OPB
Your Pension. Our Promise.

Management's Discussion & Analysis

Introduction

At the end of 2015, despite challenging markets, the Public Service Pension Plan (PSPP or the Plan) remained 98% funded on a going-concern basis. That achievement is thanks, in no small measure, to our Investments team's proven ability to manage through challenging markets and generate consistently strong returns.

In 2015, we continued to shift more of our assets from public markets to private market investments that offer the consistent long-term returns needed to keep the Plan sustainable for years to come. Our 6.14% return was a strong result given the economic conditions and volatile markets.

While investment performance remains a key focus for OPB, we also understand that service excellence and open, honest relationships with our stakeholders are of equal importance to the Plan's success. OPB is widely recognized as a leader in the global pension landscape – CEM, a leading benchmarking firm, ranks us second in pension administration among 13 Canadian peer plans, and fifth in the world out of 77 plans globally.

We're committed to upholding this reputation by delivering cutting-edge, world-class client service. To protect the pension promise, we implemented or advanced several key initiatives in 2015, as follows:

- increased our gross exposure to private markets investments by approximately $1.9 billion, including the high-profile acquisition of a 30% co-ownership interest in Toronto's iconic TD Centre;
- pursued and nurtured key relationships with like-minded institutional investors, by seeking out new co-investment and co-ownership opportunities;
- worked to advance the planned asset pooling initiative with the Workplace Safety and Insurance Board;
- revamped our Enterprise Risk Management (ERM) reporting process to give our Board of Directors and management team the information needed to more quickly identify and quantify potential risks, and to develop effective countermeasures;
- moved forward with initiatives to strengthen OPB's operational and investment risk management;
- launched an online portal for employers designed to reduce processing times for key transactions, while helping OPB to track key employer trends and focus support resources in the most efficient way;
- continued to promote our Advisory Services program launched in 2014 to provide members and retirees with the financial analysis they need to make informed pension decisions that align with their broader retirement goals and strategy;
- actively promoted the socio-economic value of the defined benefit (DB) model and demonstrated – by way of example – that DB plans are sustainable when well managed; and

- managed expenses strategically and responsibly so that we continue to meet and, ideally, exceed government expectations for fiscal restraint while continually improving our performance.

This section of the report expands on these and other important initiatives from 2015.

Funding

A strong funded position is vital to our ability to deliver the pension promise. We are pleased to report that the Plan was approximately 98% funded at the close of 2015 on a going-concern basis.

The Plan's strong funded status can be attributed to solid investment returns and to lower-than-expected increases to public sector salaries and inflation rates. This position has been achieved despite the additional pension liability we've added to the Plan by strengthening our mortality assumption in 2013 in recognition of the fact that our pensioners are living longer.

For the purposes of the accounting basis valuation, the Plan's liabilities were calculated as of December 31, 2014, the date of the last funding valuation, and extrapolated to December 31, 2015. The extrapolated numbers are based on the assumption that the Plan's 2014 experience (for factors such as salary increases, retirement ages, and termination and mortality rates) match the Plan's actuarial assumptions. The extrapolation reflects indexing adjustments made to pensions as of January 1, 2015.

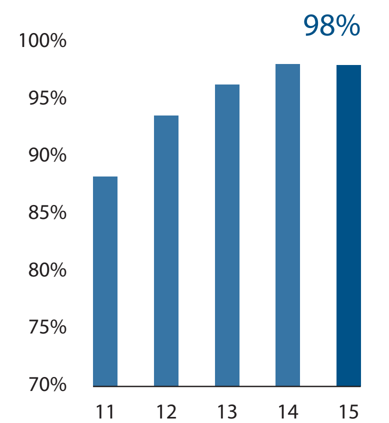
In the world of pensions, long-term plan sustainability trumps year-to-year results. Our commitment to effective pension plan management includes adherence to a robust funding policy. The Plan's current funding policy, developed with the Treasury Board Secretariat and approved by OPB's Board of Directors in 2014, guides decisions around Plan design, funding and valuation assumptions.

The Plan's discount rate is one key assumption used in valuations. It reflects what the Plan's assets can reasonably be expected to earn over the long term (less expenses and provisions for unanticipated events) and can influence Plan liabilities and, by extension, future contribution rates and benefit levels. The setting of the discount rate is a rigorous exercise designed to ensure the assumption is reasonable and aligns with the long-term investment returns OPB management believes can be achieved above our 5.95% discount rate. This is based on robust modelling that allows for a cushion.

OPB is scheduled to complete a long-term funding study in 2016 in conjunction with our next Plan valuation. This study, typically completed every three to five years, determines whether the funds flowing into the Plan (i.e., contributions together with net investment income) are sufficient to meet the pension promise in the years ahead.

If the 2016 study results show that adjustments to contributions and/or benefit levels are warranted by future developments – including changes to expected lifespans and membership levels, as well as continued market volatility – we would make recommendations for Plan adjustments to the Plan Sponsor (the Government of Ontario). Our last long-term funding study, in 2014, concluded that no changes were required at the time.

Funded status



Funding

What we did	Why it matters
Conducted an interim funding valuation	OPB is required to file a valuation with the Financial Services Commission of Ontario (FSCO) at least once every three years. Although not required by law to conduct a funding valuation again until December 31, 2016, OPB conducts interim valuations to ensure funding levels are tracking as expected. Our latest funding valuation measured the Plan's funding as of December 31, 2014.

Managing funding

The funded status of a pension plan is, in simple terms, determined by the "pension equation", which compares the value of pension assets on one side with the value of pension liabilities 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.

During the 1990s, investment returns exceeded expectations, prompting many plans to focus more on assets than liabilities. At the same time, a number of factors, including declining interest rates and longer life expectancies, began to influence the long-term cost of the Plan's pension liabilities (obligations). The combined impact of higher pension costs and the onset of market volatility quickly eroded funding surpluses and left most plans facing funding shortfalls – in many cases, significant shortfalls.

At OPB, we pride ourselves on having always paid close attention to the liability side of the pension equation. Our focus on liabilities and adoption of conservative assumptions have contributed significantly to the Plan's continued financial health. Despite ongoing economic and financial market challenges, we've been able to progress along the path to full funding while keeping benefit levels stable and contribution rates affordable.

Our success in managing liabilities can be attributed to two key factors:

1. OPB and its stakeholders have, together, made informed and responsible decisions about the benefit levels promised by the Plan; and
2. OPB has done a good job of setting prudent and realistic demographic and economic assumptions, which are used to calculate the Plan's pension obligations, and has made contribution rate adjustments in a timely fashion when needed.

Financial position

OPB conducts two different valuations on a regular basis – a funding basis valuation and an accounting basis valuation.

- The **funding basis valuation** 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; and
- The **accounting basis valuation** is used to determine the surplus or deficit position of the Plan for reporting on our financial statements. The valuation is prepared in accordance with the Chartered Professional Accountants of Canada Handbook.

