Communiqué

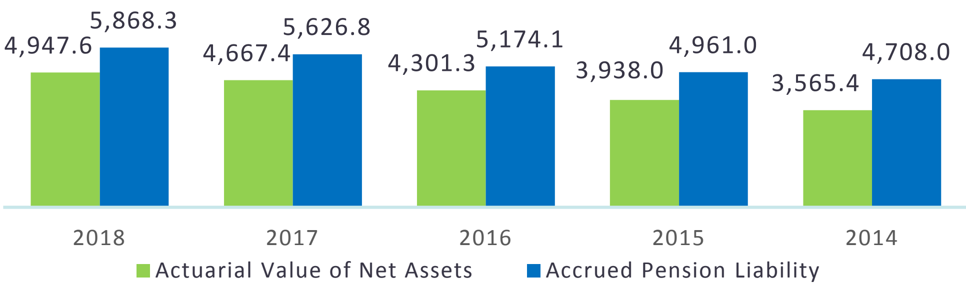
Highlights of the 2018 Annual Report

UNIVERSITIES ACADEMIC PENSION PLAN

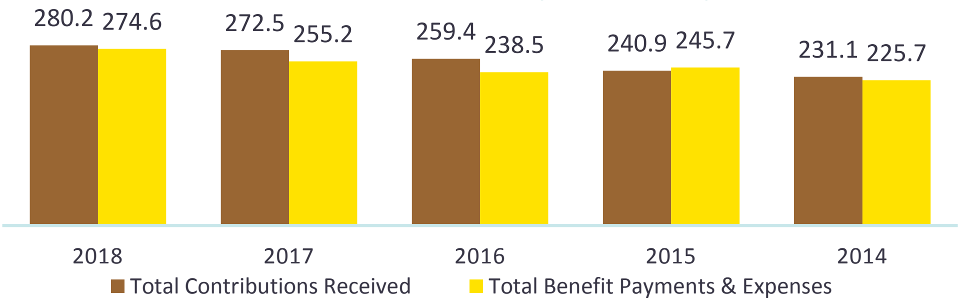
Spring 2019

The UAPP's 2018 Annual Report 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.

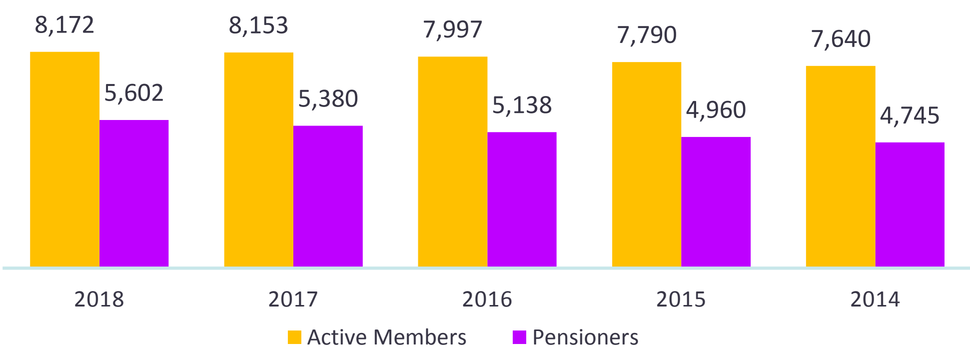
Assets vs. Liabilities ($ millions)



Contributions Received vs. Benefit Payments & Expenses ($ millions)

