

Communiqué

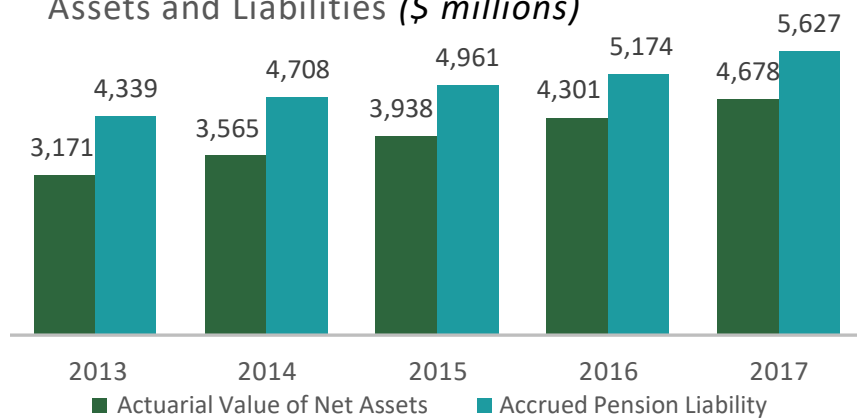
Spring 2018

HIGHLIGHTS OF THE 2017 ANNUAL REPORT

2017 ANNUAL REPORT

The UAPP's Annual Report for the year 2017 has been released and this issue of the Communiqué provides financial, statistical, and other summary highlights of the Report. The full Annual Report is available on the [UAPP website](#).

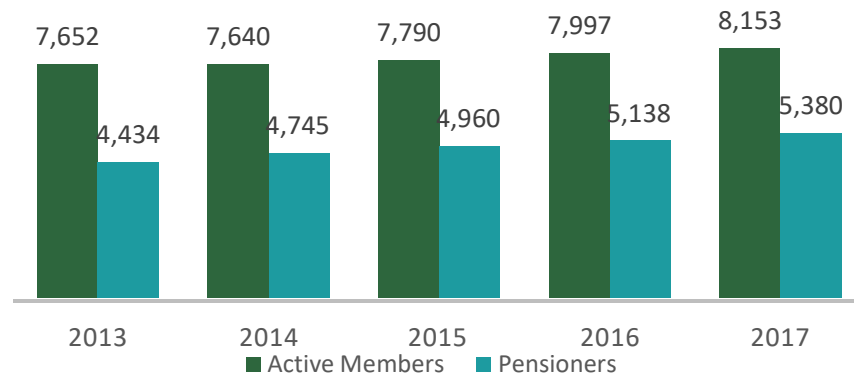
Assets and Liabilities (\$ millions)



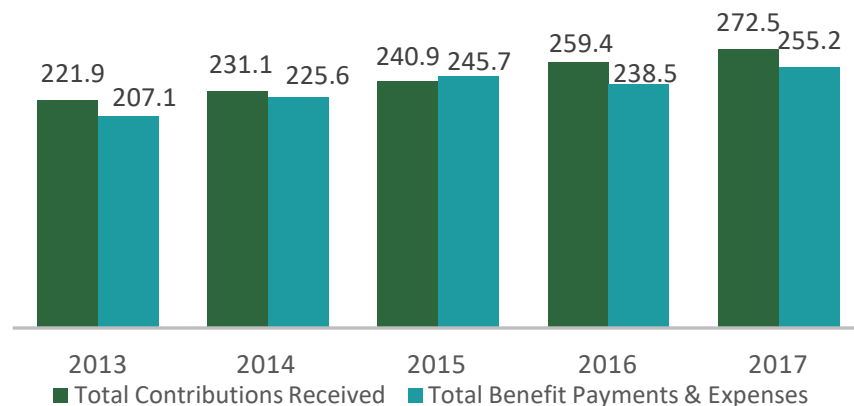
Summary of Net Assets and Pension Liabilities (\$ millions)

As at December 31	2017	2016
Investments	\$4,829	\$4,329
Net receivables	23	20
Net assets	4,852	4,349
Actuarial adjustment for fluctuation in fair value of net assets	(174)	(48)
Actuarial value of net assets	4,678	4,301
Actuarial deficiency	949	873
Accrued pension liability	\$5,627	\$5,174

Member and Pensioner Statistics



Contributions Received and Benefits & Expenses Paid (\$ millions)



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.

