Universities Academic Pension Plan

2017 Annual Report

Profile

The Universities Academic Pension Plan (UAPP) was established in 1978 as a defined benefit pension plan for members of the academic and professional staff of Alberta universities and Banff Centre. The UAPP was set up under the Public-Sector Pension Plans Act (Alberta) and the Provincial Treasurer was the trustee until December 31, 2000. The UAPP became an independent pension plan registered under the Employment Pension Plans Act (Alberta) and the Income Tax Act (Canada) as of January 1, 2001. The UAPP is now established under the Sponsorship and Trust Agreement signed by the academic staff associations and the boards of governors of four Alberta universities and Banff Centre as Sponsors.

- The Board of Trustees, as established under the Sponsorship and Trust Agreement, is responsible for administering the Plan and investing the Fund.
- The UAPP is financed by employer and employee contributions, and by investment earnings. The Alberta Government also contributes towards eliminating the unfunded liability for service before 1992.
- At December 31, 2017, the UAPP has 8,153 active members, 2,114 deferred members and 5,380 pensioners.
- The UAPP Fund's market value at the end of 2017 was $4,852 million.

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BOARD MANDATE

The Board is responsible for administration of the UAPP, investment of UAPP funds, setting contribution rates required to fund the UAPP, and assisting Sponsors in developing appropriate changes to the UAPP. In carrying out its mandate, the Board is assisted by a small management team.

BOARD COMPOSITION

The Board of Trustees (Board) of the UAPP oversees the Plan. The Board is composed of five employer trustees and four employee trustees. The total votes carried by the employer trustees are the same as the votes carried by the employee trustees. The offices of Chair and Vice-Chair alternate every two years between employer and employee trustees.

MISSION

It is the mission of the Board to deliver on its mandate in a manner that is consistent with:

- high quality services to the UAPP members and stakeholders,
- prudent investment of the Fund,
- seeking stable contribution rates within the funding requirements of the Employment Pension Plans Act,
- best practices in pension plan governance and management, and
- all applicable rules, laws, and regulations.

VALUES

In carrying out its mission, the Board is guided by the following values:

- work in full partnership with Sponsors,
- be member/stakeholder focused,
- be open, accountable, and responsible for its actions,
- conduct UAPP business with trust, fairness, and integrity,
- adhere to the highest ethical standards,
- value and treat its employees as a vital resource, and
- strive to adopt best business practices.

Administration Service Provider

Conduent Human Resource Services

Member Pension Inquiries:
201 City Center Drive
Suite 1000
Mississauga, ON L5B 4E4
Attn: UAPP Administrator
Phone: 1.866.709.2092
Email: uapp.pensions@conduenthrs.ca

Pensioner Payroll

CIBC Mellon Global Securities Services

Pensioner Payroll Inquiries:
CIBC Mellon Pension Benefits Dept.
PO Box 5858, Station B
London, ON N6A 6H2
Phone: 1.800.565.0479
Website: www.CIBCMellon.com

Investment Management

Alberta Investment Management Corp.

Beutel, Goodman & Company Ltd.

Fiera Capital Corporation

Asset Consultants & Actuary

Aon Hewitt

Auditor

KPMG LLP

Contact the Board

UAPP Office

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10611 98 Avenue
Edmonton, AB T5K 2P7
Fax: 780.415.8871
Website: www.uapp.ca

Management Team

Executive Director

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Director, Finance & Administration

Chris Schafer, ASA, ACIA
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Pension Officer

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Administrative Officer

Chloe Muller
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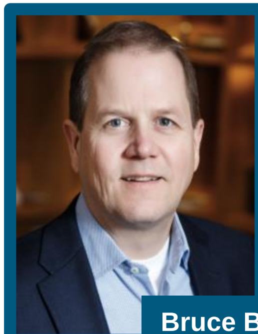
E-mail: chloe.muller@uapp.ca



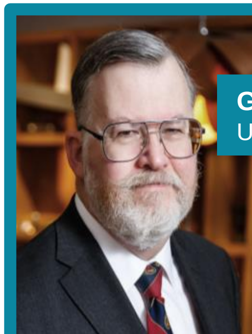
Bruce Byford ●
Banff Centre

Paul Rogers ■
University of Calgary (Chair)

Gitta Kulczycki ●
University of Alberta

Lawton Shaw ■
Athabasca University

Nancy Walker ●
University of Lethbridge



Geoffrey Hale ■
University of Lethbridge

Aditya Kaul ■
University of Alberta

Linda Dalgetty ●
University of Calgary (Vice Chair)

David Head ●
Athabasca University
Photo Unavailable

● Employer Appointee
■ Employee Appointee

Committees of the Board

Actuarial Committee
Gitta Kulczycki (Chair)
Paul Rogers
Lawton Shaw

Audit Committee
Bruce Byford
Megan Costiuk
Paul Rogers
Nancy Walker (Chair)

Investment Committee
Linda Dalgetty
Geoffrey Hale
Aditya Kaul (Chair)
Gitta Kulczycki
Bob Normand
Andrew Tambone
Laurence Waring

Chair's Message

On behalf of the Board, I am pleased to present the annual report of the Universities Academic Pension Plan for the year ended December 31, 2017. The purpose of this Report is to provide comprehensive details on the financial position of the Plan along with a report on the Plan's investments, operational performance, and administration.

Over 2017, the UAPP Fund generated a return of 11.3% based on solid returns from our public equity and alternative investments. This superior return exceeded the investment return assumed for actuarial purposes by 5.7%, and outperformed the benchmark portfolio by 1.2%. The UAPP Fund grew by $501.8 million during 2017 to end the year with $4.85 billion in assets. This is the sixth year in a row that investment return has exceeded that assumed for actuarial valuation purposes.

I indicated to you in my 2016 message that the Board would be undertaking an actuarial valuation of the Plan as at December 31, 2016. For this valuation, the Board, on the advice of the actuary, revised a number of assumptions, most notably significantly lowering the discount rate used to value Plan liabilities. Based on the results of the valuation, the Board decided to increase contributions to the Plan by 0.36% of salary as of July 1, 2018. This increase will be shared equally between members and employers.

Based on an actuarial extrapolation as at December 31, 2017, the Plan's actuarial liabilities increased to $5.63 billion from $5.17 billion the previous year-end (though note that the actuarial liabilities were $5.40 billion as reported in the end-2016 actuarial valuation). The actuarial deficit is $949.4 million, which represents an increase of $76.6 million from the previous year-end (though note that the end-2017 deficit is $153.9 million less than that reported in the end-2016 actuarial valuation). The actuarial deficit increased mainly due to the revised assumptions used in the recent actuarial valuation, however, the increase was partially offset by the investment returns earned in excess of the actuarially-assumed rate of return. Approximately 88% of the deficit relates to pre-1992 service.

Since investment returns over the last two years have exceeded those assumed for actuarial valuation purposes the Fund has built up a reserve, i.e., the difference between the market value and the actuarial value of the Fund, of $173.7 million at the end of 2017. This helps to dampen the impact of future years should the market return on assets be below the actuarially-assumed rate of return.

The Investment Committee and the Board continued to monitor the Fund's performance and developments in the capital markets, along with the implementation of the new asset mix which was established last year following completion of an asset liability study. As the Plan's financial health depends on good investment markets, the Board, through the Investment Committee, continues to identify investment opportunities that complement the Plan's risk/return profile.

Chair's Message

The Board places a high priority on quality services to members and is pleased to note members continue to be provided with excellent service, as shown by the performance against the standards set in ten key areas of service vital to our members. The details of the standards and related performance are included in this Report in the section dealing with Plan Administration.

We regularly update UAPP members and other stakeholders through publications such as the quarterly Communiqué and the website. A call centre is also available to members seeking information about the UAPP. The Retirement Planner tool that is available through the website is heavily used by the members. The Trustees' Office also provides pension information sessions when requested by employers.

It is my pleasure, on behalf of the Board, to thank Megan Costiuk (external member of the Audit Committee), and Bob Normand, Andrew Tambone and Laurence Waring (external members of the Investment Committee), who give generously of their time to the work of our Audit and Investment Committees.

Our relationship with our investment managers is vital to the successful execution of the Board's investment policies. In this regard, we thank the staff at Alberta Investment Management Corporation, Beutel Goodman & Company Ltd., and Fiera Capital Corporation for their work.

On behalf of the Board, I extend thanks to Eric Wang and Estelle Lo who both left the Board during 2017. Eric, for over 10 years, and Estelle, for over 6 years were active participants and made a valuable contribution to the Board. The Board was pleased to welcome Lawton Shaw, replacing Eric as the Board's employee representative from Athabasca University, and David Head, replacing Estelle as the Board's employer representative from Athabasca University.

As outgoing Chair, I would like to thank all of the Board members I have served with over the past two years for making the experience interesting and valuable. Linda Dalgetty succeeds me as the new Chair of the Board and I heartily wish her well in her new responsibilities.

The Board relies on a small but dedicated team to carry out its mandate. On behalf of the Board, it is my pleasure to acknowledge and thank our strong team at the Trustees' Office for their hard work and achievements on behalf of UAPP during 2017.

Paul Rogers

Paul Rogers
Chair, Board of Trustees

Management Discussion & Analysis

- **Financial Position of the Plan**
- **Investment Report**
- **Administration Report**

Financial Position of the Plan

The Plan's Assets

For the sixth consecutive year, growth in the Plan's assets exceeded the assumed rate of return. The discount rate used in the actuarial valuation as at December 31, 2016 and filed during 2017 is 5.6% per year and the annual investment return achieved by the Fund was 11.3%. The market value of the Plan's assets grew by $501.8 million, to $4,851.1 million at December 31, 2017 from $4,349.3 million at the end of 2016. The Fund experienced positive cash flow during 2017 as contributions of $272.5 million exceeded benefit payments of $253.1 million.

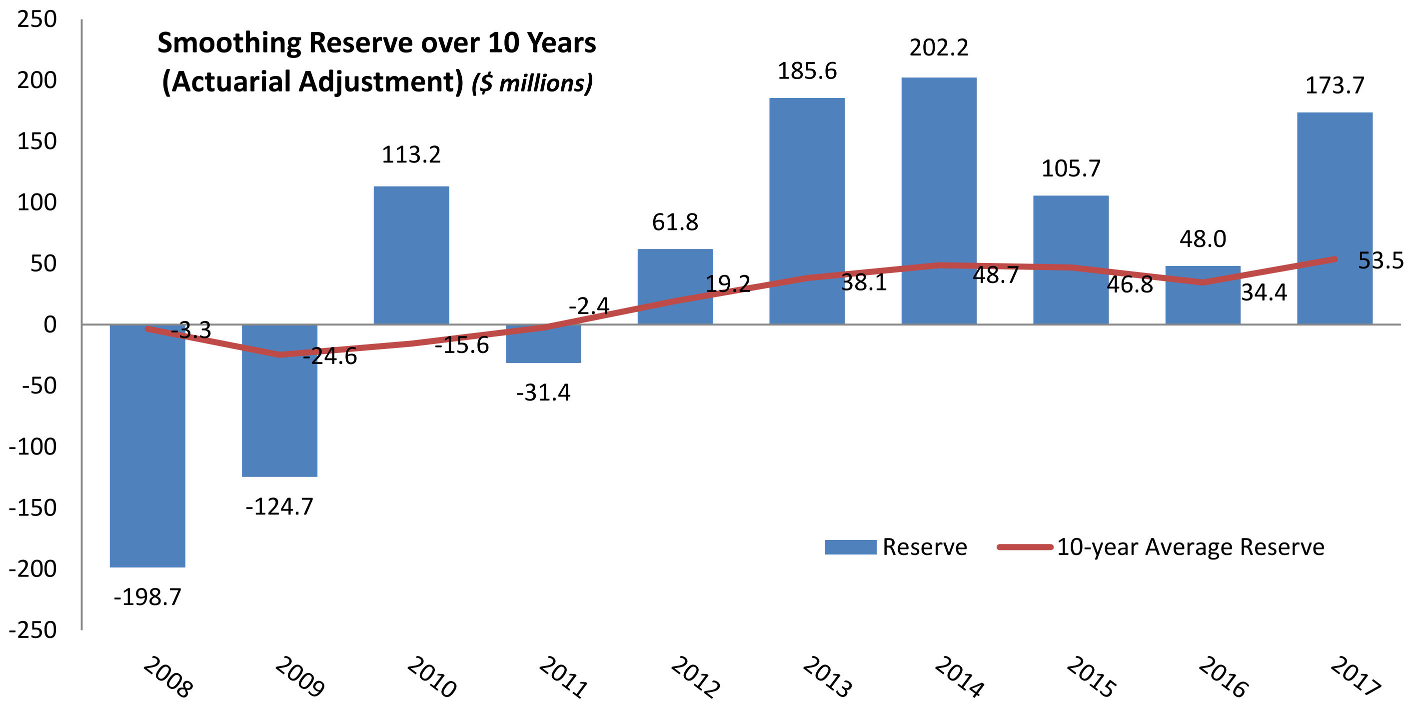
Despite warnings from analysts throughout 2017 that the ongoing bull run experienced by capital markets was getting long in the tooth, investment returns finished the year surprisingly strong. Interest rate hikes by central banks caused some weakness in fixed income returns but even that asset class performed well over the course of the full year. Following an asset liability study conducted by the Plan's investment consultant, the Fund began its transition of some public equity assets into long and universe bonds, infrastructure, and private equity investments. The net rate of return on the market value of Plan assets was 11.3%, the highest annual return of the Fund since 2014.

Investment expenses for 2017 were $21.0 million, up from $10.7 million in 2016. This increase is due to having more assets invested, utilizing investment strategies that have performance-related fee structures, and allocating more to alternative investments that are generally more expensive to access. Our focus continues to be risk-adjusted returns net of expenses.

$ Millions	December 31, 2017			December 31, 2016		
Service Period	**Pre-92**	**Post-91**	**Total**	**Pre-92**	**Post-91**	**Total**
Fair Value of Net Assets	744.8	4,106.3	4,851.1	750.4	3,598.9	4,349.3
Actuarial Adjustment	(31.9)	(141.8)	(173.7)	(11.1)	(36.9)	(48.0)
Actuarial Value of Net Assets	712.9	3,964.5	4,677.4	739.3	3,562.0	4,301.3
Accrued Pension Liability	1,547.5	4,079.3	5,626.8	1,577.7	3,596.4	5,174.1
Actuarial Deficiency	(834.6)	(114.8)	(949.4)	(838.4)	(34.4)	(872.8)
Funded Ratio	46.1%	97.2%	83.1%	46.9%	99.0%	83.1%

Financial Position of the Plan

To lessen the impact of fluctuations in market conditions, the Plan uses the actuarial or "smoothed" value of assets in calculating the funding requirements under the Employment Pension Plans Act of Alberta. The smoothing reserve increased in size from $48.0 million at the end of 2016 to $173.7 million at December 31, 2017. The market value of the assets increased from $4,349.3 million to $4,851.1 million during the year, as the Fund grew by $501.8 million. Meanwhile, the actuarial value of the assets increased from $4,301.3 million to $4,677.4 million during the year, a difference of $376.1 million. The actuarial value is calculated by averaging the actual market value at December 31, 2017 with the market value projected to the same date from each of the prior two year-end dates. This method is summarized in Note 14 of the Financial Statements and in the most recent actuarial valuation report, as at December 31, 2016.



The 10-year average smoothing reserve has increased to $53.5 million, the highest the adjustment has been since the actuarial value of assets were first smoothed at December 31, 1996. Over the last 10 years, the highest annual reserve continues to be $202.2 million at December 31, 2014 and the lowest reserve is - $198.7 million at December 31, 2008.

