Management's Discussion & Analysis

Introduction

2017 was an important year for the Public Service Pension Plan (PSPP or the Plan) with the launch of the Investment Management Corporation of Ontario (IMCO) and our pension modernization program. Both of these initiatives will help us protect the pension promise and enhance our ability to serve our clients for years to come.

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

OPB's primary objective is to manage the Plan so that, over the long term, it continues to maintain and deliver the pension benefits as promised and remains affordable for members and employers. We are focused on providing unmatched service excellence to clients and managing the Plan design and funding status to provide pension sustainability, not just for our current members but for members well into the future. We are vigilant in managing the key risks facing the Plan, and incorporate risk management in our investment, service and growth strategies.

Overview

At the end of 2017, the PSPP remained well funded at approximately 97% on a going-concern basis. This is a result of strong investment returns offset by increases in liabilities due to decisions to adjust discount rate and mortality assumptions to support the financial health of the Plan over the long term. It's what we mean when we say our Plan is built to last.

It was a pivotal year for OPB as IMCO successfully launched in July after many years of work with the Workplace Safety and Insurance Board (WSIB) on the Government of Ontario's broader public sector asset pooling initiative. IMCO is a not-for-profit investment management and advisory corporation that was established with $60 billion in pooled assets under management from OPB and WSIB.

IMCO provides OPB with top-tier investment management and the scale we need to improve our access to direct investment and new partnership opportunities in private markets at lower unit costs – helping us achieve higher incremental returns over the long term than we could achieve on our own.

IMCO assumed responsibility for the day-to-day investment management of OPB's assets and the execution of OPB's investment strategies in July 2017. OPB retains decision-making authority over key strategic aspects of the investment of its assets to be managed by IMCO and will closely monitor IMCO's performance to ensure we receive the expected benefits. The arrangement is subject to the terms of an Investment Management Agreement (IMA), a Service Level Agreement (SLA) and an Implementation and Support Agreement (ISA) between OPB and IMCO, which are described on page 40 in the Investments section. OPB also has important governance rights over IMCO. OPB is a member (similar to a shareholder) of IMCO and has the right to appoint members of IMCO's Board of Directors.

As the administrator of the PSPP, and in line with our fiduciary duties, OPB continues to:

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

Transition of the investment and investment finance teams of OPB and WSIB to IMCO went smoothly. Approximately 42 talented investment and investment finance professionals from OPB moved over to IMCO. Jill Pepall, OPB's former Chief Investment Officer, became IMCO's first CIO; Michel Paradis, OPB's former Chief Financial Officer, is its first CFO; and Gayle Fisher, OPB's former Chief Administrative Officer, became IMCO's first head of Human Resources.

The investment program had a strong year, with a one-year return of 10.8%. However, looking forward, we anticipate average returns over the next 10 years to be lower than those in the last 10 years. This view is shared widely in the investment industry and among our peers in the defined benefit pension plan industry. With initial access to $60 billion under management, IMCO will give us direct access to private market deals where we can achieve higher net returns for the Plan over the long term than we would be able to achieve on our own. Given our outlook for investment returns, this ability of IMCO to enhance returns and benefit from economies of scale is one of the reasons we played a lead role in the creation of IMCO.

OPB maintained excellent levels of service to our members during a demanding year. We managed through a surge in service requests and enrolments after an increase in retirements in late 2016 due to changes to insured benefits coverage. We also supported 1,300 members at the Ontario Lottery and Gaming Corporation (OLG) as they transitioned to new employers, and we helped our retired members understand the new pension statements we are now required to provide to them. Our high client satisfaction scores and the positive feedback we've received on our unique, one-on-one Advisory Services show our commitment to providing our members with services and advice tailored to their unique circumstances and to helping them make sound pension decisions.

The next stage of our evolution is the launch of OPB's pension modernization initiative. This is a multi-year program designed to enhance our service and add value to our clients' experience by updating and re-engineering our business processes, systems and tools. As a service provider, we are committed to meeting the evolving needs and expectations of our clients and stakeholders.

This section of the report discusses these and other important initiatives during 2017.

Funding

Our strong 10.8% investment return helped improve the Plan's funded status at the end of 2017 compared to the end of 2016. The Plan remains well funded, at approximately 97%, and well positioned to continue to meet the pension promise.

The funded status of a pension plan, in simple terms, compares the value of pension assets on one side with the present value of projected future pension benefits, or pension obligations, on the other. If assets exceed liabilities, the plan is said to be in a surplus position. If liabilities exceed assets, the plan is in a shortfall position.

To keep the Plan sustainable over the long term, we have to ensure it can withstand challenges around the potential for lower investment returns going forward and continued improvements in members' lifespans. At OPB, we regularly update our demographic and economic assumptions to reflect emerging experience, and we then use that information to make recommendations on contribution rate adjustments when needed. Our strategies have materially contributed to the Plan's continued financial health.

The 2017 returns produced an investment experience gain of over $1 billion. Consistent with our approach in recent years, we believe it is prudent to use most of this experience gain to reflect more cautious future investment expectations (by lowering the discount rate) and to reflect the increased cost of pensions due to rising lifespans. We are seeing continued improvements in member longevity, which adds to the Plan's liabilities, and for reasons outlined in this report, we believe that future investment returns are likely to be lower than they have been in recent years. In order to fulfill the pension promise for our members today and into the future, we will:

- lower our discount rate from 5.7% to 5.6%; this will add approximately $354 million to our liability estimates;
- add approximately $402 million to our liability estimates to reflect the fact that our members are living longer and that we're paying pensions for longer; and
- add approximately $191 million to align with the new Actuarial Standards requirements on expected future improvements in longevity.

In conjunction with an increase in contribution rates of 1% of pensionable salary beginning in April 2018 for both members and employers, the changes to our assumptions noted above will help maintain the financial health of the Plan in the future.

In 2013 when solvency funding requirements were introduced, the Government of Ontario allowed all single-employer defined benefit plans to apply for Stage 1 solvency funding relief – which we did. Solvency funding is there to deal with situations where a pension plan is immediately wound up as a result of the plan sponsor becoming insolvent; while this is a risk for private sector pension plans, it is a highly unlikely event for the PSPP. In fact, all other major Ontario pension plans, as jointly sponsored plans, are already permanently exempt from solvency funding requirements.

In 2017, we applied for and received relief from Stage 2, the next phase of the solvency funding requirements. By granting solvency relief to the PSPP, the Plan Sponsor can now focus on the Plan's going-concern valuation when determining funding needs. The going-concern valuation assumes the Plan will continue to operate indefinitely and is used to fund the benefits promised under the PSPP.

What We Did	Why It Matters
Maintained a strong funded status at approximately 97%	The Plan is financially healthy and well positioned to continue to meet the pension promise.
Updated our discount rate and longevity assumptions to reflect future return expectations and longevity experience	Assumptions reflecting best estimates of future events enable proper planning to meet future pension obligations.
Completed an asset/liability (A/L) study	This helps ensure our Strategic Asset Allocation (SAA) is suitable to meet future pension obligations.
Filed a funding valuation with the Financial Services Commission of Ontario (FSCO)	We are required to file a valuation with FSCO at least once every three years.
Applied for and received Stage 2 funding relief	Solvency relief enables the Plan Sponsor to focus on the Plan's going-concern valuation when determining funding needs. The going-concern valuation assumes the Plan will operate indefinitely. The PSPP is approximately 97% funded on a going-concern basis.

Key Assumptions

Effective pension plan management is about the careful and prudent management of investment returns and the design of the Plan over the long term. OPB adheres to a robust funding policy, which guides decisions around Plan design, funding and valuation assumptions.

Discount Rate

The discount rate is a key assumption that is used in funding valuations and can influence decisions about contribution rates and benefits. It is used to calculate the present value of the future pensions expected to be paid by the Plan. For example, a pension payment that is expected to be made in 20 years is "discounted" back to today at the discount rate. This means that, for valuation purposes, the present value amount of the payment in today's dollars will grow at the discount rate. This, in turn, means that, over the long term, investment returns on the Plan's assets must equal or exceed the discount rate. Otherwise, the cost of the pension will grow faster than the value of the assets, producing a shortfall.

Setting a realistic discount rate is, therefore, a critical aspect of managing the long-term financial health of a defined benefit pension plan. The process we use to set the discount rate is rigorous and is designed to ensure that the assumption is reasonable in that it aligns with the investment returns OPB management believes can be achieved over the long term, based on the strategic asset mix targets in the Strategic Asset Allocation (SAA). This is based on robust modelling that allows for a cushion for unanticipated events (what is known in our business as a "margin" or a "provision for adverse deviation").

