BRANDON UNIVERSITY

Brandon University Retirement Plan
Board of Trustees
Wednesday, June 23, 2021 @ 1:00 pm
Zoom Meeting

AGENDA

1.0 Call to Order

2.0 Approval of Agenda and Minutes
- 2.1 Approval of Agenda of June 23, 2021
- 2.2 Approval of Minutes of February 25, 2021

3.0 Connor, Clark & Lunn Investment Management Ltd (Lori Satov)
- 3.1 Investment Performance Review

4.0 New Business
- 4.1 Election of New Chair (S Lamont)
- 4.2 Motion to add New Chair to Pension Trustee Signing Authority (S Lamont)
  - 4.2.1 New Chair to sign Signature Card & Schedule 'B'
- 4.3 Retirement Experience Study (Eckler)
- 4.4 Approval of the Actuarial Valuation of the Brandon University Retirement Plan as at December 31, 2020 (Eckler)
  - 4.4.1 Valuation Results
- 4.5 Bill 8 received Royal Assent on May 8 (Eckler)
- 4.6 Approval of the Brandon University Retirement Plan Annual Report Incorporating the Annual Financial Statements (Todd Birkhan, BDO Canada; Allison Noto, BU)
  - a) Brandon University Retirement Plan – Audit Results Memo (2020)
  - b) Brandon University Retirement Plan – Annual Report 2020

5.0 Continuing Business
- 5.1 Update on Investment Manager Review (S Lamont)

6.0 Correspondence
- 6.1 CIBC Mellon Custodial Fees – Invoices

Invoice #	Duration	Amount
256736	Apr 1 – 30, 2021	$11,537.06

255167	Mar 1 – 31, 2021	$11,465.03
253651	Feb 1 – 28, 2021	$11,508.33
252281	Jan 1 – 31, 2021	$11,761.81

6.2 Connor, Clark & Lunn - Invoice

Invoice #	Duration	Amount
8694_458	Jan 1 – Mar 31, 2021	$173,478.65

6.3 Eckler Ltd

Invoice #	Duration	Amount
Professional Services 0192BUN02-EB1-21-0723	Mar 2021	$466.10
Administration Services 0194BUN10-EB1-21-0724	Jan 1 – Mar 31, 2021	$14,384.94
Professional Services 0192BUN01-EB1-21-0722	Jan – Mar 2021	$22,453.04
Professional Services 0192BUN03-EB1-21-0654	Jan 1 – Mar 31, 2021	$7,523.72
Administration Services 0194BUN10-EB1-20-3269	Oct 1 – Dec 11, 2020	$17,266.54
Professional Services 0192BUN01-EB1-20-3426	Oct – Dec 2020	$11,166.28

6.4 BU Miscellaneous

Invoice #	Duration	Amount
762549	Nov 2020	$9,710.41

7.0 For Information

8.0 Upcoming Meeting Dates

November 25, 2021 1:00 – 4:00 p.m. via Zoom Meeting or Clark Hall Room 104

BRANDON UNIVERSITY

Brandon University Retirement Plan
Pension Trustees
Thursday, February 25, 2021
MEETING MINUTES

Present: Todd Fugleberg (BUFA), Chairperson
Scott Lamont (Board of Governors)
Allison Noto (Exempt)
Brent Cuvelier (IUOE-A)
David Taylor (BUFA)
Maurice Koschinsky (Retiree)
Shawn Chambers (Board of Governors)
Nicky Kreshewski (Resource)

Regrets: Brent Cuvelier (IUOE-A)
Becky Lane (MGEU)

Absent: Kim Meadows (IUOE-D)

Guests: Lori Satov, Connor, Clark & Lunn
Andrew Kulyk, Eckler Ltd
Shannon Tesluck, Eckler Ltd
Cecilia Jackson, Retiree

1.0 Meeting called to order at 1:01 p.m.

2.0 Approval of Agenda and Minutes

2.1 Approval of Agenda of February 25, 2021

Motion: Moved and Seconded (S Lamont/D Taylor)

BE IT RESOLVED THAT THE agenda for the February 25, 2021 meeting of the Brandon University Retirement Plan Pension Trustees be approved.

CARRIED

2.2 Approval of Meeting Minutes of November 25, 2020

Motion: Moved and Seconded (A Noto/M Koschinksy)

BE IT RESOLVED THAT THE minutes for the November 25, 2020 meeting of the Brandon University Retirement Plan Pension Trustees be approved with a modification to Agenda item 3.0, second page, 5th bullet change word Extension to Equity.

CARRIED

3.0 Connor, Clark and Lunn Investment Management Ltd. (L Satov)

3.1 Investment Performance Review

- The pandemic has created a challenging time for value managers.
- COVID-19 derailed the economy in Feb/Mar 2020; and the Canadian Equity & Global markets took deep decline in 1st quarter in 2020.
- In the second & part of the third quarter, COVID challenged companies under performed while COVID beneficiary companies outperformed.
- In November, the Biden administration won the US election and positive news on the efficacy rates of several vaccines were instrumental in starting to stimulate the economy. Markets started recovering and turning around in the 3rd quarter.
- In the Canadian Bond Market, interest rates were very low at the beginning of the year. The yield curve was abnormally flat. Central Banks and Bank of Canada lowered interest rates at the short end. This steepening of the curve has been beneficial to the portfolio.
- Credit spreads – reflect the additional return that an investor gets by lending money to a province or corporation over and above the interest rate you get from lending to the Bank of Canada. Spreads continued to tighten in the 4th quarter of 2020.
- Investment Performance – The annual rate is 14.2% (10.8% benchmark) for the portfolio. There was an overall strong performance last year. Fixed Income was 12.4%; Canadian Equities were 5.7%; Global Equities were 20.5% and Cash was 1.0%.
- Multi-Year Economic Expansion – Outlook for the global economy is more positive than in 2020. Periods of economic expansions periods are getting longer, and recessions appear to be shorter. This will probably be the pattern going forward.
- Fiscal Policy – Central Banks have kept interest rates really low to ensure those in need of capital were able to get it. Governments are going to continue to spend in order to stimulate the economy. The Canadian debt, as a percentage to GDP, is in line with other G7 countries.
- Economic Summary –
  - this is the beginning a new business cycle;
  - return to some normalcy is expected;
  - pent up spending expected to rebound;
  - biggest risk is still COVID-19, the unknown aspects of the variants, and the distribution and effectiveness of the vaccines to the variants.
- Asset Mix positioning will be underweight in fixed income and overweight in Canadian & Global Equity markets in the portfolio;
- Real Estate & Infrastructure are strategic asset mix decisions should be viewed as a long-term investment. RE&I allows for diversification in the portfolio; provide an off-set to inflation and tend to be stable sources of cash flow. RE&I are not liquid assets, will change the liquidity profile of the portfolio; and are not as easily invested. RE&I will have oversight requirements.
- Environmental Social Governance (ESG) – last year CC&L's took a more systematic approach to responsible investing or ESG. The focus was on improving the reporting and the processes for the investment teams.
- Task Force on Climate-Related Financial Disclosures (TCFD) – the idea is to ensure companies are being more transparent on their carbon emissions, and their transition to a lower carbon footprint. This will be one of the CC&L's main initiatives for 2021.

3.2 International Investment Returns

- There was a question raised as to whether the change to benchmark to reflect the US Extension applies to the taxes on other international investments. There is no need to change the benchmark on international investment returns as taxes are not affected on the other funds; they are registered investors and are not taxable. The US Funds includes non-registered investors.

4.0 New Business

4.1 Appointment of the Auditor (S Lamont)

- The provincial auditor has always audited the University's pension plan. The Brandon University Act states that the Office of the Auditor General (OAG) or someone appointed by the OAG will audit the University as well as the Pension Plan.
- OAG contacted BU in January to say they will not be auditing the University. The University now needs to find an auditor. OAG did not inform the University until after year-end was completed. OAG has appointed BDO in the past to do the audit groundwork on their behalf for Brandon University.
- Next year the University will have to go to tender the summer of 2022 and will bring information from the tender process to the Pension Trustees.

ACTION: The University will start the tender process in the Summer of 2022 and will update give an update at the Trustees' meeting following the process.

Motion: Moved and Seconded (S Chambers/A Noto)

BE IT RESOLVED THAT the Brandon University Retirement Plan Pension Trustees approve the appointment of BDO to act as the auditor for the year ended December 31, 2020.

CARRIED

- Normally an Audit Plan would be presented and approved at this meeting; however, because they were not appointed a Plan was not completed. An important part of the Plan is to provide the Pension Trustees an opportunity to indicate if there are anything of particular concern that the Auditors should be reviewing.
- An email will be sent following this meeting inviting the Trustees think about anything of significance they would like to let BDO know about directly. The Auditor's email address will be included in the email for any questions or concerns the Trustees may have.

4.2 Special Payment Moratorium (A Kulyk)

- There is a new Manitoba regulation that allows plan sponsors to suspend special payments that would otherwise be required to be made during the 13-month moratorium period of December 2020 and December 2021. Special payments must resume January 2022.
- The University's Pension Plan is exempt from making solvency special payments on an ongoing basis.
- The moratorium would exempt the University from having to make going concern special payments.
- If the University wanted to file an election, they would have to provide notice to the Pension Trustees and a statement of election would have to be filed with the province. The Trustees would in turn have to advise all pensioners of the results of the election and the impact on the Plan.
- The Plan has a very positive return on assets and is expected to be fully funded on a going concern basis so there should not be any special payments required once a valuation is completed.
- Scott commented on behalf of the University and noted that the University was aware of the situation in November 2020, but it appeared at the time, the amount of the benefit would have been potentially about $20 – $30,000. For such a small sum, the University did not feel it was worth cause unnecessary concern to the pensioners about the University's decision to not make these special small payments. If by chance, Eckler had noted there was a large

going concern deficit and it would have become advantageous it could have made the election in 2021, which would have shortened the beneficial period. The University elected not to take the exemption.

Valuation Assumptions

- A Kulyk noted that are three Valuations – Going Concern, Wind-up & Solvency.
- Solvency & Wind-up more or less assume the plan is wound up and determines whether there are sufficient assets to satisfy all pension obligations. The solvency valuation is required for the Manitoba Government. Solvency deficiencies do not require special payments under current legislation.
- Going Concern valuations determine whether there will be sufficient assets in the plan to meet the plan obligations as they come due. Sets the minimum funding requirements for the Plan and special payments are required when there is a shortfall.
- Two key impacts for a solvency shortfall are
    - If solvency ratio is less than 90% the Province requires that the valuation is filed annually instead of every 3 years.
    - The Plan may not be amended until the solvency ratio is above 90%.

2021 Funding Estimate

- Brandon University's Net Fund Return in 2020 was outstanding.
- The market value return before expenses was 14.03% which was in the 5th percentile of the Balanced Fund Managers. The Median return for the Balanced Fund Managers in 2020 was 9.24%.
- The market value net of expenses was 13.51%; and the actuarial smoothed value return was 9.49%. The difference between the 13.51% and 9.49% is due to asset smoothing which helps to reduce year-to-year fluctuations in the funded status of the Plan.
- The change Eckler is proposing to the University is currently they have set a 10% corridor (5% on each side) where the smoothed value of assets could not deviate by more than 5% from the market value. With only a 5% buffer on either side; does not do enough to smooth out the assets and is suggesting that this would be a good year to increase the buffer to 20% (90% - 110% instead of currently 95% - 105% of the market value). This would not have any impact on the funded requirements in 2021.
- The 90% carries more of the extra gains or excess earnings forward this year in case there is a bad year next year or the year after. Likewise, if there were 2 or 3 bad years in a row, it would carry forward more of the negative so BU would not be impacted as much each year. This change would in effect smooth out fluctuations.
- Inflation in 2020 was lower than expected at 0.7%.
- There was an unusual change to the average wage inflation in Canada in 2020 that had an impact on the Yearly Maximum Pension Earnings (YMPE). Although the YMPE does not affect the Plan, the CPP earnings level does have an impact on the benefits as the Plan's accrual rate is below the YMPE.
- When there is a high increase in the YMPE, this is a positive for the Plan because more of the benefit is payable at the lower accrual rate, but it is expected that this will correct itself in the future, depending on the duration of the lockdowns and government restrictions during the pandemic.
- Bond Yields decreased in 2020 that will drive a decrease in the long-term expectation for the fund return. The Investment Policy Review was performed in the fall. It is still currently a draft policy and has not officially been adopted. The Asset Mix in that draft document has been reflected in the updated assumption presentation included in the agenda package.

- There was a change in the CIA Commuted Value (CV) Standard effective December 1, 2020. The select CV rate for the first 10-year interest rate decreased by 100bps, and the ultimate CV interest rate is up 40bps. There was also a change in the retirement age assumption for commuted values.
  Going-Concern Valuation
- The net discount rate at the end of 2020 is 5.3% after expenses and includes a 30-basis point margin in the discount rate.
- New regulations could see minimum margins prescribed for the Plan more than the current 30 bps; prescribed margins could be upwards of 75 – 100 bps.
- There are two prepared funding estimate scenarios later in the presentation to show the impact on the liabilities. One that incorporates the current level margin of 30 bps; and the other raised to 35 bps which brings down the discount rate to 5.25%.
- If the province introduces a prescribed margin of 75 bps next year, and the Plan margin stays at 30 bps this year, the Plan will have to be increase by 45 bps next year. 75 bps works out to approximately 10% of liability and 100 bps works out to 12%. If there is an increase and it creates a deficit, the going-concern payments would resume which would be amortized over 10 years.
- If the Plan was increased to 35 bps this year, there would be about $50,000 more put into the Plan that would not have been there and would help to offset the deficit and making special payments, if the margin were raised between 75 – 100 bps.

