

**special forces**  

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**pension plan**

# ANNUAL REPORT 2016

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Questions, concerns or feedback may be emailed to [board@sfpp.ca](mailto:board@sfpp.ca)

# 2016 HIGHLIGHTS

**NET ASSETS** \$**2.7** Billion (after expenses)

**PENSION OBLIGATION** \$**2.8** Billion (liability)

**DEFICIENCY** \$**108.5** Million



**TOTAL MEMBERSHIP**

**7,187**

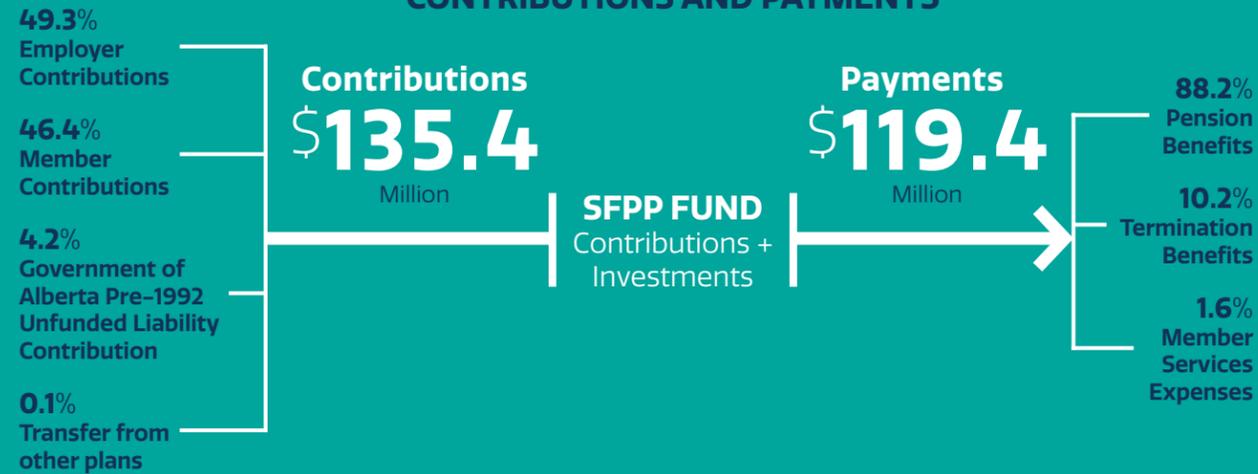
4,425 Active	2,541 Pensioners	221 Deferred
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## ACTIVE MEMBERSHIP BY EMPLOYER

- **49.1%** City of Calgary
- **43.2%** City of Edmonton
- **3.8%** City of Lethbridge
- **2.6%** City of Medicine Hat
- **0.6%** City of Camrose
- **0.4%** City of Lacombe
- **0.3%** Town of Taber

### CONTRIBUTIONS AND PAYMENTS



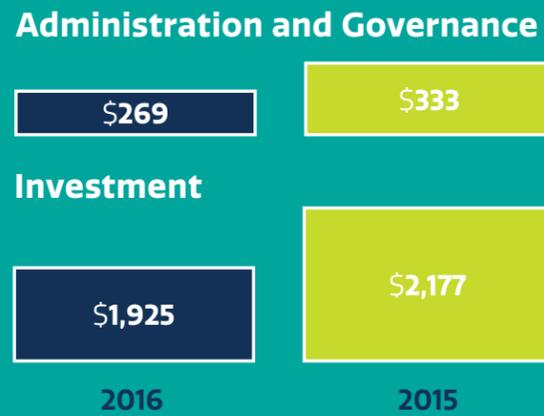
#### PLAN EXPENSES (Millions)



- \$1.7 Administrative Expenses (APS)
- \$13.8 Investment Expenses (SFPP)
- \$0.3 Governance Expenses (SFPP)

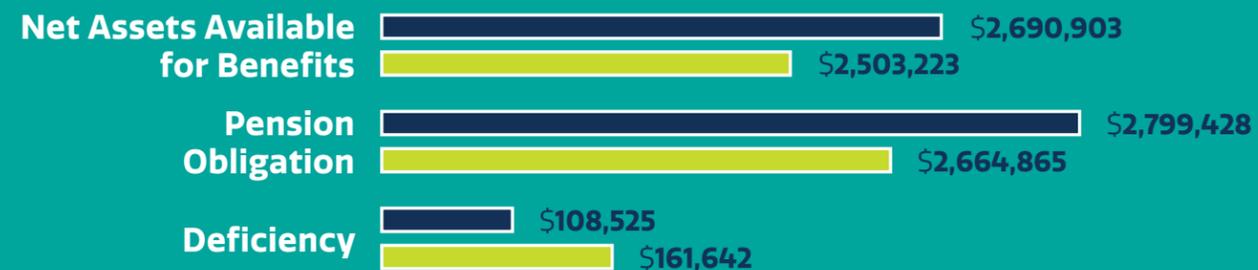
Governance expenses reflect costs associated with overseeing the SFPP. Included are Board expenses (\$65,000) plus total fees for actuarial consulting and other professional contracts (\$207,000)

#### PLAN COSTS (per member)



#### SUMMARY OF FINANCIAL POSITION

(\$ thousands as at Dec. 31, 2016)



## ABOUT SFPP

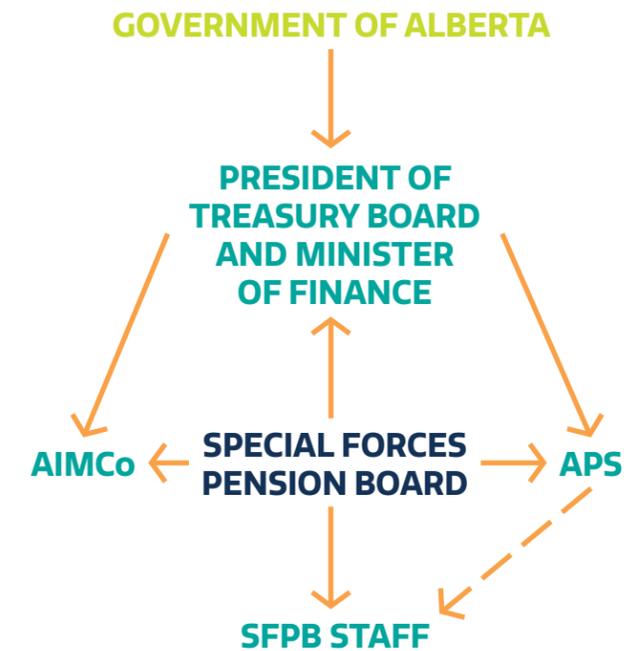
The Special Forces Pension Plan (SFPP or the Plan) is a defined benefit pension plan established in 1979 for Alberta municipal police officers.

SFPP is governed in accordance with the *Public Sector Pension Plans Act* (PSPPA) and associated regulations. The President of Treasury Board and Minister of Finance (the Minister) is the administrator and trustee of the SFPP. However, the Minister does not perform the daily tasks to operate the Plan. The following organizations are involved in the operation and governance of the Plan:

- Plan Administrator: Alberta Pensions Services Corporation (APS)
- Plan Investor: Alberta Investment Management Corporation (AIMCo)
- Special Forces Pension Board (the Board)
  - The Board's responsibilities include, but are not limited to:
    - Setting general policy guidelines on investment and management of the Plan's assets and administration of the Plan
    - Reviewing the actions of APS and AIMCo on behalf of Plan members and as delegated by the Minister
    - Seeking expert advice (investment, actuarial, legal) in order to make informed decisions regarding the Plan and discharge its legislated and fiduciary duties.

The Board has seven members: three employer nominees, three employee nominees and one Government nominee.

Alberta Treasury Board and Finance holds ultimate responsibility to monitor its delegations and for the delivery of service each organization provides to the SFPP.



# MESSAGE FROM THE BOARD CHAIR



On behalf of the Special Forces Pension Board, I am pleased to present the Annual Report for the year ending December 31, 2016. It includes audited financial statements and detailed reports on the Plan's financial position, investments, and administration.

2016 proved to be a strong year for the Plan, despite a difficult start – both in terms of investments and governance. Investments lost 1.4% in the first quarter, but rebounded in the following three quarters of 2016. By year's end, the Plan's fund returned 6.8%, meeting the Board's minimum return expectations it has set for AIMCo. That contributed to the Plan's returns over the last four years (10.6%) exceeding the discount rate (5.9%), which is used to value the current cost of future pension obligations.

Loss of quorum for the first half of the year created difficulties from a governance standpoint. The Board's decision-making ability was at a standstill while awaiting approval of nominees put forward for vacancies. After it regained quorum, the Board was able to have four meetings, beginning in August. Given the governance difficulties the nominee approval process posed, the Board is working with Government to seek improvements that will make the system more responsive to recommendations and requests put forward by the Board.

Despite the limited meeting opportunities, the Board managed to make significant strides once it regained quorum. It developed a three-year Strategic Plan, describing the Board's broad approach to governing the Plan, with a focus on risk identification and mitigation.

Thorough discussions surrounding risks to the Plan produced a roadmap for the Board to manage those risks. The Board's considerable planning, forecasting and measurement will enable it to anticipate and respond to risk.

And, there are many risks ahead: prolonged low interest rates result in increased pension liabilities. Add to that, expected long-term returns are trending downward. It all adds stress to the Plan, and necessitates an approach that is focused on balance and long-term sustainability. We will get a better picture of just why that approach is so important with the results of an actuarial valuation the Board is conducting. The valuation will be dated as at December 31, 2016, with the results and filing to come in the second half of 2017. As such, the year ahead is an important one in our long-term planning. The valuation will help us determine whether we are finding the right risk-reward mix, if our investment policy is on the right track, and whether contribution rates remain sufficient to support current and future pension obligations.

The year ahead is also an exciting one, with changes on the Board. In 2016, we welcomed Mike Baker from the Calgary Police Association and Sue Bohaichuk, who is representing the municipalities of Camrose, Lacombe, Lethbridge, Medicine Hat, and Taber. In 2017, we will welcome several new members: Doris Wilson from the City of Calgary, Jodie Graham from the City of Edmonton, as well as two additional new Board members expected later in the year. As such, we must say goodbye to those concluding their terms. On behalf of the Board,

I would like to thank Roger Rosychuk and Jon Himmens for their exemplary service to the Board and to you, the beneficiaries of the Plan.

This is also my last term, after 12 years on the Special Forces Pension Board. It has been a privilege to serve SFPP members and the Plan during my tenure. With a year of turnover ahead, transfer of knowledge will be a focus for the Board as it navigates a difficult investment environment, and complex pension landscape.

On behalf of the Board, I want to thank the SFPP management team, responsible for providing advice, direction, and information to the Board as it makes decisions that will impact Plan members and sponsors. I would also like to acknowledge our agency partners, Alberta Pensions Services Corporation (APS) and Alberta Investment Management Corporation (AIMCo), who deliver valuable services to the Board.

There are many pressures facing pension plans such as SFPP, but as I prepare to finish my final term, I am confident the Board's decisions and direction has positioned the Plan for continued success for years to come.

(Original Signed)

**Denis Jubinville**  
Board Chair

# MESSAGE FROM THE PLAN BOARD DIRECTOR



As I think back on the work the Board and SFPB management team accomplished in 2016, two words come to mind: foundation and future. While we are always working to strengthen the Plan's foundation and its future in order to continue to provide a defined benefit plan for SFPP members, our initiatives and decisions in 2016 significantly furthered our focus in those areas.

Our foundational work revolved around understanding where we are now, so that we can plan for the future. That understanding is critical, as the close of 2016 served as the required date for undertaking a triennial actuarial valuation as required in legislation. The valuation estimates the funds we will need in order to pay pensions today and decades into the future. It looks at actuarial assumptions such as life expectancy for SFPP members and their pension partners, salary and member growth, investment returns, and a number of other factors. The results of the calculations will measure whether contribution rates are sufficient to keep the Plan fully funded in the long term.

We will be looking at the results in conjunction with our new Funding Policy, which is a fundamental decision-making tool for the Board, based on certain outcomes of the actuarial valuation. The Board and its actuarial team spent considerable time outlining funding controls such as contribution rates, reserves (margin), and conditional benefits (cost of living adjustments) which are to be used depending on the funding levels. The results of the full actuarial valuation will come in the second half of 2017.

The Board also reviewed risks to the Plan again in 2016. Significant risks did happen throughout the first half of the year – loss of quorum through appointment delays, high board turnover, ineffective communications with stakeholders, and other issues resulting from the current inefficient governance model. The Board is in agreement that changes are needed and is working on recommending improvements to the governance structure to achieve a collaborative, responsive environment in a mutually agreed-upon framework.

Furthering our work on the Plan's foundation and its future, the Board (both incoming and outgoing Board members) and the SFPB management team also developed a new strategic plan, outlining the Board's focus on three key areas: governance, engagement, and Plan resiliency.

## GOVERNANCE

SFPB will continue to advocate to government for an improved governance model that clarifies roles of the Board and stakeholders, and allows for more responsiveness to Board recommendations. We are looking to have those inefficiencies addressed in order to strengthen the opportunities available to the Board to strengthen the pension plan.

## ENGAGEMENT

Through communication with our stakeholders, we will aim to increase understanding of the SFPP and its benefits, as well as increasing stakeholders' appetite and support for collaborating with the Board to address Plan risks.

## PLAN RESILIENCY

As evidenced by our work on risk identification and management, the development of a funding policy, and the advocacy for an improved governance structure, we are increasing the Plan's ability to endure and withstand risks that could negatively impact funding and the delivery of pensions.

With several new Board members, 2017 will be a year of education and research. The work we have done in 2016 will help to facilitate understanding of the Plan's complexities and confidence in decision-making among our new Board members. The SFPB management team will continue to provide the Board with direction by delivering pertinent information, extensive research, and valuable context.

