This gives the party exposure to the underlying asset without having to expend the capital to hold it.

Credit default swaps are a type of credit derivative used to transfer credit risk of an underlying financial instrument or group of securities from one party to another. In a credit default swap, the buyer of the swap pays a regular premium to the seller in return for protection against any loss of the notional amount of the underlying securities if a credit event, such as a default, occurs.

OPTIONS

Options are contractual agreements under which the buyer has the right, but not the obligation, to either buy (call option) or sell (put option) an underlying asset at a predetermined price on or before a specified future date. Conversely, the seller has the obligation to sell (call option) or buy (put option) an underlying asset at a predetermined price if the option is exercised by the buyer on or before a specified future date.

a) DERIVATIVE NOTIONAL AND FAIR VALUES

The following schedule summarizes the notional amounts and fair values of the Plan's directly held derivative positions.

As at December 31 (in thousands of dollars)	Notional Value	2023				2022	
		Fair Value				Fair Value	
		Assets	Liabilities	Notional Value	Assets	Liabilities	
Equity							
Futures	\$ 221,188	\$ 9,149	\$ -	\$ 38,661	\$ 119	\$ 223	
Currency							
Forwards	10,953,745	195,317	5,276	13,617,684	32,264	21,344	
Fixed income							
Futures	-	-	-	56,986	-	1,773	
Total	\$ 11,174,933	\$ 204,466	\$ 5,276	\$ 13,713,331	\$ 32,383	\$ 23,340	

b) DERIVATIVE NOTIONAL VALUES BY TERM TO MATURITY

The maturities of the Plan's notional values for the Plan's derivative positions are as follows:

As at December 31 (in thousands of dollars)	2023				2022			
	< 1 year	≥ 1-3 years	> 3-5 years	Total	< 1 year	≥ 1-3 years	> 3-5 years	Total
Currency forwards	\$10,953,745	\$ -	\$ -	\$10,953,745	\$13,617,684	\$ -	\$ -	\$13,617,684
Equity futures	221,188	-	-	221,188	38,661	-	-	38,661
Fixed income futures	-	-	-	-	56,986	-	-	56,986
Total	\$11,174,933	\$ -	\$ -	\$11,174,933	\$13,713,331	\$ -	\$ -	\$13,713,331

Note 6: Net investment income (loss)

The Plan's net investment income (loss) is as follows:

For the year ended December 31 (in thousands of dollars)	2023			2022		
	Income ^{1,2}	Fair Value Changes ³	Investment Income (Loss)	Income ^{1,2}	Fair Value Changes ³	Investment Income (Loss)
Cash in trust and short-term investments						
Canada (Note 6a)	\$ 12,004	\$ (131)	\$ 11,873	\$ 8,544	\$ (915)	\$ 7,629
Global (Note 6a)	130	(1,197)	(1,067)	27	3,553	3,580
	12,134	(1,328)	10,806	8,571	2,638	11,209
Fixed income						
Canada	219,613	164,415	384,028	210,390	(1,643,088)	(1,432,698)
Global	111,293	(59,427)	51,866	57,800	(15,676)	42,124
	330,906	104,988	435,894	268,190	(1,658,764)	(1,390,574)
Public equities						
Canada	155	(93)	62	484	(693)	(209)
Global	819	(3,570)	(2,751)	1,678	(134,845)	(133,167)
	974	(3,663)	(2,689)	2,162	(135,538)	(133,376)
Pooled funds (Note 6c)	-	1,336,987	1,336,987	-	(1,136,766)	(1,136,766)
Real estate	216,339	(1,225,752)	(1,009,413)	286,778	(185,008)	101,770
Infrastructure	55,148	794	55,942	831,719	(566,201)	265,518
Private equity	105,194	52,840	158,034	294,136	8,878	303,014
Reverse repurchase agreements	240	(58)	182	4	109	113
Repurchase agreements	(95,630)	30,459	(65,171)	(21,260)	(40,526)	(61,786)
Derivatives	-	180,144	180,144	206	(396,045)	(395,839)
Total investment income (loss)	\$ 625,305	\$ 475,411	\$ 1,100,716	\$ 1,670,506	\$(4,107,223)	\$ (2,436,717)
Investment management and related fees (Note 6b)			(145,324)			(123,447)
Net investment income (loss)			\$ 955,392			\$ (2,560,164)

1 Income includes interest on cash and short-term investments, fixed income and participating mortgages, dividend income on equities, and distributions from pooled funds and limited partnerships.

2 Net of management fees incurred on investments in real estate, infrastructure, private equity, and private debt that are deducted from the managed assets.

3 Includes realized losses of \$454,770 and change in unrealized gains of \$930,181 in 2023 (2022: losses of \$505,137 and \$3,602,086 respectively).

a) CASH IN TRUST AND SHORT-TERM INVESTMENTS

Earnings from pooled short-term investment funds are included within short-term notes and treasury funds. Interest income from cash in trust and short-term investments is as follows:

For the year ended December 31
(in thousands of dollars)

	2023	2022
Canada		
Cash in trust	\$ 646	\$ 2,286
Short-term notes and treasury funds	11,358	6,258
	\$ 12,004	\$ 8,544
Global		
Short-term notes and treasury funds	130	27
	\$ 130	\$ 27

b) INVESTMENT MANAGEMENT AND RELATED FEES

The following table provides a breakdown of the investment management and related investment fees.