Financial Position of the Plan

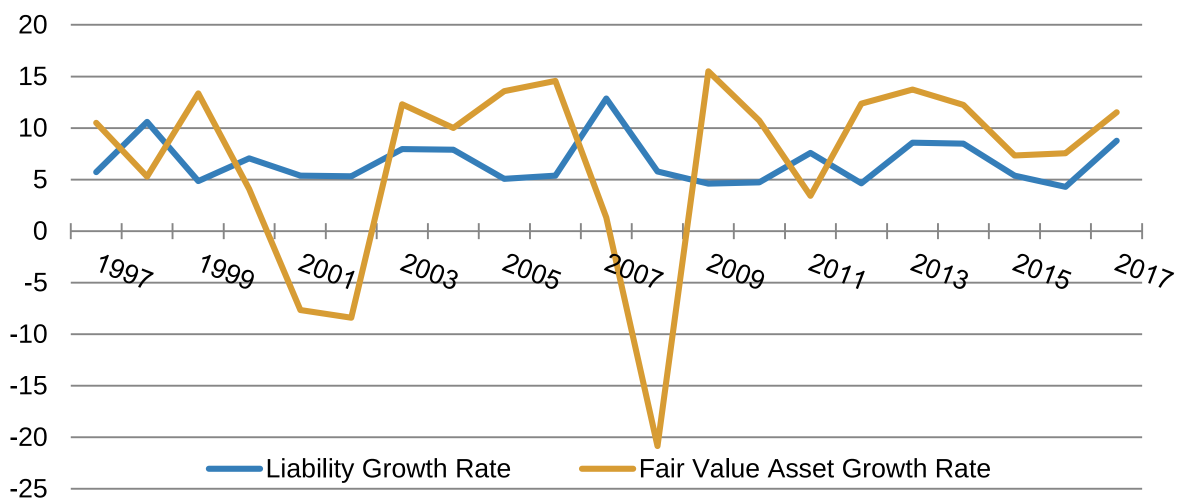
The Plan's Liabilities

During 2017, an actuarial valuation was prepared for the Plan as at December 31, 2016. The new valuation produced an updated calculation of the present value of all pension benefits accrued in the Plan, commonly referred to as the plan's liability or pension obligation. The results of this valuation are then extrapolated to December 31, 2017 to estimate the current value of these benefits. The Plan's total liability is determined to be $5,626.8 million as at the end of 2017, increasing by 8.7% from $5,174.1 million at the end of 2016. Note that the liabilities for 2016 were extrapolated from the previous full actuarial valuation as at December 31, 2014. Historically, the Plan has conducted an actuarial valuation every two years with the next one scheduled as at December 31, 2018, though pension legislation requires that the next valuation be filed no later than as at December 31, 2019.

The new valuation showed the estimated liability as $5,403.4 million as at December 31, 2016, $229.3 million higher than the $5,174.1 million liability reported in the 2016 financial statements. The higher value reflects changes in economic assumptions and differences between assumed rates of salary increase, mortality, and other demographic events versus actual plan experience since the previous valuation at December 31, 2014. Changes in assumptions, particularly the discount rate, reflect changes in expectations.

Since Plan assets are subject to market conditions, the market value can fluctuate significantly between one year and another. Liabilities, on the other hand, generally evolve more slowly over time, apart from valuations where significant assumption changes take place. In particular, a change in the discount rate can significantly impact the value of liabilities. At December 31, 2017, a 1% decrease in the discount rate is estimated to increase liabilities by $821.5 million or 14.6%.

Comparison of Asset and Liability Annual Growth Rates (%)

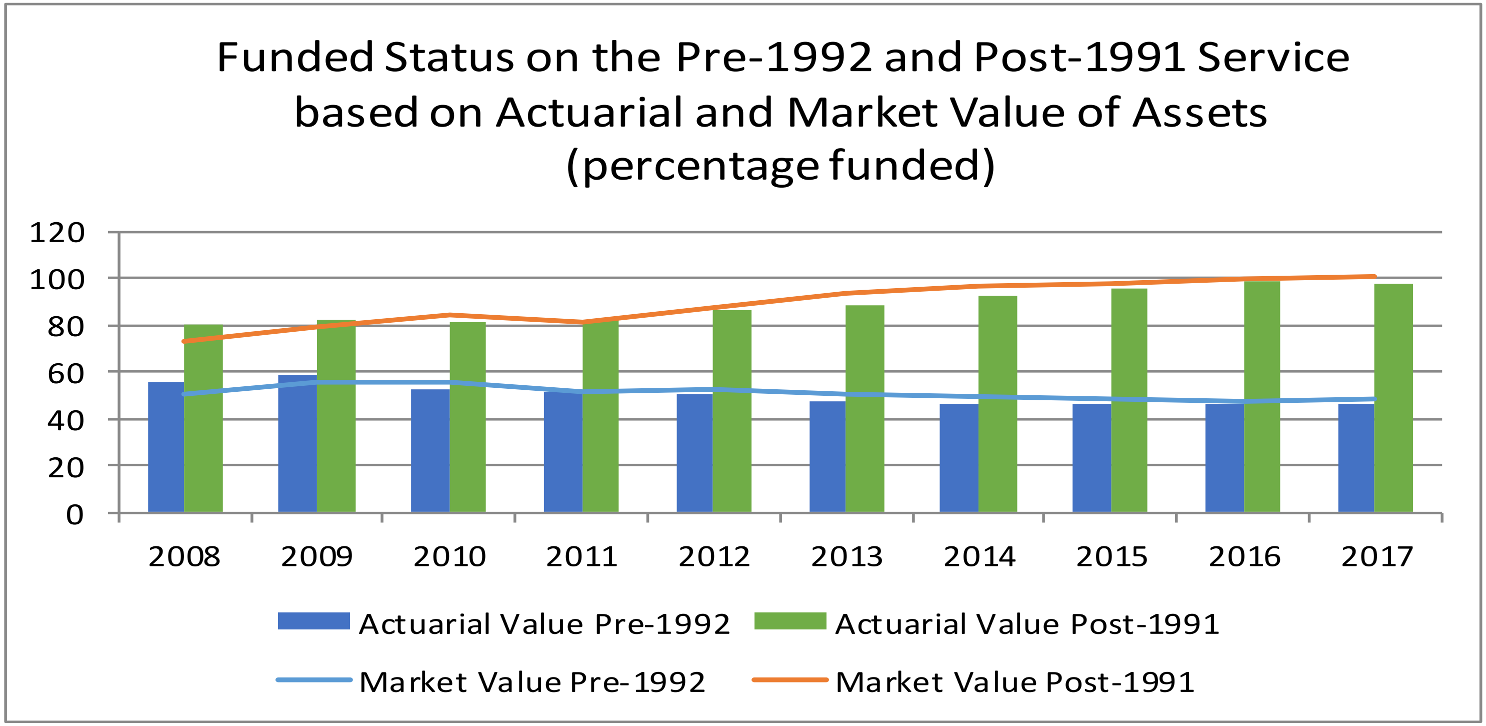


Financial Position of the Plan

The Plan's Funded Ratio

Since the market value of total Plan assets grew faster than the liabilities, despite the decrease in the discount rate, the funded ratio on a market value basis increased from 84.1% at December 31, 2016 to 86.2% at December 31, 2017. Over the year, the Plan's funded ratio on an actuarial value basis remained level at 83.1%. Gains on the assets from the actual return exceeding the assumed rate of return were offset by losses on the liabilities due to demographic experience and assumption changes, and an increase in the smoothing reserve.

UAPP deficits are separated into a pre-1992 service portion and a post-1991 service portion because the Government of Alberta contributes to the funding of the pre-1992 unfunded liability. The funded ratio for pre-1992 service is 46.1% (2016: 46.9%) on an actuarial value basis and is 48.1% (2016: 47.6%) on a market value basis. The funded ratio for post-1991 service is 97.2% (2016: 99.0%) on an actuarial value basis and is 100.7% (2016: 100.1%) on a market value basis.



Financial Position of the Plan

The unfunded liability for pre-1992 service is amortized such that it will be eliminated by December 31, 2043 with contribution requirements expressed as a percentage of payroll. The Government of Alberta's share of the funding is fixed at 1.25% of total salary with the remainder of the deficit funding shared between the employers and employees as determined at each actuarial valuation. The funded ratio for pre-1992 service continues to decline due to the long amortization period. The Government of Alberta's share of the contributions was approximately 50% when the cost-sharing was first established after 1992 but now stands at 26.1% of the total pre-1992 unfunded liability contribution made in 2017.

For post-1991 service, the Plan has been fully funded in the past and is expected to be fully funded in the future. For the past 2 years, the funded ratio on a market value basis has been over 100%. Investment returns significantly impact the funded ratio for this service. Unfunded liabilities related to this service are amortized over 15 years in accordance with pension legislation and contributions are shared between employers and employees.

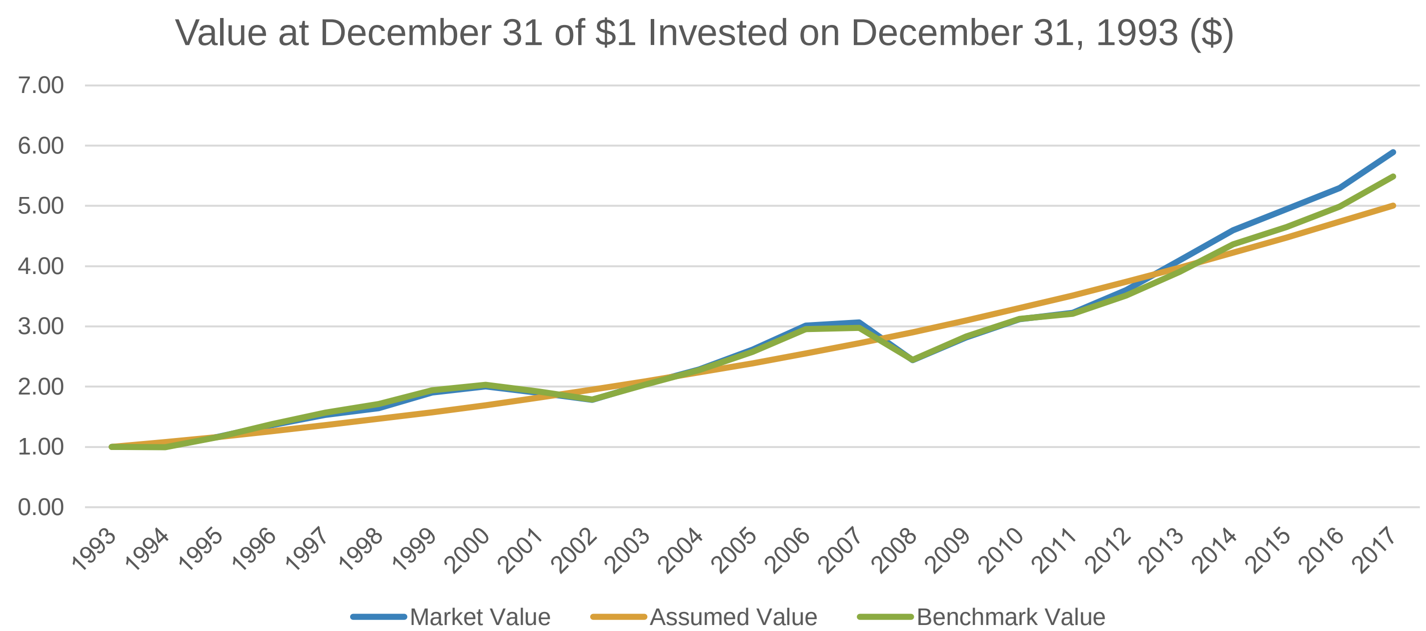
Looking to the Future

The ultimate test of any pension plan's financial soundness is whether it is able to fund all benefits payable today and in the years ahead. Regular monitoring of the Plan's financial position is conducted through an actuarial valuation which sets out a funding plan to achieve funded ratios reaching 100%. The actuarial extrapolation report as at December 31, 2017 shows the Plan remains close to full funding on the post-1991 service period. However, the full actuarial valuation as at December 31, 2016 indicated the Plan continues to face stubbornly low interest rates, improved life expectancy, and enduring costs relating to the pre-1992 deficit. The new funding requirements put forward the plan to attain full funding by December 31, 2027 on the post-1991 service period and by December 31, 2043 on the pre-1992 service period.

A new Statement of Investment Policies and Goals became effective January 1, 2017 and reflected the Board's current risk tolerance. The Plan began transitioning to its new asset mix during 2017 by moving some public equity investments into private equity and infrastructure pooled funds to work towards attaining the long-term investment objectives. This transition will continue until the full allocation is attained, expected in 2020.

Since the Plan's first December 31 year-end in 1993, assets have grown from $1,003.3 million to $4,851.1 million today while liabilities have grown from $1,282.0 million to $5,626.8 million over the same period. The following graph shows the cumulative return of the Fund since 1993 relative to the policy benchmarks and the assumed rates of return. The gap between the market value and the benchmark value represents the cumulative value added by investment managers and the gap between the market value and the assumed value represents the cumulative investment gains of the Fund on an actuarial basis.

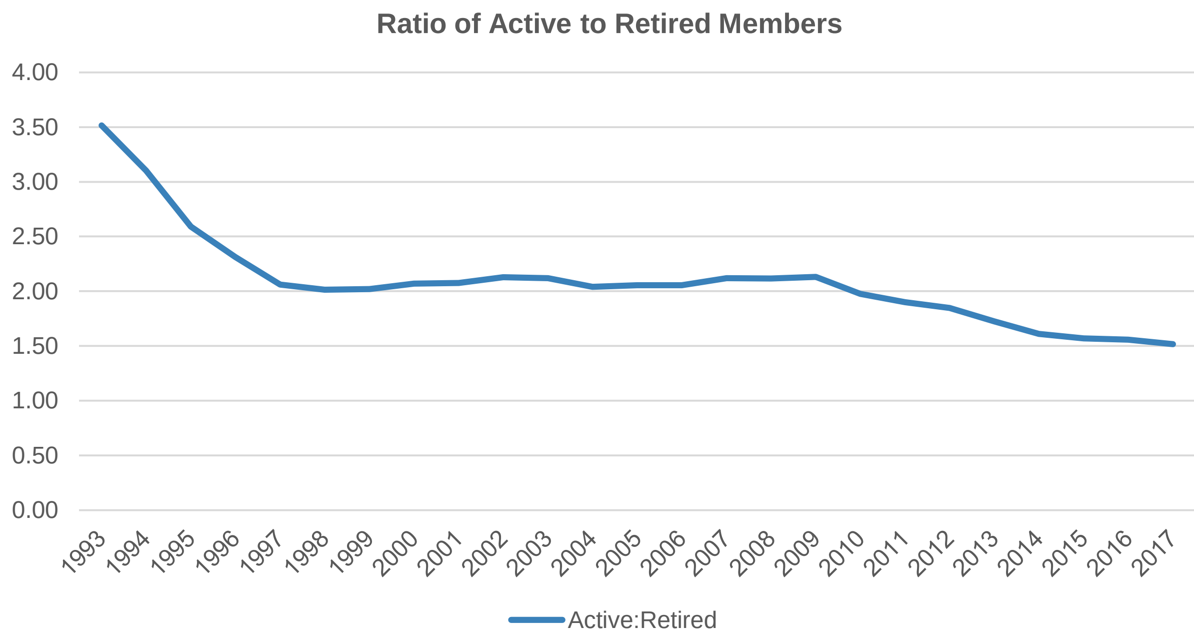
Financial Position of the Plan



The Fund's actual returns have exceeded the benchmark returns for each of the past seven years and exceeded the assumed rates of return for each of the past six years. Continued out-performance would go a long way in moving the Plan towards full funding sooner than expected.

As with many other defined benefit plans in Canada, the Plan continues to mature as growth in the retired membership (5.0% average annual rate over the past decade) continues to drastically outpace growth in the active membership (1.5% over the same period). Only three times in the past 15 years has the active group size grown more than the retired group size (2005, 2007, and 2009). Since 1993, the ratio of active members to retired members has decreased from a high of 3.52:1 in 1993 to the current low of 1.52:1.

Financial Position of the Plan



The ratio is expected to continue its gradual decline since growth in the active membership has been very slow and retired members are living longer than ever before. Life expectancy has been improving for a prolonged period of time. Despite signs that mortality improvements are slowing down, longer life spans remain a challenge for pension plans.

