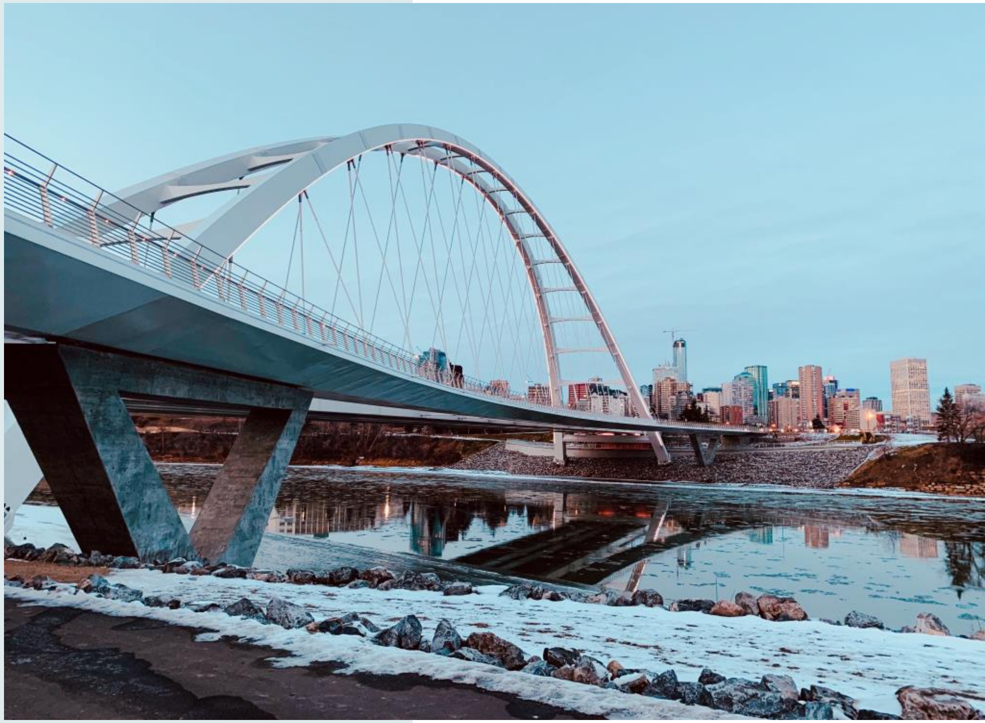
UNIVERSITIES ACADEMIC PENSION PLAN

2021 ANNUAL REPORT



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PLAN 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 Province of Alberta *Public-Sector Pension Plans Act* and the Provincial Treasurer was the trustee until December 31, 2000. The UAPP (Plan) became an independent pension plan registered under the Province of Alberta *Employment Pension Plans Act* 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 Plan's sponsors: the academic staff associations and the boards of governors of the University of Alberta, University of Calgary, University of Lethbridge, Athabasca University, and Banff Centre (Sponsors).

•The Board of Trustees (Board), 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, 2021, the UAPP has 7,814 active members, 2,551 deferred members, and 6,424 pensioners.

•The UAPP Fund's market value at the end of 2021 was $6,655.1 million.

GOVERNANCE OF THE PLAN – BOARD OF TRUSTEES

* replaced Deborah Meyers effective April 1, 2021
** replaced Linda Dalgetty effective March 15, 2021

GOVERNANCE OF THE PLAN

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 the UAPP oversees the Plan and 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 Province of Alberta *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.

COMMITTEES OF THE BOARD

Actuarial

Paul Rogers (Chair)
Geoffrey Hale *
Lawton Shaw
Nancy Walker

Audit

Todd Gilchrist (Chair)
Rob Kindrachuk * (Vice-Chair)
Paul Rogers
Megan Costiuk (external member)

Investment

Aditya Kaul (Chair)
Geoffrey Hale (Vice-Chair)
Ron Kim *
Paul Rogers
Ron Helmhold ** (external member)
David Lawson (external member)
Bob Normand (external member)
Gary Smith (external member)

* appointed to Committee effective March 31, 2021
** appointed to Committee effective September 29, 2021

PLAN SERVICE PROVIDERS

Board of Trustees

UAPP Trustees' Office
#1002, Park Plaza
10611 98 Avenue
Edmonton, AB T5K 2P7
Fax: 780.415.8871
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Administration Service Provider

UAPP Administration Centre (Buck)
Member Pension Inquiries:
201 City Centre Drive
Suite 1000
Mississauga, ON L5B 4E4
Phone: 1.866.709.2092
Email: uapp.pensions@buck.com

Pensioner Payroll Provider

CIBC Mellon
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

Actuary

Aon

Asset Consultant

Aon

Auditor

KPMG LLP

Investment Managers

Alberta Investment Management Corporation
Beutel, Goodman & Company Ltd.
Fiera Capital Corporation
State Street Global Advisors

UAPP Management Team

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Administrative Officer
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MESSAGE FROM THE CHAIR

As the world grappled with the second full year of the ongoing pandemic, the UAPP Fund performed extremely well, producing a return of 16.1 per cent during 2021, well ahead of the 5.3 per cent discount rate used in the latest actuarial valuation. It also exceeded the median annual return of Canadian defined benefit pension plans of 8.9 per cent, as reported by RBC Investor and Treasury Services. These developments position the Plan well to deal with current and anticipated market volatility in 2022.

The Board remains committed to keeping the Plan on a solid foundation. Central to this commitment is in seeking to optimize the risk-adjusted rates of return earned by the Fund. During 2021, the Plan's actuary prepared an actuarial valuation. It provides the Board with an opportunity to closely evaluate the assumptions used to determine the financial position of the Plan at December 31, 2020 and sustainable contribution rates looking forward.

The Fund's strong investment performance in recent years has significantly improved the Plan's financial position, enabling the Board to decrease contribution rates while also reducing the discount rate from 5.46 per cent to 5.30 per cent. Effective July 1, 2022, UAPP contribution rates will decline by 1.98 per cent (shared equally between members and employers), the first such reduction since the 2008 financial crisis.

Contribution rates pay for current service pension costs as well as unfunded liabilities where the assets in the Fund are less than the present value of the accrued liabilities. The valuation revealed the total Plan funded ratio to be 86.5 per cent on a going concern basis at December 31, 2020. For the Post-1991 portion of the Plan, the funded ratio was 99.9 per cent at the same date. Robust returns in 2021 gave the Plan funded ratios of 92.6 per cent (total) and 106.3 per cent (Post-1991 portion only) at December 31, 2021 – the strongest funded position since 2000, even with a much lower discount rate. These figures do not include the 6.3 per cent of assets set aside for the long-standing "smoothing" policy to stabilize contribution rates against the potential effects of market volatility.

Another major project undertaken by UAPP during 2021 was an asset/liability modelling study based on the work of the Plan's asset consultant. The study reviewed the Fund's target asset mix in the context of its actuarial liabilities and the related funding targets. After considerable deliberation and in consultation with the Investment Committee, the Board opted to maintain the current asset mix except for reducing the allocation to Canadian public equities from 12 per cent to 5 per cent, offset by an increase in global public equities from 26 per cent to 33 per cent, effective January 1, 2022. Between March 12 and April 14, 2021, the Board moved management of the Fund's public equity investments from Alberta Investment Management Corporation (AIMCo) to indexed funds at State Street Global Advisors. The move to passive management is considered temporary. Once the asset/liability study was completed late in the year, the Board started making plans to search for investment managers to actively manage the public equities portfolio once again. That work is being done in early 2022.

MESSAGE FROM THE CHAIR

In addition to working to secure the long-term fiscal viability of the pension plan, the Board also places a high priority on Plan members receiving quality service with respect to their pensions. The performance of administrators is evaluated through standards identified in certain key areas of their work. The details of those standards and related performance are included in the Administration Report. An online Retirement Planner tool and a toll-free call centre are available to assist members in estimating their pensions and the UAPP website hosts a wealth of information geared towards guiding members to a greater understanding of their pension plan. The Trustees' Office has continued to offer pension information sessions throughout the pandemic, meeting virtually with hundreds of members. The office staff are also available for one-on-one sessions, either by telephone or through virtual platforms.

The UAPP benefits from working with highly qualified service providers, both on the plan administration side (Aon, Buck, and CIBC Mellon) and on the investment management side (AIMCo, Beutel Goodman & Company Ltd., Fiera Capital Corporation, and State Street Global Advisors). All these firms provided the Plan with exceptional service during 2021 and the Board wishes to thank the staff at these firms for their continued support and guidance.

Like 2020, the past year was another one of continuing turnover among those charged with Plan governance. On behalf of the UAPP, I would like to welcome two new Board members who joined during 2021, Ron Kim (University of Calgary) and David Head (Athabasca University), and one new external member of the Investment Committee, Ron Helmhold. The Board is excited to work with them and will gain from their knowledge and experience. In addition, I would like to express gratitude to Ron, David Lawson and Gary Smith (Investment) and Megan Costiuk (Audit) as external members who give generously of their time and talents to work with the Board's committees. I want to express appreciation to Linda Dalgetty (University of Calgary) and Deborah Meyers (Athabasca University) who departed the Board during 2021. Both have made valuable contributions to the Board over several years. A special thank you goes out to Bob Normand who resigned from the Investment Committee at the end of 2021, after serving as an external member of the committee since March 7, 2002. Bob provided deep insight, dedication, and thought leadership to the UAPP, and his support will be greatly missed.

As my two-year term as Chair and eight-year term as member of the Board comes to a close at the end of 2021, I would like to thank the Board and Committee members with whom I have had the pleasure of working closely over the past several years and who have helped make the time spent both constructive and rewarding. This team effort has contributed to continued improvement in governance, improved value for money in our pension contributions, and most important, greater plan resilience which should increase the security of our members' pensions. While challenges remain, plan members may be assured that their pensions are in capable hands with the qualified individuals in charge of governance. I would like to welcome James Smith (University of Lethbridge) as my replacement on the Board and Nancy Walker (University of Lethbridge) as the new Chair of the Board.

The Board relies on a small team in the Trustees' Office to carry out its mandate. On behalf of the Board, it is my pleasure to acknowledge and thank our team led by Executive Director, Dave Schnore, for their dedication and service to the UAPP.

Geoffrey Hale
Chair, Board of Trustees

MANAGEMENT DISCUSSION AND ANALYSIS

FINANCIAL POSITION OF THE PLAN

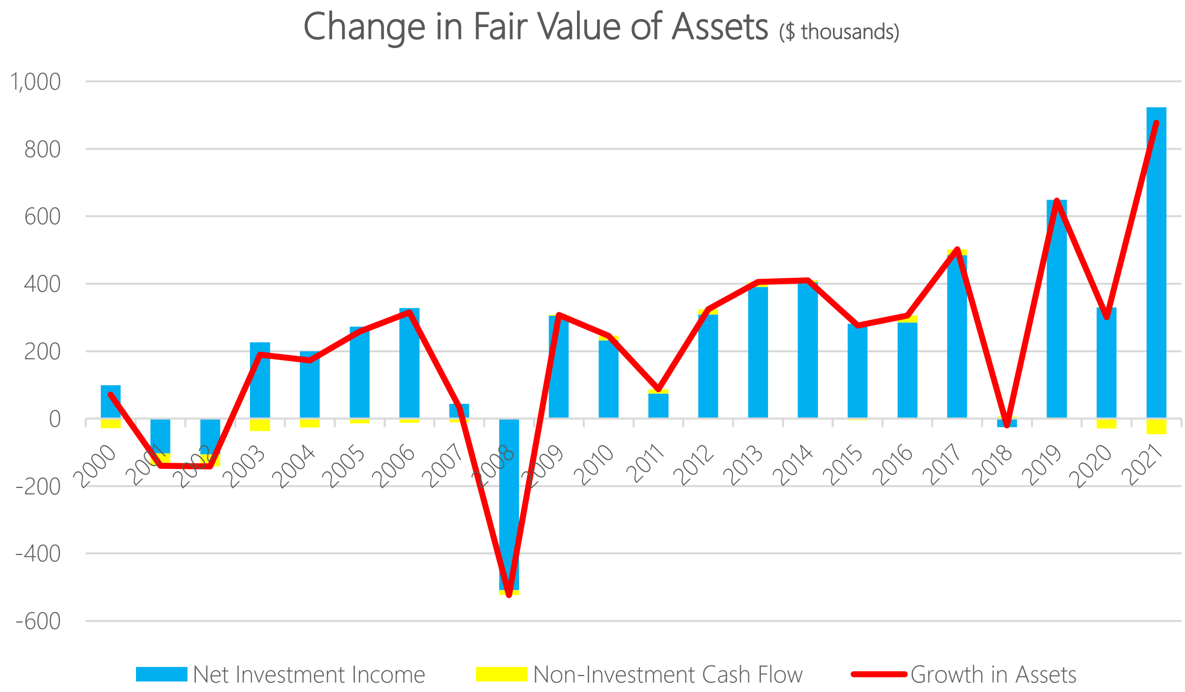
The Plan's Assets

The UAPP Fund's assets had a market value of $6,655.1 million at the end of 2021, representing an increase of $876.8 million from the prior year end. This one-year growth is the largest in the Fund's history and comes from investment income net of investment management costs of $923.4 million. The Plan is in a position of negative cash flow (excluding investment income) as Plan benefit payments and administrative expenses exceeded total contributions by $46.5 million during the year. Strong returns during 2021 and most recent years have led the Plan to its highest Funded Ratio (92.6 per cent) since 2000 (94.3 per cent).

	December 31, 2021			December 31, 2020		
	Pre-1992	Post-1991	Total	Pre-1992	Post-1991	Total
Fair Value of Net Assets	597.6	6,057.5	**6,655.1**	596.5	5,181.8	**5,778.3**
Actuarial Adjustment	(43.2)	(378.1)	**(421.3)**	(22.3)	(130.0)	**(152.3)**
Actuarial Value of Net Assets	554.4	5,679.4	**6,233.8**	574.2	5,051.8	**5,626.0**
Accrued Pension Liability	1,389.1	5,344.7	**6,733.8**	1,415.3	4,987.4	**6,402.7**
Actuarial Surplus (Deficiency)	(834.7)	334.7	**(500.0)**	(841.1)	64.4	**(776.7)**
Funded Ratio	39.9%	106.3%	**92.6%**	40.6%	101.3%	**87.9%**

Not only was the Fund's growth during the past year of historic proportions, the three years with the largest dollar value growth in assets occurred within the past five years (2021, 2019, and 2017). Investment income net of costs has always been the primary driver of changes in the value of the Fund's assets. This income remains vital to the Fund's health given the re-emergence of negative cash flow. For each of the past three years, benefit payments have exceeded contributions. Nevertheless, the Fund has managed to grow in twelve of the last thirteen years. In the years after the Global Financial Crisis of 2008, the annualized rate of return is 9.7 per cent and net investment income has accounted for $4,642.3 million of the $4,668.5 million overall increase in the Fund.