4.3 Valuation Assumptions (A Kulyk/S Tesluck)

- A Kulyk presented Eckler's 2021 Capital Market Assumptions for each asset class over 20 & 30 – year return and Standard Deviations for 20 & 30 Years. The expectation for Real Estate is 5.6%; Fixed Income 2.5 – 3% depending on the category. Real Estate is expected to be a much more stable higher return than Fixed Income.
  Demographic Assumptions – Retirement Study
- With a large data population, Plans can be studied for plan specific behaviours. This information can be used to develop assumptions about future behaviours for the University's Plan members. It also helps the Plan obtain the best possible measure of liabilities as it captures the most relevant behaviours and characteristics of its own Plan members.
- Retirement studies should have at least 5 years' worth of Plan data. These studies should be reviewed every 5 years with relevant data to refresh the assumptions, if needed.
- A retirement assumption for the University's Plan was based off a retirement study completed a few years ago included data from 2011 – 2016. The Plan's consistent gains on retirement shows a review to the retirement assumption may be needed. These consistent gains in the assumptions may be an indication of the Plan holding too much reserve in the liabilities for these expected retirements.
- In preparing the Plan's evaluation, the retirement experience is not happening as expected and is leading the Plan to have gains year over year. The current retirement assumptions may be too aggressive. The assumptions may need to be recalibrate predictions for expectations for retirement.
- Since the last retirement study was concluded, there is now current data that can be incorporated into the study to see if recent retirement behaviours have changed, and to see how they might impact the current assumption.
- Starting a retirement study in March would be ideal prior to completing the Plan Valuation; but it can be done either this year or next.
- Valuation Assumptions – Solvency Valuation
- The approximate cost of the Valuation Assumption that is scheduled to start in March 2021 is $10,000. The data will be reviewed from 2010 – 2020 and determine how many, who retired

and when to get an updated assumption table that will be used to estimate how much liability has been incurred each year because of retirement assumptions.

Motion: Moved and Seconded (S Lamont/A Noto)

BE IT RESOLVED THAT the Brandon University Retirement Plan Pension Trustees approve that Eckler prepare the Retirement Study with a maximum cost of $12,000 to conduct the study.

CARRIED

4.4 2021 Funding Estimates (A Kulyk/S Tesluck)

- There was an estimate prepared for the financial position at the end of December 31, 2020, and the required contributions for 2021 using the same discount rate of 5.3% with the same margin of 30 bps. A slightly lower rate of 5.25% was also used in the event the Trustees wanted to increase the margin.
- At 5.3%, the Plan has an $8,000,000 surplus as of December 2020 after adjusting the smooth value of assets to be within 10% of market value.
- Using a discount rate of 5.3% the University's contributions for 2021 would be reduced by $155,000 compared with the previous year.
- There were no required special payments and there was a small additional contribution that was required for a 2008 amendment.
- At 5.25%, the surplus was approximately $6,900,000 decreased by around $1,200,000. Lower discount rates mean higher contributions; although the contributions are slightly higher there was only a very small increase of $11,000.
- Hypothetically, if the margins were increased by 60 bps, the discount rate would be decreased to 5%, there would still be a surplus of approximate $1,000,000 with no special payments; but current service costs would be increased slightly higher than the contributions required in 2020, to $3,500,000 or $231,000 more than the 5.3%. Until the next Plan Valuation is completed with actual Plan member data, this is just an estimate which does not include any Plan experience in gains and losses.
- For every 5 bps of margin added, the current service cost contribution is approximately $55,000.

Motion: Moved and Seconded (S Lamont/ S Chambers)

BE IT RESOLVED THAT the Brandon University Retirement Plan Pension Trustees set the discount rate at 5.25%.

CARRIED

4.5 2021 Cost of Living Increase (COLA) (S Tesluck/A Kulyk)

July 2020/2021 COLA increase is 0.7%. This is determined by the excess of the Plan's 4-year average fund return over 6% (3.6%); but is capped each year by the increase in CPI, which for 2020 was 0.7%. That increase will be effective July 1, 2021.

4.6 Change to Pension Trustees Signing Authority (S Lamont)

The current signing officers are Todd Fugleberg, Eric Raine and Scott Lamont. Eric's term expired in January 2021; Todd's term expires at the end of April 2021. Two of three signing officers are

required for approving and signing documents. One officer needs to be appointed as soon as possible and the second one for May 1, 2021.
A new Chair will be elected at the next meeting and the Chair is usually one of the three signing officers. Scott suggested Allison Noto.

Motion: Moved and Seconded (S Lamont/M Koschinksy)

BE IT RESOLVED THAT the Brandon University Retirement Plan Pension Trustees nominate Allison Noto as one of three signing officers along with Scott Lamont and Todd Fugleberg.

CARRIED

4.7 Motion to approve Heather Gillander's resignation (S Lamont)
This motion was actioned in Agenda item 4.9.

4.8 Motion to approve Eric Raine's end of term (S Lamont)
This motion was actioned in Agenda item 4.9.

4.9 Motion to approve Todd Fugleberg's end of term effect April 30, 2021 (S Lamont)

In the Trust Agreement, legal counsel suggested that Trustees have responsibility for the Pension Plan and when a Trustee resigns or their term expires, the remaining Trustees accept the responsibility for the Plan and the Trustee leaving is released from their responsibility. Agenda items 4.7, 4.8 and 4.9 were done as an omnibus motion.

Motion: Moved and Seconded (S Lamont/M Koschinksy)

BE IT RESOLVED THAT the Brandon University Retirement Plan Pension Trustees release Heather Gillander, Eric Raine from their responsibilities as Pension Trustees effective immediately, and Todd Fugleberg, effective April 30, 2021.

CARRIED

5.0 Continuing Business

5.1 Update on Investment Manager Review (S Lamont)

- S Lamont noted that following the presentation at the November meeting, the Pension Trustees' sub-committee met to review what the requirements were. A draft document was sent to Eckler and a report to Connor, Clark & Lunn. Scott asked Naomi at Eckler and Lori at CC&L for recommendations to potentially alter the asset mix.
- Eckler's steps for the Scope of Work to be completed
- Step 1 - Review of Alternative Asset Mixes
  - Confirmation of investment objectives for the asset mix,
  - Comparison of historic returns with forward looking assumptions,
  - Forward looking modelling of potential asset mix options,
  - Back testing of various asset mix options,
  - Overall recommendation on new asset mix for the Plan. and
  - Assessment of CC&L products relative market alternatives

- Step 2 - Role of an Investment Consultant
- Step 3 - Updating the SIPP
- Scott made a request for volunteers from the Trustees to serve on the sub-committee as E Raine is no longer a member, and T Fugleberg's term is expiring.
-

Motion: Moved and Seconded (S Lamont/M Koschinsky)

BE IT RESOLVED THAT THE Brandon University Retirement Plan Trustees approve the Eckler's Review of Alternative Asset Mixes, the Role of an Investment Consultant and Updating the SIPP for an estimated $30,000.

CARRIED

6.0 Correspondence

- Invoices for agenda items 6.1 – 6.4.

Motion: Moved and Seconded (S Chambers/D Taylor)

BE IT RESOLVED THAT THE Brandon University Retirement Plan Trustees approve the payment, after the fact, of the invoices from agenda items 6.1 through 6.4.

CARRIED

7.0 Upcoming Meeting Dates

June 17, 2021 1:00 – 4:00 p.m. via Zoom
November 25, 2021 1:00 – 4:00 p.m., Clark Hall-Room 104 or via Zoom

8.0 Adjournment

Motion Moved and Seconded (M Koschinsky/S Chambers)

BE IT RESOLVED THAT THE Brandon University Retirement Plan Pension Trustees approved adjournment of the meeting at 3:56 p.m.

CARRIED

CONNOR, CLARK & LUNN
INVESTMENT MANAGEMENT

FIRST QUARTER 2021 REVIEW

Lori Satov

June 23, 2021

BRANDON UNIVERSITY

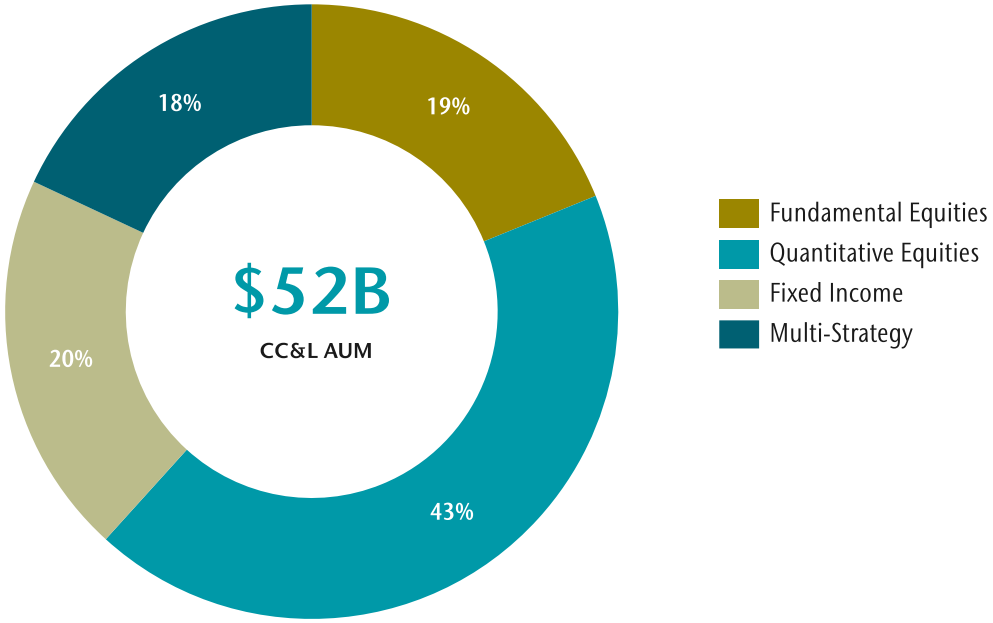
CC&L ORGANIZATIONAL UPDATE

March 31, 2021

CC&L AUM Breakdown by Strategy

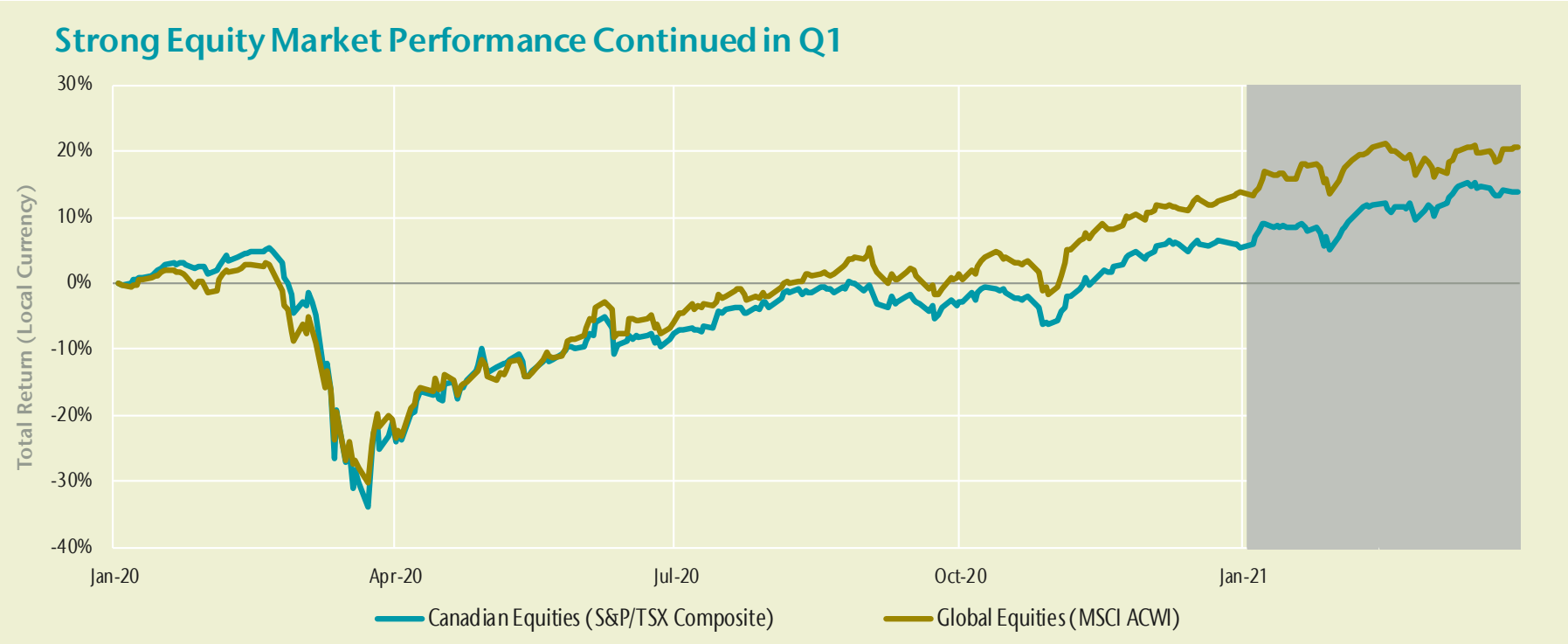
OWNERSHIP

- No changes to structure
- Employee-owned
- Succession Plan



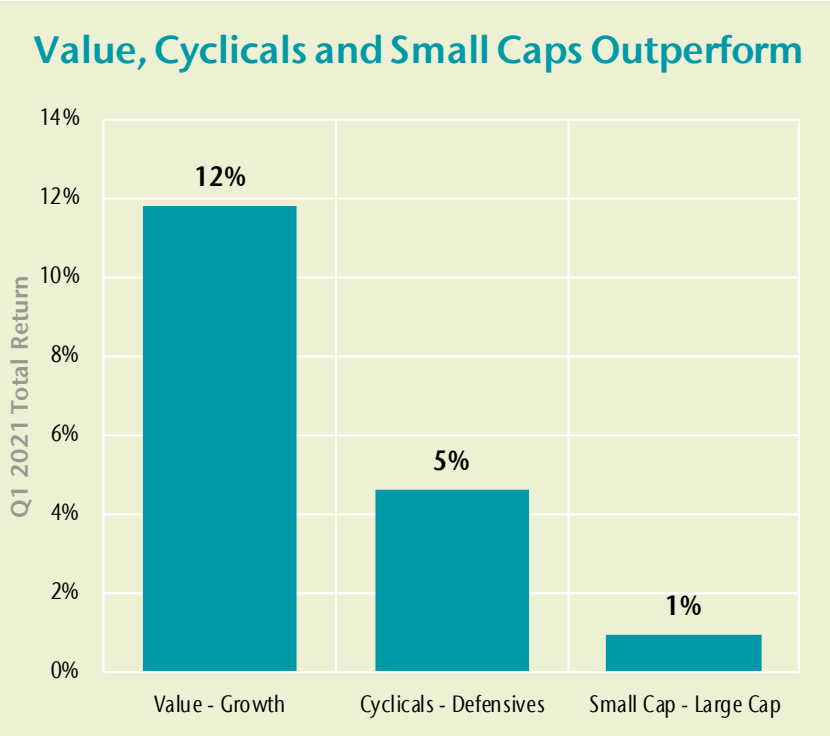
AUM breakdown may not add up to 100% due to rounding.
Source: Connor, Clark & Lunn Financial Group Ltd.