For the year ended December 31
(in thousands of dollars)

	2023	2022
IMCO management fees ¹	\$ 142,066	\$ 114,676
External investment management fees ²	2,585	4,866
Transaction costs ^{2,3}	375	1,942
Custodial fees ²	218	1,808
Other fees ^{2,4}	80	155
	\$ 145,324	\$ 123,447

1 IMCO management fees represent OPB's share of IMCO's operating expenses, which are charged back to its clients on a cost recovery basis.

2 The external investment management fees invoiced by third parties, custodial fees, other fees were paid by IMCO as agent for OPB and reimbursed by OPB (Note 17).

3 Transaction costs consist primarily of commissions and fees on public equity and futures trades.

4 Other fees include professional services and CEM benchmarking fees.

c) POOLED FUNDS NET INVESTMENT INCOME (LOSS)

The following schedule summarizes the net investment income (loss) of the Plan's pooled funds:

For the year ended December 31
(in thousands of dollars)

	2023	2022
IMCO Canadian Public Equity LP	\$ 118,427	\$ (59,488)
IMCO Global Public Equity LP	724,655	(695,971)
IMCO Emerging Markets Public Equity LP	172,064	(404,203)
IMCO Public Market Alternatives LP	(16,557)	22,896
IMCO Infrastructure LP	192,171	-
IMCO Global Credit LP	146,227	-
Total pooled funds net investment income (loss)	\$ 1,336,987	\$ (1,136,766)

Note 7: Risk management

The Plan is subject to financial risks as a result of its investing activities that could impact its cash flows, income and assets available to meet benefit obligations. These risks include market risk (including interest rate risk, currency risk and other price risk), credit and counterparty risk, liquidity risk, and others as applicable. As Plan administrator, OPB is responsible for the management of the Plan and the policies that govern the Plan. OPB manages these risks in accordance with the SIP&P, which prescribes the SAA, performance measurement, permitted investments, shareholder rights and environmental, social and governance issues, conflicts of interest and related party transactions, and valuation of infrequently traded assets. OPB has delegated the investment of substantially all of the Plan assets to IMCO, which may further sub-delegate to other investment managers and service providers. IMCO must act in accordance with any written directions of OPB, certain specified policies of OPB, as well as all applicable IMCO policies. In investing the assets of the Plan, IMCO must comply with the SIP&P, IMCO's internal policies and all relevant laws and regulations.

MARKET RISK

Market risk is the risk that the fair value or future cash flows of an investment will fluctuate because of changes in market factors. Market risk comprises the following:

Interest rate risk

Interest rate risk refers to the effect on the fair value of the Plan's assets and liabilities due to fluctuations in market interest rates. The value of the Plan's investments is affected by changes in nominal and real interest rates. Pension liabilities are exposed to fluctuations in long-term interest rates and inflation.

Management

The Plan has established an asset mix policy that balances interest-rate-sensitive investments with other investments. OPB's fixed income investments, real estate debentures, interest rate derivatives, repurchase agreements and reverse repurchase agreements have exposure to interest rate risk. Duration and weighting for the fixed income portfolio are actively managed.

Measurement

Effective duration is a measure of the sensitivity of the price of a financial instrument to a change in interest rates. Given the effective duration of 12.3 years at December 31, 2023 (2022 - 14 years) and a total net fair value of \$7,485 million (2022 - \$7,118 million), a parallel shift in the interest rate curve of +/-1% would result in an approximate impact of +/- \$947 million (2022 - +/- \$958 million) on net investments with all other variables held constant. This calculation includes fixed income investments, real estate debentures, interest rate derivatives, repurchase agreements and reverse repurchase agreements. In practice, actual results may differ materially from this sensitivity analysis.

Currency risk

Currency exposure arises from the Plan holding foreign currency denominated investments and entering contracts that provide exposure to currencies other than the Canadian dollar. Fluctuations in the value of the Canadian dollar against these foreign currencies can have an impact on the fair value of investments.

Management

Currency risk is managed by IMCO through currency hedging. Implementation of any currency hedging strategy is accomplished through the use of instruments such as forwards, futures, options, and swaps.

