Ontario Pension Board
Business Plan
2016-2018

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OPB OVERVIEW

Ontario Pension Board (**OPB**) is the administrator of the Public Service Pension Plan (the **Plan**) and manages the investment of approximately $23 billion of assets (the **Fund**) that fund the benefits under the Plan. This Business Plan speaks to the three year period from January 1, 2016 to December 31, 2018; however, the primary focus is on 2016.

MANDATE

OPB was created in 1990, by enactment of the *Public Service Pension Act*, to administer both the Plan and the Fund. Subject to the provisions of the Plan, OPB may administer other pension plans or funds or insured benefits plans. Currently, OPB has established fee-for-service agreements to administer several other plans on behalf of the Government of Ontario and, to date, all of these fee-for-service agreements are structured on a cost recovery basis, not as a profit-generating activity.

OPB is governed by its Board of Directors. The Chair of OPB's Board is accountable to the President of the Treasury Board for the performance of OPB in fulfilling its mandate.

OPB MISSION AND VISION: ADVISE & PROTECT

Our mission is to:

- deliver the pension promise;
- support the long-term sustainability of the Plan;
- invest the Plan's assets to maximize returns within acceptable risk parameters;
- keep contribution rates and benefits reasonably stable and affordable; and,
- deliver superior cost-effective service to all Plan stakeholders.

OPB has developed its "Advise & Protect" vision to fulfill its mandate and mission. The key components of the Advise & Protect vision are: (1) providing advisory services to stakeholders based on OPB's unique knowledge, perspective, and understanding of the Plan to ensure clients and stakeholders make informed decisions with respect to their pensions and the Plan as a whole, and (2) protecting the Plan to ensure it can meet the pension promise for today's and tomorrow's Plan members and retired members.

STRATEGIC DIRECTION

OPB has established the following three key strategic objectives to enable it to fulfill its mission and vision in the current environment:

- To be a trusted advisor to Plan stakeholders and a credible thought leader on public policy, to support sound decision-making that promotes the long term sustainability of the Plan and pension coverage and adequacy for all Canadians.
- To achieve excellence in the fully integrated management of all Plan funding variables (investment returns, contribution levels, and benefit structure) so as to ensure (1) that accrued benefits are delivered as promised; (2) the long term affordability of the Plan; (3) the continuance in the Plan of a benefit package structured to build lifetime income adequacy for members; and (4) intergenerational equity.

- To administer the Plan and serve its stakeholders such that every stakeholder realizes, to the extent possible, full value from their participation in the Plan so that we earn their continued support for the Plan.

Operationally, our objectives are achieved by aligning all organizational, departmental and individual initiatives and goals to four Foundations (State of the Art Governance; Strategic and Responsible Financial Management; Better, Faster, Smarter Systems and Processes; and High Performing People) and four Strategies (Disciplined and Astute Investing; Unmatched Client Service Excellence; Outstanding Stakeholder Relations; and Educate and Advocate). A high level description of these Foundations and Strategies is provided in *Appendix III*.

OPB is confident that its vision and strategies, as well as the initiatives outlined in this Business Plan, are appropriate to manage the Plan, to support the Government in its efforts to improve the Province's finances and to manage the impacts and seize the opportunities presented by the current environment.

KEY PERFORMANCE INDICATORS

OPB has adopted a number of key performance indicators (**KPIs**) to measure the success of our vision and strategies as well our success in executing them. The KPIs represent the outcomes relating to the Plan that are most important to the Plan stakeholders. The KPIs, our performance to date against them and our target performance as at the end of 2016 are set forth in the table in *Appendix IIA, "Metrics and Key Performance Indicators"*.

EXECUTIVE SUMMARY

ENVIRONMENT

LONG-TERM ENVIRONMENTAL FACTORS

A summary of the key environmental factors facing OPB is provided in the *Environmental Scan* on page 20 of this document. One of the more important environmental factors includes an increasingly complex investment environment and risk set which we are addressing by enhancing our Investments area as noted later in this summary. Management also continues to monitor the rising cybersecurity issues that threaten privacy incursions, business disruption, and address the need to replace pension administration technology systems that are aged, inefficient and approaching end-of-life in terms of support. In addition, there are pressures on OPB's expenses created by increased governance, risk management and compliance standards that require investments in people and technology.

2016 SPECIFIC ENVIRONMENTAL FACTORS

On both the Investments and Pensions Administration side, there are specific environmental factors affecting OPB in 2016. On the Investments side, we expect to implement Asset Pooling during 2016, with operations commencing January 1, 2017. This is a major project that will absorb a substantial portion of the time and attention of the Senior Executive Team as well as a number of members of the Investments Team and other management personnel. On the Pensions Administration side, changes that the Government has made to retiree insured benefits that will take effect for members retiring in or after December, 2016 are expected to result in a surge in pension commencements during the second half of 2016. The first phase of the modernization of Ontario Lottery and Gaming Corporation (**OLG**) is also expected to be implemented during 2016 which will create a substantial increase in service demand for OPB. In fact, at this point in 2015, the service impacts have begun to be felt as more clients contact OPB for pension calculations, transfer requests, and for decision support.

As a result of the 2016 specific demands presented by these factors and the extent to which they will absorb our internal resources, we are not planning significant additional initiatives for the year.

REQUIRED MODERNIZATION OF PENSION ADMINISTRATION IT SYSTEMS COMMENCING IN 2017

On the Pensions Administration side, in 2017, we will commence the modernization of our pension information technology systems which are aged, inefficient and end-of-life in terms of support. These core pension applications are more than 20 years old and can no longer co-exist with other key current technologies (such as current versions of Microsoft Windows or Web browsers). This will be a significant multi-year project that will be pressing and essential to commence by 2017, due to the increasing risk of system outages, incompatibilities, and security issues.

EXPENSE MANAGEMENT

ALIGNMENT WITH THE GOVERNMENT'S FISCAL OBJECTIVES

As an agency of the Province of Ontario, Management is very aware that OPB is operating in an environment of cost constraint and judiciously manages the Plan's expenses. OPB's expense ratio continues to be among the lowest in the industry. It is important to note that OPB's expenses are paid from the assets of the Plan rather than directly by the Government and, accordingly, none of OPB's expenses are paid from the Consolidated Revenue Fund or reported as part of Government expenses. OPB's expenses are transmitted to the Government only through changes in the funded status of the Plan that result in changes to the Government's pension expense in accordance with the Public Sector Accounting Board standards. Accordingly, OPB contributes to constraining or reducing Government expenses by generating net investment returns that improve the overall funded ratio of the Plan. The Plan's funded ratio has improved over the last several years (confirmed by the Management valuation as at December 31, 2014 that showed a going concern funding shortfall of $435 million). On filing the December 31, 2013 actuarial valuation the Government's cash contributions to the Plan were reduced by approximately $14 million per year for the three years from 2014 to 2016.

In terms of accounting (as opposed to cash flow) impacts on the Government, the approximately $400 million improvement in the funded status of the Plan during 2014 ($1.6 billion between the beginning of 2012 and the end of 2014) will result in further pension accounting expense savings for the Government as this improvement is recognized over the expected average remaining service life of members (approximately 11 years).

While OPB's total expense ratio (including all Investments and Pension Administration expenses) has been stable over the last five years at approximately 0.50% to 0.55% of average assets, expenses in absolute dollar terms have been rising. This is primarily a result of two factors. First, increased external investment fees are a natural result of growth in assets (this is actually a positive result as the appreciation in asset values improves the funded status of the Plan). During the six years to the end of 2014, the assets of the Plan increased by over 50% from $14.6 billion to more than $22 billion (despite paying out an average of approximately $250 million more in pensions each year than it receives in contributions), and as of the date of this Business Plan, the assets have risen to approximately $23 billion. OPB's investment operating expenses have increased as OPB has increased its internal asset management capabilities and shifted the Plan's asset mix to a greater percentage in private market investments such as real estate, infrastructure, and private equity (**Private Market Investments**) in line with the 2014 Strategic Asset Allocation (**2014 SAA**). Internal management of Private Market Investments is more cost-efficient than external management[1]. OPB also believes we can generate better returns and manage risk more effectively through internal management, as evidenced by the strong investment returns over the last several years (e.g. OPB's private equity investments returned 25.4% in 2014).