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

Financial position

Valuation type	Purpose and description
Funding basis valuation	Pension plans are legally required to file a funding valuation with the FSCO at least once every three years. OPB filed its 2013 valuation in September 2014. This valuation indicated that the Plan was 96% funded and had a shortfall of $0.8 billion. That compares to 94% funded with a shortfall of $1.2 billion at December 31, 2010 (the previous valuation filed with pension regulators). Although OPB is not required by law to conduct another funding valuation until December 31, 2016, we conduct annual interim valuations to ensure that funding levels are tracking as expected. We are currently finalizing an interim valuation based on data available as of December 31, 2015. This valuation is expected to show that the Plan was 98% funded. In other words, the Plan's funding position continues to hold relatively steady.
Accounting basis valuation	For the purposes of the accounting basis valuation, the Plan's liabilities were calculated as of December 31, 2014, the date of the last funding valuation, and extrapolated to December 31, 2015. The extrapolated numbers are based on the assumption that the Plan's 2015 experience (for factors such as salary increases, retirement ages, and termination and mortality rates) match the Plan's actuarial assumptions. The extrapolation reflects indexing adjustments made to pensions as of January 1, 2015. For financial reporting purposes, we have calculated the Plan's 2015 year-end financial position by comparing the extrapolated liability with the actual market value of assets as of December 31, 2015. Based on the accounting basis valuation as of December 31, 2015, the Plan had a deficit of $434 million (see Note 7 "Deficit" on page 52), compared to $332 million at year-end 2014.

Disciplined and astute investing

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 relatively 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 generate strong, long-term investment returns within acceptable risk parameters by:

- minimizing unrewarded risk;
- reducing absolute volatility;
- focusing on fundamental research and analysis to make investment decisions; and
- sourcing global investment opportunities that provide predictable cash flow.

During 2015, our Investments team focused on three key areas:

1. optimizing the implementation of our Strategic Asset Allocation (SAA) to increase our exposure to private markets;
2. continuing to build on our in-house expertise and asset management capabilities; and
3. enhancing our investment risk assessment and analysis and advancing its contribution to the management of assets.

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

Strategic Asset Allocation (SAA)

The current SAA targets, updated in 2014 following the triennial asset/liability study, help us better meet the Plan's long-term funding objectives and effectively manage investment risk. The updated targets, which called for a shift in the Plan's assets from public to private markets investments, continue to ensure superior diversification and generate enhanced risk-adjusted returns.

In 2015, OPB continued to implement the updated SAA targets according to the planned five-year phase-in period that began in 2014. The updated SAA for private markets doubled the target allocation for infrastructure, increased private equity by two-thirds and maintained the real estate target. More private markets assets help insulate the Plan from public markets volatility and, in the case of real assets, enable us to generate a larger proportion of returns from ongoing cash flow versus capital appreciation. Private equity investments are also less volatile than public market equities and offer attractive risk-adjusted returns. The team also continued the transition from universe bonds to long bonds, which provide a better match with the Plan's long-term cash flow needs.

In 2015, all three private markets asset classes exceeded their phase-in SAA target weights. As we move forward with our search for global opportunities, OPB will continue to be thorough in its analysis, and take measured, smart risks. We consider what role an investment will play in our portfolio (from both a risk and return perspective) and whether it complements our existing holdings.

SAA asset mix targets

Asset Categories	2014 Current SAA[1] Target	2011 Previous SAA Target
Cash and Equivalents	**3.0%**	2.0%
Universe Bonds	**0.0%**	18.0%
Long Bonds	**17.0%**	0.0%
Real Return Bonds	**5.0%**	5.0%
Canadian Equities	**7.5%**	10.0%
Foreign Developed Equities	**15.5%**	17.0%
Emerging Equities	**14.0%**	15.0%
Real Estate	**23.0%[2]**	25.0%
Infrastructure	**10.0%**	5.0%
Private Equity	**5.0%**	3.0%
Total Investments	**100.0%**	100.0%

1 The 2014 SAA targets are the ultimate targets to be phased in over a five-year period. This is distinct from the SAA targets that are disclosed in Note 4(a) of the Financial Statements, which are the transition plan's year-end target allocation.

2 Net of financing.

Enhancing in-house asset management capabilities

OPB continued to build on its in-house expertise and management of assets in 2015. In addition to the growth of its private markets investments, OPB advanced its Tactical Asset Allocation (TAA) strategy and continued to selectively in-source components of the Public Markets portfolio.

Leveraging evolving policies, procedures and strategies, we were able to make timely TAA decisions in 2015 that helped bolster our overall investment results. For example, in August 2015, in anticipation of increased market volatility before the subsequent downturn in equity markets, the Asset Mix Committee took steps to preserve stakeholder capital by opening a relative short position in equities (i.e., reducing the Plan's exposure to equity markets) and purchasing protective put options. The strategy was well timed. Not only did the reduced exposure to public equity markets help preserve capital but the Plan benefited from the increased market volatility as the value of the put options increased during the subsequent market turbulence.

As part of the initiative to in-source the asset management of select public markets investments (Internalization Program), OPB developed and deployed several new mandates internally in 2015, including a liquidity-focused money market mandate and a market-neutral strategy. By implementing and supporting further internal asset management, we are better able to agilely respond to market movements and opportunities and generate incremental risk-adjusted returns on a cost-effective basis.

Investment risk assessment and analysis

As OPB moves forward with the Internalization Program, it is increasingly important that we advance and strengthen our investment risk assessment and reporting capabilities.

In 2015, we developed a robust risk-attribution modeller that allows us to better integrate liability and risk considerations into the investment decision process. We also continued to enhance key systems that give us the ability to capture, process, manage and use data to provide management with enhanced investment reporting that allows for more informed decisions. We use this data for:

- performance measurement;
- attribution, which identifies key drivers of investment performance;
- trade capture and portfolio management;
- tracking private markets deals;
- managing key documents; and
- supporting internal management of equities, fixed income, currency and derivatives.

Investment

What we did	Why it matters
Achieved an annual investment return of 6.14%	Despite ongoing market volatility, good investment returns helped keep the Plan's funded status steady at 98% as of December 31, 2015.
Adjusted our SAA	The Investments team continued working to meet the adjusted SAA targets identified in 2014 to better match the Plan's liability profile. Targets were adjusted to place more emphasis on Private Markets investments and long-term bonds.
Advanced our TAA strategy	Our TAA strategy helps enhance returns by taking advantage of perceived market anomalies at various points in the market cycle and preserving capital in volatile markets. Timely TAA decisions in 2015 were key to bolstering our investment returns.
Increased our exposure to private markets investments by approximately $1.9 billion	Private markets investments 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.
Leveraged a key partnership to acquire a 30% co-ownership interest in Toronto's iconic TD Centre	This significant acquisition will further position us as a trusted investment partner – and should help us attract additional partnership opportunities in the future.
Increased our investment in private equity by more than 50%	Private equity is less liquid, but generally provides higher returns than public equity over the long term. We can leverage our long-term focus to generate value-added returns. We also diversified the portfolio by increasing our exposure to Western Europe.
Increased our investment in infrastructure by more than 50%	The Infrastructure portfolio focuses on core infrastructure investments that provide a steady stream of cash flow, stable returns during periods of equity market volatility, and a hedge against inflation. In 2015, we acquired a co-investment interest in regulated electricity assets in Spain, as well as an interest in two airports in Australia.

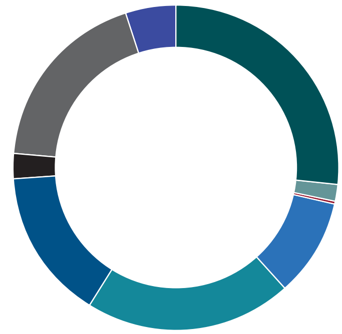
Asset mix

Asset mix is the single most important driver of investment performance. At OPB, asset mix is defined in our SAA, with deviations based on our TAA strategy.

OPB's asset mix comprises:

- Interest-bearing investments (cash, short-term investments and fixed income investments);
- Public Equities (stocks); and
- Private Markets investments (Real Estate, Infrastructure and Private Equity).

