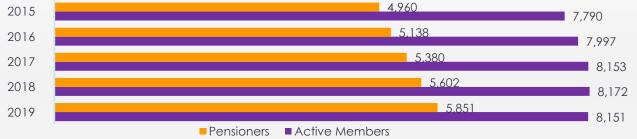
UNIVERSITIES ACADEMIC PENSION PLAN Highlights of the 2019 Annual Report

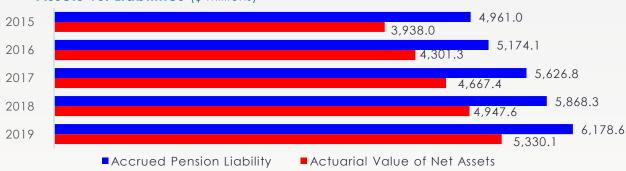
The UAPP's 2019 Annual Report has been released and this issue of the Communiqué provides financial, statistical, and other summary highlights of the Report. The full Annual Report is available on the <u>UAPP website</u>.

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

As at December 31	2019	2018
Investments	\$5,454.2	\$4,808.4
Net receivables	23.1	22.5
Net assets	5,477.3	4,830.9
Actuarial adjustment	<u>(147.2)</u>	<u>116.7</u>
Actuarial value of net assets	5,330.1	4,947.6
Accrued pension liability	<u>6,178.6</u>	<u>5,868.3</u>
Actuarial deficiency	\$848.5	\$920.7

Active Member vs. Pensioner Statistics





Assets vs. Liabilities (\$ millions)

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



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COVID-19 Virus Update

The Annual Report was written as at December 31, 2019 with the accompanying financial statements accurately reflecting the financial position of the Universities Academic Pension Plan (UAPP) at December 31, 2019.

However, as you know, Canada has been experiencing the impact of the global COVID-19 pandemic. While we do not want to diminish the impact that COVID-19 is having on individuals, we do want to provide an update on the impact COVID-19 is having on the UAPP.

Investment Fund

2020 has started out as a very difficult year for investors. With the world now facing the global spread of the COVID-19 virus along with the collapse in the price of oil, equity markets worldwide have declined significantly.

While there was no way to anticipate the impact of the COVID-19 virus, the UAPP Fund is broadly diversified which helps lessen the impact of the equity market downturn. Investments include a diversified portfolio of public equities, fixed income, and alternative assets such as real estate and infrastructure. The challenges currently facing investors reinforce the importance of following a disciplined, long-term investment approach. While the COVID-19 virus has been a shock to the global economy, we believe that it is a short-term issue which will resolve itself over time.

This decline in the value of the UAPP's investments should not impact the security of your pension from UAPP. The defined benefit pension earned by members is not solely dependent on the performance of the financial markets.

Operations

The UAPP relies on various service providers (both administrative and investment) for the day to day operation of the Plan. The service providers have activated their business continuity plans to ensure that all critical functions remain fully operational. This includes having personnel work from home and other personnel remaining on site to ensure critical systems continue to function.

The UAPP Trustees' Office has been temporarily closed with all staff working from home. We expect all service levels to be maintained during this crisis.

Monthly pension payments will continue to be paid on time.

The UAPP Board is monitoring the impacts of the COVID-19 virus on an ongoing basis and will take whatever steps are necessary to ensure the provision of pension benefits to members and their beneficiaries.





Financial Position of the Plan

The Plan's Assets

Following the poor performance of 2018, the Plan's investments rebounded impressively during 2019, returning 13.5% as the market value of assets grew by \$646.3 million to end the year at \$5,477.3 million. After starting the year at \$4,830.9 million, the market value crossed the \$5,000 million threshold before the end of February 2019 and continued on an upward trend through the rest of the year with eleven of twelve months providing positive returns.

One of the responsibilities of the UAPP Board is to ensure the Plan has net assets that fully support the total pension obligation to its members. The assets and obligations in the Plan are managed over a very long term. Through most of the 1990s, the post-1991 portion of the Plan was almost fully funded. The collapse of the information technology bubble during 2001-02 saw a fall in stock markets and the Plan's net assets declined while the pension obligation continued to grow. By 2007, the Plan's financial position had partially recovered until the world credit crisis in 2008 caused a large gap between the growing pension obligation and the net assets of the Plan. Market returns were strong in 2019 though a slightly stronger Canadian dollar hindered the Plan's foreign investments. Overall, the Plan's total funded status improved to levels not seen in almost two decades.