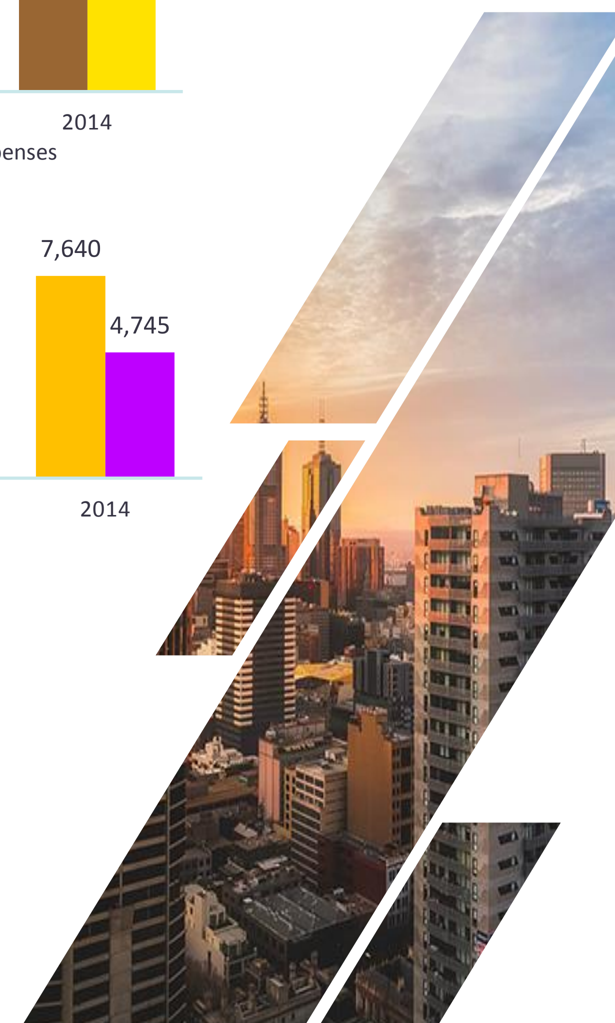


Active Member vs. Pensioner Statistics



Summary of Net Assets and Pension Liabilities

As at December 31 ($ millions)	2018	2017
Investments	$4,808.4	$4,828.8
Net receivables	22.5	22.3
Net assets	4,830.9	4,851.1
Actuarial adjustment for fluctuation in fair value of net assets	116.7	(173.7)
Actuarial value of net assets	4,947.6	4,677.4
Accrued pension liability	5,868.3	5,626.8
Actuarial deficiency	$920.7	$949.4



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Financial Position of the Plan

The Plan's Assets

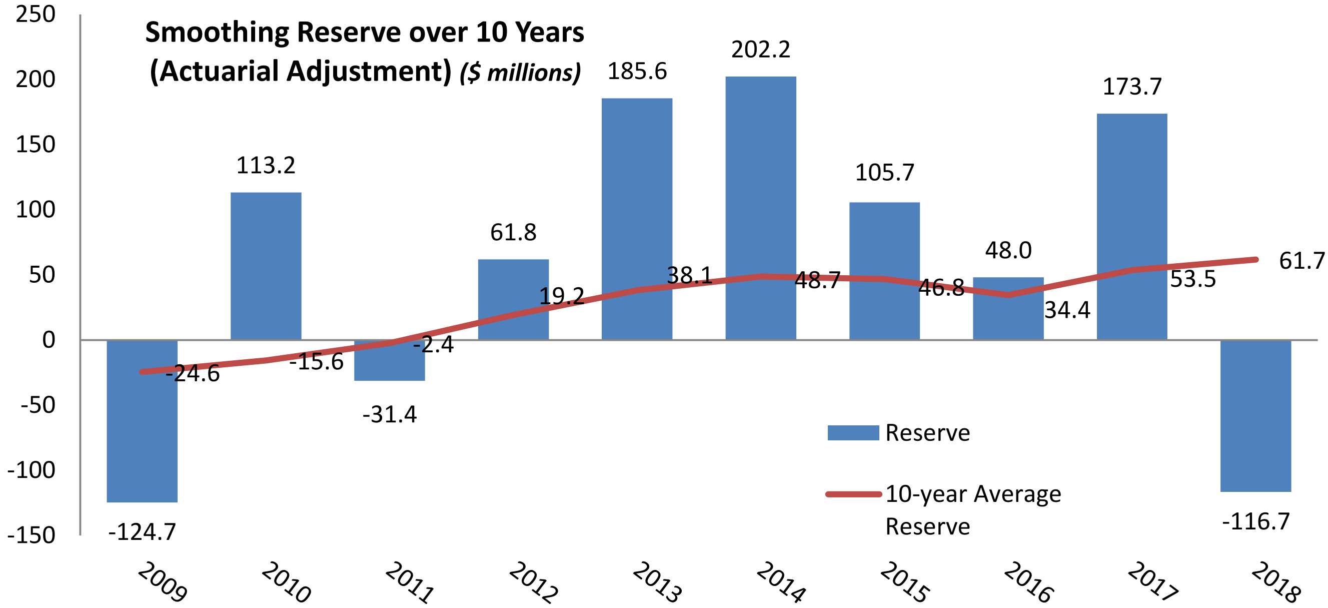
After nine consecutive years of positive investment returns, the Plan's assets decreased in value during 2018. The net negative return of 0.5% was the lowest experienced by the fund since the financial crisis of 2008. The market value of the Plan's assets fell by $20.2 million, from $4,851.1 million at the end of 2017 to $4,830.9 million at December 31, 2018. Some of the investment losses were offset by positive cash flow during 2018 as the fund received contributions of $280.2 million while making benefit payments of $272.3 million. For the first time since 2011, the actual return on Plan assets was less than the assumed return. For 2018, the assumed return was 5.6%.