(Original Signed)

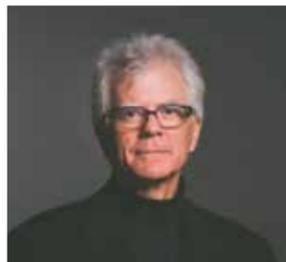
**Liz Doughty**  
Plan Board Director

# BOARD MEMBER ATTENDANCE

Based on 6 meetings



**100%**  
**Denis Jubinville**  
Chair



**100%**  
**George McLauchlan**  
Vice Chair



**100%**  
**Mike Baker**



**50%**  
**Sue Bohaichuk**



**83%**  
**Jon Himmens**



**100%**  
**Roger Rosychuk**



**100%**  
**Dwayne Smith**

# BOARD DISCUSSION AND ANALYSIS

## STRATEGIC AND BUSINESS PLANNING

In 2016, the Board faced significant challenges which impacted its ability to move forward on finalizing governance and Plan design recommendations, as outlined in its 2016-2018 Business Plan. Quorum was lost for the first half of 2016: a result of the approval process for Board nominees. In addition, uncertainty surrounding the appetite for changes to Plan design stalled consultation with Plan sponsors and communications initiatives. Despite those factors, the Board progressed to the extent it could within the framework outlined in the business plan.

2016 brought an opportunity for the Board to focus on its internal governance, including a review of some key policies and procedures. The Board also revamped its committee structure, expanded in-house Board member education and development, and focused on risk management and Plan funding.

Going forward, the Board will continue to emphasize to the Minister the importance of timely responsiveness to recommendations, and the need for further clarity surrounding accountabilities and roles. The Board has decided to revisit its strategic direction in 2017, including its approach and role respecting Plan design and governance. This approach will involve discussion with and the input and collaboration of stakeholders.

## RISK MANAGEMENT

In meeting its fiduciary responsibility to Plan members, the Board is tasked with identifying and managing a spectrum of risks facing the SFPP. In 2016, it took additional steps to quantify some of the most concerning risks within that spectrum, by adopting a "Top Nine Risks Matrix". The matrix will assist the Board in focusing, managing and mitigating those risks going forward. Among the most concerning risks addressed in that document: governance and funding.

## GOVERNANCE

The Board considers governance the key factor in achieving its mandate effectively. However, it is concerned the current governance structure restricts its ability to mitigate risks. Given that the Minister is the Plan's trustee, the Board is limited in its authority to effect decisions surrounding the Plan's administration and finances, despite the fact that it works closely with those who bear the financial risks of the Plan: risk for post-1991 service is wholly owned by members and municipal employers. During a meeting with the Minister in late 2016, the Board emphasized the need to make the governance system more nimble and responsive to Board recommendations to mitigate some of those limitations.

## FUNDING

The Board adopted a revised Funding Policy, which lays out a framework for decision-making based upon whether an actuarial valuation calculates funding levels to be adequate or inadequate. It outlines several levers which may be used to deal with fluctuations in investment returns.



2016 brought an opportunity for the Board to focus on its internal governance, including a review of some key policies and procedures.

## INVESTMENTS AND FUNDING

### SFPP PERFORMANCE IN 2016

The economic environment continued to present challenges in 2016 with low interest rates and reduced oil prices. While that combination impacts investment returns, SFPP's portfolio performed admirably with net assets increasing by 7.5% in 2016, outpacing the growth of pension obligations by 2.5%. The Plan closed out 2016 with approximately \$2.691 billion in net assets under management.

### ACTUARIAL VALUATION

The Plan's triennial actuarial valuation will be completed in 2017 and dated as at December 31, 2016. It estimates the SFPP's future assets and liabilities, based on actuarial assumptions pertaining to the Plan's demographics and economic factors. The results, expected in late 2017, will provide valuable information regarding the Plan's financial position, its long-term viability, and future funding requirements.

### COST-OF-LIVING ADJUSTMENT UPDATE

The Board has once again approved the full target Cost-of-Living Adjustment (COLA) for SFPP pensioners with post-2000 service. The target is equal to 30% of the Alberta Consumer Price Index.

## COMMUNICATIONS

The Board continues to focus on developing proactive communications initiatives and materials that provide Plan members with valuable information about their benefits, the pension industry, and the state of the SFPP fund. Over the course of 2016, SFPB staff worked in collaboration with APS to revise a number of member and Plan-related documents to increase their informational and educational value. Additionally, the launch of the website [mypensionplan.ca](http://mypensionplan.ca) in early 2016 has enabled members to communicate directly with the Member Services Centre online. Going forward, the Board will further its commitment to enhanced communications efforts to educate and engage Plan members and other stakeholders, as well as provide easy access to relevant information.

## WORKING WITH SPONSORS

Intended discussions with Plan sponsors to support risk management encountered a significant roadblock - no messaging from Government. Without responsiveness and communication from the Minister, dialogue with sponsors regarding work on a updated Plan design and governance model as risk mitigation strategies could not proceed in 2016 to the extent the Board had hoped. It will revisit the issues and its plans to communicate with sponsors in 2017.

## WORKING WITH AGENCY PARTNERS

While the Minister has delegated some of the functions related to the Plan to APS and AIMCo, it is the Board's role to monitor each entity's performance to ensure Plan objectives are met. The Board delivered on the respective responsibilities, despite not being at quorum for much of 2016.

In terms of benefits administration, the Board continues to collaborate with APS to ensure accurate and efficient service and delivery of SFPP benefits. Following 2015 discussions between the Board and APS regarding delays in new pensioners receiving their first payment, APS outlined a commitment to pay pensions within the first 30 days of a pensioner's retirement date. APS statistics show improvements throughout 2016. Overall, the Board is pleased with the results.

The Board also remains committed to its responsibility to monitor AIMCo's performance, and provide guidance on investment decisions impacting the Plan. AIMCo invests the SFPP fund based the Board's Statement of Investment Policy & Goals (SIP&G). While the Board does not have direct control over investment implementation, it is responsible for reviewing the fund's performance, as well as AIMCo's policy and procedures relating to the investment of the fund, and reporting the results of the reviews to the Minister.



# INVESTMENT SUMMARY

## INVESTMENT MANAGEMENT SERVICES

Alberta Investment Management Corporation (AIMCo) is a provincial corporation of Alberta Treasury Board and Finance. It manages and invests the assets of the Plan on behalf of the Minister and the Board. AIMCo invests SFPP's assets for the benefit of its members, subject to legislation and the investment policies approved by the Board. AIMCo manages the majority of the Plan's investments internally through pooled investment funds. However, in order to achieve greater diversification, access external expertise and specialized knowledge and reduce operational complexity, some investments are managed by third party investment managers selected and monitored by AIMCo.

## STATEMENT OF INVESTMENT POLICIES AND GOALS (SIP&G)

Plan assets are invested for the benefit of the Plan's beneficiaries in accordance with the Board's SIP&G. The SIP&G is reviewed and updated annually by the Board. It sets out the governing investment principles and guidelines, giving particular consideration to the Plan's provisions, characteristics and financial obligations and the Board's capital market expectations. It also defines the management structure and monitoring procedures.

## HIGHLIGHTS

**Fair Value of Net Assets**  
**\$2.691** Billion

**Pension Obligation**  
**\$2.799** Billion

**Deficit**  
**\$108.525** Million

In 2016, the financial position of the SFPP continued to improve. At December 31, 2016, the fair value of the Plan's net assets increased by 7.5% (or \$188 million) to \$2.691 billion. The pension obligation increased 5.0% (or \$134 million) to \$2.799 billion. As a result, the Plan's deficit decreased by \$53 million to \$108.525 million, according to the 2016 audited financial statements.

The Plan closed out 2016 with 96% of the total pension obligation supported by net assets.

### PER CENT OF PENSION OBLIGATION SUPPORTED BY NET ASSETS

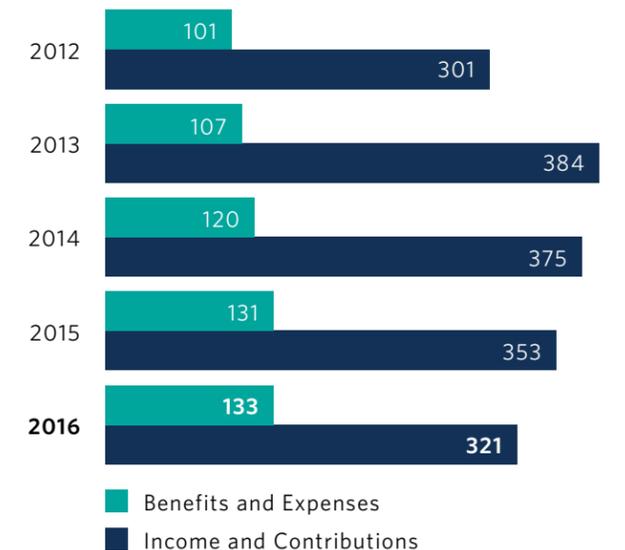
(per audited financial statements)



In 2016, inflows from investment income and contributions of \$321 million were almost triple the outflows from benefit payments and expenses of \$133 million.

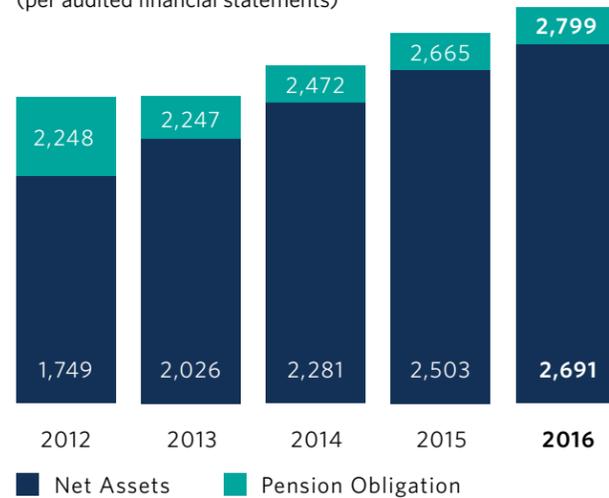
### SFPP INFLOWS AND OUTFLOWS

(in millions of dollars)  
 (per audited financial statements)



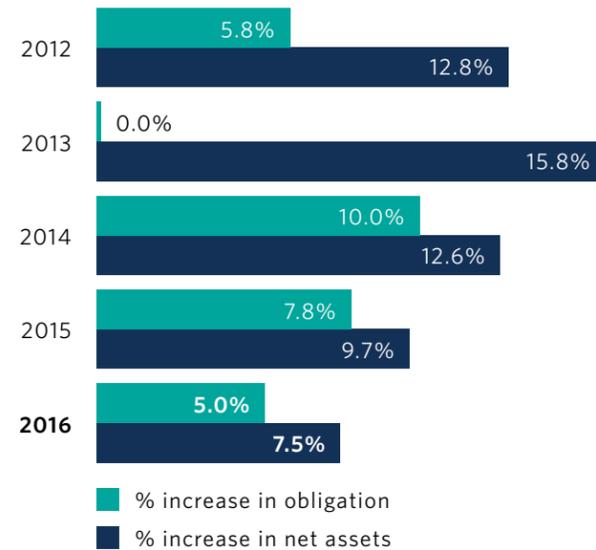
The chart below shows the gap between total pension obligation and the net assets. By the end of 2016, the gap continued to narrow as the growth in net assets exceeded the growth in the pension obligation. At December 31, 2016, the fair value of the Plan's net assets totaling \$2.691 billion was lower than the estimated pension obligation of \$2.799 billion resulting in a deficit of \$108 million. There were no changes to the major assumptions from 2015. The discount rate used for accounting purposes remained at 5.9%, and the inflation rate and salary escalation rate remained at 2.0% and 3.0% respectively.

**NET ASSETS COMPARED TO TOTAL PENSION OBLIGATION**  
(in millions of dollars)  
(per audited financial statements)



In 2016, the Plan's net assets grew by 7.5% while the total pension obligation grew by 5.0%.

**SFPP CHANGE IN NET ASSETS AND PENSION OBLIGATION**  
(per audited financial statements)



**BOARD ACTIVITIES**

The Board has put in place a number of measures to ensure proper governance of the Plan's investments. Along with reviewing the SIP&G annually, the Board evaluates the investment management structure periodically and monitors the performance of the investment portfolio and compliance with policies quarterly. Board members seek to expand their knowledge of investment issues and trends through attendance at seminars, presentations from advisors and reviewing published industry research.

The Board monitors the services provided to the Plan by AIMCo. Services provided and charges for those services including performance standards are set out in the operating protocols between AIMCo and the Board.

The Board conducts detailed asset-liability modeling studies to identify the best asset mix for the Plan taking into account the nature of the Plan's benefit structure, financial assets and the most up-to-date expectations for the financial markets. The Board then reviews the fund objectives, taking into consideration the studies' recommendations, and will make any appropriate changes to the SIP&G.

**LONG-TERM INVESTMENT OBJECTIVE (FUNDING)**

An important goal of the Board is to ensure the Plan is sustainable over the long-term so that the total pension obligation to members is fully supported by net assets in the Plan. In order to achieve this, the Board sets an expectation that the actual return on investments will exceed the required long-term average annual return of 6.1%. This includes an expectation of earning 3.8% above the forecast annual rate of inflation currently assumed to be 2.3%.

**RISK MANAGEMENT SYSTEM**

The Board accepts that in order to meet the return objectives of the Plan, the Board must take on risk in the assets in which it invests. The Plan invests in a diverse set of asset types to help improve the likelihood of achieving its desired results for a given level of risk.