As a result of the good performance, investment expenses climbed significantly during 2019, primarily due to performance in the infrastructure asset class. Fees were \$29.9 million, up from \$23.5 million in 2018. The Plan's focus continues to be on receiving risk-adjusted returns net of expenses and the healthy net return provides evidence this goal is being achieved. The fund's allocation to more expensive alternative investments continued to grow during the year and is expected to do the same in 2020.

	December 31, 2019			December 31, 2018		
	<u>Pre-92</u>	<u>Post-91</u>	<u>Total</u>	<u>Pre-92</u>	<u>Post-91</u>	<u>Total</u>
Fair Value of Net Assets	647.8	4,829.5	5,477.3	655.8	4,175.1	4,830.9
Actuarial Adjustment	(20.6)	<u>(126.6)</u>	<u>(147.2)</u>	<u> 11.8</u>	<u> 104.9</u>	116.7
Actuarial Value of Net Assets	627.2	4,702.9	5,330.1	667.6	4,280.0	4,947.6
Accrued Pension Liability	<u>1,478.8</u>	<u>4,699.8</u>	<u>6,178.6</u>	<u>1,498.7</u>	<u>4,369.6</u>	<u>5,868.3</u>
Actuarial Surplus (Deficiency)	(851.6)	3.1	(848.5)	(831.1)	(89.6)	(920.7)
Funded Ratio	42.4%	100.1%	86.3%	44.5%	97.9%	84.3%

(all figures in \$millions)

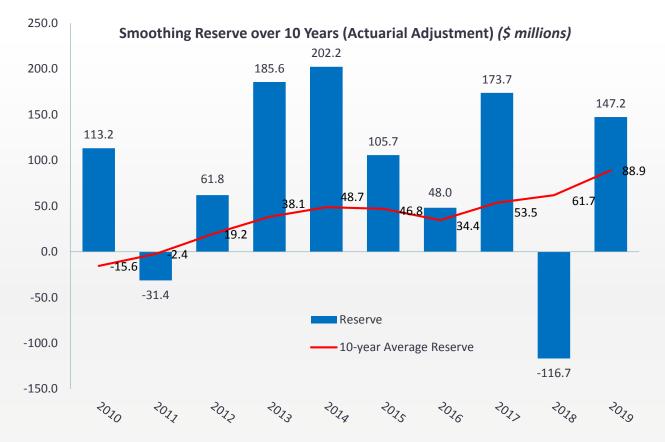
For funding purposes, assets are often calculated using an actuarial value basis that allows pension plans to filter the short-term market fluctuations out of the calculation of the financial position. Given the long-term nature of the liabilities, the Employment Pension Plans Act of Alberta provides the opportunity to apply a smoothing method. The UAPP uses an averaging of the differences between the rates of return assumed in the actuarial valuation and the market rates of return experienced by the fund. Unlike in 2018, actual investment returns exceeded the expected returns in 2019, contributing to the smoothing reserve increasing



by \$263.9 million during the year, with the Plan having a positive reserve of \$147.2 million at December 31, 2019 from a negative reserve of \$116.7 million at the end of 2018. The actuarial value of the assets increased by \$382.5 million to \$5,330.1 million from \$4,947.6 million at the start of 2019.



A detailed description of the method used to calculate the actuarial value of assets is included in the most recent actuarial valuation report as at December 31, 2018 posted on our website <u>www.uapp.ca</u>, and in Note 14 of the Financial Statements. The actuarial value is equal to the average of the actual market value at December 31, 2019 and the projected market values at the same date rolled forward from the two most recent year-end dates December 31, 2018 and December 31, 2017.



The 10-year average smoothing reserve has increased from \$61.7 million to \$88.9 million, since the 2019 positive reserve replaced the 2009 negative reserve of \$124.7 million in the 10-year average calculation. As with last year, the highest annual reserve over the last ten years continues to be \$202.2 million at December 31, 2014. The lowest reserve over the same time frame is the negative reserve of \$116.7 million from 2018.

At the December 2019 UAPP Board of Trustees meeting, a motion was passed to proceed with an asset/liability modelling study during 2020. This study follows one prepared in 2015-16 which resulted in changes to the Plan's target asset mix, specifically a reduction in public equities with a small increase in fixed income and a larger increase in alternative asset classes.