Measurement

The impact to the Plan of a 5% absolute change in foreign exchange rates relative to the Canadian dollar are as follows:

As at December 31, 2023 (in thousands of dollars)	Gross Exposure	Currency Contracts Receivable	Currency Contracts Payable	Net Exposure	Impact of +/- 5% Change
U.S. dollar	\$ 2,113,514	\$ 736,033	\$ (8,487,576)	\$ (5,638,029)	+/- \$281,901
Euro currency unit	1,951	6,812	(841,232)	(832,469)	+/- 41,623
Australian dollar	18	-	(408,843)	(408,825)	+/- 20,441
Pound sterling	2	1,152	(269,055)	(267,901)	+/- 13,395
Other	3,612	2,319	(8,813)	(2,882)	+/- 176
Total foreign	2,119,097	746,316	(10,015,519)	(7,150,106)	+/- \$357,505
Canadian dollar	29,382,972	10,206,494	(747,251)	38,842,215	
	\$ 31,502,069	\$ 10,952,810	\$(10,762,770)	\$ 31,692,109	

As at December 31, 2022 (in thousands of dollars)	Gross Exposure	Currency Contracts Receivable	Currency Contracts Payable	Net Exposure	Impact of +/- 5% Change
U.S. dollar	\$ 2,894,974	\$ 1,893,425	\$ (7,639,183)	\$ (2,850,784)	+/- \$142,539
Euro currency unit	818	672,682	(1,436,866)	(763,366)	+/- 38,168
Australian dollar	6,103	418,981	(821,343)	(396,259)	+/- 19,813
Pound sterling	921	247,811	(463,605)	(214,873)	+/- 10,744
Chinese renminbi	49,853	-	(578)	49,275	+/- 2,464
Other	3,062	-	-	3,062	+/- 153
Total foreign	2,955,731	3,232,899	(10,361,575)	(4,172,945)	+/- \$208,647
Canadian dollar	28,055,729	10,378,640	(3,239,044)	35,195,325	
	\$ 31,011,460	\$ 13,611,539	\$ (13,600,619)	\$ 31,022,380	

Other price risk

Other price risk is the risk that the fair value of an investment will fluctuate because of changes in market prices other than those arising from foreign currency or interest rate risk, whether those changes are caused by factors specific to the individual investment or factors affecting all securities traded in the market.

Management

IMCO manages other price risk through diversification and regular monitoring of the performance of the Plan against approved benchmarks.

Measurement

An absolute change in the fair value of OPB's investments that are exposed to other price risk will have a direct proportional impact on the fair value of the investments. OPB's investments in public equities or pooled funds holding public equities have the most significant exposure to other price risk. The impact of a 10% absolute change in the price of an investment, holding all other variables constant, is 10% of the net exposure of the impacted investment, as follows:

(in thousands of dollars)			Change in Net Assets as at	
	Stock Market Benchmark	Change in Price Index	December 31, 2023	December 31, 2022
Canadian	S&P/TSX Composite Index	+/- 10%	+/- \$ 80,497	+/- \$ 97,499
Global	MSCI World Index (C\$)	+/- 10%	+/- 367,399	+/- 376,488
Emerging	MSCI Emerging Markets Index (C\$)	+/- 10%	+/- 188,627	+/- 234,947
			+/- \$ 636,523	+/- \$ 708,934

The sensitivity analysis is performed using the total Plan actual investment asset mix weights summarized in Note 4a as at December 31, 2023 and 2022.

CREDIT AND COUNTERPARTY RISK

Credit risk is the risk of loss resulting from a borrower's failure to repay or meet contractual obligations. The Plan is exposed to credit risk through investments in fixed income instruments as there is a risk of default. Counterparty risk is the risk of loss arising from a counterparty defaulting on its obligations, the insolvency of a counterparty, or the risk of a market decline resulting from the deterioration in the credit quality of a counterparty. The Plan is exposed to counterparty risk through investments in derivatives, reverse repurchase agreements, and securities lending transactions.

Management

IMCO manages credit risk by creating a diversified portfolio of investments and employing a multi-sector strategy. In creating a diversified portfolio, IMCO will invest according to a risk strategy outlining specified target allocation ranges by risk strategy (i.e., investment grade), geographical focus and investment vehicle.

In mitigating counterparty risk, IMCO will initiate counterparty transactions with parties on its approved counterparty list, which meet a minimum credit rating requirement. IMCO is responsible for monitoring the credit ratings of counterparties and reviewing those who suffer a downgrade.

Derivatives

Counterparty risk from derivatives is managed through due diligence on potential counterparties, use of appropriate legal documentation such as International Swaps and Derivatives Association ("ISDA") master agreements, by imposing counterparty risk exposure limits, or by the use of a Credit Support Annex ("CSA") under an ISDA master agreement. IMCO maintains and reviews a list of approved counterparties which, at a minimum, have a long-term credit rating of A or higher as rated by S&P (or equivalent Moody's or Fitch long-term rating) and a short-term rating of A1 or higher as rated by S&P (equivalent Moody's or Fitch short-term rating). IMCO also reviews counterparties who suffer a credit rating downgrade, even if they continue to meet the minimum credit ratings noted and maintains and reviews counterparty exposure limits, considering current exposure, with limits commensurate with the credit rating of the counterparty. Liquidity and collateral management processes are also in place by IMCO. See note 8 for details of collateral held or pledged pertaining to derivatives.