[1] An article by Cost Effectiveness Management Inc. published in the Rotman Journal of Pension Management found that the incremental returns generated from Private Market Investments were entirely lost to fees if the investments were managed externally through funds.

OPB respects the Government of Ontario's ongoing objective to restrain expense growth. In preparing this Business Plan and Budget, Management continues to review all expenditures with a view to ensuring that any proposed increase in expenses only be included in the Business Plan if deemed absolutely necessary. Management defined as "necessary" those initiatives that met the following criteria:

- expected to generate a return on investment that is greater than the incremental expense;
- required to comply with legislation or Government directives;
- required to align OPB's activities with current Government policies (e.g., procurement and records management); or,
- required to manage key risks (e.g., cybersecurity threats or end-of-life IT systems).

Ultimately, the Business Plan and Budget submitted by OPB Management and approved by its Board of Directors provides for a **decrease of 1.4% over forecast 2015 expenses**. This is driven by lower projected investment management fees as OPB continues to shift its asset mix from public markets to private markets. Some of the decrease is offset by increasing operating expenses (+10%) within the investment area as we continue to invest in people, processes and technology to optimize the implementation of the 2014 SAA and continue to enhance the expertise of our internal asset management capabilities. Operating expenses within the Pension Administration area are decreasing slightly by 0.3%.

The table below sets out two significant items impacting overall investment expenses, as well as highlighting an additional $750 thousand that has been budgeted for the Asset Pooling initiative. Although the budgeted Asset Pooling costs are not part of the operating expenses they are included in overall total expenses. Despite the increased costs from the initiatives below, overall OPB expenses are expected to decrease, driven by lower external investment management fees.

Business Plan Initiative	Incremental Expense	Business Case
Investments – Foreign Exchange Management: Shift management of foreign exchange from a fixed percentage to an active approach.	$1.0 million in 2016 resulting from increased management fees paid to an external investment manager.	Expected return on investment of approximately $50 million annually. This initiative started in 2015, and the increase in expense reflects the annualization of the higher fees.
Investments – Transition to 2014 SAA: Continuation of the transition to OPB’s 2014 SAA which provides for increased allocation to Private Market Investments.	$1.5 million in 2016 resulting from hiring additional investment and investment finance professionals required to acquire, manage and oversee the investment portfolio.	Extensive modelling conducted by OPB’s independent actuarial firm indicates an average annual incremental investment return from the 2014 SAA of 0.90% per year. This implies an incremental average annual return of more than $200 million based on OPB’s current assets of approximately $23 billion.
Investments – Asset Pooling: Relocation and professional advisory services to support Asset Pooling initiative.	$750 thousand	Investment Management Corporation of Ontario (“IMCO”) was created in the last provincial budget and OPB is partially funding the expenses of establishing a functional organization. This will further assist the Investments Management team in generating the incremental investment returns of 0.90% per year, as noted above.

Status of the Plan

The long term sustainability and affordability of the Plan continues to be our top priority. The financial status of the Plan is strong. As at December 31, 2014, the Plan is over 98% funded, up from 96% at the end of 2013. OPB has eased the Government’s pension expense for the Plan by earning strong investment returns over the past several years (8.4% in 2014; 12.5% in 2013; and 11.9% in 2012) which have improved the funded status during that period by $1.6 billion. The initiatives planned for the next several years are directed at continuing to build on this success and generating returns that consistently exceed the long-term rate of return assumed in the actuarial valuation.

OPB filed its December 31, 2013 valuation of the Plan with the Financial Services Commission of Ontario during 2014, concluding that there was no requirement to increase member and employer contribution rates. The cash contributions needed to eliminate the deficit of the Plan by the Plan Sponsor declined by approximately $28 million per year. This decrease offsets the increase to the Plan Sponsor’s additional current service contributions of $14 million per year that is largely due to lower interest rates and the recognition that Plan members are living longer. This results in a reduction in the Plan Sponsor’s net payments to the Plan of $14 million per year over the 2014–2016 timeframe.

We completed a Long-Term Funding Study during 2014. Such studies are generally performed every five years (last study was completed in 2008). These studies are used by OPB to make recommendations to the Plan Sponsor regarding any changes in contributions or adjustments to benefits that we believe are necessary to maintain a long-term 50/50 current service cost sharing between employers and employees and ensure the sustainability and affordability of the Plan.

Based on the results of the study and further discussions with our actuary during the early part of 2015, OPB is not recommending any changes to contribution rates or benefits at this time. However, the study identified a number of factors that could impact the cost of the benefits going forward, such as:

- continued salary restraint in the public service;
- future increases in lifespans beyond those built into current assumptions;
- the potential impact of changes in retiree insured benefits that could result in significant retirements of long-serving public servants in 2016; and
- the potential impact of the modernization of the OLG.

Taken together, these factors may increase or decrease the cost of pension benefits.

Accordingly, OPB has determined that it should conduct another Long-Term Funding Study in association with the next triennial valuation required to be filed as at December 31, 2016 (earlier than the normal five year interval). At that point, the likely overall impact of the factors noted above will be clearer. The new Long-Term Funding Study is an initiative provided for in the Business Plan and Budget for the second half of 2016.

Investment Strategy And Business Plan Initiatives For 2016-2018

In the Investments area, our focus for 2016 includes: optimizing the management of the 2014 SAA; further building our in-house asset management capabilities; continuing to advance and enhance our internal investment reporting; and providing implementation and advisory support to the Asset Pooling initiative.

OPB completed an Asset/Liability Study during 2014 resulting in certain changes to the SAA then in effect, which were recommended to and approved by the Board of Directors. The 2014 SAA targets a further shift of assets from public markets to private market assets. A 5-year transition plan to move the investment portfolio to the 2014 SAA, with annual incremental targets during the transition period, was also approved by the Board. Management expects that the revised allocation will generate incremental returns, with lower volatility than the previous SAA.

Leveraging the in-house expertise proven by the success of OPB's Tactical Asset Allocation strategy (**TAA**) and the 2015 Asset Management Internalization Program (**Internalization Program**), the Plan will continue to evaluate and selectively in-source components of the public market portfolio over the next several years. 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.

As OPB moves forward with our Internalization Program, it is increasingly important to advance and strengthen our internal investment reporting capabilities. OPB is committed to developing timely and actionable internal investment reporting that is integrated into the investment decision process. Other select objectives for 2016 include developing specific business requirements for the private markets deal management and reporting process with a view to evaluating potential automated solutions, and continuing to enhance internal investment reporting for items such as ensuring that economic exposures arising from the effective notional principal of derivative positions are reflected in asset mix reports.

Pension Administration Strategy And Business Plan Initiatives 2016-2018

In Pension Administration, our key area of focus for 2016 will be to manage the expected higher volume of transaction requests stemming from the changes to retiree insured benefits eligibility rules that come into effect on January 1, 2017, and from the first phase of the OLG modernization which is expected to be implemented during 2016. In terms of the retiree insured benefits changes, there are approximately 5,000 active members of the Plan who will be eligible to take unreduced early retirement pensions between now and the end of November 2016. This means that OPB could experience retirement applications at levels significantly higher than normal. As members focus on their pension commencement they typically also request from OPB other related support services such as buy back quotes and pension estimates, as well as other transactional services. Therefore, we would expect to experience higher demand for these and other services as well. In fact, as at mid-2015, we are already experiencing higher service demands. Furthermore, the first phase of OLG modernization will begin during Q2 2016 with 500 members being divested out of the Plan. Up to an additional 6,000 members could also be divested between 2016 and 2018. This divestment situation will also create intensive service demands and result in extraordinary pressures on OPB's human resources and systems.