Low interest rates continue to hamper investment returns, particularly as they relate to fixed income holdings. The pre-1992 unfunded liability also endures as an ongoing concern for the UAPP. As the Plan approaches the mid-way point of the 50-year amortization, the deficit remains persistently high. However, the Board reviewed the actuarial valuation results during the year and adjusted contribution rates on the advice of the Plan's actuary. The new contribution rates taking effect July 1, 2018 reflect the strengthened assumption base adopted by the Board.

Investment Report

Investment Beliefs and Approach

As discussed in previous Annual Reports, the development of the UAPP's strategic, long-term investment policy is based on several key beliefs.

1. There is a relationship between risk and return. Achieving higher returns generally requires exposure to higher risks. The relationships between risk and return are more predictable over the longer term. Equities will, in the long-term, provide greater returns than fixed income investments although with greater short-term volatility. The long-term strategic asset allocation decision is the most important factor in determining investment risk and return.

2. In establishing the asset mix policy of the Fund, the liabilities of the Plan should be taken into consideration. As an example, inflation has a direct impact on the UAPP's liabilities. Investments in inflation-sensitive assets like Real Return Bonds, Real Estate and Infrastructure are a way of managing the inflation risk.

3. Diversification within and across asset classes can reduce risk over the long term without compromising expected returns and is a prerequisite to prudent fund management. Exposure to foreign currencies as a result of moderate levels of foreign investments can provide diversification benefits. Currency hedging should only be undertaken on an opportunistic basis.

4. Over the long term, longer term bonds will outperform cash and short term bonds. Longer term bonds will outperform during periods of stable and declining rates, but will underperform during periods of significantly rising interest rates. Relative to shorter term bonds, longer term bonds generally provide better matching with the Plan's liabilities thus reducing the volatility of the required contributions and funded status.

5. Active management will serve the Plan better than passive management in most asset classes. Markets are efficient to varying degrees, and short term deviations from long term fundamentals can occur. Therefore, there is an expectation for skilled managers to add value and/or reduce risk relative to passive exposure to the market. The opportunity for value added and/or reduced risk from active management should be weighed against the incremental cost relative to passive market exposure.

6. Over the long term, but not necessarily in most years, investment in a value stock portfolio will tend to produce performance similar to or better than investment in a growth stock portfolio and the performance of the value stock portfolio will be less volatile.

7. A specialist manager structure offers a number of benefits over a balanced manager structure including the potential to hire the best manager for each asset class, greater flexibility to replace underperforming funds, and the ability to make use of passive investment funds for appropriate asset classes.

8. With respect to foreign equities, global mandates are preferred over combinations of U.S. and international equity mandates because global mandates allow managers more flexibility and greater opportunities to add value.

9. Market timing is not seen as an effective strategy for generating consistent returns. Therefore, a rebalancing protocol around the strategic asset mix is seen as the most effective way of ensuring that portfolio risk does not drift materially above or below the intended risk level.

10. Investment managers should be monitored regularly for changes in ownership, investment process and philosophy, key investment personnel, and for investment returns against relevant peer groups and indices. Managers may be terminated on the basis of qualitative issues even if investment returns are acceptable. Investment returns should be evaluated over at least a 4-year period. Emphasis should be placed, not only on the level of returns, but also on the amount of risk taken to achieve those returns. Tracking error should be assessed in terms of the impact on volatility of the Plan's required contributions and funded status.

These beliefs require an investment approach that seeks to obtain higher long-term returns while containing the volatility in short-term results. This goal underlies the UAPP's investment policy and risk management measures.

Investment Policy

The UAPP's investment policies are based on the investment beliefs and expectations of the Board and are set out in the Statement of Investment Policies & Goals (SIP&G). The asset mix policy, or the Fund's long-term allocation to the different asset classes, is a key component of the SIP&G. It is through the asset allocation decision that the Board diversifies its investments across asset classes and attempts a balance between the objective of higher long-term returns and the need to reduce shorter-term volatility in those returns.

The Board, through its Investment Committee, monitors on an ongoing basis the performance of the Fund, the funded status of the Plan, capital markets and economic developments and expectations. Based on this monitoring, the Board may make adjustments to the asset mix and take other appropriate measures to control risk or improve returns. The Board reviews the SIP&G at least once a year.

The table below compares the Board's current Long-term Policy Asset Mix benchmark and ranges to the actual asset mix of investments for 2017 and 2016. A copy of the full text of the UAPP's SIP&G is available on the UAPP website www.uapp.ca under Publications.

Long-term Policy Asset Mix

(percentage of Fund)

Asset Class	2017 Benchmark	2017 Min	2017 Max	2017 Actual	2016 Benchmark	2016 Min	2016 Max	2016 Actual
	%			%	%			%
Money market and fixed Income								
Cash & short term	0.0	0.0	1.0	0.4	0.0	0.0	1.0	0.8
Universe bonds	11.5	8.0	14.0	13.3	10.0	8.0	12.0	7.6
Private mortgages	5.0	3.0	7.0	3.6	5.0	3.0	7.0	4.0
Long duration bonds	11.5	8.0	14.0	11.0	10.0	8.0	12.0	9.3
Real return bonds	7.0	5.0	9.0	6.7	7.0	5.0	9.0	7.1
	35.0	**26.0**	**41.0**	35.0	32.0	**26.0**	**38.0**	28.8
Public equities								
Canadian	16.0	10.0	20.0	12.5	17.5	15.0	20.0	19.3
Foreign								
Global	28.0	22.0	31.0	31.6	29.5	26.0	31.0	30.6
Emerging markets	8.0	5.0	9.0	7.5	8.0	4.0	9.0	7.9
	52.0	**40.0**	**60.0**	51.6	55.0	**50.0**	**60.0**	57.8
Alternative investments								
Real estate	8.0	5.0	11.0	7.4	8.0	5.0	11.0	8.2
Infrastructure and private debt and loan	4.0	3.0	9.0	3.6	4.0	1.0	6.0	3.2
Timberland	1.0	0.0	1.0	0.8	1.0	0.0	1.0	0.9
Private equity	0.0	0.0	7.0	0.6	n/a	n/a	n/a	0.0
	13.0	**12.0**	**25.0**	12.4	13.0	**6.5**	**17.0**	12.3
Strategic opportunities and currency	-	**-**	**-**	1.0	-	**-**	**-**	1.1
Total	100.0			100.0	100.0			100.0

The 2017 benchmark represents the interim policy weighting as the Plan transitions to reduced long-term weightings in Canadian and global equities and increased weightings in private equity and infrastructure investments. During the transition, specific actual allocations may fall outside of the Min and Max levels shown in the table.

Investment Report

The Plan holds a highly-diversified portfolio of investments in fixed income securities, Canadian and foreign equities, alternative investments and strategic opportunities. This includes participation in both passively and actively managed pooled investment funds. The Plan invests in units of pooled investment funds which are created and managed by investment managers. Pooled fund units have a market-based unit value that is used to allocate income to participants in the pool and to value purchases and sale of units. There are thousands of securities held in various pooled investment funds. These securities are bought and sold on a daily basis. The Plan has a broad global diversification across publicly traded equities and fixed income which increases opportunities to add value. In addition, the Fund's investments in real estate and infrastructure provide better cash yields that grow with inflation.

The Plan's money market and fixed income portfolio is exposed to credit risk and interest rate risk through bond and mortgage holdings and derivative products. Based on the view that currencies are a zero-sum game in the long-run, currency exposure to foreign equity markets is largely unhedged. Up to 25% of the Plan's foreign currency exposure can be hedged. Therefore, unless currency exposure is hedged, the returns from foreign markets will be impacted by changes in the exchange rate of the Canadian dollar.

Investment Management

UAPP engages three investment managers to manage its investment portfolio. Beutel, Goodman & Company Ltd. and Fiera Capital Corporation manage its Canadian long bond and the majority of the universe bond portfolios totaling 21.6% of total investments. The majority of UAPP's investments totaling 78.4% are managed by Alberta Investment Management Corporation (AIMCo). AIMCo manages UAPP's public equity investments, alternative investments, private mortgages and real return bonds.

Beutel, Goodman & Company Ltd. is a privately owned Canadian company founded in 1967, with over $35 billion in assets under management. Fiera Capital Corporation was established in 2003 and has more than $128 billion in assets under management. AIMCo is an Alberta provincial corporation established in 2008, reporting to the President of Treasury Board, Minister of Finance. In total, AIMCo administers investment portfolios of over $100 billion on behalf of other public sector pension plans and the Government of Alberta. These investment managers invest the UAPP's assets subject to the investment policies set out in the Board's SIP&G. The majority of investments are managed through pooled investment funds.

To mitigate implementation risk, clearly defined benchmarks, guidelines, standards and controls have been established at both the total Fund and asset class levels. Investment managers have the flexibility to act within the prescribed limits in order to add value over the policy. Both compliance with the SIP&G and performance against the specified benchmarks are monitored formally on a quarterly basis. The Board has retained an independent asset consultant, Aon Hewitt, to provide evaluation of investment managers on a regular basis.

Proxy Voting

Proxy voting is an important tool in corporate governance. The Board delegates responsibility for proxy voting to investment managers. Pension funds are to be managed in the best interests of beneficiaries. This principle governs the voting of proxies. The UAPP 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.

Investment Report

Risk Management

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

Investment risk management is a key focus for the Board and the investment managers. Investment managers seek to measure and monitor both historic and possible future risks, allocating risk as a scarce resource to the most promising investment opportunities. A quantitative investment risk system is designed to operate across all asset classes and a variety of risk types such as credit risk, price risk, interest rate risk, currency risk and liquidity risk.

UAPP monitors the risk of the Plan's liabilities in relation to the investment assets.

Evaluating Investment Performance

A key assumption in calculating the Plan's pension obligation is the discount rate. The estimated value of the Plan's pension obligation is highly sensitive to this assumption. According to the audited financial statements, a decrease in the discount rate by 1% increases the pension obligation by approximately $821.5 million. The current discount rate of 5.6% includes a long-term real return rate of 3.35% and an assumed inflation rate of 2.25%. This rate represents the Plan's long-term investment return objective for funding purposes. In the 2016 actuarial valuation, the discount rate decreased to 5.6% from 5.95% used in the 2014 valuation.

The Plan's investment performance can also be assessed in terms of whether investment managers are adding value above their respective benchmarks. In this case, the performance of the Plan is measured against a policy benchmark return calculated using the Plan's policy allocation to each asset class and the market index return for the specific class.

While investment performance can be compared to other funds, this comparison is meaningful only to the extent that the funds being compared have similar investment objectives, risks and constraints and policies. A fund that is 100% invested in fixed income, for example, does not provide a valid comparison to a fund that is 100% invested in equities.

Investment Report

2017 Investment Performance

Investments: $4,828.8 million
(2016: $4,329.2 million)

Return on Investments: 11.3%
(2016: 7.1%)

Investment Income: $505.5 million
(2016: $295.4 million)

Investment Expense: $21.0 million
(2016: $10.7 million)

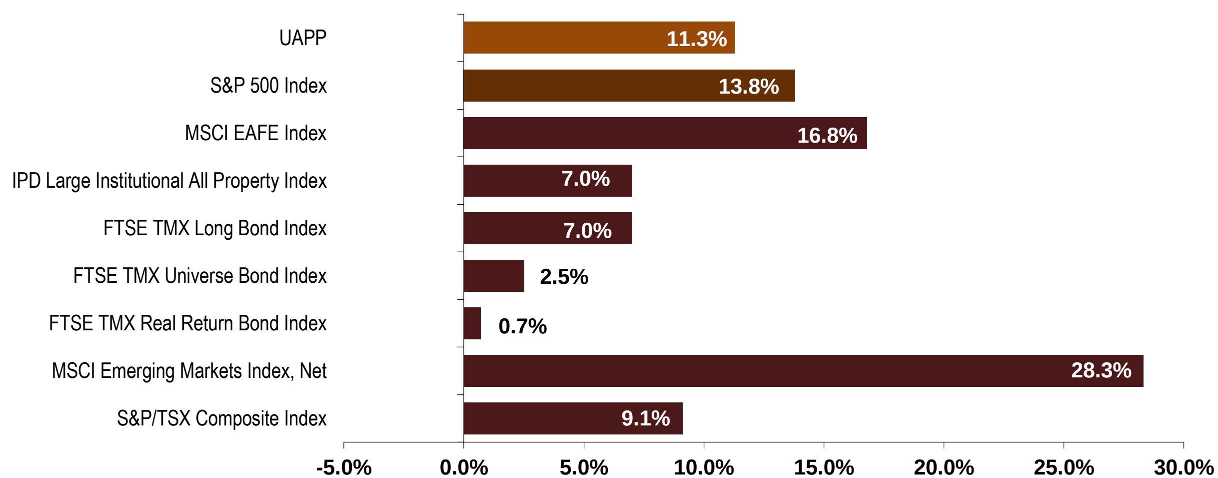
At December 31, 2017, the fair value of the Plan's investments totaled $4,828.8 million, up from $4,329.2 million at the end of the previous year.

Overall, UAPP finished the 2017 year earning an overall investment return of 11.3%, after expenses, compared to 7.1% in 2016.

UAPP gained 3.6% on its investments in the 1st quarter, when equity markets continued their bull run, following the surprise 2016 US election results. During the year, both the US Federal Reserve System and the Bank of Canada increased interest rates, impacting the value of fixed income investments. UAPP posted modest 2nd and 3rd quarter returns of 1.5% and 0.6% respectively. With global economies growing and strengthening, the year finished very strong. The much anticipated end to the long bull market never materialized, and in the 4th quarter, investments earned 5.0% for a final year end return of 11.3%.

The following chart summarizes the market returns in Canadian dollars from various indices around the world and the overall return of UAPP for 2017.

Returns for Major Markets and the UAPP (in $CDN)



Investment Report

The Standard & Poor's (S&P) 500 Index, which tracks the performance of the top 500 American companies, gained 13.8% in Canadian dollars (21.8% in U.S. dollars) compared to 8.1% in Canadian dollars (12.0% in U.S. dollars) in 2016.

Approximately 18% of the Plan's investments (2016: 18%) are denominated in U.S. dollars. The stronger Canadian dollar in relation to U.S. dollar had a negative impact on the value of U.S. dollar investments held by the Plan. At December 31, 2017, one U.S. dollar was worth $1.25 Canadian compared to $1.34 Canadian at the beginning of the year. As a result, U.S. dollar investments were worth less when translated into Canadian dollars at December 31, 2017 resulting in lower returns in Canadian dollars.

The Morgan Stanley Capital International (MSCI) EAFE Index covering Europe, Australasia and the Far East, gained 16.8% in Canadian dollars compared to a loss of 2.5% in 2016. Approximately 20% (2016: 20%) of the Plan's investments are denominated in currencies other than the Canadian and U.S. dollar including the Euro which comprises 4% (2016: 4%) of the Plan's investments. At December 31, 2017, one Euro was worth $1.51 Canadian compared to $1.42 Canadian at the beginning of the year.

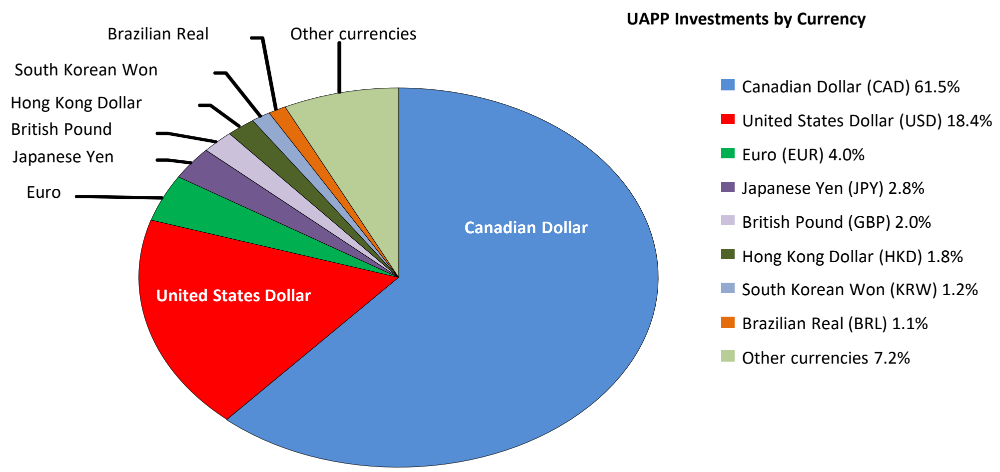
The Canadian real estate market represented by the IPD Large Institutional All Property Index increased by 7.0% in 2017 compared to an increase of 5.8% in 2016.