Investment expenses for 2018 were $23.5 million, up from $21.0 million in 2017, as the focus continues to be risk-adjusted returns net of expenses. The increase in expenses is due to a greater allocation of assets to alternative investments which are generally more expensive to access.

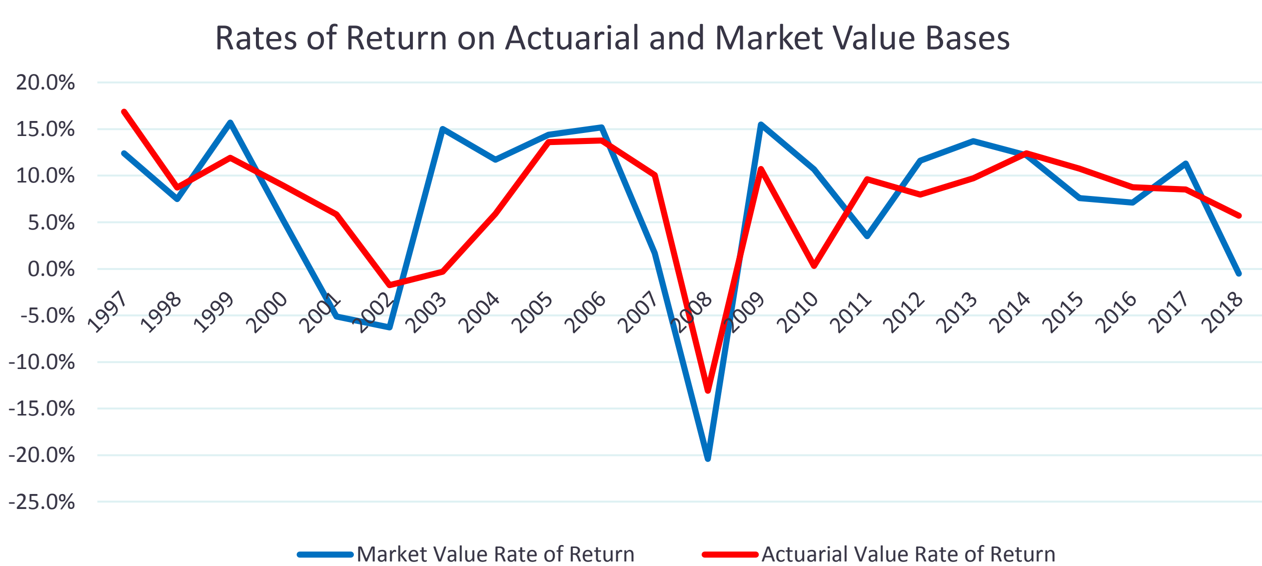
$ Millions	December 31, 2018			December 31, 2017		
Service Period	Pre-92	Post-91	Total	Pre-92	Post-91	Total
Fair Value of Net Assets	655.8	4,175.1	4,830.9	744.8	4,106.3	4,851.1
Actuarial Adjustment	11.8	104.9	116.7	(31.9)	(141.8)	(173.7)
Actuarial Value of Net Assets	667.6	4,280.0	4,947.6	712.9	3,964.5	4,677.4
Accrued Pension Liability	1,498.7	4,369.6	5,868.3	1,547.5	4,079.3	5,626.8
Actuarial Surplus (Deficiency)	(831.1)	(89.6)	(920.7)	(834.6)	(114.8)	(949.4)
Funded Ratio	44.5%	97.9%	84.3%	46.1%	97.2%	83.1%