Reverse repurchase agreements

In a reverse repurchase agreement, OPB is the buyer/lender and gives a third-party (the seller/borrower) cash in exchange for collateral and a promise to repurchase the assets in the future. Credit risk exists in a reverse repurchase agreement even if the collateral is of very high quality. There is a risk that the seller/borrower will not have sufficient funds to repay the loan (repurchase the securities) at the end of the term. To mitigate this risk, IMCO diversifies across no less than 3 counterparties, and has legal agreements that set out the remedies in the event of default and requires additional margin collateral to be exchanged if the value of the collateral increases or declines resulting in the loan being over or under collateralized.

Securities lending

On behalf of the Plan, IMCO may lend investments in accordance with its securities lending program. The IMCO securities lending program is managed pursuant to written agreements with securities lending agents. The securities lending agents shall have a minimum long-term credit rating of A, or equivalent, as rated by a recognized credit rating service. The lending agents monitor counterparty credit risk and collateral, negotiate individual callable loans, and charge competitive fees. The lending agent will also provide indemnification from losses due to factors such as a borrower default, failure of security recall, or operational and settlement risks. There is a maximum percentage of assets that may be on loan at any given time. All loans are secured by readily marketable securities having a market value greater than the outstanding market value of the loaned investments. The value of collateral held shall not be less than 102% of the market value of loaned securities and must be in the form of readily marketable securities. Securities on loan must be able to be recalled in sufficient time to permit timely delivery on trade settlement if the loaned securities are sold or timely delivery if the loaned security must be pledged as collateral. See note 8 for collateral received pertaining to the securities lending program.

Measurement

Counterparty and credit risk exposure is measured by the fair value of contractual obligations less any collateral or margin received from the counterparties. The use of credit ratings allows the Plan to assess the creditworthiness of counterparties using an independent source. As at December 31, 2023, the Plan's greatest credit exposure to a single securities issuer is with the Government of Canada in the form of interest-bearing securities for \$2.2 billion (2022 - with the Government of Canada for \$2.4 billion).

The credit risk exposure, without considering any collateral held, is as follows:

As at December 31 (in thousands of dollars)	2023 Total Risk Exposure	2022 Total Risk Exposure
Credit risk		
Fixed income		
AAA	\$ 4,649,617	\$ 3,961,518
AA	2,853,120	2,780,066
A	59,419	108,195
BBB	-	232,006
BB	-	86,765
B	-	44,998
CCC	-	13,353
Not rated	323,801	2,804,584
Total fixed income	\$ 7,885,957	\$ 10,031,485
Short-term investments		
AAA	276,252	200,940
A	-	58,739
Total short-term investments	\$ 276,252	\$ 259,679
Counterparty risk		
Derivative assets		
AA	107,044	16,836
A	97,422	15,547
Total derivative assets	\$ 204,466	\$ 32,383
Securities lending		
AA-	42,884	221,704
A+	37,936	14,775
A	6,915	6,914
A-	42,564	-
Not rated	1,129	26,429
Total securities lending	\$ 131,428	\$ 269,822

Note 4f illustrates the maximum net exposure to counterparty risk in derivatives, repurchase agreements, reverse repurchase agreements and securities lending by summarizing the amount of collateral held or pledged as security and their financial effect to mitigate credit risk exposure.

LIQUIDITY RISK

Liquidity risk is the risk that the Plan has insufficient cash flows to meet its pension obligations and operating expenses as they become due. The typical cash requirements of the Plan are in the form of monthly retirement benefit payments as well as periodic termination and other benefit payments and expenses.

Management

OPB manages liquidity risk by maintaining a physical cash reserve and performing regular cash flow projections to ensure the Plan can meet obligations. Most cash requirements are typically met through member, employer, and Plan Sponsor contributions. Additional cash requirements can be met through investment liquidity. In January 2023, OPB entered into a new \$130 million overdraft credit facility to reduce potential liquidity risks and ensure client and operational disbursements are made in instances where there is a delay in funds made available from the investment portfolio.

IMCO manages liquidity risk by determining how much liquid assets should be maintained, the portion of liquid assets to be held as cash, day-to-day management of cash inflows and outflows, monitoring and reporting of measures including a liquidity coverage ratio and acknowledging and responding to crisis environment conditions. An IMCO liquidity committee is also responsible for overseeing a crisis environment plan and approving any breach remediation plans. A crisis environment condition is triggered by a drop in the S&P 500 of 10% (USD) over the prior week in conjunction with a drop of 15% over the prior month or as declared by the liquidity committee during period of significant market stress.