The FTSE TMX Universe Bond Index, FTSE TMX Real Return Bond Index, and the FTSE TMX Long Term Bond Index posted gains of 2.5%, 0.7%, and 7.0% respectively compared to gains of 1.7%, 2.9%, and 2.5% in 2016.

Outside of Canada, the Morgan Stanley Capital International (MSCI) Emerging Markets Index gained 28.3% in 2017 in Canadian dollars compared to a gain of 7.3% in 2016.

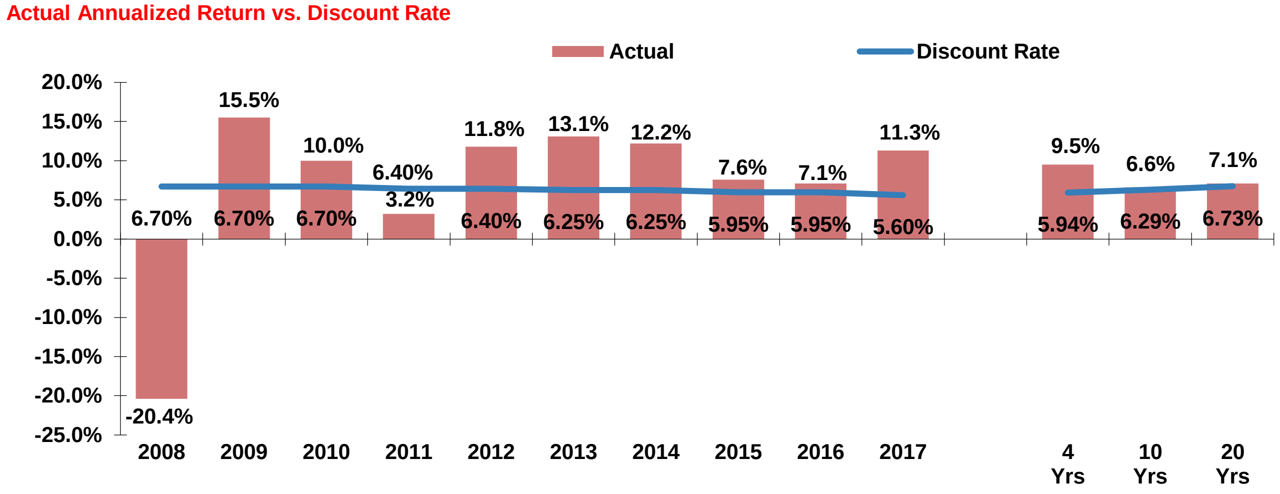
The Canadian stock market represented by the S&P Toronto Stock Exchange (TSX) Composite Index gained 9.1% in 2017 compared to a gain of 21.1% in 2016.

The table shows UAPP's exposure to foreign currencies and its investments in Canadian dollars.



Investment Report

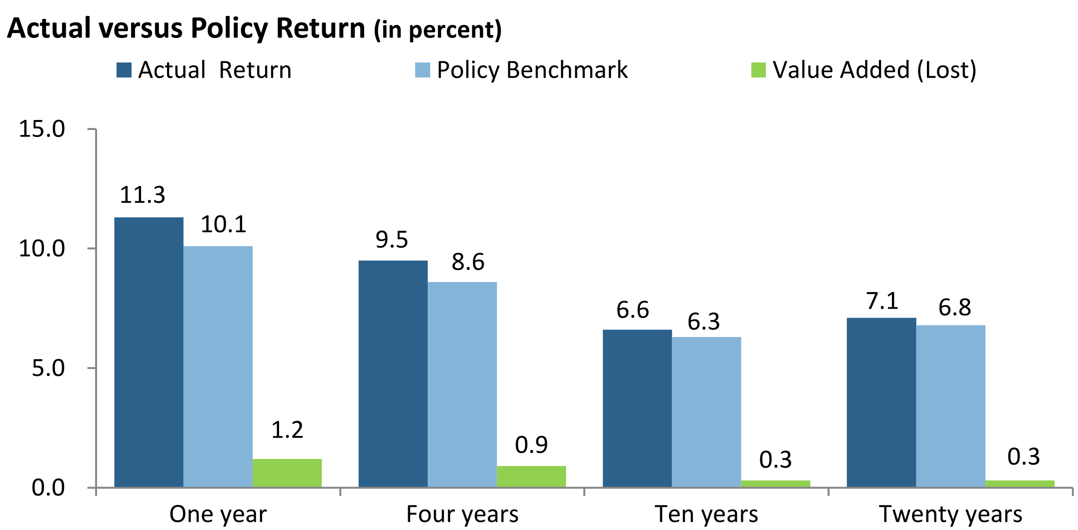
The chart below compares the Plan's actual return over one year and annualized returns over four, ten and twenty years against the Plan's long-term investment return objective for funding purposes (i.e. for 2017, asset real rate of return of 3.35% plus an assumed inflation rate of 2.25%).



The Plan's annualized returns over four, ten, and twenty years are 9.5%, 6.6% and 7.1% respectively. Over four, ten, and twenty years the Plan's actual investment return is greater than the cumulative discount rate for funding purposes.

Actual versus Policy Return

According to the Plan's SIP&G, the Board has set a performance goal based on the expectation that investment management will add 0.5% per annum over a four-year period beyond the passively managed market-based policy benchmark. Over the past four years, the value added by investment management decisions was 0.9% per annum.

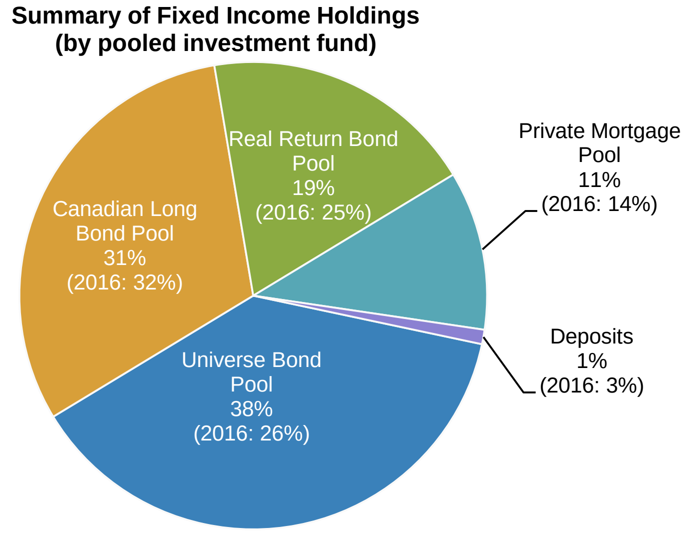


Investment Report

PERFORMANCE BY ASSET CLASS

Fixed Income

At December 31, 2017, fixed income holdings comprise 35.0% of the Plan's total investments or $1,691 million compared to 28.8% or $1,247 million at December 31, 2016. The Canadian long bond portfolio and the universe bond portfolio are primarily managed by Beutel, Goodman & Company Ltd. and Fiera Capital Corporation. AIMCo manages private mortgages, real return bonds and deposits in the Consolidated Cash Investment Trust Fund.



In 2017, the Plan's total fixed income securities gained 3.7%, the same as the combined benchmark gain of 3.7%.

Total Fixed Income	Actual Return %	Benchmark Index Combined Benchmark* %	Net Value Added (lost) %
One year	**3.7**	**3.7**	**0.0**
Four year	**5.2**	**5.3**	**(0.1)**

* The combined benchmark includes the FTSE TMX Long Bond Index, FTSE TMX Real Return Bond Index, FTSE TMX Universe Bond Index, and FTSE TMX 91-Day T-Bill Index.

Canadian Equities

At December 31, 2017, Canadian public equities represented 12.5% of the Plan's total investments or $604 million down from 19.3% or $836 million at the end of the previous year. The Plan's Canadian equity portfolio is invested in AIMCo's Canadian Equities Master Pool, which in turn invests in the Global Alpha Strategy (GLAS) and structured equity products which replicate Canadian public instruments. The purpose of GLAS is to gain access to more markets than would be available if the pool were locked to specific countries or industries, providing more value-add return (alpha). GLAS's portfolio includes directly held investments in public companies in the U.S., Europe, Australasia, and the Far East (EAFE) with smaller allocations to emerging markets and Canada. Non-Canadian exposure is swapped out to provide exposure to the Standard and Poor's Toronto Stock Exchange (S&P/TSX) while still maintaining the alpha earned in GLAS. Interest bearing securities support the notional value of index swaps and futures contracts.

Investment Report

Canadian Equities Master Pool **Industry Exposure Relative to Benchmark** **December 31, 2017**	Benchmark TSX Composite Index	Over (Under) Benchmark
Sector	%	%
Consumer discretionary	5.4	0.8
Consumer staples	3.7	(0.3)
Energy	19.7	(0.3)
Financials	34.6	0.5
Health Care	1.0	(0.3)
Industrials	9.5	(0.4)
Information technology	3.2	0.3
Materials	11.5	0.6
Real estate	2.9	(0.3)
Telecommunications	4.7	(0.2)
Utilities	3.8	(0.3)
	100.0	

In 2017, the Canadian equity portfolio gained 10.5%, 1.6% more than the benchmark gain of 8.9%.

Total Canadian Equities	Actual Return %	Benchmark Index S&P/TSX Composite %	Net Value Added %
One year	**10.5**	**8.9**	**1.6**
Four year	**8.4**	**7.5**	**0.9**

Foreign Public Equities

At December 31, 2017, foreign public equities comprised 39.1% of the Plan's total investments or $1,886 million compared to 38.5% or $1,666 million the previous year. UAPP's global public equity portfolio consists of units owned in AIMCo's Global Equities Master Pool (81%) and Emerging Markets Equity Pool (19%).

In 2017, the foreign public equity portfolio gained 19.2%, 2.2% more than the benchmark gain of 17.0%.

Total Foreign Equities	Actual Return %	Benchmark Index Combined benchmark* %	Net Value Added %
One year	**19.2**	**17.0**	**2.2**
Four year	**13.7**	**12.3**	**1.4**

* Combined benchmark incudes the MSCI World and MSCI Emerging Markets indices. Prior to July 1, 2015, combined benchmark return included MSCI All Country World Index (ACWI) and MSCI Emerging Markets Index.

Global Equities Master Pool

The Plan's global equity portfolio is invested in units of AIMCo's Global Equities Master Pool. The Pool's investment in GLAS provides exposure to a diverse market which ideally provides a higher rate of return than what could be earned investing solely in traditional global markets. The Pool replicates exposure to foreign equity markets by investing in structured equity products using index swaps and futures contracts. Interest bearing securities support the notional value of index swaps and futures contracts.

Global Equities Master Pool
Industry Exposure Relative to Benchmark
December 31, 2017

Sector	Benchmark MSCI World Total Return Index %	Over (Under) Benchmark %
Consumer discretionary	12.3	0.8
Consumer staples	9.0	(0.3)
Energy	6.3	(0.3)
Financials	18.1	0.5
Health Care	11.8	(0.3)
Industrials	11.6	(0.4)
Information technology	16.8	0.2
Materials	5.3	0.6
Real estate	3.1	(0.3)
Telecommunications	2.8	(0.2)
Utilities	3.0	(0.3)
*	100.0	

* Total exposure may not add up to 100% due to rounding.

Investment Report

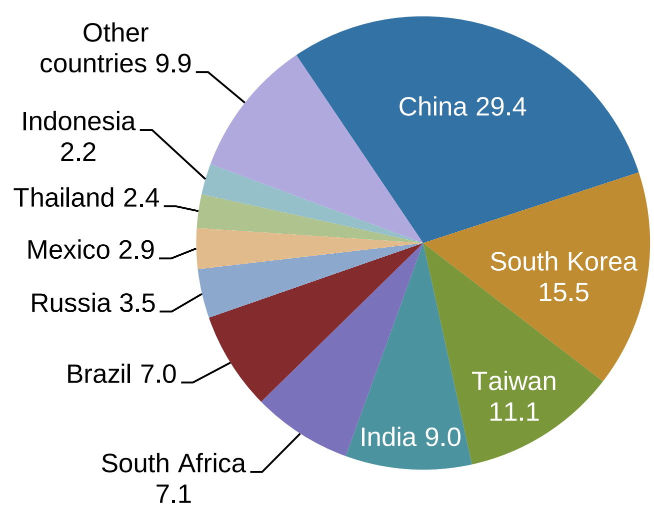
Global Equities Master Pool Relative Regional Exposure to Benchmark December 31, 2017	Benchmark MSCI World Total Return Index	Over (Under) Benchmark
Region	%	%
United States	59.2	0.2
Europe, Australasia & the Far East	37.2	0.2
Canada	3.6	(0.1)
Emerging markets	0.0	(0.2)
	100.0	

In 2017, the Plan's global equity portfolio gained 16.6%, 2.2% more than the combined benchmark gain of 14.4%.

Total Global Equities	Actual Return %	Benchmark Index Combined Benchmark* %	Net Value Added %
One year	**16.6**	**14.4**	**2.2**
Four year	**13.8**	**12.5**	**1.3**

* MSCI World Index. Prior to July 1, 2015, MSCI ACWI Index.

Top Ten Countries in Emerging Markets Pool
(in per cent)



Emerging Markets Pool

Approximately 19% of UAPP's foreign equity portfolio includes an investment in AIMCo's Emerging Market Pool which holds an investment in GLAS with the non-emerging market exposure being swapped out to the MSCI Emerging Markets Index.

Investment Report

In 2017, the Plan's emerging markets portfolio gained 30.4%, 2.1% more than the MSCI Emerging Markets Index gain of 28.3%.

Emerging Markets	Actual Return %	Benchmark Index MSCI Emerging Markets Index %	Net Value Added %
One year	**30.4**	**28.3**	**2.1**
Four year	**13.5**	**11.5**	**2.0**

Alternative Investments

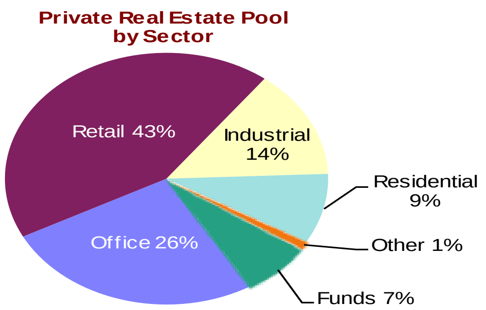
Alternative investments totaling $600 million or 12.4% (2016: $530 million or 12.3%) of the Plan's total portfolio includes real estate, infrastructure and private debt, timberland, and private equity investments. In 2017, the Plan's actual gain from alternative investments was 9.2%, 1.9% more than the combined benchmark gain of 7.3%. Over four years, the annualized return was 7.3%, 0.2% more than the combined benchmark gain of 7.1%.

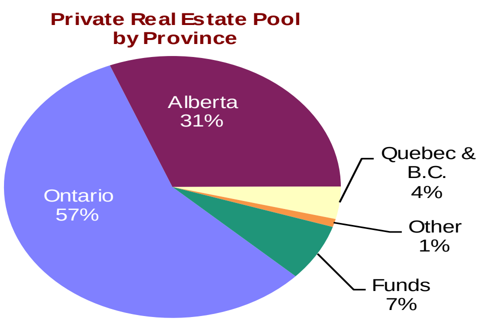
Real Estate

At December 31, 2017, real estate investments comprised 7.4% of the Plan's total investments or $357 million compared to 8.2% or $355 million the previous year. Real estate investments provide diversification, high cash flow and are expected to provide protection from inflation. The UAPP invests in AIMCo's Private Real Estate Pool which includes a mix of office, retail, industrial, and residential properties located in Ontario, Alberta, Quebec, and British Columbia.