Asset mix
As at December 31, 2015



- 26.7 % Fixed Income[1]
- 1.8 % Long Bonds
- 0.3 % Real Return Bonds
- 9.8 % Canadian Equities
- 20.5 % Foreign Developed Equities
- 15.0 % Emerging Equities
- 2.4 % Private Equities
- 18.5 % Real Estate
- 5.0 % Infrastructure

[1] The Fixed Income amount contains the negative value of -0.3% Cash and Equivalents

Bond offerings

OPB completed two private bond financings in 2015, raising $500 million. Issuing bonds allows us to enhance the return on our rental property portfolio in a cost-effective manner; the financing allows OPB to add high-quality assets to its Real Estate portfolio which generate cash flows greater than the amounts needed to cover the interest payments on the OPB bonds.

Bond issues are rated by credit agencies, and we are very pleased that our bond issues received strong ratings from both Standard & Poor's (S&P) and Dominion Bond Rating Service (DBRS), which confirmed our ratings at AA+ (S&P) and AA high (DBRS).

In February 2015, OPB completed its fourth private placement of bonds in the amount of $250 million (Series "D"). The seven-year offering was priced with a 1.88% annual coupon (interest payment to bondholders) and was OPB's most broadly distributed bond issue to date. The 1.88% annual coupon was the lowest pension sector coupon ever achieved, as well as the lowest seven-year coupon ever recorded in the Canadian corporate market. Net proceeds from the bond issue were loaned to two wholly owned real estate subsidiaries and a real estate trust previously established for the benefit of OPB. In turn, these entities partially repaid amounts previously loaned to them by OPB for the acquisition of real estate assets, most notably Centre 10, a newly constructed, fully leased office building in Calgary.

In November 2015, OPB reopened its Series "D" bonds and issued another $250 million. The net proceeds from this bond issue were loaned to a wholly owned real estate subsidiary that, in turn, partially repaid an amount loaned to it by OPB for the acquisition of a 30% co-ownership interest in the Toronto TD Centre.

Investment performance

Investment excellence continues to be a top priority for OPB. The Investments team is pleased with the performance of the Plan in 2015. Our overall annual return of 6.14% exceeded the portfolio benchmark by 77 basis points and helped maintain the current funded status of the Plan.

The continued expansion of OPB's in-house capabilities gives us the agility we need to quickly pursue innovative, cost-effective investment opportunities – an essential advantage in fast-changing markets. Other factors bolstering our results included timely TAA decisions and the strong performance in our Private Markets portfolio.

Given that pensions are accrued and paid out over decades, pension plans need to take a long-term perspective. As such, our investment approach emphasizes capital preservation and seeks to generate strong long-term returns that limit exposure to market volatility and lower absolute risk. On a four-year basis, our compounded annualized return has exceeded the portfolio benchmark by 1.32% (132 basis points) per year.

Following is a more detailed look at our performance results by asset class.

Interest-bearing investments

Interest-bearing investments give the Plan a stable source of cash flow. They also help preserve capital in times of market volatility. As of December 31, 2015, interest-bearing investments accounted for 28.8% of the Plan's net assets and included:

- **Fixed Income** – The Plan's fixed income portfolio provided a solid return of 3.8% in 2015, ending the year valued at $6.6 billion. That compares to a 9.1% return in 2014, when the year-end value was $6.2 billion.
- **Private Debt** – Within the Plan's fixed income portfolio, Private Debt assets consist mostly of high-quality, investment-grade, income-bearing fixed income products of various maturities that are unavailable in the public market. These investments typically offer higher yields than public bonds and, with appropriate issuer collateral and financial covenants, can reduce investment risk. The portfolio returned 8.7% in 2015, with a year-end value of $390 million. That compares to a return of 6.5% and a year-end value of $421.3 million in 2014.

In 2015, we:

- continued to transition from universe to long bonds, which provide a better match for the Plan's long-term cash flow needs;
- launched a liquidity-focused money market mandate and a market-neutral strategy incorporating an indexed bond portfolio; and
- developed the capability to transact in OTC Interest Rate Swaps, providing management with another tool to manage interest rate risk.

Public Equities

OPB continued shifting assets from Public Equities to Private Markets, as part of the SAA shift initiated in 2011 and confirmed in the 2014 asset/liability study. As of December 31, 2015, Public Equity investments accounted for 45.3% of OPB's net assets, compared to 51.7% at year-end 2014. We in-sourced select public markets assets identified as part of OPB's Internalization Program, which better positions us for value-added portfolio management, lower costs and greater control and transparency. The Plan also benefited from a transition to active foreign currency management of its developed markets equity positions in 2015.

The Plan's Canadian equity portfolio returned -9.3% in 2015. That compares to 8.7% in 2014. The year-end market value of the portfolio was $2.2 billion, compared to $2.3 billion at year-end 2014.

The Plan's foreign developed equity portfolio generated a return of 21.7% in 2015. That compares to 13.1% in 2014. At year-end 2015, the portfolio held a market value of $4.7 billion, compared to $5.3 billion at year-end 2014.

The Plan's emerging markets equity portfolio returned 5.0% in 2015, compared to 10.2% in 2014. As of December 31, 2015, the portfolio's market value was $3.5 billion, compared to $3.9 billion at year-end 2014.

Private Markets investments

As previously indicated, our Investments team continued to shift assets from Public to Private Markets in 2015. Real assets help protect the Plan from Public Markets volatility as a larger proportion of their returns are in the form of ongoing stable cash flows versus capital appreciation. Private equity offers attractive risk-adjusted returns and allows improved diversification by asset type, industry and geography. OPB's Private Markets investment strategy involves acquiring first-class real estate properties, core infrastructure assets and private equity buyouts through a combination of direct investment, fund investments and co-investments.

OPB increased its gross exposure to private markets investments by approximately $1.9 billion in 2015, increasing both our Infrastructure and Private Equity portfolios by more than 50% and our Real Estate portfolio by 30%. Our reputation as a trusted and respected partner provides us access to sought-after assets that may not otherwise come to market. This is a distinct advantage, especially as demand for private markets assets becomes increasingly competitive. Investing directly and through co-ownership and co-investment opportunities helps us deploy investment dollars more quickly and reduce investment fee drag.

As of December 31, 2015, Private Markets investments accounted for 26.0% of OPB's net assets, up from 20.5% at year-end 2014. The market value of these investments as of December 31, 2015 was $6.0 billion, up from $4.5 billion at year-end 2014.

Our Private Markets portfolio has a winning track record – posting positive returns from day one. The portfolio's success can be attributed to several factors:

- our disciplined approach to investing;
- our success in avoiding the J-curve effect (a situation that results in lower returns in the early years – paying fees to managers before they have actually made investments) by investing in assets directly or in more mature funds;
- strong relationships with partners who continue to give us access to top-quality investment opportunities; and
- our ability to negotiate the best possible investment fees.

The following is a more detailed breakdown of Private Markets assets by asset class.

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

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

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. Our allocation to real estate assets as of December 31, 2015 stood at 18.5%. The portfolio's net market value at year-end 2015 was $4.3 billion, compared to $3.4 billion a year earlier.

OPB's Real Estate portfolio returned 12.2% in 2015, compared to 5.0% in 2014. Since 1994, when OPB made its initial investment in real estate, the portfolio has generated an average annual return of 10.6%. The Real Estate portfolio return is measured net of privately issued bonds guaranteed by OPB of $1.250 billion (par value) at the end of 2015 ($750 million (par value) as at December 31, 2014) and any property-specific mortgages. The objectives of the Plan's 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.

OPB continued to make key additions to its Real Estate portfolio in 2015. Of particular note, we leveraged a key partnership to acquire a 30% co-ownership interest in Toronto's iconic TD Centre from Cadillac Fairview. We anticipate that this high-profile acquisition will help us attract additional partnership opportunities in the near future.