We also consider the current economic environment and the outlook. Despite strong investment returns in 2017, we concluded that it is prudent to moderate our expectations for future returns, which remain uncertain. Interest rates, though moving up, remain low, and, while economic growth has been picking up, we expect it to be moderate over the next 10 years. Should growth exceed our expectations, it is likely to lead to a tightening of monetary policy on a global scale, meaning higher interest rates.

While higher interest rates are positive for retirement plans in the long term, in the short to medium term, increases in interest rates would likely result in capital assets being repriced lower. This would hurt investment returns in the short to medium term. Consequently, we foresee pressure on investment returns in both economic scenarios. Moreover, competition for private markets assets, notably quality real estate and core infrastructure, remains intense, which means acquisition prices are high, thus putting downward pressure on returns. We also foresee greater geopolitical risk factors, including uncertainty around the Brexit negotiations, the actions of North Korea, and the growing influence of populism on trade policy. We also face the uncertain impact of climate change on infrastructure, agriculture, forestry, and water resources.

Through this process, we determined that the discount rate should be further reduced from 5.7% to 5.6%. This is in addition to the reduction from 5.95% to 5.7% we made at the end of 2016. Changes to the discount rate impact the Plan's projected liabilities (a lower discount rate means higher plan liabilities) and, by extension, impact the Plan's funded position. A reduction in the discount rate by 1/10 of 1% (0.10%) increases the present value of the expected cost of pensions in the PSPP by approximately $350 million.

Longevity

At this point, the most important demographic factor facing the Plan is that people are living longer and collecting their pensions longer. In OPB's case, we have strengthened the longevity assumptions used to cost the pension obligations (liabilities) of the Plan. 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 2016, a member retiring at the same age would be expected to receive their pension for 25 years – an increase of 3.6 years.

We closely monitor demographic trends in our membership and may make adjustments to our funding assumptions, or recommendations for changes to Plan design, to ensure that we can continue to meet our future pension obligations, while pension benefits remain affordable for members and employers.

Long-Term Funding Study

The projected cost of providing benefits to members is affected by many factors that will occur in the future, about which we must make assumptions. As part of our prudent management of the Plan, OPB conducts a number of comprehensive studies to evaluate the appropriateness of those assumptions and to evaluate whether the contribution rates are set at appropriate levels. One of these reports is the Long-Term Funding Study (LTFS).

In 2016, OPB initiated an LTFS to determine if the cost of providing the benefits under the Plan had increased, and whether the current economic and demographic assumptions were still appropriate. Based on the study results, we adjusted the discount rate and longevity assumptions and recommended a contribution rate increase of 1% of pensionable salary for members and employers.

In 2017, the government accepted our recommendation and approved the contribution increase, which will be phased in over two years. Phase 1 took effect in April 2018 and phase 2 takes effect in April 2019. Even with this increase, contribution rates are among the lowest of peer pension plans, and the PSPP continues to offer excellent value for our members and employers.

Asset/Liability Study

OPB is responsible for conducting an asset/liability (A/L) study approximately every three years to see how our various asset allocations meet the goal of paying members' pensions – our liabilities – in light of long-term capital markets assumptions and the Plan's cash flow requirements.

An A/L study involves the projections of a pension plan's assets and liabilities using numerous economic and capital markets scenarios, and models several investment portfolios with varying levels of risk and return characteristics. OPB's A/L study process is designed to give OPB a full understanding of the investment strategies available to the Plan and their inherent expected benefits and risks.

OPB completed its most recent study in early 2017, prior to the commencement of IMCO's operations. The A/L study helps to ensure our Strategic Asset Allocation (SAA) is appropriate for the coming years, given projected future liability streams.

Financial Position

OPB conducts actuarial valuations of the Plan on a regular basis. The actuarial valuation for funding purposes is used to ensure there are sufficient assets to meet the Plan's pension obligations. It is also used to determine contributions to the Plan. In determining the surplus or deficit position of the Plan for reporting on our financial statements, OPB uses the latest actuarial valuation for funding purposes and extrapolates the pension obligations to the financial statement date.

The funding valuations provide a best estimate of the Plan's accrued pension liabilities and are performed by an independent actuary appointed by OPB's Board of Directors.

Valuation Type	Purpose and Description
Funding basis	Pension plans are legally required to file a funding valuation with the regulator, FSCO, once every three years. OPB filed its 2016 valuation in December 2017. The valuation indicated that as at December 31, 2016, the Plan was just over 96% funded and had a shortfall of $943 million. That compares to 96% funded with a shortfall of $804 million at December 31, 2013 (the previous valuation filed with pension regulators).
Financial statements	For the purposes of the financial statements, the Plan's liabilities were calculated as of December 31, 2016, the date of the last funding valuation, and extrapolated to December 31, 2017. The extrapolated numbers are based on the assumption that the Plan's 2017 experience (for factors such as salary increases, retirement ages, and termination and mortality rates) would match the Plan's actuarial assumptions. For financial reporting purposes, we have calculated the Plan's 2017 year-end financial position by comparing the extrapolated liability with the actual market value of assets as of December 31, 2017. Based on this, the Plan had a deficit of $738 million.

Investments

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

1. securing and maintaining the pension benefits promised to members; and
2. maintaining affordable contribution rates for members and participating employers.

To achieve these objectives, OPB has developed an investment approach that emphasizes capital preservation and seeks to mitigate the risk of a long-term funding shortfall, and the risk of significant volatility in the Plan's funded status. As we seek to generate strong, long-term investment returns within an acceptable risk framework, tactical asset allocation decisions can contribute to capital preservation and enhanced risk-adjusted returns, while opportunistic investments offer another way to add value. This investment approach has not changed with the launch of IMCO.

IMCO will invest and reinvest OPB's investment portfolio within OPB's investment policies (including its Statement of Investment Policies and Procedures and its Statement of Investment Principles and Beliefs), and asset class investment strategies and policies. With IMCO taking over the management of OPB's assets and those of WSIB, we will have access to a larger investment platform and improved systems, investment products and structures that enable execution of our investment approach.

During 2017, our Investments team focused on the following key areas:

1. optimizing the implementation and management of the Strategic Asset Allocation (SAA);
2. transitioning internal expertise and asset management capabilities to IMCO;
3. transitioning a broad network of key investment partners and relationships to IMCO; and
4. enhancing risk and performance reporting.

These areas are discussed in more detail on the following pages.

Strategic Asset Allocation

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

OPB continues to be responsible for setting the SAA, and IMCO manages OPB funds according to the SAA. The SAA targets are developed with the intention of meeting the Plan's long-term funding objectives while effectively managing investment risk through diversification across several asset classes.

In 2011, OPB began a multi-year strategic transition to shift more of the Plan's assets from public to private markets investments. Private assets, such as real estate and infrastructure, help to insulate the Plan from public markets volatility, generate a larger proportion of returns from ongoing and predictable cash flow, enable greater access to company management teams, offer the potential for higher overall returns, and are also highly correlated to the Plan's inflation-based pension obligations. Private equity investment returns are generated principally from capital appreciation and typically achieve higher returns than public equities.

OPB's Board of Directors approved updated SAAs in 2014 and 2017. In 2017, the allocations to private equity and infrastructure assets were increased and a small decrease was made to the real estate allocation. In establishing the 2017 SAA, which is being phased in over several years, OPB considered liquidity requirements and the economic assumptions used in the Plan's actuarial valuation.

OPB increased the Plan's holdings in private assets to approximately 29% of the Fund at the end of 2017, up from 27% at the end of 2016.

In the ongoing search for high-quality global opportunities, we expect IMCO will continue to be thorough in its analysis of the role that new investments will play in our investment portfolio (from both a risk and return perspective) and whether they complement our existing holdings. Compared to four years ago, the Plan's Reward to Risk ratio (four-year return divided by volatility) increased by 30 percentage points (192.5% as at December 2017 versus 162.6% as at December 2013). This increase in Total Plan Reward to Risk is due to better emerging market equity and private equity returns and the lower volatility of infrastructure assets.

SAA Asset Mix Targets

Asset Class	2017 Target Weight*	Range
Fixed Income (Cash, Long Bonds, Private Debt, Real Return Bonds)	25%	10%–45%
Equity (Canadian Equity, Global Equity, Emerging Equity, Private Equity)	42.5%	13%–70%
Real Assets (Real Estate, Infrastructure)	32.5%	20%–47%

* The 2017 targets are to be phased in over a three-year period from 2017 to 2020.