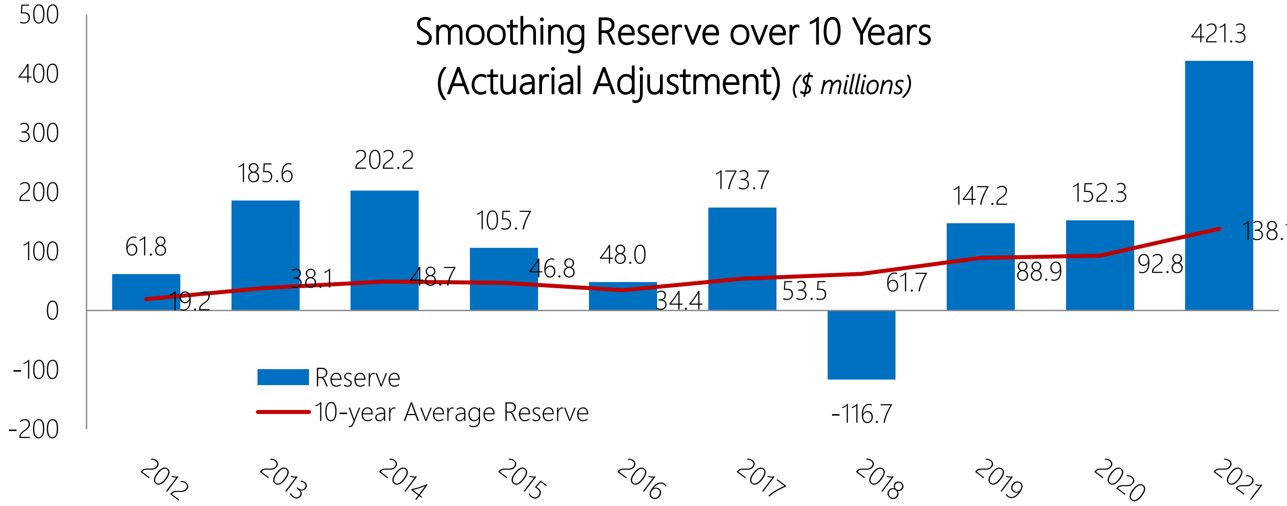
MANAGEMENT DISCUSSION AND ANALYSIS



One of the great challenges confronting all pension fund managers is in managing the timing, magnitude, and direction of the inevitable market fluctuations as they occur. To handle the ebbs and flows of market returns, actuarial practice permits the use of asset smoothing when measuring the financial position of a plan. Note 14 of the Financial Statements contains a reference to the details of the smoothing methodology used by UAPP, as does the most recent actuarial valuation report, posted on the Plan's website (www.uapp.ca). As at December 31, 2021, the smoothing reserve is $421.3 million, compared to a reserve of $152.3 million for 2020. The actuarial value of assets increased by $607.8 million, from $5,626.0 million at the beginning of the year to $6,233.8 million at the end.

The exceptional return of 16.1 per cent earned during 2021 significantly influenced the smoothing reserve applied for the year as the Plan attained a new all-time high reserve point. The next highest reserve was $202.2 million in 2014 with the lowest point in the past ten years being a negative reserve of $116.7 million in 2018. The 10-year average smoothing reserve has jumped considerably, from $92.8 million to $138.1 million from 2020 to 2021.

MANAGEMENT DISCUSSION AND ANALYSIS



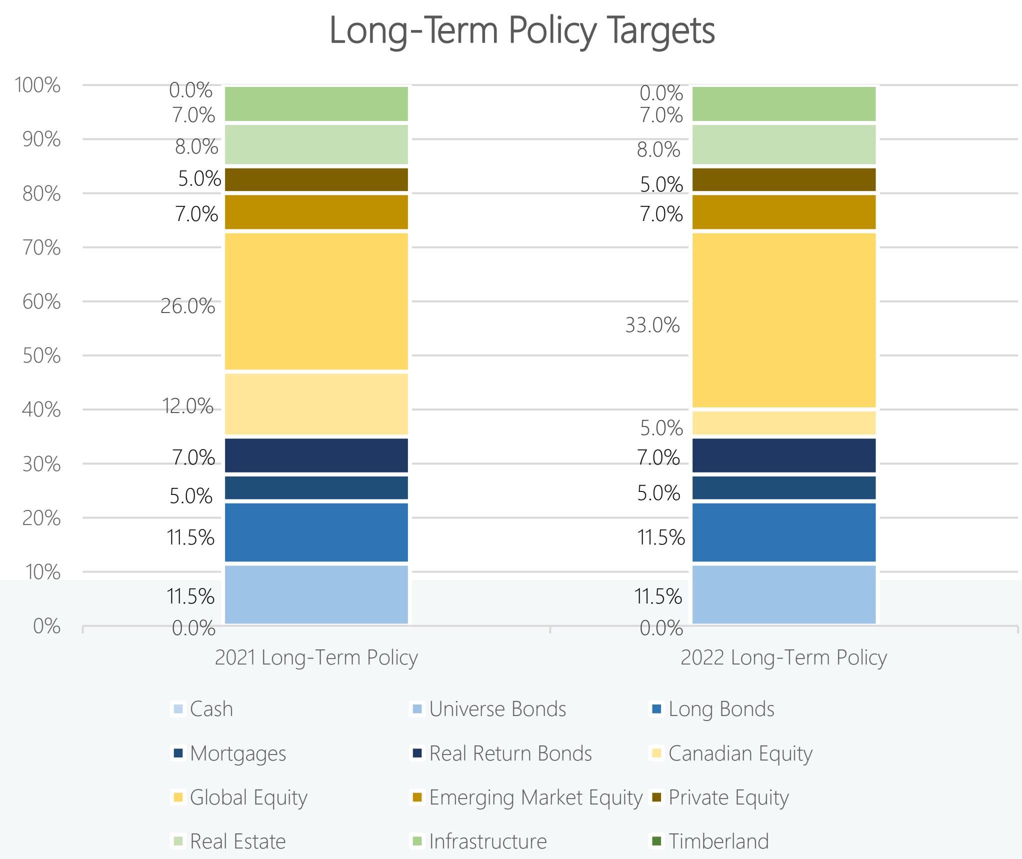
As noted in last year's annual report, UAPP carried out an asset/liability modeling study with the assistance of the Plan's asset consultant. The goal of the study was to review the existing asset mix of the Fund and adjust it as needed within the context of the Plan's liabilities. Over the long-term, the Fund must ensure the Plan is able to meet all its benefit obligations and the study provides an opportunity to closely evaluate the risk-return profile of the asset mix. The project involved significant consultation between the Investment Committee and the asset consultant, with the Committee ultimately providing its recommendations to the Board. The study resulted in three changes to the UAPP Statement of Investment Policies and Goals (SIP&G) effective January 1, 2022.

Firstly, as a risk mitigation measure, the allowed ranges for the asset mixes will be tightened on both the upper and lower bounds. The impressive market returns on equities caused the actual mix to shift considerably and the Investment Committee felt that tighter ranges would allow the Fund to better track towards its target allocations.

Secondly, since UAPP first invested in the private equity asset class in 2017, the allocation was included with the Alternatives class, alongside infrastructure, real estate, and timberlands. However, from a risk-return perspective, private equity behaves more like public equity investments. As a result, private equities were moved to the Equities class. As an additional risk mitigation measure, this change allows UAPP to consider private and public equities together when evaluating the need for rebalancing the Fund.

MANAGEMENT DISCUSSION AND ANALYSIS

The last change was to reduce the Fund's allocation to Canadian public equities from a 12 per cent target to 5 per cent, with an offsetting increase to global public equities, increasing from 26 to 33 per cent. This change increases diversification, reduces home country bias, and brings the Fund's allocation to Canada more in line with Canada's share of the world's capital markets.



MANAGEMENT DISCUSSION AND ANALYSIS

Changes to the Fund to satisfy the criteria of the updated asset mix were completed in early 2022 with Canadian public equity funds reallocated to global equity funds and fixed income investments.

The Plan's Liabilities

The Plan's accrued liabilities as of December 31, 2021 are estimated at $6,733.8 million, an increase of 5.2 per cent over the December 31, 2020 liability of $6,402.7 million as reported in the 2020 financial statements. Of the $6,733.8 million liability, a total of $1,389.1 million relates to the pre-1992 service period and $5,344.7 million relates to the post-1991 service period.

Just prior to the commencement of the asset/liability modelling study, the Plan's actuary performed both a study of the termination and retirement experience of the membership and an actuarial valuation as at December 31, 2020. The experience study enabled the Board to adopt updated demographic assumptions. As part of the actuarial valuation process, the Board reviews all assumptions and this year, they opted to reduce the discount rate, an assumption directly related to anticipated future investment returns. Asset values have grown with positive market experience, but such strong returns may be more difficult to attain in the future. As a result, the discount rate was changed from 5.46 per cent to 5.30 per cent. The valuation results revealed that the Plan is in a significantly improved financial position and the Board was able to reduce contribution rates, even while reducing the discount rate. Generally, a lower discount rate will increase the value of actuarial liabilities.

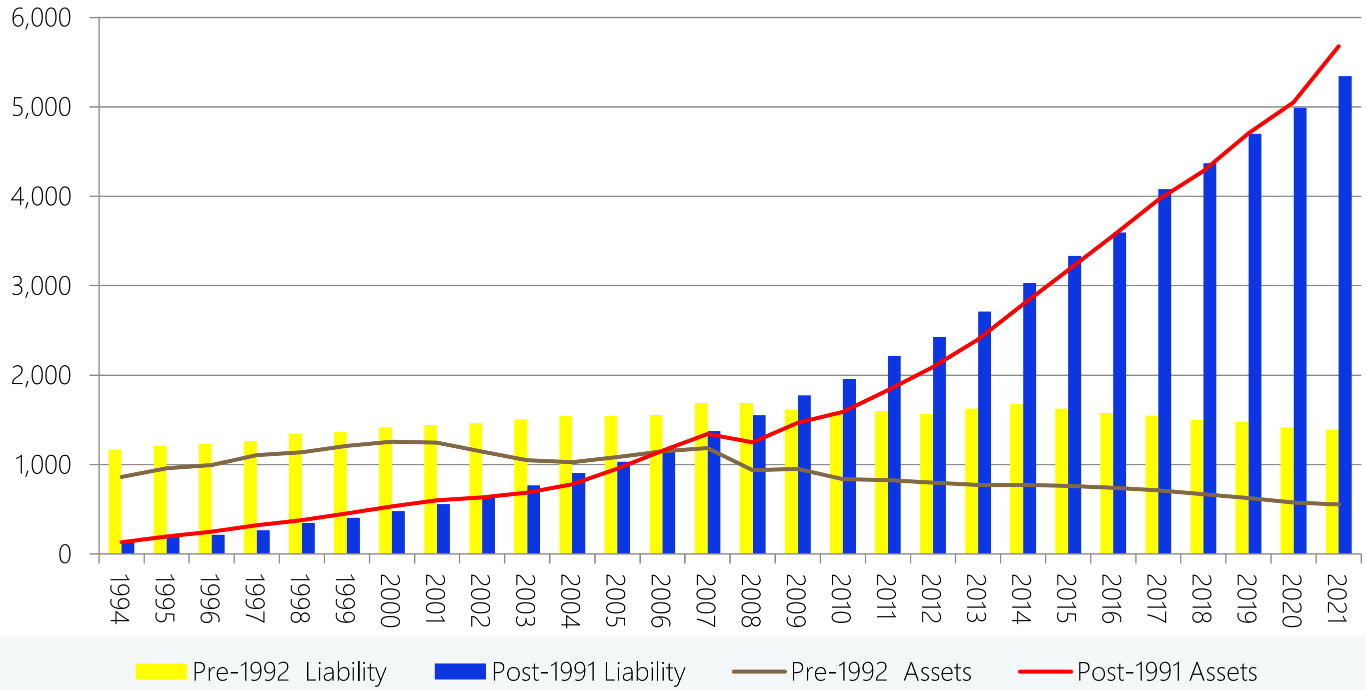
For almost three decades, UAPP has reported liabilities for the pre-1992 period separate from those for the post-1991 period because the Government of Alberta contributes towards the funding of the unfunded liability first established at December 31, 1991 and amortized to 2043. The Plan's financial statements identify the assets (at both market value and actuarial value), actuarial liabilities, and the resulting surplus/deficit for the two periods.

The pre-1992 assets continue to decline due to the long amortization period. Meanwhile, the pre-1992 liability has not declined as quickly as initially expected due to increases in life expectancies and decreases in discount rates over the years.

The post-1991 liability has been impacted by the same factors but grows from the current service accrued by Plan members. The assets for this period have benefited from the shorter amortization timeline built into pension legislation. This portion of the Plan has been fully funded in the past and has recently reached full funding again after many years of deficits.

MANAGEMENT DISCUSSION AND ANALYSIS

Actuarial Value of Assets and Liabilities ($ millions)



The liability calculations for December 31, 2021 are derived from the Plan actuary's extrapolation to that date from the December 31, 2020 actuarial valuation. The 2020 liability was determined from an extrapolation of the previous actuarial valuation as at December 31, 2018. The assumptions used in each extrapolation are reviewed as part of the year-end process and are summarized in Note 5 of the Financial Statements.

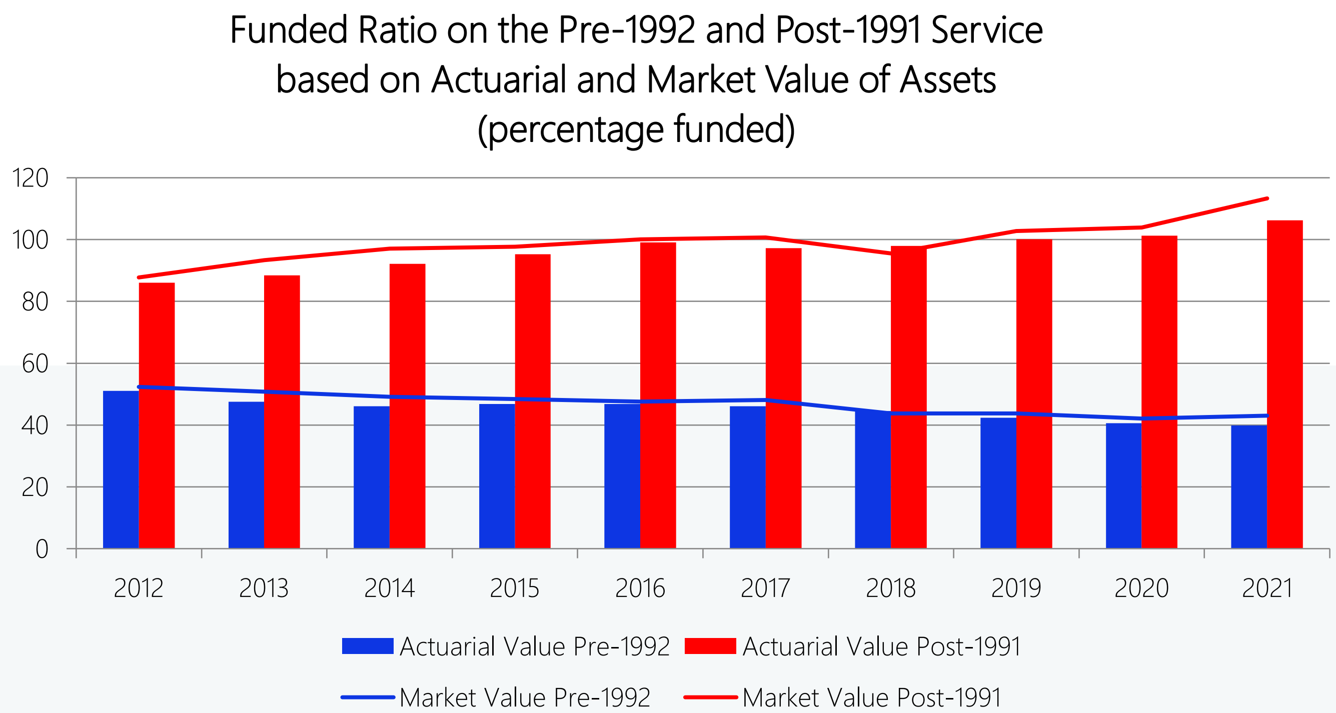
The Plan's Funded Ratio

UAPP tracks a number of funded ratios to monitor the fiscal health of the pension plan. The ratios are calculated for the pre-1992 period, post-1991 period, and the total combined, on both a market value and an actuarial value basis. The underlying result of these many ratios is that the pre-1992 period remains significantly under-funded, but this period is a shrinking portion of the total plan. The post-1991 period, on the other hand, has reached full funding, while the combined result shows that the Plan is at its healthiest point in over twenty years.