As permitted under the funding requirements of the Employment Pension Plans Act of Alberta, UAPP uses the "smoothed" value of assets in calculating the actuarial financial position of the Plan. Because market values can fluctuate significantly from day-to-day, the smoothing method allows the Plan to look at the general trend in the status of the fund rather than a precise point-in-time situation. The smoothing reserve decreased by $290.4 million during 2018. The Plan has a negative reserve of $116.7 million at December 31, 2018, down from a positive reserve of $173.7 million at the end of 2017. While the market value of the Fund decreased during the year, the actuarial value of the assets increased by $270.2 million to $4,947.6 million from $4,677.4 million at the start of 2018.

Intuitively, one may expect the actuarial value of assets to move in the same direction as the market value of assets in any given year. In most years, that is the case. However, the Plan experienced several years of strong positive investment returns up to the end of 2017, resulting in a large cushion when it came time to smooth the asset value. Since 2018 experienced a poor return, that cushion was eliminated and, in fact, moved into a negative position. The actuarial value is determined by averaging the actual market value at December 31, 2018 with the projected market value at 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 from $53.5 million to $61.7 million, due to the 2018 negative reserve being less than the large negative reserve of $198.7 million from 2008 dropping out of the 10-year average calculation. Over this time period, the highest annual reserve continues to be $202.2 million at December 31, 2014 and the lowest reserve is a negative reserve of $124.7 million at December 31, 2009. UAPP has employed the smoothing method since December 31, 1996. Over the intervening 22 years, the average annual market value rate of return is 7.3% and the average annual actuarial (smoothed) value rate of return is 7.5%. The purpose of smoothing the asset values is to reduce fluctuations in market values from one year to the next.



UNIVERSITIES ACADEMIC PENSION PLAN

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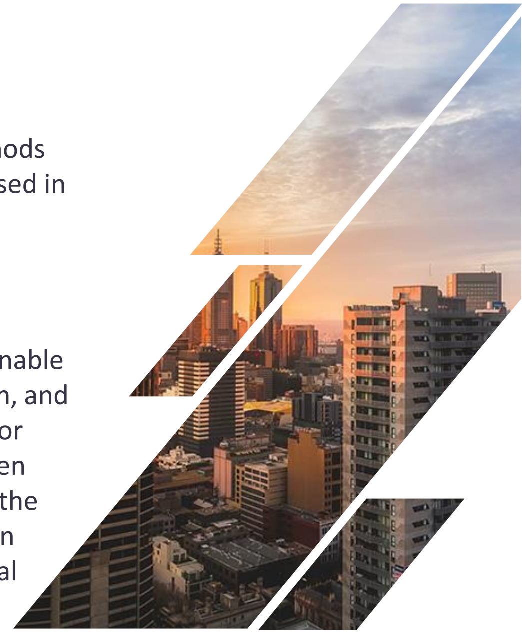
The Plan's Liabilities

