1999 Academic Pension Plan

NEWSLETTER TO MEMBERSHIP

UNIVERSITY OF SASKATCHEWAN

USASK PENSION

Due to COVID-19 restrictions, the Academic Defined Benefit Pension Committee has decided to send a newsletter to replace the Annual General Meeting. In this newsletter you will find Plan Basics, 2021 Investment performance and Year in Review, Pension calculation examples and 2022 Outlook.

The 1999 Academic Pension Plan

What type of Plan do I have?

You participate in the defined benefit ("DB") pension plan. When you retire, you receive a set monthly pension payment for the rest of your life.

When You Retire

You will receive a monthly pension for your lifetime.

How Much?

It is calculated using a formula based on how long you participated in the plan and your top earning years while working at USask.

Contributions

All contributions go into a common pension fund—the same fund that is used to pay out pensions to each of our retired plan members. This fund is invested by professional investment managers.

Your Contributions

8.5%

of pensionable earnings

The University's Contributions

8.5%

of pensionable earnings

Pension Calculation

One of the greatest advantages of a defined benefit pension plan is that you can calculate how much pension you will receive. That's because your pension is based on a formula—simply plug in your numbers to see what you'll get when you retire!

2% X **Highest average earnings** X **Pensionable service**

Highest average earnings: Average of your highest pensionable earnings in 48 consecutive months of participation.

Pensionable service: Years and months that you participate in the plan.

Minus

0.4% X **Average YMPE*** X **Years of Service post-2005**

*The Years' Maximum Pensionable Earnings (YMPE) is an amount set by the federal government each year. It is used as the ceiling for contributions to the Canada Pension Plan. We use the average YMPE from the three calendar years immediately prior to your retirement to calculate the offset.

When can you retire?

The plan offers three retirement scenarios—in all cases, your retirement will take effect on the first of the month:

Early

On June 30 following your **55th** birthday

Normal

On June 30 following your **67th** birthday

Postponed

By the end of the year you turn **71**

Early Retirement

You can retire on the June 30 following your 55th birthday and any time before the June 30 following your 67th birthday. Depending on when you retire, you may receive a reduced or an unreduced pension from the plan.

55	56	57	58	59	60	61	62	63	64	65	66
REDUCED PENSION UNLESS YOU MEET SPECIAL CRITERIA					UNREDUCED PENSION STARTING AT AGE 60						

No Reduction

To retire before age 60 with no reduction, you must:

- Have 30 years of continuous service, **or**
- Your age + continuous service must total at least 80

Reduced

If you retire early (and don't meet the special criteria), your pension will be reduced:

0.25% for each month that you retire before being eligible for an unreduced pension (that adds up to a total of 3% per year) This reduction applies for all the years you receive your lifetime pension.

Retirement Payment Options

Your pension is payable at the end of each month for your lifetime

If you're single (Normal Form)

You get the "normal form" pension paid from the time you retire for the rest of your lifetime.

The normal form is a single life guaranteed 10 year pension.

That means if you die before receiving 10 years (i.e., 120 months) of pension payments, your remaining pension will be paid out to your beneficiary or estate.

If you have a spouse (Joint and Survivor Form)

You get a pension paid from the time you retire for the rest of your lifetime.

If you die before your spouse, they will continue to receive a percentage of your pension for the rest of his or her lifetime.

You can choose the percentage paid to your spouse—**100%, 75%, 66.7% or 60%** of the pension amount paid to you.

When you choose the joint and survivor form, your monthly pension will be less than if you were single. This is to account for the extra payments that may continue to your spouse.

$183,980

is the maximum amount of pension you can earn in 2022. Limit is set by the Canada Revenue Agency and increases annually.