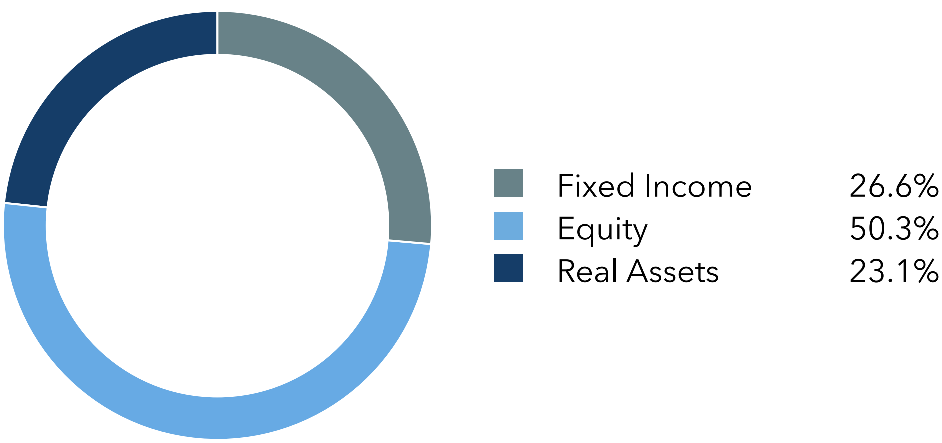
The proportion allocated to each asset class at any point in time will be determined by OPB's assessment of economic and financial market conditions. During the transition period toward meeting the SAA target allocations, certain asset class weights may be outside the ranges set out in investment policies. OPB monitors the SAA allocations regularly and may make adjustments in case of changes in:

- the ratio of Plan assets to Plan liabilities;
- the design of the Plan's benefits and pension eligibility requirements;
- the respective proportions of active and inactive members in the Plan;
- long-term capital market prospects;
- cash flow requirements;
- the risk tolerance of the Plan with regard to its liabilities; and
- any other factors considered relevant.

Using long-term capital market assumptions, the SAA has an expected average rate of return equal to or greater than 5.60% nominal/3.60% real (that is, after inflation) per year, net of expenses.

Asset Mix

As at December 31, 2017



IMCO Transition

After years of preparation, in July 2017 the responsibility for managing OPB's assets was transferred to the newly created Investment Management Corporation of Ontario (IMCO). This independent investment management firm, established with approximately $60 billion in assets under management from OPB and WSIB, is designed to provide public sector clients in Ontario with professional investment services, best-in-class advice around portfolio construction, efficient access to a diverse range of asset classes and superior reporting on risks and returns.

The Roles and Responsibilities of OPB and IMCO

OPB	IMCO
Owns Plan assets and is responsible for Plan liabilities	Manages Plan assets for a fee based on cost recovery (i.e., non-profit)
Sets Strategic Asset Allocation (SAA), considering Plan funding and cash flow needs	Manages investments based on OPB's SAA investment strategies and policies and other requirements
Oversees IMCO's performance	Regularly reports to OPB under the terms of the Investment Management Agreement (IMA), the Service Level Agreement (SLA), and the Implementation and Support Agreement (ISA)

IMCO developed new investment policies in respect of the fair allocation of investment opportunities among its members, and investment approvals to ensure an equitable allocation of private asset opportunities to clients.

By pooling assets with other clients of IMCO, OPB is in a stronger position to deliver on the long-term pension promise for Plan members. IMCO offers immediate economies of scale that open the door to opportunities we otherwise wouldn't be able to access, at a relatively lower cost, which we expect will produce higher risk-adjusted returns than OPB could achieve on its own. IMCO is better positioned to attract and retain superior leadership and investment management talent; to invest in advanced risk management and measurement, investment and investment finance systems; to access a broader range of assets and partnership opportunities; and to negotiate better deal terms.

The Investment Management Agreement (IMA) governs the investment management relationship between IMCO and OPB and focuses largely on investment-related matters. The Service Level Agreement (SLA) sets out a framework for dealing with matters such as deliverables, including the content and frequency of reporting, and the expected service levels IMCO will meet.

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

In recent years, OPB focused on expanding its in-house investment management expertise in certain asset classes (known as the Internalization Program). By building internal asset management capabilities, we were better able to agilely respond to market movements and opportunities and generate incremental risk-adjusted returns in a cost-effective manner. With the transfer of OPB investment and investment finance employees to IMCO, we will continue to benefit from our past investment in these capabilities and their future internalization initiatives.

As OPB expanded its asset management capabilities in recent years, we also took on greater complexity with respect to assessing and managing risk. This required a greater focus on compliance, risk monitoring, and middle- and back-office support. OPB implemented new risk assessment and reporting initiatives in order to attribute, measure and monitor the risk associated with a particular investment. With IMCO starting operations in 2017, the professionals and systems producing these reports and analyses transitioned to IMCO. As a client, we will continue to benefit from the risk initiatives and expertise we put in place. IMCO managers will take investment risks on behalf of OPB only when they expect to be appropriately rewarded.

Investments

What We Did	Why It Matters
Achieved an annual investment return of 10.8%	Strong overall investment returns enabled us to improve the funded status of the Plan by increasing Plan assets, which more than offset the impact of increasing Plan liabilities due to raising longevity assumptions and lowering the discount rate used in the valuation of OPB's pension liability at December 31, 2017.
Progressed with our SAA phase-in targets	We increased our target allocations to private equity and infrastructure assets, which are expected to generate the long-term returns required to fund the Plan's liabilities.
Continued to add exposure to private markets investments, as planned	Real estate and infrastructure investments help generate good returns, help insulate the Plan from public markets volatility and enable us to generate a larger proportion of returns from ongoing cash flow, versus capital appreciation. On the other hand, private equity investments generate returns principally from capital appreciation, which are typically higher than returns from public equities.
Increased our real estate holdings with the purchase of an interest in Cadillac Fairview's prime Vancouver portfolio	Quality real estate assets generate strong cash flow and stable returns, and act as a hedge against inflation.
Contributed key investment personnel and systems to IMCO and supported transition	OPB supported the transition and will continue to benefit from the investment expertise that now resides within IMCO.

Investment Performance

Investment excellence continues to be a top priority for OPB, as well as for IMCO, which took over management of OPB assets in July 2017.

OPB management is pleased with the strong performance of the Plan in 2017.

Our overall annual return of 10.8% (excluding external investment management fees and operating expenses) exceeded the portfolio benchmark by 0.4% and helped improve our funded status to approximately 97%. The Plan's 2017 return net of all fees and operating expenses was 10.3%, which was slightly below the benchmark return.

Rates of Return

For the period ended December 31, 2017

1-year	4-year	10-year	Since 1995
10.8%	8.3%	6.8%	8.1%

From 1995 until the end of 2017, 72% of the sources of pension funding at OPB have come from net investment income, with the remainder coming from employee and employer contributions. The investment program is crucial for ensuring future benefits are available and sustainable for Plan members.

A number of factors positively influenced our results in 2017.

The Infrastructure and Private Equity portfolios earned favourable absolute returns and, as a group, the Plan's public market managers outperformed their benchmarks, enhancing returns. Private Debt strongly outperformed relative to its benchmark.

The Tactical Asset Allocation (TAA) strategy delivered significant value in 2017, adding 1% of the Plan's excess return (value added above the total fund benchmark). The enhanced return came from several strategies, one of which was an overweight position in equities, which benefited from strong corporate earnings and rising stock prices. Another positive contributor to performance was our decision to maintain a shorter duration in the Fixed Income portfolio than the SAA benchmark duration. That helped to preserve capital as interest rates rose and bond prices declined. (Shorter duration bonds are affected by price movements to a lesser degree than longer dated bonds.)

Even though rising interest rates moderated bond returns, the Plan's bonds outperformed our benchmarks due to management's decision to maintain a shorter duration bond strategy.

Our Real Estate portfolio detracted from returns, arising from an unrealized valuation write-down in response to the Sears Canada bankruptcy (a tenant in nine directly held and four indirectly held OPB properties).

Given that pensions are accrued and paid out over decades, pension plans need to take a long-term perspective. Our investment approach therefore emphasizes capital preservation and seeks to generate stable, long-term investment returns within an acceptable risk framework by minimizing unrewarded risk, reducing total risk, focusing on fundamental research and analysis to make investment decisions and sourcing diversified investment opportunities that provide predictable cash flow.

On a four-year basis, our compounded annualized return of 8.3% has exceeded the corresponding portfolio benchmark of 7.9% by 0.4%.

We continued to implement the shift in OPB's asset mix from Public Markets to Private Markets assets, pursuant to the SAA phase-in plan, increasing private investments by $1 billion during 2017 to 29% of the market value of the Fund at year-end.

Public Markets Investments

We continued to implement the strategic shift in OPB's asset mix from Public Markets to Private Markets assets, pursuant to the SAA phase-in plan. As of December 31, 2017, public markets investments accounted for approximately 71% of OPB's net assets, compared to 73% at year-end 2016.

A significant undertaking in 2017 was the planning, analysis and research for IMCO investment pools, which are expected to be in place in early 2019.