Our Investments team added to our Manhattan office property holdings by co-investing in two more office towers, with a third building under contract that was completed in mid-January 2016. We also realized significant profits from the sale of our partnership interest in OPB's first New York real estate fund investment and partial co-investment interests in four Manhattan office buildings. As of December 31, 2015, OPB co-owns eight office buildings in Manhattan. The portfolio's international content also includes several properties under development in London and Paris.

The major portion of our Real Estate holdings consist of rental properties located in Canada. As of December 31, 2015, our Canadian holdings included ownership interests in approximately 8.5 million square feet of retail space and 6.3 million square feet of office space. A full list of our Canadian real estate holdings can be found on page 59.

Infrastructure – OPB's Infrastructure portfolio was first introduced in 2011. The Investments team focuses on core infrastructure assets that provide a steady stream of cash flow, stable returns during periods of equity market volatility, and a hedge against inflation.

In 2015, we increased our infrastructure investments by almost 55%. This included acquiring a co-investment interest in regulated electricity assets in Spain, as well as an interest in two airports in Australia. The latter marked our first private investment in Australia, and doubled our investments in airports.

Our Infrastructure portfolio returned 16.3% in 2015, compared to 9.8% in 2014. The portfolio had a year-end value of $1.17 billion, compared to $754.6 million at the end of 2014.

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 timeline positions us well to earn value-added returns from this increasingly important asset class.

By focusing on more mature investments since entering the asset class in 2012, we have achieved vintage year diversification and the portfolio began receiving distributions (in the form of income and capital gains) almost immediately.

In 2015, OPB increased private equity investments by 56%. We increased our exposure to Western Europe, adding diversification benefits to our U.S.-focused portfolio.

As of December 31, 2015, OPB had remaining unfunded commitments of $565.0 million to Private Equity, up from $345.0 million at December 31, 2014. The portfolio generated a return of 38.2% in 2015, compared to 25.4% in 2014, and had a year-end value of $561.8 million (compared to $359.8 million at the end of 2014).

Investment outlook

We expect volatility to continue in financial markets for the foreseeable future. A number of factors are already contributing to reduced global liquidity, including a historic collapse in energy prices, the commencement of interest rate increases by the U.S. central banking authority, and the decision by Chinese authorities to sell foreign exchange reserves to manage an orderly decline in their currency.

After a lengthy period of financial easing, the U.S. Federal Reserve concluded its quantitative easing program in 2014 and commenced the process of normalizing its policy interest rates in 2015. This reduction in monetary stimulus had the impact of withdrawing liquidity from risk assets, thereby exacerbating financial market volatility. In China, economic growth has slowed as the leadership attempts to control the rebalancing of its economy from one dependent upon fixed asset investment and exports, to one that is consumption-based. Accelerating this transition are recent policy decisions by Chinese authorities to loosen capital markets controls and to support a depreciating currency. Adding to global growth uncertainty are weak energy prices that have led to disarray in global debt capital markets, further exacerbating the withdrawal of liquidity.

As global liquidity has been reduced, so has the support for risk assets, elevating market volatility and uncertainty. When coupled with relatively expensive valuation levels for equities and slowing global growth, the investment horizon for 2016 could be challenging.

With a focus on capital preservation and established TAA capability, OPB is well placed to manage the anticipated market challenges over the next year. Going forward, OPB will continue to implement investment strategies that manage through market volatility, avoid unnecessary risk and generate the incremental returns needed to protect the long-term sustainability of the Plan.

Other initiatives that will support this strategy are:

- continuing to advance our in-house TAA capability;
- further evaluating and selectively in-sourcing additional components of our Public Markets portfolio; and
- continuing to build our front-, middle- and back-office expertise and enhancing our infrastructure (systems, tools, software) to support the Plan's increasingly complex investment mandate.

Return on investments and benchmarks

OPB has adopted a Statement of Investment Policies & Procedures (SIP&P) which defines:

- the Plan's investment objectives;
- permitted categories for investments;
- asset mix targets; and
- rate of return expectations.

The SIP&P is reviewed annually and was last amended on November 4, 2015.

The Plan's expected long-term real rate of return, as set out in the SIP&P, is a minimum of 3.85% per year, net of expenses. This figure is equal to the Plan's discount rate (the assumed interest rate used to calculate, in today's dollars, the value of the Plan's future liabilities) of 5.95%, which is the rate used for the long-term funding of the Plan less an assumed inflation rate of 2.10% per annum.

OPB's total annual rate of return is measured against a composite index, referred to as the Total Benchmark. The Total Benchmark takes the weighted average of the benchmark returns for each of the different investment categories, using the target phase-in allocation of the SAA to determine the weightings. The Plan's relative rate of return expectation for the year is set to equal or exceed the Total Benchmark (net of fees). The Plan's rate of investment return for 2015 was 6.14%; the Total Benchmark return for the year was 5.37%.

Annual rate of investment return

		Annual Rate of Investment Return (%)			
		2015		2014	
Asset Categories	**Benchmark**	**Actual[1]**	**Benchmark**	Actual[1]	**Benchmark**
Cash and Equivalents	FTSE TMX 91 Day T-Bill	**7.0%**	**0.6%**	3.1%	0.9%
Fixed Income	FTSE TMX Bond Universe	**4.9%**	**3.5%**	9.6%	8.8%
Long Bonds	FTSE TMX Long Bond	**3.4%**	**1.3%**	n/a	n/a
Real Return Bonds	FTSE TMX RRB	**2.5%**	**0.9%**	0.0%	13.2%
Canadian Equities	S&P/TSX Composite Index	**-9.3%**	**-8.3%**	8.7%	10.6%
Foreign Developed Equities	MSCI World (C$)	**21.7%**	**19.5%**	13.1%	15.0%
Emerging Equities	MSCI Emerging Equity Index (C$)	**4.8%**	**2.4%**	13.1%	7.0%
Real Estate	Custom Real Estate Benchmark	**12.2%**	**7.0%**	5.0%	6.9%
Infrastructure	Custom Infrastructure Benchmark	**16.3%**	**16.3%**	9.8%	9.8%
Private Equity	Custom Private Equity Benchmark	**38.2%**	**38.2%**	25.4%	25.4%
Total Investments	Composite Index	**6.1%**	**5.4%**	8.4%	9.4%

[1] Actual returns shown are gross of fees, except for real estate, infrastructure and private equity returns, which are shown net of fees.

Responsible Investing beliefs

OPB supports Responsible Investing (RI) through a number of investment initiatives that align well with OPB's broader investment objectives *and* are resource-efficient in terms of both time and money. The combination of OPB's investment objectives and RI beliefs translates into an RI approach that:

1. supports collaborative initiatives that aim to further corporate governance issues (e.g., improving corporate disclosures);
2. adopts a pragmatic approach to integrating environmental, social and governance (ESG) considerations into the investment decision process led by both internal and external investment managers (both Public and Private Investments); and
3. utilizes proxy voting as a tool to engage corporations to focus on ESG issues and advocate for transparency and disclosure standards.

To support our approach, we developed our own proxy voting strategy in 2015 and developed the capability to vote proxies in-house instead of having external managers vote on our behalf. The goal is to ensure that proxy voting is incorporated in a manner that supports the Plan's fiduciary responsibilities. Further, we adopted an ESG statement within the strategy that recognizes the three main areas of concern used to measure the sustainability and ethical impact of a particular investment.

OPB also joined the United Nations-supported Principles for Responsible Investment (UNPRI) initiative. This international network of investors is collaborating to put RI into practice and help build a more sustainable global financial system.