EQUITY MARKETS STAGED A REMARKABLE RECOVERY

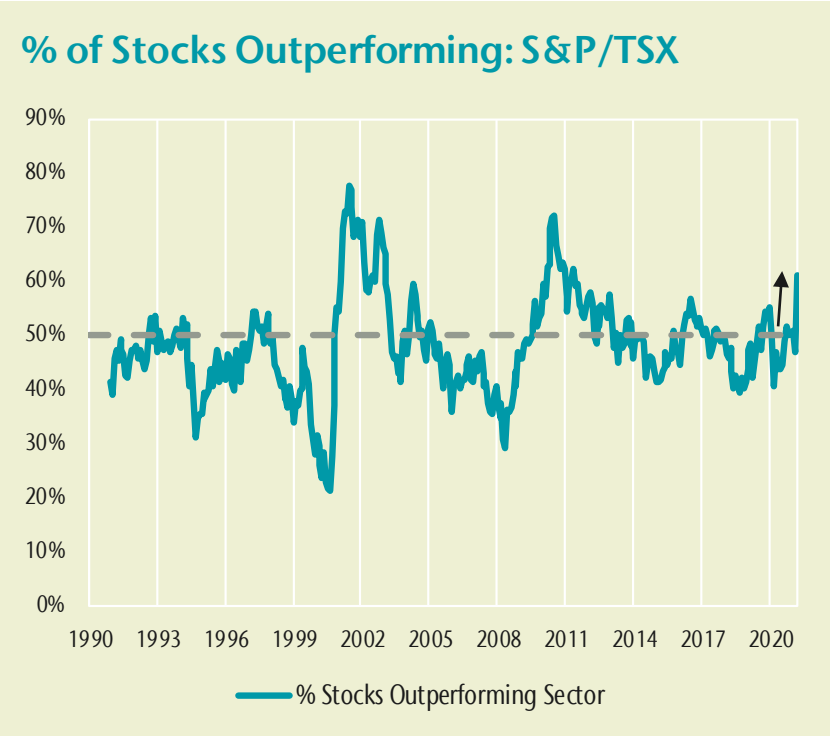


Source: Macrobond, MSCI Barra
Shaded area represents Q1 2021

EARLY CYCLE LEADERSHIP CONTINUED



Value/Growth based on Russell 1000 indices, cyclicals/defensives are proprietary sector classifications, Small Cap/Large are S&P/TSX 60 and S&P/TSX Small Cap Index
Source: Bloomberg, Connor, Clark & Lunn Investment Management Ltd.

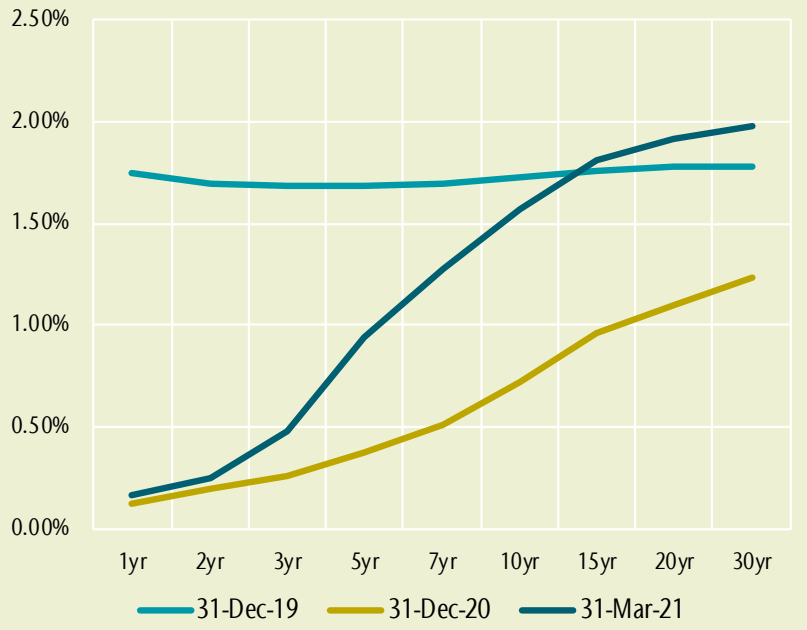


Source: BMO Investment Strategy

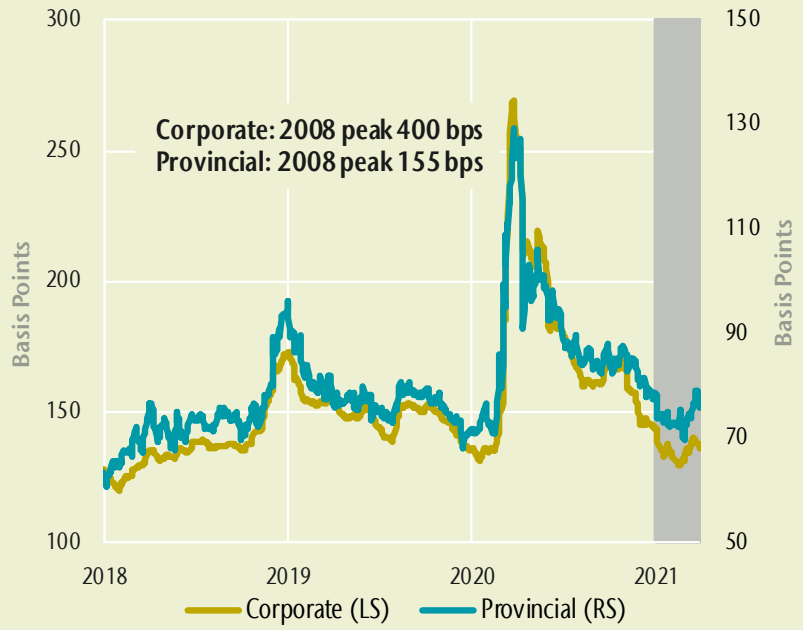
BOND MARKET REVIEW

March 31, 2021

Change in Canada Yield Curve



Credit Spreads



Source: FTSE Global Debt Capital Markets Inc., Connor, Clark & Lunn Investment Management Ltd.
Shaded area represents Q1 2021

INVESTMENT PERFORMANCE

	2021 (%)	Annualized Returns to March 31, 2021 (%)					
	Q1	1 YR	2 YR	3 YR	4 YR	5 YR	10 YR
Brandon University	**0.5**	**27.9**	**11.3**	**9.9**	**9.3**	**9.8**	**8.5**
Benchmark *	-0.7	22.6	8.8	8.2	7.8	8.8	7.4
Added Value	**1.2**	**5.3**	**2.5**	**1.7**	**1.5**	**1.1**	**1.0**

* 25% S&P/TSX Composite Index & 15% S&P500 Index (Net 15%) & 15% MSCI EAFE Index (CAD$) & 5% MSCI Emerging Markets Net (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (USD$) & 35% FTSE Canada Long Term Overall Bond Index & 1.5% FTSE Canada Corporate BBB Bond Index & 0.5% Merrill Lynch Canada BB-B High Yield Index.

Prior to December 31, 2020, benchmark was 25% S&P/TSX Composite Index & 15% S&P500 Index (CAD$) & 15% MSCI EAFE Index (CAD$) & 5% MSCI Emerging Markets Net (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (USD$) & 35% FTSE Canada Long Term Overall Bond Index & 1.5% FTSE Canada Corporate BBB Bond Index & 0.5% Merrill Lynch Canada BB-B High Yield Index. Prior to December 19, 2016, benchmark was 35% S&P/TSX Composite Index & 12.5% S&P500 Index (CAD$) & 12.5% MSCI EAFE Index (CAD$) & 35% FTSE Canada Universe Bond Index & 5% FTSE Canada 91 Day Tbill Index. Prior to July 3, 2006, benchmark was 27.5% S&P/TSX Composite Index & 27.5% MSCI World ex-Cda Index (CAD$) & 40% DEX Universe Bond Index & 5% DEX 91-day T-bill Index.

Inception Date: December 30, 1994

All returns are gross of fees except where noted. Added value may differ due to rounding.

Source: Connor, Clark & Lunn Financial Group Ltd.

INVESTMENT PERFORMANCE

March 31, 2021

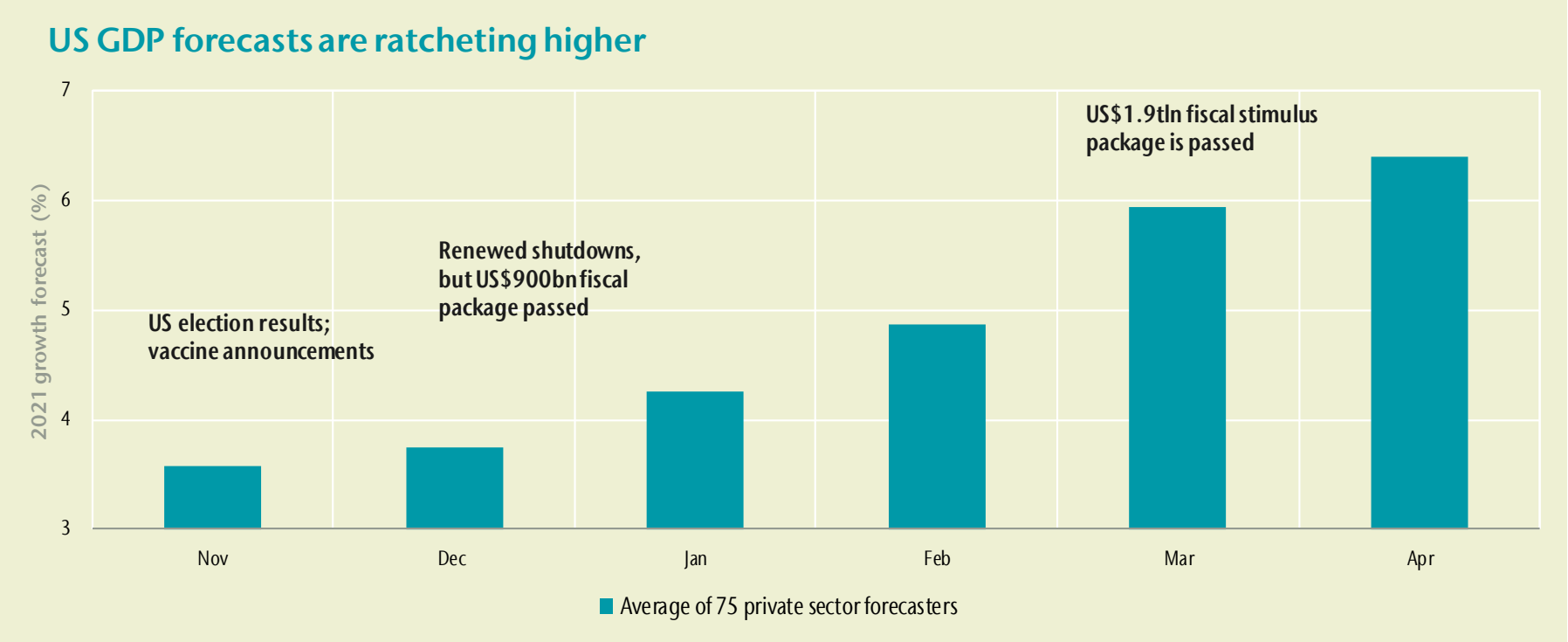
	2021 (%)	Annualized Returns to March 31, 2021 (%)					
	Q1	1 YR	2 YR	3 YR	4 YR	5 YR	10 YR
Fixed Income	**-9.6**	**2.6**	**3.5**	**4.7**	**4.7**	**4.3**	**4.9**
CC&L Long Bond Fund A	-10.5	1.4	3.3	4.6	4.6		
FTSE Canada Long Term Overall Bond Index	-10.7	-0.2	2.6	4.2	4.4		
CC&L High Yield Bond Fund I	-1.1	13.9	5.3	5.8	4.7		
High Yield Benchmark ±	-1.4	13.0	6.0	6.3	5.2		
Canadian Equities	**10.4**	**51.1**	**12.2**	**10.1**	**8.3**	**10.5**	**6.8**
CC&L Q Equity Extension I	13.3	54.9	11.9	9.7	8.2	10.8	9.6
SRA Canadian Equity Fund	10.0	51.2	11.9	9.5	7.8	10.6	6.0
PCJ Canadian Equity Fund A	8.0	46.9	12.6	10.8	8.9	10.3	6.0
S&P/TSX Composite Index	8.1	44.2	11.2	10.2	8.0	10.1	6.0
Global Equities	**3.7**	**41.2**	**17.6**	**13.8**	**13.7**	**14.1**	**14.5**
MSCI World ex-Cda Index (CAD$)	3.5	36.5	14.7	12.6	12.1	13.5	13.7
NS Partners International Equity Fund A	0.2	37.9	19.0	12.7	13.4	12.3	11.2
MSCI EAFE Index (CAD$)	2.2	28.2	8.4	5.6	7.1	8.7	8.8
CC&L Q US Equity Extension Fund A	7.1	42.0	17.1	15.8			
S&P500 Index (Net 15%) (CAD$)	4.7	37.7	16.7	15.5	14.0	15.3	16.5
CC&L Q Emerging Markets Equity Fund	4.3	48.2	15.1	7.6	11.7		
MSCI Emerging Markets Net (CAD$)	0.9	39.9	10.8	5.6	9.2		