Investment risk management is a central thesis for the Plan's investment manager, AIMCo. AIMCo seeks to measure and monitor both historic and possible future risks, allocating risk as a scarce resource to the most promising investment opportunities. AIMCo maintains a quantitative investment risk system designed to operate across all asset classes and a variety of risk types such as market risk, currency risk, and concentration risk. As the ultimate risk to a pension plan is not being able to meet pension obligations, the Board monitors the risk of the Plan's liabilities in relation to the investment assets. AIMCo will model the risk of both assets and theoretical liabilities and report to the Board on a quarterly basis.

**PROXY VOTING**

The Board considers proxy voting to be a key element of responsible investing and that thoughtful voting is a contributor to optimizing the long term value of

investments. The Plan entrusts the proxy voting function to AIMCo, its primary service provider. Research and proxy voting have been outsourced by AIMCo to an independent adviser that specializes in providing proxy-related services to institutional investors. While AIMCo may review and utilize the recommendations of the research provider in making proxy voting decisions, it is not obligated to follow such recommendations.

**INVESTMENT PERFORMANCE YEAR-IN-REVIEW**

The growth in net assets of 7.5% or \$188 million was comprised of a return on investments, net of expenses, of 6.8%, or \$172 million and 0.7% or \$16 million from contributions in excess of pension benefits.

SFPP INVESTMENT RETURNS	
1st Quarter	-1.4%
2nd Quarter	2.7%
3rd Quarter	4.1%
4th Quarter	1.2%
<b>Annual 2016</b>	<b>6.8%</b>

The year started out with SFPP losing 1.4% on its investments in the first quarter. A strengthening Canadian dollar contributed to losses on foreign investments. In the second and third quarters investment markets improved with SFPP gaining 2.7% and 4.1% respectively.

As the US Federal Reserve increased interest rates, and OPEC announced cuts in oil production, bond yields widened, lowering the fixed income gains. In the fourth quarter, SFPP earned 1.2% on its investments. Overall, SFPP earned a return of 6.8% in 2016, net of investment expenses, compared to 9.3% in 2015.

**ANNUAL RETURNS BY YEAR AND PER CENT OF PENSION OBLIGATION SUPPORTED BY NET ASSETS**

According to the audited financial statements, the Plan's investments generated a return of 6.8% in 2016 and 7.2% per annum over the past twenty years. At December 31, 2016, 96% of the total pension obligation was supported by net assets, up from 94% at the end of 2015.

**ACTUAL RETURN VERSUS REQUIRED RETURN**



**PER CENT OF PENSION OBLIGATION SUPPORTED BY NET ASSETS**

(per audited financial statements)

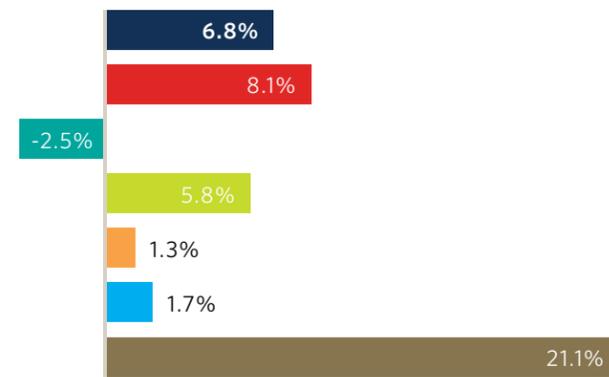


At December 31, 2016, equities comprised 54.3% of the Plan's total assets (2015: 54.6%), followed by interesting bearing securities at 24.7% (2015: 24.4%), and inflation sensitive and alternative investments at 19.7% (2015: 19.5%). Inflation sensitive and alternative investments include real estate, infrastructure, real return bonds and timberland. Strategic opportunities, tactical allocations and currency overlays made up 1.3% (2015: 1.5%).

The following chart summarizes the market returns in 2016 from various indexes around the world and the return of SFPP.

**RETURNS FOR MAJOR MARKETS AND THE SFPP**

(in Canadian dollars)



- SFPP
- S&P 500 Index
- MSCI EAFE Index
- IPD Large Institutional Index
- FTSE TMX L.T. Government Bond Index
- FTSE TMX Universe Bond Index
- S&P/TSX Composite Index

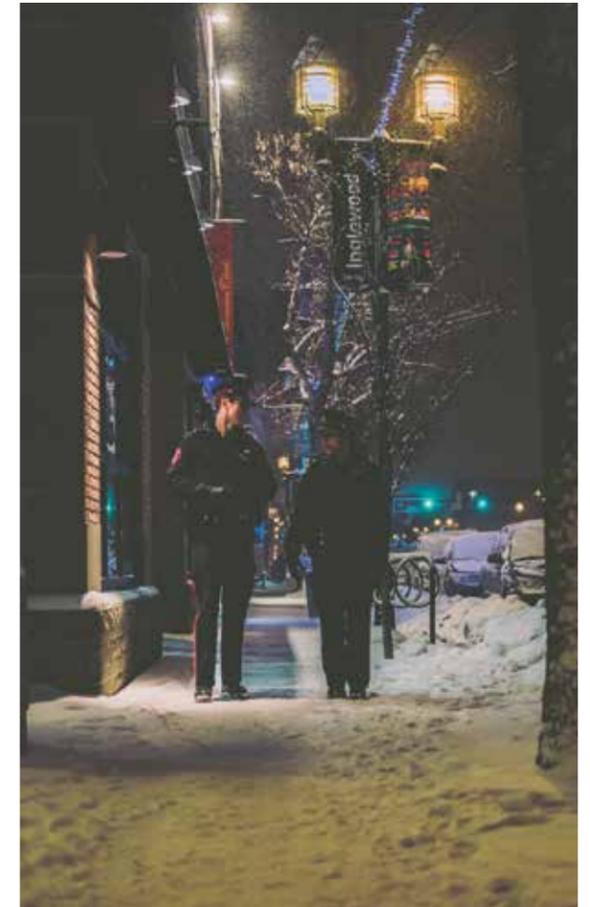
In the United States, the S&P 500 Index tracks the performance of the top 500 American companies. In 2016, the S&P 500 Index increased by 8.1% in Canadian dollars and 12.0% in U.S. dollars (2015: 21.6% in Canadian dollars and 1.4% in U.S. dollars).

In equity markets outside of North America, the Morgan Stanley Capital International Index for Europe, Australasia, and the Far East (MSCI EAFE) Index lost 2.5% in 2016 in Canadian dollars compared to a gain of 19.0% in Canadian dollars in 2015.

The Canadian real estate market, represented by the IPD Large Institutional Index gained 5.8% in 2016 compared to 8.0% in 2015.

In the Canadian stock market, the Standard & Poor's Toronto Stock Exchange (S&P/TSX) Composite Index gained 21.1% in 2016, wiping out the loss of 8.3% in 2015.

In the bond market, the FTSE TMX Long-term Government Bond Index recorded a modest gain of 1.3% in 2016, compared to gain of 4.5% in 2015. The FTSE TMX Universe Bond Index posted a gain of 1.7% in 2016 compared to a gain of 3.5% in 2015.



## ASSET MIX

The table below shows the long-term policy asset weight for each class of investments held in the Plan compared to the actual asset mix for 2016 and the previous year.

Asset Class	LT Policy Benchmark	Policy Range		Actual	
		Minimum	Maximum	2016	2015
<b>Money Market</b>	<b>1%</b>	<b>0%</b>	<b>10%</b>	<b>1.3%</b>	<b>1.1%</b>
<b>Fixed Income</b>	<b>24%</b>	-	-	<b>23.4%</b>	<b>23.3%</b>
Universe Bonds	-	-	-	5.4%	5.2%
Private Debt	-	-	-	1.2%	1.4%
Private Mortgages	-	-	-	2.0%	2.4%
Universe Bonds, Mortgages, Private Debt	8%	4%	18%	8.6%	9.0%
Long Government Bonds	16%	12%	22%	14.8%	14.3%
<b>Equities</b>	<b>50%</b>	-	-	<b>54.3%</b>	<b>54.6%</b>
Canadian	14%	8%	20%	16.7%	14.6%
Global Developed	24%	14%	34%	27.9%	29.7%
Emerging Markets	4%	0%	8%	3.9%	4.0%
Global Small Cap	3%	0%	6%	3.2%	3.1%
Private Equity	5%	0%	8%	2.6%	3.2%
<b>Inflation Sensitive</b>	<b>25%</b>	-	-	<b>19.7%</b>	<b>19.5%</b>
Real Return	5%	2%	10%	4.7%	4.6%
Real Estate	10%	7%	13%	9.6%	10.0%
Infrastructure	-	-	-	3.7%	3.3%
Timberland	-	-	-	1.7%	1.6%
Infrastructure and Timberland	10%	7%	13%	5.4%	4.9%
<b>Strategic, Tactical and Currency Investments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.3%</b>	<b>1.5%</b>
<b>Grand Total</b>	<b>100%</b>	<b>-</b>	<b>-</b>	<b>100.0%</b>	<b>100.0%</b>

Money market includes investments that have a low absolute volatility with cash benchmarks. Fixed income includes universe bonds, long bonds, mortgages and private debt which have a high correlation to the interest rate risk associated with the Plan's pension obligation. Equities include ownership in both publicly traded and private enterprises, in Canada and outside Canada, that provide long-term growth to meet the funding requirements of the Plan's pension obligation. Inflation

sensitive investments include any publicly traded or privately held investment that provides inflation based returns that are positively correlated with the inflation risk of the Plan's liability including, but not exclusive to, investments in real estate, infrastructure, real return bonds and timberland. The Board provides AIMCo with the autonomy to invest up to 5% of total assets in certain strategic opportunities that are outside the asset classes listed above.

## INVESTMENT RESULTS IN RELATION TO THE BENCHMARKS

To evaluate performance and measure the value added by the investment managers from their active investment decisions, such as security selection, the actual investment results are compared to the investment policy benchmark. The benchmark return represents what could reasonably be earned without active management if invested in the market indices in proportion to the policy asset mix approved by the Board. Investment managers strive to earn more than market returns by over or underweighting specific investments in relation to the indices. The Plan's investment policy benchmark is based on the long-term asset mix weightings of the portfolio invested in the following indices: *FTSE TMX 91-Day T-Bill Index, FTSE TMX Universe Bond Index, FTSE TMX Long Term All Government*

*Bond Index, FTSE TMX Real Return Bond Index, S&P/TSX Composite Index, MSCI World, All Country World and EM net Indexes, Small Cap Index (1/3 S&P/TSX Small Cap and 2/3 MSCI Small Cap Index), IPD Large Institutional All Property Index and the Infrastructure and Timberland combined benchmark indices.*

The performance of AIMCo is reviewed against the policy benchmark to measure the effectiveness of its decisions. Performance is reviewed quarterly, with an emphasis on four-year returns. According to the Plan's SIP&G, the Board expects that the investments held by the Plan will return approximately 100 basis points, or 1.0% per annum, above the policy benchmark return over the long-term.

The table below shows the value added (lost) return from the investment manager in each of the past four years along with the annualized returns over four years, ten years and twenty years.

INVESTMENT RETURNS (Ending December 31, 2016)	Annual Returns				Annualized Returns		
	2016	2015	2014	2013	4 Years	10 Years	20 Years
Actual Return	6.8%	9.3%	12.0%	14.5%	10.6%	6.1%	7.2%
Policy Benchmark Return	6.8%	7.1%	12.2%	13.3%	9.8%	5.8%	6.8%
<b>Value Added (Lost) Return</b>	<b>0.0%</b>	<b>2.2%</b>	<b>(0.2)%</b>	<b>1.2%</b>	<b>0.8%</b>	<b>0.3%</b>	<b>0.4%</b>

The table below compares the actual returns from the Plan's investments against the benchmark index returns.

<b>TABLE OF INVESTMENT RETURNS (1)</b> (December 31, 2016)							
	Investment (Millions)	Asset Mix	2016	Annual Returns			Annualized Returns 4 Years
			2016	2015	2014	2013	
<b>Overall Actual</b>	<b>\$2,687.9</b>	<b>100.0%</b>	<b>6.8%</b>	<b>9.3%</b>	<b>12.0%</b>	<b>14.5%</b>	<b>10.6%</b>
Policy Return (2)	-	-	6.8%	7.1%	12.2%	13.3%	9.8%
Consumer Price Index (3)	-	-	1.2%	1.4%	2.0%	0.9%	1.4%
<b>Money market</b>							
<b>Short-term Fixed Income</b>	<b>\$35.6</b>	<b>1.3%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>1.0%</b>
FTSE TMX 91-Day T-Bill Index	-	-	0.5%	0.6%	0.9%	1.0%	0.8%
<b>Fixed income</b>							
<b>Universe Bonds</b>	<b>\$144.3</b>	<b>5.4%</b>	<b>3.3%</b>	<b>4.1%</b>	<b>9.8%</b>	<b>0.6%</b>	<b>4.4%</b>
<b>Private Debt (1)</b>	<b>\$31.8</b>	<b>1.2%</b>	<b>4.4%</b>	<b>6.1%</b>	<b>7.1%</b>	-	-
<b>Private Mortgages (1)</b>	<b>\$54.0</b>	<b>2.0%</b>	<b>1.5%</b>	<b>5.3%</b>	<b>10.0%</b>	<b>0.2%</b>	<b>4.2%</b>
<b>Bonds, Private Debt and Mortgages</b>	-	-	<b>3.0%</b>	<b>4.7%</b>	<b>9.6%</b>	<b>0.5%</b>	<b>4.5%</b>
FTSE TMX Universe Bond Index	-	-	1.7%	3.5%	8.8%	(1.2)%	3.1%
<b>Long-term Government Bonds</b>	<b>\$397.6</b>	<b>14.8%</b>	<b>2.4%</b>	<b>4.1%</b>	<b>18.8%</b>	<b>(5.0)%</b>	<b>4.8%</b>
FTSE TMX Long-term All Government Bond Index	-	-	1.3%	4.5%	17.9%	(7.0)%	3.8%
<b>Equities</b>							
<b>Canadian Equities</b>	<b>\$448.9</b>	<b>16.7%</b>	<b>20.0%</b>	<b>(7.4)%</b>	<b>12.4%</b>	<b>15.4%</b>	<b>9.6%</b>
S&P/TSX Composite Index	-	-	21.1%	(8.3)%	10.4%	13.0%	8.5%
<b>Foreign Equities</b>	<b>\$854.5</b>	<b>31.8%</b>	<b>5.0%</b>	<b>20.0%</b>	<b>13.8%</b>	<b>31.7%</b>	<b>18.7%</b>
Combined (MSCI World & EM net Indexes)	-	-	3.8%	16.7%	13.5%	31.1%	16.6%
<b>Global Small Cap Equities</b>	<b>\$87.2</b>	<b>3.2%</b>	<b>12.1%</b>	<b>13.6%</b>	<b>8.0%</b>	-	-
1/3 S&P/TSX and 2/3 MSCI Small Cap	-	-	18.5%	7.7%	3.4%	-	-
<b>Private Equities (1)</b>	<b>\$68.9</b>	<b>2.6%</b>	<b>(3.8)%</b>	<b>9.8%</b>	<b>12.2%</b>	<b>5.7%</b>	<b>5.4%</b>
MSCI All Country World Index (ACWI)	-	-	4.1%	17.1%	13.5%	31.1%	16.1%