MANAGEMENT DISCUSSION AND ANALYSIS

On a market value basis, the total Plan has a funded ratio of 98.8 per cent (2020: 90.2 per cent), split between the pre-1992 portion with a ratio of 43.0 per cent (2020: 42.1 per cent) and the post-1991 portion at 113.3 per cent (2020: 103.9 per cent). The market value funded ratio is at an all-time high for the combined total Plan. Credit for the attainment of the high ratios is mainly due to strong investment returns over many years, especially since 2008.

In looking at the position of the Plan on an actuarial value basis, the funded ratios remain high but are tempered by the buffer added to asset values as a means of protecting the Fund from market fluctuations. The total Plan has a funded ratio of 92.6 per cent (2020: 87.9 per cent), comprised of the pre-1992 portion at 39.9 per cent (2020: 40.6 per cent) and the post-1991 portion at 106.3 per cent (2020: 101.3 per cent).



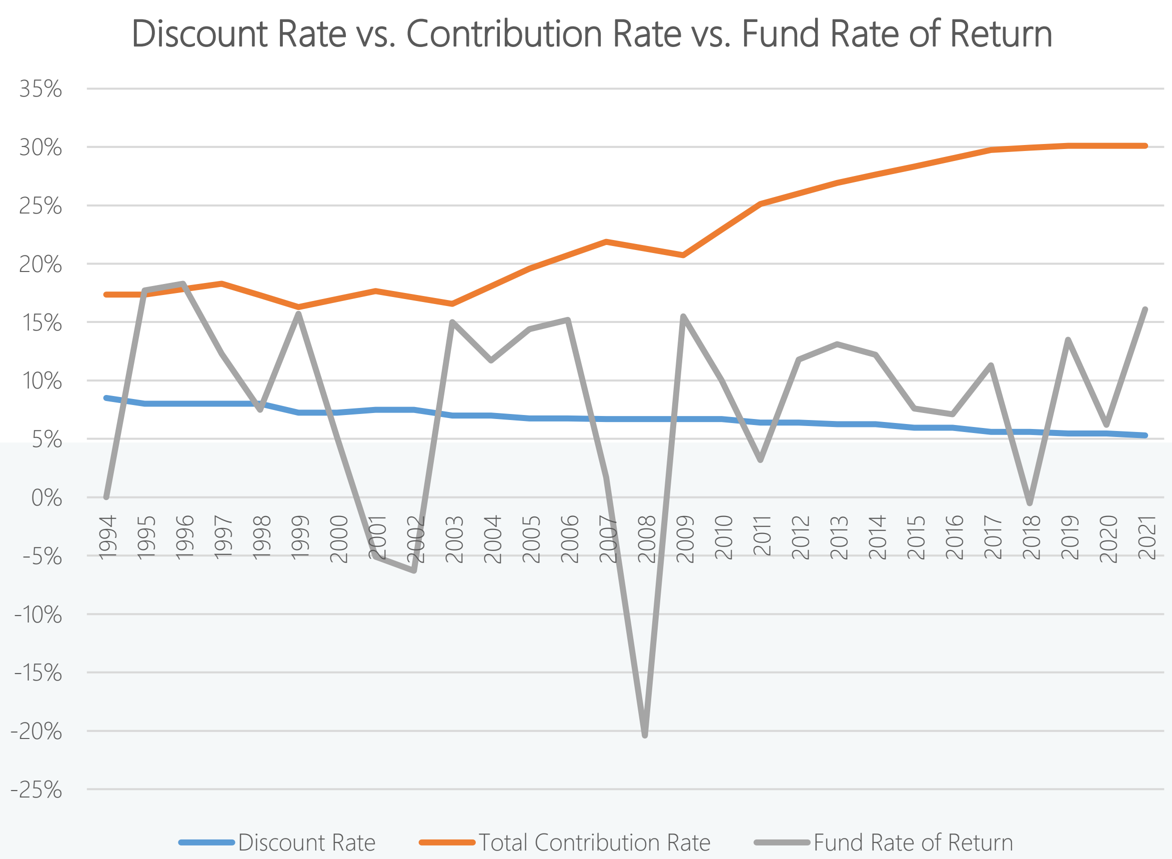
MANAGEMENT DISCUSSION AND ANALYSIS

Looking to the Future

Effective July 1, 2022, UAPP contribution rates will reduce by 1.98 per cent, split evenly between employers and members. This reduction is the first since January 1, 2008. While strong recent investment performance has put the Plan in a healthy financial position and allowed the Board to lower contribution rates, it is important to understand why the Board also lowered the discount rate. After years of good returns, it is wise to build a margin for adverse experience, a traditional actuarial tool for guarding Plan assets, and lowering the discount rate is a common way to do that given its outsized influence on the value of the liabilities. The rate is derived from anticipated future investment returns based on the Plan's asset mix and most industry experts are projecting lower future investment performance for pension funds.

While healthy rates of return have led to a decrease in the contribution rate now, future returns will heavily influence the direction of contribution rates over the coming years. The Board will continue to proceed with caution when it comes to adopting actuarial valuation assumptions such that a healthy measure of conservatism is involved to avoid fluctuations in contribution rates, knowing that market returns will always behave erratically.

Early in 2021, the Board directed that all public equity investments be managed on a passive basis for the duration of the asset/liability modelling study. Now that this study is complete, the Board has some important steps to take on the investment side as it contemplates future management of the Fund. Plan members should be confident that the Board will carefully evaluate those next steps as it searches for how this sizable portion of the Fund will be managed going forward.



INVESTMENT REPORT

Investment Beliefs and Approach

The development of 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. A new SIP&G became effective January 1, 2022. A copy of the full text of the UAPP's SIP&G is available on the UAPP website www.uapp.ca under Publications.

INVESTMENT REPORT

The following table compares the Board's current Long-term Policy Asset Mix benchmark and ranges to the actual asset mix of investments for 2021 and 2020.

Long-term Policy Asset Mix
(percentage of Fund)

	2021				2020			
Asset Class	Benchmark	Min	Max	Actual	Benchmark	Min	Max	Actual
	%			%	%			%
Money market and fixed Income								
Cash & short term	0.0	0.0	1.0	1.1	0.0	0.0	1.0	0.2
Universe bonds	11.5	8.0	14.0	9.3	11.5	8.0	14.0	11.3
Private mortgages	5.0	3.0	7.0	3.5	5.0	3.0	7.0	4.0
Long duration bonds	11.5	8.0	14.0	9.6	11.5	8.0	14.0	11.5
Real return bonds	7.0	5.0	9.0	6.2	7.0	5.0	9.0	7.1
	35.0	26.0	41.0	29.7	35.0	26.0	41.0	34.1
Public equities								
Canadian	12.0	10.0	20.0	12.9	12.0	10.0	20.0	12.0
Foreign								
Global	26.0	22.0	31.0	27.6	26.0	22.0	31.0	26.9
Emerging markets	7.0	5.0	9.0	6.2	7.0	5.0	9.0	7.3
	45.0	40.0	60.0	46.7	45.0	40.0	60.0	46.2
Alternative investments								
Real estate	8.0	5.0	11.0	7.2	8.0	5.0	11.0	6.7
Infrastructure	7.0	3.0	9.0	5.2	7.0	3.0	9.0	6.4
Timberland	0.0	0.0	1.0	0.6	0.0	0.0	1.0	0.6
Private equity	5.0	0.0	7.0	10.4	5.0	0.0	7.0	5.6
	20.0	12.0	25.0	23.4	20.0	12.0	25.0	19.3
Strategic opportunities and currency	-	-	-	0.2	-	-	-	0.4
Total	100.0			100.0	100.0			100.0

As can be seen from the table, the Plan holds a highly diversified portfolio of investments in fixed income securities, Canadian and foreign public equities, private equities, alternative investments, and strategic opportunities, including 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 sales of units. There are thousands of securities held in various pooled investment funds. Securities may be bought and sold on a daily basis. The Plan has a broad global diversification across publicly traded and private equities which increases opportunities to add value. In addition, the Fund's investments in real estate and infrastructure are expected to provide better cash yields that grow with inflation.

During 2021, the private equity portion of the portfolio breached its upper limit identified in the SIP&G due to exceptional investment returns experienced in the asset class. No new investments in private equity will be made until the asset class is within its allowed range.

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 REPORT

Investment Management

During 2021, UAPP utilized four investment managers to manage its investment portfolio. Beutel, Goodman & Company Ltd. and Fiera Capital Corporation manage its Canadian long bond and universe bond portfolios totaling 18.9% of total investments at year-end. A new public equity manager, State Street Global Advisors, was added during 2021 and managed 46.7% of UAPP's investments by the end of the year. Alberta Investment Management Corporation (AIMCo) manages the remaining 34.4% in a mix of private equity investments, alternative investments, private mortgages, and real return bonds.

AIMCo is an Alberta provincial corporation established in 2008, reporting to the President of Treasury Board and Minister of Finance, administering investment portfolios of around $160 billion on behalf of other public sector pension plans and the Government of Alberta. Beutel, Goodman & Company Ltd. is a privately-owned Canadian company founded in 1967, with over $40 billion in assets under management. Fiera Capital Corporation was established in 2003 and has almost $190 billion in assets under management. State Street Global Advisors was established in 1978 and has more than $5,250 billion in assets under management. 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, 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.

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.

INVESTMENT REPORT

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 $1,057.9 million. The current discount rate of 5.30% includes a long-term real return rate of 3.05% and an assumed inflation rate of 2.25%. This rate represents the Plan's long-term investment return objective for funding purposes. In the 2020 actuarial valuation, the discount rate decreased to 5.30% from 5.46% used in the 2018 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.

2021 Investment Performance

At December 31, 2021, the fair value of the Plan's investments totaled $6,633.6 million, up from $5,756.4 million at the end of the previous year.

Overall, UAPP finished the 2021 year with a return on investments of 16.1% compared to a gain of 6.2% in 2020.

UAPP experienced positive returns on its investments in all four quarters of 2021, starting with 2.2% in the 1st quarter, 5.8% in the 2nd quarter, and 1.1% in the 3rd quarter, before ending the year with the strongest quarter and a 6.2% return in the 4th quarter. UAPP investments outperformed the benchmark return of 11.1%, by 5.0%.

Outstanding investment performance from Canadian and global public equities, private equities, and other alternative asset classes supported a very strong calendar year for the Fund. Fixed income investments experienced losses due to low bond yields and high inflation while emerging markets equities performed especially poorly in the latter half of the year with the pandemic an ongoing concern.

Investments: $6,633.6 million
(2020: $5,756.4 million)

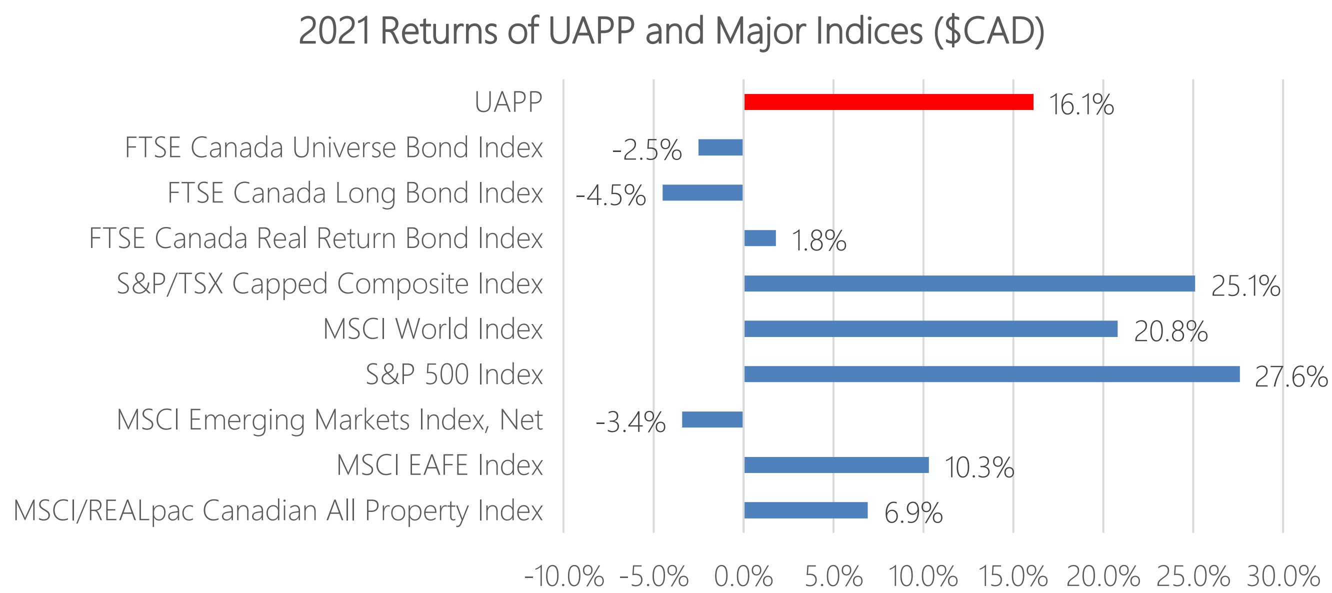
Return on Investments: 16.1%
(2020: 6.2%)

Investment Income: $945.7 million
(2020: $358.0 million)

Investment Expense: $22.3 million
(2020: $28.1 million)

INVESTMENT REPORT

The following chart summarizes the market returns in Canadian dollars from various indices around the world and the overall return of UAPP for 2021.



The Standard & Poor's (S&P) 500 Index, which tracks the performance of the top 500 American companies, gained 27.6% in Canadian dollars (28.7% in U.S. dollars) compared to a gain of 16.3% in Canadian dollars (18.4% in U.S. dollars) in 2020.

Following the transition of public equity investments from AIMCo to State Street, approximately 34.3% of the Plan's investments (2020: 17.5%) are denominated in U.S. dollars. The slightly stronger Canadian dollar in relation to U.S. dollar had a small negative impact on the value of U.S. dollar investments held by the Plan. At December 31, 2021, one U.S. dollar was worth $1.26 Canadian compared to $1.27 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, 2021 resulting in less favourable returns in Canadian dollars.

The Morgan Stanley Capital International (MSCI) EAFE Index covering Europe, Australasia and the Far East, gained 10.3% in Canadian dollars compared to 5.9% in 2020. As most of UAPP's foreign currency exposure is through public equity investments, the Plan's investments denominated in currencies other than the Canadian and U.S. dollar comprise only approximately 0.1% (2020: 16.5%) of the total Fund.