	2021 (%)	Annualized Returns to March 31, 2021 (%)					
	Q1	1 YR	2 YR	3 YR	4 YR	5 YR	10 YR
Cash	**0.0**	**0.5**	**1.2**	**1.4**	**1.3**	**1.2**	**1.2**
FTSE Canada 91 Day TBill Index	0.0	0.2	1.1	1.2	1.1	1.0	0.9
Inflation (Canada CPI)	1.6	2.2	1.5	1.7	1.8	1.8	1.6

* 25% S&P/TSX Composite Index & 15% S&P500 Index (Net 15%) & 15% MSCI EAFE Index (CAD$) & 5% MSCI Emerging Markets Net (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (USD$) & 35% FTSE Canada Long Term Overall Bond Index & 1.5% FTSE Canada Corporate BBB Bond Index & 0.5% Merrill Lynch Canada BB-B High Yield Index.
Prior to December 31, 2020, benchmark was 25% S&P/TSX Composite Index & 15% S&P500 Index (CAD$) & 15% MSCI EAFE Index (CAD$) & 5% MSCI Emerging Markets Net (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (CAD$) & 1.5% Merrill Lynch US High Yield Cash Pay BB Index (USD$) & 35% FTSE Canada Long Term Overall Bond Index & 1.5% FTSE Canada Corporate BBB Bond Index & 0.5% Merrill Lynch Canada BB-B High Yield Index. Prior to December 19, 2016, benchmark was 35% S&P/TSX Composite Index & 12.5% S&P500 Index (CAD$) & 12.5% MSCI EAFE Index (CAD$) & 35% FTSE Canada Universe Bond Index & 5% FTSE Canada 91 Day Tbill Index. Prior to July 3, 2006, benchmark was 27.5% S&P/TSX Composite Index & 27.5% MSCI World ex-Cda Index (CAD$) & 40% DEX Universe Bond Index & 5% DEX 91-day T-bill Index.
± 30% Merrill Lynch US High Yield Cash Pay BB Index (CAD$) & 30% Merrill Lynch US High Yield Cash Pay BB Index (USD$) & 30% FTSE Canada Corporate BBB Bond Index & 10% Merrill Lynch Canada BB-B High Yield Index.
Inception Date: December 30, 1994
All returns are gross of fees except where noted. Added value may differ due to rounding.
Source: Connor, Clark & Lunn Financial Group Ltd.

OUTLOOK & POSITIONING

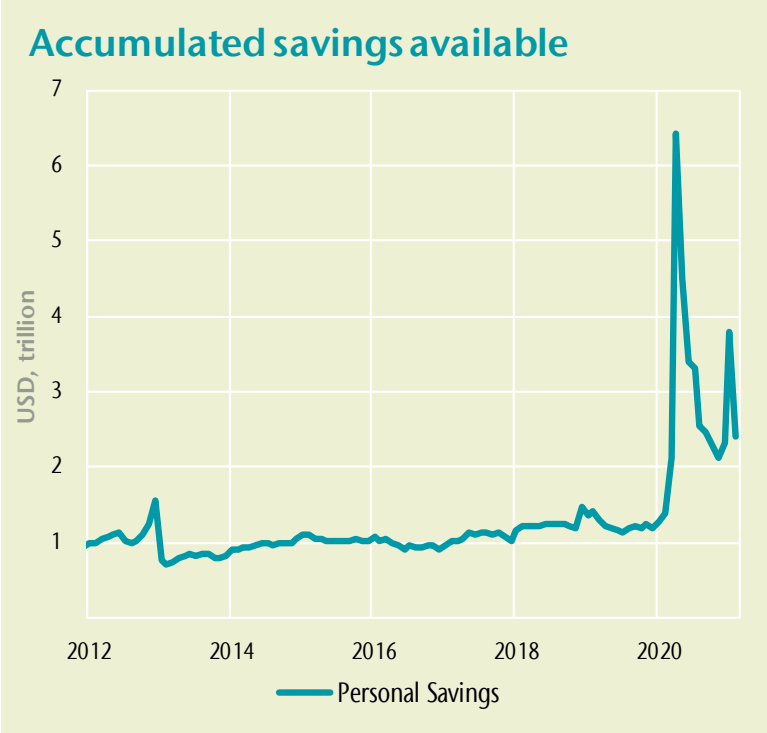
A RADICAL SHIFT IN THE ECONOMIC ENVIRONMENT



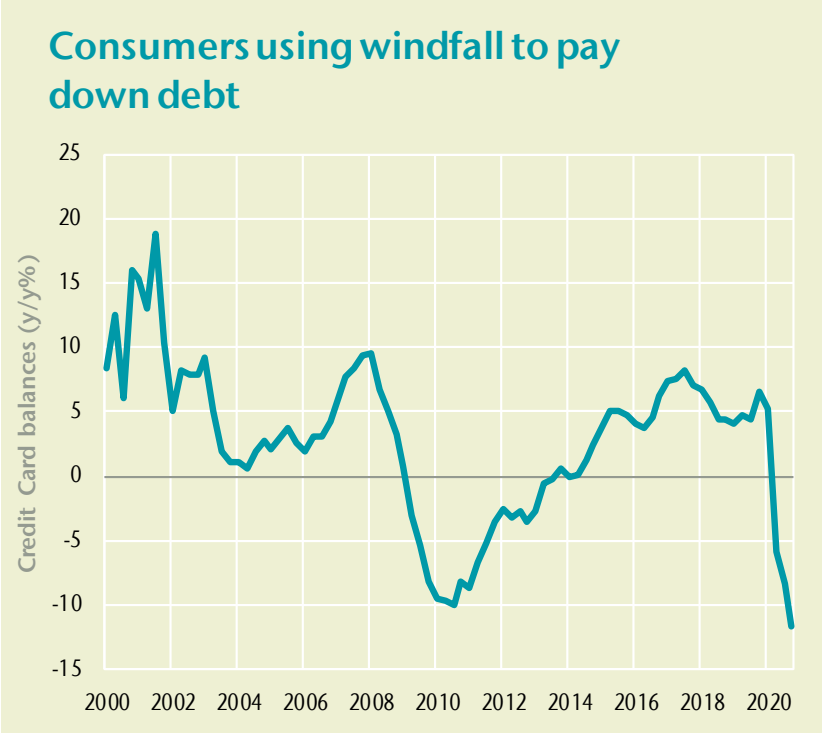
Source: WSJ Monthly Economic Surveys, Connor, Clark & Lunn Investment Management Ltd.

Expectations for strong economic growth are rising around the world

CONSUMER SPENDING LOOKS WELL SUPPORTED



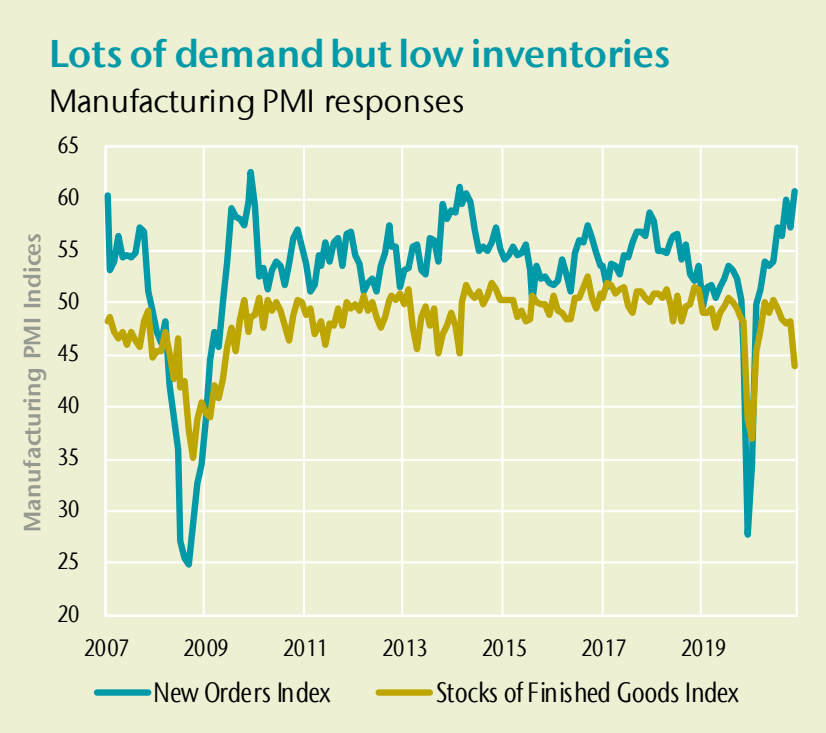
Source: Bureau of Economic Analysis, Macrobond



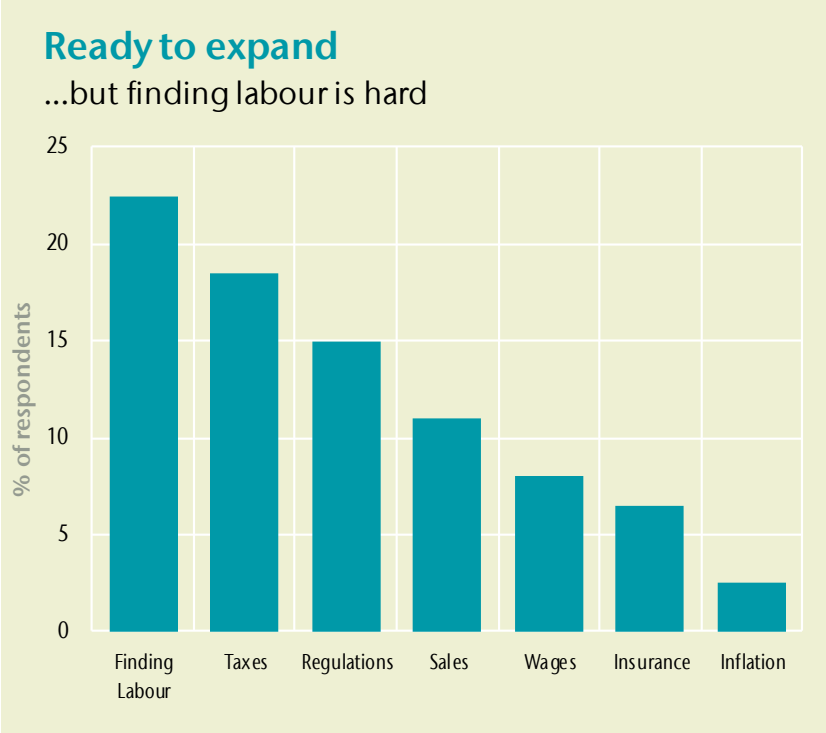
Source: US Federal Reserve Bank of New York, Macrobond

Benefits from reduced debt & interest payments, rising savings

STRONG BACKDROP FOR BUSINESSES



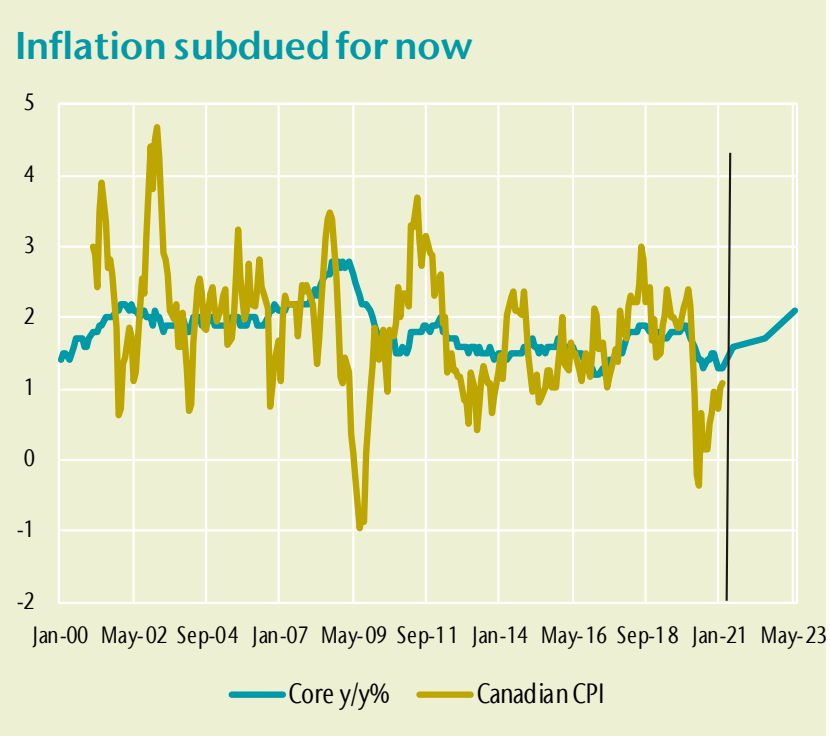
Source: Institute of Supply Management, IHS Markit, Macrobond



Source: NFIB, Connor, Clark & Lunn Investment Management Ltd.