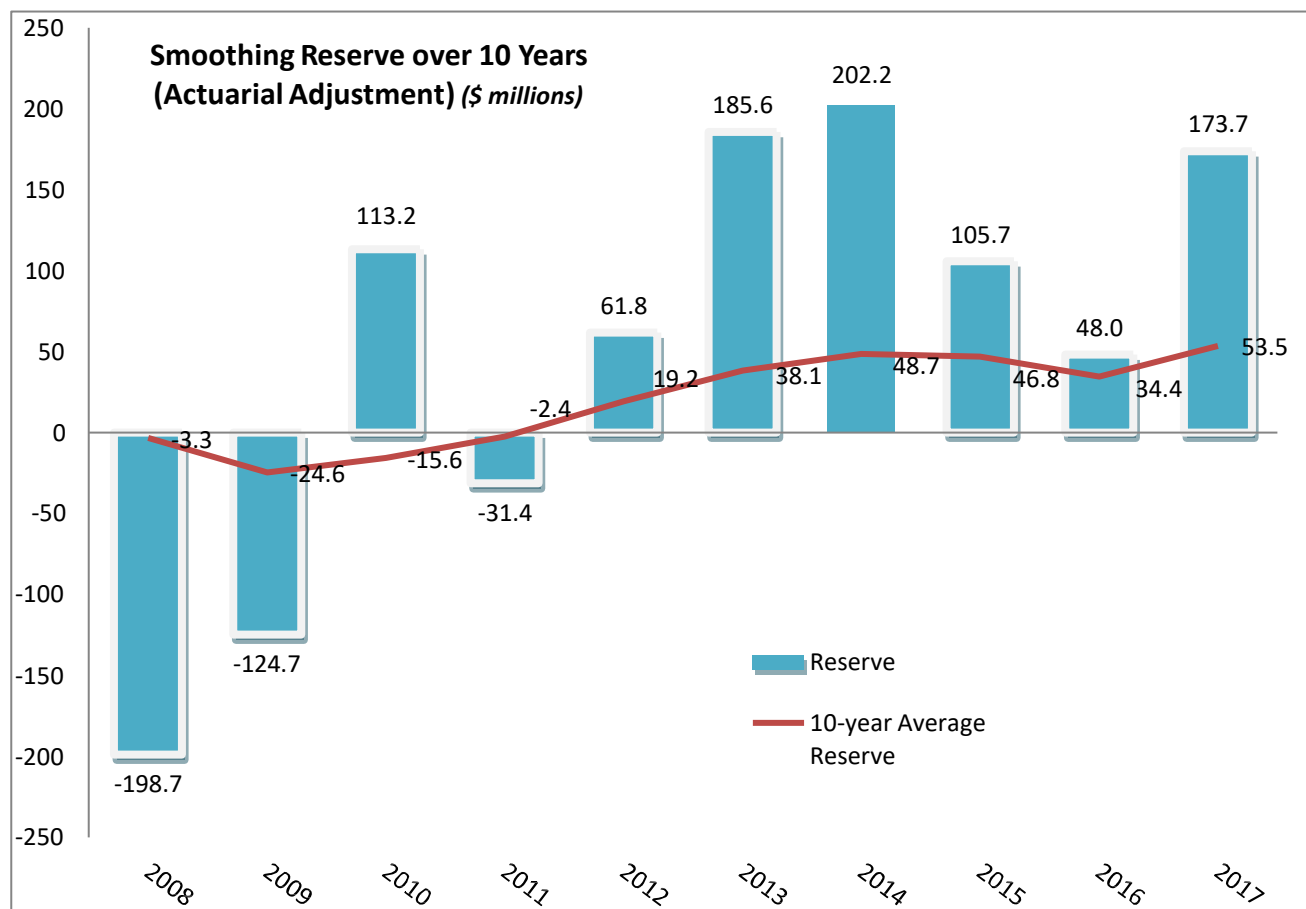
Despite warnings from analysts throughout 2017 that the ongoing bull run experienced by capital markets was getting long in the tooth, investment returns finished the year surprisingly strong. Interest rate hikes by central banks caused some weakness in fixed income returns but even that asset class 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 in 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%

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 which can be found in the 2017 Annual Report, 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.