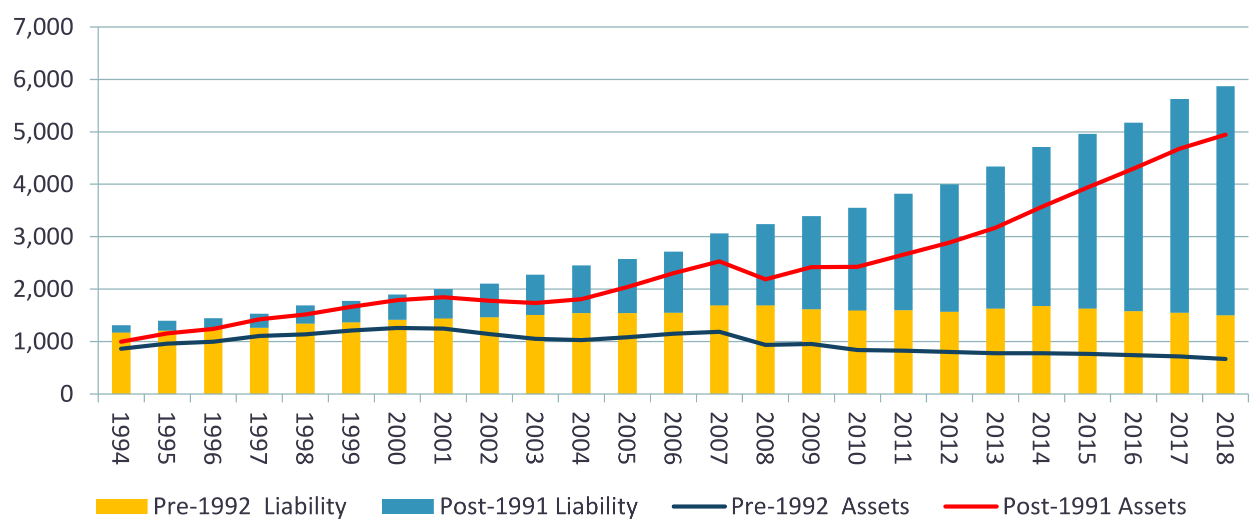


The Plan's accrued liabilities as of December 31, 2018 are estimated at $5,868.3 million, a growth of 4.3% over the December 31, 2017 liability estimate of $5,626.8 million. Both liability estimates are based on extrapolations by the Plan's actuary using the membership data and methods utilized in the December 31, 2016 actuarial valuation. The assumptions used in each extrapolation are determined separately. A summary of the key assumptions can be found in Note 5 of the Financial Statements.

Contributions to fund the Plan's liabilities are generally comprised of two components: 1) current service cost, which is the cost of providing pensionable service to members actively accruing pensions under the terms of the Plan, and 2) unfunded liabilities, which are pension benefits accrued in prior years for which the Plan has insufficient assets. These unfunded liabilities arise when investment returns are less than assumed and when the present value of the accrued pension benefits increase more than expected, usually due to Plan experience being different than assumed or due to changes in the actuarial assumptions.

The last actuarial valuation was performed as at December 31, 2016 and the Board has elected to undertake a new valuation as at December 31, 2018. The assumptions used in the previous valuation will be reviewed in the context of prior Plan experience with guidance provided by the actuary. Any changes made to the assumptions will be summarized in the actuarial valuation report which will be posted to the UAPP website later in 2019.

Actuarial Value of Assets and Liabilities
($ millions)



The Plan's Funded Ratio

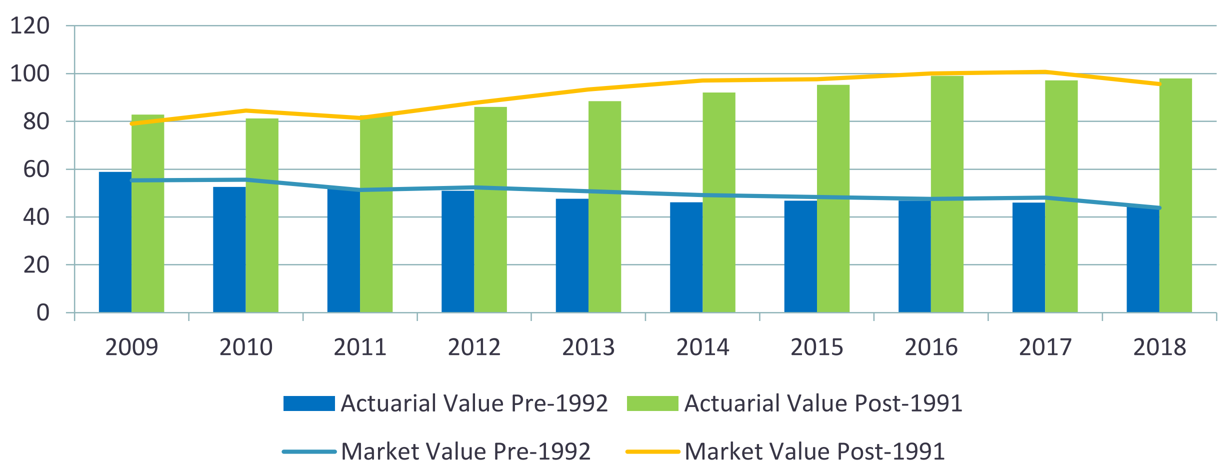
Investment returns during 2018 did not meet expectations. As a result, the Plan's funded ratio on a market value basis decreased to 82.3% at the end of 2018 from 86.2% at December 31, 2017. On an actuarial value basis, the funded ratio actually increased to 84.3% from 83.1% due to the asset-smoothing methodology. In recent years, strong investment returns have contributed to the consistent generation of smoothing reserves (where the market value of the assets is greater than the actuarial value of the assets). However, experience in 2018 has caused the Plan to record a negative reserve at year-end for the first time since 2011, the last time the actual investment returns were less than expected.