2021: $174,598
2020: $166,351
2019: $162,758
2018: $158,402
2017: $156,782

Pension Calculation Examples

Meet Elyse

Age: 60
Retirement: Dec. 31, 2022
Spouse Age: 57
Years of Service: 23
- 6 years pre-2006
- 17 years post-2005

Pensionable Earnings and Year's Maximum Pensionable Earnings (YMPE) for the last 4 years

Year	Actual Earnings	Annual Pensionable Earnings*	Year's Maximum Pensionable Earnings
2022	$110,000	$110,000	$64,900
2021	$105,000	$105,000	$61,600
2020	$100,000	$100,000	$58,700
2019	$95,000	$95,000	$57,400

*After Applying Maximum Limit

Highest Average Earnings (4 years) = $102,500
($110,000 + $105,000 + $100,000 + $95,000) / 4

Average of the final 3 years of the Yearly Maximum Pensionable Earnings (YMPE) = $61,733
($64,900 + $61,600 + $58,700) / 3

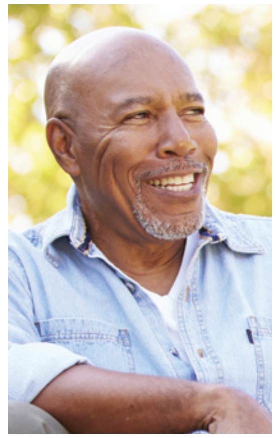
Calculation

2% x	Highest average earnings $102,500	x	Pensionable service 23	=	$47,150.00
MINUS					
0.4% x	YMPE $61,733	x	Years of Service post-2005 17	=	$4,197.84
					$42,952.16

Elyse will receive:
$42,952.16 per year or **$3,579.35** per month

Retirement Payment Options

	Guaranteed Period (Years)			
	0	5	10	15
Normal Form	N/A	N/A	$3,579.35	$3,532.82
Joint and Survivor Form 60%				
Member Amount	$3,342.14	$3,338.61	$3,328.26	$3,310.66
Spouse's Amount	$2,005.28	$2,003.17	$1,996.96	$1,986.40



Meet John

Age: 65
Retirement: Dec. 31, 2022
Years of Service: 33
- 16 years pre-2006
- 17 years post-2005

Pensionable Earnings and Year's Maximum Pensionable Earnings (YMPE) for the last 4 years

Year	Actual Earnings	Annual Pensionable Earnings*	Year's Maximum Pensionable Earnings
2022	$190,000	$183,980	$64,900
2021	$185,000	$174,598	$61,600
2020	$180,000	$166,351	$58,700
2019	$175,000	$162,758	$57,400

*After Applying Maximum Limit

Highest Average Earnings (4 years) = $171,922
($183,980 + $174,598 + $166,351 + $162,758) / 4

Average of the final 3 years of the Yearly Maximum Pensionable Earnings (YMPE) = $61,733
($ 64,900 + $61,600 + $58,700) / 3

Calculation

2% x	Highest average earnings $171,922	x	Pensionable service 33	=	$113,468.52
MINUS					
0.4% x	YMPE $61,733	x	Years of Service post-2005 17	=	$4,197.84
					$109,270.68

John will receive:
$109,270.68 per year or **$9,105.89** per month

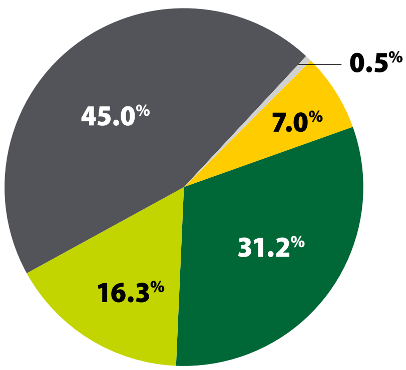
Additional Maximum Test

Maximum pension payable for each year of service is **$3,420.00** (for retirements in 2022)
$3,420.00 x 33 = $112,860.00 per year payable in the **Normal Form**

Because the maximum pension is less than the calculation of the pension using plan formula, there is no additional limit applied.