For this reason we are not planning any significant pension systems modification initiatives during 2016. We will, however, make certain necessary modifications to our pension administration systems. The modifications are required to ensure compliance with the *Pension Benefits Act,* to reflect the changes to retiree insured benefits, as well as expected changes to how long-term income protection entitlements are calculated for members with disabilities.

OPB is committed to continually improving the quality of our client service. To that end OPB has introduced a new performance metrics tool for Management to provide better line of sight to workflow and workload inventory. This new tool was introduced in Q3 2015 and will be rolled out over the next two years.

Beyond 2016, OPB must modernize our aging pension administration systems. During 2016 we will complete the project charter and budget for this multi-year initiative. During 2017 we will begin to determine our business needs to provide IT with the requirements to determine the systems solutions needed to move this initiative forward.

As noted above, we will also conduct a Long-Term Funding Study during 2016 to determine whether adjustments to contribution rates are advisable to support the long-term sustainability of the Plan.

More detail about these initiatives is provided in the Pension Administration *Key Areas of Focus for 2016-2018* section of this Business Plan.

Corporate Strategy And Business Plan Initiatives 2016-2018

OPB is a significant financial institution and has fiduciary duties and a duty of care to more than 80,000 members and retired members; is accountable to the Government of Ontario as the Plan Sponsor; and has legal obligations to a number of regulatory bodies, such as the Financial Services Commission of Ontario and Canada Revenue Agency. It is also required to comply with many of the Government of Ontario corporate directives. As such, OPB is committed to the highest standards of business practice in matters of governance, risk management, compliance, business continuity and resilience, records management, and privacy. For several years, OPB has been strengthening its practices in each of these areas and has achieved a satisfactory level of maturity in almost all, which led to increased expenses for compliance and risk management. For example, OPB Management elevated the role of Director, Enterprise Risk Management to a full-time position, and has added support for OPB's business continuity and disaster recovery programs.

For 2016-2018, we have identified several areas in need of strengthening. The special projects noted on the following page, which are not optional, all result in increased operational costs:

- procurement process – work will commence on this initiative in 2016 to improve the efficiency in complying with government policies and directives on procurement activities;
- records management – work will commence in 2016 to introduce better systems and processes to comply with the government policies and directives on records management (with the exclusion of Pension Administration records which will be considered separately as part of the overall Pension Administration systems review);
- security and cybersecurity – investments required to strengthen security and keep pace with the expanding nature of threats in a modern technology-based world. A security officer position has been added in 2016. In addition, $100 thousand has been added to the operational budget to address key threats identified in 2015.

Budget And Projection 2016-2018

As explained in further detail in the *Financial Budget and Staffing – 2016* section of this Business Plan, OPB's total expenses budget for 2016 of $124.6 million compared to forecast expenses of $126.3 million for 2015, represents a 1.4% decrease. For the purposes of the 2016 Budget, we have assumed that public market assets and, therefore, public market investment management fees, will not significantly increase relative to the asset levels at the end of June, 2015. If public market assets actually appreciate significantly, investment management fees will be higher than the 2016 budget. In that case, although external investment management fees will be higher, the incremental return will far exceed those additional expenses. As noted earlier, OPB requires ongoing investments in people, processes and technology to ensure that the Plan's assets continue to be managed to deliver superior risk-adjusted returns over the long term; that we continue to provide quality service to our clients and stakeholders; and that we continue to implement immediately required improvements with respect to cybersecurity, and enhanced functionality to assist with the expected increase in retirements.

EXPENSES - INVESTMENTS

OPB's investment expense ratio for 2014 remained at a low level (0.44% or 44 cents per 100 dollars of assets under management[2] – this includes both operating expenses and external investment fees) and we expect this trend to continue into the future even with increased absolute expenses. The shift toward more Private Market Investments results in additional costs, as these assets are more expensive to acquire and manage than public market equities and fixed income. However, the additional returns from these assets are expected to significantly exceed the additional expenses and generate positive incremental returns over the longer term. Certain hires planned for 2015 were deferred but are still required. Accordingly, OPB needs to grow the Investments team to implement the 2014 SAA and associated strategies in order to generate better risk-adjusted returns and incremental value for the Plan, the Sponsor, and all of its members over the long-term.

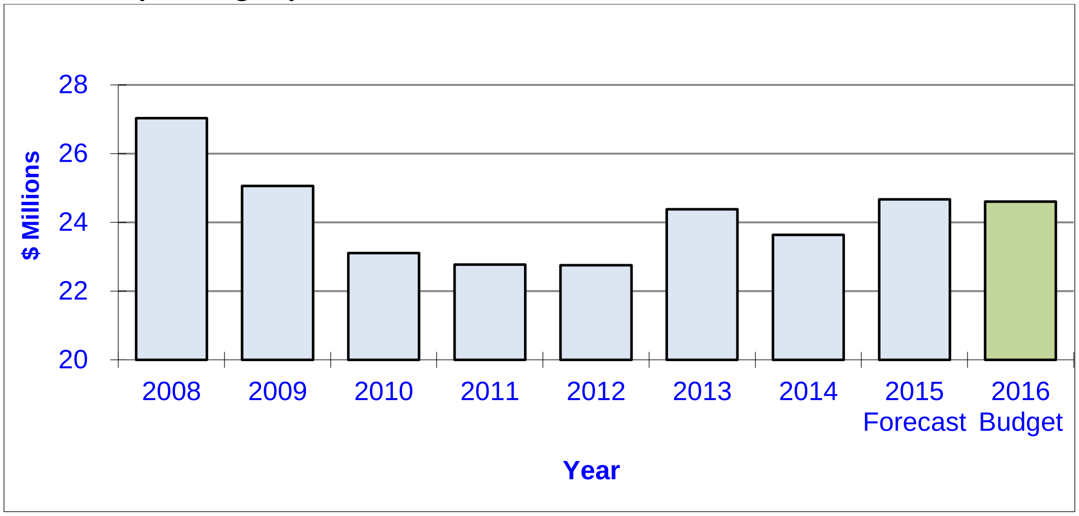
OPB's strategy to maintain a low expense ratio is to pursue economies of scale. We have successfully simulated scale by partnering with larger institutional investors and other private sector investment partners, which we will continue to do in the future. A second key tactic in the pursuit of economies of scale has been to advocate for, and drive forward, Asset Pooling for the investment of public sector asset portfolios in Ontario. OPB Management is very pleased with the Government's proposed legislation in its last budget and expects to devote significant efforts to make Asset Pooling a reality during 2016 in order to prepare for an operational launch on January 1, 2017. OPB has budgeted $750 thousand to support this initiative in 2016. If additional costs are required, Management is committed to funding this important initiative and will explain any overage.

OPERATING EXPENSES – PENSION ADMINISTRATION

For Pension Administration, OPB's expense ratio, at under 0.11% (or 11 cents per 100 dollars of assets under management) is competitive with its peers of similar size. Our cost per member at $299 compares to a Canadian peer average of $234. Although our cost per member is higher than larger peers (the average membership in the Canadian peer group is 3 times the Plan membership), it is very competitive with peers of our size in terms of membership. Since 2008, OPB has substantially decreased the cost per member despite increased service demands and considerable additional compliance requirements imposed on the Plan by legislation and through the Government's corporate directives. The following chart shows actual Pension Operating Expenses from 2008 to 2014, plus the 2015 forecast and budget for 2016.

[2] This ratio is based upon a simple average of the assets under management. In our 2014 Annual Report, we used the year-end assets under management, resulting in a reported 0.43% or 43 cents per 100 dollars of assets under management. Future reports will use this updated simple average methodology.

Pension Operating Expenses – 2008 to 2016



Key areas of Focus for 2016-2018

Investments

For Investments, the areas of focus for 2016 are: to optimize the implementation of the SAA, to continue to build in-house expertise and asset management capabilities; to continue to advance and strengthen our internal investment reporting; and to provide Investments expertise to Asset Pooling.