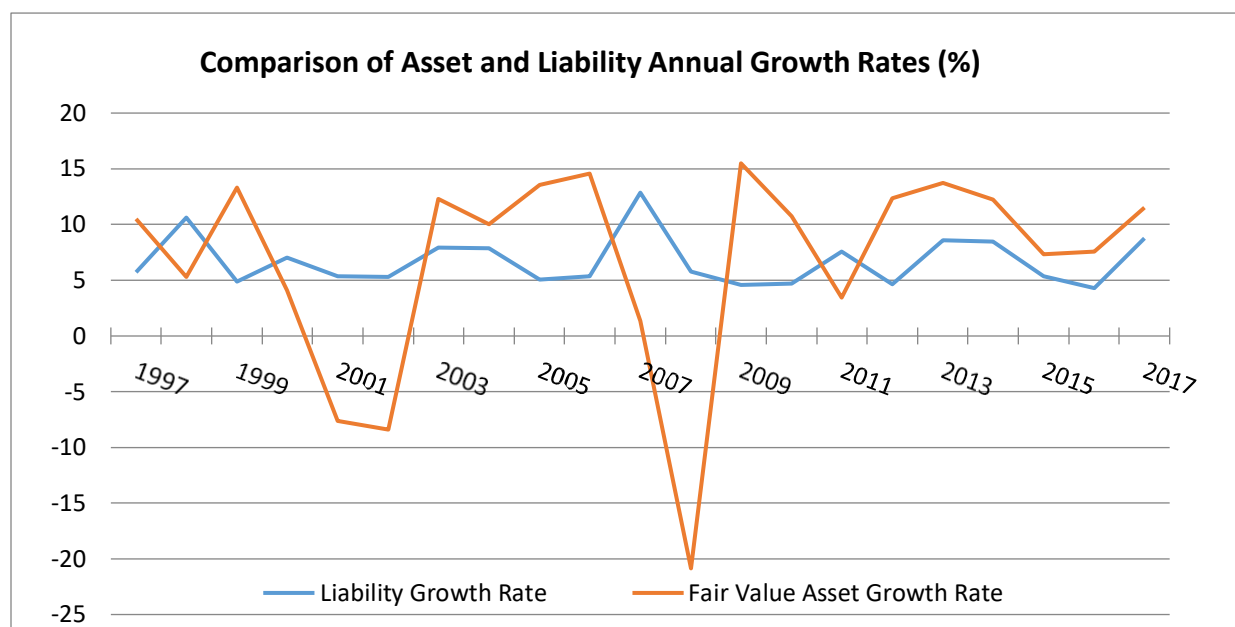
The Plan's Liabilities

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 outstanding 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%.