Additionally in 2017, we:

- brought the management of OPB government bonds in-house, representing 53.9% of OPB's total fixed income assets;
- funded two Chinese Renminbi bond strategies that are invested in both Chinese government and corporate bonds to capitalize on higher potential returns with minimal incremental risks;
- reduced higher-risk credit exposure and reduced high-yield bonds;
- realized a strong gain on OPB's first non–investment grade private debt co-investment, achieving a 15.6% return; and
- initiated research into dedicated equities investing in India.

Interest-Bearing Investments

- **Fixed Income** – The Fixed Income portfolio, including global bonds, real return bonds, and private debt (currency hedged) but excluding emerging market debt, provided a solid return of 4.1%. Year-end market value was $7.0 billion. In comparison, fixed income earned a 4.2% return in 2016 and was valued at $6.2 billion.
- **Private Debt** – These assets consist of investments across the capital structure, including investment-grade senior debt, non–investment grade senior debt and forms of junior capital including subordinated and mezzanine debt that are unavailable in the public market. This gives OPB the capability to invest in private credit across the risk spectrum and capitalize on market opportunities while maintaining a focus on capital preservation and current cash yield. The portfolio returned 8.5% in 2017 on a currency hedged basis, with a year-end value of $448 million. That compares to a return of 9.0% and a year-end value of $456 million in 2016.

Public Equities

The purpose of public equities within the investment portfolio is primarily as a long-term return enhancement asset. Public equities are expected to generate higher returns than the benchmark return over the long term.

The Canadian equity portfolio returned 9.3% in 2017, compared to 25.6% in 2016. The year-end market value of the portfolio was $2.8 billion, compared to $2.8 billion at year-end 2016.

The Plan's foreign developed market equity portfolio generated a return of 18.7% in 2017 compared to 2.7% in 2016. At year-end 2017, the portfolio held a market value of $4.8 billion, compared to $5.0 billion at year-end 2016.

The Plan's emerging markets equity portfolio, which includes emerging market debt, returned 25.0% in 2017, compared to 6.1% in 2016. As of December 31, 2017, the portfolio's market value was $4.3 billion, compared to $3.8 billion at year-end 2016.

Private Markets Investments

While demand for quality Private Markets assets remains high, OPB's reputation as a trusted and respected partner provided access to high-quality deal flow and assets that may not otherwise come to market, and we expect IMCO to maintain this positive reputation in the industry.

OPB, and now IMCO, continued the strategic shift of assets from public to private markets in 2017. The private markets strategy involves acquiring first-class real estate properties, core infrastructure assets and private equity through a combination of direct investment, fund investments and co-investments. Private Markets assets tend to be more illiquid and longer-term holdings than those in public markets. Because of the added liquidity risk, returns are typically higher than those expected from Public Markets investments.

Real assets such as real estate and infrastructure assets help partially protect the Plan from public markets volatility as a larger proportion of their returns are generated from predictable, ongoing cash flows versus capital appreciation. Private equity offers attractive risk-adjusted returns and allows improved diversification by asset type, industry and geography.

As of December 31, 2017, Private Markets investments accounted for 28.6% of OPB's net assets, up from 27.0% at year-end 2016. The market value of these investments at the end of 2017 was $7.6 billion, up $1.0 billion from $6.6 billion at year-end 2016.

Overall, our Private Markets portfolio, with the exception of real estate stemming from the bankruptcy of Sears Canada, continued to generate strong returns in 2017, which we attribute to our disciplined approach to investing, our robust partnerships that bring access to top-quality investment opportunities, and our ability to negotiate the best possible investment fees.

Real Estate

Real estate assets provide strong cash flow generation, more stable returns than equity market assets, and a hedge against inflation, which makes them a good match for the Plan's long-term pension liabilities.

OPB's Real Estate portfolio is presented net of financings and made up of:

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

Our real estate investments as of December 31, 2017 stood at 17.7% (compared to its phase-in allocation of 19.0%), down from 18.0% in 2016. The portfolio's net market value at year-end 2017 was $4.7 billion, compared to $4.4 billion a year earlier.

The Real Estate portfolio returned 2.4% in 2017, compared to 9.5% in 2016, on a currency hedged basis. Since 1994, when OPB made its initial investment in real estate, the portfolio has generated an average annual return of 10.1%. The return is measured net of privately issued bonds guaranteed by OPB of $2.25 billion (par value) at the end of 2017 ($1.5 billion (par value) as at December 31, 2016) and any property-specific mortgages. The objectives of our financing strategy are:

- improving returns on OPB's rental property portfolio;
- improving the funded status of the Plan over the longer term; and
- creating a partial hedge against a decline in the market value of the Plan's rental properties arising from higher interest rates in the future.

See the Bond Offerings section, on the next page, for details of recent issues.

In 2017, we partnered with the Workplace Safety and Insurance Board (WSIB) to acquire 50% of Cadillac Fairview's Vancouver portfolio, with each partner taking a 25% interest. The portfolio consists of approximately 4.0 million square feet of leasable space and includes CF Pacific Centre, one of North America's top-performing shopping centres, along with 12 best-in-class office properties located in downtown Vancouver.

Driven by the strong Toronto office market, OPB and partner Cadillac Fairview commenced development of a 32-storey downtown office building at 16 York Street, scheduled for completion in 2020. Toronto is experiencing near-record-low vacancy rates, and we expect continued demand for commercial office space, along with a deep pool of prospective tenants for this property.

In the U.S. market, we added an iconic midtown office tower to the Plan's Manhattan office property holdings and co-invested in five multi-residential development projects across the New York Tri-State area.

OPB's retail portfolio was significantly impacted in 2017 due to its exposure to failing department store retailer Sears Canada. Sears, a tenant in nine directly held and four indirectly held properties, filed for creditor protection in June 2017 and subsequently liquidated inventory and closed all of its stores in January 2018. IMCO has plans for all locations that are affected by the store closures. For shopping centres, such as Pickering Town Centre, we will consider redevelopment opportunities (office, commercial, residential). In other locations, we will look to either reposition or dispose of the centres, continuing our strategy of reducing our retail exposure as disruption in this sector is changing the investment characteristics that had previously fit with our overall Real Estate strategy.

As of December 31, 2017, our Canadian holdings included ownership interests in approximately 8.7 million square feet of retail space and 9.6 million square feet of office space. A list of our Canadian real estate holdings can be found on page 101.

Bond Offerings

Issuing bonds allows us to enhance the return on our Real Estate portfolio in a cost-effective manner. The financing allows OPB to add high-quality assets to its Real Estate portfolio that generate cash flows greater than the amounts needed to cover the interest payments on the bonds.

In January 2017, OPB issued $750 million (Series "F") of 10-year bonds priced with a 2.98% annual coupon in conjunction with the purchase of a 25% interest in the portfolio of properties located in Vancouver. Bond issues are rated by credit agencies, and this issue again received strong ratings from Standard & Poor's (S&P) and Dominion Bond Rating Service (DBRS), which confirmed our ratings at AA+ (S&P) and AA (high) (DBRS).

OPB or entities created by IMCO may be bond issuers in future, depending on the asset or assets being acquired.

Infrastructure

OPB's Infrastructure portfolio consists of equity investments in assets that provide an essential service to the communities in which they operate. Our strategy focuses on core infrastructure assets that provide predictable and ongoing cash flow, stable returns during periods of equity market volatility, and some degree of inflation protection, which provides a good correlation with the Plan's inflation-linked long-term pension liabilities.

The Infrastructure portfolio has good diversification with respect to revenue source, geography and industry sector.

On a hedged basis, the Infrastructure portfolio generated a 2017 return of 4.5% compared to 9.8% in 2016. The portfolio generated $74 million in income during the year, with a year-end value of $1.43 billion, compared to $1.24 billion at the end of 2016. As of December 31, 2017, OPB had remaining unfunded commitments of $565 million to Infrastructure, up from $506 million a year earlier.

In 2017, we increased commitments to Infrastructure by approximately $350 million and invested in a new strategy focusing on late-stage development/greenfield projects and platform opportunities consistent with our infrastructure strategy.

Competition for high-quality infrastructure assets remains strong and prices are high. On our behalf, IMCO takes a consistent and disciplined approach in pursuing investment opportunities in this asset class and will only make investments that provide an appropriate risk/return payoff. It continues to focus on building relationships with investment partners and fund managers in order to increase access to a strong pipeline of co-investments in this competitive market. As a result, Infrastructure is slightly below its 2017 phase-in allocation (5.4% versus 6.0%), but is expected to be at or very near the target allocation by mid-2018.

The formation of IMCO in 2017 was instrumental in OPB's ability to position itself within Brookfield's (BIF III) group of investors with priority access to co-investments, and we anticipate working with Brookfield in the coming years to identify suitable co-investment opportunities.