Businesses look to expand and invest to meet demand

LOW INFLATION TO KEEP CENTRAL BANKS ACCOMMODATIVE

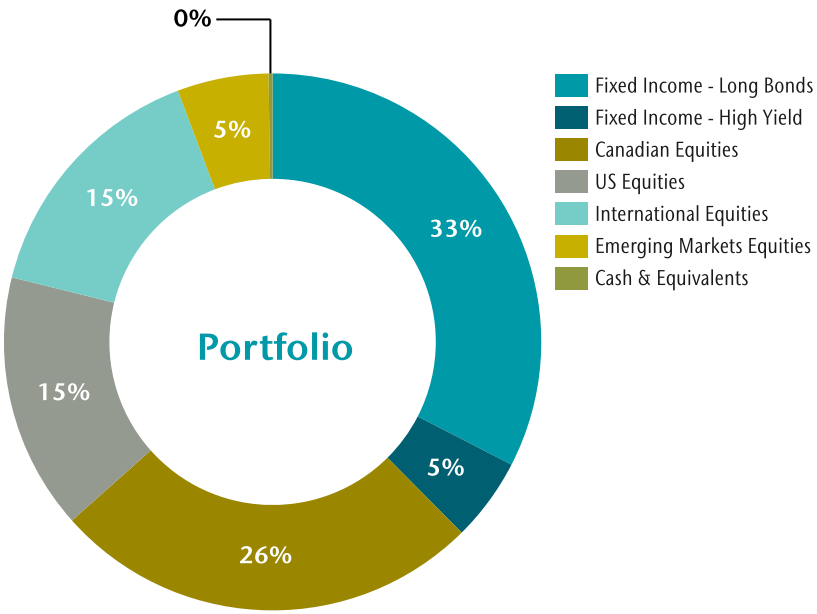


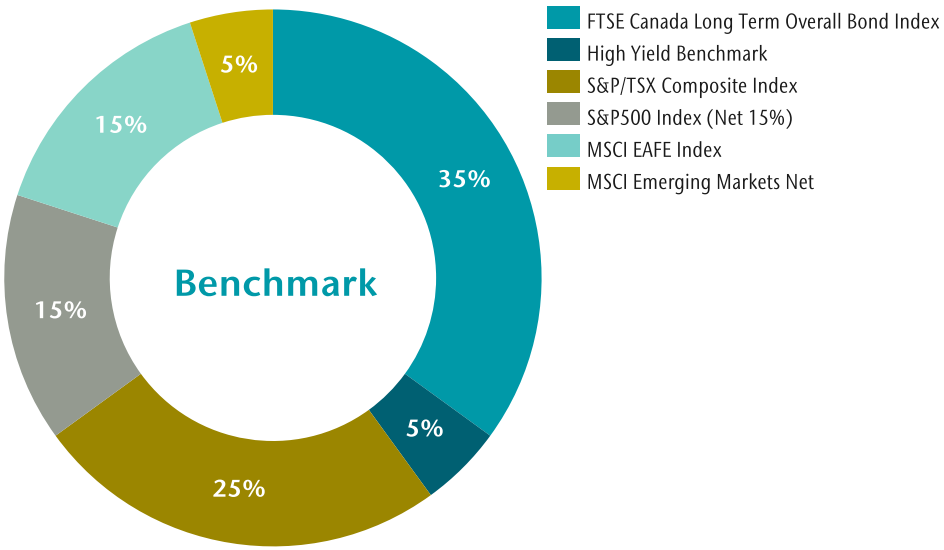
Source: Statistics Canada, Macrobond

"...there is still considerable excess capacity. [...] We remain committed to holding the policy interest rate at the effective lower bound until economic slack is absorbed ... this is now expected to happen some time in the second half of 2022."

-- April 2021 Bank of Canada Statement

ASSET MIX POSITIONING





Overweight equities, underweight bonds

As of March 31, 2021
Pie chart totals may not add exactly to 100% due to rounding.
Source: Connor, Clark & Lunn Financial Group Ltd.

APPENDIX

BRANDON UNIVERSITY RETIREMENT PLAN CASH FLOWS

December 31, 2020 Market Value	**$**	**225,092,034**
Contributions	$	1,490,058
Withdrawals	$	(2,686,101)
Investment Gains	$	1,000,274
March 31, 2021 Market Value	**$**	**224,896,265**
Total Rate of Return		0.45%
Investment Management Fees:	$	173,479

Source: Connor, Clark & Lunn Financial Group Ltd.

DISCLAIMER

This report may contain information obtained from third parties including: Merrill Lynch, Pierce, Fenner & Smith Incorporated (BofAML), S&P Global Ratings, and MSCI.

Source: Merrill Lynch, Pierce, Fenner & Smith Incorporated (BofAML), used with permission. BofAML permits use of the BofAML indices related data on an "As Is" basis, makes no warranties regarding same, does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the BofAML indices or any data included in, related to, or derived therefrom, assumes no liability in connection with the use of the foregoing, and does not sponsor, endorse, or recommend Connor, Clark & Lunn Investment Management Ltd. or any of its products.

This may contain information obtained from third parties, including ratings from credit ratings agencies such as S&P Global Ratings. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Source: MSCI. The MSCI information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. MSCI makes no express or implied warranties or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. This report is not approved, reviewed or produced by MSCI.

CIBC MELLON

SPECIMEN SIGNATURES FOR THE FOLLOWING FUND(S):

Brandon University Retirement Plan Pension Trustees

I, _____, the Chair of Brandon University Pension Trustees ("Company")

hereby certify for and on behalf of the Company that as of this date:

1. Each of the persons named below is duly authorized by the Company ("Authorized Officer") to give instructions and directions to CIBC Mellon Global Securities Services Company for the fund(s) named above pursuant to the terms of the trust/custodial agreements(s) with CIBC Mellon Global Securities Services Company. All instructions require the signature of _not applicable_____ (if applicable) and any (indicate #) 2 of 3 of the Authorized Officers.

2. The signature appearing opposite the name and title of each Authorized Officer is the genuine and original signature of such officer. I further certify and undertake that if any Authorized Officer ceases to hold his/her current title and authority to bind the Company as set out below or if any additional person receives such authority, the Company will provide CIBC Mellon Global Securities with a new specimen signature form reflecting such changes.

_____ _____

Date Signature of Chair

Name	Title	Signature
	Chair	
	Trustee	
	Trustee	

Schedule "B"

Acceptance of Trust

The undersigned hereby accepts the appointment to act as a Pension Trustee of The Brandon University Pension Fund (the "**Fund**") and the duties and obligations imposed on the Pension Trustees under the Amended and Restated Trust Agreement made the _____day of_____,_____(the "Trust Agreement"). The undersigned acknowledges having read the Trust Agreement and understanding its nature and effect, and agrees to hold the Fund and administer the Brandon University Retirement Plan in accordance with its terms and the provisions of the Trust Agreement.

DATED the_____day of_____,_____.

_____
Name:
Address:

ECKLER

Actuarial Report on

The Brandon University Retirement Plan

Actuarial Valuation as at December 31, 2020

CRA Reg. No. 0206078

Eckler Ltd.
One Lombard Place, Suite 2475
Winnipeg, Manitoba R3B 0X3
204-988-1586

May 26, 2021

TABLE OF CONTENTS

Report on the Actuarial Valuation of the Brandon University Retirement Plan as at December 31, 2020

SUMMARY OF RESULTS

	12.31.2020	12.31.2019
Going Concern Financial Position		
Going concern assets	$206,407,000	$193,668,000
Going concern liabilities	$196,622,000	$193,842,000
Going concern surplus/(unfunded liability)	$9,785,000	($174,000)
Going concern funded ratio	1.050	0.999
Windup Financial Position		
Market value of assets net of provision for wind-up expenses	$225,344,000	$203,556,000
Windup liability	$258,756,000	$239,958,000
Windup excess/(deficiency)	($33,412,000)	($36,402,000)
Solvency Financial Position		
Solvency assets net of provision for wind-up expenses	$206,107,000	$193,484,000
Solvency liabilities	$258,756,000	$239,958,000
Solvency excess/(deficiency)	($52,649,000)	($46,474,000)
Solvency ratio	0.797	0.806
Minimum Contributions in Year Following valuation		
Estimated employer's current service cost	$3,591,000	$3,398,000
Minimum special payments	$0	$26,000
Total minimum required contributions	$3,591,000	$3,424,000

Section 1. EXECUTIVE SUMMARY

We are pleased to present this report which was prepared at the request of the Pension Trustees of the Brandon University Retirement Plan ("Pension Trustees") for the following purposes:

1. To report on the financial position of the Brandon University Retirement Plan ("Plan") as at December 31, 2020 on a going concern basis;

2. To determine the actuarial cost of benefits expected to accrue under the Plan for service of the employees for the period following the valuation date and up to the date of the next actuarial valuation. The effective date of the next valuation must be no later than December 31, 2021;

3. To determine the financial position of the Plan as at December 31, 2020 on solvency and hypothetical wind-up bases;

4. To establish the minimum and maximum contributions required for the period from December 31, 2020 until the date of the next actuarial valuation for compliance with the applicable pension legislation and the terms of the Plan;

5. To provide the actuarial certifications required under the Pension Benefits Act of Manitoba and the Income Tax Act of Canada.

The intended users of this report are the Pension Trustees, Brandon University, the Office of the Superintendent - Pension Commission (Manitoba), and Canada Revenue Agency. This report is not intended or necessarily suitable for purposes other than those listed above. Any party reviewing this report for other purposes should have their own actuary or other qualified professional assist in their review to ensure that the party understands the assumptions, results and uncertainties inherent in our estimates.

A summary of the key valuation results is provided below.

1. Using the projected unit credit accrued benefit funding method the Plan has a going concern surplus equal to $9,785,000 at December 31, 2020. There are no special payments required.
2. There is a solvency deficiency of $52,649,000. The solvency ratio is 0.797.

   This Plan is subject to the funding requirements of the Pension Benefits Act of Manitoba. As such, a solvency valuation must be prepared and normally any solvency deficiency would require funding over a five-year period. However, the University is eligible and has made an election to be exempt from certain solvency funding and other requirements in accordance with the *Solvency Exemption for Public Sector Pension Plans Regulation*. As a result of the election, the University is exempt from making special payments for solvency deficiencies. The election was filed with the Office of the Superintendent – Pension Commission (Manitoba) on January 19, 2009.

   In the absence of the election under the *Solvency Exemption for Public Sector Pension Plans Regulation* special payments would be necessary to fund the solvency deficiency as follows:

Effective Date	Amortization Period	Annual Special Payment
December 31, 2020	Jan 2021 – Dec 2025	$11,960,000

3. If the Plan was wound-up on the valuation date the liabilities would exceed assets by $33,412,000.

4. The recommended contributions shown in this valuation satisfy the collective agreement between Brandon University ("University") and the Brandon University Faculty Association ("BUFA"), the requirements of the Pension Benefits Act of Manitoba, and the Income Tax Act. The recommended University contributions are in accordance with the following schedule.

	Amount as a percent of pensionable payroll	Estimated Dollar Amount
University contributions for current service between January 1, 2021 and the next valuation	8.78%	$3,591,000
Unfunded liability special payments	-	$0
Total		$3,591,000

University contributions recommended in this report are eligible contributions under the Income Tax Act.

5. Since the solvency ratio of the Plan is less than 0.90, the Pension Benefits Act of Manitoba requires that the next valuation be performed no later than December 31, 2021.

6. Based on the Plan's investment experience from 2017 to 2020, retired and deferred members are eligible for a supplementary pension increase effective July 1, 2021. The amount of the increase, capped by the increase in the Consumer Price Index, is 0.7%. This has been reflected in the going concern valuation results at December 31, 2020.

7. This report should be filed with the Office of the Superintendent – Pension Commission (Manitoba), to meet the filing requirements of the Pension Benefits Act of Manitoba, and with Canada Revenue Agency, in order to ensure that contributions recommended in the report will qualify as eligible contributions for purposes of the Income Tax Act. The next actuarial valuation of the Plan should be performed no later than December 31, 2021.

This report has been prepared and our opinions given in accordance with accepted actuarial practice.

Respectfully submitted

ECKLER Ltd.

DRAFT

Andrew Kulyk
Fellow of the Canadian Institute of Actuaries

DRAFT

Shannon Tesluck
Fellow of the Canadian Institute of Actuaries

Section 2. INTRODUCTION

The Brandon University Retirement Plan (hereinafter referred to as the "Plan") was amended and restated January 1, 1992. There have been no amendments to Plan since the date of the previous valuation that would have a material effect on the results of our valuation.