Since 1993, the Government of Alberta has been making contributions to fund the UAPP unfunded liabilities related to pensions accrued prior to 1992. The rate of annual contributions has been fixed at 1.25% of salary of the active membership, continuing until the earlier of the date the pre-1992 unfunded liability is retired or December 31, 2043. The remainder of the pre-1992 deficit and any post-1991 unfunded liability are funded by the employers and employees. The funded ratio for pre-1992 service continues to decline due to the long amortization period. About 28% of the total 2018 pre-1992 unfunded liability contribution came from the Government, though the initial share of the contribution was approximately 50%.

The funded ratio for pre-1992 service is 44.5% (2017: 46.1%) on an actuarial value basis and is 43.8% (2017: 48.1%) on a market value basis. The funded ratio for post-1991 service is 97.9% (2017: 97.2%) on an actuarial value basis and is 95.5% (2017: 100.7%) on a market value basis. The funded ratio for all service is 84.3% (2017: 83.1%) on an actuarial value basis and is 82.3% (2017: 86.2%) on a market value basis.

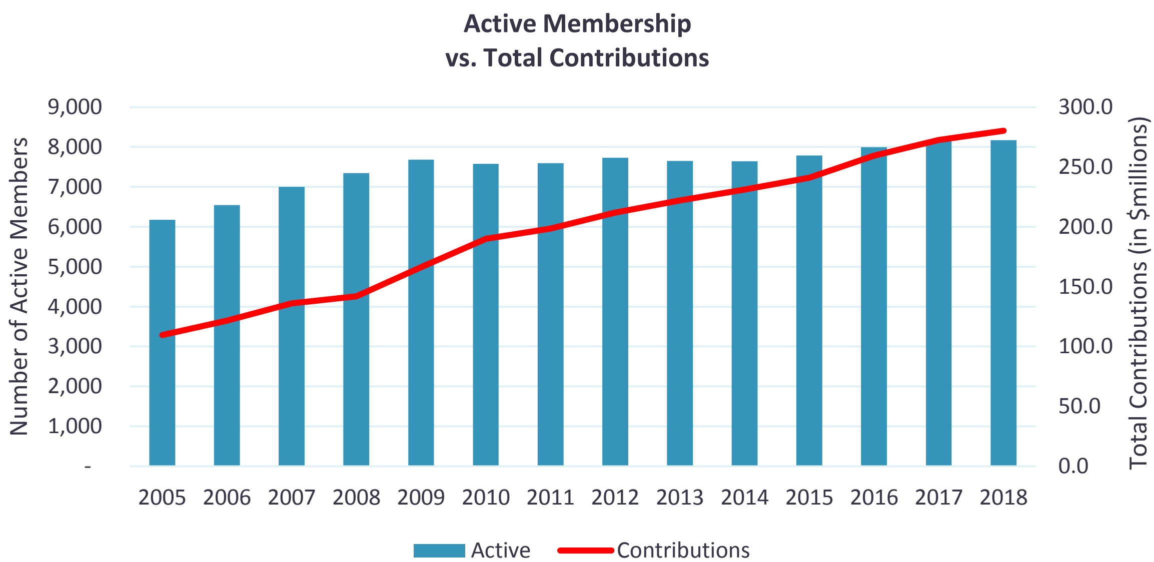
An actuarial valuation will be completed during 2019 following which the Board will be able to assess the sufficiency of current contribution rates for the paying off of both pre-1992 and post-1991 unfunded liabilities.