**TABLE OF INVESTMENT RETURNS (1)**  
(December 31, 2016)

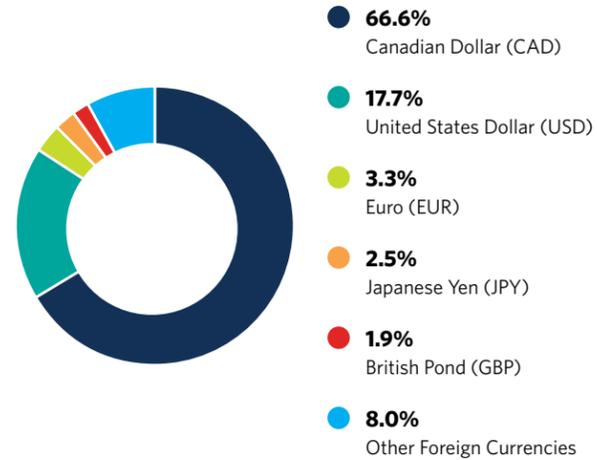
	Investment (Millions)	Asset Mix	2016	Annual Returns			Annualized Returns 4 Years
			2016	2015	2014	2013	
<b>Inflation Sensitive</b>							
<b>Real Estate (1)</b>	<b>\$257.4</b>	<b>9.6%</b>	<b>4.6%</b>	<b>9.2%</b>	<b>8.3%</b>	<b>12.2%</b>	<b>8.1%</b>
IPD Large Institutional All Property Index	-	-	5.8%	8.0%	7.1%	10.9%	7.9%
<b>Real Return Bonds</b>	<b>\$125.8</b>	<b>4.7%</b>	<b>3.4%</b>	<b>3.0%</b>	<b>13.5%</b>	<b>(12.5)%</b>	<b>1.4%</b>
FTSE TMX Real Return Bond Index	-	-	2.9%	2.8%	13.2%	(0.6)%	4.4%
<b>Infrastructure (1)</b>	<b>\$101.0</b>	<b>3.7%</b>	<b>8.1%</b>	<b>26.7%</b>	<b>8.1%</b>	<b>4.4%</b>	<b>9.4%</b>
Combined Benchmark (4)	-	-	5.7%	(0.8)%	11.3%	(0.6)%	3.8%
<b>Timberland (1)</b>	<b>\$45.1</b>	<b>1.7%</b>	<b>10.0%</b>	<b>7.6%</b>	<b>(2.9)%</b>	<b>28.4%</b>	<b>10.0%</b>
Combined Benchmark (4)	-	-	5.7%	(0.8)%	11.3%	(0.7)%	3.8%
<b>Strategic, Tactical and Currency Investments</b>							
Strategic Opportunities	\$32.7	1.2%	(3.2)%	42.9%	16.0%	9.0%	16.6%
Tactical Asset Allocation	\$2.4	0.1%	13.1%	49.8%	(46.7)%	(5.3)%	(3.9)%
Currency Hedges	\$0.7	0.0%	n/a	n/a	n/a	n/a	n/a

- (1) Investment returns are provided by AIMCo. Investment returns for assets classified as Level 3 in the financial statements are based on estimates of fair value. Level 3 includes real estate, private equities, infrastructure, timberland, hedge funds and private debt. For these investments measurement uncertainty exists because trading activity is infrequent and fair values are derived using valuation techniques which incorporate assumptions that are based on non-observable market data. Reasonably possible alternative assumptions could yield an increase or decrease in the fair value amounts and investment returns reported for these types of investments. Any change in estimated returns and valuations, resulting from new information received after the cut-off date for preparation of the Plan's financial statements, will be reflected in the next reporting period.
- (2) The policy benchmark is a product of the weighted average policy sector weights and sector returns.
- (3) The Consumer Price Index (CPI) on a one month time lag.
- (4) Benchmark is a combined benchmark. Prior to October 1, 2015, combination of FTSE TMX Universe Bond, L.T. Government Bond, and Real Return Bond indices, and S&P TSX Composite and MSCI ACWI indices. Effective October 1, 2015, CPI + 4.5% (5-year rolling average).

### INVESTMENTS BY CURRENCY

At December 31, 2016, 66.6% (2015: 60.2%) of the Plan's investments were denominated in Canadian currency, followed by 17.7% (2015: 20.0%) in U.S. currency and 15.7% (2015: 19.8%) in currencies outside North America. The value of the Plan's foreign investment portfolio is exposed to foreign currency risk (i.e. potential loss) when the value of the Canadian dollar strengthens against other currencies. By year-end, the Canadian dollar was stronger against the U.S. dollar, meaning U.S. dollar investments were worth less when translated into Canadian dollars. At December 31, 2016, one U.S. dollar was worth \$1.34 Canadian compared to \$1.38 Canadian at the beginning of the year.

### SFPP INVESTMENTS BY CURRENCY

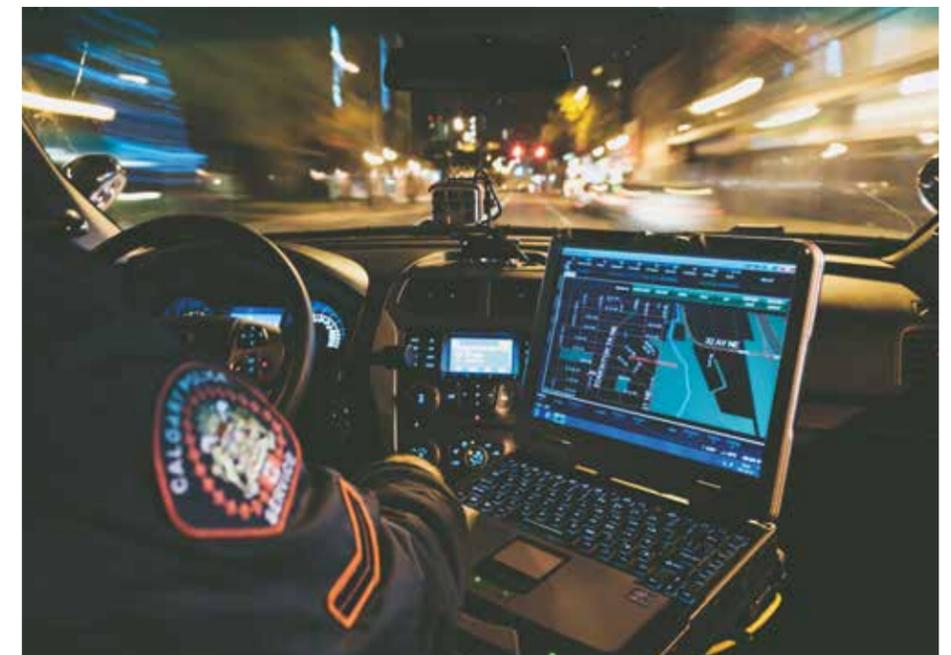


### INVESTMENT EXPENSES

In 2016, investment expense totalled \$13.8 million compared to \$15.2 million the previous year.

(\$ millions)	2016	2015
Amounts charged by AIMCo for:		
Investment costs (a)	\$ 11.7	\$ 10.7
Performance based fees (a)	1.6	4.1
<b>Investment expense before GST</b>	<b>13.3</b>	<b>14.8</b>
GST (b)	0.5	0.4
<b>Total investment expense including GST</b>	<b>\$ 13.8</b>	<b>\$ 15.2</b>
Per cent (decrease) increase in investment expense, before GST	(10.1)%	23.1%
Per cent increase in average investments under management	8.6%	11.1%
Increase in value of investments attributed to AIMCo	0.0%	2.2%
Expenses as a per cent of each dollar earned	7.5%	6.7%
Expenses as a per cent of each dollar invested	0.5%	0.6%

- (a) Please refer to AIMCo's financial statements for a detailed breakdown of the types of expenses incurred by AIMCo. Amounts recovered by AIMCo for investment costs include those costs that are primarily non-performance related including external management fees, external administration costs, employee salaries and incentive benefits and overhead costs. Amounts recovered by AIMCo for performance based fees relate to external managers hired by AIMCo.
- (b) Two thirds of GST paid is expensed in the year and the remaining one-third is recorded as a receivable until received.



# BENEFIT ADMINISTRATION

Alberta Pensions Services Corporation (APS) provides pensions services (as directed under a Pension Services Agreement with the President of the Treasury Board and Minister of Finance) on behalf of Special Forces Pension Plan (SFPP) members, pensioners, municipal employers and Plan governors.

Services to the SFPP include:

- Contributions management
- Member, pensioner and employer information management
- Member, pensioner and employer communications respecting benefits
- Benefit calculations
- Benefit disbursements
- Policy development and implementation
- Compliance, regulatory and Plan financial reporting



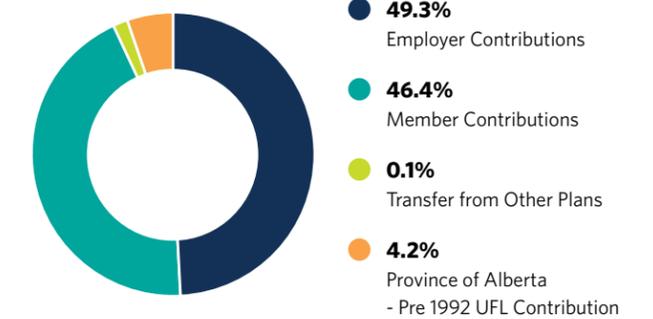
## 2016 YEAR-IN-REVIEW

APS focused on the following activities in 2016 to further enhance services to its valued SFPP clients:

- In May, APS went live with a new pension administration system called *Compass*, reflecting the work it does to guide the pension experience. This system automated many processes which were previously manual and also provides municipal employers with a new portal that gives them greater control of their information and increased flexibility and choice of data submission formats.
- Introduced a new and enhanced online portal for active members in May, which includes a more robust pension estimator and allows the exchange of secure e-mail for both pensioners and members. To date, more than 1,000 SFPP registrants have used the portal.
- Committed to a website redesign project for [www.SFPP.ca](http://www.SFPP.ca), set to begin in 2017.
- Introduced an outbound team to proactively walk members through the retirement process.
- Provided 32 member-counselling sessions for SFPP members, including 13 in-house, 16 out of town, and 3 group sessions.

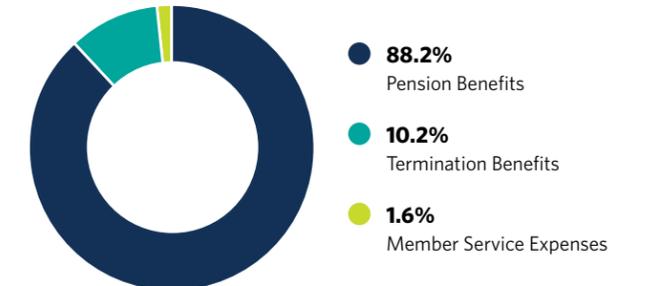
### CONTRIBUTIONS TO SFPP

In 2016, total **contributions** to SFPP were **\$135,362,000**. (↑ 8% from 2015)



### PAYMENTS FROM SFPP

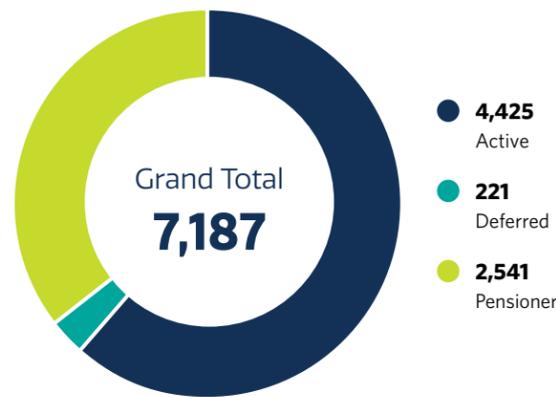
In 2016, total **payments** from SFPP were **\$119,440,000**. (↑ 4% from 2015)



## A LOOK AT SFPP MEMBERSHIP

As part of its benefit administration services, APS collects and tracks statistical and membership trend data about the SFPP that might be of interest to its membership. The following sections provide some Plan statistics.

### SFPP MEMBERSHIP



**Active members:** those currently contributing to the Plan.

- Active membership in SFPP increased by 2.1% in 2016, rising to 4,425 at December 31, 2016 from 4,334 at the end of 2015.