Measurement

The remaining contractual maturities of the Plan's investment related liabilities are as follows:

	2023				
(in thousands of dollars)	< 1 year	≥ 1-5 years	> 5-10 years	> 10 years	Total
Debentures ¹	\$ -	\$ 1,000,000	\$ -	\$ 500,000	\$ 1,500,000
Derivatives payable	5,276	-	-	-	5,276
Repurchase agreements	2,532,878	-	-	-	2,532,878
Total	\$ 2,538,154	\$ 1,000,000	\$ -	\$ 500,000	\$ 4,038,154

1 Refer to Note 9 for additional information.

	2022				
(in thousands of dollars)	< 1 year	≥ 1-5 years	> 5-10 years	> 10 years	Total
Debentures ²	\$ 250,000	\$ 1,000,000	\$ -	\$ 500,000	\$ 1,750,000
Derivatives payable	23,340	-	-	-	23,340
Repurchase agreements	1,575,925	-	-	-	1,575,925
Total	\$ 1,849,265	\$ 1,000,000	\$ -	\$ 500,000	\$ 3,349,265

2 Refer to Note 9 for additional information.

INTEREST RATE BENCHMARK REFORM

The Canadian Dollar Offered Rate benchmark ("CDOR") is a daily benchmark reference rate for Bankers' Acceptance ("BA") borrowings. CDOR is currently the primary interest rate benchmark in Canada and is widely used in other Canadian dollar financial instruments including interest rate swaps, exchange-traded futures, loans and floating rate notes. Refinitiv Benchmark Services (UK) Limited ("RBSL") is the administrator of CDOR. On June 28, 2024 RBSL will cease the calculation and publication of CDOR. As at December 31, 2023, the Plan held \$nil (2022: \$34 million) of directly held non-derivative financial assets, fixed income investments, referencing CDOR.

Note 8: Collateral

Collateral management is the process of exchanging collateral in the form of securities or cash transferred as security between two counterparties in financial transactions, such as Futures, Credit Default Swaps, Interest Rate Swaps, Currency Forwards, Repurchase Agreements, and Securities Lending. The collateral requirements for these financial transactions are governed by the terms of the negotiated CSA agreements, which outline permissible assets to pledge or receive as collateral, minimum transfer amounts and haircut schedules. The ultimate objective of collateral management is to mitigate counterparty credit risk exposure, described in note 7.

DERIVATIVES

Initial margin for centrally cleared derivatives (Futures and Credit Default Swaps) is the minimum collateral required to be posted at the outset of a derivatives transaction and is typically based on a percentage of the notional contract value or a fixed amount based on the number of contracts. Non-centrally cleared derivatives (Currency Forwards or Interest Rate Swaps) are private deals governed by the terms of the ISDA and CSA agreement negotiated with each counterparty.

Securities pledged under derivatives arrangements continue to be recognized as OPB's investments, as OPB retains the risks and rewards associated with these securities. Securities received under derivative arrangements are segregated from OPB's investments and OPB has the obligation to return the collateral to the owner on termination of the agreement. OPB does not have the risk and rewards associated with these securities. Cash is not eligible collateral for non-centrally cleared derivatives.

SECURITIES LENDING

As outlined in note 7, credit and counterparty risk, it is the responsibility of the securities lending agents to ensure all loans are secured by readily marketable securities collateral that have a market value in excess of the value of the loaned securities ("margin") in amounts that represent the greater of prevailing market practice and the minimum margin imposed by IMCO of 102%. Collateral received from brokers shall be delivered in the form of readily marketable securities, or such other forms of readily marketable securities, as IMCO deems appropriate and in which IMCO strategies are permitted to invest.

Securities loaned to third parties under lending arrangements continue to be recognized as OPB's investments as OPB retains the rewards and risks associated with these securities.

Securities received as collateral from third parties are not recognized as OPB investments, as the rewards and risks have not been transferred.

REPURCHASE AND REVERSE REPURCHASE AGREEMENTS

Securities owned that are sold subject to a repurchase agreement are treated as collateral and not as sales and therefore continue to be recognized as OPB's investments with the amount of the repurchase agreement reflected as a liability. A reverse repurchase agreement is the purchase of a security at a specified amount with an agreement to resell the same or substantially identical security at a definite amount at a specific future date. For financial reporting, the transaction is treated as a receivable collateralized by the security purchased.

Permissible assets for collateral include, with some exceptions, Canadian Treasury Bills, Canadian Government and Provincial Bonds up to 35 years, Real Return Bonds, or other forms of collateral as agreed by both parties.

The fair value of collateral received and pledged as at December 31 is as follows:

(in thousands of dollars)	2023	2022
Derivatives¹		
Collateral received	\$ 74,863	\$ -
Collateral pledged	-	5,212
Securities lending¹		
Securities loaned	131,269	269,822
Collateral received ²	137,830	283,555
Repurchase agreements		
Associated liability from repurchase agreements	2,532,878	1,575,925
Net collateral pledged	2,530,735	1,571,500

1 Note 4f illustrates how OPB's net exposure on derivatives, securities lending, and repurchase agreements is reduced by collaterals.

2 Securities lending collateral received provides a 5% (2022 - 5.09%) cushion against the potential credit risk associated with these securities lending activities.

Note 9: Commitments and guarantees

As at December 31, 2023, OPB had unfunded commitments for certain private market investments of \$6,168 million (2022 - \$7,065 million).