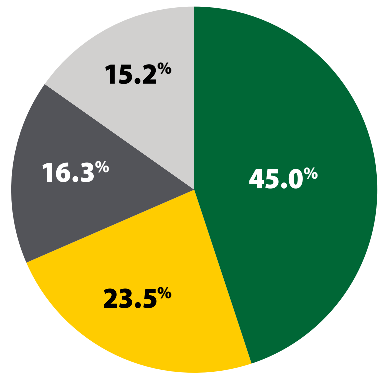
Pension Plan Information at December 31, 2021

Market Value of Pension Plan Assets



Asset Classes	2021
Canadian Equities	$13,201,000
Non-Canadian Equities	$58,488,000
Real Estate	$30,615,000
Total Equities	**$102,304,000**
Bonds	$84,346,000
Money Market and Short-term Inv.	$883,000
Total Fixed Income	**$85,229,000**
Total Market Value	**$187,533,000**

Distribution of Assets Among Investment Managers



Investment Manager	2021
BlackRock	$84,346,000
Jarislowsky Fraser Limited	$44,008,000
TD Asset Management – Greystone	$30,615,000
TD Asset Management – Epoch	$28,564,000
Total	**$187,533,000**

Investment Performance

The long-term investment goal of the Plan is to achieve a minimum annualized rate of return of at least 4.25%. To achieve this goal, the Plan adopted an asset mix balanced between Cash & Fixed Income Assets (i.e. Long Term Bonds and Money Market & Short-Term Investments) and Growth Assets (Equities and Real Estate). The responsibility for investing the assets of the Plan is delegated to four professional investment management firms with different mandates to ensure adequate investment diversification.

The Plan's Return Benchmark is a performance standard developed by the Plan's Investment Consultant, Aon. The Academic Defined Benefit Pension Committee and the Board of Governors approved the benchmark. The investment managers of the Plan are expected to meet or surpass the benchmark.

Investment Performance	2021	Last 4 Years	Last 10 Years
Return*	7.8%	7.1%	9.1%
Benchmark*	6.7%	7.9%	8.9%

*Gross of Fees

2021 The Year In Review

Market Performance

Markets experienced volatility in 2021, with a divergence in results between lower risk bonds and higher risk equities. While major stock markets did remarkably well, bond markets posted negative returns and real estate results were steady.

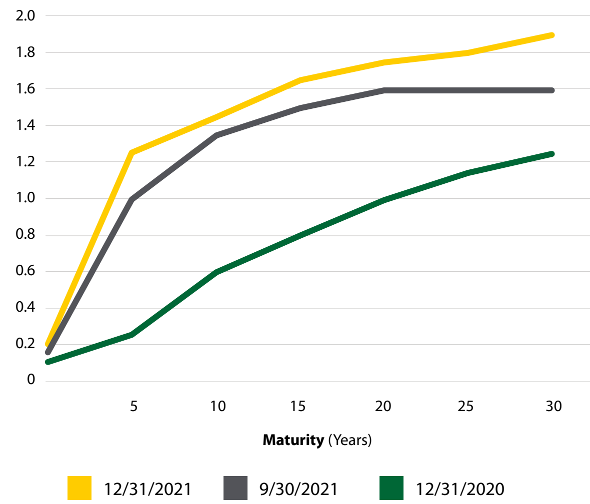
Global equities generated strong positive returns over the last twelve months, boosted by optimism over Covid-19 vaccine roll-outs, supportive monetary and fiscal policies, and improving economic data. However, the discovery of Covid-19 variants casted doubts over the prospect of global economic growth in 2021. Inflation rates worldwide continued to increase, as supply chain problems and rising wages persisted. Rising inflation lead major central banks to indicate the end of pandemic-era bond purchase programs and hinting at accelerated interest rate hikes to help ease the persistent inflation. Equity markets were able to shrug most of these concerns, posting solid gains in 2021.

Bond investors began 2021 with low yields and the growing consensus that, due to the combination of growing corporate earnings, GDP growth and rising inflation, bond yields were likely to rise. While not even throughout the year, bond yields did rise through 2021 across most bond maturities (terms). (See Canadian Federal Yield Curve Chart.) The only exception was at the very short end of the yield curve, where the Bank of Canada held its overnight rate steady through the year. With sensitivity to rising yields greater for longer-termed bonds than shorter-termed bonds, long-term bond returns declined the most, exemplified by Government of Canada bonds, where short-term federal bonds declined 1.1% in the year, while long-term federal bonds declined by 7.1%.