Based on the Plan's investment experience from 2017 to 2020, retired and deferred members are eligible for a supplementary pension increase in 2021 effective July 1. The amount of the increase is capped by the increase in the Consumer Price Index and is equal to 0.7%. This has been reflected in our going concern valuation.

CHANGES SINCE THE PREVIOUS VALUATION

The last valuation of the Plan was prepared as at December 31, 2019. Since the last valuation, the going concern actuarial assumptions were also revised. In particular,

- the discount rate was decreased to 5.25% per year from 5.30% per year, and
- the retirement assumption was revised to reflect a retirement study conducted in April 2021.
- For the calculation of the actuarial valuation of assets, the actuarial value of assets is restricted to be within 10% of the market value of assets. Previously, it was restricted to be within 5% of the market value of assets.

See Appendix B for details of the assumptions used in this valuation and the rationale employed in setting these assumptions. See Section 4 for the impact of the changes in assumptions on the valuation results.

The solvency economic and demographic assumptions were changed to reflect the amendments to Section 3500 of the Practice-Specific Standards for Pension Plans – Pension Commuted Values effective December 1, 2020, market conditions as at the valuation date, and the CIA's Educational Note on Assumptions for Hypothetical Wind-up and Solvency Valuations. These assumptions are summarized in Appendix B.

SUBSEQUENT EVENTS

We are not aware of any events that occurred between the valuation date and the date this report was completed that would have a material impact on the results of this valuation.

VALUATIONS INCLUDED IN THIS REPORT

In this report, we describe the results of three different valuations of the Plan:

- A "going concern valuation" which is used to estimate the funded position of the Plan, assuming the Plan is continued indefinitely, and to estimate the contributions currently required to be made to the Plan's fund, both to fund the cost of any benefits being earned by members for current service and, in the event there is a funding deficiency, to liquidate the amount of the funding deficiency.

- A "wind-up valuation", which is intended to reflect the status of the Plan as if it had been wound up on the valuation date and the Plan members had been provided with the

benefits specified by the Plan and the Pension Benefits Act of Manitoba. The purpose of this valuation is to show the degree of benefit security provided for all of the Plan members' accrued benefit by the current assets of the pension fund. The wind-up valuation is not used to determine the required contributions to the Plan. It is, however, used to determine the maximum contributions permitted by the Canada Revenue Agency.

- A "solvency valuation", which is required by the Regulations under the Pension Benefits Act of Manitoba. This valuation is similar to a wind-up valuation, except that certain adjustments may be made to the assets. The solvency valuation is required to be performed but does not affect the required contributions to the Plan as the University has made an election under the *Solvency Exemption for Public Sector Pension Plans Regulation*.

The difference between the wind-up and solvency valuations for this Plan relates to the value of assets that are included in the valuation. For the wind-up valuation, the only assets taken into account are the invested assets of the Plan, which are taken at their market values net of provision for wind-up expenses plus in-transit accrued amounts. For the solvency valuation, Plan assets also take into account the present value of special payments that are scheduled to be made for the next five years from the valuation date and an adjustment to smooth the market value over a period which cannot exceed five years. For purposes of the solvency valuation the assets have been smoothed over four years. Please note that due to the going concern surplus position of the Plan as at December 31, 2020, special payments will cease and therefore no present value of special payments is included in the solvency assets.

FILING REQUIREMENTS

The last filed actuarial report was effective December 31, 2019. This report outlines the movements of the Plan's financial position since the previous valuation and is to be filed with the Office of the Superintendent – Pension Commission (Manitoba) and Canada Revenue Agency. It is to be used by the University to determine its funding requirements for the period following the valuation date.

Section 3. DATA

The valuation was based on data as of the valuation date, December 31, 2020, supplied to us by Brandon University. This data is summarized in Appendix C.

We subjected the data to a number of tests of reasonableness and consistency, including the following:

- a member's (and partner's as applicable) age is within a reasonable range;
- all dates remained unchanged from the data used in the previous actuarial valuation of the Plan;
- accrued pensions changed by a reasonable amount;
- the form of pension payment did not change (other than resulting from the death of a retired member); and
- we examined the additions to, and deletions from, each of the data files (i.e., the files for active employees, pensioners and terminated members entitled to a deferred vested pension) since the previous valuation to determine whether all Plan members were accounted for in this valuation, to check for duplicate records and to confirm pension amounts.

Data was corrected as appropriate. The results of our tests were satisfactory.

Assets of the Plan are held in trust with CIBC Mellon. The funds are invested in a number of pooled funds operated by Connor, Clark & Lunn Investment Management Limited. We have relied on the financial statements for the fund prepared by Brandon University for the December 31, 2020 year-end.

Section 4. GOING CONCERN VALUATION

VALUATION BALANCE SHEET

The following is the going concern valuation balance sheet as at December 31, 2020 based on:

- the Plan provisions (summarized in Appendix A);
- the going concern valuation assumptions (described in Appendix B);
- the membership data (summarized in Appendix C);
- the actuarial value of assets (summarized in Appendix D), and

Going Concern Valuation	12.31.2020	12.31.2019
Going Concern Assets		
Actuarial value of Plan assets	$206,407,000	$193,668,000
Going Concern Liabilities		
Retired members and survivors	$112,294,000	$109,885,000
Terminated vested members	$5,244,000	$5,454,000
Active members – Academic and non-union members	$63,144,000	$62,124,000
Active members – Non-Academic union members	$15,426,000	$15,972,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total going concern liabilities	$196,622,000	$193,842,000
Surplus / (unfunded liability)	$9,785,000	($174,000)
Funded Ratio	1.050	0.999

The liability as at December 31, 2020 for Other Benefits Outstanding includes:

- $143,000 for sessional employees with no pensionable earnings in 2020,
- Small benefit payouts to terminated members that are pending settlements.

There is a going concern surplus of $9,785,000 as at December 31, 2020, therefore no unfunded liability special payments are required for 2021.

EXPERIENCE GAIN AND LOSS

The Plan has a going concern surplus of $9,785,000 at December 31, 2020. Our previous valuation of the Plan showed the Plan had an unfunded liability of $174,000. The approximate derivation of the going concern surplus at December 31, 2020 is as follows:

Going concern surplus (unfunded liability) at Dec. 31, 2019		($174,000)
Special payments to eliminate the unfunded liability		$26,000
Interest on surplus (unfunded liability), special payments and transfers in for 2020 at 5.30%		($9,000)
Expected surplus (unfunded liability) at Dec. 31, 2020		($157,000)
Plus actuarial gains(losses) due to experience differing from the actuarial assumptions in 2020:		
▪ Gain/(loss) on terminations other than assumed	($507,000)	
▪ Gain/(loss) on active and deferred member retirements other than assumed	$874,000	
▪ Gain/(loss) on mortality other than assumed	$1,154,000	
▪ Gain/(loss) on salaries and the YMPE increasing at different rates than assumed	($1,076,000)	
▪ Gain/(loss) attributable to net investment experience	$8,005,000	
▪ Gain/(loss) attributable to pension increases other than assumed	$180,000	
▪ Gain/(loss) attributable to service accrued different than expected	$9,000	
Net actuarial experience gain/(loss)		$8,639,000
Gain/ (loss) due to data corrections		($233,000)
Gain/ (loss) due decreasing the discount rate to 5.25%		($1,092,000)
Gain/ (loss) due to change in retirement scale		$2,628,000
Other experience resulted in a net gain/(loss) of approximately		$0
Going concern surplus (unfunded liability) at Dec. 31, 2020		**$9,785,000**

The following summarizes the largest sources of gains and losses to the Plan since the previous valuation:

- The actual net investment return earned by the Plan in 2020, based on smoothed asset values, was 9.49% compared to an expected return of 5.30% per year resulting in a gain of $8,005,000.
- The going concern discount rate has decreased from 5.30% to 5.25% resulting in a loss of $1,092,000.
- A new retirement scale was implemented based on the results of the retirement study completed in early 2021 resulting in a gain of $2,628,000.

- Member salaries and the YMPE increased at a rate that was more than expected, resulting in a loss of $1,076,000.
- There were more pensioner deaths (15) than assumed (8), resulting in a gain of $1,154,000.

INTEREST RATE SENSITIVITY OF THE GOING CONCERN LIABILITY

The effect of decreasing the interest rate used to determine the going concern liability by 1% from 5.25% to 4.25% is an increase in the total going concern liability of $23,987,000.

CURRENT SERVICE COST

Employees are required to contribute 8.0% of pensionable earnings less 1.8% of pensionable earnings for which Canada Pension Plan (CPP) contributions are required. Pensionable earnings for this purpose are subject to an annual limit related to the maximum benefit accrual in a year. For 2021, the Yearly Maximum Contributory Earnings (YMCE) is $117,230.

Based on the assumptions and membership data described herein, we estimate that the University's current service cost from December 31, 2020, until the effective date of the next valuation, is 8.05% of pensionable earnings. Unlike member contributions, pensionable earnings for this purpose are not limited to the YMCE. The current service cost determined as at December 31, 2019 was 8.60% of pensionable earnings.

In accordance with the Plan provisions, the University shall pay additional contributions equal to the normal actuarial cost of the benefit improvements effective November 10, 2008 and April 1, 2009.

The table below summarizes the development of the University's estimated required current service contribution and additional contribution for 2021. The actual dollar amount of the current service contribution and additional contribution for 2021 may be higher or lower than the amount indicated below if the actual pensionable earnings are different than estimated.

2021	Dollar	% of Earnings
Estimated 2021 pensionable earnings	$40,883,000	
Current service cost		
Total current service cost	$5,887,000	14.40%
Estimated employee contributions	($2,596,000)	(6.35%)
Employer current service cost (A)	$3,291,000	8.05%
Total special payments (B)	$0	0.00%
Total minimum contribution required by the Act and Regulations	**$3,291,000**	**8.05%**
Plan Provision Contribution		
Employer formula contribution	$2,855,000	6.98%
Additional current service cost	$736,000	1.80%
Total minimum contribution required by the Plan provisions (C)	**$3,591,000**	**8.78%**
Employer current service cost (A)	$3,291,000	8.05%
Total special payments (B)	$0	0.00%
Employer additional contribution (C - A - B)	$300,000	0.73%
Total Employer required contribution	**$3,591,000**	**8.78%**

INTEREST RATE SENSITIVITY OF THE CURRENT SERVICE COST

The effect of decreasing the interest rate used to determine the regular current service cost by 1% from 5.25% to 4.25% increases the total current service cost from $5,887,000 to $6,991,000, an increase of $1,104,000. This represents an increase in the 2021 employer current service cost as a percent of pensionable earnings from 8.05% to 10.75%.

Section 5. HYPOTHETICAL WIND-UP VALUATION

The purpose of the hypothetical wind-up valuation is to determine the financial position of the Plan if it were wound up on the valuation date. The circumstances in which the plan wind-up occurs is that both Brandon University and the Plan wind-up, giving rise to termination benefits to members not eligible for retirement on the wind-up date and retirement benefits to all other members. There are no benefits on plan wind-up that were excluded from our valuation. The liability for all active members with 15 years or more of service on the valuation date includes the value of the early retirement subsidy as provided by the Plan.

Accordingly, the following approach was used:

1. The Plan assets were valued at market value.

2. The benefits valued are those which members would be entitled to under applicable legislation if the Plan were wound up on the valuation date. All Plan members become fully vested on Plan wind-up, regardless of age or service.

3. In the hypothetical wind-up valuation, we assumed immediate pension commencement for members eligible to retire. For members assumed to elect the lump sum option, it was assumed with a probability of 50% that the pension would start at the earliest age at which the member will be entitled to an unreduced lifetime pension and with a probability of 50% the pension would start at the age which produced the highest present value of the pension.

4. The actuarial assumptions are developed in accordance with the Canadian Institute of Actuaries' (CIA's) Standard of Practice for determining Pension Commuted Values and the CIA Educational Note – *Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates on or after December 31, 2020 and no later than December 30, 2021* dated March 2021. These assumptions are described in detail in Appendix B.

5. In accordance with the CIA Educational Note, the spread above the unadjusted CANSIM series V39062 was determined to be 138 basis points based on a duration of 11.1 for the portion of the liability assumed to be settled through the purchase of annuities. Accordingly, the discount rate assumed for the purchase of non-indexed annuities is 2.48%.

Based on the Plan provisions in effect on December 31, 2020, the wind-up valuation assumptions and the membership data supplied by the University, the following is the wind-up position of the Plan as at December 31, 2020:

Hypothetical Wind-up Valuation	12.31.2020	12.31.2019
Wind-up Assets		
Market value of Plan assets	$225,644,000	$203,861,000
Allowance for wind-up expenses	($300,000)	($305,000)
Total wind-up assets	$225,344,000	$203,556,000
Wind-up Liabilities		
Retired members and survivors	$134,326,000	$124,497,000
Terminated vested members	$7,227,000	$7,169,000
Active members – Academic and non-union members	$95,120,000	$86,418,000
Active members – Non-Academic union members	$21,569,000	$21,467,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total wind-up liabilities	$258,756,000	$239,958,000
Wind-up excess/ (shortfall)	($33,412,000)	($36,402,000)

As shown above, if the Plan had been wound-up as at December 31, 2020, the wind-up liabilities would have exceeded the wind-up assets by $33,412,000.

Section 6. SOLVENCY VALUATION

The table below shows the solvency position of the Plan as at December 31, 2020. The circumstances in which the plan wind-up occurs is that both Brandon University and the Plan wind-up giving rise to termination benefits to members not eligible for retirement on the wind-up date and retirement benefits to all other members. There are no benefits on Plan wind-up that were excluded from our valuation. The liability for all active members with 15 years or more of service on the valuation date includes the value of the early retirement subsidy as provided by the Plan.