The primary focus for the investment team during 2016 will be to meet the transition plan target weights as approved in the 2014 SAA policy mix. The key shifts required in 2016 are:

- increase Private Market Investments and correspondingly reduce public market investments to improve returns and reduce volatility.
- continue to transition from universe bonds to long bonds to reduce the risk associated with an asset/liability mismatch. Long bonds are a better match for the long duration liabilities.
- continue to enhance and expand our TAA capability.

In order to manage the increased private market exposure, as well as further the internalization of certain public markets investment activities, OPB must invest in people. The 2016 budget anticipates new hires for Investments and the Investment Finance area (front-, middle- and back-office[3]). In 2016, the increased cost of $1.5 million in salary and benefits is more than offset by the over $200 million of expected incremental returns based on the results of the 2014 Asset/Liability Study prepared with our independent actuaries. Over the next decade, which coincides with the actuaries' projection horizon, the Plan's assets are expected to grow by an additional $3.5 billion due to the implementation of the 2014 SAA which is expected to generate an average annual 0.90% in incremental returns. Similar to 2015, a modest increase in resources will be needed to generate the anticipated incremental returns.

Some of the specific initiatives to support increasing our in-house investment capabilities include continuing to:

- evaluate and selectively in-source components of the public market portfolio as part of the Internalization Program; and
- build on the expertise in the front-, middle-, and back- offices, including investments in technology infrastructure and risk management which are critical to a proper control environment and sound investment decision-making in an environment of increased internal investment management.

[3] The front office is responsible for the pure investment activities including portfolio management, trading, investment research, and investment due diligence. The middle office is responsible for the monitoring, oversight and administrative aspects of the front office investing activities. The back office is responsible for fund administration, transaction processing, reconciliation, and dealing with the custodian. The back and middle office comprise the Investment Finance and Investment Risk departments of OPB. It is essential for the back and middle office to grow and strengthen as the front office does so that appropriate and prudent internal controls, compliance and investment risk management are maintained.

Another ongoing priority is to continue to develop and strengthen our internal investment reporting. As we continue to shift more assets to Private Market Investments, we will undertake a comprehensive end-to-end assessment of our private markets deal management system starting later this year and continuing into 2016. In addition, for 2016, we plan to further enhance the performance measurement and attribution application which was implemented in 2014 to ensure, for example, that economic exposures arising from the effective notional principal of derivative positions are reflected in asset mix reports.

PENSION ADMINISTRATION

MEETING EXPECTED EXTRAORDINARY SERVICE DEMANDS

As noted in the Executive Summary, the key area of focus for 2016 is to meet the expected surge in service demand resulting from a likely material increase in retirements and other member transactions due to changes in retiree insured benefits eligibility, and implementation of the first phase of OLG modernization. Members seeking to crystallize their entitlement to retiree insured benefits under the current rules must retire and receive their first pension payment no later than December, 2016. Based on data currently available to us, up to 5,000 members are eligible to retire and commence an unreduced pension or moderately reduced pension (up to a 10% reduction) by the end of November 2016. In addition, depending on when the OLG modernization proceeds, we can expect up to an additional 6,000 divestment transactions between 2016 and 2018 that will need to be serviced. At least 700 of these transactions will be demanded at the same time as we experience higher retirement applications due to the change in retiree insured benefits. Together, the additional service demands will cause a potential increase of roughly 400% above normal levels. As such, initiatives that we had expected to develop and implement in 2016 are now being put on hold until at least 2017 in order to ensure our resources are directed to the anticipated higher service demands.

ENHANCING OUR ONLINE SERVICES

As demands for services continue to increase, we must continue to build our suite of on-line tools – doing so is essential to ensure we can meet the expected higher service demand. For example, we will implement improvements to the online retirement application process, including adding the ability for retiring members to upload and submit e-copies of key documents to complete the application process.

ENHANCING OUR ADVISORY SERVICES

We now have four staff who are Certified Financial Planners and we are targeting to have an additional six of our current staff achieve the Certified Financial Planners certificate. We expect them to complete the program by the end of 2016 and will then assess further needs as this initiative progresses. In 2015 we publicly introduced to our clients and stakeholders our advisory service program. Since that announcement, demand for meetings and conversations with our advisors has steadily increased (from 20 meeting requests per month to now approximately 80 meeting requests per month). We expect the demand for these services to continue to increase as we move into 2016.

We will also introduce improvements to our retirement planner tool so members can more fully consider their options before contacting our Client Service Advisors for assistance.

Improving our Service Response Times

During 2016 we will be fully implementing a new client service metrics tool that, together with updated service level standards, will assist client service management to better identify opportunities for greater efficiencies in benefit administration. The new metrics tool will help managers better understand the workflow, the total workload inventory, and the life-cycle type and complexity which will allow Management to better deploy assets to meet client and stakeholder demands. The service targets are internally set and are aimed at ensuring we are in-step with current client and stakeholder expectations.

Required 2016 Modifications to Pension Administration Systems

In 2016, we must develop and implement certain pension systems modifications required to address the eligibility changes to retiree insured benefits, the calculation of pension entitlement for those on long-term disability benefits, and disclosure requirements with respect to split entitlements on marriage breakdown to comply with provisions of the *Pension Benefits Act*. Examples and related costs of the specific enhancements required include (these are also noted in our Initiatives listing on page 30 of this Business Plan):

- ability to address heightened activity from Provincial initiatives (estimated cost $80 thousand);
- ability to handle long term income protection entitlement calculations and update Annual Pension Statement requirements (estimated cost $150 thousand); and
- investigate converting existing custom built workflow, customer dashboard, and service queues to address end-of-life technology support issues – “Livelink customization” (estimated cost $185 thousand).

Planning for Modernizing Our Pension Administration Systems in 2017 and Beyond

Upgrading pension administration applications and infrastructure is critical to ongoing operations to ensure we are able to operate efficiently and in order to meet new compliance and governance standards for IT applications to address ongoing cybersecurity threats and protect the personal information of clients. We have conducted the initial assessment of our pension systems infrastructure and are confident that, although our systems are aged, we are not faced with immediate “end-of-life” technology and don’t expect that we would experience service interruption scenarios. Therefore, we have the time in 2016 to focus our resources on developing our Pension Modernization Plan. The initiatives for 2016 will include: preparing a project charter with a detailed time line, a resource plan for all affected areas of OPB, and a project budget.

During 2016 we intend to complete a directional review of our digital strategy. The purpose of this review is to determine the most effective digital channels for communicating with clients and stakeholders, and the most effective method to deliver service offerings based on age groupings, career progression, and complexity of the service requested. This work will inform the development of our technology strategy to support our Pension Modernization project.

The 2016 budget includes over $600 thousand for certain Pension Administration initiatives (refer to *2016 Initiatives* listing on page 30) to ensure these required initiatives are started and completed during the year. Our commitment to cost restraint and the need to focus on meeting the anticipated increase in service demands has materially reduced the budgeted Initiatives for 2016. This combination of restraint and reduced initiatives has resulted in an overall slight decrease of 0.3% for Pension Administration operating expenses.

We continue to be focused on maintaining or decreasing the pension administration expense ratio. However, 2016 may prove to be a challenge given the unknown impact of the higher demand for service.

RISK

Management has designed and implemented two principal risk management programs to capture the operational, strategic and financial risks encountered by OPB:

- the Investment Risk Management Program (the **IRM Program**); and
- the Enterprise Risk Management Program (the **ERM Program**).

Together, these programs are called the Governance, Risk and Compliance Program (the **GRC Program)**. The primary purpose of the GRC Program is to apply a targeted management system to identify, assess, monitor and mitigate the universe of risks faced by OPB over time.

A key focus of the IRM Program is the risk that OPB generates insufficient returns to meet Plan obligations over the long-term. A key focus of the ERM Program is the risk that OPB is unable to achieve its strategic objectives because cost constraints prevent its ability to invest sufficiently in people, processes and technology.