The Canadian dollar rose marginally in value relative to the U.S. dollar in 2021, influenced by increasing commodity prices, particularly for oil as global economic activity ramped up. The U.S. economy performed strongly through 2021 and into early 2022, increasing demand for oil. This, coupled with the impacts on global oil supply related to Russia's invasion of Ukraine, creates further upward pressure on oil prices that may in turn result in strengthening of the Canadian dollar versus the U.S. dollar. Further, there is potential the hawkish Bank of Canada may raise rates before the U.S. in response to Canada's strong labour market, high inflation and concerns over housing market prices.

The Canadian commercial real estate market surprised many, positing a 7.9% return (MSCI/REAL PAC Annual Property Index) in 2021. The Industrials segment was the big winner in the Pandemic economy, rising 31.8% in the year. Rapid growth in e-commerce led to a huge increase in demand for warehouse space. While the Retail segment lagged all other market segments, a 17.4% increase in rental income demonstrated retailers are getting back on their feet and able to pay their full rents each month. Low borrowing rates and institutional investors search for yield continue to drive strong pricing in the real estate market.

Canada Federal Yield Curve



Source: Bloomberg

Plan Performance

The University of Saskatchewan 1999 Academic Pension Plan experienced a return of +7.8% in 2021, gross of investment management fees and expenses. Performance was consistent in the year, with long bonds seeing the most volatility in response to yield movements in the bond market.

Manager	Strategy	Q1	Q2	Q3	Q4	2021
BlackRock	CDN Long Bonds	-10.8%	3.7%	-1.6%	4.8%	-4.6%
Jarislowsky Fraser	Equities	5.4%	6.1%	3.8%	7.0%	24.3%
TDAM – Epoch	Global Equities	6.0%	3.2%	0.8%	6.7%	17.6%
TDAM – Greystone	Real Estate	2.1%	3.6%	2.9%	5.3%	14.6%
Total Funds		-2.7%	4.2%	0.6%	5.6%	7.8%

Performance was driven by the strong, double-digit returns from equities and real estate, which more than offset the negative return earned by the Canadian Long Bond portfolio. The Plan's asset mix, that blends 50% in Cash & Fixed Income, with 50% in Growth Assets (equities and real estate) provided a 7.8% annual return, nicely ahead of the minimum 4.25% return objective.

2022 Outlook

Bonds

The Bank of Canada kept its policy rates unchanged in January 2022, citing concerns about the impact of the Omicron variant. Bank Committee members made it clear that current policy interest rates are not appropriate for the growth and inflation mix. Indeed, 6 rate increases are expected by the market in 2022, to bring the overnight policy rate from its current level of 0.25% to 1.75%. This would represent a an aggressive pace of tightening and a path, away from near-zero interest rates. Complicating matters is the impact of high interest rates on the cost of living, consumer demand and economic growth. Any slowdown in the economy would be accelerated by sharply rising interest rates, so the expected pace of tightening may end up being too quick for the economy to tolerate. Longer duration bond yield movements have been modest so far, implying investors do not expect either growth or inflation to remain strong.

The rise in short term government bond yields negatively impacted corporate bond performance to start 2022. Expected returns are low despite the significant risks of rising interest rates and credit spreads. With high institutional demand for investment grade bonds, risk premiums over government bonds are compressed. Credit pickings are very slim for a return-enhancement, though this might change if yields keep rising.

Equities

The anticipation of interest rate rises and upward pressure on bond yields to start 2022, will continue to hurt performance of stocks sensitive to yield increases, and in particular, technology stocks with high valuations. This dynamic may fuel a rotation from technology and into financials and energy, or more broadly a rotation from 'growth' and towards 'value' stocks. Recent rotations have proven be more mini-cycle then trend.