In 2017, the Plan's actual gain from real estate investments was 8.5%, 1.5% more than the benchmark gain of 7.0%.

Real Estate	Actual Return %	Benchmark Index IPD Large Institutional All Property Index %	Net Value Added (Lost) %
One year	**8.5**	**7.0**	**1.5**
Four year	**6.3**	**7.0**	**(0.7)**





Investment Report

Private Income (Infrastructure and Private Debt and Loan)

At December 31, 2017, the UAPP's investment in AIMCo's Infrastructure and Private Debt and Loan Pools comprised 3.6% of total Plan investments or $176 million compared to 3.2% or $139 million at the end of the previous year. The investment in infrastructure pools, totaling $132 million (2016: $94 million), includes projects that provide attractive returns and includes projects in transportation (eg. toll roads, airports, ports, and railways), power (eg. contracted power generation and power transmission pipelines) and utilities (eg. water, waste water, and natural gas networks). The investment in the Private Debt and Loan Pool, totaling $45 million (2016: $45 million), includes investments in debt instruments such as senior secured debt and convertible debt which are generally unrated or non-investment grade.

In 2017, investments in infrastructure and private debt and loan gained 10.6%, 2.5% more than the benchmark gain of 8.1%.

Infrastructure and private debt and loan	Actual Return %	Benchmark Index Consumer Price Index (CPI) Plus 6% %	Net Value Added %
One year	**10.6**	**8.1**	**2.5**
Four year	**9.9**	**7.6**	**2.3**

Timberland

At December 31, 2017, the UAPP's investment in AIMCo's Timberland Pool comprised 0.8% of total Plan investments or $40 million compared to 0.9% or $37 million at the end of the previous year. The Timberland investment includes forestry land in Canada and globally. The investment in Canada represents an interest in a limited partnership which holds forestry land and land held for higher and better use in the Province of British Columbia. The foreign investment primarily includes forestry and agricultural land in Australia and New Zealand.

In 2017, the Timberland investment gained 17.5%, 11.4% more than the benchmark gain of 6.1%.

Timberland	Actual Return %	Benchmark Index Consumer Price Index (CPI) Plus 4% %	Net Value Added %
One year	**17.5**	**6.1**	**11.4**
Four year	**7.6**	**5.6**	**2.0**

Investment Report

Private Equities

A new addition to the asset mix this year is the investment in private equities. The portfolio includes investments in institutionally sponsored international private equity pools managed by experienced external investment advisors with proven track records. At December 31, 2017, the Plan's investment in AIMCo's private equity pools comprised 0.6% of the Plan's total investment portfolio, or $28 million. The long-term policy weight is 5% with an allowed range of 0-7% of the total Plan market value. An initial investment in AIMCo's Private Equity Pool was made in the third quarter of 2017 with non-meaningful returns reported to the end of the year.

Strategic Opportunities Pool and Currency Hedges

At December 31, 2017, the UAPP's investment in AIMCo's Strategic Opportunities Pool comprised 1.0% of total Plan investments or $47.1 million compared to 1.1% or $49.6 million at the end of the previous year. AIMCo's Strategic Opportunities Pool consists of investments in infrastructure and hydropower in emerging market countries in Brazil and Colombia. In 2017, the Strategic Opportunities Pool had a return of 5.0%, 9.4% less than the benchmark gain of 14.4%.

At December 31, 2017, the fair value of the UAPP's investment in foreign forward exchange contracts totaled a negative $0.1 million compared to a negative $0.1 million at the end of the previous year.

Table of Investment Returns

	December 31, 2017		Annual Returns				
	Investments (in millions)	Asset Mix (%)	2017 %	2016 %	2015 %	2014 %	Annualized 4 yr %
Total Fund	**$ 4,828.8**	**100.0%**	**11.3**	**7.1**	**7.6**	**12.2**	**9.2**
Policy Return			*10.1*	*7.0*	*6.5*	*11.8*	**8.6**
Value Added (Lost) from Active Management			*1.2*	*0.1*	*1.1*	*0.4*	*0.6*
Consumer Price Index (1)			*2.1*	*1.2*	*1.4*	*2.0*	*1.7*
Total Fixed Income	**$ 1,691.5**	**35.0%**	**3.7**	**2.7**	**3.0**	**11.7**	**5.2**
Combined Benchmarks			*3.7*	*2.3*	*3.4*	*12.5*	**5.3**
Short-term fixed income	19.1	0.4%	**1.0**	**0.9**	**0.9**	**1.2**	**1.0**
FTSE TMX 91-Day T-Bill Index			*0.6*	*0.5*	*0.6*	*0.9*	*0.7*
Universe Bonds	641.6	13.3%	**2.7**	**2.1**	**2.7**	**7.4**	**3.7**
FTSE TMX Universe Bond Index			*2.5*	*1.7*	*3.5*	*8.8*	*4.1*
Private Mortgages	175.8	3.6%	**2.5**	**2.1**	**5.0**	**9.7**	**4.8**
FTSE TMX Universe Bond Index plus 1%			*3.5*	*2.7*	*4.5*	*9.8*	*5.1*
Long Duration Bonds	529.2	11.0%	**7.0**	**2.9**	**2.4**	**15.5**	**7.0**
FTSE TMX Long Bond Index			*7.0*	*2.5*	*3.8*	*17.5*	*7.5*
Real Return Bonds	325.8	6.7%	**1.3**	**3.5**	**3.0**	**13.5**	**5.2**
FTSE TMX Real Return Bond Index			*0.7*	*2.9*	*2.8*	*13.2*	*4.8*
Total Public Equities	**$ 2,489.9**	**51.6%**	**17.0**	**9.6**	**9.0**	**13.8**	**12.3**
Combined Benchmark			*15.1*	*10.0*	*7.1*	*12.2*	*11.1*
Total Canadian Equities	604.2	12.5%	**10.5**	**20.3**	**(7.4)**	**12.3**	**8.4**
S&P/TSX Composite Capped Index			*8.9*	*21.1*	*(8.3)*	*10.6*	*7.5*
Foreign Equities			**19.2**	**4.6**	**17.3**	**14.4**	**13.7**
MSCI World Index and MSCI Emerging Markets Index			*17.0*	*4.7*	*15.1*	*12.8*	*12.3*
Global Equities	1,522.9	31.6%	16.6	3.4	20.6	15.4	**13.8**
MSCI World Index			*14.4*	*3.8*	*18.9*	*13.5*	*12.5*
Emerging Markets	362.8	7.5%	30.4	8.7	6.2	10.4	**13.5**
MSCI Emerging Markets Index			*28.3*	*7.3*	*2.0*	*10.1*	*11.5*
Alternative Investments	**$ 600.4**	**12.4%**	**9.2**	**6.5**	**9.5**	**6.2**	**7.3**
Combined Benchmark			*7.3*	*6.2*	*7.6*	*7.3*	*7.1*
Real Estate	356.6	7.4%	**8.5**	**5.4**	**5.1**	**6.4**	**6.3**
IPD Large Institutional All Property Index			*7.0*	*5.8*	*8.0*	*7.1*	*7.0*
Infrastructure and Private Debt and Loan	176.1	3.6%	**10.6**	**8.3**	**19.1**	**8.1**	**9.9**
CPI plus 6%			*8.1*	*7.2*	*7.4*	*8.0*	*7.6*
Timberland	39.5	0.8%	**17.5**	**10.1**	**7.6**	**(2.9)**	**7.6**
CPI plus 4%			*6.1*	*5.2*	*5.4*	*6.0*	*5.6*
Private Equities	28.2	0.6%	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
CPI plus 6.5%			*8.6*	*7.7*	*7.9*	*8.5*	*8.1*
Strategic Investments	**$ 47.1**	**1.0%**	**7.0**	**(3.2)**	**42.9**	**16.0**	**17.5**
Currency Hedges	**(0.1)**	**-**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**

(1) The Consumer Price Index (CPI) is reported on a one month lagged basis.

Administration Report

The Board of Trustees for the Universities Academic Pension Plan is responsible for the ongoing operation and administration, including the collection of member data and contributions, the calculation and payment of pension benefits, and the communication of pension information to plan members and employers. The 2017 results in these areas are as follows.

Membership

There are three types of members of the UAPP:

- Active members are those currently employed by an employer participating in the plan.
- Deferred members are those who have terminated and have accrued benefits in the plan but have not withdrawn their entitlement or commenced a pension.
- Pensioners are those who have commenced a pension, including surviving spouses.

Participation

Participation	2017	2016
Active Members	8,153	7,997
Deferred Members	2,114	1,977
Pensioners	5,380	5,138
Total	**15,647**	**15,112**

Active membership in the UAPP increased 2.0% in 2017 from 7,997 at December 31, 2016 to 8,153 members at December 31, 2017. For the 3rd consecutive calendar year, the plan experienced growth in active membership. Over the last decade, active membership in the UAPP has grown at an average annual rate of 1.5%.

The number of retired members and surviving spouses of pensioners receiving a pension from the UAPP increased by 4.7% during 2017, rising to 5,380 at December 31, 2017 from 5,138 at the start of the year. The most popular pension choice among new retirees with a spouse continues to be a Joint Life pension.

Retirement Type	2017	2016
Retirements at Age 65 or Later	120	63
Retirements Before Age 65	201	163
Pensions to Surviving Spouses	8	3
Total	**329**	**229**

The number of deferred members who continue to have funds in the Plan increased to 2,114 at the end of 2017 from 1,977 at December 31, 2016. This group continues to be the fastest growing group as it has increased at an average annual rate of 6.9% over the last ten years.

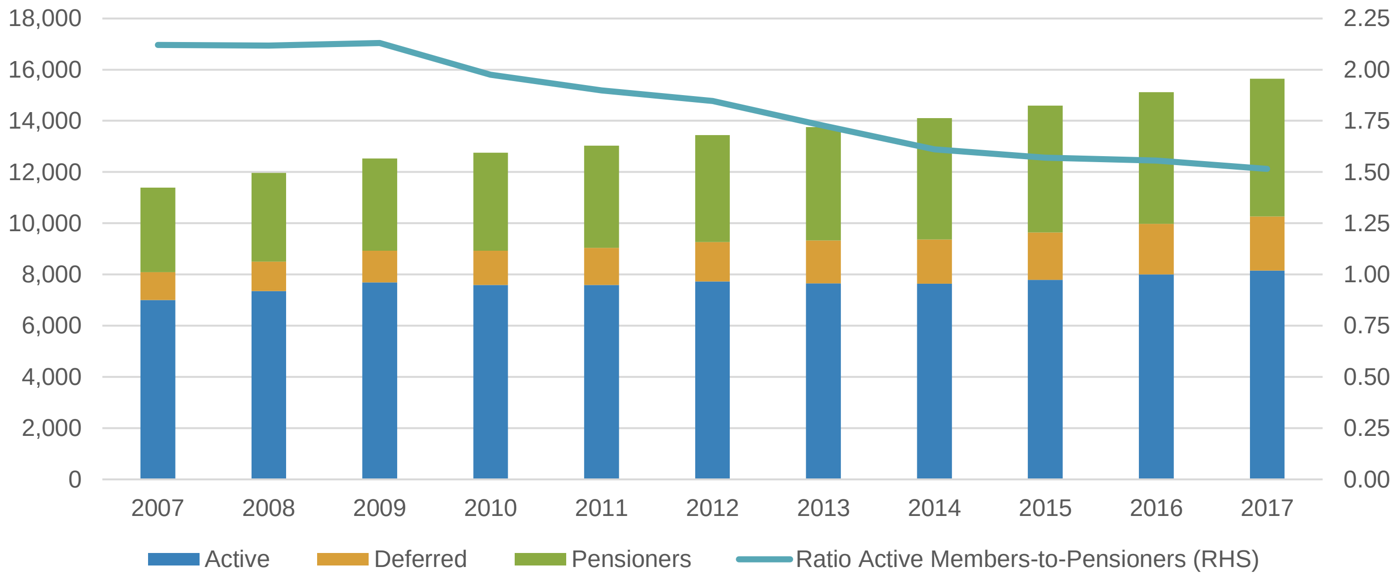
New Pensioner Retirement Choices

Percentage Electing Option	2017	2016
Single life – with or without guarantee	20%	33%
Joint life – 2/3 spouse, no guarantee	11%	8%
Joint life – 2/3 spouse, 10-year guarantee	15%	21%
Joint life – 100% spouse, no guarantee	18%	14%
Joint life – 100% spouse, 10-year guarantee	36%	24%
TOTAL	**100%**	**100%**

Monthly Payment Distribution As At December 31, 2017

Dollar Value ($) Per Month	Member Pensions	Spouse Pensions	Total
1 to 999	854	29	883
1,000 to 1,999	732	37	769
2,000 to 2,999	661	33	694
3,000 to 3,999	697	25	722
4,000 to 4,999	768	13	781
5,000 to 5,999	596	7	603
6,000 to 6,999	443	7	450
7,000 and over	474	4	478
TOTAL	**5,225**	**155**	**5,380**

Growth of Membership by Group



Administration Report

Cash Flow

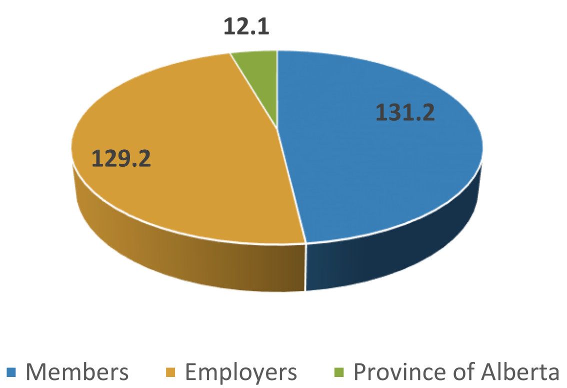
Total contributions received from employers, employees, and the Province of Alberta were higher by 5.1% in 2017 ($272.5 million) versus 2016 ($259.4 million) due to growth in the UAPP's active membership, higher salaries, and higher contribution rates.

Total payments to pensioners grew by 4.1% during 2017 to $229.5 million from $220.5 million in 2016. Pensioners received a cost-of-living increase of 0.78% effective January 1, 2017.

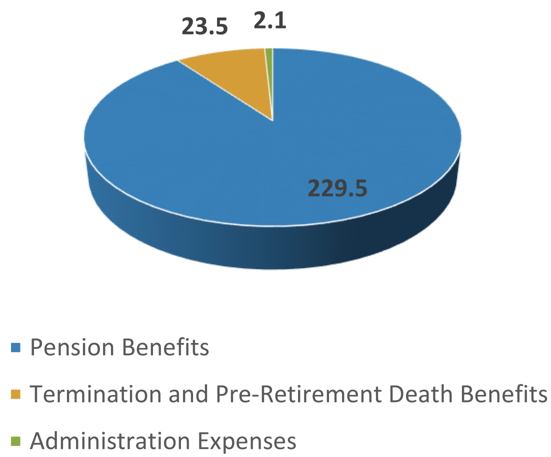
Termination and pre-retirement death benefit payments to or on behalf of former members of the UAPP were $23.5 million for 2017 (2016: $15.9 million). The significant increase is due to an increase in the number of members who terminated and withdrew benefits.

Management strives to ensure service providers provide efficient and cost-effective services to the UAPP. The UAPP's general plan expenses amounted to $2.1 million during 2017 ($140 per member) compared to $2.2 million ($145 per member) in 2016.