Investment Risk: Management mitigates investment risk in several ways:

- OPB formally reviews its strategic asset allocation every three years so Management and the Board of Directors can consider the Plan's asset mix relative to its pension obligations. As noted earlier, an Asset/Liability Study was completed during 2014, forming the basis of the 2014 SAA which continues to target a shift of assets from public market to private market assets;
- OPB has implemented a performance measurement and attribution system which enables Management to measure performance daily. For 2016, OPB plans to further enhance our internal investment reporting using this application to ensure, for example, that notional derivative positions are accurately reflected in asset mix reports;
- Management is developing an in-house long-term pacing application to manage the timing of new investments and the roll-off of existing investments for each Private Market asset class. This will ensure alignment with the 5-year transition plan approved by the Board of Directors;
- Surplus Risk analysis is integrated into the investment decision process to optimize incremental returns and mitigate the risk that returns are not sufficient to meet our liabilities; and
- OPB continues to build in-house expertise and asset management capabilities.

Operational Risk: As noted throughout this Business Plan, OPB continues to invest in both Pension Administration and Investments to ensure OPB maintains industry-leading practices in a cost effective manner and with regard to stakeholder expectations. Ongoing investment is needed to sustain OPB's risk mitigation activities related to:

- Governance, particularly with respect to ensuring that OPB maintains an effective internal control framework as its activities become more complex;
- Compliance with legislation, regulations and Government directives;
- Cybersecurity, particularly concerning the protection of personally identifiable information;
- IT business continuity/resiliency plans;

- Increased service demands from members, retired members and employers, particularly as a result of the Government’s announced changes to retiree insured benefits;
- Upgrades to systems and infrastructure to ensure continued efficiency in pension operations; and
- People, processes and technology required to implement the 2014 SAA and internalize components of OPB’s public markets investment activities.

The costs budgeted for 2016 are necessary so that OPB can continue to judiciously allocate its cost-constrained resources to support these key risk mitigation activities.

ENVIRONMENTAL SCAN

The environment for administrators of large public sector defined benefit pension plans continues to be complex and challenging. Environmental factors present opportunities, risks and impacts for the Plan. Whether and how effectively OPB responds to these factors can significantly impact Plan stakeholders. Accordingly, properly identifying and assessing these factors is necessary to successfully fulfill our mission. There are many aspects of the current environment that are placing significant and unavoidable pressure on OPB's expenses and resources. Despite this, OPB remains committed to the Government's expectation of expense restraint and we believe that the budget provided for in this Business Plan is highly respectful of that expectation considering these unavoidable, external pressures.

A summary of the top environmental factors is provided below:

Investment Environment: Recent geopolitical and economic factors have combined to create one of the most challenging investment climates since the global financial crisis seven years ago. After many years of improving liquidity, the US Federal Reserve terminated Quantitative Easing earlier in 2015 and is looking for an opportunity to raise interest rates. Adding to the potential negative effect of this on economic activity is concern about slowing growth in China and the impact on the global economy. Continued weak energy prices, declining commodity prices generally, and fragile growth in Europe (exacerbated by the never-ending Greek bailout debate), all add to the uncertainty. The outcome was a dramatic return to market volatility post mid-year, which is expected to continue. After many years of rising equity markets resulting in stretched valuations, it is not surprising to see this turbulence. The real question now is whether this is a mid-cycle correction or something longer term in nature.

Province of Ontario Fiscal Situation: Controlling human resource costs, including pension expense, in the public sector is seen as one of the key paths to fiscal health in Ontario. Measures taken or being considered by the Government of Ontario to address the Province's budget deficit and debt level could impact the Plan and OPB in various ways. Initiatives such as changes to retiree insured benefits, changes to the long-term income protection program and its interplay with the Plan, and the OLG modernization have the potential to create significant human resource demands on OPB. Asset Pooling is another Government policy initiative that will increase the efficiency and effectiveness of the investment of public sector assets. To assist in making Asset Pooling a reality, OPB may incur expenses not currently budgeted.

Private Sector vs. Public Sector Pension Coverage: The already low and declining level of private sector pension coverage has led to attacks on public sector defined benefit pension plans because it has created an unfairness perception. It has led the Government of Ontario to advocate for building private sector pension coverage and adequacy through such measures as the establishment of an Ontario Retirement Pension Plan.

Demographics: There are several demographic pressures facing the Plan. The most important of these is lengthening life spans. This increases the costs of pensions and creates funding pressures. This has been largely, if not entirely, addressed by strengthening the mortality assumption used to fund the Plan. OPB must continue to monitor this trend (i.e., people living longer) to determine if plan design and other funding changes are required in response to this demographic trend. The aging of the Plan membership is also impacting OPB, as the number of members eligible to retire with an unreduced pension over the next five years is much higher than OPB has experienced in the past. This will create a significant spike in service demands that OPB must plan for and manage.

Rising mandatory governance, risk and compliance standards*:* The Office of the Superintendent of Financial Institutions (OSFI) has issued governance and cybersecurity guidelines for federally regulated financial institutions. OPB has self-assessed against these guidelines and found that we substantially meet the standards; however, there are areas where we must improve. Cybersecurity threats are constantly evolving and becoming more sophisticated which means that continuous vigilance is essential to effectively mitigate risk. This creates resource and cost pressures and impedes our progress on strategic initiatives, as we must dedicate limited human and financial resources to these initiatives.

Rising service expectations: Our members, retired members, employers and other stakeholders expect ever faster, and ever more sophisticated service. Our clients want more and more personalized decision-making support around key pension life cycle options, and there is increasing pressure for online exchange, online transactions, and e-communications. Our current IT infrastructure and systems are not capable of meeting these service demands and expectations.

FINANCIAL BUDGET AND STAFFING - 2016

(All numbers in the tables are expressed in $thousands unless otherwise stated)

BUDGET OVERVIEW

The 2016 Budget separately details the key operating expenses for the Plan's two main lines of business, Pension Administration and Investments, as well as on a consolidated basis.

As noted throughout this document, the Business Plan calls for continued investment in people, processes and technology in the Investments area. Senior Management supports the view that development must continue in order for OPB to maintain its strong investment results, thus improving the likelihood that the funded position of the Plan continues to improve. The increased expense levels to move to the 2014 SAA are even more necessary in the current volatile market environment.

Technology investments in the Pension Administration area are also required to address the heightened client service needs resulting from the Province's changes to retirement benefits eligibility and the modernization of OLG, in addition to shoring up the infrastructure to mitigate cyber threats. Substantial investments in technologies to replace our aging systems have been deferred to 2017 because of these priorities. We are fully aware that the redevelopment of these systems cannot be deferred beyond this time.

In spite of the increased operating expense levels, OPB's investment expense ratio continues to be at the lower end of the range relative to our benchmarks and peers.

Tables and narratives within this document are used to explain material differences between the 2016 Budget and 2015 Forecast expenses.

INTRODUCTION

This section of OPB's Business Plan presents the Financial Budget and Staffing expenses for 2016. The Province of Ontario does not directly fund the investment and operating expenses of OPB. These costs are funded from the assets of the pension plan and accordingly are not a charge against the Consolidated Revenue Fund or recorded as part of the Province's operational expenses.

Consolidated Expenses	2016 Budget	2015 Forecast	Increase/ (Decrease)	Change %
Investment Management Fees	74,519	78,923	(4,404)	(5.6%)
Operating Expenses	49,084	46,900	2,184	4.7%
Capital Expenditures	254	492	(238)	(48.4%)
Asset Pooling support	750	-	750	n/a
Total	**124,607**	**126,315**	**(1,708)**	**(1.4%)**

The 2016 consolidated budget for Investment Management Fees, Operating Expenses and Capital Expenditures is $124.6 million, a decrease of 1.4% over 2015 Forecast**.** Investment management fees are planned to decrease by $4.4 million primarily on the assumption there will be no increase in externally managed assets after June 30, 2015 (this was the base level of assets used for the Forecast and Budget in this Business Plan)[4], while total Operating Expenses are planned to increase by $2.2 million.

The continued shift of assets from publicly traded bonds and equities to Private Market Investments as OPB implements its 2014 SAA is contributing to the expected decline in investment management fees. If publicly traded assets (which are, for the most part, externally managed) increase significantly in value, then investment management fees will be higher than projected.