Private Equity

Private equity consists of equity securities not publicly traded on a stock exchange. Private equity tends to be illiquid, and returns are generated principally from capital appreciation over the mid- to long term. Because of the added liquidity risk, returns for private equity are typically higher than those expected from public equities. OPB's long-term investing horizon positions us well to earn value-added returns from this increasingly important asset class.

Our Private Equity portfolio returned 17.6% in 2017, compared to 21.8% in 2016, on a hedged basis. The portfolio had a year-end value of $1.45 billion, compared to $946.7 million at the end of 2016.

Strong returns from funds and co-investments continued in 2017, with $143 million in income distributions during the year. Since inception in 2012, the Private Equity portfolio has generated a net return of 20%.

The Private Equity portfolio is ahead of its phase-in allocation, at approximately 5.5% versus the 2017 4.0% target allocation at year-end.

It was a busy year for co-investments, with approximately $384 million deployed in five new co-investments. Our largest co-investment was in Corsair, a leader in the PC gaming hardware market, where OPB partnered with EagleTree, a mid-market buyout fund with whom we have a long-standing relationship.

2017 was also a strong year for private equity realizations, with total proceeds of $136 million from the sale of a specialty packaging company, which generated a 49.8% net internal rate of return after being held for less than three years.

Annual Returns and Benchmarks

OPB's total annual rate of return is measured against a composite index, which takes the weighted average of the benchmark returns for each of the different asset categories (using the target phase-in allocation of the SAA to determine the weightings). The Plan expects its total return, net of fees, to meet or exceed the composite benchmark. The Plan's 10.8% rate of return for 2017 was 0.4% above the composite benchmark return of 10.4%.

Annual Rate of Investment Return

		2017		2016	
Asset Categories	Benchmark	**Actual**	**Benchmark**	Actual	Benchmark
Cash and Equivalents	FTSE TMX 91-Day T-Bill	**0.8%**	**0.6%**	2.6%	0.5%
Fixed Income	Custom Fixed Income Index	**4.1%**	**3.5%**	4.2%	1.4%
Canadian Equities	S&P/TSX Composite Index	**9.3%**	**9.1%**	25.6%	21.1%
Foreign Developed Equities	MSCI World (C$)	**18.7%**	**15.0%**	2.7%	4.4%
Emerging Equities	MSCI Emerging Equity Index (C$)	**25.0%**	**28.3%**	6.1%	7.7%
Real Estate	Custom Real Estate Benchmark	**2.4%**	**6.7%**	9.5%	5.7%
Infrastructure	Custom Infrastructure Benchmark	**4.5%**	**5.5%**	9.8%	6.9%
Private Equity	Custom Private Equity Benchmark	**17.6%**	**17.6%**	21.8%	21.7%
Total Investments	Composite Index	**10.8%**	**10.4%**	8.1%	6.6%

Note that, effective January 1, 2017, the Emerging Equities benchmark changed to MSCI Emerging Market Net of Dividend Withholding Tax. Prior to this, the benchmark was MSCI Emerging Market Gross of Dividend Withholding Tax.

Note that, effective March 1, 2017, the Real Return Bond component of the Custom Fixed Income Index changed from the FTSE/TMX RRB Index to the FTSE/TMX RRB Federal Non-Agency Index.

Responsible Investing

We believe that Responsible Investing (RI) – effectively managing environmental, social and governance (ESG) risks – supports our ability to pay pensions over the long term. In general, our view is that supporting ESG initiatives will improve corporate disclosure practices and enable long-term investors, such as OPB, to better evaluate investment return-risk/trade-offs.

OPB has fiduciary responsibilities to act in the best interests of Plan beneficiaries and for the long-term sustainability of the Plan. Therefore, it is important that factors such as ESG are incorporated in a manner that supports, and does not take precedence over, OPB's overriding fiduciary responsibilities.

The Ontario *Pension Benefits Act* requires OPB and other pension plan administrators to establish a Statement of Investment Policies and Procedures (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. Our SIP&P describes how ESG factors are incorporated by IMCO, which began to manage our assets in July 2017. IMCO will report annually to OPB on the consideration of ESG factors in accordance with OPB's investment management policies and procedures as well as proxy voting results. We will work closely with IMCO to further define and advance our commitment to Responsible Investing over time.

Voting proxies at shareholder meetings enables investors to convey their views to the board of directors and management of companies. In 2016, OPB brought proxy voting in-house to increase our influence with the companies we invest in, and this function has moved over to IMCO.

In 2017, votes were cast at more than 1,000 public company meetings. We voted against the management recommendation for 9% of agenda items at shareholder meetings. This includes election of directors and advisory votes on executive compensation, among other items. We supported 21 shareholder proposals seeking enhanced disclosure and/or action on climate change risks and opportunities at companies in our portfolio.

Responsible Investing

What We Did	Why It Matters
Voted our proxies based on the ISS Sustainability Proxy Voting Guidelines	ISS updates its proxy voting guidelines each year to take into account emerging issues and trends on ESG topics.
Supported collaborative initiatives, such as the Canadian Coalition for Good Governance; the annual CDP climate change information request sent to over 5,000 companies globally; and a global investor letter urging the G7 and G20 to stand by the Paris Agreement on climate change	Collaborative engagement leverages internal resources and encourages improved disclosure practices and performance of ESG factors across the investment portfolio.
Responded to the Principles for Responsible Investment (PRI) annual questionnaire (As of March 2018, OPB ceased to be a PRI signatory due to the transition of our investment management function to IMCO. However, IMCO will become a signatory.)	PRI is an international network of investors working to put Responsible Investing into practice and help build a more sustainable global financial system.
Began working with partner Cadillac Fairview to build a new 32-storey Toronto office tower to LEED Platinum specifications	LEED certification encourages the construction of energy- and resource-efficient buildings that are healthy to live and work in.

Investment Risk Management

At OPB, investment risk management has been integrated into the investment decision-making process and day-to-day activities.

OPB developed a risk dashboard that provides management with the ability to attribute, monitor and manage Total Risk, Active Risk and Surplus at Risk. The model is able to report at the SAA, asset class and mandate levels and was designed so that investment risk levels can be managed within the parameters established by OPB's Investment Risk Policy. The Risk Management Dashboard also enables management to integrate Surplus at Risk analysis into the investment decision process to optimize incremental returns and mitigate the risk that returns are insufficient to meet OPB's liabilities. With the transition of our investment management function to IMCO, OPB's Risk Management Dashboard and its Investment Risk Policy were transferred to IMCO, and IMCO will continue to manage and report to OPB on the foregoing risks as they pertain to OPB's investment portfolio.

IMCO further developed its investment risk capabilities in 2017 by incorporating risk contribution analysis during periods of market stress to better assess the Plan's ability to meet its obligations should a downside event occur. It began evaluating a scalable risk analytics solution to introduce risk factor analysis into the investment decision-making framework and will continue to enhance its risk measurement and management practices in 2018.

Risk Oversight

IMCO's activities with respect to OPB's investments are defined in a carefully negotiated legislative, regulatory and contractual framework that clearly lays out IMCO's duties, responsibilities and obligations and OPB's governance and investment-related rights. Under this framework, OPB sets the investment strategy and IMCO implements it.

The Investment Management Agreement (IMA) between OPB and IMCO states that IMCO will manage investment and enterprise risk in accordance with the *Pension Benefits Act*'s standard of care and best practices for Canadian public sector managers. IMCO will establish an investment risk management function, and has retained a Chief Risk Officer, joining in early 2018, who will report to IMCO's CEO.

In July 2017, we appointed Ken Lusk to the newly created role of Head of Investments and, in November 2017, to the role of OPB's Chief Investment Officer. As CIO, he will oversee OPB's fiduciary responsibilities and ensure that IMCO is managing our assets and related investment risks in accordance with our investment strategies and policies.

OPB will monitor, assess and report on IMCO's performance to the OPB Board of Directors, and ongoing risk assessment will play an important part in that monitoring function.

Investment Outlook

Global economic health is the most robust it has been in the post–Global Financial Crisis period. The synchronous nature of this growth has been unparalleled in recent decades. Commencing in the spring of 2016, powerful economic growth has been the engine of corporate earnings gains, and the basis for the long-drawn-out advance in risk assets (equities and credit in particular).

We believe the acceleration phase of this global economic growth will peak in the first half of 2018. This is not viewed as bad for global economic health generally, but a deceleration in growth could lead to a stalling of corporate earnings in 2018, which could increase the risk of a meaningful sell-off in risk assets, especially considering high asset valuations and changing global liquidity conditions, which remain favourable but are tightening at the margin.

More recently, the Bank of England joined the U.S. Federal Reserve (Fed), the Bank of China, and the Bank of Canada by tightening its policy rate for the first time in 10 years. Our internal tracking of global liquidity remains constructive; however, the tide of liquidity infusion by the central banks is receding. Net contributions to global liquidity remain positive overall, a function of China's additions to foreign exchange reserves and the ongoing Quantitative Easing programs of the European Central Bank and the Bank of Japan. By way of contrast, the Fed has commenced Quantitative Tightening (effectively reducing liquidity available to markets by reducing the central banks' asset holdings that were built up in response to the Global Financial Crisis).