OPB Finance Trust was established for the benefit of OPB and its related entities. It raises funds through the issuance of debentures. These debentures are recorded at fair value. The proceeds of the Series A, B, D, E and F debentures were loaned to several OPB wholly owned real estate subsidiaries. In turn, these real estate companies used the proceeds to repay amounts owed to OPB and/or to acquire real estate investments. The proceeds from the issuance of the Series C debentures were loaned to a real estate trust established for the benefit of OPB. OPB's real estate investments are shown net of the OPB Finance Trust debentures and any other financings specifically assumed by these real estate entities.

OPB has provided a guarantee for the payment of principal and interest on \$1,500 million in debentures that were issued by OPB Finance Trust. Four series of debentures were outstanding as at December 31, 2023:

1. \$350 million, Series A, 30-year debentures due 2042, with a 3.89% coupon payable semi-annually.
2. \$150 million, Series B, 50-year debentures due 2062, with a 3.87% coupon payable semi-annually.
3. \$250 million, Series E, 10-year debentures due 2026, with a 2.95% coupon payable semi-annually.
4. \$750 million, Series F, 10-year debentures due 2027, with a 2.98% coupon payable semi-annually.

On February 24, 2022, the Series D debenture with a \$500 million principal and 1.88% semi-annual coupon matured and was repaid in full.

On May 24, 2023, the Series C debenture with a \$250 million principal and 2.90% semi-annual coupon matured and was repaid in full.

In addition to the guarantee on the debentures, \$7.3 million in letters of credit is guaranteed by OPB as at December 31, 2023 (2022: \$8.9 million).

In January 2023, OPB entered into a new \$130 million overdraft credit facility (Note 7). Each draw under the loan shall be repaid in full within two days. No amounts were drawn on this credit facility during 2023.

The Plan leases its office premises with minimum future lease payments as follows:

(in thousands of dollars)	Minimum Lease Payments
2024	\$ 3,609
2025	3,767
2026	3,767
Total	\$ 11,143

Note 10: Capital assets

Capital assets as of December 31 consist of the following:

	2023			2022		
(in thousands of dollars)	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Computer equipment	\$ 4,906	\$ (4,814)	\$ 92	\$ 4,906	\$ (4,762)	\$ 144
Furniture and fixtures	2,118	(2,022)	96	2,118	(2,004)	114
Leasehold improvements	1,891	(1,861)	30	1,891	(1,832)	59
Total capital assets	\$ 8,915	\$ (8,697)	\$ 218	\$ 8,915	\$ (8,598)	\$ 317

Note 11: Pension obligations

FINANCIAL STATEMENT VALUATION

For the purposes of these financial statements, Aon, the Plan's actuary, used the funding valuation as at December 31, 2022 on the basis of the accounting methodology required by the CPA Canada Handbook - Accounting, Section 4600 and extrapolated those liabilities to December 31, 2023. The obligations as of December 31, 2022 have been extrapolated to December 31, 2023, based on the estimated service cost during the period, actual benefit payments, asset transfers from other plans, and prior service buybacks. The pension obligation, excluding PfAD, as at December 31, 2023 is \$35.2 billion (2022 - \$32.9 billion). The pension obligation, including PfAD, as at December 31, 2023 is \$37.4 billion (2022 - \$35.0 billion).

The other experience losses of \$0.3 billion (2022: \$0.2 billion) are primarily due to actual salary increases higher than expected, losses from retirement and termination experience and a loss from reflecting the Bill 124 remedy for AMAPCEO members. The 2024 indexation loss of \$0.57 billion (2022: \$0.59 billion) is a result of reflecting the actual cost-of-living adjustment of 4.80% effective January 2024. The net assumption gains of \$0.2 billion (2022: \$1.7 billion) are primarily driven by the increase in the real discount rate and a reduction in the PfAD.

During 2023, changes were made to actuarial assumptions to reflect updated capital market assumptions, the target asset mix and inflation plus productivity growth.

The actuarial assumptions used in determining the value of the pension obligations reflect management's best estimate of future economic and non-economic events. The primary economic assumptions as at December 31 are:

	2023	2022
Nominal discount rate before the application of the PfAD ¹	6.20%	6.10%
Real rate of return before the application of the PfAD ¹	4.20%	4.10%
PfAD, a percentage of non-indexed liabilities and service cost	7.46%	7.70%
Effective real discount rate ²	3.75%	3.64%
Inflation		
2023	-	6.30%
2024	4.80%	2.00%
2025	2.50%	2.00%
2026 and thereafter	2.00%	2.00%
Salary increases³		
2023	-	2.00%
2024	2.75%	2.00%
2025 and thereafter	2.75%	2.75%

1 Net of investment and operating expenses.

2 The effective real discount rate is the rate that includes the impact of a margin for adverse deviation, rather than splitting out the PfAD as a percentage of liabilities, as required by legislation.

3 Prior to promotional scale increases in salaries.

FUNDING VALUATION

An actuarial valuation prepared for funding purposes (“funding valuation”) is used as the basis for funding, Plan design decisions and the periodic determination of the Plan’s pension obligations. This funding valuation is based on methods required under the PSP Act and the PBA. The PBA and the ITA require that a funding valuation of the PSPP be completed and filed with the regulatory authorities at least every three years.