Funded Ratio on the Pre-1992 and Post-1991 Service based on Actuarial and Market Value of Assets (percentage funded)



Looking to the Future

As an open defined benefit pension plan, UAPP invests with an eye on achieving sound long-term financial stability. However, this lengthy focus is challenged by the realities of the present. The number of members actively accruing pensions and making ongoing contributions to the fund has increased very slowly in recent years. Retired members are living longer such that pensions are being paid for longer than expected when previous contribution rates were set. Despite some increases, interest rates continue to be near historic lows which creates situations of higher commuted values paid on lump sum pension transfers and some investment challenges. The pre-1992 unfunded liability also presents UAPP with its own unique difficulties.



As at December 31, 2018, the Plan has 8,172 active members. Ten years earlier, there were 7,345 active members, an increase of only 11% over the decade. Three of the last ten years saw a decline in the year-end number of active members. The active membership is not expected to significantly increase in the next few years and new members are the lifeblood of a defined benefit plan. Over the same period, total Plan contributions have doubled from $141.8 million during 2008 to $280.2 million during 2018. There are multiple reasons for the faster escalation in contributions, including inflationary and productivity growth in the salaries of Plan members on which contributions are based. However, higher contribution rates have played a major role in this difference as well. The December 31, 2008 actuarial valuation identified the total contribution rate to be 25.09% of pay while the December 31, 2016 report determined the rate as 30.11% of pay, both including the Government of Alberta's fixed share of the pre-1992 unfunded liability.

The Board has contracted with the Plan's actuary to prepare an actuarial valuation as at December 31, 2018 to evaluate the financial position of the UAPP. Each valuation presents an opportunity to update economic assumptions, like the discount rate, and demographic assumptions, like the mortality tables. Once that valuation is complete, new contribution rates may be established to ensure that the Plan's funding remains on track. Following the last valuation, the post-1991 unfunded liability was scheduled to be eliminated by December 31, 2027 and the pre-1992 unfunded liability by December 31, 2043.

The transition of the fund's asset mix continued during 2018 as the actual combined allocations to private equity and infrastructure holdings increased from 3.3% (about $159.7 million) to 5.5% (about $263.8 million). The long-term target asset mix as disclosed in the Statement of Investment Policies and Goals is 5.0% for private equity and 7.0% for infrastructure, with both allocations expected to be completely filled by 2020. The Board will continue to work with its investment manager to monitor progress towards this goal.

Keep Your Address Information Updated

Once you leave employment with a participating employer of the UAPP and leave your funds in the plan, it is very important that you keep your contact information up to date. Active members should notify their employer about any changes to their address. Pensioners and other terminated members must ensure UAPP has their current contact information in case the UAPP needs to contact them about their pension, including for the purposes of issuing your annual tax slip. 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 the UAPP Administration Centre at 1.866.709.2092.

Comments

If you recently used the services of any group (the UAPP Administration Centre, CIBC Mellon, 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 at www.uapp.ca/contact-us/.

Keep Your Beneficiary Information Updated

If you leave employment and leave your funds with the UAPP, keep your Designation of Beneficiary and the addresses of your beneficiaries up-to-date with the UAPP. Doing so will help expedite payment to your beneficiaries. Make sure your family or your executor knows you are entitled to a benefit from the UAPP.

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Questions About Your Pension Or The Retirement Planner

Call the UAPP Administration Centre at 1.866.709.2092 if you have questions about your pension or if you need help accessing the Retirement Planner. 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.

New To The UAPP?

We encourage you to spend some time reviewing our website, www.uapp.ca. You will find lots of information in the "Publications" section, including our Member Handbook and a "*New Member Basics*" Information Sheet. Questions about UAPP can be directed to the UAPP Trustees' Office at 780.415.8868.

Thinking About Retirement?

Members can run an unlimited number of estimates on the Retirement Planner, adjusting for important details like retirement dates and future salary adjustments. Also, read the Information Sheet "*Preparing For Retirement*", available at www.uapp.ca under "Publications".

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