**Inactive or deferred members:** those who terminated their employment, but left contributions in the Plan.

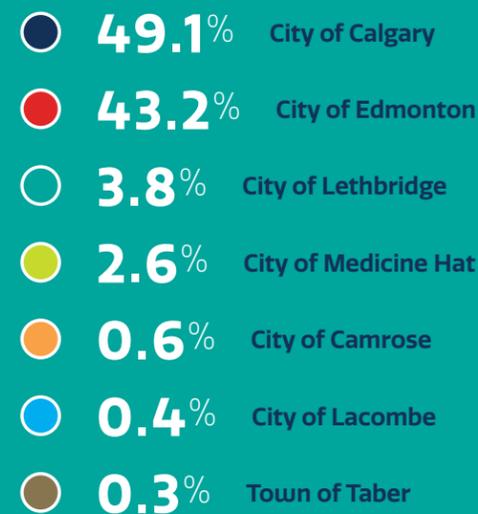
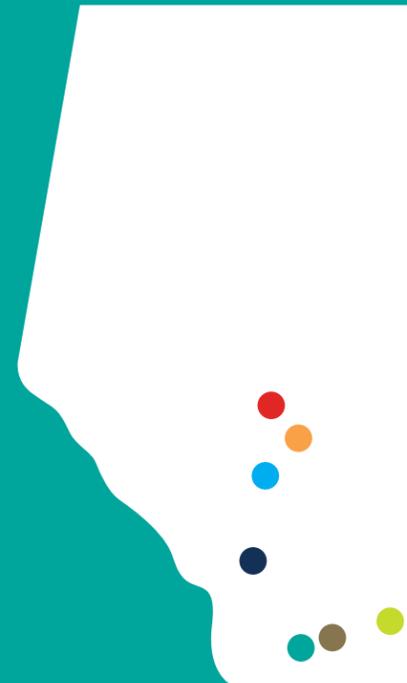
- There are 221 inactive plan members, a 16.3% increase from 2015.

**Retired members:** those receiving a pension, including a spousal pension.

- There are 2,541 retired plan members, a 2.9% increase from 2015.

In 2016, 191 members joined the Plan, 6 re-joined the Plan, 59 members retired, 51 members deferred funds and 56 members terminated and left the Plan. As a result, membership grew 2.8% over 2015.

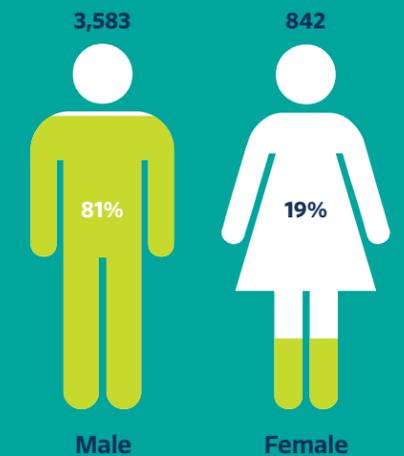
### ACTIVE MEMBERSHIP BY EMPLOYER



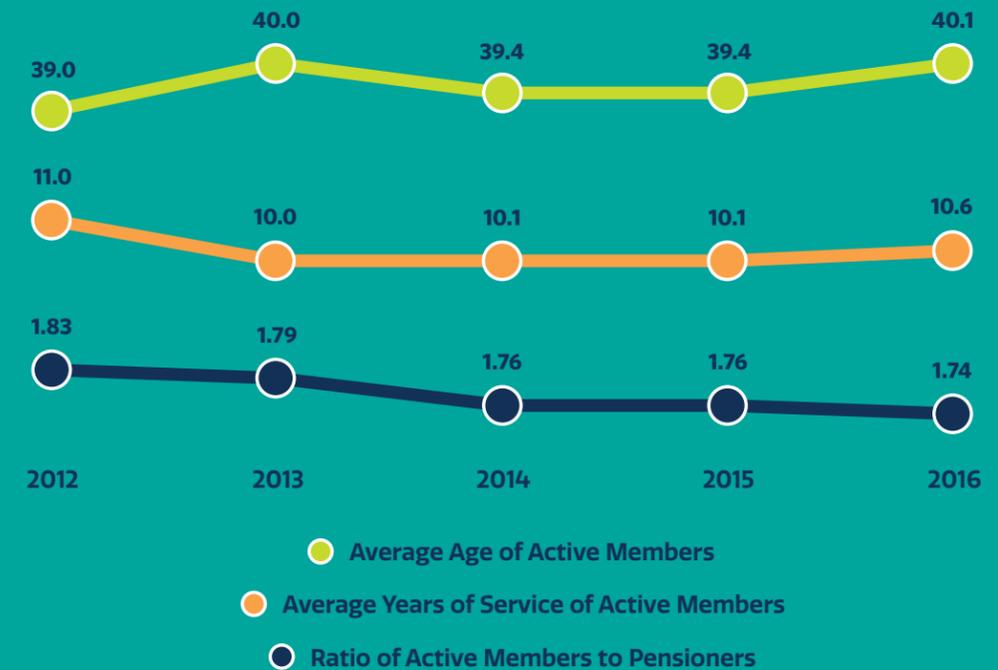
### MEMBERSHIP TRENDS



### GENDER DISTRIBUTION OF ACTIVE MEMBERS



### ACTIVE MEMBERSHIP INFORMATION



## PENSIONER INFORMATION

### PENSIONERS AND BENEFIT PAYMENTS

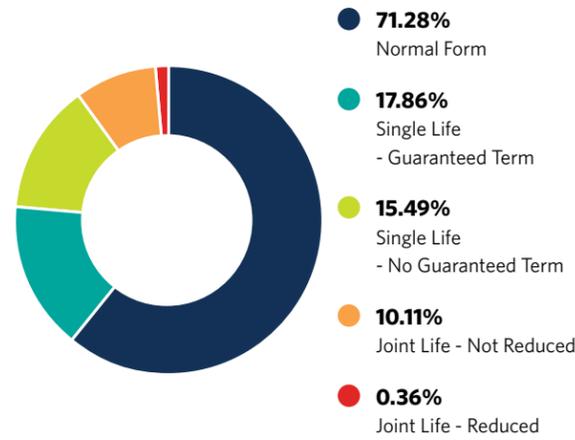
The number of former employees and their spouses receiving a pension from the SFPP increased by 3%, rising to 2,541 in 2016 from 2,469 in 2015. Spousal pensions account for 12% of all pensions in payment. During the year, the total payments of benefits to pensioners rose by 3.0% to \$103,354,000 in 2016 from \$100,003,000 in 2015.

SFPP PENSIONER PROFILE		
	2016	2015
Number of new pensioners	59	90
Average age at retirement	54.7	54
Average Yearly Pension Paid Out (Gross)	\$ 49,090	\$ 43,896

Dollar Value (\$) Per Year in 2016	Member Pensions
1 to 9,999	19
10,000 to 19,999	103
20,000 to 29,999	314
30,000 to 39,999	661
40,000 and over	1159
<b>Total</b>	<b>2256*</b>

\*Only original pensioners are considered in the calculation of average yearly pension amount. Including spouses and beneficiaries, who may be splitting the pension among themselves, deflates the average pension amount

### CURRENT PENSION CHOICES IN PAYMENT

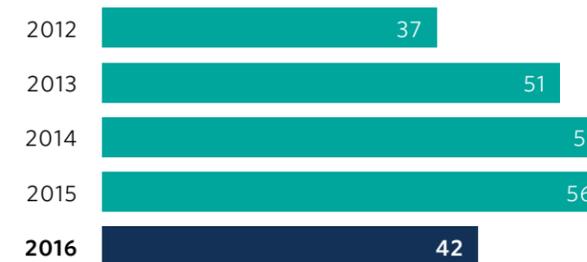


## ADDITIONAL INSIGHTS

### TERMINATED AND DEFERRED MEMBERS

Termination benefits amounting to \$12.1 million (2015: \$12.0 million) were paid during the year to or on behalf of former members of SFPP.

### VOLUME OF TERMINATION PAYOUTS



### SFPP MEMBER SERVICES AND PLAN EXPENSES

SFPP's share of APS' operating and Plan-specific costs are based on cost allocation policies approved by the President of Treasury Board and the Minister of Finance. SFPP's share of APS' costs were almost \$1,929,000 in 2016. Based on average membership, SFPP's per member service expense is \$269 which includes APS' operating costs, Board costs and other professional fees.

SFPP EXPENSES		
	2016	2015
APS Corporate Operating Costs	\$1,657,000	\$1,611,000
Board and Plan-specific Costs, including Actuarial and Investment Consulting	\$272,000	\$716,000
<b>Total Plan Operating Costs</b>	<b>\$1,929,000</b>	<b>\$2,327,000</b>
Expenses per Member	\$269	\$333

## LOOKING AHEAD TO 2017

In 2017, APS plans to:

- Redesign and refresh the SFPP's website.
- Complete the transition to the new Compass system which will provide SFPP clients faster and more efficient benefit administration.
- Go live with a new online retirement wizard called *Pension Ease* that will allow SFPP members to apply for their pension online.
- Continue to monitor the corporate goal to pay pensions within 30 days of the member's pension commencement date at least 77% of the time.

# FINANCIAL STATEMENTS

Year Ended December 31, 2016



32	<b>Independent Auditor's Report</b>
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34	<b>Statement of Changes in Net Assets Available for Benefits</b>
35	<b>Statement of Changes in Pension Obligation</b>
36	<b>Notes to the Financial Statements</b>



## INDEPENDENT AUDITOR'S REPORT

To the President of Treasury Board and Minister of Finance and the Special Forces Pension Board

### REPORT ON THE FINANCIAL STATEMENTS

I have audited the accompanying financial statements of the Special Forces Pension Plan, which comprise the statement of financial position as at December 31, 2016, and the statements of changes in net assets available for benefits and changes in pension obligation for the year then ended, and a summary of significant accounting policies and other explanatory information.

### MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

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

### AUDITOR'S RESPONSIBILITY

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

### OPINION

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Special Forces Pension Plan as at December 31, 2016, and changes in its net assets available for benefits and changes in its pension obligation for the year then ended in accordance with Canadian accounting standards for pension plans.

(Original signed by Merwan N. Saher FCPA, FCA)

Auditor General  
April 20, 2017  
Edmonton, Alberta

## STATEMENT OF FINANCIAL POSITION

As at December 31, 2016

(\$ thousands)	2016	2015
<b>Net Assets Available for Benefits</b>		
<b>Assets</b>		
Investments (Note 3)	\$ 2,687,940	\$ 2,496,904
Contributions receivable		
Employers	2,658	2,684
Employees	2,829	2,500
Province of Alberta	661	576
Accounts receivable	1,295	1,102
Receivable for investment sales	2,500	2,844
<b>Total Assets</b>	<b>2,697,883</b>	<b>2,506,610</b>
<b>Liabilities</b>		
Accounts payable	3,673	543
Liability for investment purchases	3,307	2,844
<b>Total Liabilities</b>	<b>6,980</b>	<b>3,387</b>
<b>Net assets available for benefits</b>	<b>\$ 2,690,903</b>	<b>\$ 2,503,223</b>
<b>Pension obligation and deficit</b>		
Pension obligation (Note 5)	\$ 2,799,428	\$ 2,664,865
Deficit (Note 6)	(108,525)	(161,642)
<b>Pension obligation and deficit</b>	<b>\$ 2,690,903</b>	<b>\$ 2,503,223</b>

The accompanying notes are part of these financial statements.

## STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

Year ended December 31, 2016

(\$ thousands)	2016			2015
	Plan Fund	Indexing Fund	Total	Total
<b>Increase in assets</b>				
Contributions (Note 7)	\$ 128,760	\$ 6,602	\$ 135,362	\$ 125,154
Investment income (Note 8)	179,601	5,988	185,589	227,649
COLA transfer increase (decrease) (Note 15)	650	(650)	-	-
	309,011	11,940	320,951	352,803
<b>Decrease in assets</b>				
Benefit payments (Note 10)	117,511	-	117,511	113,001
Investment expenses (Note 11)	13,422	409	13,831	15,226
Administrative expenses (Note 12)	1,929	-	1,929	2,327
	132,862	409	133,271	130,554
<b>Increase in net assets</b>	<b>176,149</b>	<b>11,531</b>	<b>187,680</b>	<b>222,249</b>
<b>Net assets available for benefits at beginning of year</b>	<b>2,423,939</b>	<b>79,284</b>	<b>2,503,223</b>	<b>2,280,974</b>
<b>Net assets available for benefits at end of year</b>	<b>\$ 2,600,088</b>	<b>\$ 90,815</b>	<b>\$ 2,690,903</b>	<b>\$ 2,503,223</b>

The accompanying notes are part of these financial statements.

## STATEMENT OF CHANGES IN PENSION OBLIGATION

Year ended December 31, 2016

(\$ thousands)	2016			2015
	Pre-1992	Post-1991	Total	Total
<b>Increase in pension obligation</b>				
Interest accrued on opening pension obligation	\$ 48,679	\$ 111,336	\$ 160,015	\$ 158,386
Benefits earned	-	94,545	94,545	84,179
Net increase due to actuarial assumptions changes (Note 5a)	-	-	-	65,486
	48,679	205,881	254,560	308,051
<b>Decrease in pension obligation</b>				
Benefits, transfers and interest	63,517	56,480	119,997	115,159
	63,517	56,480	119,997	115,159
<b>Net increase in pension obligation</b>	(14,838)	149,401	134,563	192,892
<b>Pension obligation at beginning of year</b>	825,077	1,839,788	2,664,865	2,471,973
<b>Pension obligation at end of year (Note 5)</b>	\$ 810,239	\$ 1,989,189	\$ 2,799,428	\$ 2,664,865

The accompanying notes are part of these financial statements.