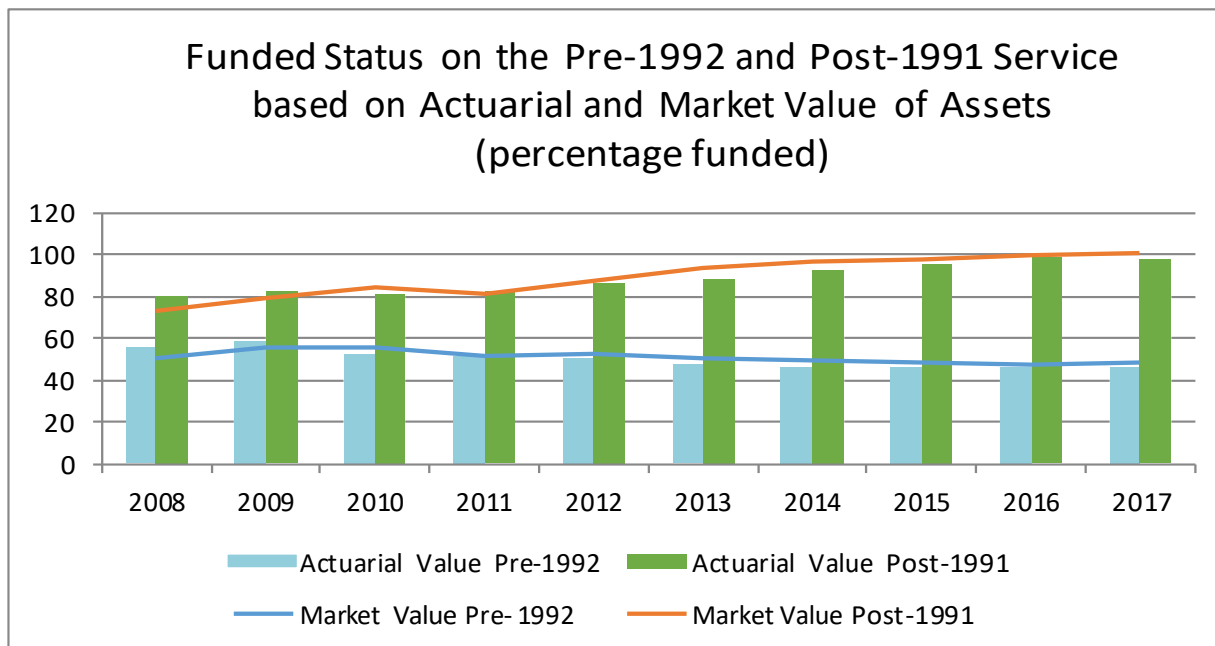


The Plan's Funded Ratio

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.



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.

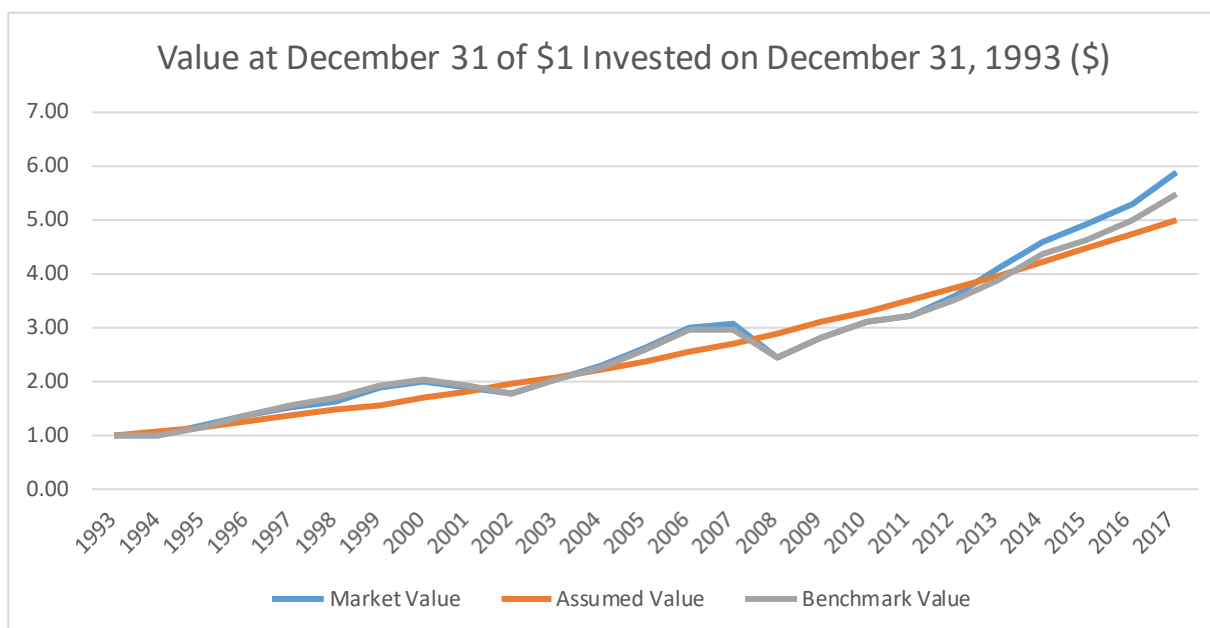
Looking to the Future

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.