INVESTMENT REPORT

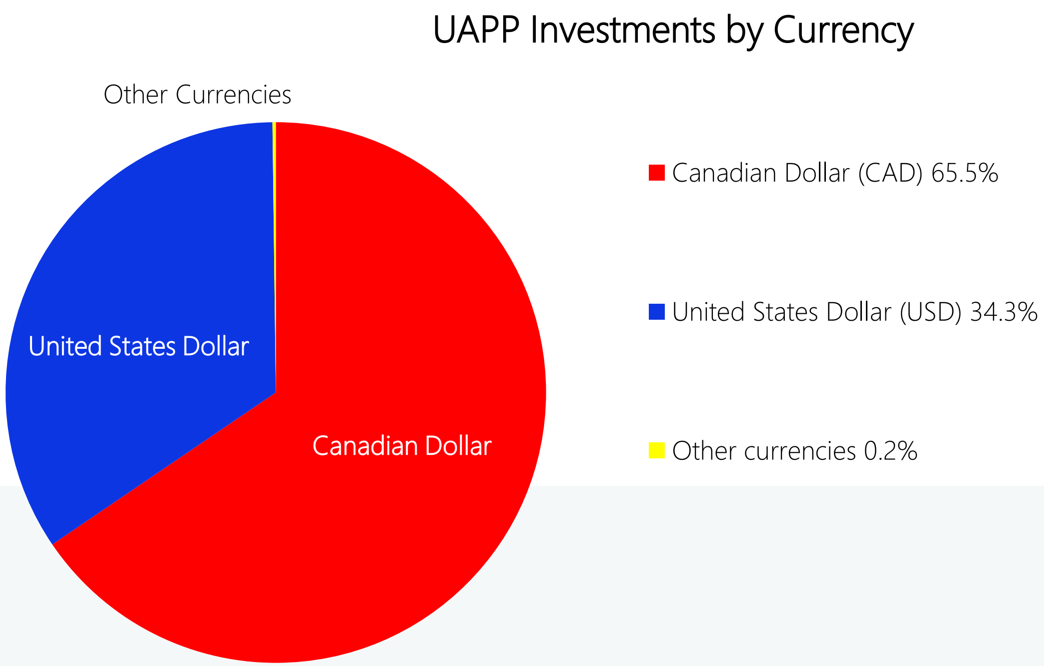
Outside of the global developed equity markets, the MSCI Emerging Markets Index lost 3.4% in 2021 in Canadian dollars compared to a gain of 16.2% in 2020.

The Canadian public equities, represented by the S&P Toronto Stock Exchange (TSX) Composite Index, gained 25.1% in 2021 compared to a gain of 5.6% in 2020.

The Canadian real estate market represented by the MSCI/REALpac Canadian All Property Index increased by 6.9% in 2021 compared to a decrease of 5.2% in 2020.

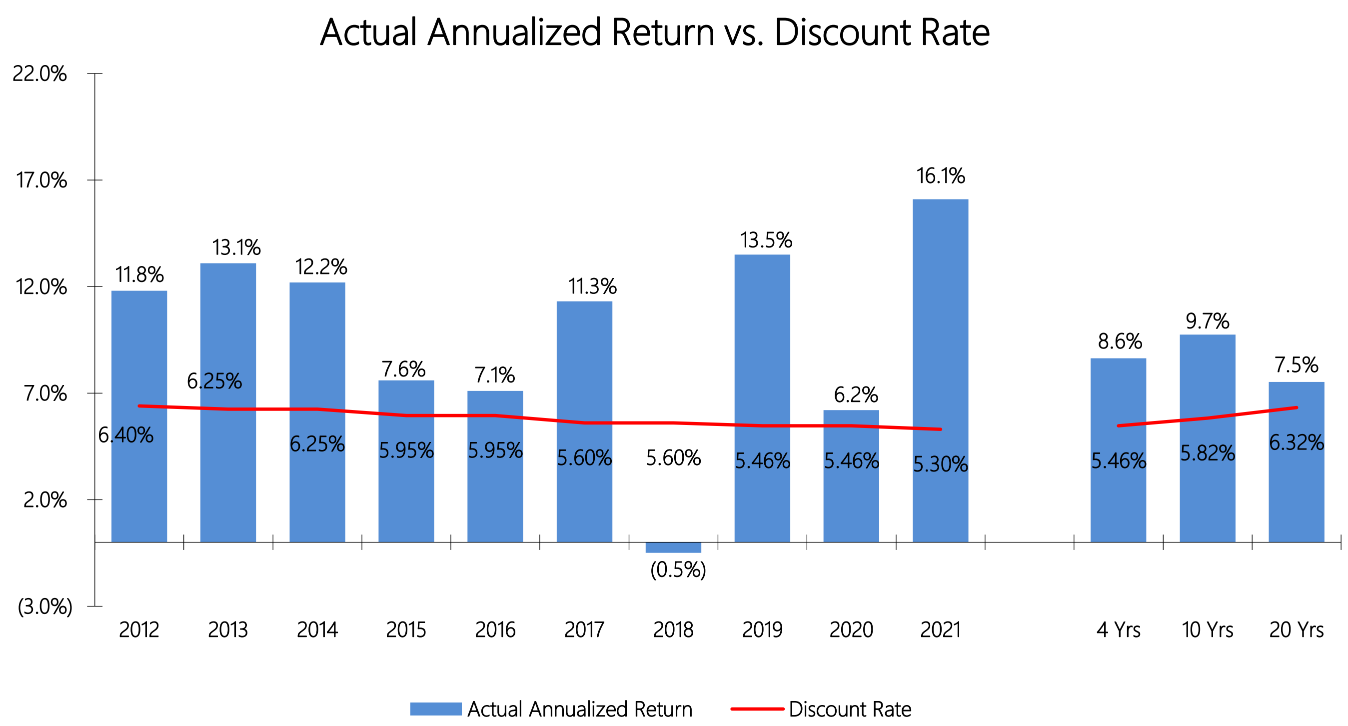
Fixed income portfolios struggled through the year. The FTSE Canada Universe Bond Index posted a loss of 2.5% in 2021 after a gain of 8.7% in 2020. The FTSE Canada Long-Term Overall Bond Index posted a loss of 4.5% after a gain of 11.9% in 2020. The FTSE Canada Real Return Bond Index returned a gain of 1.8% compared to a return of 13.0% in 2020.

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 actuarial discount rate for funding purposes.



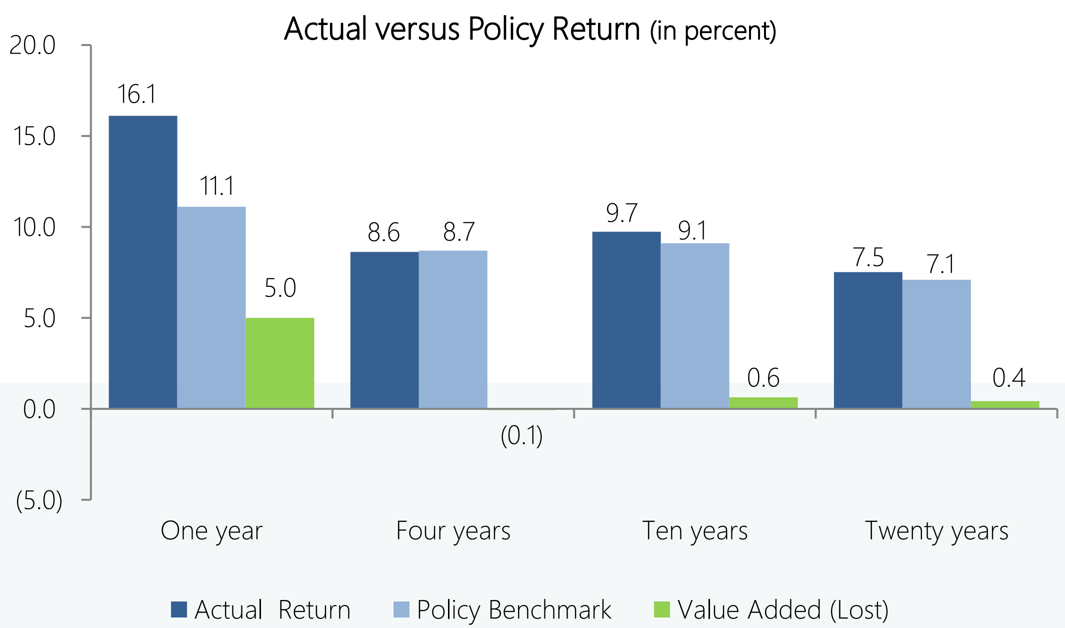
The Plan's annualized returns over four, ten, and twenty years are 8.6%, 9.7% and 7.5% respectively. Over each of these periods, the Plan's actual investment return is greater than the long-term return objective for funding purposes.

INVESTMENT REPORT

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. Note that in early 2021, the UAPP moved its public equities portfolio into a passive management strategy at State Street while completing an asset/liability modeling study, with the expectation that an active management strategy would be re-implemented upon the study's completion.

Over the past four years, the value lost by investment management decisions was 0.1% per annum.



INVESTMENT REPORT

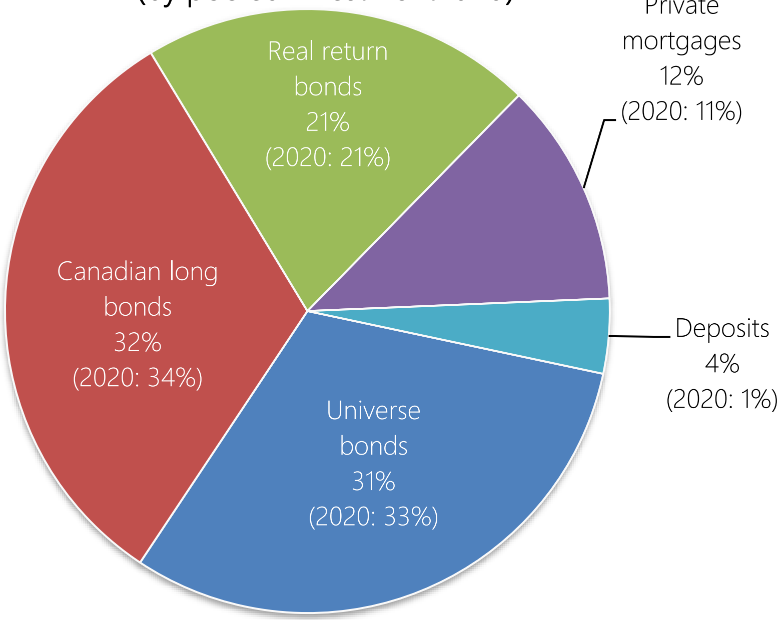
PERFORMANCE BY ASSET CLASS

Fixed Income

At December 31, 2021, fixed income holdings comprise 29.7% of the Plan's total investments or $1,971 million compared to 34.1% or $1,965 million at December 31, 2020. The Canadian long bond portfolio and universe bond portfolio are 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 2021, the Plan's total fixed income securities lost 1.6%, outperforming against the combined benchmark loss of 2.0% by 0.4%.

Summary of Fixed Income Holdings
(by pooled investment fund)



Total Fixed Income	Actual Return %	Benchmark Index Combined Benchmark* %	Net Value Added %
One year	(1.6)	(2.0)	0.4
Four year	5.0	4.5	0.5

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

INVESTMENT REPORT

Universe Bonds	Actual Return %	Benchmark Index *FTSE Universe Bond Index* %	Net Value Added %
One year	(2.2)	(2.5)	0.3
Four year	4.1	3.5	0.6

Mortgages	Actual Return %	Benchmark Index *FTSE 60%S-T/40%M-T Bond Index plus 0.75%* %	Net Value Added %
One year	1.1	(0.9)	2.0
Four year	5.3	4.7	0.6

Long Bonds	Actual Return %	Benchmark Index *FTSE Long Bond Index* %	Net Value Added %
One year	(4.2)	(4.5)	0.3
Four year	5.2	4.8	0.4

Real Return Bonds	Actual Return %	Benchmark Index *FTSE Real Return Bond Index* %	Net Value Added (lost) %
One year	1.6	1.8	(0.2)
Four year	5.8	5.6	0.2

Canadian Equities

At December 31, 2021, Canadian public equities represented 12.9% of the Plan's total investments or $853 million, up from 12.0% or $689 million at the end of the previous year. The Plan's Canadian equity portfolio is invested in State Street's WindWise S&P/TSX Composite pooled index fund, after starting the year in AIMCo's Canadian Equities Master Pool. The Canadian equity portfolio was transitioned to State Street in four tranches between March 12 and April 5, 2021. The purpose of the index fund is to mimic the S&P/TSX Composite index, a move to passive investments viewed as temporary while UAPP completes an asset/liability modeling study. As such, the index fund is not expected to provide any value-add return.

Canadian Equities Sector Exposure Relative to Benchmark December 31, 2021	WindWise S&P/TSX Composite Pool	Over (Under) Benchmark
Sector	%	%
Communication services	4.7	0.0
Consumer discretionary	3.6	0.0
Consumer staples	3.7	0.0
Energy	13.1	0.0
Financials	32.2	0.0
Health care	0.8	0.0
Industrials	12.0	0.0
Information technology	10.7	0.0
Materials	11.5	0.0
Real estate	3.1	0.0
Utilities	4.6	0.0
	100.0	

In 2021, the Canadian equity portfolio returned 28.0%, outperforming against the S&P/TSX Composite benchmark gain of 25.1% by 2.9%. The outperformance occurred during the first quarter of 2021 when the portfolio was actively managed.

Total Canadian Equities	Actual Return %	Benchmark Index S&P/TSX Composite %	Net Value Added (lost) %
One year	28.0	25.1	2.9
Four year	7.6	10.3	(2.7)

INVESTMENT REPORT

Foreign Public Equities

At December 31, 2021, foreign public equities accounted for 33.8% of the Plan's total investments or $2,240 million, compared to 34.2% or $1,968 million the previous year. UAPP's foreign public equity portfolio consists of units in State Street's MSCI World pooled index fund (82%) and MSCI Emerging Markets pooled index fund (18%), after starting the year in AIMCo's Global Equities Master Pool and Emerging Markets Equity Pool. The global equity portfolio was transitioned to State Street in three tranches between March 23 and April 5, 2021, and the emerging markets equity portfolio transitioned in three tranches between March 22 and April 14, 2021. The purpose of the index funds is to mimic the MSCI World and MSCI Emerging Markets indices, a move to passive investments viewed as temporary while UAPP completes an asset/liability modeling study. As such, the index funds are not expected to provide any value-add return.

Total Foreign Equities	Actual Return %	Benchmark Index Combined Benchmark* %	Net Value Added (lost) %
One year	19.8	16.4	3.4
Four year	9.6	11.9	(2.3)

* Combined benchmark incudes the MSCI World and MSCI Emerging Markets indices.