The calculations are based on the Plan provisions in effect on the valuation date, the solvency valuation assumptions described in Appendix B, and the membership data supplied by the University.

Solvency Valuation	12.31.2020	12.31.2019
Solvency Assets		
Actuarial value of Plan assets (A)	$206,407,000	$193,668,000
Present value of the first five years of special payments to eliminate the going concern unfunded actuarial liability	$0	$121,000
Allowance for wind-up expenses (B)	($300,000)	($305,000)
Total solvency assets	$206,107,000	$193,484,000
Solvency Liabilities		
Retired members and survivors	$134,326,000	$124,497,000
Terminated vested members	$7,227,000	$7,169,000
Active members – Academic and non-union members	$95,120,000	$86,418,000
Active members – Non-Academic union members	$21,569,000	$21,467,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total solvency liabilities (C)	$258,756,000	$239,958,000
Solvency excess/ (shortfall)	($52,649,000)	($46,474,000)
Solvency ratio [(A + B) ÷ C]	0.797	0.806

INTEREST RATE SENSITIVITY OF THE SOLVENCY LIABILITY

The effect of decreasing the interest rates used to determine the solvency liability by 1%, i.e. reducing the annuity purchase rate from 2.48% p.a. to 1.48% and a corresponding decrease in the commuted value rates, is an increase in the liability of approximately $38,698,000.

SOLVENCY INCREMENTAL COST

The incremental cost represents the present value on the valuation date of the expected aggregate change in the solvency liability between valuations, adjusted upward for expected benefit payments between the valuation dates.

The total estimated incremental cost between the valuation date, December 31, 2020 and the date of the next valuation, December 31, 2021, is $10,991,000.

SPECIAL PAYMENTS

This plan is subject to the funding requirements of the Pension Benefits Act of Manitoba. As such, it is required that a solvency valuation is prepared and any solvency deficiency is required to be funded over a five-year period. However, the University is eligible and has made an election to be exempt from certain solvency funding and other requirements in accordance with the *Solvency Exemption for Public Sector Pension Plans Regulation* ("Solvency Exemption"). As a result of the election, the University is exempt from making special payments for solvency deficiencies. The election was filed with the Office of the Superintendent – Pension Commission (Manitoba) on January 19, 2009.

The Plan has a solvency deficiency (i.e., an excess of solvency liabilities over solvency assets including the present value of five years previously established special payments (nil at December 31, 2020) of $52,649,000. In the absence of the Solvency Exemption the requirement would be to liquidate the solvency deficiency by equal monthly payments over the period beginning on the valuation date and ending on December 31, 2025. Accordingly, the minimum solvency special payment would be $11,960,000 per year, payable monthly from 2021 to 2025 inclusive.

The following schedule summarizes the special payments that would normally be required to liquidate the solvency deficiency as at December 31, 2020. Any payments to liquidate an unfunded liability must be made regardless of the solvency exemption. Payments to liquidate the solvency deficiency are not required.

Effective Date	Annual Special Payment (payable monthly)	End of Liquidation Period	Present Value of Payments on December 31, 2020 for purposes of Solvency Valuation (Next 5 Years)	Present Value of Payments on December 31, 2020 for purposes of Going Concern Valuation
Solvency Deficiency				
12.31.2020	$11,960,000	12.31.2025	$52,649,000	n/a

Section 7. ELIGIBLE CONTRIBUTIONS

MINIMUM CONTRIBUTIONS

Members and the University are each required to contribute at the rate of 8.0% of salary up to the Year's Basic Earnings (YBE) under the Canada Pension Plan, 6.2% between the YBE and the Year's Maximum Pensionable Earnings (YMPE) and 8.0% in excess of the YMPE. Members contribute only on the amount earned up to the Year's Maximum Contributory Earnings (YMCE).

Notwithstanding, the University may be required to make additional contributions in excess of the contributions described above in order to satisfy the negotiated funding of certain benefit improvements or requirements of the Pension Benefits Act of Manitoba and Regulations.

Accordingly, the University is required to make current service cost contributions equal to 8.05% and additional contributions of 0.73% of pensionable earnings for the period from January 1, 2021 to the effective date of the next valuation.

The minimum University contributions required under the Pension Benefits Act of Manitoba and in accordance with the *Solvency Exemption for Public Sector Pension Plans Regulation* are as follows:

	Total
Total current service cost	$5,887,000
Estimated employee contributions	$2,596,000
Employer current service cost	$3,291,000
Estimated 2021 pensionable earnings	$40,833,000
Employer current service cost as a percentage of earnings	8.05%
Total special payments	$0
Total minimum University contribution	**$3,291,000**

The minimum University contributions required under the Plan are as follows:

	Total
Employer current service cost	$3,291,000
Employer additional contribution	$300,000
Total employer contribution for current service	$3,591,000
Estimated 2021 pensionable earnings	$40,883,000
Employer current service cost as a percentage of Earnings	8.78%
Total special payments	$0
Total estimated employer contribution	**$3,591,000**

The minimum University contribution required to be made in accordance with the provisions of the Plan exceeds the minimum University contribution required by the Pension Benefits Act.

MAXIMUM CONTRIBUTIONS

The University may choose to fund at a higher level than the minimum required by the Pension Benefits Act shown above. In accordance with the Income Tax Act, the maximum permitted contribution the University could make is equal to the sum of:

1. A lump sum equal to $33,412,000 – the greater of the unfunded actuarial liability ($0 since in a surplus position at December 31, 2020) and the windup deficiency of $33,412,000 as of December 31, 2020; plus

2. The current service contributions of 8.05% of pensionable earnings for the period ending December 31, 2021, until the effective date of the next valuation.

In accordance with the Pension Benefits Act of Manitoba, all contributions due to the Plan must be remitted monthly. Employee and Employer contributions are due within 30 days following the end of the month to which they apply.

Section 8. ACTUARIAL OPINION

With respect to the Brandon University Retirement Plan forming part of the actuarial report on a valuation of the Plan at December 31, 2020:

The recommendations for funding are in accordance with an agreement regarding the University's funding obligations by the signatories to the collective agreement between the University and BUFA that provides for the funding of certain benefit improvements.

We hereby certify that,

a. The purpose of this report is to provide actuarial estimates of the funding payments required to be made by Brandon University for the period from December 31, 2020 to the date of the next valuation. The effective date of the next valuation must be no later than December 31, 2021 in order to comply with applicable legislation.

b. Based on the projected unit credit accrued benefit funding method the Plan has a going concern surplus of $9,785,000.

c. There are no special payments to be made.

d. Based on the projected unit credit accrued benefit funding method, to satisfy the funding requirements of the Pension Benefits Act the University is required to contribute 8.05% of pensionable earnings for the period from January 1, 2021 to the date of the next valuation. The estimated cost of benefits for 2021 is $5,887,000 of which $2,596,000 will be paid by the members and $3,291,000 will be paid by the University.

e. The University is required to contribute an additional 0.73% of pensionable earnings for current service in order to satisfy the provisions of the Plan.

f. The minimum University contribution required by the Plan exceeds the University contribution otherwise required by the provisions of the Pension Benefits Act of Manitoba.

g. In our opinion, the value of the Plan assets would be less than the actuarial liabilities if the Plan were to be wound up as at December 31, 2020. The estimated shortfall would be approximately $33,412,000.

h. The Plan has a solvency shortfall at December 31, 2020 of $52,649,000 and the solvency ratio is 0.797.

Notwithstanding the foregoing opinion, emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations.

In our opinion,

a. the membership data on which the valuation is based are sufficient and reliable, for the purposes of the valuation,

b. the assumptions used are appropriate for the purposes of the valuation, and

c. the methods employed in the valuation are appropriate for the purposes of the valuation.

This report has been prepared and this opinion given in accordance with accepted actuarial practice in Canada.

DRAFT	***DRAFT***
Andrew Kulyk Fellow of the Canadian Institute of Actuaries	Shannon Tesluck Fellow of the Canadian Institute of Actuaries
May 26, 2021	May 26, 2021
Date	Date

Appendix A. SUMMARY OF PLAN PROVISIONS

There have been no amendments to Plan since the date of the previous valuation that would have a material effect on the results of our valuation.

ELIGIBILITY
New staff must join the Plan when employed.

MEMBER CONTRIBUTIONS
Members are required to contribute at the rate of 8.0% of salary up to the YBE, 6.2% between the YBE and the YMPE, and 8% in excess of the YMPE. Members contribute only on the amount earned up to the YMCE.

The YMCE is the sum of $86,111 prior to April 1, 2009 or $98,750 thereafter, and 30% of the YMPE for the year.

UNIVERSITY CONTRIBUTIONS
Basic Contributions
The University is required to contribute at the rate of 8.0% up to the YBE, 6.2% between the YBE and the YMPE and 8.0% in excess of the YMPE with no salary limitation applied, plus any special payments required under the Pension Benefits Act of Manitoba.

Additional Contributions
As a result of amendments to improve benefits effective November 10, 2008 and April 1, 2009 and the collective bargaining agreement between the University and BUFA, the provision for University contributions was amended for additional contributions. The University shall pay additional contributions equal to the normal actuarial cost of the benefit improvements made effective on the above dates but excluding the effect of the increase in the member contribution rate effective April 1, 2009.

Further, additional University contributions of 1.15% of salary effective November 10, 2008, increasing to 2.25% of salary effective April 1, 2009, are required for members who joined the Plan prior to January 1, 2008 with an Initial Amount, as defined in amendment 10/01, having a present value as at December 31, 2007 of $5,107,000. Additional contributions under this provision shall cease when the outstanding balance on the Initial Amount is reduced to zero by any University contributions that are in excess of the University's portion of the normal actuarial cost of current service. The requirement under this provision had been fully satisfied previous to the date of this valuation.

Contributions Required to Satisfy Requirements of the Pension Benefits Act
The University is required to contribute the amounts required to satisfy the Pension Benefits Act of Manitoba and Regulations ("Act and Regulations"). If the University contributions required to satisfy the Act and Regulations exceed those amounts above (Basic and Additional), the University is required to make additional contributions to satisfy those requirements.

NORMAL RETIREMENT
The normal retirement date of all members is the first of the month following their 65th birthday.

EARLY RETIREMENT
A member may retire on the first day of any month within the ten-year period prior to his normal retirement date. If the member is age 60 or over and his age plus years of service equals 85 or more, there is no reduction on early pension commencement, otherwise the reduction is 1/3% for each month by which his early retirement date precedes the first date that he would have satisfied the "rule of 85, minimum age 60", had employment continued, but not later than age 65.

LATE RETIREMENT
A member who continues in employment after his normal retirement date continues to make contributions to the Plan and his pension does not commence until his actual retirement date or the end of the year in which the member attains age 71, if earlier.

PENSION
At retirement, the member is entitled to an annual pension equal to 2% of his final average earnings multiplied by the member's years of credited service less 0.6% of his CPP average earnings multiplied by the member's years of service since January 1, 1990. Final average earnings are the average of the best 5 years earnings in the last 12 prior to retirement. CPP average earnings are the member's average earnings up to the YMPE in the 5 years prior to retirement. For members who retired prior to April 1, 2009, the maximum annual pension was $1,722.22 per year of credited service. Effective April 1, 2009, the maximum was increased to $1,975.00 per year of credited service for members who retired on or after April 1, 2009.

FORMS OF PENSION
For members who retired prior to November 10, 2008, the normal form of pension at retirement was payable for life with a guarantee of 5 years' payments. Effective November 10, 2008, members retiring with a spouse at retirement receive a pension in the form of joint and survivor with 2/3 continuing to the surviving spouse. Other options are available on an actuarially equivalent basis.

PENSION INCREASES
For increases provided prior to December 31, 2013, pensions in payment and deferred pensions are increased automatically on July 1 by the same percentage as the investment return on the fund in the previous year, based on actuarial values, exceeds 6%, subject to a maximum increase of the CPI in that year. If the increase in any year is limited by the CPI increase and there was a previous year, or years, when the increase was less than the CPI, the University, on the advice of the Plan trustees, may provide a higher increase so that some or the entire shortfall may be made up.

The Plan was amended for increases provided after December 31, 2013 to revise the method of calculating supplemental pension increases. The amendment changes the calculation of the excess fund return to be the excess over 6% of the previous four-year geometric average rather than the excess over 6% of the actuarial return of smoothed assets in the previous year.

DEATH BENEFITS PRIOR TO RETIREMENT
The death benefit is the commuted value of the pension earned to the date of death.

BENEFITS ON TERMINATION OF EMPLOYMENT

A member who terminates employment is entitled to a deferred pension payable from normal retirement date.

50% of the deferred pension in respect of service after January 1, 1985 must be paid for by University contributions.

Members not eligible to commence an immediate pension upon termination of employment may transfer the commuted value of their accrued pension to a locked-in retirement account.

GREAT-WEST LIFE PENSIONERS

Those members who retired prior to May 1989 had their pensions provided by an annuity purchased from Great-West Life. Each year additional amounts of annuities had been purchased to provide pension increases but beginning in 1999 any additional pensions for these members are paid from the fund.

Appendix B. ACTUARIAL ASSUMPTIONS AND METHODS

Going Concern Valuation

These assumptions are the same as those used at the previous valuation, except where noted.