At present, it is difficult to see the basis for a global recession in the near term. However, the policy risk of "too loose for too long" is a rising threat indicated by signals such as economies reaching full output levels, and employment approaching, or near, equilibrium levels in many countries. As inflation rates approach policy objectives, there is the risk that central banks will implement tightening at a level greater than economic fundamentals can withstand.

Service Excellence

At OPB, we believe that delivering on the pension promise goes beyond simply paying pensions and processing transactions. It means offering the support, services and tools our roughly 87,000 members need to make sound pension decisions in the context of their broader personal goals and financial circumstances. We recognize that each member has unique needs and retirement goals. Our goal is to ensure that our members have the information they need to make sound pension decisions. Our approach looks to add value to our members' service experience, and reflects our belief in creating a model that, in addition to providing sustainable retirement security, is designed for service excellence.

OPB led the industry by introducing Advisory Services for our members in 2015, and, to our knowledge, we remain the only defined benefit pension plan in the world that offers this service.

We continued to see excellent results in our client surveys in 2017 – despite record demand for services – with the launch of a new Retired Member Statement (RMS) and the introduction of optional insurance benefits coverage provided by the Government of Ontario. We experienced a 17% increase in service transactions over 2016 and an 11% jump in call volumes, and processed close to 6,500 optional insurance upgrade applications.

Even with this increased workload, 87% of OPB clients surveyed were satisfied or extremely satisfied with the service they received. This speaks to our organization's agility in responding to changing regulatory, industry and Plan circumstances.

Externally, OPB earned a score of 90/100 from CEM, a leading pension benchmarking firm. This placed us second among our Canadian peer plans for excellence in service and pension administration, and we rose to fourth place globally (up from fifth place previously).

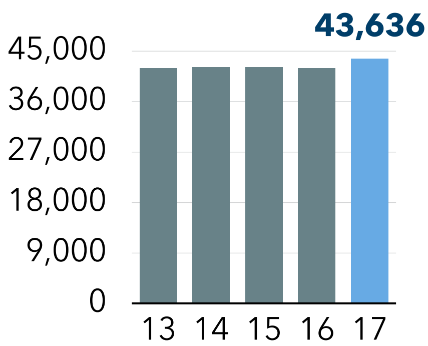
Client Services

At OPB, we take great pride in providing world-class service to our clients, tailored to align with their unique financial and retirement circumstances. In 2017, we continued to raise the service bar by:

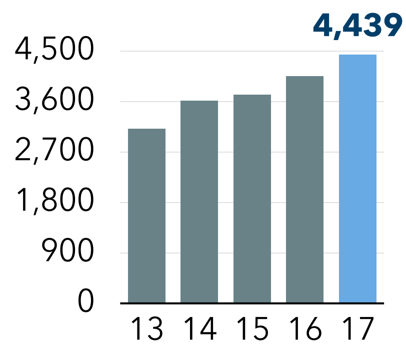
- creating a comprehensive annual Retired Member Statement that will provide our retired members with an overview of their pension entitlement along with a custom newsletter for retirees;
- helping retired members understand their options with the introduction of optional insurance upgrades and registering close to 6,500 retired members for these benefits;
- supporting 1,500 members at OLG in navigating the transition to their new employer;
- introducing advisory articles for our members; and
- launching new advisory workshops that incorporate financial literacy content and exercises to help early-, mid-, and late-career members improve their understanding of how their pension works with and impacts their broader financial plan.

What We Did	Why It Matters
Helped 2,800 members through our Advisory Services program; almost half of these interactions were about retirement planning	We help educate members on how pension benefits fit into their larger financial picture, so they can make the best financial decisions (about their pension and retirement) for themselves and their families.
Managed a 183% increase in service demand from retired members, with the launch of the new RMS and optional insurance upgrades	We are agile in responding to changing circumstances and surging work volumes without a significant increase in operating costs.
Answered 99% of client care calls within 30 seconds; managed more than 54,000 calls, an 11% increase over 2016	We are committed to maintaining world-class service to members.
Saw our strongest newsletter engagement yet, with popular advisory articles and information on retirement preparation, estate planning and relationship changes	We support improved retirement and financial literacy, so our members are better equipped to make important financial decisions.
Ranked second among our Canadian peer plans and fourth in the world by CEM Benchmarking for excellence in service and pension administration	We are recognized as a world-class service leader.

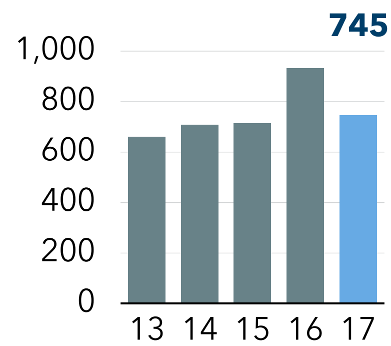
Number of Active Members



Enrolments



Buybacks Completed



In response to emerging technology and evolving client needs and preferences, we continue to enhance our digital services and become more mobile-responsive and interactive across our web channels.

- E-services usage increased by 8%.
- Members took advantage of our online retirement planning tool 16,034 times in e-services.

Advisory Services

In our third year, our team of in-house Certified Financial Planners® helped more than 2,800 clients to understand how their pension decisions fit into their broader financial and life circumstances. Client Service Advisors are designated Certified Financial Planners® (CFP®) or are accredited Registered Retirement Consultants® (RRC®) in the process of completing their CFP® designation.

Client feedback from those who have used our Advisory Services and advisory tools has been overwhelmingly positive:

- 91% report they are satisfied to extremely satisfied with the service;
- 84% indicate their advisor provided valuable insights they hadn't considered; and
- 86% indicate they received objective guidance to protect their best interest.

In 2017, we expanded our range of value-added, high-touch Advisory Services to members on LTIP and Case Management Masters, which means more members benefit from access to personalized advice about how pension benefits fit into their larger financial picture.

Pension Modernization

In 2017, we began the next stage of our evolution by officially launching our multi-year pension modernization initiative. This is a five- to seven-year program that will enhance our clients' experience – individually and across the board – by updating and re-engineering our business processes, systems and tools to provide the services they want and need. As a service provider, we are committed to meeting the evolving needs and expectations of our clients and stakeholders.

To help members make sound pension decisions, we need to deliver the personalized advisory services and tools they need to help them navigate those decisions. We also need to ensure our technology infrastructure and systems remain current and secure.

Pension modernization will focus on implementing new systems and tools that will help us support our members in their pension and overall retirement planning. Increasingly, members expect to be able to exchange information, complete transactions and receive their communications online. As we modernize our system, we will be able to add additional transactions and advisory tools online.

Our modernization initiative is a significant undertaking that requires careful planning and due diligence – we have a duty to our clients to get it right. In 2017, we dedicated significant effort to understanding how best to set up the program and engage our clients. We met with Canadian peers to learn from their experiences with pension modernization and researched solutions and approaches currently available.

In 2018, we will continue this planning and conduct further research into tools that support our Advisory Services. We intend to expand our research to explore solutions used in the financial, insurance and technology sectors, and use our findings to inform our request for proposals (RFP) process. We expect to confirm the timing of the RFP process before the end of 2018.

Outstanding Stakeholder Relations

OPB works closely with the Government of Ontario to ensure that its decision-makers, including Ministers, Deputy Ministers and other senior civil servants, fully understand the issues that impact the Plan. We also conduct regular and ongoing discussions with bargaining agent groups – keeping them informed about the health of the Plan and emerging trends and issues, and ensuring that they understand the value of the Plan.

We know that protecting the long-term sustainability of the Plan requires that we maintain strong relationships with the Plan Sponsor, our stakeholders and our members, and OPB remains committed to doing so.

In 2017, we:

- delivered 100 presentations, workshops and webinars to more than 2,100 Plan members across Ontario, providing them with education and information about the value of their pension, Plan provisions, and key decision points;
- presented at the Annual General Meetings (AGMs) of bargaining agents; and
- held 20 presentations and forums for employers.

We had almost 212,000 visits to OPB's public website in 2017, up 17% over the previous year. Mobile traffic throughout 2017 was steady, with approximately one in five visitors accessing opb.ca and our e-services websites via smartphone or tablet.

Use of our employer portal continues to grow after its successful launch in 2015. By the end of 2017, more than 12,500 transactions had been submitted by employers through the employer portal.

Financial Management

OPB is committed to managing costs and 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. We've expanded our range of member services in recent years, and incurred expenses related to the establishment of IMCO, yet our overall expense ratio remains among the lowest in the industry.