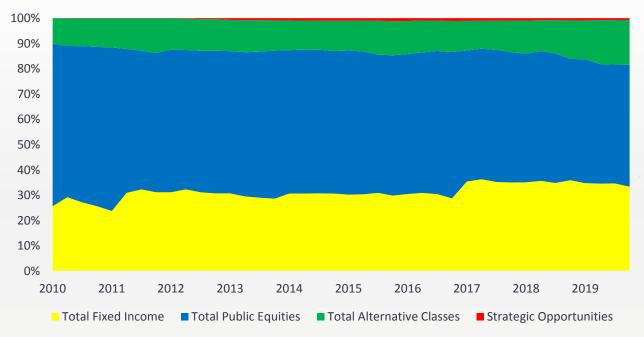
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Since the end of 2009, the fixed income allocation has grown from 25.5% of the fund to 33.4% at December 31, 2019. Over the same time period, public equities have decreased from 63.8% to 48.2% and alternative asset classes have increased from 10.7% to 17.7%. The strategic opportunities and currency portion of the fund has never exceeded 1.2% of the total fund and, today, comprises only the remaining 0.7%.

The fund is expected to continue moving towards the target allocations as outlined in the Statement of Investment Policies and Goals during 2020 but a plan to transition to a new mix, if needed, will commence at the conclusion of the new study.



Actual Asset Class Distribution

The Plan's Liabilities

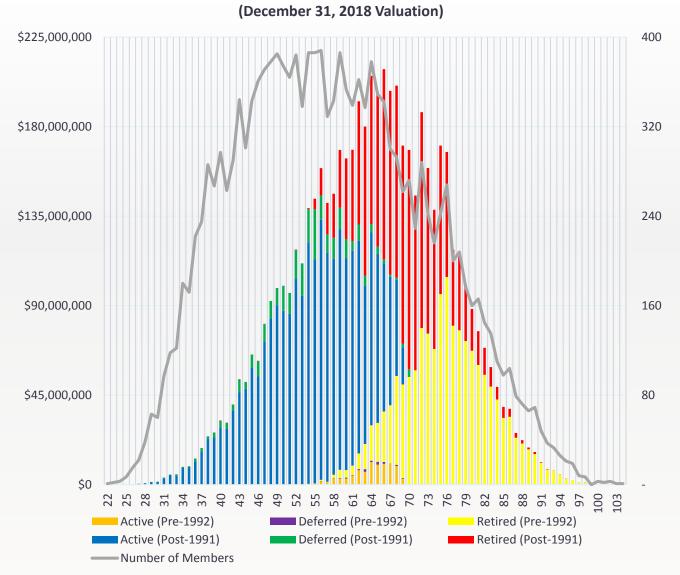
The Plan's accrued liabilities as of December 31, 2019 are estimated at \$6,178.6 million, increasing by 5.3% from the December 31, 2018 liability estimate of \$5,868.3 million. The 2019 liability was calculated based on an extrapolation by the Plan's actuary using the membership data and methods utilized in the December 31, 2018 actuarial valuation, which was completed during 2019 but after the 2018 Financial Statements were finalized. The 2018 liability was determined from an extrapolation of the December 31, 2016 actuarial valuation. The assumptions used in each extrapolation are determined separately with a summary of key assumptions found in Note 5 of the Financial Statements.





Prior to 1992, pension benefits in UAPP were not fully funded. At that time, the unfunded liability for service accrued to 1992 was to begin being funded between members, employers, and the Government of Alberta based on an amortization to 2043. Today, the deficit for pre-1992 service continues to be funded with the Government of Alberta making contributions equal to 1.25% of active membership total salary. Members and employers share the remaining cost, as determined at each actuarial valuation. From the latest valuation report, members and employers will each contribute 1.52% of payroll. The pre-1992 liability now comprises 23.9% of the total for the plan.

Liabilities by Age and Member Group



The lifecycle of a member's actuarial liability in a pension plan like UAPP generally is one of gradual growth



while actively accruing additional years of pensionable service, culminating in a peak at the time of retirement. As pensions are paid, the value of the liability will usually decline steadily before equalling zero when the pension ceases upon the member's (or in many cases, the surviving spouse's) death.

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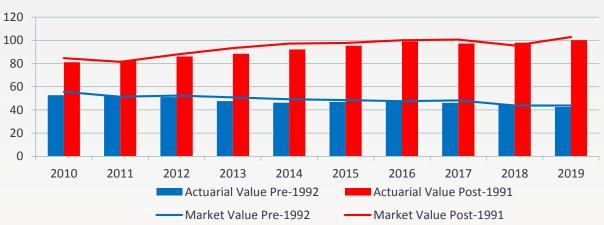


The Plan's Funded Ratio

Despite the increase in actuarial liabilities during 2019, in part from the strengthening of the valuation assumptions, the Plan's funded ratio (i.e. assets divided by liabilities) still improved as a result of excellent returns on Plan assets. On a market value basis, the funded ratio for all service is 88.6% (2018: 82.3%) and on an actuarial value basis is 86.3% (2018: 84.3%).