Asset pooling

In an increasingly complex investment world, one of the best ways to tackle uncertain markets is through economies of scale. A larger pool of assets to invest means better opportunities – which is why we are looking to pool our assets through the Investment Management Corporation of Ontario (IMCO).

In our 25 years administering the Plan, we've realized, first-hand, the significant investment value of partnering with large, world-class organizations that have long-term views similar to ours.

Background

In 2008, the report entitled *Ontario Expert Commission on Pensions* highlighted the importance of fund size in pension policy innovation. The report noted that smaller and medium-sized pension plans were unable to operate across the full investment spectrum, generally lacking the necessary infrastructure, resources, expertise and/or inclination to undertake maximum portfolio diversification. Following a mandate in the 2012 provincial budget, the report entitled *Facilitating Pooled Asset Management for Ontario's Public Sector Institutions* led by now-current federal Finance Minister Bill Morneau found that a pooled asset arrangement for broader public sector plans in Ontario would result in the following efficiencies:

- Significant cost advantages of scale, particularly as it relates to the development of in-house expertise;
- More cost-effective access to alternative asset classes made possible through a larger fund, which can reasonably be expected to result in more diversified investments; and
- A pooling framework, which should help the potential achievement of higher returns.

Much of the recognized success of the larger Canadian pension plans has come through the implementation of internal investment management. There is strong evidence to suggest that large pension plans outperform smaller and medium-sized plans, with lower relative investment costs, better overall returns and improved diversification across asset classes.

To further explore asset pooling, a BPS (broader public sector) working group was formed. Both OPB and the Workplace Safety and Insurance Board (WSIB), as the two largest Ontario public sector funds who could deliver immediate scale to and benefit from the asset pooling initiative, played a lead role in this process. Having OPB and WSIB as the first two members (or clients) in this investment management arrangement would result in a combined approximate pool of $50 billion that would:

- enable OPB to have access to top investment talent;
- enhance our investment decisions with strong research and risk management capabilities;
- greatly increase our ability to invest directly in high-quality opportunities; and
- help us realize higher risk-adjusted investment returns.

Structure

The fundamental principles that guide the asset pooling initiative focus on three structural components: investment manager, governance and investments.

Investment manager structure

- Participation to be voluntary, not mandatory;
- Ability to accept pension and non-pension asset management mandates;
- Independent of government and any one client;
- Investment manager to operate on a cost recovery basis;
- Board of directors structured to ensure alignment of (long-term) interests with clients; and
- High-calibre investment team.

Governance structure

- Board of directors must qualify as an "expert board" with the majority of directors, including the board chair, unaffiliated with any one client or government;
- Initial participants, in consultation with government, will agree on process for initial board chair appointment, nominate majority of directors and establish a framework for nomination of subsequent participants;
- No overlapping members of board and clients' boards of directors; board size to be capped to maintain an effective governance structure with term limits; and
- Periodic reviews of the investment manager to ensure that it is operating efficiently, effectively and in accordance with best practices, where directors have the full range of skills required for oversight, as established by a skills/needs matrix.

Investment structure

- Accommodate different client asset mix requirements; provide assistance to clients in developing an appropriate asset mix in accordance with the client's SIP&P;
- Ownership of client assets to remain with clients (i.e., not to be transferred to the investment manager or government);
- Investments to be structured to: (i) achieve compliance with all applicable laws, (ii) preserve Canadian tax-exempt status of clients; and (iii) minimize foreign taxes; and
- An appropriate mix of internal/external investment management to be adopted; illiquid pools to require lock-ups/longer exit periods.

We believe asset pooling will boost investment returns, and even a small increase could have a significant impact. For example, if OPB were able to increase its annual investment returns by 25 basis points (1/4 of 1%) above the Plan's 5.95% discount rate, this would add approximately $2.0 billion to the funded status of the Plan at the end of 15 years.

Investment Management Corporation of Ontario

The pooled assets would be managed by the new Investment Management Corporation of Ontario (IMCO). However, OPB would continue to own its assets and maintain its fiduciary responsibility to the Plan.

The purpose of IMCO, an independent statutory corporation, is to provide investment management and advisory services to various Ontario BPS entities and funds (including OPB and WSIB as the initial members) in order to improve the overall risk-adjusted returns of its participants through the pooling of assets owned by them.

Key requirements designed to be protective of OPB's (and WSIB's) investment programs achieved in the IMCO legislation include:

- Independence from government (i.e., not a Crown Agency);
- Consultation by the Ministry of Finance with OPB and WSIB on the appointment of the IMCO Board Chair;
- An expert and independent Board of Directors with skills and competencies to cover investment management, risk management, investment finance, corporate governance, human resources, accounting, legal matters, etc.; and
- Regulations to set out which BPS organizations are permitted to be members of IMCO.

OPB and WSIB will appoint a joint majority of IMCO's initial Board of Directors (appoint two each – four of the seven IMCO Board members).

Implementation

The current timetable for the government's approval of the regulations to the *IMCO Act*, including the naming of OPB and WSIB as the initial members, the proclamation of the *IMCO Act* and the appointment of the Chair and initial Board of Directors, is mid-2016. With governance in place, the IMCO Board will be tasked with the recruitment of a Chief Executive Officer later in 2016. OPB expects that by spring 2017, IMCO will be operating as an independent investment manager for its first clients, OPB and WSIB, with investment and investment finance staff from both organizations, as appropriate, moving over to IMCO.

The transfer of OPB's investment management function to IMCO will be subject to an executed contractual agreement between OPB and IMCO (Investment Management Agreement or IMA). Subsequent to the transfer of the investment management function to IMCO, OPB will continue to:

- own its assets;
- be responsible for its liabilities and only its liabilities;
- have its own Statement of Investment Policies and Benefits and SIP&P;
- conduct its triennial asset/liability (A/L) study; and
- establish its own SAA policy.

In order for OPB to perform the functions listed above and to ensure uninterrupted and clear communications on all investment matters, including required performance reporting, between OPB and IMCO, as well as to maintain a direct liaison with OPB's Board, it is intended that there will continue to be an investment function (CIO and administrative support as required) at OPB. It is also intended that there continue to be an investment accounting function at OPB.

IMCO will invest OPB's assets in accordance with the IMA and subject to OPB's investment philosophies and beliefs, investment policies and asset allocation targets (i.e., asset mix). OPB will not assume any liabilities of other IMCO members and there will be no merging of pension plans. Furthermore, IMCO will be a not-for-profit entity and operate on a cost recovery basis.

Part of the fundamental value IMCO will offer PSPP members is the sustainability of a competitive, qualified and properly resourced investment team, as well as improved risk management and investment monitoring through best-in-class systems and people.

OPB is currently positioned to generate the long-term returns needed to fund the pension promise, even without asset pooling. However, we believe IMCO will benefit the PSPP by providing economies of scale that will facilitate greater access to larger and more diverse investment opportunities at a lower relative cost than we could achieve on our own. It will also give us enhanced risk management capabilities and permit the optimal use of internal versus external management to deliver world-class investment expertise with the expectation of delivering enhanced risk-adjusted returns.

Service excellence

OPB remains committed to providing world-class service to our members. We have focused considerable efforts on finding innovative ways to meet our clients' needs in a cost-effective and meaningful manner.

OPB announced the launch of our Advisory Services program in 2015, an innovative initiative designed to help protect the interests of clients by giving them the financial analysis they need to make informed pension decisions at critical times. The program is built on our belief that active and retired members need to understand the implications of their pension decisions, and how these benefits fit within their broader retirement planning. To our knowledge, we are the only DB plan in the world to offer this type of member service.