Contributions ($ millions)



Payments ($ millions)



TEN-YEAR FINANCIAL AND MEMBERSHIP REVIEW

Financial Position ($ millions)	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Fair Value of Net Assets	$4,851.1	$4,349.3	$4,043.7	$3,767.6	$3,357.2	$2,952.0	$2,627.5	$2,540.4	$2,294.3	$1,986.6
Actuarial Adjustment	-$173.7	-$48.0	-$105.7	-$202.2	-$185.6	-$61.8	$31.3	-$113.2	$124.7	$198.7
Actuarial Value of Assets	**$4,677.4**	**$4,301.3**	**$3,938.0**	**$3,565.4**	**$3,171.6**	**$2,890.2**	**$2,658.8**	**$2,427.2**	**$2,419.0**	**$2,185.3**
Accrued Pension Liability	$5,626.8	$5,174.1	$4,961.0	$4,708.0	$4,339.4	$3,996.5	$3,819.0	$3,550.1	$3,390.0	$3,240.7
Actuarial Deficiency	**-$949.4**	**-$872.8**	**-$1,023.0**	**-$1,142.6**	**-$1,167.8**	**-$1,106.3**	**-$1,160.2**	**-$1,122.9**	**-$971.0**	**-$1,055.4**
Funded Ratio	83.1%	83.1%	79.4%	75.7%	73.1%	72.3%	69.6%	68.4%	71.4%	67.4%
Pre-1992 Period Only										
Fair Value of Net Assets	$744.8	$750.4	$787.6	$824.9	$826.0	$819.5	$821.1	$886.3	$892.5	$851.8
Actuarial Adjustment	-$31.9	-$11.1	-$25.5	-$51.0	-$52.5	-$20.1	$6.5	-$48.3	$59.1	$85.5
Actuarial Value of Assets	**$712.9**	**$739.3**	**$762.1**	**$773.9**	**$773.5**	**$799.4**	**$827.6**	**$838.0**	**$951.6**	**$937.3**
Accrued Pension Liability	$1,547.5	$1,577.7	$1,627.0	$1,677.6	$1,626.1	$1,566.7	$1,599.9	$1,592.0	$1,617.6	$1,689.7
Actuarial Deficiency	**-$834.6**	**-$838.4**	**-$864.9**	**-$903.7**	**-$852.6**	**-$767.3**	**-$772.3**	**-$754.0**	**-$666.0**	**-$752.4**
Funded Ratio	46.1%	46.9%	46.8%	46.1%	47.6%	51.0%	51.7%	52.6%	58.8%	55.5%
Post-1991 Period Only										
Fair Value of Net Assets	$4,106.3	$3,598.9	$3,256.1	$2,942.7	$2,531.2	$2,132.5	$1,806.4	$1,654.1	$1,401.8	$1,134.8
Actuarial Adjustment	-$141.8	-$36.9	-$80.2	-$151.2	-$133.1	-$41.7	$24.9	-$64.9	$65.6	$113.2
Actuarial Value of Assets	**$3,964.5**	**$3,562.0**	**$3,175.9**	**$2,791.5**	**$2,398.1**	**$2,090.8**	**$1,831.3**	**$1,589.2**	**$1,467.4**	**$1,248.0**
Accrued Pension Liability	$4,079.3	$3,596.4	$3,334.0	$3,030.4	$2,713.3	$2,429.8	$2,219.1	$1,958.1	$1,772.4	$1,551.0
Actuarial Deficiency	**-$114.8**	**-$34.4**	**-$158.1**	**-$238.9**	**-$315.2**	**-$339.0**	**-$387.8**	**-$368.9**	**-$305.0**	**-$303.0**
Funded Ratio	97.2%	99.0%	95.3%	92.1%	88.4%	86.0%	82.5%	81.2%	82.8%	80.5%
Contributions	$272.5	$259.4	$240.9	$231.1	$221.9	$212.0	$198.6	$190.0	$166.2	$141.8
Benefit Payments	$253.1	$236.3	$243.6	$223.6	$205.4	$194.8	$184.0	$174.2	$161.6	$155.0
Administrative Expenses	$2.1	$2.2	$2.1	$2.1	$1.7	$1.8	$1.9	$1.8	$1.9	$1.8
Investment Expenses	$21.0	$10.7	$13.8	$12.8	$11.8	$9.2	$6.9	$6.4	$6.1	$6.6
Total Return on Investments	11.3%	7.1%	7.6%	12.2%	13.1%	11.8%	3.2%	10.0%	15.5%	-20.4%
Discount Rate	5.60%	5.95%	5.95%	6.25%	6.25%	6.40%	6.40%	6.70%	6.70%	6.70%
January 1 Cost-of-Living Adjustment	0.78%	0.72%	1.56%	0.72%	0.96%	1.20%	0.60%	0.06%	2.16%	2.94%
Plan Members										
Active	8,153	7,997	7,790	7,640	7,652	7,727	7,592	7,582	7,682	7,345
Deferred	2,114	1,977	1,849	1,720	1,672	1,532	1,444	1,338	1,244	1,159
Pensioners	5,380	5,138	4,960	4,745	4,434	4,185	3,998	3,838	3,607	3,468
Total	**15,647**	**15,112**	**14,599**	**14,105**	**13,758**	**13,444**	**13,034**	**12,758**	**12,533**	**11,972**
Average Age (Active)	48.8	48.8	48.7	48.8	48.8	48.6	48.5	48.2	47.8	47.7
Average Service (Active)	9.6	9.6	9.6	9.5	9.5	9.5	9.3	9.0	9.1	9.2
Average Capped Salary	$115,241	$114,079	$111,971	$110,150	$107,733	$107,209	$104,245	$101,779	$98,510	$94,204
Average Age (Pensioners)	73.8	73.5	72.2	72.9	73.0	72.8	72.5	72.2	72.0	72.2
Average Annual Pension	$44,465	$44,782	$44,469	$43,966	$43,557	$42,953	$43,209	$42,940	$42,593	$42,393

Administration Report

Service to Members

Management strives to provide high-quality pension services in a timely manner to UAPP members. Service standards have been established and the delivery of services against those standards is closely monitored in an effort to assess and promote quality service.

Service standards of direct interest to members are as follows:

Responsibilities	Service Level Standards	2017 Results
Time to answer calls	80% of calls answered within 20 seconds with a call abandonment rate below 5%	95.0% of calls answered within 20 seconds with a call abandonment rate of 2.1%
Escalated calls and voice mails	Answered within 1 business day	98.5% of calls answered within 1 business day
Emails	Answered within 2 business days	97.3% of emails answered within 2 business days
Written enquiries	Answered within 5 business days	100.0% of written enquiries answered within 5 business days
Statement of options on termination	5 business days from receipt of all required information	90.6% of options on termination issued within 5 business days from receipt of all required information
Statement of options on retirement	5 business days from receipt of all required information	90.4% of options on retirement issued within 5 business days from receipt of all required information
Statement of options on death	5 business days from receipt of all required information	91.2% of options on death issued within 5 business days from receipt of all required information
MPO* estimate requests	5 business days from receipt of all required information	76.9% of MPO estimates issued within 5 business days from receipt of all required information
MPO final calculations	10 business days from receipt of all required information	100% of MPO final calculations issued within 10 business days from receipt of all required information
MPO payment authorization	3 business days from receipt of all required information	100% of all MPO payment authorizations issued within 3 business days from receipt of all required information

*Matrimonial Property Order

Administration Report

Plan Communications

The 2017 Member Handbook was prepared and posted to our website in February 2017, and the quarterly Communiqué was issued to update members and employers on topical subjects related to UAPP and pensions. Annual member statements, highlighting individual pension entitlements as at December 31, 2016, were posted to the Retirement Planner for active members in May and mailed to retired members in June. A message section has been added to the Retirement Planner to help the Trustees' Office and Conduent communicate directly with Plan members. Small modifications were made to the Information Sheets posted on the UAPP website. The Trustees' Office presented pension seminars for groups of employees as well as one-on-one information sessions promoting member understanding of the pension plan. A video version of the seminar is posted on the website.

The UAPP website experienced a slight decrease in number of visitors in 2017 as it had over 54,000 hits during the year. Popular areas of interest on the site included Frequently Asked Questions, Contact Us, Forms, Member Handbook, Links, News, Annual Report, Information Sheets, Contribution Rates, Communiqués, and Video Member Seminar.

Plan members made significantly greater use of the Conduent helpline for pension-related information during 2017 as there were almost 3,500 calls handled by the call center in the year. Plan members accessed the Retirement Planner over 9,000 times during the year.

Other Developments in 2017

- The new Retirement Planner portal was launched in the fall. The updates include a fresh new look, self-registration to allow members to reset their own password, and milestone dates for members to consider in retirement planning.
- A seventh pensioner status confirmation commenced in 2017 in accordance with the audit policy.
- Pension forms and standard letters were reviewed and updated with small changes.
- A live demonstration of the Retirement Planner was added to the member information seminars offered during the year.
- Member satisfaction surveys were provided to new retirees and responses suggest communication needs are being met by attending information sessions, reviewing the UAPP website, and utilizing the Conduent Call Centre and their employer's Human Resources group.
- The Pension Benefits Administration User Group continued to meet to discuss common issues.

The Year Ahead

Key plans for 2018 include:

- Assess effectiveness of and seek improvements to UAPP website.
- Review pensioner status confirmation audit policy.
- Complete and implement the re-design of pension forms and standard letters.
- Continue to offer member information seminars and one-on-one member sessions.
- Work with employers to review potential improvements to processes.
- Update the employer administration manual.

Management's Responsibility for Financial Reporting

The financial statements and information in the 2017 Annual Report are the responsibility of management and have been approved by the Board of Trustees.

The financial statements have been prepared in conformity with Canadian accounting standards for pension plans and, of necessity, include some amounts that are based on estimates and judgments. Financial information presented in the 2017 Annual Report that relates to the operations and financial position of the Universities Academic Pension Plan is consistent with that in the financial statements.

Alberta Investment Management Corporation (AIMCo), Beutel, Goodman & Company Ltd. and Fiera Capital Corporation, acting as investment managers, and Conduent Human Resource Services and CIBC Mellon, acting as pension administrators, maintain systems of internal control, including written policies, standards and procedures and formal authorization structures.

These systems are designed to provide management with reasonable assurance that transactions are properly authorized, reliable financial records are maintained and assets are adequately accounted for and safeguarded.

The Audit Committee assists the Board of Trustees in discharging its responsibility to approve the annual financial statements. The Committee meets regularly with both management and external auditors to review the scope and timing of the audit as well as to review any internal control or financial issues and their resolution. The Committee reviews the annual financial statements and recommends them to the Board of Trustees for approval.

KPMG LLP (KPMG), the Plan's external auditor, provides an independent audit of the operations, investments, and financial statements. Their examination is conducted in accordance with Canadian generally accepted auditing standards and includes tests and other procedures that allow them to report on the fairness of the financial statements in accordance with Canadian accounting standards for pension plans. KPMG has full and unrestricted access to discuss the audit and related findings regarding the integrity of financial reporting and the adequacy of internal controls.

Dave Schnore
Executive Director

Chris Schafer
Director, Finance & Administration

Independent Auditors' Report

To the Board of Trustees of Universities Academic Pension Plan

We have audited the accompanying financial statements of Universities Academic Pension Plan, which comprise the statement of financial position as at December 31, 2017, the statements of changes in net assets available for benefits and changes in pension obligation for the year then ended, and notes, comprising 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 necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an 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 our 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, we consider 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.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Universities Academic Pension Plan as at December 31, 2017, and the 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.

KPMG LLP

Chartered Professional Accountants
Edmonton, Canada
April 9, 2018

Statement of Financial Position

As at December 31, 2017

	($ thousands) 2017	2016
Net assets available for benefits		
Assets		
Investments (Note 3)	$ 4,828,802	$ 4,329,190
Contributions receivable		
Employers	10,579	9,937
Employees	10,905	10,154
Province of Alberta	1,041	624
Accounts receivable	512	185
Total Assets	4,851,839	4,350,090
Liabilities		
Accounts payable and accrued liabilities	771	815
Total Liabilities	771	815
Net assets available for benefits	$ 4,851,068	$ 4,349,275
Pension obligation and deficit		
Pension obligation (Note 5)	$ 5,626,800	$ 5,174,100
Deficit (Note 6)	(775,732)	(824,825)
Pension obligation and deficit	$ 4,851,068	$ 4,349,275

The accompanying notes are part of these financial statements.

Statement of Changes In Net Assets Available For Benefits

For the year ended December 31, 2017

	2017	2016
	($ thousands)	
Increase in assets		
Contributions (Note 7)	$ 272,505	$ 259,353
Investment income (Note 8)	505,517	295,434
	778,022	554,787
Decrease in assets		
Benefit payments (Note 10)	(253,062)	(236,336)
Investment expenses (Note 11)	(21,045)	(10,678)
Administrative expenses (Note 12)	(2,122)	(2,152)
	(276,229)	(249,166)
Increase in net assets	501,793	305,621
Net assets available for benefits at beginning of year	4,349,275	4,043,654
Net assets available for benefits at end of year	$ 4,851,068	$ 4,349,275

The accompanying notes are part of these financial statements.

Statement of Changes In Pension Obligation

For the year ended December 31, 2017

($ thousands)

	2017			2016
	Pre-1992	Post-1991	Total	Total
Increase in pension obligation				
Interest accrued on pension obligations	$ 93,900	$ 224,500	$ 318,400	$ 305,200
Benefits earned	-	175,900	175,900	169,200
Actuarial assumption changes (Note 5(a))	43,000	197,300	240,300	-
	136,900	597,700	734,600	474,400
Decrease in pension obligation				
Benefits paid, including interest	137,600	123,000	260,600	243,400
Net experience gains (losses)	21,300	(17,400)	3,900	-
Cost-of-living experience gain	8,200	9,200	17,400	17,900
	167,100	114,800	281,900	261,300
Net increase (decrease) in pension obligation	(30,200)	482,900	452,700	213,100
Pension obligation at beginning of year	1,577,700	3,596,400	5,174,100	4,961,000
Pension obligation at end of year	$ 1,547,500	$ 4,079,300	$ 5,626,800	$ 5,174,100

The accompanying notes are part of these financial statements.

Notes to the Financial Statements
For the year ended December 31, 2017

NOTE 1 SUMMARY DESCRIPTION OF THE PLAN

Effective January 1, 2001, the Universities Academic Pension Plan (the "Plan") became a non-statutory pension plan subject to and registered under the Employment Pension Plans Act of Alberta. The Plan is also registered under the Income Tax Act. The Plan's registration number is 0339572. The Plan operates under a Sponsorship and Trust Agreement signed by the Plan Sponsors. A complete description of the Plan can be found in the Sponsorship and Trust Agreement. The Board of Trustees appointed by Plan Sponsors is responsible for administration of the Plan. The summary description of the Plan described below applies to members who contribute to the Plan on or after January 1, 2001.

a) GENERAL

The Plan is a contributory defined benefit pension plan for academic staff members and other eligible employees of the Universities of Alberta, Calgary and Lethbridge, Athabasca University and Banff Centre. In addition, employees of the Board of Trustees and the professional staff of the University of Calgary Faculty Association, the Association of Academic Staff University of Alberta and the Athabasca University Faculty Association also participate in the Plan.

b) FUNDING POLICY

Contributions and investment earnings are expected to fund all benefits payable under the Plan. Employees and employers are responsible for fully funding service after 1991.

The unfunded liability for service prior to January 1, 1992 is financed by additional contributions from the Province of Alberta, employers and employees. These contribution rates are set on the basis that the additional contributions will eliminate the pre-1992 service unfunded liability on or before December 31, 2043. The Province pays 1.25% of salary and the balance of the required contributions are equally split between employees and employers.

Under the Employment Pension Plans Amendment Regulation 245/2003 (Order in Council 357/2003), the Plan is exempt from funding solvency deficiencies effective January 1, 2003 in respect of all service.

The Board of Trustees, in consultation with the Plan's actuary, reviews the contribution rates at least once every three years.

The contribution rates in effect from July 1, 2016 for employees of the Universities of Alberta, Calgary and Lethbridge, employees of the Board of Trustees, and the professional staff of the University of Calgary Faculty Association and the Association of Academic Staff University of Alberta were 12.41% of pensionable salary up to the YMPE, 15.91% on pensionable salary above the YMPE and up to the pensionable salary cap, and 1.77% on earnings above the pensionable salary cap. Employers contribute at the same rate as employees.