The most recent regulatory filing of a funding valuation was as at an effective date of December 31, 2022, which disclosed pension obligations of \$33,484 million, adjustments of \$2,493 million, and a funding shortfall of \$2,333 million on a going-concern basis. Adjustments include a provision for adverse deviation, prior year credit balance, and all solvency liability and solvency asset adjustments, where applicable. The actuarial cost method used was projected unit credit. The asset valuation method was the smoothed value of assets with investment gains and losses relative to the assumed rate of return recognized over three years. The funding valuation was prepared by Aon. The next actuarial valuation for the purposes of developing funding requirements must be prepared with an effective date no later than December 31, 2025.

Note 12: Contributions

The contribution requirements are set out in the PSP Act and summarized in Note 2. The Government of Ontario, as sponsor of the Plan, contributed \$263,184 in 2023 (2022 – \$263,628) in special payments towards the funding shortfall identified in the filed funding valuation as at December 31, 2022. In 2023, the Province also made an additional contribution of \$29,040 (2022: \$4,867), which generated a prior year credit balance (“PYCB”) in the funding valuation. A PYCB can occur when a Plan Sponsor makes more than the minimum contribution.

For 2023 and 2022, the contributions to the Plan were made in accordance with the funding requirements as specified by the most recently filed actuarial funding valuation.

There was \$300 in required contributions past due as at December 31, 2023 (2022: \$444).

For the year ended December 31
(in thousands of dollars)

	2023	2022
Members		
Current service	\$ 428,744	\$ 402,612
Prior service	79,190	69,488
Long-Term Income Protection benefits	1,244	872
	509,178	472,972
Employers		
Current service	424,924	402,160
Prior service	4,892	4,215
Long-Term Income Protection benefits	21,838	26,303
	451,654	432,678
Sponsor		
Special payments	292,224	268,495
Additional current service	71,548	70,715
	363,772	339,210
Total contributions	\$ 1,324,604	\$ 1,244,860

Note 13: Operating expenses

For the year ended December 31
(in thousands of dollars)

	2023 ¹	2022 ¹
Staffing	\$ 29,108	\$ 24,620
IT and project management	12,794	12,345
Office premises and operations	5,302	5,512
Professional services	1,971	1,829
Depreciation	99	52
Staff development and support	491	506
Communications	567	344
Audit	597	560
Board remuneration	297	296
	\$ 51,226	\$ 46,064

1 Included in the above operating expenses are actuarial services provided to OPB amounting to \$603 (2022 - \$480) and external audit services provided to OPB amounting to \$269 (2022 - \$279).

Note: Recorded by subsidiary operations are external audit services provided to and recorded by subsidiaries amounting to \$180 (2022 - \$197).

Note 14: Termination and other benefit payments

Terminations and other benefit payments consists of the following amounts:

For the year ended December 31
(in thousands of dollars)

	2023	2022
Transfers to other plans	\$ 36,848	\$ 30,708
Commuted value transfers and death benefits ¹	125,261	169,548
Total termination and other benefits	\$ 162,109	\$ 200,256

1 Disability payments amounted to \$nil in 2023 and 2022.

Note 15: Transfers of service from other plans

Transfers of service from other plans consists of the following amounts:

For the year ended December 31
(in thousands of dollars)

	2023	2022
Transfers from OPSEU Pension Plan	\$ 217,495	\$ 138,478
Transfers from Agricorp merger	-	89,649
Transfers from MOPPs	42,599	23,908
Transfers from other plans	5,057	2,372
Total transfers of service from other plans	\$ 265,151	\$ 254,407

Note 16: Accounts receivable and prepaid expenses

Accounts receivable and prepaid expenses consists of the following amounts:

As at December 31
(in thousands of dollars)

	2023	2022
Prepaid expenses	\$ 7,660	\$ 7,999
HST recoverable	1,414	1,459
Other receivables	678	556
Total accounts receivable and prepaid expenses	\$ 9,752	\$ 10,014

Note 17: Related party transactions

In the normal course of business, OPB transacted with various ministries, agencies and Crown corporations over which the Government of Ontario has control or significant influence. The Government of Ontario is the sponsor of the Plan. OPB purchased investments with IMCO, the Government of Ontario and related entities at normal commercial terms. As at December 31, 2023, OPB held Province of Ontario bonds valued at \$1,188 million (2022: \$1,112 million). Refer to Note 4h for details on IMCO pooled funds.

OPB provides additional employee benefit administrative services for the Province under Service Level Agreements. These services are all provided on a cost-recovery basis and have no net impact on OPB's operating expenses budget.

In 2018, IMCO entered into an arrangement to lease office space in a building partially owned by OPB and the lease commenced in 2021. The lease agreement was negotiated on an arm's length basis. As at December 31, 2023, OPB had funded capital expenditures in respect of capital assets at 16 York Street which are reported as prepaid expenses in the statement of financial position in the amount of \$6,566 (2022 - \$7,581).