In its first year, the Advisory Services team of in-house Certified Financial Planners® – supported by a suite of electronic services – helped approximately 2,500 clients navigate critical pension decisions. Heading into our second full year, we will look to build on the following impressive numbers from 2015:

- 2,472 Advisory Sessions – up from 2,050 total sessions in 2014 during the soft launch;
- 97% of client care calls answered within 30 seconds, with an average wait time of three seconds;
- 75% of interactions with Advisory Services include buybacks, retirements or terminations;
- 47% of members and 29% of pensioners/retired members are currently registered on our e-services portal;
- 44% of registered members are making use of the self-serve options in the portal, with three-quarters using the pension estimate tool;
- top services being used include updates to marital status (55%), current address (43%) and beneficiaries (32%);
- 9% of members are now using the portal to initiate retirement activities; and
- traffic to the e-services portal has seen an increase of approximately 12% to roughly 38,000 logins. This is consistent with our evolving digital strategy as we move forms from the public site to the self-service area on e-services.

In response to emerging technology and evolving client needs and preferences, we continue to enhance our digital services – and to become more mobile-responsive and interactive across our web channels. We recently hired a digital content strategist to help improve the digital experience for members as well as identify opportunities to expand our digital presence, broaden our communications strategy and, ultimately, help us to improve the effectiveness of our client initiatives. As our clients become more sophisticated, we need the tools to be able to support their service demands as we continue to provide a secure online environment with a strong focus on the privacy of our members' data. Starting in 2016, we will work with IT to ensure we invest in the technology we need to move us forward in our client-first strategy.

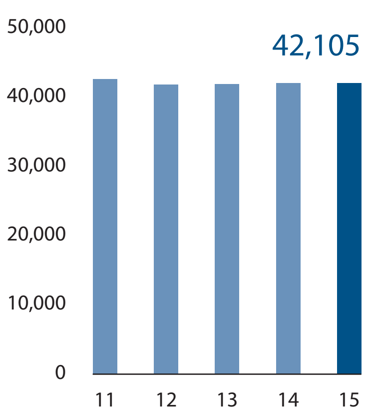
Everything we do is ultimately about ensuring that every client realizes, to the extent possible, full value for their participation in the Plan. The innovations and transformative initiatives that we focused on in 2015 will help reinforce our reputation as a market leader and one of the world's top five pension providers.

Service

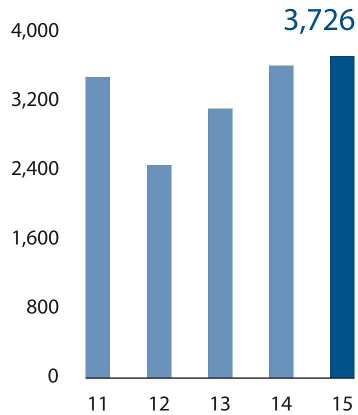
2015 Initiatives

What we did	Why it matters
Formally announced our Advisory Services program	Pension issues are complex, and inopportune decisions can potentially have a significant impact on an individual's financial future. Advisory Services provides our clients access to Certified Financial Planners® and Registered Retirement Consultants® to assist them in making sound decisions about their pensions within their broader financial circumstances, helping them avoid costly mistakes that could negatively impact their retirement security.
Hired a digital content strategist	This individual has a mandate to identify opportunities to expand our digital presence and broaden our communications strategy, in order to better serve client needs in the coming years.

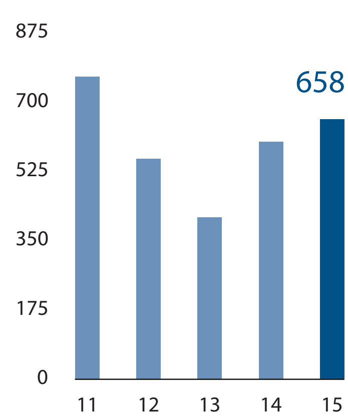
Number of active members



Enrolments



Buybacks completed



Proactive advocacy

Pension and retirement security issues have gained growing attention from governments, media and Canadians. At OPB, we believe that well-designed, well-managed DB pension plans remain the best option for delivering efficient, affordable and sustainable retirement income. DB plans have a long track record of providing members with a secure retirement income.

Studies also show that DB plans play an important role in stimulating our economy, by providing retirees with disposable income that is pumped back into the economy. Just as important, these plans provide an important source of investment capital.

OPB continues to advocate strongly for the DB model as well as shared-risk or DB-type plans – and to help ensure that policy-makers and thought leaders understand the many socio-economic advantages that the DB model provides. Our ultimate goal is to advocate for a viable and meaningful retirement system for all Canadians, and to promote the importance of long-term financial planning. We continue to promote these issues in a wide array of public, private and government forums. In particular, we believe that shared-risk plans retain the best features of the DB model, while spreading the risk of unfunded liabilities between members and plan sponsors. These sustainable DB-type models could easily be made accessible to a broader range of working Canadians. To that end, we applaud the Government of Ontario's initiative to ensure that all Ontarians have access to "comparable" plans by introducing the Ontario Retirement Pension Plan (ORPP).

We are also working closely with the Government of Ontario and the Workplace Safety and Insurance Board to advance the planned asset pooling initiative. Pooling the assets of smaller public sector plans can create important economies of scale, generate larger and higher quality investment opportunities, and improve investment returns.

Advocacy

What we did	Why it matters
Continued to promote the DB pension model	We believe DB plans are the best option for providing retirement security and adequate income for retired Canadians. With that in mind, we continued to publicly promote the value of the DB model – ensuring that decision-makers and thought leaders understand the model's many advantages.
Continued to advocate for regulators to allow sustainable shared-risk plans (i.e., DB-type plans) for all Canadians	Shared-risk plans, which retain the best features of the DB model and divide the risk of unfunded liabilities between members and plan sponsors, are a sustainable option that could be used to provide meaningful retirement income for all working Canadians.
Continued to lay the groundwork for asset pooling	Asset pooling will open the door to a broader range of investments and partnerships, which we believe will boost our long-term returns. The resulting incremental investment returns would contribute to maintaining the stability of benefits and contribution rates and support the long-term sustainability of the Plan.

Outstanding stakeholder relations

OPB's "shared governance" model helps to ensure that all key stakeholders have (1) the information they need to make informed decisions and (2) a meaningful voice in Plan administration. It's an open, collaborative approach that has earned us the dual role of trusted advisor and honest broker to the Plan Sponsor and bargaining agents that represent members.

OPB works closely with the Government of Ontario to ensure that politicians and 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.

In 2015, we also:

- increased our client education sessions and webinars by 45%, reaching 232% more clients than we did in 2014;
- delivered 173 presentations to Plan members across Ontario, providing them with information about the value of their pension, Plan provisions, and key decision points;
- held five retirement advisory workshops;
- participated in the Government of Ontario Chief Administrative Officer forum; and
- presented at the Annual General Meetings (AGMs) of bargaining agents.

We had almost 160,000 visits to OPB's public website in 2015, up 6.4% over the previous year. We also saw substantial growth in mobile traffic throughout 2015 – with nearly one in five visitors accessing opb.ca and our e-services websites via smartphone or tablet.

We launched our online portal for participating employers in 2015. This system will reduce processing times for key transactions and allow OPB to track key employer trends to identify areas where employers need the most support. We are pleased that employers submitted more than 1,500 transactions through the portal in its first two months of operation.

We know that protecting the long-term sustainability of the Plan requires constant nurturing of our stakeholder relationships. OPB will continue to do so, using all of the connection points at our disposal.