The contribution rates in effect from July 1, 2016 for employees of Athabasca University, Banff Centre and the professional staff of the Athabasca University Faculty Association were 11.91% of pensionable salary up to the YMPE and 15.41% on pensionable salary above the YMPE and up to the pensionable salary cap. Employers contribute at a rate 1.0% higher than employees. In addition, employees and employers provide equal matching contributions of 1.77% on earnings above the pensionable salary cap.

Note 1 (continued)

Effective July 1, 2018, contribution rates for employees of the Universities of Alberta, Calgary, and Lethbridge, employees of the Board of Trustees, and the professional staff of the University of Calgary Faculty Association and the Association of Academic Staff University of Alberta shall change to 12.46% of pensionable salary up to the YMPE, 16.23% on pensionable salary above the YMPE and up to the pensionable salary cap, and 1.45% on earnings above the pensionable salary cap. Employers contribute at the same rate as employees.

Also effective July 1, 2018, contribution rates for employees of Athabasca University, Banff Centre, and the professional staff of the Athabasca University Faculty Association shall change to 11.96% of pensionable salary up to the YMPE and 15.73% on pensionable salary above the YMPE and up to the pensionable salary cap. Employers contribute at a rate 1.0% higher than employees. In addition, employees and employers provide equal matching contributions of 1.45% on earnings above the pensionable salary cap.

c) RETIREMENT BENEFITS

The Plan provides for a pension based upon the average pensionable salary of the highest five consecutive years. For service before 1994, the pension is 2% for each year of pensionable service. From January 1, 1994, the Plan's benefits and contributions were integrated with the Canada Pension Plan. As a result, pensions for service after 1993 are reduced at age 65. The reduction is 0.6% of the average YMPE for the same five years as used in calculating the average pensionable salary of the highest five consecutive years. The maximum service allowable under the Plan is 35 years.

Members are entitled to an unreduced pension for service before 1994 if they have attained age 55.

Members are entitled to an unreduced pension for service after 1993 if they have either attained age 60 or have attained age 55 and the sum of their age and years of membership equals at least 80. Members are entitled to a reduced pension for service after 1993 if they have attained age 55.

Members who become disabled and are not in receipt of benefits from an approved disability plan are eligible to apply for a disability pension.

d) DEATH BENEFITS

Death benefits are payable on the death of a member. A surviving spouse may choose to receive a pension based on total service or a lump sum payment. For a beneficiary other than a spouse, a lump sum payment must be paid.

Note 1 (continued)

e) TERMINATION BENEFITS

Members who terminate and are not immediately entitled to a pension may elect to receive a deferred pension or a lump sum refund.

Refunds on service performed before 1994 equal employee and employer contributions plus interest, or the commuted value of the member's earned pension, whichever is greater.

Refunds on service performed after 1993 equal 1.75 times employee contributions plus interest, or the commuted value of the member's earned pension, whichever is greater.

Refunds are subject to the Plan's lock-in provisions and excess contribution rules.

f) DISABILITY BENEFITS

Members who become disabled and are in receipt of benefits from an approved disability plan continue to earn pensionable service credits under the Plan.

g) OPTIONAL SERVICE

Leaves of absence which are purchased before April 30th following a return to work are costed based on the contributions which would have been paid during the leave period plus interest. All other optional service purchases are costed on an actuarial reserve basis and are cost neutral to the Plan. Funds related to the transfer of service to other plans are based on the regular termination benefits.

h) COST-OF-LIVING ADJUSTMENTS

Pensions payable 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.

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) STANDARDS ISSUED BUT NOT YET EFFECTIVE

In July 2014, the International Accounting Standards Board issued: IFRS9 – Financial Instruments (effective for annual periods beginning on or after January 1, 2018) to replace IAS 39 – Financial Instruments and IFRIC – Reassessment of Embedded Derivatives and seeks to establish principles for the financial reporting that will present relevant and useful information to users of financial statements. Management does not expect this standard to have a material impact 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").

Contracts to buy and sell financial instruments in the pools are between the investment managers and the third parties 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. The investment managers control 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.

Note 2 (continued)

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 the investment managers (see Note 3(b)). 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 the investment managers on the fourth business day following the year end. Differences in valuation estimates provided to Treasury Board and Finance after the year end cut-off date are reviewed by management.

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 includes the following items recorded in the plan account

i. Income distributions from the pools, based on the Plan's pro-rata share of total units issued by the pools; and

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.

Note 2 (continued)

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) CONTRIBUTIONS, BENEFIT PAYMENTS AND ADMINISTRATIVE EXPENSES

Contributions, benefit payments, administrative expenses and related accounts receivable and payable are recorded on an accrual basis.

g) 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. A valuation must be performed at least 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.

Note 2 (continued)

(h) 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, real estate and timberland pools. 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, real estate and timberland pools 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, 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 statements 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.

i) 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. The Plan's assets are managed in accordance with the Statement of Investment Policies and Goals (SIP&G) approved by the Plan's Board of Trustees. 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 the pool units. The investment managers are delegated authorities 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]			2017	2016
Asset class	Level 1	Level 2	Level 3	**Fair Value**	**Fair Value**
Fixed Income					
Cash and short-term securities	$ -	$ 19,152	$ -	$ 19,152	$ 33,911
Bonds and mortgages	-	1,170,776	175,767	1,346,543	904,907
Real return bonds	-	325,763	-	325,763	308,414
	-	1,515,691	175,767	1,691,458	1,247,232
Public Equities					
Canadian	461,082	34,060	109,085	604,227	836,180
Global	1,131,719	123,448	267,749	1,522,916	1,322,572
Emerging markets	276,253	21,133	65,357	362,743	343,392
	1,869,054	178,641	442,191	2,489,886	2,502,144
Alternatives					
Real estate	-	-	356,635	356,635	354,717
Private equity	-	-	28,222	28,222	-
Infrastructure and private debt and loans	-	-	176,049	176,049	138,676
Timberland	-	-	39,518	39,518	36,962
	-	-	600,424	600,424	530,355
Strategic and currency investments*	-	(109)	47,143	47,034	49,459
Total investments	$1,869,054	$1,694,223	$1,265,525	$4,828,802	$4,329,190

* 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).

Note 3 (continued)

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 totaling $1,869,054 (2016: $2,076,511).
- ***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 totaling $1,694,223 (2016: $1,392,208). 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 and all alternative investments totaling $1,265,525 (2016: $860,471).

Reconciliation of Level 3 Fair Value Measurements:

	($ thousands) 2017	2016
Balance, beginning of year	$ 860,471	$ 884,046
Investment income *	40,222	47,221
Purchases of Level 3 pooled fund units	479,589	42,145
Sale of Level 3 pooled fund units	(114,757)	(112,941)
Balance, end of year	$ 1,265,525	$ 860,471

* Investment income includes unrealized losses of $10,415 (2016: $165).

Note 3 (continued)

b) **Valuation of Financial Instruments in the Pools**

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

- ***Fixed income:*** 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. Real return bonds are valued similar to public interest bearing securities.
- ***Public 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.
- ***Alternatives:*** 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 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. Infrastructure investments are valued similar to private equity investments. Private debt and loans are valued similar to private mortgages. The fair value of timberland investments is appraised annually by independent third party evaluators.
- ***Strategic and currency investments:*** The estimated fair value of infrastructure investments held in emerging market countries are valued similar to private equities. 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 values of derivative contracts in favorable and unfavorable positions are recorded at fair value and are included in the fair value of pooled investment funds (see Note 4(f)). The estimated fair values of equity and bond index swaps are 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. 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 foreign 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 of Trustees. The purpose of the SIP&G is to ensure the Plan assets are invested and managed in a prudent manner in accordance with current, accepted governance practices incorporating an appropriate level of risk. The Board of Trustees 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 4(b)).

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 of Trustees has established the following asset mix policy ranges:

Asset Class	Target Asset Policy Mix	Actual Asset Mix 2017		Actual Asset Mix 2016	
		($ thousands)	*%*	*($ thousands)*	*%*
Fixed income	26 - 41%	$ 1,691,458	35.0	$ 1,247,232	28.8
Public equities	40 - 60%	2,489,886	51.6	2,502,144	57.8
Alternatives	12 - 25%	600,424	12.4	530,355	12.3
Strategic and currency investments	(a)	47,034	1.0	49,459	1.1
		$ 4,828,802	100.0	$ 4,329,190	100.0

(a) An investment manager may, at its discretion, use currency overlays limited to a notional amount of 2.5% of that manager's mandate of the Plan's assets.

Note 4 (continued)

a) Credit Risk

i) Debt securities

The Plan is indirectly exposed to credit risk associated with the underlying debt securities held in the pools. 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. The credit rating of a debt security may be impacted by the overall credit rating of the counterparty, the seniority of the debt issue, bond covenants, maturity distribution and other factors. 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 have credit ratings considered to be investment grade.

The table below summarizes the Plan's investments in debt securities by credit rating at December 31, 2017:

Credit rating	2017	2016
Investment Grade (AAA to BBB-)	86.2%	83.8%
Speculative Grade (BB+ or lower)	0.1%	0.0%
Unrated	13.7%	16.2%
	100.0%	100.0%

ii) Counterparty default risk - derivative contracts

The Plan is exposed to counterparty credit risk associated with the derivative contracts held in the pools. The maximum credit risk in respect of derivative financial instruments is the fair value of all contracts with counterparties in a favourable position (see Note 4(f)). The investment manager is responsible for selecting and monitoring derivative counterparties on behalf of the Plan. The investment manager monitors counterparty risk exposures and actively seeks to mitigate counterparty risk by requiring that counterparties collateralize mark-to-market gains for the Plan. Provisions are in place to allow for termination of the contract should there be a material downgrade in a counterparty's credit rating. 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 Plan participates 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, 2017, the Fund's share of securities loaned under this program is $374,342 (2016: $361,730) and collateral held totals $404,175 (2016: $386,476). 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.

Note 4 (continued)

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 value of investments denominated in foreign currencies is 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 39% (2016: 38%) of the Plan's investments, or $1,859,000 (2016: $1,662,359), are denominated in currencies other than the Canadian dollar, with the largest foreign currency exposure being to the US dollar at 18% (2016: 18%) and the Euro at 4% (2016: 4%).

If the value of the Canadian dollar increased by 10% against all other currencies, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 3.5% of total investments (2016: 3.5%).

The following table summarizes the Plan's exposure to foreign currency investments held in the pools:

($ thousands)

2017			2016		
Currency		**Fair Value**	**Currency**		**Fair Value**
US dollar	$	887,327	US dollar	$	791,593
Euro		192,065	Euro		152,143
Japanese yen		135,962	Japanese yen		109,258
British pound		95,624	British pound		82,843
Hong Kong dollar		86,969	Hong Kong dollar		72,811
South Korean won		58,634	South Korean won		56,587
Brazilian real		53,773	Brazilian real		52,337
			Indian rupee		43,068
Other foreign currencies (<1%)		348,646	Other foreign currencies (<1%)		301,719
Total foreign currencies	$	1,859,000	**Total foreign currencies**	$	1,662,359

Note 4 (continued)

c) Interest Rate Risk

The Plan is exposed to interest rate risk associated with the underlying interest-bearing securities held in pooled investment funds. 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 1.0% and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 5.8% (2016: 4.8%) of total investments.

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 the pools. 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 in fair value to the Plan would be approximately 5.9% (2016: 5.7%) of total investments. 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 active markets that are easily sold and converted to cash. Units in pools that hold private investments like real estate, timberland, infrastructure and private equities are less easily converted to cash since the underlying securities are illiquid because they take more time to sell. These sources of cash are used to pay pension benefits and operating expenses, purchase new investments, settle derivative transactions with counterparties and settle margin calls on futures contracts. The Plan's future liabilities include the pension obligation and exposure to net payables to counterparties (Note 4(f)).

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. Derivative financial instruments are used to 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.

Note 4 (continued)

By counterparty	Number of counterparties 2017	Number of counterparties 2016	Plan's Indirect Share ($ thousands) 2017	Plan's Indirect Share ($ thousands) 2016
Contracts in net favourable position (current credit exposure)	59	39	$ 57,652	$ 22,590
Contracts in net unfavourable position	14	8	(37,607)	(4,899)
Net fair value of derivative contracts	73	47	$ 20,045	$ 17,691

Types of derivatives used in pools	Plan's Indirect Share ($ thousands) 2017	Plan's Indirect Share ($ thousands) 2016
Structured equity replication derivatives	$ 13,983	$ 17,278
Foreign currency derivatives	3,530	(181)
Interest rate derivatives	1,202	(325)
Credit risk derivatives	1,330	919
Net fair value of derivative contracts	$ 20,045	$ 17,691

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 net favorable position totaling $57,652 (2016: $22,590) 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, they are not recognized in the statement of financial position.

i) Structured equity replication derivatives: Equity derivatives 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 derivatives. 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, 2017 deposits in futures contracts margin accounts totaled $4,836 (2016: $13,452) and deposits as collateral for derivative contracts totaled $(503) (2016: $nil).

NOTE 5 PENSION OBLIGATION

(a) ACTUARIAL VALUATION AND EXTRAPOLATION

An actuarial valuation of the Plan was carried out as at December 31, 2016 by the Plan's actuarial consultants, Aon Hewitt. The December 31, 2016 valuation results were extrapolated to December 31, 2017.

The pension obligation was determined using the projected benefit method prorated on service. The assumptions used in the valuation extrapolation were developed as the best estimate of expected short-term and long-term market conditions and other future events. After consultation with the Plan's actuary, the Board of Trustees adopted this best estimate.

The major assumptions used were:

	2016 Valuation and 2017 Extrapolation	**2014 Valuation and 2016 Extrapolation**
	%	%
Asset real rate of return		
For 2 years after valuation	3.35	3.70
Thereafter	3.35	3.70
Inflation rate		
For 2 years after valuation	2.25	2.25
Thereafter	2.25	2.25
Discount rate	5.60	5.95
Salary escalation rate *		
For 2 years after valuation	1.50	1.00
Thereafter	2.75	2.75
Mortality table	85% (100% for females) of 2014 Public Sector Canadian Pensioner table with generational projection (Scale CPM-B)	85% (100% for females) of 2014 Public Sector Canadian Pensioner table with generational projection (Scale CPM-B)

** In addition to merit and promotion*

The next actuarial valuation of the Plan will be carried out no later than December 31, 2019. Any differences between the actuarial valuation results and extrapolation results as reported in these financial statements that affect the financial position of the Plan will be accounted for as gains or losses in the following year.

Note 5 (continued)

b) SENSITIVITY OF CHANGES IN MAJOR ASSUMPTIONS

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

	Changes in Assumptions (%)	Increase in Plan's Actuarial 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	402,100	1.88
Salary escalation rate increase holding inflation rate and discount rate assumptions constant	1.0	77,400	0.87
Discount rate decrease holding inflation rate and salary escalation assumptions constant	(1.0)	821,500	4.64

* The current service cost as a % of pensionable earnings as determined by the December 31, 2016 valuation is 21.52% (December 31, 2014 valuation: 20.03%)

NOTE 6 DEFICIT

($ thousands)

	2017			2016
	Pre-1992	Post-1991	Total	Total
Deficit (surplus), beginning of year	$ 827,300	$ (2,475)	$ 824,825	$ 917,346
Decrease (increase) in net assets available for benefits	5,600	(507,393)	(501,793)	(305,621)
Net (decrease) increase in accrued pension liability	(30,200)	482,900	452,700	213,100
Deficit (surplus), end of year	$ 802,700	$ (26,968)	$ 775,732	$ 824,825

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

The following table summarizes the net assets available for benefits, pension obligation, and the resulting deficit (surplus) as at December 31, 2017 allocated between the pre-1992 and post-1991 periods:

($ thousands)

	2017			2016
	Pre-1992	Post-1991	Total	Total
Net assets available for benefits	$ 744,800	$ 4,106,268	$ 4,851,068	$ 4,349,275
Pension obligation	1,547,500	4,079,300	5,626,800	5,174,100
Deficit (surplus)	$ 802,700	$ (26,968)	$ 775,732	$ 824,825

The deficit (surplus) for accounting purposes may differ from that for funding purposes (see Note 14).