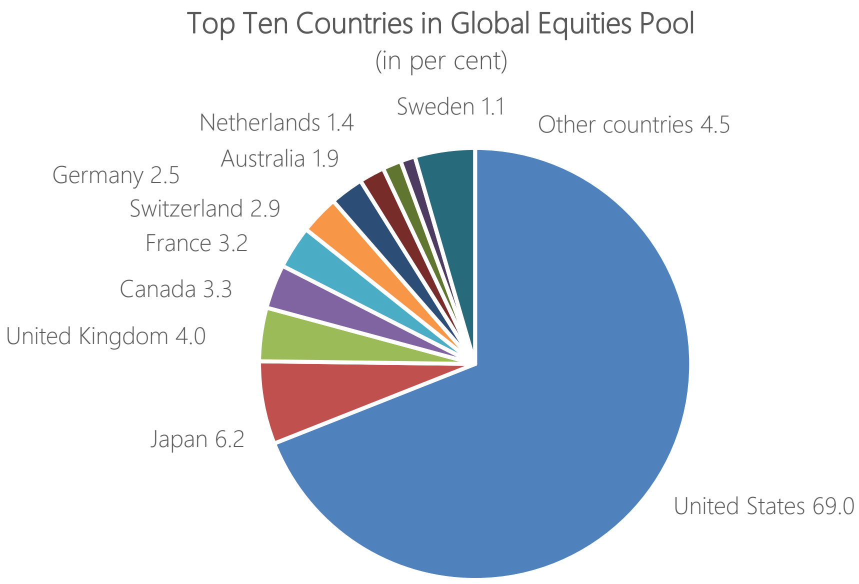
In 2021, the foreign public equity portfolio gained 19.8%, outperforming against the combined benchmark gain of 16.4% by 3.4%. The outperformance occurred during the first quarter of 2021 when the portfolio was actively managed.

Global Equities

The Plan's global equity portfolio is invested in units of State Street's MSCI World Index pooled fund.

Global Equities Sector Exposure Relative to Benchmark December 31, 2021	MSCI World Index Pooled Fund	Over (Under) Benchmark
Sector	%	%
Communication services	8.3	0.0
Consumer discretionary	12.3	0.0
Consumer staples	6.9	0.0
Energy	3.1	0.0
Financials	13.1	0.0
Health care	12.6	0.0
Industrials	10.2	0.0
Information technology	23.8	0.0
Materials	4.2	0.0
Real estate	2.8	0.0
Utilities	2.7	0.0
	100.0	

INVESTMENT REPORT



Total Global Equities	Actual Return %	Benchmark Index MSCI World Index %	Net Value Added (lost) %
One year	24.8	20.8	4.0
Four year	11.3	13.5	(2.2)

In 2021, the Plan's global equity portfolio gained 24.8%, outperforming against the MSCI World Index benchmark gain of 20.8% by 4.0%.

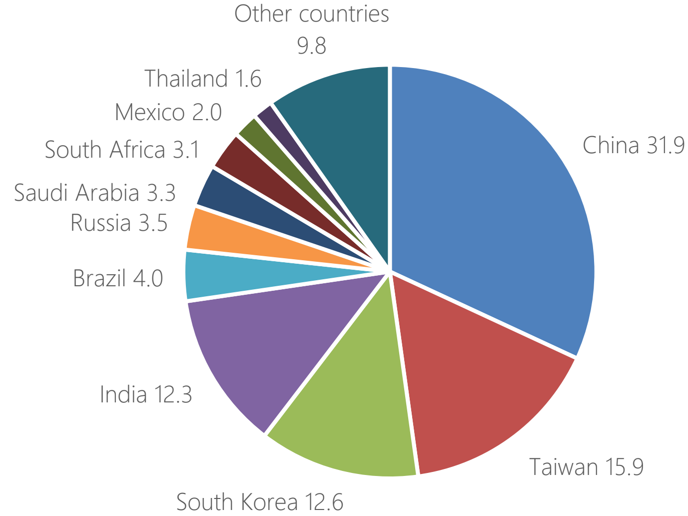
INVESTMENT REPORT

Emerging Markets Equities

Approximately 18% of UAPP's foreign equity portfolio is invested in State Street's MSCI Emerging Markets Index pooled fund.

Global Equities Sector Exposure Relative to Benchmark December 31, 2021	MSCI Emerging Markets Index Pooled Fund	Over (Under) Benchmark
Sector	%	%
Communication services	11.0	0.2
Consumer discretionary	13.7	0.2
Consumer staples	5.6	(0.3)
Energy	5.6	0.0
Financials	19.5	0.1
Health care	4.1	(0.1)
Industrials	4.8	(0.3)
Information technology	22.8	0.2
Materials	8.5	(0.1)
Real estate	2.0	0.0
Utilities	2.4	0.0
	100.0	

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



Note that Russian equities have been removed from the Emerging Markets Index following the invasion of Ukraine in early 2022. The pooled fund in which the Plan participates may continue to hold some assets which have become uninvestable.

In 2021, the Plan's emerging markets portfolio lost 2.6%, outperforming against the MSCI Emerging Markets Index benchmark loss of 3.4% by 0.8%.

Emerging Markets	Actual Return %	Benchmark Index MSCI Emerging Markets Index %	Net Value Added (lost) %
One year	(2.6)	(3.4)	0.8
Four year	1.4	4.1	(2.7)

Alternative Investments

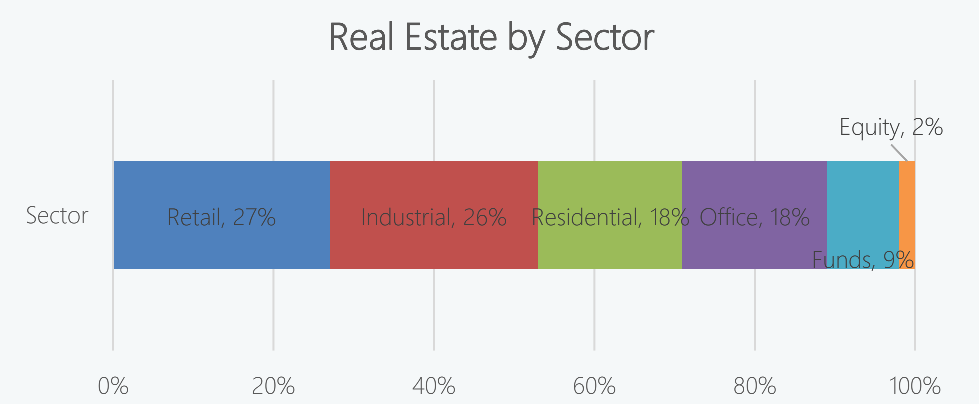
Alternative investments totaling $1,555 million or 23.4% (2020: $1,112 million or 19.3%) of the Plan's total portfolio includes real estate, infrastructure, private equity, and timberland investments. In 2021, the Plan's actual gain from alternative investments was 43.7%, 34.0% more than the combined benchmark gain of 9.7%. Over four years, the annualized return was 16.8%, 9.9% more than the combined benchmark gain of 6.9%.

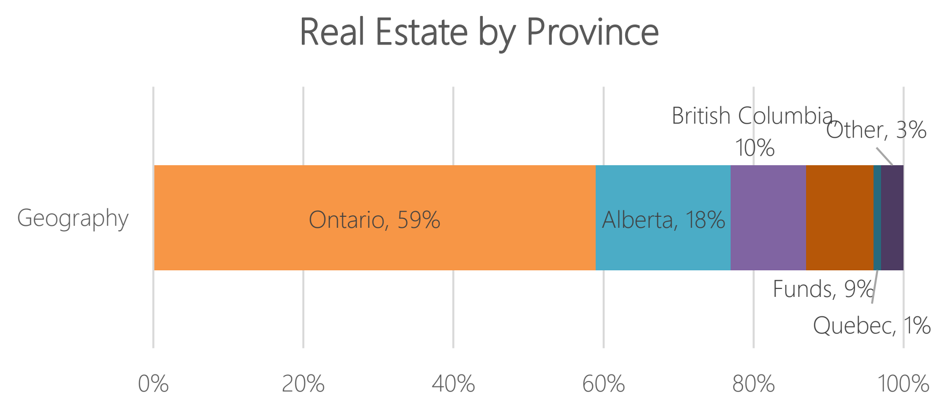
Real Estate

At December 31, 2021, real estate investments comprised 7.2% of the Plan's total investments or $478 million compared to 6.7% or $387 million the previous year. Real estate investments provide diversification and 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 2021, the Plan's actual gain from real estate investments was 14.1%, outperforming against the MSCI/REALpac Canadian All Property Index benchmark gain of 6.9% by 7.2%.

Real Estate	Actual Return %	Benchmark Index MSCI/REALpac All Property Index %	Net Value Added (lost) %
One year	14.1	6.9	7.2
Four year	3.7	3.8	(0.1)





Private Income (Infrastructure)

At December 31, 2021, the UAPP's investment in AIMCo's Infrastructure pools comprised 5.2% of total Plan investments or $344 million, down from 6.4% or $367 million at the end of the previous year. The decline is largely due to a cash distribution of about $60 million late in 2021 from the infrastructure pool into short-term fixed income. Investments include projects in pipelines and midstream, integrated utilities, renewable energy, telecommunications, industrial sector, water, transportation, waste management, power generation, and logistics and data centers.

In 2021, investments in infrastructure gained 26.3%, outperforming against the Consumer Price Index plus 6% benchmark gain of 10.7% by 15.6%.

Infrastructure	Actual Return %	Benchmark Index Consumer Price Index (CPI) plus 6% %	Net Value Added %
One year	26.3	10.7	15.6
Four year	11.7	8.3	3.4

INVESTMENT REPORT

Timberland

At December 31, 2021, the UAPP's investment in AIMCo's Timberland Pool comprised 0.6% of total Plan investments or $38 million, compared to 0.6% or $33 million at the end of the previous year. The Timberland investment includes forestry land in Australia, New Zealand and Latin America.

In 2021, the Timberland investment gained 20.8%, outperforming against the Consumer Price Index plus 4% benchmark gain of 8.7% by 12.1%.

Timberland	Actual Return %	Benchmark Index Consumer Price Index (CPI) plus 4% %	Net Value Added %
One year	20.8	8.7	12.1
Four year	11.6	6.3	5.3

Private Equities

The private equity portfolio includes investments in institutionally sponsored international private equity pools managed by experienced external investment advisors with proven track records and co-investments with private equity managers. At December 31, 2021, the Plan's investment in one of AIMCo's private equities pools comprised 10.4% of the Plan's total investment portfolio, or $695 million, up from 5.6%, or $325 million, in the previous year.

In 2021, investments in private equities gained 74.0%, outperforming against the Consumer Price Index plus 6.5% benchmark gain of 11.2% by 62.8%.

Private Equities	Actual Return %	Benchmark Index Consumer Price Index (CPI) plus 6.5% %	Net Value Added %
One year	74.0	11.2	62.8
Four year	31.3	8.8	22.5

Strategic Opportunities Pool and Currency Hedges

At December 31, 2021, the UAPP's investment in AIMCo's Strategic Opportunities Pool comprised 0.2% of total Plan investments or $15 million, down from 0.4% or $22 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 2021, the Strategic Opportunities Pool had a loss of 2.7%.

INVESTMENT REPORT

Table of Investment Returns	December 31, 2021		Annual Returns				
	Investments (in millions)	Asset Mix (%)	2021 %	2020 %	2019 %	2018 %	Annualized 4 yr %
Total Fund	$ 6,633.6	100.0%	16.1	6.2	13.5	(0.5)	8.6
Policy Return			*11.1*	*10.1*	*14.4*	*(0.2)*	*8.7*
Value Added (Lost) from Active Management			*5.0*	*(3.9)*	*(0.9)*	*(0.3)*	*(0.1)*
Consumer Price Index			*4.7*	*0.8*	*2.2*	*1.7*	*1.8*
Total Fixed Income	$ 1,971.3	29.7%	(1.6)	11.8	8.9	1.4	5.0
Combined Benchmarks			*(2.0)*	*10.7*	*9.1*	*0.9*	*4.5*
Short-term fixed income	74.8	1.1%	0.7	0.9	1.9	1.7	1.3
FTSE Canada 91-Day T-Bill Index			*0.2*	*0.9*	*1.7*	*1.4*	*1.0*
Universe Bonds	615.5	9.3%	(2.2)	10.6	6.9	1.7	4.1
FTSE Canada Universe Bond Index			*(2.5)*	*8.7*	*6.9*	*1.4*	*3.5*
Private Mortgages	229.8	3.5%	1.1	9.4	6.0	4.7	5.3
FTSE Canada 60% Short-Term/40% Mid-Term plus 0.75%			*(0.9)*	*9.8*	*7.9*	*2.4*	*4.7*
Long Duration Bonds	636.8	9.6%	(4.2)	12.9	12.5	0.5	5.2
FTSE Canada Long Bond Index			*(4.5)*	*11.9*	*12.7*	*0.3*	*4.8*
Real Return Bonds	414.4	6.2%	1.6	13.7	8.3	0.1	5.8
FTSE Canada Real Return Bond Index			*1.8*	*13.0*	*8.0*	*0.0*	*5.6*
Total Public Equities	$ 3,092.5	46.7%	22.1	3.2	18.2	(4.8)	9.1
Combined Benchmark			*18.8*	*12.1*	*20.4*	*(3.3)*	*11.6*
Total Canadian Equities	852.7	12.9%	28.0	(3.4)	20.8	(10.1)	7.6
S&P/TSX Composite Capped Index			*25.1*	*5.6*	*22.9*	*(8.9)*	*10.3*
Foreign Equities			19.8	5.5	17.5	(3.0)	9.6
MSCI World Index and MSCI Emerging Markets Index			*16.4*	*14.4*	*19.6*	*(1.6)*	*11.9*
Global Equities	1,830.2	27.6%	24.8	5.0	19.2	(1.9)	11.3
MSCI World Index			*20.8*	*13.9*	*21.2*	*(0.5)*	*13.5*
Emerging Markets	409.6	6.2%	(2.6)	7.1	10.6	(8.2)	1.4
MSCI Emerging Markets Index			*(3.4)*	*16.2*	*12.4*	*(6.9)*	*4.1*
Alternative Investments	$ 1,555.3	23.4%	43.7	7.4	8.8	11.0	16.8
Combined Benchmark			*9.7*	*2.7*	*7.8*	*7.6*	*6.9*
Real Estate	477.7	7.2%	14.1	(14.0)	5.5	11.5	3.7
MSCI/REALpac Canadian All Property Index			*6.9*	*(5.2)*	*6.2*	*7.7*	*3.8*
Infrastructure	344.1	5.2%	26.3	4.7	10.6	6.6	11.7
CPI plus 6%			*10.7*	*6.8*	*8.2*	*7.7*	*8.3*
Timberland	38.2	0.6%	20.8	(8.3)	19.1	17.7	11.6
CPI plus 4%			*8.7*	*4.8*	*6.2*	*5.7*	*6.3*
Private Equities	695.3	10.4%	74.0	37.6	10.1	12.9	31.3
CPI plus 6.5%			*11.2*	*7.3*	*8.7*	*8.2*	*8.8*
Strategic Investments and Currency Hedges	$ 14.5	0.2%	(2.7)	(2.0)	24.7	(2.2)	3.8

ADMINISTRATION REPORT

The Board of Trustees for the Universities Academic Pension Plan is responsible for the ongoing operation and administration of the pension plan, including the collection of relevant member data and contributions, the calculation and payment of pension benefits, and the communication of pension information to plan members and employers. The 2021 results in these areas are as follows:

Membership

There are three types of member currently in the UAPP:

- Active members are those currently employed by a participating employer in a UAPP-eligible position.
- Deferred members are those who have terminated employment and have accrued benefits remaining in the plan but have not yet withdrawn their entitlement nor commenced receiving a monthly pension.
- Pensioners are those who have commenced receiving a monthly pension, including surviving spouses.