Stakeholder relations

What we did	Why it matters
Continued to build a strong working relationship with the Plan Sponsor	The Plan Sponsor is responsible for major decisions governing the Plan. We believe a strong working relationship will earn us a place at the table during future discussions related to Plan design and funding.

Strategic and responsible financial management

OPB remains mindful of the financial pressures facing the Government of Ontario. We are committed to managing costs and offering value-added service at a cost-effective price.

Although we've expanded our range of member services in recent years – and added to the breadth, depth and sophistication of our investment program – our operating expense ratio remains among the lowest in the industry. We've accomplished this by:

- focusing on priorities and working smart;
- automating and redeploying resources where it makes sense to do so;
- negotiating prudent agreements with investment managers and suppliers;
- enhancing our abilities, through staffing and training, to perform more value-added services in-house rather than pay premiums to external service providers; and
- increasing our focus on digital delivery channels.

Our operating expenses for 2015 increased by 8.4% over 2014. This increase is related primarily to OPB's ongoing investment in the people and technology needed to support our strategy of generating superior risk-adjusted returns and maximizing the member experience.

We will continue to make prudent though potentially significant technology investments that are critical to OPB's security, stability and success. This includes focusing on the investment systems, technology, cybersecurity and talent we need to migrate more key investment and asset management services in-house and offer a superior member experience.

In 2016, we will focus efforts on gathering key information that will help guide our multi-year modernization process scheduled to start in 2017. For example, we anticipate replacing our aging pension administration system in the coming years. This will help further improve data security, support our progressive digital strategy and increase client service efficiency.

Financial management

What we did	Why it matters
Continued to make cost constraint a priority	OPB is committed to managing costs. During 2015, we continued to enhance our ability to provide value-added services in-house, expanded our focus on digital service delivery, and made smart and prudent investments in both talent and technology.

Costs

At OPB, we are committed to the disciplined management of Plan-related costs. Our goal, in all cases, is to streamline our cost base – but to spend strategically where it is in the best interest of our members and other stakeholders to do so. For accounting purposes, Plan operating costs are broken down into two key categories:

- **Investment management costs**, comprising:
  - **Investment fees** (external) – This primarily includes fees paid to external fund managers, as well as transaction costs and custodial fees associated with managing and investing the Plan's assets. These costs are deducted from total investment income; and
  - **Investment operating expenses** (internal) – These are the costs associated with the operation of the investment portfolio, including costs related to our in-house activities, such as investment staff (front-, middle- and back-office), technology, control and reporting processes and investment research initiatives.
- **Pension administration expenses** – These are the costs associated with operating and administering the Plan, including costs related to providing client service, processing member transactions (retirements, terminations, etc.) and maintaining our pension administration system.

Investment management costs

We experienced an increase in investment expenses (as a percentage of average net assets available for benefits) in 2015. The following factors have influenced our investment management costs in recent years:

- the Plan's growing asset base;
- increased exposure to higher-cost alternatives and specialty mandates;
- a reduced exposure to cheaper passive-index mandates;
- higher research costs;
- additional technology applications; and
- a building out of investment expertise.

While we operate with an eye toward cost containment, we continue to invest strategically in the talent, technology and processes needed to support our increasingly sophisticated investment program. By improving our in-house team, our ability to analyze investment data and risk, and our performance measurement processes, we can act quickly on new investment opportunities. This is especially crucial as we shift to more private markets assets – which can generate higher long-term returns but are more expensive to acquire and manage than public market equities and fixed income. We expect that the higher returns generated by our investment strategy will more than offset any increase in expenses.

Our investment expense ratio remains among the lowest in the industry. It stood at 0.44% (or 44 cents per $100 of average net assets available for benefits) at the end of 2015, consistent with 0.44% in 2014 (or 44 cents per $100 of average net assets available for benefits)[1]. The expense ratio compares total investment expenses – including investment operating expenses and investment fees – with average net assets available for benefits. Investment fees for 2015 totalled $79.4 million (or 35 cents per $100 of average net assets available for benefits), compared to $75.2 million (or 35 cents per $100 of average net assets available for benefits)[1] in 2014.

By partnering with larger institutional investors and other private sector investment partners, we have been able to maintain a low expense ratio through economies of scale. Our expectation is that the planned initiative to pool assets with WSIB (and, potentially, other entities in the future), will also position us for enhanced returns (net of expenses).

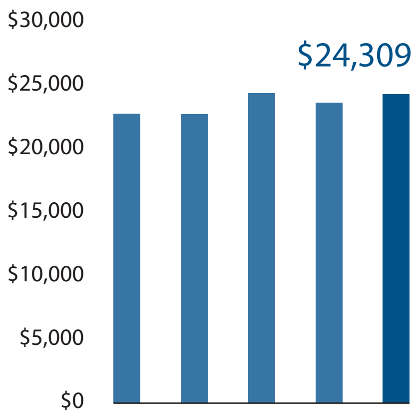
[1] The 2014 comparative figures have been restated, as they had been originally reported on the basis of end-of-year net assets available for benefits. For 2015, the methodology has been updated to reflect costs as a portion of average net assets available for benefits.

Pension administration expenses

We are committed to meeting or exceeding the cost compliance requirements set out by legislation and through the Government of Ontario's corporate directives, and to providing value-added service at a cost-effective price.

The Plan's pension administration expenses were $24.3 million in 2015 (or 11 cents per $100 of average net assets available for benefits), compared to $23.6 million (or 11 cents per $100 of average net assets available for benefits) in 2014. We will continue to manage our costs by keeping overall staffing costs in check, deferring some non-critical strategic initiatives and continuing to negotiate competitive contracts with service providers.

Pension administration operating expenses
(in thousands of dollars)



Contributions

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

Members currently contribute 6.4% of their salary below the Year's Maximum Pensionable Earnings (YMPE) and 9.5% of their salary above the YMPE. Employers contribute a matching amount. Contributions for members receiving Long Term Income Protection benefits are paid by their employers.

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 40 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 2015, contributions for all OPB members and employers totalled $732 million, up marginally from $719 million in 2014. This modest increase is attributable to ongoing salary restraint in the public sector.

Pensions paid

Monthly pension payments for December 2015 totalled $87.7 million, up from $83.2 million in December 2014. Part of the increase is attributable to a 1.7% inflation protection adjustment (Escalation Factor) that was applied to pensions on January 1, 2015. The remainder is attributable to an increase in the average pension for new retired members.

Executive compensation

OPB recognizes compensation as a key component in achieving its long-term strategies and organizational effectiveness. The compensation programs as they pertain to the senior executives are described in this section. OPB is an Ontario public sector agency, a distinction which is incorporated into its compensation philosophy. In addition, OPB is very aware that the Province is in an era of cost constraint. While OPB's executive compensation is benchmarked against Ontario's other public sector pension plan administrations, it does not exceed that of any of its peers.

Compensation for the President and CEO is approved by the Board. Compensation for the executives reporting directly to the CEO is approved by the Human Resources Committee of the Board. Incentives are performance-based.

A long-term incentive plan (LTIP) was introduced for key investment personnel only, in 2014. In 2015, this was expanded to include two additional key executives that support the Investments function. The LTIP uses a mix of performance metrics that include total fund returns against benchmark, client service and PSPP funded status and measures these over a four-year timeline. The use of these metrics supports the alignment of interests of senior investment staff with those of PSPP members. There is an upper limit of incentive payout, dependent upon position, ranging from 35% to 55% of base salary at the commencement of each performance period. A transitional provision in the LTIP places a ceiling on the amount that can be paid out in the first three years of the program. Commencing in 2014, the ceiling was set at 25% of the maximum otherwise payable, and increases by 25% in each of the subsequent three years.