NOTE 7 CONTRIBUTIONS

($ thousands)	2017	2016
Current service		
Employers	$ 89,973	$ 84,145
Employees	89,680	84,094
Contributions to meet post-1991 unfunded liability and optional service		
Employers	22,145	23,473
Employees	24,423	26,281
Contributions to meet pre-1992 unfunded liability		
Employers	17,103	14,884
Employees	17,103	14,884
Province of Alberta	12,078	11,592
	$ 272,505	$ 259,353

NOTE 8 INVESTMENT INCOME

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

($ thousands)

	Income (Loss)	Change in Fair Value	2017 Total	2016 Total
Fixed income	$ 71,580	$ (10,359)	$ 61,221	$ 32,321
Public equities				
Canadian	29,782	33,690	63,472	148,110
Foreign	267,196	57,347	324,543	80,842
	296,978	91,037	388,015	228,952
Alternatives				
Real estate	15,386	14,573	29,959	19,705
Private equity	209	185	394	-
Infrastructure and private debt and loans	20,779	(4,490)	16,289	12,743
Timberland	3,916	2,483	6,399	3,575
	40,290	12,751	53,041	36,023
Strategic and currency investments	5,921	(2,681)	3,240	(1,862)
	$ 414,769	$ 90,748	$ 505,517	$ 295,434

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 $48, and $40,963 respectively (2016: $11,759 and $18,924 respectively). Realized and unrealized gains and losses on currency hedges total $938 and $(3) respectively (2016: $(1,846) and $355 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, and income and expense on derivative contracts.

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

The following is a summary of investment returns (losses), the annual change in net assets, the annual change in the pension obligation and the percentage of the pension obligation supported by net assets.

	(percentage)				
	2017	2016	2015	2014	2013
Increase (decrease) in net assets attributed to:					
Investment income					
Policy benchmark return (PBR) on investments	10.1	7.0	6.5	11.8	11.2
Value added (lost) by investment managers	1.2	0.1	1.1	0.4	1.9
Time weighted rate of return, at fair value [a]	**11.3**	**7.1**	**7.6**	**12.2**	**13.1**
Other sources [b]	0.2	0.5	(0.3)	0.0	0.6
Percent change in net assets [c]	**11.5**	**7.6**	**7.3**	**12.2**	**13.7**
Percent change in pension obligation [c]	**8.7**	**4.3**	**5.4**	**8.5**	**8.6**
Percent of pension obligation supported by net assets	**86**	**84**	**82**	**80**	**77**

a) The annualized total return and policy benchmark return on investments over five years is 10.2% (PBR: 9.4%), ten years is 6.6% (PBR: 6.3%) and twenty years is 7.1% (PBR: 6.8%). The Plan’s actuary estimates the long-term net investment return on assets for funding purposes to be 5.6% (2016: 5.95%).

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 percent change in net assets and pension obligation are based on the amounts reported on the statement of changes in net assets available for benefits and the statement of changes in pension obligation, respectively.

NOTE 10 BENEFIT PAYMENTS

	($ thousands)	
	2017	**2016**
Retirement benefits	$ 229,533	$ 220,463
Termination benefits	23,012	15,520
Death benefits	517	353
	$ 253,062	$ 236,336

NOTE 11 INVESTMENT EXPENSES

	($ thousands) 2017	2016
Amount charged:		
Management fees [a]	$ 20,991	$ 10,624
Alberta Treasury Board and Finance [b]	54	54
Total investment expenses	$ 21,045	$ 10,678
Increase (decrease) in expenses	97.1%	(22.5%)
Increase in average investments under management	9.6%	7.5%
Increase (decrease) in value of investments attributed to active management	1.2%	(0.2%)
Investment expenses as a percent of :		
Dollar earned	4.2%	3.6%
Dollar invested	0.5%	0.3%

a) For investment management services, including non-recoverable GST of $580 (2016: $297).

b) For investment accounting and Plan reporting services.

NOTE 12 ADMINISTRATIVE EXPENSES

	($ thousands) 2017	2016
General administration costs	$ 1,985	$ 1,956
Board costs	71	71
Actuarial fees	10	70
Audit fees	56	55
	$ 2,122	$ 2,152

General Plan costs, including the costs for benefit administration and delivery, amounted to $140 per member (2016: $145 per member).

NOTE 13 REMUNERATION OF BOARD OF TRUSTEES MEMBERS

Plan Sponsors may determine remuneration rates. Current remuneration rates are as follows:

	Chair	Trustee
Remuneration rates effective April 1, 2009		
Up to 4 hours	$ 219	$ 164
4 to 8 hours	383	290
Over 8 hours	601	427

	2017	2016
The following amounts were paid:		
Remuneration		
Chair	$ 4,375	$ 4,047
Trustees (8)	31,505	30,971
Travel expenses		
Chair	755	1,161
Trustees (8)	16,173	15,656

Trustees are paid for attending and preparing for Board of Trustees and Committee meetings and for time spent on specified Plan business upon the approval of the Board of Trustees. Preparation time for a meeting is remunerated at no more than 4 hours.

NOTE 14 CAPITAL

The Plan defines its capital as the funded position. 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.

The Plan's surplus or deficit is 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. Under this method, asset values are calculated based on what the asset value would be at the valuation date had the assets earned precisely the rate of return assumed in the actuarial valuation. This calculation is carried out independently at each of two starting points, namely the market value as at each of the two calendar year-ends preceding the valuation date. These two calculated values, together with the market value as at the valuation date, are averaged to determine the actuarial value of assets with a constraint limiting the actuarial value not to exceed 110% or fall below 90% of net assets available for benefits.

Actuarial asset values for funding valuation purposes amounted to $4,677,368 at December 31, 2017 (2016: $4,301,275), comprising of $712,900 (2016: $739,300) pre-1992 and $3,964,468 (2016: $3,561,975) post-1991.

Note 14 (continued)

The following table summarizes on the funding basis, the accrued pension liability, net assets available for benefits, and the resulting deficit as at December 31, 2017 allocated between the pre-1992 and post-1991 periods:

($ thousands)

	2017			2016
	Pre-1992	Post-1991	Total	Total
Net assets available for benefits	$ 744,800	$ 4,106,268	$ 4,851,068	$ 4,349,275
Actuarial adjustment for fluctuation in fair value of net assets	(31,900)	(141,800)	(173,700)	(48,000)
Actuarial value of net assets available for benefits	712,900	3,964,468	4,677,368	4,301,275
Pension obligation	1,547,500	4,079,300	5,626,800	5,174,100
Actuarial deficit	$ 834,600	$ 114,832	$ 949,432	$ 872,825

The Plan's unfunded liability for service prior to January 1, 1992 is being financed by additional contributions of 1.25% of salaries by the Province of Alberta with employers and employees equally sharing the balance of the contributions of 3.54% of salaries as required to eliminate the unfunded liability on or before December 31, 2043. The actuarial valuation shows the present value of the Province of Alberta's obligation for future additional contributions was $257.8 million at December 31, 2016.

The Plan's unfunded liability for service after December 31, 1991 is being financed by special payments of 4.93% of salaries shared equally between employers and employees to eliminate the unfunded liability on or before December 31, 2027.

The additional contributions and special payments have been included in the rates shown in Note 1(b).

NOTE 15 COMPARATIVE INFORMATION

Comparative information has been reclassified to be consistent with 2017 presentation.

NOTE 16 APPROVAL OF FINANCIAL STATEMENTS

These financial statements were approved by the Board of Trustees of the Plan.

Glossary - Terms

Absolute Return Strategies/Hedge Funds
Encompass a wide variety of investments and trading strategies in private and publicly-traded securities with the objective of realizing positive returns independent of market direction. Investments in absolute return strategies are made through fund-of-funds and specific fund investments to increase strategy diversification.

Active Management
Managing the investments of a portfolio with the objective of outperforming the return of its benchmark. Active management generally takes two forms - security selection and change in asset allocations within the prescribed ranges. Security selection is the buying and selling of particular securities to earn a return above a market index. Asset allocation refers to changing asset class or sector weights to earn a return above what would be available from maintaining the asset class or sector weight in the benchmark.

Alternative Assets
Holdings that are considered non-traditional assets, including real estate, private equity, infrastructure, and timberland. These assets act as a hedge against inflation and are known for being less liquid than traditional assets. They are typically held by investors with long-term investment horizons.

Asset Mix/Allocation
The allocation of a pensions fund's investments among various asset classes such as bonds, equities, real estate, etc.

Benchmark
A standard against which investment performance is measured.

Bonds
Certificates of indebtedness issued by corporations, municipalities or governments on which the issuer promises to pay a specified amount of interest for a specified length of time and to repay the loan on maturity or the expiration date. A bond purchaser is lending money to the issuer. Bonds have terms to maturity greater than one year.

Credit Spread
The difference in yield between two bonds due to differences in credit quality.

Duration
The weighted average term to payment of the cash flows of a bond.

Emerging Market
An economy in the earlier stages of development whose markets have sufficient size and liquidity and are receptive to foreign investment (examples include China, Greece, and Brazil).

Equities/Common Stock
Units of ownership of a corporation where owners typically are entitled to vote on the selection of directors and other important matters as well as to receive dividends on their holdings. In the event that a corporation is liquidated, the claims of secured and unsecured creditors and owners of bonds and preferred stock take precedence over the claims of those who own common stock. The liability of owners of equity is limited to the amount paid for the stock.

External Manager
A third-party firm contracted by the Investment Manager to provide investment management services.

Growth Stock
A share in a company whose earnings are expected to grow at an above-average rate relative to the market.

Large Cap
"Large cap" refers to firms with large market capitalization. Market capitalization is simply the market value of a corporation's outstanding shares. In the US market, this refers to companies with market capitalization above $10 billion. These are mega companies of the financial world and include Apple, Alphabet, and Microsoft. Classifications such as "large cap" or "small cap" are only approximations that change over time.

Passive Management
Managing the investments of a portfolio with the objective of matching/replicating the performance of a given market index or benchmark.

Policy Benchmark/Return
The "policy benchmark" is a composite return based on the percentage of a pension plan's fund allocated by policy to each asset class and the market index for that class. It is used to measure the plan's relative performance.

Pooled Fund
A fund in which money from two or more investors is accepted for investment and where units allocated to each investor serve to establish the proportionate interest at any time of each investor in the assets of the fund.

Glossary - Terms

Private Income/Infrastructure
Private income opportunities represent privately-negotiated investments in private and publicly-traded entities. These investments are selected, structured and managed to provide (i) a current income component of total return, (ii) diversification and (iii) an inflation hedge. These investment opportunities are typically capital-intensive and may include infrastructure projects (long-life assets used to provide essential services), bridge loans and corporate finance arrangements (with a current income component of total return). Most infrastructure asses are illiquid assets.

Real Return Bond
A fixed-income security (a bond) that generates a specified real rate of return. The real interest rate is the nominal (set) interest rate minus inflation.

Small Cap
"Small cap" refers to firms with relatively smaller market capitalization. Though there is no rigorous definition, in the US, a company with a market capitalization of between $300 million and $2 billion is considered a small cap. The definition can change over time.

Statement of Investment Policies and Goals
A comprehensive statement by the Board outlining, among other things, the asset mix of the Fund, the allowable range for each asset class and the benchmarks for measuring performance.

Swap
A privately-negotiated contract between two parties to exchange a stream of periodic payments on certain dates in the future based on an underlying investment. The size of these payments is normally determined in relation to a nominal, underlying amount, called the notional amount. The underlying security, representing the notional amount, is not exchanged between counterparties. Swaps available in and between all financial markets include, but are not exclusive to, equities, currencies, fixed income and commodities.

Timberland
Timberland investments are made primarily in privately-owned areas of woodland; that is, forested areas consisting of both hardwood and softwood species. When responsibly managed, timberland investments are a renewable and sustainable resource. Timberland investments are illiquid assets.

Total Return
Interest and dividend income plus price increases or decreases.

Tracking Error
The difference between the performance of a position and the performance of a benchmark.

Treasury Bill/T-Bill
A short-term government debt security.

Unfunded Liability
When the actuarial valuation determines that a pension fund's accrued liabilities exceed the assets available for the payment of benefits.

Value Stock
A stock that tends to trade at a lower price relative to its fundamentals (i.e. dividends, earnings, sales, etc.) and thus considered undervalued by an investor.

YMPE (Year's Maximum Pensionable Earnings)
The maximum earnings set each year by the Canada Pension Plan (CPP) up to which employers and employees are required to make CPP contributions.

Glossary - Indices

BMO Small Cap Index
An index maintained by Bank of Montreal that is made up of 400 representative Canadian public companies and income trusts with market capitalizations of less than 0.1% of the S&P/TSX Composite total capitalization. This index is market capitalization weighted.

Consumer Price Index (CPI)
An indicator of the prices encountered by consumers. It is obtained by calculating, on a monthly basis, the cost of a fixed "basket" of commodities purchased by a typical consumer during a given month. The CPI is published by Statistics Canada and is a widely used indicator of inflation (or deflation) in Canada.

FTSE TMX 91-Day T-Bills Index
An index that represents the performance of Government of Canada 91-day Treasury Bills.

FTSE TMX Long Bond Index
An index that tracks the performance of approximately 300 marketable, domestically issued, Canadian bonds with terms to maturity of more than 10 years. This index is comprised of Canada's, provincial, municipal, and AAA- through BBB-rated corporate issuers.

FTSE TMX Real Return Bond Index
An index that tracks the daily performance of real return (inflation-linked) bonds issued in Canada.

FTSE TMX Universe Bond Index
An index that tracks the performance of approximately 1,000 marketable, domestically issued, Canadian bonds with terms to maturity of more than one year. This index is comprised of Canada's, provincial, municipal and AAA- through BBB-rated corporate issuers.

IPD Large Institutional All Property Index
An index that measures the total return from a diversified pool of over 2,400 properties. IPD compiles property level information from pension funds, life insurance companies, and real estate managers on a quarterly basis.

MSCI ACWI (Morgan Stanley Capital International All Country World Index)
An index maintained by the MSCI Index Committee designed to measure market equity performance of developed and emerging markets. The MSCI ACWI is a free float-adjusted market capitalization index that is calculated on a total return basis, which includes re-investment of net dividends after deduction of withholding taxes. The MSCI ACWI consists of securities across large and mid-cap segments and across style and sector segments in 47 developed and emerging markets.

MSCI EAFE (Morgan Stanley Capital International – Europe, Australasia, Far East)
An index maintained by the MSCI Index Committee that is designed to measure developed public market equity performance, excluding the US and Canada. The MSCI EAFE Index consists of 21 market country indices capturing large and mid-cap equities across developed markets in Europe, Australasia, and the Far East.

MSCI (Morgan Stanley Capital International) Emerging Markets Free Index
An index maintained by the MSCI Index Committee that is designed to measure emerging public market equity performance net of withholding taxes. The MSCI Emerging Market Index consists of 24 emerging market country indices.

Russell 2500 Index
An index maintained by Russell Investments that measures the performance of the 2500 smallest companies in the Russell 3000. The Russell 2500 is taken to represent small and mid-cap US Equities.

S&P/TSX Capped Composite Index
An index maintained by the S&P Canadian Index Committee that measures the return on the largest companies and trust units listed on the Toronto Stock Exchange. Any stock in the S&P/TSX Capped Composite Index whose float capitalization exceeds 10% of the Index is capped at 10% during the quarterly rebalancing process.

Standard & Poor's 500 Index
An index maintained by the Standard & Poor's Index Committee that includes a representative sample of 500 leading operating companies in the US economy to create a broad market portfolio representing the market capitalization of US public equities.

2017 Annual Report

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