Participation	2021	2020
Active members	7,814	7,837
Deferred members	2,551	2,465
Pensioners	6,424	6,158
TOTAL	**16,789**	**16,460**

Membership Participation Annual Growth Rates

Member Type	Active Members	Deferred Members	Pensioners
2012	1.8%	6.1%	4.7%
2013	-1.0%	9.1%	5.9%
2014	-0.2%	2.9%	7.0%
2015	2.0%	7.5%	4.5%
2016	2.7%	6.9%	3.6%
2017	2.0%	6.9%	4.7%
2018	0.2%	7.5%	4.1%
2019	-0.3%	3.5%	4.4%
2020	-3.9%	4.8%	5.2%
2021	-0.3%	3.5%	4.3%

The number of retired members and surviving spouses of pensioners receiving a pension from the UAPP increased to 6,424 at the end of 2021, from 6,158 at December 31, 2020, representing an increase of 4.3% during the year. The retired membership total has grown by 60.7% since 2011. The most popular pension choice among new retirees with a spouse continues to be a Joint Life pension.

Active membership in the UAPP decreased 0.3% during 2021 to 7,814 at December 31, 2021 from 7,837 members at December 31, 2020. The plan experienced its third consecutive annual decline in members during 2021. Nevertheless, the number of active members in the UAPP is 2.9% larger today than ten years ago.

New Pensioner Retirement Type

Retirement Type	2021	2020
Retirements at Age 65 or Later	167	143
Retirements Before Age 65	204	250
Pensions to Surviving Spouses	8	10
TOTAL	**379**	**403**

New Pensioner Retirement Choices

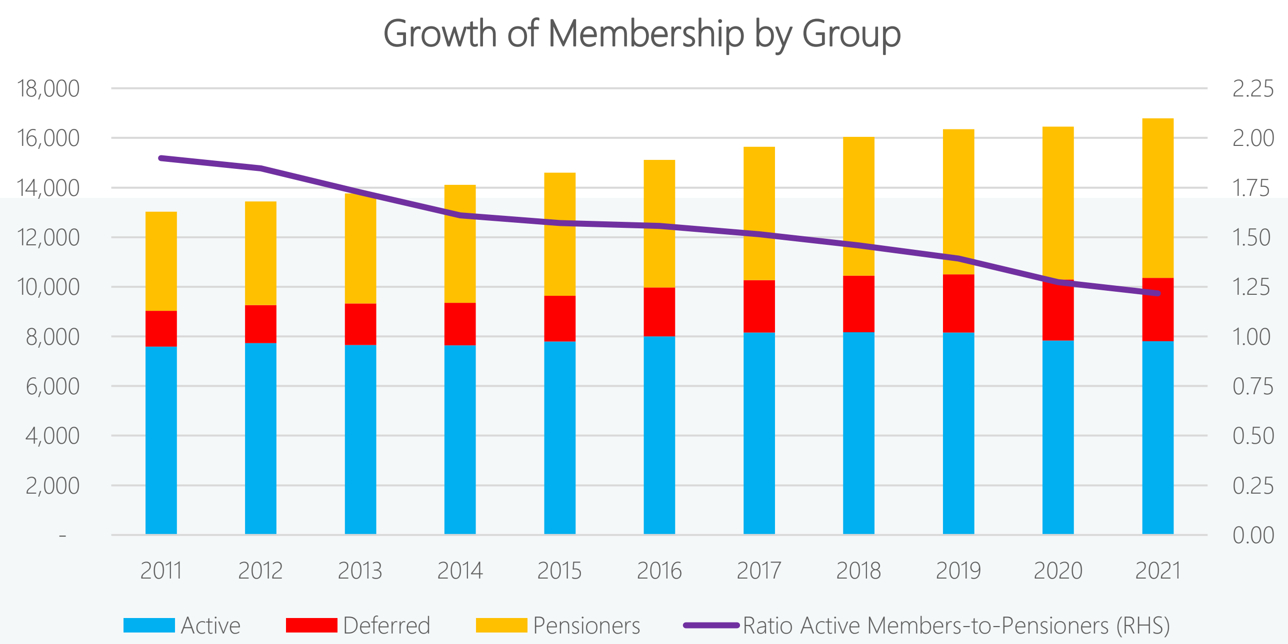
Percentage Electing Option	2021	2020
Single life – with or without guarantee	20%	26%
Joint life – 2/3 spouse, no guarantee	14%	9%
Joint life – 2/3 spouse, 10-year guarantee	16%	16%
Joint life – 100% spouse, no guarantee	17%	10%
Joint life – 100% spouse, 10-year guarantee	33%	39%
TOTAL	**100%**	**100%**

ADMINISTRATION REPORT

Monthly Payment Distribution As At December 31, 2021

Dollar Value ($) Per Month	Member Pensions	Spouse Pensions	Total
1 to 999	1,190	28	1,218
1,000 to 1,999	911	37	948
2,000 to 2,999	799	33	832
3,000 to 3,999	758	28	786
4,000 to 4,999	748	16	764
5,000 to 5,999	641	6	647
6,000 to 6,999	498	7	505
7,000 and over	716	8	724
TOTAL	6,261	163	6,424

The number of deferred members who continue to have funds in the Plan increased from 2,465 at December 31, 2020 to 2,551 at December 31, 2021. Over the past decade, this group has been the fastest growing member type as it has increased by 76.7%.



ADMINISTRATION REPORT

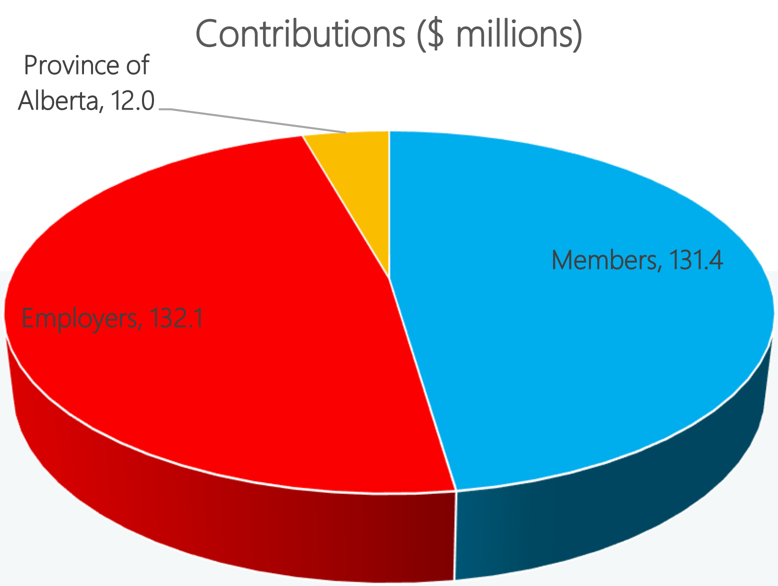
Cash Flow

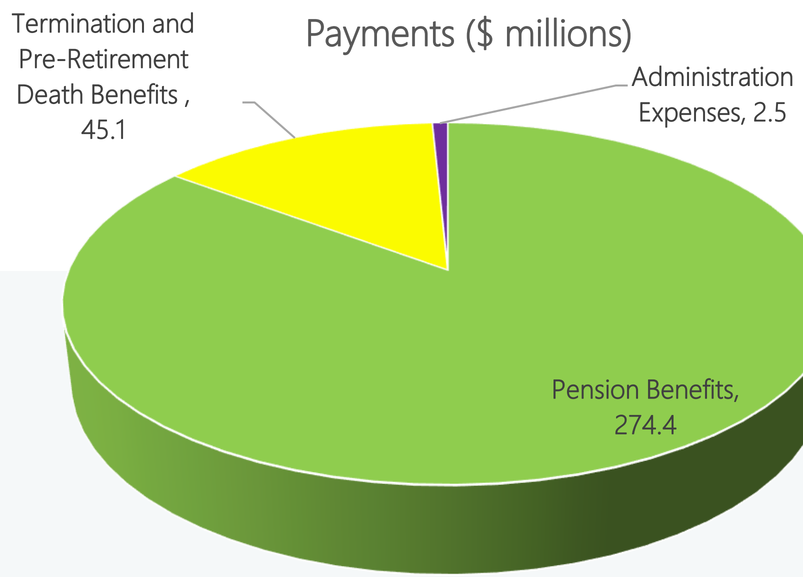
Contributions received from employers, members, and the Province of Alberta decreased by 1.3% from 2020 ($279.1 million) to 2021 ($275.5 million) due to a decline in the number of active members.

Total pension payments rose by 4.0% during 2021 to $274.4 million from $263.9 million in 2020. Pensioners received a cost-of-living increase of 0.78% effective January 1, 2021.

Lump sum payments for terminations and pre-retirement death benefits to or on behalf of former UAPP members were $45.1 million for 2021 (2020: $41.9 million).

Management strives to ensure that all the Plan's service providers deliver efficient and cost-effective services to the UAPP. The general plan administrative expenses were $2.5 million during 2021 ($149 per member) compared to $2.3 million ($140 per member) in 2020.





ADMINISTRATION REPORT

TEN-YEAR FINANCIAL AND MEMBERSHIP REVIEW

Financial Position ($ millions)	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Fair Value of Net Assets	$6,655.1	$5,778.3	$5,477.3	$4,830.9	$4,851.1	$4,349.3	$4,043.7	$3,767.6	$3,357.2	$2,952.0
Actuarial Adjustment	($421.3)	($152.3)	($147.2)	$116.7	($173.7)	($48.0)	($105.7)	($202.2)	($185.6)	($61.8)
Actuarial Value of Assets	**$6,233.8**	**$5,626.0**	**$5,330.1**	**$4,947.6**	**$4,677.4**	**$4,301.3**	**$3,938.0**	**$3,565.4**	**$3,171.6**	**$2,890.2**
Accrued Pension Liability	$6,733.8	$6,402.7	$6,178.6	$5,868.3	$5,626.8	$5,174.1	$4,961.0	$4,708.0	$4,339.4	$3,996.5
Actuarial Surplus (Deficit)	**($500.0)**	**($776.7)**	**($848.5)**	**($920.7)**	**($949.4)**	**($872.8)**	**($1,023.0)**	**($1,142.6)**	**($1,167.8)**	**($1,106.3)**
Funded Ratio	92.6%	87.9%	86.3%	84.3%	83.1%	83.1%	79.4%	75.7%	73.1%	72.3%
Pre-1992 Period Only										
Fair Value of Net Assets	$597.6	$596.5	$647.8	$655.8	$744.8	$750.4	$787.6	$824.9	$826.0	$819.5
Actuarial Adjustment	($43.2)	($22.3)	($20.6)	$11.8	($31.9)	($11.1)	($25.5)	($51.0)	($52.5)	($20.1)
Actuarial Value of Assets	**$554.4**	**$574.2**	**$627.2**	**$667.6**	**$712.9**	**$739.3**	**$762.1**	**$773.9**	**$773.5**	**$799.4**
Accrued Pension Liability	$1,389.1	$1,415.3	$1,478.8	$1,498.7	$1,547.5	$1,577.7	$1,627.0	$1,677.6	$1,626.1	$1,566.7
Actuarial Surplus (Deficit)	**($834.7)**	**($841.1)**	**($851.6)**	**($831.1)**	**($834.6)**	**($838.4)**	**($864.9)**	**($903.7)**	**($852.6)**	**($767.3)**
Funded Ratio	39.9%	40.6%	42.4%	44.5%	46.1%	46.9%	46.8%	46.1%	47.6%	51.0%
Post-1991 Period Only										
Fair Value of Net Assets	$6,057.5	$5,181.8	$4,829.5	$4,175.1	$4,106.3	$3,598.9	$3,256.1	$2,942.7	$2,531.2	$2,132.5
Actuarial Adjustment	($378.1)	($130.0)	($126.6)	$104.9	($141.8)	($36.9)	($80.2)	($151.2)	($133.1)	($41.7)
Actuarial Value of Assets	**$5,679.4**	**$5,051.8**	**$4,702.9**	**$4,280.0**	**$3,964.5**	**$3,562.0**	**$3,175.9**	**$2,791.5**	**$2,398.1**	**$2,090.8**
Accrued Pension Liability	$5,344.7	$4,987.4	$4,699.8	$4,369.6	$4,079.3	$3,596.4	$3,334.0	$3,030.4	$2,713.3	$2,429.8
Actuarial Surplus (Deficit)	**$334.7**	**$64.4**	**$3.1**	**($89.6)**	**($114.8)**	**($34.4)**	**($158.1)**	**($238.9)**	**($315.2)**	**($339.0)**
Funded Ratio	106.3%	101.3%	100.1%	97.9%	97.2%	99.0%	95.3%	92.1%	88.4%	86.0%
Contributions	$275.4	$279.1	$282.3	$280.2	$272.5	$259.4	$240.9	$231.1	$221.9	$212.0
Benefit Payments	$319.6	$305.8	$282.3	$272.3	$253.1	$236.3	$243.6	$223.6	$205.4	$194.8
Administrative Expenses	$2.5	$2.3	$2.2	$2.2	$2.1	$2.2	$2.1	$2.1	$1.7	$1.8
Investment Expenses	$22.3	$28.1	$29.9	$23.5	$21.0	$10.7	$13.8	$12.8	$11.8	$9.2
Total Return on Investments	16.1%	6.2%	13.5%	-0.5%	11.3%	7.1%	7.6%	12.2%	13.1%	11.8%
Discount Rate	5.30%	5.46%	5.46%	5.60%	5.60%	5.95%	5.95%	6.25%	6.25%	6.40%
January 1 Cost-of-Living Adjustment	0.78%	1.02%	1.50%	0.78%	0.78%	0.72%	1.56%	0.72%	0.96%	1.20%
Plan Members										
Active	7,814	7,837	8,151	8,172	8,153	7,997	7,790	7,640	7,652	7,727
Deferred	2,551	2,465	2,352	2,273	2,114	1,977	1,849	1,720	1,672	1,532
Pensioners	6,424	6,158	5,851	5,602	5,380	5,138	4,960	4,745	4,434	4,185
Total	**16,789**	**16,460**	**16,354**	**16,047**	**15,647**	**15,112**	**14,599**	**14,105**	**13,758**	**13,444**
Average Age (Active)	49.4	49.4	49.1	48.9	48.8	48.8	48.7	48.8	48.8	48.6
Average Service (Active)	10.4	10.0	9.8	9.7	9.6	9.6	9.6	9.5	9.5	9.5
Average Capped Salary	$120,128	$118,728	$117,186	$116,839	$115,241	$114,079	$111,971	$110,150	$107,733	$107,209
Average Age (Pensioners)	74.5	74.3	74.2	74.0	73.8	73.5	72.2	72.9	73.0	72.8
Average Annual Pension	$44,430	$44,823	$44,763	$44,426	$44,465	$44,782	$44,469	$43,966	$43,557	$42,953

ADMINISTRATION REPORT

Service to Members

Management seeks to ensure UAPP members receive high-quality pension services in a timely manner. Service standards have been established with providers 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	2021 Results
Time to answer calls	80% of calls answered within 20 seconds with a call abandonment rate below 5%	99.7% of calls answered within 20 seconds with a call abandonment rate of 0.0%
Escalated calls and voice mails	Answered within 1 business day	99.7% of calls answered within 1 business day
Emails	Answered within 2 business days	93.6% 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	97.3% 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	100.0% 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	93.2% of options on death issued within 5 business days from receipt of all required information
FPO* estimate requests	5 business days from receipt of all required information	74.2% of FPO estimates issued within 5 business days from receipt of all required information
FPO* final calculations	10 business days from receipt of all required information	77.3% of FPO final calculations issued within 10 business days from receipt of all required information
FPO* payment authorization	3 business days from receipt of all required information	88.9% of all FPO payment authorizations issued within 3 business days from receipt of all required information

*Family Property Order

ADMINISTRATION REPORT

Plan Communications

The 2021 Member Handbook was prepared and posted to our website in February 2021, and the quarterly Communiqué was posted throughout the year to update members and employers on subjects related to UAPP and pensions. The Handbook includes examples of pension calculations updated annually for changes in the maximum pensionable salary and YMPE. Annual member statements, highlighting individual pension entitlements as at December 31, 2020, were posted to the Retirement Planner for active members in May and mailed to retired members in June. The Trustees' Office presented pension seminars for groups of current active members as well as one-on-one information sessions promoting member understanding of the pension plan. Several virtual information sessions were offered during 2021, allowing the Trustees' Office staff to connect with more members than ever before. A video version of a seminar is also posted on the website.