On the Operating Expense side, OPB has planned expenses of $24.5 million for the investment operating expenses and $24.6 million for pension administration operating expenses. The budgeted increase of $2.2 million in consolidated operating expenses is entirely attributable to higher investment operations expenses, as pension administration operational expenses are expected to slightly decrease in 2016.

The increase in expenses for the Investments area is primarily due to the continued expansion of the Plan's in-house investment capabilities. Leveraging on previous success, Management plans to further build its internal asset management capabilities in order to continue generating the incremental returns required to improve the Plan's funded status. The increase of $2.2 million in investment expenses represents an increase of 10.1% over the 2015 forecast of $22.2 million. Total investment expenses (including both investment operating expenses and investment management fees) are budgeted to be $99.0 million versus $101.2 million in the 2015 forecast, representing a decrease of 2.1%, primarily due to reduced external investment management fees.

The last Provincial budget created IMCO for the Asset Pooling initiative. OPB is partially funding the establishment of this organization. In 2016, Management has budgeted $750 thousand related to the Asset Pooling initiative to cover costs for relocation, as well as other advisory legal and consulting costs. These costs are included as part of the overall expenses, however, are not considered as part of OPB's 2016 operational expenses budget for purposes of comparing year over year changes.

CONTINGENCIES AND RISK

Management has identified the following factors that may impact the costs as set out in the 2016 Budget:

[4] For budgeting purposes, given that OPB cannot control whether markets increase or decrease in a particular year, Management has adopted a practice of assuming zero growth in order to more easily explain any variance in asset level driven expenses. Planned asset mix changes and the impact on external management fees of those planned changes are reflected in the projected external investment management fees. In 2015, the investment management fees are now forecast to be $4.1 million higher than the $74.8 million projected figure contained in the 2015-2017 Business Plan and Budget, primarily due to asset growth and differences between projected and actual asset mix.

1. Increased external investment management fees, resulting from greater assets under management due to positive investment returns, will drive an increase in overall expenditures.
2. Costs related to implementing any new or modified legislation or to government workforce amendments that have not already been considered as part of the 2016 Budget, such as the costs related to the modernization of OLG or the changes to retiree insured benefits.
3. Costs associated with unexpected events or litigation.
4. Higher than anticipated costs related to the Asset Pooling initiative. Management has budgeted $750 thousand (as noted above), however, implementation costs could be higher.

To mitigate the above-noted risks, Senior Management regularly meets to consider the impact of unplanned events on planned projects and the budget. Where possible, priorities are adjusted to ensure that the overall budget impact is managed.

INVESTMENT MANAGEMENT FEES PROJECTIONS[5]

Investment Management Fees Projections	2016 Projection	2015 Projection	Increase /Decrease	Change %
Investment Management fees - Public	57,095	62,038	(4,942)	(8.0%)
Custodial Fees	6,000	5,800	200	3.4%
Transaction Costs	10,824	10,286	538	5.2%
Private Market Costs	600	800	(200)	(25.0%)
Total Investment Fees	**74,519**	**78,923**	**(4,404)**	**(5.6%)**

Investment management fees paid to external managers are projected to drop with a further shift in the Plan's asset mix towards private assets. The custodial fees are projected to increase by 3.4% due to asset mix composition. Transaction costs (i.e. equity commissions) are budgeted to be higher due to higher transaction volumes anticipated as a result of the continued shift of public market assets to private market assets.

The private market costs represent costs for due diligence on deals that do not close (i.e. where Management ultimately decides not to invest). These are budgeted below 2015 levels on the assumption that there will be fewer such events in 2016. As is customary (i.e. industry practice) for Private Market Investments, fees paid on private market funds (limited partnerships) are generally deducted directly from the distributions or proceeds of any sales and are netted against the fund returns.

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[5] Given that Investment Management Fees are driven by the underlying appreciation/depreciation of the assets based on market movements which cannot be budgeted, we have indicated that the fees are "Projections" rather than a "Budget".

Operating Expenses

The tables on the following page present the consolidated view of the 2016 and 2015 operating expenses for OPB, followed by the breakdown between the Pension Administration (**Pensions**) and Investments businesses.

Operating Expenses	2016 Budget	2015 Forecast	Increase /Decrease	Change %
Staffing Costs	29,518	27,615	1,903	6.9%
Office Operations	5,992	5,855	137	2.3%
Technology	8,886	8,962	(76)	(0.8%)
Professional Services	2,696	2,599	97	3.7%
Depreciation	898	878	20	2.3%
Communication, Board Remuneration & Audit	1,094	991	103	10.4%
Total	49,084	46,900	2,184	4.7%

Operating Expenses for Pensions & Investments (in thousands of dollars)	**2016 Pension Budget**	**2016 Invest. Budget**	**Total 2016 Budget**	**2015 Pension Forecast**	**2015 Invest. Forecast**	**Total 2015 Forecast**	**Pensions Change %**	**Invest. Change %**
Staffing Costs	13,875	15,643	29,518	13,503	14,112	27,615	2.8%	10.8%
Office Operations	3,150	2,842	5,992	3,381	2,474	5,855	(6.8%)	14.9%
Technology	5,808	3,078	8,886	6,138	2,824	8,962	(5.4%)	9.0%
Professional Services	636	2,060	2,696	518	2,081	2,599	22.8%	(1.0%)
Depreciation	517	381	898	573	305	878	(9.8%)	24.9%
Communication, Board Remuneration & Audit	615	479	1,094	553	438	991	11.2%	9.3%
Total	24,602	24,483	49,084	24,666	22,234	46,900	(0.3%)	10.1%

Overall operating expenses are expected to increase by 4.7% over the 2015 Forecast. The Pensions area is expected to decrease by 0.3% in 2016, whereas the Investments area operating expenditures are expected to grow by 10.1% over the 2015 forecast, mainly due to grow-in of staff hired in 2015. There is also a small increase in the Investment Finance complement budgeted for 2016 which is required to continue enhancing the capability of Investment Finance to adequately support increasing investments in private market assets, as well as the Internalization Program, whereby OPB continues to selectively in-source portions of the investment portfolio and hedging activities become more complex.

Budget Highlights

The larger contributors to budgeted expenses are analyzed below. Each section also details the impact of these costs on the Pensions and Investments business areas.

Staffing Costs

Operating Expenses for Staffing (in thousands of dollars)	2016 Pension Budget	2016 Invest. Budget	Total 2016 Budget	2015 Pension Forecast	2015 Invest. Forecast	Total 2015 Forecast	Pensions Change %	Invest. Change %
Salaries	11,486	13,142	24,628	11,332	11,778	23,110	1.4%	11.6%
Benefits	2,010	2,000	4,010	2,010	1,842	3,852	0.0%	8.6%
Other	379	501	880	161	493	654	134.8%	1.9%
Total ($)	13,875	15,643	29,518	13,503	14,112	27,615	2.8%	10.8%
Staff Complement, end of year	156	46	202	156	42	198	0	14.3%

Investments' complement represents staff for the front-, middle-, and back-office teams**.**

Staffing costs represents 60% of total operating costs. The salaries budget includes both salaried and temporary staff, as well as accruals for incentives, severance, vacation pay and pensions.

In accordance with the collective agreement reached in 2014, there are no scheduled salary adjustments for bargaining unit staff in 2016 or 2017. We have provided for stepped merit increases available for some of the bargaining unit members as they reach certain milestone anniversary dates. Salary increases are also budgeted for Investments and executive staff. A more detailed explanation of the salaries variance of $1,518 is provided in Table 1.1 below.

Benefits are estimated to be 20% of salaries. We expect the benefit rates to remain substantially unchanged for 2016. The growth in benefits is due to correlated increase in the salaries budget.

Staffing costs for the Investments area are expected to increase by 11.6% primarily due to grow-in of positions hired in 2015, related incentives and two new hires for the middle- and back-office functions to support the increased volumes resulting from more complex internal asset management activities. Staffing costs for the Pensions area are expected to increase by 1.4% primarily due to the increase in incentives and accrued salary costs like vacation pay, time bank and SERP.