## NOTES TO THE FINANCIAL STATEMENTS

Year ended December 31, 2016

(All dollar amounts in thousands, except per member data and remuneration of board members)

### NOTE 1 – SUMMARY DESCRIPTION OF THE PLAN

The following description of the Special Forces Pension Plan (the Plan) is a summary only. For a complete description of the Plan, reference should be made to the *Public Sector Pension Plans Act*, Revised Statutes of Alberta 2000, Chapter P-41, and *Special Forces Pension Plan Alberta Regulation 369/93*, as amended. Unless otherwise stated, all terms that are not defined below have the meaning prescribed to them in the Plan. Should anything in Note 1 or the financial statements conflict with the legislation, the legislation shall apply.

#### A) GENERAL

The Plan is a contributory defined benefit pension plan for police officers employed by participating employers in Alberta. The Plan is a registered pension plan as defined in the *Income Tax Act*. The Plan's registration number is 0584375. The President of Treasury Board, Minister of Finance is the legal trustee for the Plan and Alberta Treasury Board and Finance is management of the Plan. The Plan is governed by the Special Forces Pension Board (the Board). The Board has certain statutory functions with respect to the Plan, including but not limited to, setting general policy guidelines on investment and management of the Plan's assets and administration of the plan, setting contribution rates, conducting actuarial valuations and recommending amendments to the Plan rules.

#### B) PLAN FUNDING

##### Plan Fund

Contributions and investment earnings are expected to fund all benefits payable under the Plan from the Plan Fund. The Board, in consultation with the Plan's actuary, reviews the contribution rates at least once every three years. The last actuarial valuation for funding purposes was prepared as at December 31, 2013.

The unfunded liability for service prior to December 31, 1991 is being financed by additional contributions from the Province of Alberta, employers and employees. Additional contributions are payable until December 31, 2036 unless the unfunded liability has been previously eliminated. The rates in effect at December 31, 2016 were 1.25% of pensionable salary for the Province of Alberta, and 0.75% each for employers and employees.

Employees and employers are responsible for fully funding service after 1991. The current service contribution rates for employers are 1.1% higher than the rates of employees. The contribution rates in effect at December 31, 2016 for current service and post-1991 actuarial deficiency were 13.05% of pensionable salary for employers and 11.95% for employees. Of this, contribution rates towards current service were 10.26% of pensionable salary for employers and 9.16% for employees. Contributions towards the post-1991 actuarial deficiency were 2.79% of pensionable salary each for both employers and employees.

The total contribution rates in effect at December 31, 2016 were 14.55% of pensionable salary for employers and 13.45% for employees and includes contributions towards COLA of 0.75% each (refer to the Indexing Fund below) and the pre-1992 unfunded liability of 0.75% each.

### Indexing Fund

Benefit payment increases for post-1991 COLA (see Note 1i) are funded by contributions to another fund called the Indexing Fund from employers and employees and earnings from investments. The rates in effect at December 31, 2016 were 0.75% of pensionable salary each for employers and employees. COLA rates and benefits are set by the Board. Subject to the *Employment Pension Plans Act*, the Indexing Fund may receive surpluses of the Plan Fund respecting service after 1991.

### C) RETIREMENT BENEFITS

The Plan provides for a pension of 1.4% for each year of pensionable service based on the average salary of the highest five consecutive years up to the average YMPE over the same five consecutive year period and 2.0% on the salary above YMPE, subject to the maximum pension benefit limit allowed under the *Income Tax Act*. For members who retire before age 65, the pension will include a bridge benefit. This bridge is provided up to age 65. The bridge benefit is 0.6% for each year of pensionable service based on the average of the highest five consecutive years up to the YMPE.

### D) DISABILITY BENEFITS

Pensions may be payable to members who become totally disabled and retire early with at least five years of pensionable service. Reduced pensions may be payable to members who become partially disabled and retire early with at least five years of pensionable service. Individuals who became members after June 30, 2007 and had no pensionable service prior to July 1, 2007 are not entitled to disability benefits.

### E) DEATH BENEFITS

Benefits are payable on the death of a member before retirement. If the member had at least five years of service and there is a pension partner or dependent minor child, benefits may take the form of a survivor pension, or a lump sum payment. If the member has less than five years of pensionable service, the pension partner or beneficiary is entitled to receive death benefits in the form of a lump sum payment, and with respect to pre-1992 service there are additional benefits for dependent minor children.

### F) TERMINATION BENEFITS, REFUNDS AND TRANSFERS

Members who terminate with at least five years of pensionable service and who are not immediately entitled to a pension may receive a refund of their contributions and interest on service prior to 1992 and the commuted value of their pension for service after 1991, with the commuted value being subject to locking-in provisions. Any optional service purchased wholly by the member is not included in the commuted value and is paid as contributions with interest. If the remaining member contributions fund more than 50% of the benefit, that excess is paid as a cash refund. Alternatively, they may elect to receive a deferred pension. Members who terminate with less than five years of pensionable service receive a refund of contributions and interest. The refunds are accounted for as benefit payments on the statement of changes in net assets available for benefits.

### G) GUARANTEE

As long as there remains an unfunded liability for pre-1992 service, payment of all benefits arising from service before 1992 is guaranteed by the Province of Alberta. (Section 9.1(c) of the *Public Sector Pension Plans Act* Schedule 4).

### H) OPTIONAL SERVICE AND TRANSFERS

All optional service purchases are to be cost-neutral to the Plan.

Reciprocal agreements provide that transferred-in service be on an actuarial reserve basis and transfers-out receive the greater of commuted value for all service, or all contributions made by the member to the Plan.

### I) COST-OF-LIVING ADJUSTMENTS (COLA)

Pensions payable by the Plan Fund for pre-1992 service are increased each year on January 1st by an amount equal to 60% of the increase in the Alberta Consumer Price Index. The increase is based on the increase during the twelve-month period ending on October 31st in the previous year.

For post-1991 service, the Board is responsible for setting COLA based on funds available in the Indexing Fund (see Note 15). COLA at 60% has been granted on service up to December 31, 2000. Effective January 1, 2016, COLA at 30% (January 2015: 30%) of the Alberta Consumer Price Index was applied to the portion of Plan pensions in pay, and deferred pensions, relating to pensionable service after December 31, 2000.

## NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES

### A) BASIS OF PRESENTATION

These financial statements are prepared on the going concern basis in accordance with Canadian accounting standards for pension plans. The Plan has elected to apply International Financial Reporting Standards (IFRS) for accounting policies that do not relate to its investment portfolio or pension obligation. The statements provide information about the net assets available in the Plan to meet future benefit payments and are prepared to assist Plan members and others in reviewing the activities of the Plan for the year.

### B) FUTURE CHANGES IN ACCOUNTING POLICY

In July 2014 the International Accounting Standard Board issued the accounting standard IFRS 9 – Financial Instruments (effective for annual periods beginning on or after January 1, 2018) to replace International Accounting Standard (IAS) 39 – Financial Instruments: Recognition and Measurement and establishes principles for the financial reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements. Management is currently assessing the impact of this financial standard on the financial statements.

### C) VALUATION OF INVESTMENTS

Investments are recorded at fair value. As disclosed in Note 3, the Plan's investments consist primarily of direct ownership in units of pooled investment funds ("the pools"). The pools are established by Ministerial Order 16/2014, being the Establishment and Maintenance of Pooled Funds, pursuant to the *Financial Administration Act* of Alberta, Chapter F-12, Section 45, and the *Alberta Investment Management Corporation Act* of Alberta, Chapter A-26.5, Section 15 and 20. Participants in pools include government and non-government funds and plans.

Contracts to buy and sell financial instruments in the pools are between the Province of Alberta and the third party to the contracts. Participants in the pools are not party to the contracts and have no control over the management of the pool and the selection of securities in the pool. Alberta Investment Management Corporation (AIMCo) controls the creation of the pools and the management and administration of the pools including security selection. Accordingly, the Plan does not report the financial instruments of the pools on its statement of financial position.

The Plan becomes exposed to the financial risks and rewards associated with the underlying financial instruments in a pool when it purchases units issued by the pools and loses its exposure to those financial risks and rewards when it sells its units. The Plan reports its share of the financial risks in Note 4.

The fair value of units held by the Plan is derived from the fair value of the underlying financial instruments held by the pools as determined by AIMCo (see Note 3b). Investments in units are recorded in the Plan's accounts. The underlying financial instruments are recorded in the accounts of the pools. The pools have a market-based unit value that is used to distribute income to the pool participants and to value purchases and sales of the pool units. The pools include various financial instruments such as bonds, equities, real estate, derivatives, investment receivables and payables and cash.

The Plan's cut-off policy for valuation of investments, investment income and investment performance is based on valuations confirmed by AIMCo on the fourth business day following the year end. Differences in valuation estimates provided to Alberta Treasury Board and Finance after the year end cut-off date are reviewed by management. Differences considered immaterial by management are included in investment income in the following period.

Investments in units are recorded in the Plan's accounts on a trade date basis.

All purchases and sales of the pool units are in Canadian dollars.

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

#### **D) INVESTMENT INCOME**

- (a) Investment income is recorded on an accrual basis.
- (b) Investment income is reported in the statement of changes in net assets available for benefits and in Note 8 and includes the following items recorded in the Plan's accounts:
  - i. Income distributions from the pools.
  - ii. Changes in fair value of units including realized gains and losses on disposal of units and unrealized gains and losses on units determined on an average cost basis.

#### **E) INVESTMENT EXPENSES**

Investment expenses include all amounts incurred by the Plan to earn investment income (see Note 11). Investment expenses are recorded on an accrual basis. Transaction costs are expensed as they are incurred.

#### **F) VALUATION OF PENSION OBLIGATION**

The value of the pension obligation and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is made every three years and results from the most recent valuation are extrapolated, on an annual basis, to year-end. The valuation uses the projected benefit method pro-rated on service and management's best estimate, as at the valuation and extrapolation date, of various economic and non-economic assumptions.

#### **G) MEASUREMENT UNCERTAINTY**

In preparing these financial statements, estimates and assumptions are used in circumstances where the actual values are unknown. Uncertainty in the determination of the amount at which an item is recognized in the financial statements is known as measurement uncertainty. Such uncertainty exists when there is a variance between the recognized amount and another reasonably possible amount, as there is whenever estimates are used.

Measurement uncertainty exists in the valuation of the Plan's pension obligation, private investments, hedge funds, real estate and timberland investments. Uncertainty arises because:

- i. the Plan's actual experience may differ, perhaps significantly, from assumptions used in the extrapolation of the Plan's pension obligation, and
- ii. The estimated fair values of the Plan's private investments, hedge funds, real estate and timberland investments may differ significantly from the values that would have been used had a ready market existed for these investments.

While best estimates have been used in the valuation of the Plan's pension obligation, private investments, hedge funds, real estate and timberland investments, management considers that it is possible, based on existing knowledge, that changes in future conditions in the short term could require a material change in the recognized amounts.

Differences between actual results and expectations in the Plan's pension obligation are disclosed as assumption or other changes and net experience gains or losses in the statement of changes in pension obligation in the year when actual results are known. Differences between the estimated fair values and the amount ultimately realized for investments are included in net investment income in the year when the ultimate realizable values are known.

#### **H) INCOME TAXES**

The Plan is a registered pension plan, as defined by the *Income Tax Act* (Canada) and, accordingly, is not subject to income taxes.

### NOTE 3 – INVESTMENTS

The Plan's investments are managed at the asset class level for purposes of evaluating the Plan's risk exposure and investment performance against approved benchmarks based on fair value. AIMCo invests the Plan's assets in accordance with the Statement of Investment Policies and Guidelines (SIP&G) approved by the Plan's board. The fair value of the pool units is based on the Plan's share of the net asset value of the pooled fund. The pools have a market based unit value that is used to allocate income to participants of the pool and to value purchases and sales of pool units. AIMCo is delegated authority to independently purchase and sell securities in the pools and Plan, and units of the pools, within the ranges approved for each asset class (see Note 4).

(\$ thousands)	Fair Value Hierarchy (A)			2016	2015
	Level 1	Level 2	Level 3	Fair Value	Fair Value
<b>Interest-bearing securities</b>					
Cash and short-term securities	\$ -	\$ 35,608	\$ -	\$ 35,608	\$ 26,400
Bonds, mortgages and private debt and loans	-	541,889	85,771	627,660	582,707
	-	577,497	85,771	663,268	609,107
<b>Equities</b>					
Canadian	408,687	36,631	3,575	448,893	365,460
Global developed	366,282	89,262	293,539	749,083	740,203
Private	-	-	68,901	68,901	80,142
Emerging markets	101,924	3,499	-	105,423	99,797
Global small cap equity	87,218	-	-	87,218	77,326
	964,111	129,392	366,015	1,459,518	1,362,928
<b>Inflation sensitive</b>					
Real estate	-	-	257,390	257,390	249,207
Infrastructure	-	-	100,989	100,989	83,471
Real return bonds	-	125,795	-	125,795	113,953
Timberland	-	-	45,143	45,143	41,129
	-	125,795	403,522	529,317	487,760
<b>Strategic, tactical and currency investments*</b>	-	3,140	32,697	35,837	37,109
<b>Total investments</b>	\$ 964,111	\$ 835,824	\$ 888,005	\$ 2,687,940	\$ 2,496,904

\*This asset class is not listed separately in the SIP&G as it relates to strategic investments and currency overlays made on an opportunistic and discretionary basis (see Note 4).

### A) FAIR VALUE HIERARCHY

The quality and reliability of information used to estimate the fair value of investments is classified according to the following fair value hierarchy with level 1 being the highest quality and reliability.