The UAPP website saw over 67,400 hits during the year, representing an increase of 11.2% from 2020. Besides the homepage, the rest of the top ten sections of the website include Contact Us, Frequently Asked Questions, Forms, Links, News, Member Handbook, Annual Report, Information Sheets, and Communiqués.

Plan members accessed the Retirement Planner over 12,200 times during 2021, representing a 12.6% increase from 2020. The UAPP Administration Centre helpline received over 2,800 calls during the year, a decline of 11.6% from 2020, in part due to the self-service nature of the Retirement Planner.

Other Developments in 2021

- Pensioner status confirmation project conducted throughout the year after a pandemic-related deferral from 2020. Over 2,400 confirmations were sent out in total.
- Fifteen virtual member information sessions were offered during the year, allowing hundreds of members to attend.
- Ability for employers to upload batch calculations implemented into the employer portal.
- The Pension Benefits Administration User Group continued to meet regularly to discuss common issues. The virtual nature of the meetings allowed more attendees than past years.
- Provided data and other inputs to Plan actuary for the completion of an experience study and the actuarial valuation as at December 31, 2020.
- Reviewed tools for dealing with unlocatable members with deferred pensions and amounts-held-on-deposit.

The Year Ahead

Key plans for 2022 include:

- Triennial pension administration audits to be completed by most of the Plan's employers.
- Update format of quarterly Communiqué.
- Continue to offer member information seminars, either virtually or in person, and one-on-one member sessions.
- Work with employers to review potential improvements to processes.
- Implement strategy for dealing with unlocatable members.
- Investigate potential re-design of Plan website.

MANAGEMENT RESPONSIBILITY FOR FINANCIAL REPORTING

The financial statements and information in the 2021 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 2021 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., Fiera Capital Corporation, and State Street Global Advisors, acting as investment managers, and Buck 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 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

Opinion

We have audited the financial statements of Universities Academic Pension Plan (the Entity), which comprise:

- the statement of financial position as at December 31, 2021
- the statement of changes in net assets available for benefits for the year then ended
- the statement of changes in pension obligation for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at December 31, 2021, and its changes in net assets available for benefits and its changes in pension obligation for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "***Auditors' Responsibilities for the Audit of the Financial Statements***" section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

INDEPENDENT AUDITORS REPORT

Other Information

Management is responsible for the other information. Other information comprises the information, other than the financial statements and the auditors' report thereon, included in the Entity's Annual Report.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information, other than the financial statements and the auditors' report thereon, included in the Entity's Annual Report as at the date of the auditors' report.

If, based on the work we have performed on the other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

INDEPENDENT AUDITORS REPORT

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit 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.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

INDEPENDENT AUDITORS REPORT

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

[Original signed by KPMG LLP]

Chartered Professional Accountants

Edmonton, Canada

March 30, 2022

Statement of Financial Position

As at December 31, 2021

	($ thousands) 2021	2020
Net assets available for benefits		
Assets		
Investments (Note 3)	$ 6,633,641	$ 5,756,437
Contributions receivable		
Employers	10,687	10,660
Employees	10,602	10,609
Province of Alberta	972	1,077
Accounts receivable	476	496
Total Assets	6,656,378	5,779,279
Liabilities		
Accounts payable and accrued liabilities	1,279	1,025
Total Liabilities	1,279	1,025
Net assets available for benefits	$ 6,655,099	$ 5,778,254
Pension obligation and deficit		
Pension obligation (Note 5)	$ 6,733,800	$ 6,402,700
Deficit (Note 6)	(78,701)	(624,446)
Pension obligation and deficit	$ 6,655,099	$ 5,778,254

The accompanying notes are part of these financial statements.

Statement of Changes In Net Assets Available For Benefits

For the year ended December 31, 2021

	($ thousands) 2021	2020
Increase		
Contributions (Note 7)	$ 275,454	$ 279,125
Investment income (Note 8)	414,161	278,177
Change in fair value (Note 8)		
Net realized gain on sale of investments	162,934	9,467
Change in net unrealized gains	368,585	70,386
	1,221,134	637,155
Decrease		
Benefit payments (Note 10)	319,543	305,825
Investment expenses (Note 11)	22,267	28,052
Administrative expenses (Note 12)	2,479	2,292
	344,289	336,169
Increase in net assets available for benefits	876,845	300,986
Net assets available for benefits at beginning of year	5,778,254	5,477,268
Net assets available for benefits at end of year	$ 6,655,099	$ 5,778,254

The accompanying notes are part of these financial statements.

Statement of Changes In Pension Obligation

For the year ended December 31, 2021

	($ thousands)					
	2021			**2020**		
	Pre-1992	**Post-1991**	**Total**	**Pre-1992**	**Post-1991**	**Total**
Increase in pension obligation						
Interest accrued on pension obligations	$ 77,300	$ 283,500	$ 360,800	$ 80,700	$ 267,500	$ 348,200
Benefits earned	-	204,000	204,000	-	200,300	200,300
Actuarial assumption changes (Note 5(a))	16,200	48,300	64,500	-	-	-
Net experience losses	12,100	-	12,100	-	-	-
Cost-of-living experience losses	2,800	16,100	18,900	-	-	-
	108,400	551,900	660,300	80,700	467,800	548,500
Decrease in pension obligation						
Benefits paid, including interest	134,600	193,700	328,300	136,400	177,700	314,100
Net experience gains	-	900	900	-	-	-
Cost-of-living experience gains	-	-	-	7,800	2,500	10,300
	134,600	194,600	329,200	144,200	180,200	324,400
Net (decrease) increase in pension obligation	(26,200)	357,300	331,100	(63,500)	287,600	224,100
Pension obligation at beginning of year	1,415,300	4,987,400	6,402,700	1,478,800	4,699,800	6,178,600
Pension obligation at end of year	$ 1,389,100	$ 5,344,700	$ 6,733,800	$ 1,415,300	$ 4,987,400	$ 6,402,700

The accompanying notes are part of these financial statements.

Notes to the Financial Statements

For the year ended December 31, 2021
(*all $ figures in thousands except Note 13*)

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 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 Province of Alberta *Employment Pension Plans Regulation* 154/2014, the Plan is exempt from funding solvency deficiencies 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.

Note 1 b) FUNDING POLICY (continued)

The contribution rates in effect from July 1, 2020 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 are 12.37% (12.46% prior to July 1, 2020) of pensionable salary up to the Year's Maximum Pensionable Earnings (YMPE), 16.32% (16.23% prior to July 1, 2020) on pensionable salary above the YMPE and up to the pensionable salary cap, and 1.52% (1.45% prior to July 1, 2020) on earnings above the pensionable salary cap. Employers contribute at the same rate as employees.

The contribution rates in effect from July 1, 2020 for employees of Athabasca University, Banff Centre, and the professional staff of the Athabasca University Faculty Association are 11.87% (11.96% prior to July 1, 2020) of pensionable salary up to the YMPE and 15.82% (15.73% prior to July 1, 2020) 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 1.52% (1.45% prior to July 1, 2020) on earnings above the pensionable salary cap.

Effective July 1, 2022, 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 decrease to 11.38% of pensionable salary up to the YMPE, 15.49% on pensionable salary above the YMPE and up to the pensionable salary cap, and increase to 1.785% on earnings above the pensionable salary cap. Employers contribute at the same rate as employees.

Also effective July 1, 2022, contribution rates for employees of Athabasca University, Banff Centre, and the professional staff of the Athabasca University Faculty Association shall decrease to 10.88% of pensionable salary up to the YMPE and 14.99% 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 1.785% 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.

Note 1 (continued)

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.

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) 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 financial risks in Note 4.

The fair value of units held by the Plan is derived from the fair value of the underlying financial instruments held by the pools using the fair value hierarchy (see Note 3(a)) as determined by the investment managers (see Note 3(b)). Investments in units are recorded in the Plan's accounts. 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 following the year end. Differences in valuation estimates 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.

Note 2 (continued)

c) INVESTMENT INCOME AND CHANGE IN FAIR VALUE

(a) Investment income and change in fair value are recorded on an accrual basis.

(b) Investment income and change in fair value are reported in the statement of changes in net assets available for benefits and in Note 8 and include interest income, dividend income, and the following items recorded in the Plan's accounts:

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 including realized gains and losses on disposal of investments and unrealized gains and losses on investments determined on an average cost basis.

d) 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.

e) CONTRIBUTIONS, BENEFIT PAYMENTS AND ADMINISTRATIVE EXPENSES

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

f) VALUATION OF PENSION OBLIGATION

The value of the pension obligation and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. 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 dates, of various economic and non-economic assumptions.

Note 2 (continued)

g) USE OF ESTIMATES AND JUDGMENTS

In preparing these financial statements, estimates, judgments, 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 and Level 3 investments. Uncertainty arises because:

i) the Plan's actual experience may differ, perhaps significantly, from assumptions used in the valuation and extrapolation of the Plan's pension obligation; and

ii) the estimated fair values of the Plan's Level 3 investments may differ significantly from the values that would have been used had a ready market existed for these investments.

While best estimates have been used in the valuation of the Plan's pension obligation and Level 3 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 change in fair value on the statement of changes in net assets available for benefits in the year when the ultimate realizable values are known.

h) INCOME TAXES

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

FINANCIAL STATEMENTS

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 Plan adopted a new SIP&G that will be effective January 1, 2022. 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]		2021	2020		
Asset class	Level 2	Level 3	**Fair Value**	Level 2	Level 3	**Fair Value**
Fixed Income						
Cash and short-term securities	$ 74,617	$ -	$ 74,617	$ 12,590	$ -	$ 12,590
Bonds and mortgages	1,252,459	229,830	1,482,289	1,314,704	230,472	1,545,176
Real return bonds	414,375	-	414,375	407,392	-	407,392
	1,741,451	229,830	1,971,281	1,734,686	230,472	1,965,158
Public Equities						
Canadian	852,727	-	852,727	688,767	-	688,767
Global	1,830,234	-	1,830,234	1,546,318	-	1,546,318
Emerging markets	409,627	-	409,627	422,030	-	422,030
	3,092,588	-	3,092,588	2,657,115	-	2,657,115
Alternatives						
Real estate	-	477,700	477,700	-	387,286	387,286
Private equity	-	695,272	695,272	-	325,279	325,279
Infrastructure	-	344,097	344,097	-	366,718	366,718
Timberland	-	38,163	38,163	-	33,050	33,050
	-	1,555,232	1,555,232	-	1,112,333	1,112,333
Strategic and currency investments*	-	14,540	14,540	(320)	22,151	21,831
Total investments	$ 4,834,039	$ 1,799,602	$ 6,633,641	$ 4,391,481	$ 1,364,956	$ 5,756,437

* 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.

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. Although the pools may ultimately hold publicly traded listed equity investments, the pool units themselves are not listed in an active market and therefore cannot be classified as Level 1 for fair value hierarchy purposes. Pool units classified by the Plan as Level 2 may contain investments that might otherwise be classified as Level 1.
- *Level 2:* fair value is estimated using valuation techniques that make use of market-observable inputs other than quoted market prices. This level includes pool units that hold public equities, debt securities and derivative contracts.
- *Level 3:* fair value is estimated using inputs based on non-observable market data. This level includes pool units that hold private mortgages and all alternative investments.

Reconciliation of Level 3 Fair Value Measurements:

	($ thousands)	
	2021	**2020**
Balance, beginning of year	$ 1,364,956	$ 1,231,079
Investment income	115,643	87,720
Change in fair value (Note 8)		
Net realized gain on sale of investments	30,840	15,426
Change in net unrealized gains	279,404	(39,556)
Purchases of Level 3 pooled fund units	208,628	214,058
Sale of Level 3 pooled fund units	(199,869)	(143,771)
Balance, end of year	$ 1,799,602	$ 1,364,956

b) Valuation of Financial Instruments in the Pools

The methods used to determine the fair value of investments recorded in the pools are 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 each business day at fair value, defined as the price the fund would receive to sell an asset or pay to transfer a liability in an orderly transaction between market participants at the measurement date.
- *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. 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 favourable and unfavourable 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 are valued based on discounted cash flows using current market yields and current forward exchange rates. 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)).

The Plan's pension obligation is impacted 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 2021		Actual Asset Mix 2020	
		($ thousands)	*%*	*($ thousands)*	*%*
Fixed income	26.0 - 41.0%	$1,971,281	29.7	$1,965,158	34.1
Public equities	40.0 - 60.0%	3,092,588	46.6	2,657,115	46.2
Alternatives	12.0 - 25.0%	1,555,232	23.5	1,112,333	19.3
Strategic and currency investments	(a)	14,540	0.2	21,831	0.4
		$6,633,641	100.0	$5,756,437	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.

* Effective January 1, 2022, the Target Asset Policy Mix will change to:
- Fixed income = 31.0 - 39.0%
- Equities = 45.0 - 55.0% (will include Private Equity)
- Alternatives = 11.0 - 19.0% (will not include Private Equity)

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. Unrated debt securities consist primarily of mortgages and private debt placements.

The table below summarizes the Plan's investments in debt securities by credit rating at December 31, 2021:

Credit rating	2021	2020
Investment Grade (AAA to BBB-)	83.3%	79.3%
Speculative Grade (BB+ or lower)	0.0%	1.0%
Unrated	16.7%	19.7%
	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.

Note 4 a) Credit Risk (continued)

iii) Security lending risk

To generate additional income, the Plan participates in a securities-lending program. Under this program, the Plan may lend investments held in the pools to eligible third parties for short periods. At December 31, 2021, the Fund's share of securities loaned under this program is $166,322 (2020: $293,382) and collateral held totals $182,883 (2020: $315,646). Securities borrowers are required to provide the collateral to assure the performance of redelivery obligations. Collateral may take the form of cash, other investments or a bank-issued letter of credit. All collateralization, by the borrower, must be in excess of 100% of investments loaned.

b) Foreign Currency Risk

The Plan is exposed to foreign currency risk associated with the underlying securities held in the pools that are denominated in currencies other than the Canadian dollar. Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The fair 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.

If the value of the Canadian dollar increased by 10.0% against all other currencies, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 3.1% of total investments
(2020: 3.1%).