Table 1.1: Salaries variance	Amount
Net grow-in of positions in 2016	309
2 new positions in Investments Finance	195
Planned salary increases for investments front-, middle- and back-offices	285
Incentives increasing due to grow-in, new staff, salary increases	529
Increase in accrued salary costs (vacation pay, termination pay, SERP)	200
Total Variance Explained	1,518

OFFICE OPERATIONS

Operating Expenses for Office Operations (in thousands of dollars)	2016 Pension Budget	2016 Invest. Budget	Total 2016 Budget	2015 Pension Forecast	2015 Invest. Forecast	Total 2015 Forecast	Pensions Change %	Invest. Change %
Office Rental	2,057	1,775	3,833	2,242	1,559	3,801	(8.2%)	13.9%
Office Operations	1,093	1,067	2,159	1,139	915	2,054	(4.1%)	16.6%
Total	**3,150**	**2,842**	**5,992**	**3,381**	**2,474**	**5,855**	**(6.8%)**	**14.9%**

The office operations budget includes the rental cost of the premises and general business support costs. Rent and related charges such as realty taxes and operating utilities represent a significant portion of the budget. Overall, budgeted office rental costs are increasing by less than 1%. However, due to a revised allocation to reflect current activities, the Investments business portion of this expense increases by 13.9% while the Pensions business portion offsets much of this through a decrease of 8.2%.

The cost of subscription, travel, accommodation, meals, etc. related to attending conferences, participating in registered seminars and presenting to stakeholders throughout the province is also included in office operations. Prior to incurring such expenses, Management has processes in place to ensure the planned expenses comply with the Government's Travel, Meal and Hospitality Expenses Directive.

There are no major variances in Office Operations requiring further analysis.

TECHNOLOGY

Operating Expenses for Technology (in thousands of dollars)	2016 Pension Budget	2016 Invest. Budget	Total 2016 Budget	2015 Pension Forecast	2015 Invest. Forecast	Total 2015 Forecast	Pensions Change %	Invest. Change %.
Base IT Operations	4,041	1,016	5,057	3,662	1,013	4,675	10.3%	0.3%
IT Projects	601	214	815	1,373	467	1,840	(56.2%)	(54.1%)
Investment Data & Applications	-	1,305	1,305	-	1,028	1,028	-	27.0%
Software	1,166	543	1,709	1,103	316	1,419	5.7%	71.7%
Total	**5,808**	**3,078**	**8,886**	**6,138**	**2,824**	**8,962**	**(5.4%)**	**9.0%**

The Technology budget consists of both oversight and maintenance of the current Pension Administration and Investments systems, investment data, application licenses and project costs to implement new initiatives.

IT project costs for 2016 have decreased as fewer large initiatives are planned in 2016 due to the expected increase in service demands within Pension Administration. Details of the *2016 Initiatives* are provided on page 30.

OPB operates a technology framework, which is maintained through an outsourcing contract. The base contract has a planned increase of less than 1%. Software and maintenance costs have increased to support the full year costs for certain licenses purchased last year. $50 thousand has been planned for cybersecurity enhancements.

PROFESSIONAL SERVICES

Operating Expenses for Professional Services (in thousands of dollars)	2016 Pension Budget	2016 Invest. Budget	Total 2016 Budget	2015 Pension Forecast	2015 Invest. Forecast	Total 2015 Forecast	Pensions Change %	Invest. Change %.
Actuarial	198	35	233	172	31	203	15.3%	11.8%
Consulting & Other Services	222	1,743	1,965	178	1,806	1,984	24.2%	(3.4%)
Legal & Other	216	282	498	168	244	412	28.8%	15.6%
Total	**636**	**2,060**	**2,696**	**518**	**2,081**	**2,599**	**22.8%**	**(1.0%)**

Actuarial costs are expected to increase from the 2015 forecast due to a planned Long-Term Funding Study to be commissioned in 2016. Work will also commence on a full funding valuation for the December 31, 2016 year-end as the last full actuarial study was undertaken during 2014 for December 31, 2013.

Consulting & Other Services are budgeted to decrease slightly as a result of fewer dollars allocated to initiatives in 2016; however, $60 thousand has been budgeted relating to Crisis Communication retainer fees.

Legal costs are expected to increase by $86 thousand. A large portion of this increase is attributable to human resource consulting work and a Data Governance review needed in 2016.

2016 INITIATIVES

Expenses for initiatives are generally one-time or project-based costs that support a specific objective or initiative identified as furthering the progress towards fulfilling OPB's various key goals and objectives. The costs of these initiatives, which may include costs from multiple expense categories, are listed below. Certain details related to these initiatives have been described throughout this Business Plan. The expenses are the incremental external costs of the initiatives. The internal costs (such as salaries and related benefits of internal staff), while considered in the planning and execution of the projects, are not included as part of the initiatives budget shown on the following page.

Core Value	Business initiative	Operating Expenses (in thousands of dollars)
Unmatched Client Service Excellence	Board of Directors Portal	30
	Annual Pension Statement update to include family law changes	100
	Recorded Information Management Program	250
	2016 Divestment Activity	20
	Temporary Assistance - Pension Administration, to address heightened activity from Provincial initiatives	100
	Long Term Income Replacement Program legislative changes	150
	Insured Benefits - IT enhancements to address heightened activity from Provincial initiatives	80
Disciplined and Astute Investing	Continued Internalization of Investment Management	100
	Enhanced Investment Reporting	100
	Requirements development and RFP for a new Private Market application	100
Better, Faster, Smarter Business Systems and Processes	Livelink blueprint to convert customization for risk mitigation	185
Total Initiatives for 2016		**1,215**

Asset Pooling (IMCO)

The Investment Management Corporation of Ontario is expected to commence operation on January 1, 2017. OPB is partially funding the expenses associated with the establishment of this enterprise. For 2016, OPB has budgeted $750 thousand for this initiative which, as noted earlier, has been segregated from the regular operational expenses of OPB. It is important to note that actual costs to operationalize IMCO may be substantially higher than the amount budgeted, however, OPB management is committed to completing this project and will undertake to explain any budget overage that may occur.

APPENDIX 1: DEFINED TERMS

In this Business Plan:

Asset Pooling means the asset pooling initiative contemplated by the *Investment Management Corporation of Ontario Act, 2015* (not yet proclaimed in force).

Budget means the budget contained in the Business Plan.

Business Plan means this Ontario Pension Board Business Plan 2016-2018.

Management means, collectively, employees of OPB holding the position of or senior to manager.

Investments means all activities relating to the investment and management of the Plan's assets.

Plan Sponsor means the Province of Ontario in its capacity as sponsor of the Plan.

Pension Administration means all activities relating to the management and administration of the Plan.

SERP means Supplementary Employer Retirement Plan

CEM is an independent benchmarking agency

AUM means assets under management

bps means basis points, a measure equal to one one-hundredth of a percentage point

EVP means Executive Vice President

Plan means the Public Service Pension Plan

Fund means the assets that fund the benefits under the Plan

KPIs means key performance indicators

OLG means the Ontario Lottery and Gaming Corporation

2014 SAA means the 2014 Strategic Asset Allocation

Private Market Investments means investments that are not listed or traded on public markets such as real estate, infrastructure and private equity

Internalization Program means the 2015 Asset Management Internalization Program

TAA means the Tactical Asset Allocation strategy

APPENDIX 2A: METRICS AND KEY PERFORMANCE INDICATORS

	Long-Term Objective	Current Performance	2016 Objective
INVESTMENTS			
Return vs. Discount Rate	Exceed Discount Rate (5.95%) over rolling 4 year period by 50 bps	Outperforming (As at June 30, 2015 3.16% above Discount Rate)[6]	6.45% or higher over a rolling 4 year period
Return vs. SAA Benchmark	Exceed SAA Benchmark over rolling 4 year period by 50 bps	Outperforming (As at June 30, 2015 1.08% above Benchmark)	Exceed Benchmark by 50 bps over a rolling 4 year period
PENSION SERVICES			
Client Satisfaction Score	8.5/10 or higher	Outperforming (8.6/10)	8.6 or higher
CEM Service Score	85/100 or higher	Outperforming (89 for 2014 per CEM Survey)	87 or higher
CEM Peer Ranking	4th or higher	Outperforming (2nd in 2014 per CEM Survey)	4th or higher
EXPENSE MANAGEMENT (cost per $ of AUM)			
Consolidated	70 bps or lower	Outperforming (54 bps in 2014, expect 55 bps for 2015)	60 bps or lower
Investments	60 bps or lower	Outperforming (44 bps in 2014[7], expect 45 bps in 2015)	48 bps or lower
Pensions	12 bps or lower	Outperforming (11 bps in 2014, expect 11 or lower in 2015)	12 bps or lower

[6] The percentage of outperformance is calculated on a blended discount rate of 6.00%, as the actuarial assumption for the discount rate was changed from 6.35% to the current 5.95% effective January 1, 2012.