- **Level 1** - fair value is based on quoted prices in an active market. This level includes publicly traded listed equity investments totalling \$964,111 (2015: \$873,457).
- **Level 2** - fair value is estimated using valuation techniques that make use of market-observable inputs other than quoted market prices. This level includes debt securities and derivative contracts not traded on a public exchange totalling \$835,824 (2015: \$781,588). For these investments, fair value is either derived from a number of prices that are provided by independent pricing sources or from pricing models that use observable market data such as swap curves and credit spreads.
- **Level 3** - fair value is estimated using inputs based on non-observable market data. This level includes private mortgages, hedge funds, private equities and inflation sensitive investments totalling \$888,005 (2015: \$841,859).

### RECONCILIATION OF LEVEL 3 FAIR VALUE MEASUREMENTS

(\$ thousands)	2016	2015
<b>Balance, beginning of year</b>	\$ 841,859	\$ 661,412
Investment income*	46,816	109,756
Purchases of Level 3 pooled fund units	158,335	156,406
Sale of Level 3 pooled fund units	(159,005)	(85,715)
<b>Balance, end of year</b>	\$ 888,005	\$ 841,859

\*Investment income includes unrealized (losses)/gains of \$(23,079) (2015: \$77,586)

### B) VALUATION OF FINANCIAL INSTRUMENTS RECORDED BY AIMCO IN THE POOLS

The methods used to determine the fair value of investments recorded in the pools is explained in the following paragraphs:

- **Interest-bearing securities:** Public interest-bearing securities are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. Private mortgages are valued based on the net present value of future cash flows. Cash flows are discounted using appropriate interest rate premiums over similar Government of Canada benchmark bonds trading in the market. Private debt and loans is valued similar to private mortgages.
- **Equities:** Public equities are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. The fair value of hedge fund investments is estimated by external managers. The fair value of private equities is estimated by managers or general partners of private equity funds, pools and limited partnerships. Valuation methods may encompass a broad range of approaches. The cost approach is used to value companies without either profits or cash flows. Established private companies are valued using the fair market value approach reflecting conventional valuation methods including discounted cash flows and earnings multiple analysis.

- Inflation sensitive:** The estimated fair value of private real estate investments is reported at the most recent appraised value, net of any liabilities against the real property. Real estate properties are appraised annually by qualified external real estate appraisers. Appraisers use a combination of methods to determine fair value including replacement cost, direct comparison, direct capitalization of earnings and the discounted cash flows. The fair value of timberland investments is appraised annually by independent third party evaluators. Infrastructure investments are valued similar to private equity investments.
- Strategic, tactical and currency investments:** The estimated fair value of infrastructure investments held in emerging market countries is estimated by managers or general partners of private equity funds and joint ventures. For tactical asset allocations, investments in derivative contracts provides overweight or underweight exposure to global equity and bond markets, including emerging markets. Currency investments consist of directly held currency forward and spot contracts.
- Foreign currency:** Foreign currency transactions in pools are translated into Canadian dollars using average rates of exchange. At year end, the fair value of investments in other assets and liabilities denominated in a foreign currency are translated at the year-end exchange rates.
- Derivative contracts:** The carrying value of derivative contracts in a favourable and unfavourable position is recorded at fair value and is included in the fair value of pooled investment funds (see Note 4f). The estimated fair value of equity and bond index swaps is based on changes in the appropriate market-based index net of accrued floating rate interest. Interest rate swaps and cross-currency interest rate swaps are valued based on discounted cash flows using current market yields and exchange rates. Credit default swaps are valued based on discounted cash flows using current market yields and calculated default probabilities. Forward foreign exchange contracts and futures contracts are valued based on quoted market prices. Options to enter into interest rate swap contracts are valued based on discounted cash flows using current market yields and volatility parameters which measure changes in the underlying swap. Warrants and rights are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company.

#### NOTE 4 – INVESTMENT RISK MANAGEMENT

The Plan is exposed to financial risks associated with the underlying securities held in the pooled investment funds created and managed by AIMCo. These financial risks include credit risk, market risk and liquidity risk. Credit risk relates to the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract. Market risk is comprised of currency risk, interest rate risk and price risk. Liquidity risk is the risk the Plan will not be able to meet its obligations as they fall due.

The investment policies and procedures of the Plan are clearly outlined in the SIP&G approved by the Board. The purpose of the SIP&G is to ensure the Plan is invested and managed in a prudent manner in accordance with current, accepted governance practices incorporating an appropriate level of risk. The Board manages the Plan's return-risk trade-off through asset class diversification, target ranges on each asset class, diversification within each asset class, quality constraints on fixed income instruments and restrictions on amounts exposed to countries designated as emerging markets. Forward foreign exchange contracts may be used to manage currency exposure in connection with securities purchased in a foreign currency (see Note 4b).

Actuarial liabilities of the Plan are primarily affected by the long-term real rate of return expected to be earned on investments. In order to earn the best possible return at an acceptable level of risk, the Board has established the following asset mix policy ranges:

Asset Class	Long-term Policy Weight	Actual Asset Mix			
		2016		2015	
		(\$ thousands)	%	(\$ thousands)	%
Interest-bearing securities					
Money market (cash and short-term securities)	1%	\$ 35,608	1.3	\$ 26,400	1.1
Fixed income (bonds and mortgages)	24%	627,660	23.4	582,707	23.3
Equities	50%	1,459,518	54.3	1,362,928	54.6
Inflation sensitive	25%	529,317	19.7	487,760	19.5
Strategic, tactical and currency investments	(a)	35,837	1.3	37,109	1.5
		<b>\$ 2,687,940</b>	<b>100.0</b>	<b>\$ 2,496,904</b>	<b>100.0</b>

a) In accordance with the SIP&G, AIMCo may invest up to 5% of the fair value of the Plan's investments in strategic opportunities that are outside of the asset classes listed above. AIMCo may, at its discretion, invest the funds in currency overlays.

#### A) CREDIT RISK

##### i. Debt securities

The Plan is indirectly exposed to credit risk associated with the underlying debt securities held in the pools managed by AIMCo. Counterparty credit risk is the risk of loss arising from the failure of a counterparty to fully honour its financial obligations. The credit quality of financial assets is generally assessed by reference to external credit ratings. Credit risk can also lead to losses when issuers and debtors are downgraded by credit rating agencies usually leading to a fall in the fair value of the counterparty's obligations. Credit risk exposure for financial instruments is measured by the positive fair value of the contractual obligations with counterparties. The fair value of all investments reported in Note 3 is directly or indirectly impacted by credit risk to some degree. The majority of investments in debt securities are with counterparties with credit ratings considered to be investment grade.

The table below summarizes these debt securities by counterparty credit rating at December 31, 2016:

Credit Rating	2016	2015
Investment Grade (AAA to BBB-)	90.3%	90.6%
Speculative Grade (BB+ or lower)	0.0%	0.0%
Unrated	9.7%	9.4%
	<b>100.0%</b>	<b>100.0%</b>

## ii. Counterparty default risk - derivative contracts

The Plan's maximum credit risk in respect of derivative financial instruments is the fair value of all contracts with counterparties in a favourable position (see Note 4f). The Plan can only transact with counterparties to derivative contracts with a credit rating of A+ or higher by at least two recognized ratings agencies. Provisions are in place to either transfer or terminate existing contracts when the counterparty has their credit rating downgraded.

The exposure to credit risk on derivatives is reduced by entering into master netting agreements and collateral agreements with counterparties. To the extent that any unfavourable contracts with the counterparty are not settled, they reduce the Plan's net exposure in respect of favourable contracts with the same counterparty.

## iii. Security lending risk

To generate additional income, the pools participate in a securities-lending program. Under this program, the custodian may lend investments held in the pools to eligible third parties for short periods. At December 31, 2016, the Plan's share of securities loaned under this program is \$309,651 (2015: \$112,856) and collateral held totals \$328,499 (2015: \$119,748). Securities borrowers are required to provide the collateral to assure the performance of redelivery obligations. Collateral may take the form of cash, other investments or a bank-issued letter of credit. All collateralization, by the borrower, must be in excess of 100% of investments loaned.

## B) FOREIGN CURRENCY RISK

The Plan is exposed to foreign currency risk associated with the underlying securities held in the pools that are denominated in currencies other than the Canadian dollar. Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The fair values of investments denominated in foreign currencies are translated into Canadian dollars using the reporting date exchange rate. As a result, fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or negative effect on the fair value of investments. Approximately 33.4% (2015: 39.8%) of the Plan's investments, or \$898,695 (2015: \$992,789), are denominated in currencies other than the Canadian dollar, with the largest foreign currency exposure being to the US dollar, 17.7% (2015: 20.0%) and the Euro, 3.3% (2015: 3.9%).

If the value of the Canadian dollar increased by 10% against all other currencies, and all other variables are held constant, the potential loss to the Plan would be approximately 3.3% (2015: 4.0%).

The following table summarizes the Plan's exposure to foreign currency investments held in pooled investment funds at December 31, 2016:

(\$ thousands)	2016		2015	
	Fair Value	Sensitivity	Fair Value	Sensitivity
<b>Currency</b>				
U.S. dollar	\$ 476,497	\$ (47,650)	\$ 499,657	\$ (49,966)
Euro	88,558	(8,856)	96,630	(9,663)
Japanese yen	68,488	(6,849)	76,974	(7,697)
British pound	49,946	(4,995)	65,489	(6,549)
Other foreign currencies (below 1%)	215,206	(21,521)	254,039	(25,404)
<b>Total foreign currency investments</b>	<b>\$ 898,695</b>	<b>\$ (89,870)</b>	<b>\$ 992,789</b>	<b>\$ (99,279)</b>

## C) INTEREST RATE RISK

The Plan is exposed to interest rate risk associated with the underlying interest-bearing securities held in the pools managed by AIMCo. Interest rate risk relates to the possibility that the investments will change in value due to future fluctuations in market interest rates. In general, investment returns from bonds and mortgages are sensitive to changes in the level of interest rates, with longer term interest bearing securities being more sensitive to interest rate changes than shorter-term bonds. If interest rates increased by 1%, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 3.3% (2015: 3.2%).

## D) PRICE RISK

Price risk relates to the possibility that equity investments will change in value due to future fluctuations in market prices caused by factors specific to an individual equity investment or other factors affecting all equities traded in the market. The Plan is exposed to price risk associated with the underlying equity investments held in pools managed by AIMCo. If equity market indices (S&P/TSX, S&P500, S&P1500 and MSCI ACWI and their sectors) declined by 10%, and all other variables are held constant, the potential loss to the Plan would be approximately 6.4% (2015: 6.1%). Changes in fair value of investments are recognized in the statement of changes in net assets available for benefits.

## E) LIQUIDITY RISK

Liquidity risk is the risk that the Plan will encounter difficulty in meeting obligations associated with its financial liabilities. Liquidity requirements of the Plan are met through income generated from investments, employee and employer contributions, and by investing in pools that hold publicly traded liquid assets traded in an active market that are easily sold and converted to cash. These sources of cash are used to pay pension benefits and operating expenses, purchase new investments, settle derivative transactions with counterparties and margin calls on futures contracts. The Plan's future liabilities include the accrued pension benefits obligation and exposure to net payables to counterparties (Note 4f).

## F) USE OF DERIVATIVE FINANCIAL INSTRUMENTS IN POOLED INVESTMENT FUNDS

The Plan has indirect exposure to derivative financial instruments through its investment in units of the pools. AIMCo uses derivative financial instruments to cost effectively gain access to equity markets in the pools, manage asset exposure within the pools, enhance pool returns and manage interest rate risk, foreign currency risk and credit risk in the pools.

By Counterparty	Number of Counterparties	Plan's Indirect Share (\$ thousands)	
		2016	2015
Contracts in favourable position (current credit exposure)	46	\$ 15,156	\$ 10,787
Contracts in unfavourable position	10	(4,855)	(24,937)
<b>Net fair value of derivative contracts</b>	<b>56</b>	<b>\$ 10,301</b>	<b>\$ (14,150)</b>

- i. Current credit exposure: The current credit exposure is limited to the amount of loss that would occur if all counterparties to contracts in a favourable position totaling \$15,156 (2015: \$10,787) were to default at once.
- ii. Cash settlements: Receivables or payables with counterparties are usually settled in cash every three months.
- iii. Contract notional amounts: The fair value of receivables (receive leg) and payables (pay leg) and the exchange of cash flows with counterparties in pooled funds are based on a rate or price applied to a notional amount specified in the derivative contract. The notional amount itself is not invested, received or exchanged with the counterparty and is not indicative of the credit risk associated with the contract. Notional amounts are not assets or liabilities and do not change the asset mix reported in Note 3. Accordingly, there is no accounting policy for their recognition in the statement of financial position.

Types of derivatives used in pools	Plan's Indirect Share (\$ thousands)	
	2016	2015
Structured equity replication derivatives	\$ 6,717	\$ (1,152)
Foreign currency derivatives	3,359	(10,603)
Interest rate derivatives	(653)	(3,036)
Credit risk derivatives	878	641
<b>Net fair value of derivative contracts</b>	<b>\$ 10,301</b>	<b>\$ (14,150)</b>

- i. Structured equity replication derivatives: Equity index swaps are structured to receive income from counterparties based on the performance of a specified market-based equity index, security or basket of equity securities applied to a notional amount in exchange for floating rate interest paid to the counterparty. Floating rate notes are held in equity pools to provide floating rate interest to support the pay leg of the equity index swap. Rights, warrants, futures and options are also included as structured equity replication derivatives.
- ii. Foreign currency derivatives: Foreign currency derivatives include contractual agreements to exchange specified currencies at an agreed upon exchange rate and on an agreed settlement date in the future.
- iii. Interest rate derivatives: Interest rate derivatives exchange interest rate cash flows (fixed to floating or floating to fixed) based on a notional amount. Interest rate derivatives primarily include interest rate swaps and cross currency interest rate swaps, futures contracts and options.
- iv. Credit risk derivatives: Credit risk derivatives include credit default swaps allowing the pools to buy and sell protection on credit risk inherent in a bond. A premium is paid or received, based on a notional amount in exchange for a contingent payment should a defined credit event occur with respect to the underlying security.
- v. Deposits: At December 31, 2016 deposits in futures contracts margin accounts totalled \$6,311 (2015: \$6,378) and deposits as collateral for derivative contracts totalled \$737 (2015: \$1,531).