Compensation of the listed executives includes base salary, incentives, insured benefits and retirement benefits. Compensation totals, excluding retirement benefits, paid to the President & CEO, and the other executives reporting directly to the CEO, are shown below.

Compensation in 2015

For the year ended December 31	Year	Base Salary[1]	Short-Term Incentive[2]	Long-Term Incentive[3]	Taxable Benefits & Allowances[4]	Total
Mark J. Fuller, President & CEO	2015	$ 459,223	$ 196,992	$ n/a	$ 721	$ 656,936
	2014	454,654	181,486	n/a	720	636,860
Jill Pepall, Executive Vice-President & Chief Investment Officer	2015	492,878	206,721	135,960	749	836,308
	2014	464,635	185,625	61,875	726	712,861
Peter Shena, Executive Vice-President & Chief Pension Officer	2015	316,793	110,749	n/a	534	428,076
	2014	319,360	106,077	n/a	544	425,981
Valerie Adamo, Chief Technology Officer[5]	2015	298,973	104,531	n/a	514	404,018
	2014	292,074	105,469	n/a	365	397,908

For the year ended December 31	Year	Base Salary[1]	Short-Term Incentive[2]	Long-Term Incentive[3]	Taxable Benefits & Allowances[4]	Total
R. Paul Edmonds, Chief Legal & Governance Officer	2015	316,793	108,266	n/a	534	425,593
	2014	319,360	103,666	n/a	544	423,570
Gayle Fisher, Chief Administrative Officer[6]	2015	297,823	104,531	n/a	445	402,799
Michel J. Paradis, Chief Financial Officer[7]	2015	323,888	113,242	65,000	546	502,676
	2014	165,681	57,129	n/a	206	223,016

1 Base salary is based upon amounts paid during the year. In 2015, there were 26 bi-weekly pays. In 2014, there were 27 bi-weekly pays.

2 Short-term incentive earned is paid in March of the following year.

3 LTIP payments are only applicable to the Chief Investment Officer and Chief Financial Officer on this list. These are paid in March of the year following the completion of the measurement period. The figures shown are the amount vested and expected to be paid in the subsequent year.

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

5 Ms. Adamo joined on January 13, 2014. Amounts shown reflect compensation from that date.

6 Ms. Fisher joined on January 5, 2015. Amounts shown reflect compensation from that date.

7 Mr. Paradis joined on July 1, 2014. Amounts shown reflect compensation from that date. Mr. Paradis became eligible for LTIP in 2015.

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 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 Ontario government 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

At OPB, we understand that innovation can carry a degree of risk. That's why sound risk management is embedded in everything we do. Defined benefit pension plans like the PSPP face a wide range of risks, including operational risk, investment risk, funding risk and liquidity risk, to name a few. To manage that risk, OPB has implemented a comprehensive ERM program.

ERM provides an integrated approach to risk management. Specifically, it prescribes a formal framework for identifying, reporting and monitoring risks that could adversely affect the Plan. It also helps identify mitigation strategies. As part of our program, we have:

- strengthened our governance over risk management and compliance to enhance oversight;
- made it our practice to review risk and risk mitigation strategies on a quarterly basis to ensure we have the people, policies and procedures needed to protect the Plan;

- integrated risk management into our strategic planning process;
- put in place a comprehensive risk-based internal audit process; and
- started reviewing actuarial valuation assumptions on an annual basis to ensure they continue to reflect Plan experience.

In 2015, we revamped our ERM reporting process to give our Board of Directors and management team more accurate data and actionable risk mitigation strategies. This enables OPB to better identify risks and implement the strategies needed to manage those risks quickly and effectively.

Operational risk

OPB is focused on continuous improvement as part of our operational risk mitigation strategy. In 2015, OPB moved to reduce operational risk by:

- identifying the need to hire an information security officer in 2016 to assist with operational risk monitoring and reduction; and
- preparing to replace our aging pension administration systems in the coming years. This important technology upgrade will help us to improve client and stakeholder outreach and support our progressive digital strategy, while improving the security of key data. OPB will need to invest in replacing our aging pension administration systems in the coming years.

Investment risk

To position the Plan to meet its investment objectives in an increasingly challenging environment, OPB has moved from balanced mandates to specialty mandates, allocated more funds to private markets and shifted a growing number of investment decisions in-house. These changes increase our ability to adapt quickly to changing markets and pursue opportunities that can offer better long-term returns. While these key initiatives enable OPB to manage market and currency risk more effectively, they add a level of complexity that demands an increased focus on investment risk management, compliance and monitoring.

Our risk-managed approach to investing integrates risk monitoring and management into our investment processes and day-to-day activities. We ensure our investment decisions are supported by comprehensive risk analysis. And we improve the return/risk relationship of our investment decisions by taking only those risks we believe will be duly rewarded.

In 2015, we introduced a number of key tactics designed specifically to help us manage required risk and mitigate unrewarded risk. Specifically, we:

- developed in-house risk and attribution models that allow us to forecast investment risk more effectively and integrate risk management into the investment decision-making process;
- advanced the planned asset pooling initiative with WSIB, which, once fully operational, will offer OPB the opportunity to further enhance our research and risk management capabilities through access to more sophisticated information technology applications; and
- retained investment managers that have a focus on capital preservation and a track record of managing effectively through volatile markets.

Risk management

What we did	Why it matters
Strengthened our ERM program	ERM forms the framework for risk management across the organization. In 2015, we revamped our ERM reporting process to give our Board of Directors and management team the information needed to more quickly identify risk and implement strategies to effectively manage those risks.
Adopted a new risk mitigation model for delegating authority within OPB	The model helped streamline the approvals process and strengthen our internal system of checks and balances.
Developed, and currently implementing, a series of risk appetite statements and a risk scale	These tools enable OPB to specify and more objectively measure acceptable risk levels for specific business priorities across the organization.
Used our TAA strategy to effectively deploy capital in a risk-controlled fashion	The TAA strategy enables us to effectively and efficiently adjust the percentage of assets held in various investment portfolios so that we can take advantage of market opportunities to generate value-added returns. It is also used to preserve and protect capital at major inflection points in the economic cycle.
Developed in-house investment risk and attribution models	These tools address the need to forecast investment risk more effectively and integrate risk management into the investment decision-making process.
Continued to advance the planned asset pooling initiative with WSIB	This initiative will provide access to more sophisticated information technology to further enhance OPB's ability to quickly identify, analyze and manage risk.
Identified the need to hire a dedicated information security officer in 2016	This individual will ensure information and cybersecurity best practices are at the core of all of our information and technology decision making, and will oversee the continued enhancement of our information security capabilities in responding to the ever changing demands for cybersecurity responsiveness.

Five-year review

(in millions of dollars)	**2015**	2014	2013	2012	2011	
Opening net assets	**$22,231**	$ 20,915	$ 18,991	$ 17,270	$ 17,376	
Investment income	**1,224**	1,642	2,244	1,964	19	
Contributions	**731**	719	709	714	715	
Transfers from other plans	**111**	81	91	104	132	
	2,066	2,442	3,044	2,782	866	
Pension payments	**1,038**	989	959	918	869	
Terminations	**137**	94	121	105	68	
Operating expenses	**47**	43	40	38	35	
	1,222	1,126	1,120	1,061	972	
Closing net assets	**23,075**	22,231	20,915	18,991	17,270	
						Cumulative Since Inception
Annual rate of return	**6.1%**	8.4%	12.5%	11.9%	0.4%	8.5%