We accomplish this by:

- focusing on priorities and working smart;
- automating and redeploying resources where it makes sense to do so;
- enhancing our abilities, through staffing and training, to perform more value-added services in-house rather than pay premiums in the open markets; and
- increasing our digital offerings.

Our total operating expenses for 2017 decreased by 5.6% from 2016. This decrease is primarily related to the transfer of staff from OPB to IMCO during 2017, and was moderated by some increased spending incurred in the setup of IMCO.

Our overall combined (investments and pension administration) expense ratio for 2017 was 0.52% (or 52 cents per $100 of average net assets available for benefits). This was up slightly from 50 basis points in 2016.

Managing Costs

At OPB, we are committed to disciplined cost management. Our goal is to ensure we spend strategically where it is in the best interests of our members and stakeholders. To properly illustrate the Plan's status and our ability to meet the pension promise, we need to compare our returns against all Plan expenses, from investment costs to pension administration. This is because the funds available to pay pensions are determined by our investment returns after all expenses have been deducted. Due to the transition of our investment management operations during 2017, these costs are now incurred in two organizations: in the investment management fees and operations of IMCO and in the operating expenses of OPB.

Investment Fees – OPB (and, later in 2017, IMCO on OPB's behalf) incurs investment management and custodial fees. In addition, a share of the cost of IMCO's operations is charged to OPB on a cost-recovery basis. In 2017, these two costs were 0.33% (or 33 cents per $100 of average net assets available for benefits). These fees are deducted from total investment income. The investment fees disclosed in Note 8 to the financial statements include transaction costs. These costs are already included in our gross returns and, accordingly, are not deducted for purposes of calculating the basis point ratios of investment fees.

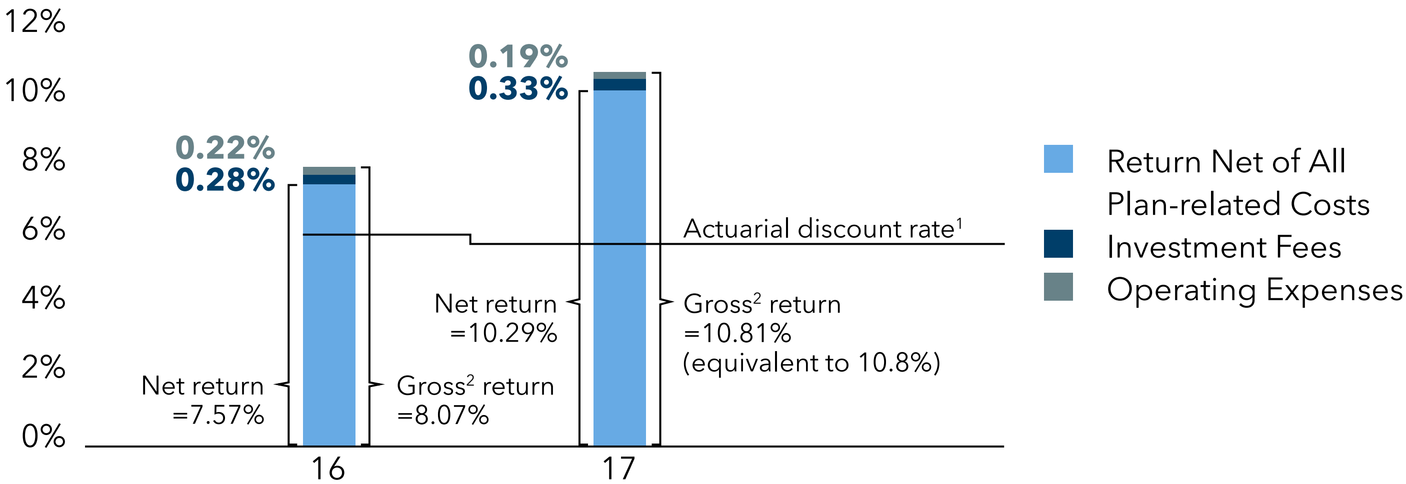
Operating Expenses – OPB has direct operating expenses, which are the internal costs associated with managing the pension plan, the pension administration and the oversight activities over IMCO. These costs represent 0.19% of the average net assets available for benefits for 2017.

The above two costs consolidate to a 0.52% expense ratio. We will continue to manage our costs at industry lows through strong budget management, keeping staffing costs in check compared to industry norms and focusing upon competitive procurements for essential services and technologies.

Returns

OPB's one-year return for 2017 is 10.8%. This is a return without netting out investment fees or operating expenses. The return net of all expenses is 10.3%. The comparison of the Plan's net return against the actuarial discount rate used to value the Plan's liabilities helps us answer the question "are we generating sufficient returns to meet the Plan's obligations net of all expenses incurred in managing the Plan?" The graph on the next page shows how the Plan's net returns for 2016 and 2017 compared to the actuarial discount rate we use to value the Plan's liabilities. In other words, it shows how our net returns in 2016 and 2017 compare to, and exceed, the long-term rate of return we need to meet our pension obligations based on our valuation's assumptions.

How the Plan's Net Return Compares to Its Discount Rate



Contributions

Contribution rates for the PSPP are set by the *Public Service Pension Act* (*PSP Act*), 1990. They remain among the lowest rates for major pension plans in Canada.

In 2017, members contributed 6.4% of their salary below the Year's Maximum Pensionable Earnings (YMPE) and 9.5% of their salary above the YMPE ($55,300 for 2017). Employers contribute a matching amount.

Ontario Provincial Police (OPP) officers 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 9.2% of salary up to the YMPE and 12.3% of salary above the YMPE. For civilians, the contribution rates are 6.775% of salary up to the YMPE and 9.875% of salary above the YMPE. These higher contribution rates are matched by the employer.

During 2017, contributions for all OPB members and employers totalled $804 million, up from $765 million in 2016. This increase is attributable to modest salary changes and an increase to the sponsor's additional current service contributions.

We noted in the 2016 Annual Report that the Plan would require a contribution rate increase to respond to changes in Plan member longevity and expectations for lower investment returns in the future. To address these changes while maintaining benefit levels, the Government of Ontario accepted our recommendation in 2017 and announced an increase in contribution rates of 1% of pensionable salary for PSPP members and employers. The increase will be phased in over two years. Phase 1 of this increase took effect in April 2018.

1 The actuarial discount rate assumption during 2016 was 5.95%. It was reduced to 5.7% for 2017. At the end of 2017, it was reduced to 5.6%.

2 The gross return shown above is net of investment manager fees on private assets that are deducted at source. Investment fees deducted from the gross return in the graph above include fees explicitly paid to external managers.

For OPP officers in the PSPP, the increase will be partially offset by a reduction in the additional contributions for 50/30 starting in 2019. In April 2019, OPP officers will have their additional 2% contributions reduced to 1.5% to reflect the fact that the cost of the 50/30 benefit has gone down because officers are starting later and, therefore, fewer of them are able to take full advantage of the 50/30 provision. This means OPP officers will see an overall increase in contribution rates of only 0.50% of pensionable salary after the increase has been fully implemented.

Although contribution rates will rise modestly, they remain among the lowest of peer pension plans, and the PSPP continues to offer excellent value for our members and employers. The contribution rate increase will help to ensure that members' pension benefits remain affordable and sustainable over the long term.

Pensions Paid

OPB made pension payments totalling $1.2 billion in 2017, up from $1.1 billion in 2016. Part of the increase is attributable to a 1.3% inflation protection adjustment (Escalation Factor) that was applied to pensions on January 1, 2017. The remainder is attributable to increases in the average pensions 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. More specifically, as a designated employer, OPB is required to abide by the provisions of the *Broader Public Sector Executive Compensation Act*, 2014 to ensure transparency relative to compensation decisions.

Executives receive an annual base salary that is within the salary range assigned for the corresponding classification. 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 comparators, including other public sector pension plan administrators, third-party administration firms, and investment management organizations. OPB regularly participates in third-party external compensation surveys and typically trends below market average.

In 2014, a long-term incentive plan (LTIP) was introduced for key investment personnel. It used a mix of performance metrics that included total fund returns against benchmark, client service and PSPP funded status, and measured these over a four-year timeline. With the creation of IMCO and transfer of investment executives to that organization in July 2017, the LTIP has subsequently been discontinued at OPB.

The table below sets out the compensation for the CEO and the four senior executives who report directly to the CEO. The figures set out in the table include the components of compensation and the total compensation (excluding only retirement benefits) paid to the listed executives. In July 2017, three of OPB's senior executives transferred to IMCO, and hence have not been listed in the table below.