OPB administers the PSPP, in which all eligible IMCO employees participate. In relation to this service, IMCO remits to OPB the employee contributions and employer matching portion. IMCO has been managing OPB's investment assets since July 2017. OPB pays its share of IMCO's operating and capital expenditures on a cost recovery basis (Note 6b). External investment manager and custodial fees are paid by IMCO on OPB's behalf.

Note 18: Capital management

The funding surpluses or deficits determined periodically through the funding valuations prepared by the independent actuary are defined as the Plan's capital. The actuary's funding valuation is used to measure the long-term health of the Plan. The objective of managing the Plan's capital is to ensure the Plan is funded to fully pay out the Plan's benefits. The funding valuation determines the annual minimum contribution levels to eliminate any shortfalls. The Plan's SIP&P also provides guidance with respect to the investment of the Plan's assets (see Note 4a) to assist with the management of any funding excesses or shortfalls. The Plan's expected average annualized real rate of return has been set in the SIP&P at equal to or greater than 3.7%, net of expenses.

Note 19: Subsequent events

On December 22, 2023, IMCO launched the IMCO Private Equity LP with initial seed funding of \$639. On January 2, 2024, there was an in-kind transfer of substantially all indirect and direct private equity investments held by OPB to the pooled fund.

Directory of Key Personnel

Officers

Mark J. Fuller
President & Chief Executive Officer

Darwin Bozek
President & Chief Pension Officer
(as of February 1, 2024)

Peter Shena
Executive Vice-President & Chief Pension
Officer (until January 31, 2024) and Chief
Transition Officer (as of February 1, 2024)

Christian Kautzky
Chief Investment Officer

Valerie Adamo
Chief Technology Officer

Mila Babic
Senior Vice-President, Client &
Advisory Services

Armand de Kemp
Chief Financial Officer

Jasmine Kanga
Chief Human Resources Officer &
Corporate Services

Marc Rondeau
Senior Vice-President, Plan Management

Glossary

Active risk: The volatility or fluctuations of portfolio returns compared to the portfolio benchmark.

Asset class: A group of securities that exhibit similar characteristics.

Asset mix: The categorization of asset classes within the pension plan portfolio (e.g., cash, Canadian equities, real estate, etc.). Each category is measured as a percentage of the total pension plan portfolio's fair value.

Assumptions: Estimates of what certain variables – such as interest rates, investment returns and mortality rates – will be in the future. Assumptions are used to estimate the future cost of pensions and the future value of pension assets.

Benchmark: A point of reference that is used to compare portfolio performance and risk. The S&P/TSX Composite Index is a commonly used benchmark to compare Canadian equity portfolio performance and risk. OPB's Strategic Asset Allocation (SAA) is a benchmark against which the overall Plan is assessed from a risk and return perspective.

CEM Benchmarking Inc.: An international pension administration benchmarking company.

Counterparty risk: The risk of a counterparty not fulfilling its contractual financial obligations.

Debenture: A long-term debt security normally yielding a fixed rate of interest, not secured against assets.

Discount rate: The expected rate of future investment return used to calculate the present value of pensions.

Funded status: A measure of the amount of assets the pension plan currently holds to pay out its future pension benefits (present value of projected future pension benefits). The funded status is regarded as the "health check" of a pension plan, and is determined by undertaking a funding valuation of the pension plan.

IMCO: Investment Management Corporation of Ontario.

Implementation and Support Agreement (ISA): The ISA deals with operating and governance matters such as employee transition in the short term, shared services, IMCO governance policies, and cost allocation and cost containment principles.

Investment Management Agreement (IMA): The IMA governs the investment management relationship between IMCO and OPB, and focuses largely on investment-related matters.

Options: Options are contractual agreements under which the buyer has the right, but not the obligation, to either buy (call option) or sell (put option) an underlying asset at a predetermined price on or before a specified future date.

Pension modernization: A program we are initiating to re-engineer our business processes and review and upgrade our pension administration system to allow us to meet the evolving needs of our clients and stakeholders, and ensure our technology remains current and secure.

PMA: Public market alternatives include a broad range of assets, including pooled funds, equities, fixed income, credit, and currencies, as well as derivatives, seeking to offer low correlation to public equities.

PSPP: The Public Service Pension Plan.

Responsible Investing (RI): The integration of environmental, social and governance (ESG) factors into the investment decision-making and monitoring process, which supports long-term investment performance.

Risk-adjusted return: A measurement used to analyze an investment's return based on how much risk is involved in producing that return. Risk-adjusted returns can be used to compare the return of a portfolio against a benchmark with a known return and risk profile.

Strategic Asset Allocation (SAA): A long-term strategy that involves setting target allocations of the Plan's asset mix with the purpose of achieving highest returns on investment to meet current and projected future pension benefits given the Plan's risk tolerance and investment horizon.

Total risk: The volatility or fluctuations of portfolio returns over a defined period of time.