The pensionable service accrued by members prior to 1992 is accounted for separately because, under rules established by the provincial government at that time, the unfunded liability was amortized over 50 years, such that the deficit is retired no later than 2043. The funded ratios for pre-1992 service are 43.8% (2018: 43.8%) on a market value basis and 42.4% (2018: 44.5%) on an actuarial value basis. The ratio struggles to improve due to the long amortization period, improvements in life expectancy, and decreases in the discount rate over the years. Initially, the Government's share of the pre-1992 unfunded liability contribution was approximately 50% but their contribution represents about 30% today.

The Plan's funded status history for post-1991 service is significantly brighter. Despite some setbacks, this portion of the Plan has been fully funded in the past. Today, the funded ratio on a market value basis is 102.8% (2018: 95.5%) and the funded ratio on an actuarial value basis is 100.1% (2018: 97.9%). Unfunded liabilities for this service period are amortized over 15 years with the costs equally shared between members and employers.



Funded Ratio on Pre-1992 and Post-1991 Service Actuarial and Market Value of Assets (%)

The liabilities for 2019 are based on an extrapolation of the results calculated for the December 31, 2018 actuarial valuation completed during the year. Assumptions used in that valuation were reviewed and updated by the Board. The financial position of the Plan had improved to the end of 2018 so the Board elected to adjust the assumptions by lowering the discount rate to 5.46% from 5.60% and by adopting the latest mortality projection scale, allowing the Plan to maintain contribution rates to help continue moving the Plan to a more secure financial footing. Legislation requires an actuarial valuation be completed at least



once every three years, but it has been a long-standing practice for UAPP to perform valuations every two years to ensure contribution rates are adjusted in a timely manner.

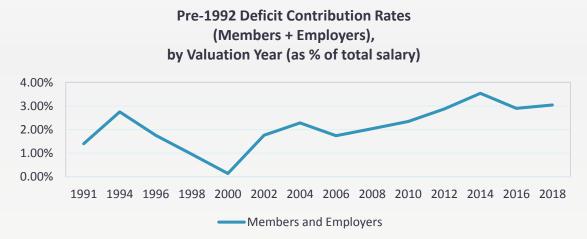


Looking to the Future

As the UAPP looks forward, the Plan continues to face many of the same risks that have impacted the funded status in the past. The Board addresses these risks through an ongoing process of identification and mitigation as it seeks to achieve its long-term goal to ensure the provision of pension benefits to Plan members and their beneficiaries.

In only two of the eleven years since the 2008 financial crisis, 2011 and 2018, did the Plan experience investment returns that did not exceed its target. Over that period, markets have performed very well and the Plan has also benefited from a diversified portfolio of assets that are professionally managed with policy guidance from the Board. Interest rates continue to slide downwards, creating some difficulties in attaining higher returns.

Liabilities continue to grow as the Plan contends with its demographic challenges. Members are living longer than ever before, meaning pensions are paid for longer periods. For the first time since 2014, the Plan experienced a decline at year-end in the number of active members. Lower discount rates reflect more subdued expectations of investment returns but they also lead to increases in the liabilities as they represent the present value of all future pension payments.



The demographic challenges have especially impacted the funding of the pre-1992 liability. The 50-year amortization of that deficit reached its halfway mark with the December 31, 2018 valuation and continues to affect total contribution rates.

The Board monitors investment returns closely and, while performance fluctuates where a negative return in one year, such as 2018, can be followed quickly by a great return the next year, the focus continues to be on the long-term. Indeed, the promise to pay accrued pensions for the lifetime of the Plan's youngest members is factored into current funding requirements. To safeguard these promises, the Plan's asset mix reflects a combination of the Board's funding goals and its appetite for investment risk. The Board looks forward to



the 2020 asset/liability modelling study with results used to update the asset mix as appropriate.

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Questions About Your Pension Or The Retirement Planner

Call the UAPP Administration Centre toll-free 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 website at <u>www.uapp.ca</u>. Your annual Member Statement can be accessed through the Retirement Planner.

For new members of the plan, please spend some time reviewing our <u>website</u>. 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 also be directed to the UAPP Trustees' Office at 780.415.8868.

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/.

For members thinking about retirement, you can run an unlimited number of estimates on the Retirement Planner, adjusting for important details like retirement dates and future salary adjustments. Also, please read the Information Sheet "Preparing For Retirement", available at our <u>website</u> under "Publications".

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 toll-free at 1.800.565.0479 to update their information. Other terminated members should contact the UAPP Administration Centre at 1.866.709.2092.

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.

Universities Academic Pension Plan The Board of Trustees #1002, Park Plaza 10611 - 98 Avenue Edmonton, Alberta T5K 2P7



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