For the year ended December 31	Year	Base Salary[1]	Short-Term Incentive[2]	Taxable Benefits & Allowances[3]	Total
Mark Fuller, President & CEO	2017	$ 487,135	$ 276,819	$ 682	$ 764,636
	2016	$ 473,000	$ 258,077	$ 699	$ 731,776
Valerie Adamo, Chief Technology Officer	2017	$ 323,069	$ 152,983	$ 497	$ 476,549
	2016	$ 316,758	$ 139,057	$ 508	$ 456,323
Paul Edmonds, Chief Legal & Governance Officer	2017	$ 316,685	$ 126,168	$ 473	$ 443,326
	2016	$ 316,758	$ 129,125	$ 513	$ 446,396
Ken Lusk,[4] Chief Investment Officer	2017	$ 42,393	n/a	n/a	$ 42,393
Peter Shena, Executive Vice-President & Chief Pension Officer	2017	$ 323,069	$ 147,917	$ 497	$ 471,483
	2016	$ 316,758	$ 139,057	$ 513	$ 456,328

1 Base salary is based upon amounts paid during the year.
2 Short-term incentive earned is paid in March of the following year.
3 Includes life insurance. There are no car allowances or other perquisites.
4 Mr. Lusk was appointed to CIO on November 21, 2017. Amounts shown reflect compensation from that date.

The above-noted individuals are entitled to pension benefits on their base salary from both the PSPP and the Public Service Supplementary Benefits Account (the PSSBA). Having the executives as members of the same pension plans as the clients that they serve builds strong alignment.

The listed executives (except for the newly appointed Chief Investment Officer) 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.

Sound Risk Management

OPB's risk framework is set out in our Corporate 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 risks and develop mitigations that limit downside risk exposures. In a rapidly changing environment characterized by technology disruption, geopolitical instability, cyber-threats and changing societal demands, risk management will play an increasingly important role in enabling OPB to engage in innovative strategies designed to keep our Plan strong while maximizing value for all our 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 and competing demands. ERM delivers value by providing a consistent framework that helps address the strategic uncertainty we face in the pursuit of building value for our stakeholders.

While OPB tries to anticipate all material risks that it faces, unforeseen and unprecedented events will occur. The ERM program provides a framework to confidently evaluate and manage uncertainty that will naturally arise from our responsibility to administer a major defined benefit pension plan.

Managing risk is about making strategic and tactical decisions to control the risks that should be controlled and to exploit those opportunities that can be exploited. OPB values an enterprise-wide approach that involves all areas of our organization and all levels of staff.

In the near term, planned risk management initiatives will focus on continuous improvement of our governance and reporting processes. As we embark on a large technology transformation, changes in how we manage risk become critical. We fully anticipate that a transformational program such as pension modernization will introduce new challenges and opportunities. By planning early and refining how we manage risk, we can confidently advance opportunities and protect value at the enterprise level.

We continue to advance the maturity of our ERM practices.

Operational Risk Management

We use operational risk management (ORM) to provide 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, service quality and key process delivery.

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. Our risks are controlled through:

- management allocation of internal resources to monitor and manage individual technology life cycles;
- an increased focus on infrastructure and supplier service management governance; and
- development of relevant contingency plans for core applications and systems in the event that an incident occurs.

The next few years are critical as we plan for new systems and models of IT service delivery.

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. In 2017, we reviewed and updated our inventory of key business processes, as well as the risks within each identified business process, and prioritized areas for review over the next several years.

Privacy, Security and Compliance

Like most public institutions and financial services organizations, OPB faces a number of risks related to privacy, security and compliance. We continue to invest in and monitor privacy controls and conduct an enterprise-wide compliance program using a combination of policy training and ongoing review of reputational reporting and attestations. On the security front, we continue to enhance the security of our systems, people and data. We have implemented changes in our network security protocols, ramped up our user training awareness campaigns, selected industry-leading cybersecurity and cyber-threat intelligence suppliers, and implemented a cross-functional cyber-action team. We have in place a comprehensive third-party risk management program.

Project Delivery

Large projects have the ability to introduce 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.

What We Did	Why It Matters
Acquired the services of a managed security service provider to enhance the prevention and response capabilities of OPB	Takes a more proactive and continuous improvement–based approach to the evolving security threat landscape.
Began preparations to replace our existing IT managed service delivery model with an evolved model; procurement and selection will take place in 2018	Will enable IT services to support current and future digital business processes and outcomes.
Transitioned the investment portion of OPB's Risk Management Dashboard and Investment Risk Policy to IMCO	IMCO will continue to manage and report on risks pertaining to OPB's investment portfolio, and IMCO will build its in-house risk management capabilities.
Continued in-depth planning for the replacement of our aging pension administration systems as part of the multi-year pension modernization program	Will help us to improve client and stakeholder outreach and support our progressive digital strategy, while improving data security.
Implemented a Board of Directors–approved Emerging Risk Trends Scanning Process	Routine surveillance helps us assess the business impact of threats and opportunities presented by changes in the external environment.

Governance

A strong 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 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.

Underpinning our governance framework is a series of documents that define our organizational structure, 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.

Our Governance Documents clearly define roles and responsibilities, 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. That said, the Board has delegated to management the responsibility for the day-to-day operations required to administer the Plan and manage the Fund, and approved the appointment of IMCO as OPB's sole and exclusive investment manager to manage the investment and reinvestment of the Fund and as OPB's non-exclusive investment advisor.

As part of IMCO's appointment, 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 returns and risk management, and its performance in fulfilling its duties, responsibilities and obligations under the IMA and the ISA, including with respect to financial reporting, audit and internal controls.

The Board has also chosen to delegate specific responsibilities to five committees of the Board: the Governance Committee, Investment Committee, Audit Committee, Pensions Committee and Human Resources Committee.

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;
- conducts performance and compensation reviews for the President & CEO;
- approves the Strategic Asset Allocation, which drives investment management asset mix decisions;
- supervises and approves all audit matters;
- ensures that management is maintaining a culture of integrity;
- conducts an annual review of OPB's Statement of Investment Policies and Procedures;
- approves any recommendations made to the Plan Sponsor regarding Plan amendments and funding; and
- monitors compliance with OPB's governance documents.

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 Commission of Ontario (the organization that oversees registered pension plans in Ontario); and
- the Government of Ontario (the Plan Sponsor).

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.

Looking Ahead

In 2018, we will remain focused on providing members with unsurpassed service, protecting the sustainability of the Plan and effectively managing costs. We will work to keep the PSPP strong and to achieve our goal of helping members achieve retirement security with a plan that is designed for service excellence and remain financially healthy.

The pension modernization initiative will be a priority throughout 2018. We are focusing on planning and preparation in the early stages of this program to ensure we identify and begin to address our clients' needs and our business requirements.

Our public website will also receive a relaunch in 2018, offering members access to a mobile-responsive platform and a more engaging experience that helps them find relevant information based on their life stage.

We will continue to enhance the range and quality of our Advisory Services, and elevate our engagement with members and stakeholders so we can better tailor our services to meet their needs.

We continue to work on funding management strategies that will support Plan sustainability. OPB will also continue to support the Government of Ontario's goal of consolidating smaller broader public sector pension plans. By bringing in smaller plans and growing our client base, this strategy also supports the long-term sustainability of the PSPP by increasing our membership and assets. As participants in the PSPP, these smaller plans will also have access to immediate professional investment management through IMCO. We expect to experience higher service demands as we bring on new employers and support the final groups of OLG employees whose employment will transfer to new private sector providers.

We continue to work closely with IMCO in its first full year of operation and will continue to build our oversight function, so OPB can be assured our assets are being prudently managed by the new organization. Work remains to be done in order for IMCO to become fully self-sufficient. For example, OPB is currently providing IMCO with transitional support services including technology infrastructure, payroll, facilities maintenance and financial reporting. It is expected that by mid- to late 2018, these services will be largely self-contained within IMCO. In 2018, we will continue to diligently manage our costs. When preparing our business plan and budget, we review all expenditures with a view to ensuring that any proposed increase in expenses is included only if deemed absolutely necessary. Our 2018 operating expenses are expected to decline due to the outsourcing of OPB investment operations to IMCO.

Five-Year Review

(in millions of dollars)	**2017**	2016	2015	2014	2013	
Opening net assets	**$ 24,381**	$ 23,075	$ 22,231	$ 20,915	$ 18,991	
Investment income	**2,531**	1,751	1,224	1,642	2,244	
Contributions	**804**	765	731	719	709	
Transfers from other plans	**137**	85	111	81	91	
	3,472	2,601	2,066	2,442	3,044	
Pension payments	**1,175**	1,099	1,038	989	959	
Terminations	**148**	146	137	94	121	
Operating expenses	**48**	50	47	43	40	
	1,371	1,295	1,222	1,126	1,120	
Closing net assets	**26,482**	24,381	23,075	22,231	20,915	
						Cumulative Since Inception
Annual rate of return	**10.8%**	8.1%	6.1%	8.4%	12.5%	8.6%