The following table summarizes the Plan's exposure to investments denominated in foreign currencies held in pooled investment funds:

($ thousands)

2021			**2020**		
Currency		**Fair Value**	**Currency**		**Fair Value**
US dollar	$	2,277,779	US dollar	$	1,007,197
			Euro		166,650
			Japanese yen		125,072
			Hong Kong dollar		98,240
			Chinese yuan		83,740
			British pound		81,396
			South Korean won		62,289
Other foreign currencies (<1%)		9,136	Other foreign currencies (<1%)		334,547
Total foreign currencies	$	2,286,915	**Total foreign currencies**	$	1,959,131

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 3.2% (2020: 6.1%) of the Plan's total investments.

d) Market Price Risk

Market price risk relates to the possibility that the value of an instrument will change due to future fluctuations in market prices caused by factors specific to an individual investment or other factors affecting all instruments traded in the market. The Plan is exposed to market price risk associated with the underlying investments held in the pools. If market indices (S&P/TSX, S&P500, S&P1500 and MSCI ACWI and their sectors) declined by 10.0%, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 5.9% (2020: 4.4%) of total investments. Changes in fair value of investments are recognized as part of investment income in the statement of changes in net assets available for benefits. The COVID-19 pandemic and the measures taken to contain the virus continue to impact the market. The situation is dynamic and the ultimate duration and magnitude of the impact on the economy and the financial effect on the Plan is not known at this time.

e) Liquidity Risk

Liquidity risk is the risk that the Plan will encounter difficulty in meeting obligations associated with its financial liabilities under both normal and stressed conditions. 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)).

Note 4 (continued)

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.

	Number of counterparties		Plan's Indirect Share *($ thousands)*	
By counterparty	**2021**	**2020**	**2021**	**2020**
Contracts in net favourable position (current credit exposure)	10	144	$ 3,213	$ 102,699
Contracts in net unfavourable position	6	11	(3,583)	(35,439)
Net fair value of derivative contracts	16	155	$ (370)	$ 67,260

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 favourable position totaling $3,213 (2020: $102,699) 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.

Note 4 f) Use of Derivative Financial Instruments in Pooled Investment Funds (continued)

	Plan's Indirect Share ($ thousands)	
Types of derivatives used in pools	2021	2020
Equity-based derivatives	$ 323	$ 42,071
Foreign currency derivatives	(703)	25,358
Interest rate derivatives	10	(1,956)
Credit risk derivatives	-	1,787
Net fair value of derivative contracts	$ (370)	$ 67,260

i) 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 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 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 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) At December 31, 2021, deposits in futures contracts margin accounts totaled $910 (2020: $14,110). Cash and non-cash collateral for derivative contracts pledged and received, respectively, totaled $8,988 (2020: $39,893)) and $nil (2020: $nil).

NOTE 5 PENSION OBLIGATION

a) ACTUARIAL VALUATION AND EXTRAPOLATION

An actuarial valuation of the Plan was carried out as at December 31, 2020 by the Plan's actuarial consultants, Aon. The December 31, 2020 valuation results were extrapolated to December 31, 2021.

The pension obligation has been 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 are:

	2020 Valuation and 2021 Extrapolation	**2018 Valuation and 2020 Extrapolation**
	%	%
Asset real rate of return		
For 2 years after valuation	3.05	3.21
Thereafter	3.05	3.21
Inflation rate		
For 2 years after valuation	2.25	2.25
Thereafter	2.25	2.25
Discount rate	5.30	5.46
Salary escalation rate *		
For 2 years after valuation	0.00	1.00
Thereafter	2.75	2.75
Mortality table	85% (100% for females) of 2014 Public Sector Canadian Pensioner table with generational projection (Scale MI-2017)	85% (100% for females) of 2014 Public Sector Canadian Pensioner table with generational projection (Scale MI-2017)

** In addition to merit and promotion*

The next actuarial valuation of the Plan must be carried out no later than December 31, 2023. 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	443,300	1.48
Salary escalation rate increase holding inflation rate and discount rate assumptions constant	1.0	133,600	1.36
Discount rate decrease holding inflation rate and salary escalation assumptions constant	(1.0)	1,057,900	5.82

* The current service cost as a % of pensionable earnings as determined by the December 31, 2020 valuation is 23.31%

NOTE 6 DEFICIT

($ thousands)

	2021			2020		
	Pre-1992	Post-1991	Total	Pre-1992	Post-1991	Total
Deficit (surplus), beginning of year	$ 818,800	$ (194,354)	$ 624,446	$ 831,000	$ (129,668)	$ 701,332
(Increase) in net assets available for benefits	(1,100)	(875,745)	$ (876,845)	51,300	(352,286)	$ (300,986)
Net (decrease) increase in accrued pension liability	(26,200)	357,300	$ 331,100	(63,500)	287,600	$ 224,100
Deficit (surplus), end of year	$ 791,500	$ (712,799)	$ 78,701	$ 818,800	$ (194,354)	$ 624,446

Note 6 (continued)

In accordance with the requirements of the Province of Alberta *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 as at December 31, 2021 allocated between the pre-1992 and post-1991 periods:

($ thousands)

	2021			2020		
	Pre-1992	Post-1991	Total	Pre-1992	Post-1991	Total
Net assets available for benefits	$ 597,600	$ 6,057,499	$ 6,655,099	$ 596,500	$ 5,181,754	$ 5,778,254
Pension obligation	1,389,100	5,344,700	6,733,800	1,415,300	4,987,400	6,402,700
Deficit (surplus)	$ 791,500	$ (712,799)	$ 78,701	$ 818,800	$ (194,354)	$ 624,446

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

NOTE 7 CONTRIBUTIONS

($ thousands)

	2021	2020
Current service		
Employers	$ 102,728	$ 100,903
Employees	101,600	100,044
Contributions to meet post-1991 unfunded liability and optional service		
Employers	14,741	17,573
Employees	15,170	18,110
Contributions to meet pre-1992 unfunded liability		
Employers	14,603	14,954
Employees	14,603	14,954
Province of Alberta	12,009	12,587
	$ 275,454	$ 279,125

NOTE 8 INVESTMENT INCOME AND CHANGE IN FAIR VALUE

The following is a summary of the Plan's investment income (loss) and change in fair value by asset class:

($ thousands)

	Investment Income	Change in Fair Value	2021 Total	Investment Income	Change in Fair Value	2020 Total
Fixed income	$ 72,172	$ (103,994)	$ (31,822)	$ 119,573	$ 91,370	$ 210,943
Public equities						
Canadian	112,040	77,107	189,147	(2,568)	(6,120)	(8,688)
Foreign	106,842	243,054	349,896	82,981	20,634	103,615
	218,882	320,161	539,043	80,413	14,514	94,927
Alternatives						
Real estate	5,587	54,569	60,156	10,184	(69,690)	(59,506)
Private equity	77,244	204,168	281,412	47,649	53,265	100,914
Infrastructure	32,290	56,240	88,530	6,628	10,234	16,862
Timberland	2,383	4,470	6,853	3,724	(6,482)	(2,758)
	117,504	319,447	436,951	68,185	(12,673)	55,512
Strategic and currency investments	5,603	(4,095)	1,508	10,006	(13,358)	(3,352)
	$ 414,161	$ 531,519	$ 945,680	$ 278,177	$ 79,853	$ 358,030

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 $162,496 and $368,265 respectively (2020: $10,373 and $70,670 respectively). Realized and unrealized gains and losses on currency hedges total $438 and $320 respectively
(2020: $(907) and $(283) 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 AVAILABLE FOR BENEFITS, 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)				
	2021	2020	2019	2018	2017
Increase (decrease) in net assets attributed to:					
Investment income					
Policy benchmark return (PBR) on investments	11.1	10.1	14.4	(0.2)	10.1
Value added (lost) by investment managers	5.0	(3.9)	(0.9)	(0.3)	1.2
Time weighted rate of return, at fair value [a]	**16.1**	**6.2**	**13.5**	**(0.5)**	**11.3**
Other sources [b]	(0.9)	(0.7)	(0.1)	0.1	0.2
Percent change in net assets [c]	**15.2**	**5.5**	**13.4**	**(0.4)**	**11.5**
Percent change in pension obligation [c]	**5.2**	**3.6**	**5.3**	**4.3**	**8.7**
Percent of pension obligation supported by net assets	**98.8**	**90.2**	**88.6**	**82.3**	**86.2**

a) The annualized total return and policy benchmark return on investments over five years is 9.2% (PBR: 9.0%), ten years is 9.7% (PBR: 9.1%), and twenty years is 7.5% (PBR: 7.1%). The Plan's actuary estimates the long-term net investment return on assets for funding purposes to be 5.30% (2020: 5.46%).

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)	
	2021	**2020**
Retirement benefits	$ 274,436	$ 263,902
Termination benefits	43,727	40,267
Death benefits	1,380	1,656
	$ 319,543	$ 305,825

FINANCIAL STATEMENTS

NOTE 11 INVESTMENT EXPENSES

	($ thousands) 2021	2020
Amount charged:		
Management fees [(a)]	$ 22,213	$ 27,998
Alberta Treasury Board and Finance [(b)]	54	54
Total investment expenses	$ 22,267	$ 28,052
(Decrease) in expenses	(20.6%)	(6.3%)
Increase in average investments under management	10.5%	9.2%
Increase (decrease) in value of investments attributed to active management [(c)]	5.0%	(3.9%)
Investment expenses as a percent of dollar invested	0.4%	0.5%

a) For investment management services, including non-recoverable GST of $859 (2020: $919).

b) For investment accounting and Plan reporting services.

c) Active management is currently applied in the fixed income and alternative asset classes.

NOTE 12 ADMINISTRATIVE EXPENSES

	($ thousands) 2021	2020
General administration costs	$ 2,357	$ 2,117
Board costs	25	37
Actuarial fees	41	83
Audit fees	56	55
	$ 2,479	$ 2,292

General Plan costs, including the costs for benefit administration and delivery, amounted to $149 per member (2020: $140 per member).

NOTE 13 REMUNERATION OF BOARD OF TRUSTEES MEMBERS

The Plan defines its key management personnel as the Board of Trustees and other members of the senior executives responsible for planning, controlling, and directing the activities of the Plan.

	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

	2021	2020
The following amounts were paid:		
Remuneration		
Chair	$ 4,835	$ 3,841
Trustees (8)	19,664	19,954
Travel expenses		
Chair	-	105
Trustees (8)	-	1,774

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.

Note 14 (continued)

Actuarial asset values for funding valuation purposes amounted to $6,233,799 at December 31, 2021 (2020: $5,625,954), comprising of $554,400 (2020: $574,200) pre-1992 and $5,679,399 (2020: $5,051,754) post-1991.

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, 2021 allocated between the pre-1992 and post-1991 periods:

($ thousands)

	2021			**2020**		
	Pre-1992	**Post-1991**	**Total**	**Pre-1992**	**Post-1991**	**Total**
Net assets available for benefits	$ 597,600	$ 6,057,499	$ 6,655,099	$ 596,500	$ 5,181,754	$5,778,254
Actuarial adjustment for fluctuation in fair value of net assets	(43,200)	(378,100)	(421,300)	(22,300)	(130,000)	(152,300)
Actuarial value of net assets available for benefits	554,400	5,679,399	6,233,799	574,200	5,051,754	5,625,954
Pension obligation	1,389,100	5,344,700	6,733,800	1,415,300	4,987,400	6,402,700
Actuarial deficit (surplus)	$ 834,700	$ (334,699)	$ 500,001	$ 841,100	$ (64,354)	$ 776,746

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 3.04% 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 $227,400 at December 31, 2020.

The Plan's unfunded liability for service after December 31, 1991 is being financed by special payments of 3.24% of salaries shared equally between employers and employees to eliminate the unfunded liability by June 30, 2022.

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

NOTE 15 APPROVAL OF FINANCIAL STATEMENTS

These financial statements were approved by the Board of Trustees of the Plan on March 30, 2022.

GLOSSARY - TERMS

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, 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 pension 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.

GLOSSARY - TERMS

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.

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, bridge loans and corporate finance arrangements. Most infrastructure assets 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.

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.

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.

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 for the Canada Pension Plan (CPP) up to which employers and employees are required to make base CPP contributions.

GLOSSARY - INDICES

Consumer Price Index (CPI)
An indicator of the change in 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 (Financial Times Stock Exchange) Canada 91-Day T-Bill Index
An index that represents the performance of Government of Canada 91-day Treasury Bills.

FTSE Canada Overall Long Term Bond Index
An index that tracks the performance of approximately 600 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 Canada Real Return Bond Index
An index that tracks the daily performance of real return (inflation-linked) bonds issued in Canada.

FTSE Canada Universe Bond Index
An index that tracks the performance of approximately 1,600 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.

MSCI (Morgan Stanley Capital International) EAFE (Europe, Australasia, and 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 Emerging Markets Net 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 25 emerging market country indices.

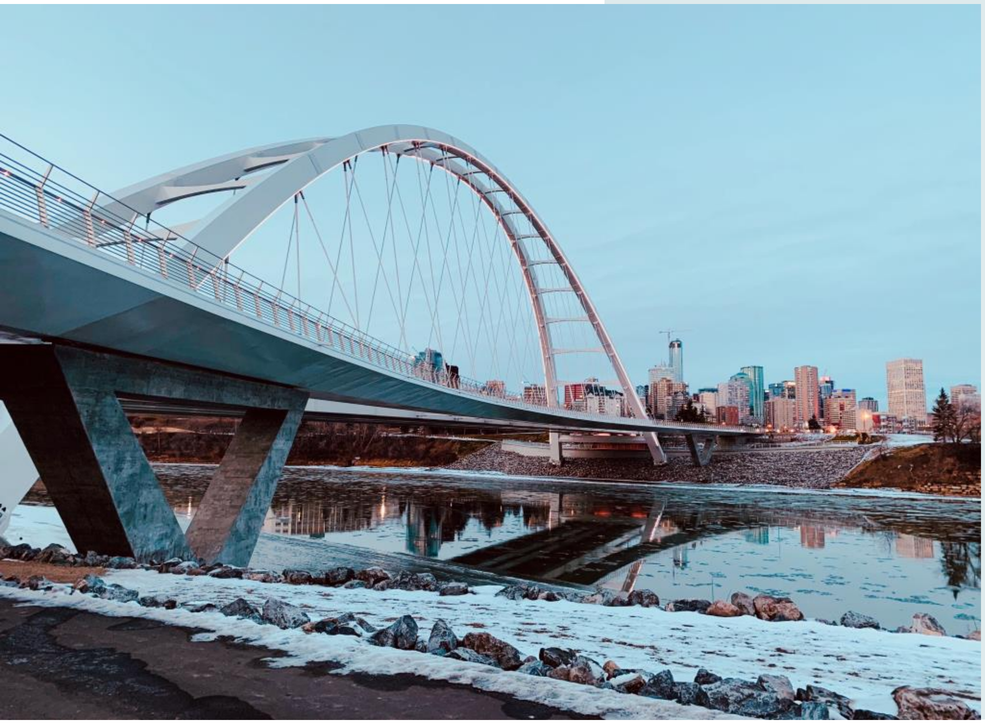
MSCI/REALpac Canadian All Property Index
An index that measures the total return from a diversified pool of about 2,400 properties, compiling property level information from pension funds, life insurance companies, and real estate managers on a quarterly basis.

MSCI World Total Return Net Index
An index maintained by the MSCI Index Committee designed to measure market equity performance of developed markets. The MSCI World Total Return Net Index is a free float-adjusted market capitalization index that is calculated on a total return basis, which includes reinvestment of net dividends after deduction of withholding taxes. The index consists of securities across large and mid-cap segments and across style and sector segments in 23 developed markets.

S&P/TSX (Standard & Poor's/Toronto Stock Exchange) 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.

S&P 500 Index
An index maintained by the S&P 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.

UNIVERSITIES ACADEMIC PENSION PLAN



UNIVERSITIES ACADEMIC PENSION PLAN

2021 ANNUAL REPORT

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