Market supports for equities appear less durable coming into 2022. The earnings rebound in 2020/21 was impressive, but the best of the recovery is over. Corporate earnings revisions are no longer upwards. While there is no obvious threat to economic growth, fiscal and monetary stimulus is now being pulled back. Also, wage and other input cost pressures represent drags by companies as they issue guidance on future financial results. While earnings growth has paced market gains so far, valuations are high in historical ranges. High valuations heighten the vulnerability to adverse market developments. The liquidity and interest rate environment is expected to be a negative equities and other risk assets. On a more positive note, if market volatility continues in the way seen early in 2022, an equity buying opportunity will develop.

Markets historically have been challenged to price 'event risk', despite the potential material impacts. Russia's invasion of Ukraine is an unfolding example of such a risk, and initial market reactions were negative, but rebounded quickly. The largest impacts limited to directly impacted assets such as Russian markets or energy prices. Much the same could be said for other areas of conflict too, such as China-Taiwan or indeed other event risks for which setting a probability is difficult, such as a cyber-attack or a climate-change event that disables significant economic infrastructure. While the inability of markets to price event risk appropriately is not new, high asset prices in equity markets raise the likelihood of a deeper market impact should risk events occur.

Currencies

The Canadian dollar received a boost from rising oil prices and the prospect of several interest rate rises this year. U.S. dollar strength kept the appreciating trend in check somewhat. Looking ahead to 2022, the U.S. dollar is likely to lose momentum as the economy slows, while oil prices may remain high. This supports a more positive outlook for the Canadian dollar, subject to the pace at which the U.S. dollar trends lower.

Summary

The closing months of 2021 demonstrated the developed equity markets' long-standing resilience, especially in the U.S.. Other regions, particularly emerging markets, struggled, while Canadian equities were supported by rising energy prices. Large cap U.S. equities sailed through worries over rising inflation and interest rates alongside the rapid spread of the Omicron variant. Some pressure on bond yields surfaced in 2021's final quarter, mainly in shorter-term bonds, limiting returns in corporate bonds.

2022 began with a marked change in market tone. Tested by an anticipation of faster increase in central bank interest rates and a sharp move in global bond yields, equities have looked shaky. This weak start could be a blip, or an indication that market resilience will face a sterner test in 2022.

IT'S NEVER TOO EARLY (OR TOO LATE) TO START THINKING ABOUT YOUR RETIREMENT

Retirement represents a major milestone in your career and is a significant life event. Before you reach your desired retirement age it is important that you prepare by ensuring you have your retirement plan so you're ready to begin the next adventure in your life.

There is a new retirement resource in PAWS that will help guide you on this journey.

paws.usask.ca/go/retirement

When should I contact the Pensions Office?

YOU SHOULD CONTACT US IF YOU:

- have general questions about your pension plan or annual statement
- are retiring or leaving the University
- considering retirement and require information
- need to make changes to your pension beneficiary designation
- have already left the University and require assistance understanding your options
- completing your pension option forms

Pension Administration and Support

Pension and Benefits Office, Finance and Resources
Room E180, Administration Building
105 Administration Place
Saskatoon, SK S7N 5A2

Tel: 306-966-6633
Email: pensions.inquiries@usask.ca
Web: **wellness.usask.ca/benefits/pension.php**

University of Saskatchewan

USASK **PENSION**

APPENDIX A

1999 Academic Pension Plan Governance Structure

BOARD OF GOVERNORS

COMMITTEE

INVESTMENT

- Investment Policy
- Investment Monitoring

BENEFIT, FINANCIAL, ACCOUNTING AND CONTROLS

- Plan Design
- Communication/Education
- Expense Controls
- Financial Statement Accounting

ADMINISTRATION AND COMPLIANCE

- Daily Administration
- Plan Documentation
- Regulatory, Filings and Compliance

Academic Defined Benefit Pension Committee Members

FACULTY ASSOCIATION APPOINTEES:

- **Phil Chilibeck,** Kinesiology
- **Doug Degenstein,** Physics and Engineering Physics

BOARD OF GOVERNOR REPRESENTATIVES

- **Sandra Baptiste,** Finance and Resources
- **Ana Crespo-Martin,** Faculty Relations
- **Heather Fortosky**, Finance and Resources

OBSERVER

Michael Cuggy, ASPA