## NOTE 5 – PENSION OBLIGATION

### A) ACTUARIAL VALUATION AND EXTRAPOLATION ASSUMPTIONS

An actuarial valuation of the Plan was carried out as at December 31, 2013 by Mercer (Canada) Limited and was then extrapolated to December 31, 2016.

The actuarial assumptions used in determining the value of the liability for accrued benefits of \$2,799,428 (2015: \$2,664,865) reflect management's best estimate, as at the valuation and extrapolation date, of future economic events and involve both economic and non-economic assumptions. The non-economic assumptions include considerations such as mortality as well as withdrawal and retirement rates. The primary economic assumptions include the discount rate, inflation rate and salary escalation rate. The discount rate is based on the average from a consistent modeled investment return, net of investment expenses, and an additive for diversification and rebalancing. It does not assume a return for active management beyond the passive benchmark.

The major assumptions used for accounting purposes were:

	2016	2015
Discount rate	5.90%	5.90%
Inflation rate	2.00%	2.00%
Salary escalation rate*	3.00%	3.00%
Mortality rate	2014 Canadian Pension Mortality Table (Public Sector)	

An actuarial valuation of the Plan as at December 31, 2016 will be carried out. Any differences between the actuarial valuation results and extrapolation results as reported in these financial statements will affect the financial position of the Plan and will be accounted for as gains or losses in 2017.

\*In addition to age specific merit and promotion increase assumptions.

### B) SENSITIVITY OF CHANGES IN MAJOR ASSUMPTIONS

The Plan's future experience will differ, perhaps significantly, from the assumptions used in the actuarial valuation and extrapolation. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations and will affect the financial position of the Plan.

The following is a summary of the sensitivities of the Plan's deficiency and current service cost to changes in assumptions used in the actuarial extrapolation at December 31, 2016:

	Changes in Assumptions (%)	Increase in Plan Deficiency (\$ thousands)	Increase in Current Service Cost as a % of Pensionable Earnings*
Inflation rate increase holding discount rate and salary escalation assumptions constant**	1.0	178,740	0.8
Salary escalation rate increase holding inflation rate and discount rate assumptions constant	1.0	135,627	2.3
Discount rate decrease holding inflation rate and salary escalation assumptions constant	(1.0)	479,865	5.8

\* The current service cost as a % of pensionable earnings as determined by the December 31, 2016 extrapolation is 20.63%.

\*\* Contributions to the Indexing Fund are fixed and are not affected by assumed inflation.

## NOTE 6 – DEFICIT

In accordance with the requirements of the *Public Sector Pension Plans Act*, a separate accounting is required of the pension obligation and deficiency with respect to service that was recognized as pensionable as at December 31, 1991.

(\$ thousands)	2016			2015
	Pre-1992	Post-1991	Total	Total
<b>Deficit at beginning of year</b>	\$ (198,400)	\$ 36,758	\$ (161,642)	\$ (190,999)
Increase in Plan Fund net assets available for benefits	(8,051)	184,200	176,149	211,809
Increase in Indexing Fund net assets	-	11,531	11,531	10,440
Net increase in pension obligation	14,838	(149,401)	(134,563)	(192,892)
<b>Deficit at end of year</b>	\$ (191,613)	\$ 83,088	\$ (108,525)	\$ (161,642)

(\$ thousands)	2016			2015
	Pre-1992	Post-1991	Total	Total
Plan opening net assets available for benefits	\$ 626,677	\$ 1,876,546	\$ 2,503,223	\$ 2,280,974
Increase in Plan net assets available for benefits	(8,051)	195,731	187,680	222,249
Plan closing net assets available for benefits	\$ 618,626	\$ 2,072,277	2,690,903	\$ 2,503,223

This Plan deficiency is for accounting purposes and may differ from the Plan Fund deficiency for funding purposes (Note 16).

## NOTE 7 – CONTRIBUTIONS

(\$ thousands)	2016	2015
Current service		
Employers	\$ 50,393	\$ 46,319
Employees	45,353	41,678
Unfunded liability		
Employers	16,222	14,953
Employees	16,222	14,953
Province of Alberta	5,728	5,280
Past service		
Employers	162	310
Employees	1,250	1,289
Transfers from other plans	32	372
	\$ 135,362	\$ 125,154

## NOTE 8 – INVESTMENT INCOME

The following is a summary of the Plan's investment income (loss) by asset class:

(\$ thousands)	Income	Change in Fair Value	2016 Total	2015 Total
<b>Interest-bearing securities</b>	\$ 43,529	\$ (26,335)	\$ 17,194	\$ 26,490
<b>Equities</b>				
Canadian	27,903	51,200	79,103	(28,469)
Foreign	71,221	(9,042)	62,179	168,403
Private	5,407	(3,365)	2,042	8,750
	104,531	38,793	143,324	148,684
<b>Inflation Sensitive</b>				
Real estate	15,445	(2,614)	12,831	20,998
Real return bonds	7,364	(3,188)	4,176	2,204
Infrastructure	22,122	(13,894)	8,228	17,958
Timberland	(841)	5,207	4,366	3,143
	44,090	(14,489)	29,601	44,303
<b>Strategic, tactical and currency investments</b>	(1,256)	(3,274)	(4,530)	8,172
	\$ 190,894	\$ (5,305)	\$ 185,589	\$ 227,649

The change in fair value includes realized and unrealized gains and losses on pool units and currency hedges. Realized and unrealized gains and losses on pool units total \$10,303 and \$(11,048) respectively (2015: \$12,061 and \$38,879 respectively). Realized and unrealized gains and losses on currency hedges total \$(5,201) and \$641 respectively (2015: \$(8,400) and \$1,664 respectively).

Income earned in pooled investment funds is distributed to the Plan daily based on the Plan's pro rata share of units issued by the pool. Income earned by the pools is determined on an accrual basis and includes interest, dividends, security lending income, realized gains and losses on sale of securities determined on an average cost basis, income and expense on derivative contracts and writedowns of securities held in pools which are indicative of a loss in value that is other than temporary.

## NOTE 9 – INVESTMENT RETURNS, CHANGE IN NET ASSETS AND PENSION OBLIGATION

The following is a summary of investment returns (losses), and the annual change in net assets compared to the annual change in the pension obligation and the per cent of pension obligation supported by net assets:

(in per cent)	2016	2015	2014	2013	2012
Increase (decrease) in net assets attributed to:					
Investment income					
Policy benchmark return on investments	6.8	7.1	12.2	13.3	9.3
Value added return (loss) by investment manager	-	2.2	(0.2)	1.2	2.3
<b>Total return on investments (a)</b>	<b>6.8</b>	<b>9.3</b>	<b>12.0</b>	<b>14.5</b>	<b>11.6</b>
Other sources (b)	0.7	0.4	0.6	1.3	1.3
<b>Per cent change in net assets (c)</b>	<b>7.5</b>	<b>9.7</b>	<b>12.6</b>	<b>15.8</b>	<b>12.9</b>
<b>Per cent change in pension obligation (c)</b>	<b>5.0</b>	<b>7.8</b>	<b>10.0</b>	<b>-</b>	<b>5.8</b>
Per cent of pension obligation supported by net assets	96	94	92	90	78

- a) All investment returns are provided by AIMCo and are net of investment expenses. The annualized total return and policy benchmark return (PBR) on investments over five years is 10.8% (PBR: 9.7%), ten years is 6.1% (PBR: 5.8%) and twenty years is 7.2% (PBR: 6.8%). The Plan's actuary estimates the long-term net investment returns on assets for funding purposes to be 6.1% (2015: 6.1%).
- b) Other sources includes employee and employer contributions and transfers from other plans, net of benefit payments, transfers to other plans and administration expenses.
- c) The percentage change in net assets and the pension obligation is based on the amounts reported on the statement of changes in net assets available for benefits and the statement of changes in pension obligation.

## NOTE 10 – BENEFIT PAYMENTS

(\$ thousands)	2016	2015
Retirement benefits	\$ 103,120	\$ 99,769
Disability benefits	234	234
Termination benefits	12,157	11,986
Death benefits	2,000	1,012
	<b>\$ 117,511</b>	<b>\$ 113,001</b>

## NOTE 11 – INVESTMENT RETURNS, CHANGE IN NET ASSETS AND PENSION OBLIGATION

(\$ thousands)	2016	2015
Amount charged by AIMCo for:		
Investment costs (a)	\$ 11,658	\$ 10,729
Performance based fees (a)	1,555	4,080
GST	540	339
	<b>13,753</b>	<b>15,148</b>
Amounts charged by Treasury Board and Finance for:		
Investment accounting and Plan reporting	78	78
<b>Total investment expenses</b>	<b>\$ 13,831</b>	<b>\$ 15,226</b>
<b>(Decrease) increase in expenses (a)</b>	<b>(9.2%)</b>	<b>16.0%</b>
<b>Increase in average investments under management</b>	<b>8.6%</b>	<b>11.1%</b>
<b>Increase in value of investments attributed to AIMCo</b>	<b>0.0%</b>	<b>2.2%</b>
<b>Investment expense as a percent of:</b>		
Dollar earned	7.5%	6.7%
Dollar invested	0.5%	0.6%
Investment expenses per member	<b>\$ 1,925</b>	<b>\$ 2,177</b>

- a) Please refer to AIMCo's financial statements for a more detailed breakdown of the types of expenses incurred by AIMCo. Amounts recovered by AIMCo for investment costs include those costs that are primarily non-performance related including external management fees, external administration costs, employee salaries and incentive benefits and overhead costs. Amounts recovered by AIMCo for performance based fees relate to external managers hired by AIMCo.
- The per cent (decrease) increase in investment costs and performance based fees is (10.8%) (2015: 23.1%).

#### NOTE 12 – ADMINISTRATIVE EXPENSES

General administration costs including Plan board costs were paid to Alberta Pensions Services Corporation (APS) on a cost-recovery basis.

The Plan's share of the APS's operating and plan specific costs was based on cost allocation policies approved by the President of Treasury Board, Minister of Finance.

(\$ thousands)	2016	2015
General administration costs	\$ 1,657	\$ 1,611
Board costs	65	144
Actuarial fees	113	270
Other professional fees	94	302
	\$ 1,929	\$ 2,327
Member service expenses per member	\$ 269	\$ 333

#### NOTE 13 – TOTAL PLAN EXPENSES

Total Plan expenses of investment expenses per Note 11 and member service expenses per Note 12 are \$15,760 (2015: \$17,553) or \$2194 (2015: \$2,510) per member and 0.59% (2015: 0.70%) of net assets under administration.

#### NOTE 14 – REMUNERATION OF BOARD MEMBERS

Remuneration paid to or on behalf of the Board members, as approved by the Lieutenant Governor in Council, is as follows:

	Chair	Members
Remuneration rates effective April 1, 2009		
Up to 4 hours	\$ 219	\$ 164
4 to 8 hours	383	290
Over 8 hours	601	427
	2016	2015
The following amounts were paid:		
Remuneration		
Chair	\$ 2,378	\$ 19,760
Members	25,160	39,716
Travel, training and conference expenses		
Chair	323	4,882
Members	11,395	30,124

#### NOTE 15 – TRANSFER FROM THE INDEXING FUND TO THE PLAN FUND

If the Board has set a COLA increase and the conditions have been met under the *Public Sector Pension Plans Act* (i.e. plan's actuary has certified that the indexing fund contains enough assets to cover the increase) the Minister shall, on the recommendation of the Board, transfer from the Indexing Fund to the Plan Fund the amount certified by the Plan's actuary to cover the cost-of-living increases for post-1991 service. For 2016 there was a transfer of \$650 (2015: \$2,200)

#### NOTE 16 – CAPITAL

The Plan defines its capital as the funded status. In accordance with the *Public Sector Pension Plans Act*, the actuarial surplus or deficit is determined by an actuarial funding valuation performed, at a minimum, every three years. The objective is to ensure that the Plan is fully funded over the long term through the management of investments, contribution rates and benefits. Investments, the use of derivatives and leverage are based on an asset mix and risk policies and procedures that are designed to enable the Plan to meet or exceed its long-term funding requirement within an acceptable level of risk, consistent with the Plan's SIP&G approved by the Board.

The Plan's asset values are determined on the fair value basis for accounting purposes. However for funding valuation purposes, asset values are adjusted for fluctuations in fair values to moderate the effect of market volatility on the Plan's funded status. Actuarial asset values for funding valuation purposes amounted to \$2,655,190 at December 31, 2016 (2015 \$2,417,139), comprising of \$609,369 (2015: \$602,775) Pre-1992 and \$2,045,821 (2015: \$1,814,364) Post-1991.

In accordance with the *Public Sector Pension Plans Act*, the unfunded liability for post-1991 service as determined by actuarial funding valuation is financed by a special payment currently totalling 5.58% of pensionable salary shared equally between employees and employers (2.79% each) until December 31, 2023. The special payment is included in the rates in effect at December 31, 2016 (see Note 1b).

#### NOTE 17 – COMPARATIVE FIGURES

Comparative figures have been reclassified to be consistent with 2016 presentation.

#### NOTE 18 – RESPONSIBILITY FOR FINANCIAL STATEMENTS

These financial statements were approved by the Deputy Minister of Treasury Board and Finance, based on information provided by APS, AIMCo and the Plan's actuary, and after consultation with the Board.

**special forces**  

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**pension plan**