[7] This ratio is based upon a simple average of the assets under management. In our 2014 Annual Report, we used the year-end assets under management, resulting in a reported 0.43% or 43 cents per 100 dollars of assets under management. Future reports will use this updated simple average methodology.

	Long-Term Objective	Current Performance	2016 Objective
PSPP SUSTAINED			
Going Concern Funded Ratio	100% by 2020	On track (98% at Dec 31, 2014)	98% or better
Contribution Rates	9% or lower blended rate on average salary for non-OPP members (currently $85,000)	Met (Current blended rate is 7.64%)	9% or lower[8]
Benefit Levels	Current benefits maintained	Met	Current benefits maintained[8]

[8] It is recognized that this metric is not completely within the control of OPB since the Plan Sponsor can make decisions that impact this KPI. Nevertheless, Management strives to attain the noted objective.

APPENDIX 2B: KEY GOALS / OBJECTIVES FOR 2016

Description of Key Goals / Objectives	Metric / Measurement
Optimize the implementation of the 2014 SAA	Meet interim 2014 SAA benchmark targets
Continue to build on in-house expertise and asset management capabilities	Evaluate 1-2 public asset classes/mandates and selectively insource if appropriate
Continue to enhance internal investment reporting	Adjust asset mix for the effective notional principal of derivative positions Revise front office reporting for private markets assets, trade capture and existing positions
Continue to enhance internal control structure to accommodate new asset management activities	No “major” audit issues arising from any internal audits All moderate (and lower level) audit issues are addressed within stated timelines
Establish IMCO functional organization structure	IMCO operational for January 1, 2017
Develop a multi-year pension administration strategy and associated information technology plan/strategy Deliver agreed projects as noted in the 2016 Initiatives section on page 30	Strategies/Plans presented to, and approved by, OPB Board of Directors Deliver implementation of solutions per agreed project charters
Meet or exceed core Application & Infrastructure service levels while improving IT compliance and productivity	Meet standards set in Service Level Agreements
Manage cybersecurity threats	Develop new security/cybersecurity strategy Train employees on cyber threats Ongoing assessment of risk via ERM process
Attraction and retention of staff, especially those positions defined as critical to the organization	Voluntary turnover < 10% for full year Vacancy rate < 5%, measured quarterly
Continue to manage internal operating expenses[9] judiciously	Budget variance for year within + / - 5%

[9] Operating expenses exclude investment management fees.

APPENDIX 3: STRATEGIES AND FOUNDATIONS

To implement OPB's strategic vision, all organizational, departmental and individual objectives align with one or more of the following Strategies and Foundations.

State of the Art Governance – our approach to governance is to ensure that structures and processes are in place to provide appropriate oversight with respect to the strategy of the organization and management of its key risks.

High Performing People – we believe strong leaders facilitate a culture of high performing teams, and that each individual employee contributes to the organization's success. We view programs and initiatives aimed at developing and retaining our internal talent as a crucial investment.

Strategic and Responsible Financial Management – this is a fundamental fiduciary responsibility, and essential for maintaining the trust of our stakeholders. We must demonstrate value for money as we invest in programs that improve service to clients and stakeholders, build out support for investment activity, meet legislative requirements, and improve the efficiency, reliability and security of our networks.

Better, Faster, Smarter – OPB looks to automate, and streamline, routine pension administration transactions and certain investment related activities in order to ensure efficiency and to enable the delivery of advisory services at reasonable cost.

Unmatched Client Service Excellence – OPB is committed to providing outstanding service to our clients. This means delivering the pension promise with proactive, knowledgeable, timely and accurate service and support.

Disciplined and Astute Investing – to achieve Plan objectives, OPB has developed a strategic approach with an emphasis on capital preservation. We seek to generate strong, stable, long-term investment returns within acceptable risk parameters.

Outstanding Stakeholder Relations – we believe our role is one of a trusted advisor. This means providing stakeholders with balanced recommendations that reflect our fiduciary duty, our commitment to the long-term sustainability of the Plan, and the Government of Ontario's need for cost constraint.

Educate and Advocate – OPB has a significant role to play in contributing to public discourse, and policy making, on the topic of pension coverage and retirement income adequacy, not just for the benefit of members of the PSPP, but for the benefit of all Canadians.

APPENDIX 4: 3 YEAR PROJECTED EXPENDITURES 2016 – 2018

Projected Expenditures (in thousands of dollars)	2016 [1]	2017 [2, 8]	2018 [2, 8]
Investment Fees			
Investment Management Fees – public[3]	57,095	57,100	57,100
Custodial Fees[3]	6,000	6,000	6,000
Transaction Costs	10,824	10,820	10,820
Private Market Costs[4]	600	610	620
TOTAL INVESTMENT FEES (A)	**74,519**	**74,530**	**74,540**
Operating Expense			
Staffing Costs[5]	29,518	29,395	30,183
Office Operations	5,992	6,110	6,230
Technology[6]	8,886	9,060	9,240
Professional Services	2,696	2,750	2,810
Depreciation	898	920	940
Communication, Board Remuneration and Audit	1,094	1,120	1,140
TOTAL OPERATING EXPENSE (B)	**49,084**	**49,355**	**50,543**
TOTAL CAPITAL EXPENDITURE (C)	**254**	**350**	**360**
IMCO SUPPORT (D)	**750**	**-**	**-**
TOTAL EXPENDITURE (A+B+C+D)	**124,607**	**124,235**	**125,443**
Projected Annual Increase (%)		(0.3%)	1.0%
Planned Staff Complement[7]	202	162	162

NOTES AND ASSUMPTIONS FOR 3 YEAR PROJECTED EXPENDITURES:

1. The 2016 Projection is the 2016 Budget.
2. For 2017 and 2018, an overall 2% increase is assumed for each category, except as noted below.
3. Investment expenses projected to remain flat in 2017-2018.
4. Private market costs (consulting and broken deals) projected to grow by 2%.
5. Staffing costs - 2% salary increase provided for in 2017 and 2018, additional costs for new complement hires and grow-in of positions for investments business.
6. Technology costs in 2017 and 2018 are expected to significantly increase due to the investment required to modernize our pension administration systems. At this time however, Management is not in a position to reliably estimate the potential costs. An

estimate of these costs should be available when preparing the 2017-2019 business plan next year.

7. Complement is projected to decrease by approximately 40 Full Time Equivalents for the years 2017-18, as the majority of Investments business personnel move into IMCO. No complement changes are projected in the Pensions business.
8. Operating expenses include both costs associated with the Pension and Investment businesses. This 3 year projection does not reflect any further costs that may be associated with the implementation of IMCO beyond the $750 thousand estimated for support by OPB in 2016. IMCO is expected to be operational as a separate entity effective January 1, 2017. Its costs will, in turn, be billed proportionately to its clients, including OPB. We have maintained costs in their traditional categories in operating expenses for 2017 and 2018 as a proxy for this future billing.

Appendix 5: Organizational Chart – Management Level