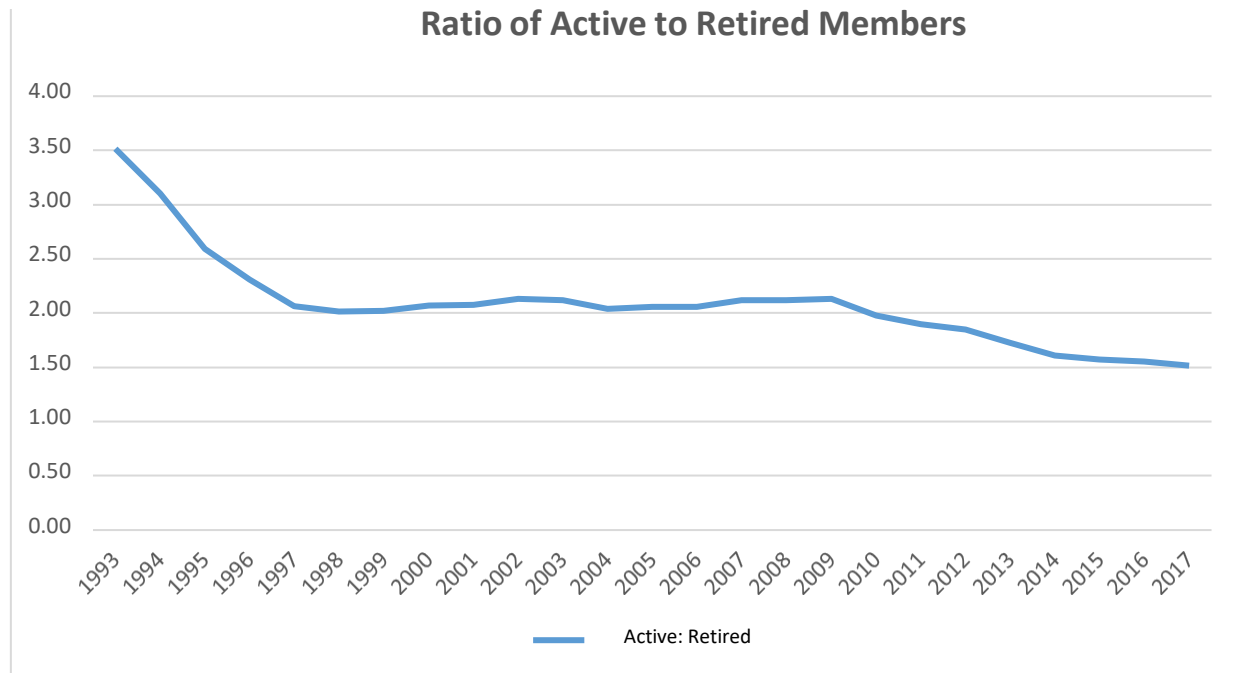
A new Statement of Investment Policies and Goals became effective January 1, 2017 and reflected the Board's current risk tolerance. The Plan began transitioning to its new asset mix during 2017 by moving some public equity investments into private equity and infrastructure pooled funds to work towards 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.



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.



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.

Comments/Suggestions

- If you recently used the services of any group (such as Conduent Human Resource Services, the Human Resources Department at your institution, or the UAPP Trustees' Office) on a matter related to the UAPP and would like to comment on the service you received, please feel free to write to us at board@uapp.ca. Other contact information is available on our website, www.uapp.ca/contact-us/.

Keep Your Beneficiary Information Updated

- If you leave employment and leave your funds with the UAPP, be sure to update your pension beneficiaries by completing the Designation of Beneficiary form found on the UAPP website. Doing so will help expedite payment to your beneficiaries and ensure your pension is paid to the correct parties. Make sure your family or your executor knows you are entitled to a benefit from the UAPP.

Keep Your Contact Information Updated

- It is very important that all members keep the plan updated with changes to contact information in case the UAPP needs to contact them about their pension. Active members should notify their employer about any changes to their address. Pensioners or their agents should contact CIBC Mellon directly by telephone at 1.800.565.0479 to update their information. Other terminated members should contact Conduent Human Resource Services at 1.866.709.2092.

Questions About the Retirement Planner?

- Call Conduent Human Resource Services at 1.866.709.2092 if you need help accessing the Retirement Planner, or for login or password inquiries. The Retirement Planner can be accessed through the link on our homepage at www.uapp.ca. Your annual Member Statement can be accessed through the Retirement Planner.

Questions About Your Pension?

- Call Conduent Human Resource Services at 1.866.709.2092, the Human Resources Department at your institution, or the UAPP Trustees' Office at 780.415.8868.

Questions About Purchasing Prior Service or Leaves of Absence?

- Call the Human Resources Department at your institution or the UAPP Trustees' Office at 780.415.8868.

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