Interest:

In order to determine the expected investment return on the investments of the Plan our model determined expected long-term capital market returns, standard deviations and correlations for each major asset class noted in Appendix E (universe bonds, Canadian equities, global equities, etc.) by using historic returns, current yields and forecasts. We then stochastically generated projected asset class returns for 5,000 paths over 30 years to create expected returns for each asset class. The simulated going concern discount rate was the return at the median of each asset class weighted by the asset mix percentages of the benchmark fund in the Managed Account Agreement between Connor, Clark and Lunn and the Pension Trustees.

We have assumed that there will be no added-value returns from the active management strategy employed in excess of the associated additional investment management fees.

Based on the methodology described above, the going concern discount rate assumption was developed as follows:

	Expected Return
Simulated gross investment return before margin and expenses	5.90%
Assumed active management value added	0.15%
Provision for investment management and administration expenses	(0.45%)
Provision for adverse deviations	(0.35%)
Going concern discount rate	5.25%

For the previous valuation, a going-concern discount rate of 5.30% was used.

Expenses:

The interest rate assumption includes an implicit provision for investment and administration expenses paid from the Plan based on recent experience in the Plan.

Inflation:

We have assumed increases in the Consumer Price Index for Canada ("CPI") equal to 2.0% per year. We have based our assumed inflation rate on our estimate of future inflation considering the Bank of Canada's inflation target of 1% to 3% per annum. Our chosen rate is consistent with the implied market rate based on long term Government of Canada nominal bonds and long-term Government of Canada real return bonds.

Salary Increases:
Salaries are assumed to increase from 2020 levels as follows:

i. General - 3.0% per year. This rate is based on an allowance for market implied inflation at December 31, 2020 of 2.0% per year plus real salary increases of 1.0% per year which is consistent with historical increases in the Canadian economy.

ii. Promotional & Merit - Academic and non-union members – we have used a promotional and merit scale, extracts of which are shown below:

Age	Average Annual Increase over next 5 years	Average Annual Increase to age 65
30	3.3%	2.3%
35	2.8%	2.2%
40	2.5%	2.0%
45	2.2%	1.9%
50	2.0%	1.8%
55	1.8%	1.7%
60	1.7%	1.7%

Scheduled rate increases according to collective bargaining agreements are reflected in our valuation. A summary of the annual increases are as follows:

Year	Academic and non-union members	Non-Academic union members
2019	0.00%	3.50%
2020	0.00%	1.00%
2021	0.75%	1.00%
2022	1.00%	1.75%
2023	*	2.00%

** increase rates as per our assumption above*

Mortality:
The 2014 Public Sector Mortality Table without size adjustments (CPM2014Publ), projected with full generational improvements in mortality using CPM improvement Scale B (CPM-B), was used to estimate the incidence of death before and after retirement.

Termination:
Considering the size of the Plan, there is not adequate termination experience data appropriate for developing a table of termination probabilities. We have continued to assume termination probabilities in accordance with three times the probabilities from the Ontario Light Table, with zero probability for ages greater than or equal to 55. Sample rates are as follows:

Age	Probability of Termination
30	16.8%
35	9.6%
40	6.6%
45	5.1%
50	3.6%
55	0%

We have assumed that 75% of members terminating prior to becoming eligible for retirement will elect to receive their pension as a lump sum commuted value. The commuted values are calculated using an assumed rate of 4.0% per year. The remaining terminating members are assumed to receive a deferred pension from the Plan.

The assumed future commuted value discount rate is based on:

- Assumed current bond yields with an expectation that yields will rise in future years, and
- The inflation assumption of 2.0% per year

Retirement:
The retirement age of members has a financial impact on the Plan. A retirement study was performed in April 2021 and we have used the results of that study to develop the following table based on 10 years of retirement experience in the Plan from 2011 to 2020. This table will be re-evaluated as more experience is revealed and updated as appropriate when future valuations are performed.

Age	Probability of Retirement
55 - 56	3.0%
57 - 58	4.0%
59 - 64	10.0%
65	30.0%
66 - 69	15.0%
70+	100.0%

Deferred plan members are assumed to retire at age 55.

For the previous valuation, the following probabilities of retirement were used based on retirement experience in the Plan from 2011 to 2016.

Age	Probability of Retirement
55 – 57	5.0%
58	7.5%
59 - 61	10.0%
62 - 63	15.0%
64	25.0%
65	35.0%
66 - 69	25.0%
70+	100.0%

Year's Maximum Pensionable Earnings:
We have assumed that the CPP Year's Maximum Pensionable Earnings (YMPE) will increase annually based on average general increases in wages in Canada. For this valuation we have assumed that the YMPE will increase from its 2021 level of $61,600 by 3.0% per year. This is consistent with the general salary increase assumption.

For the previous valuation it was assumed that the YMPE would increase from its 2020 level of $58,700 by 3.0% per year.

Future Pension Increases:
Pensions in pay and deferred pensions are increased annually by an amount equal to the excess of the four-year average investment return of the fund over a base rate of 6.0%, limited by the increase in the Consumer Price Index for Canada. Despite assuming that the fund will earn 5.25% per year on average over the long term, based on the asset mix of the fund we expect that there will be years where the fund return will exceed 6.0% and increases in pensions will be granted. Pensions for retired and deferred members will be increased in 2021 by 0.70%. We have assumed that pensions will subsequently increase following 2021 by 0.75% per year thereafter.

Future increases in respect of pensions paid by Great-West Life:
Pension for retired and deferred members will be increased in 2021 by 0.70%. We have assumed pensions will subsequently increase following 2021 by 0.75% per year. We have included in our valuation a provision for the full amount of pension increases to be paid out of the Plan with respect to pensions paid by Great-West Life.

Actuarial value of assets:
For this valuation, we have continued to use an actuarial value of assets that smooths excess investment returns over a four-year period relative to the assumed investment return. The assumed investment return is the rate applicable from the prior actuarial valuation for each year during the smoothing period. The applicable assumed investment returns are shown below:

Year	Assumed Investment Return
2017	5.55%
2018	5.55%
2019	5.55%
2020	5.30%

We further restrict the actuarial value of assets to be within 10% of the market value of assets, if required.

For the previous valuation, the actuarial value was restricted to be within 5% of the market value of assets.

Family composition:
Because members who are married at the time of retirement receive a joint and survivor pension with 2/3rds of the pension continuing to the spouse and single members receive a lifetime pension guaranteed for five years, the marital status at retirement can have a financial impact on the Plan. Reliable data on family composition at retirement is unavailable for this Plan. We have assumed that 85% of male members and 70% of female members have a spouse at retirement and the male spouse is three years older than the female spouse which is typical for pension plans in general.

GOING-CONCERN VALUATION METHOD
We have used a projected unit credit actuarial cost method. This values the benefits for accrued service to the valuation date by projecting salaries to retirement, determining the pension at retirement and discounting the value back to the valuation date. We compare the value of the liabilities in respect of service after 1984 to the contributions plus interest in respect of the same period to determine if the 50% test is applicable. If it is, we make the appropriate adjustment to the liability. Ancillary benefits on death or termination of employment are valued in a similar manner.

The liability for sessional employees who had no pensionable earnings in 2020 is determined to be two times their accumulated contributions with interest as at December 31, 2020.

The University's current service cost under this method is the excess of the cost of benefits which will arise in the year following the valuation over the member's contributions in that year.

Solvency and Wind-up Valuation

The following summarizes the actuarial assumptions used for the Solvency and Wind-up Valuations:

Actuarial value of assets:	Solvency: Smoothed value based on four-year smoothing relative to an expected return of: • 2017: 5.55% • 2018: 5.55% • 2019: 5.55% • 2020: 5.30%

	Wind-up: Market value
Interest:	2.48% per year for annuity purchase[1] 1.40% per year for 10 years and 2.90% per year thereafter for lump sum transfer.
Future increases in Pensionable Earnings:	None
Mortality:	CPM2014 (Combined) Mortality Table with mortality improvement projected generationally in accordance with Scale CPM-B.
Marital Status	85% of male members are married, 70% of female members are married, with male spouse 3 years older than female spouse.
Proportion electing annuity purchase	100% of retirees and 100% of active and deferred members age 55 & older. All others elect a lump sum transfer of the commuted value.
Allowance for wind-up expenses:	$300,000 (approximately $50,000 plus $275 per member). Excludes costs related to surplus/deficit distribution issues on plan wind-up. Assumes all expenses will be paid from the Plan in the event of wind-up.
Pension Increase	We have made no allowance for any assumed future pension increases.

The liability for sessional employees who had no pensionable earnings in 2020 is determined to be two times their accumulated contributions with interest as at December 31, 2020.

Incremental Cost

The incremental cost is the present value, at the valuation date, of the expected aggregate change in the hypothetical wind-up or solvency liability between the valuation date and the next valuation date. It also reflects expected benefit payments between the valuation date and the calculation date.

In our report we have determined the incremental cost under the solvency basis. The incremental cost was determined as the sum of (a) and (b) minus (c)

[1] In accordance with the CIA Educational Note, the spread above the unadjusted CANSIM series V39062 was determined to be 138 basis points based on a duration of 11.1 for the portion of the liability assumed to be settled through the purchase of annuities. Accordingly, the discount rate assumed for the purchase of non-indexed annuities is 2.48%.

(a) the projected solvency liability at the next valuation date for those members at the current valuation date, allowing for expected decrements and change in membership status, service accrual and increase in earnings between the current valuation date and the next valuation date. An adjustment was made for new entrants between the two valuation dates. The demographics and earnings of the new entrants are consistent with the new entrants hired over the past year. An adjustment was also made for the cost of living increase to be granted to retired and deferred members prior to the end of the year, if any. The resulting projected solvency liability was then discounted with interest to the current valuation date;

(b) the present value of the benefit payments expected to be paid between current valuation date and the next valuation date, discounted with interest to the current valuation date;

(c) the solvency liability as at the current valuation date.

For purposes of calculating the solvency incremental cost, the expected decrements, as well as the expected benefit payments between the current valuation date and the next, were determined using the going concern demographic assumptions. The projected solvency liability at the next valuation date was determined using the same method and assumptions as disclosed in this Appendix. In particular, we have assumed that the discount rates will remain the same throughout the projection period and the Standards of Practice for determining commuted value rates in effect at the valuation date will remain unchanged, as will the current educational guidance on the estimation of annuity purchase costs.

Appendix C. MEMBERSHIP DATA

This section provides a summary of membership data used in the valuation. Eckler provides membership record keeping and administration services for the Plan, updated based on an annual report provided by the University. The data was compiled from our records as at December 31, 2020. We have reconciled the data with that used in the previous valuation and are satisfied that the data are sufficient and reliable for the purposes of the valuation.

Active Members[2]	12.31.2020	12.31.2019
Number of Members	459	470
Average Pensionable Earnings[3]	$84,732	$80,760
Average Credited Service	10.5	10.3
Average Age	49.0	48.7
Total Required Contributions with Interest	$24,949,392	$24,087,821
Total Additional Voluntary Contributions with Interest	$123,591	$108,754

Deferred Pensioners	12.31.2020	12.31.2019
Number of Members	66	76
Average Age	55.1	54.2
Average Annual Deferred Pension Payable at 65	$6,831	$6,373

Pensioners and Survivors	12.31.2020	12.31.2019
Number of Lifetime Pensions	351	341
Average Age (Lifetime Pensions)	74.8	74.6
Average Annual Lifetime Pension	$26,665	$26,459
Number of Certain Only Pensions	1	1
Average Annual Certain Only	$11,643	$11,393
Number of Great-West Life	6	7
Average Age (Great-West Life Pensions)	94.2	93.4
Average Annual Great-West Life Pension	$10,872	$9,513

[2] Active Members includes sessional employees with earnings in the calendar year prior to the valuation date.

[3] Earnings shown represent the actual earnings in the year prior to the valuation date. Earnings for new entrants have been annualized.

Sessional Employees[4]	12.31.2020	12.31.2019
Number of Members	41	36
Total Required Contributions with Interest	$72,217	$44,857

[4] Sessional Members includes sessional employees that did not have any pensionable earnings in the calendar year prior to the valuation date.

Distribution of Active Membership

The following tables summarize the distribution of active membership by age and credited service. We have included the count of members in each group and shown their average pensionable earnings for 2020.

Academic and Non-Union Members

Age Group	Credited Service								Total
	0 - 4	5 - 9	10 - 14	15 – 19	20 – 24	25 - 29	30 - 34	35+	
25 - 29	2								2
	*								*
30 - 34	18	1	1						20
	58,630	*	*						58,137
35 - 39	27	11	1						39
	74,608	96,915	*						82,651
40 - 44	24	19	8	2					53
	72,208	98,320	105,069	*					87,743
45 - 49	13	12	5	6	1				37
	52,125	105,674	120,849	113,822	*				89,892
50 - 54	17	9	6	15	4				51
	44,102	100,804	126,076	123,981	134,931				94,370
55 - 59	14	7	12	6	13	2			54
	68,207	101,338	123,354	109,039	139,716	*			107,686
60 - 64	7	5	5	12	6	3	1		39
	38,983	117,661	101,836	139,867	156,697	183,120	*		120,333
65 - 69		1	3	7	4	2	2	3	22
		*	121,633	134,175	139,967	*	*	139,012	139,009
70 - 74					2		1	1	4
					*		*	*	147,809
Total	122	65	41	48	30	7	4	4	321
	61,876	101,749	116,220	125,485	142,340	154,405	140,885	139,609	97,894

**Earnings in cells with fewer than three members have been suppressed.*

Non-Academic Union Members

Age Group	Credited Service								Total
	0 - 4	5 - 9	10 – 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	
25 - 29	3	1							4
	36,435	*							36,463
30 - 34	8	6	1						15
	30,869	63,183	*						46,109
35 - 39	9	10	5	1					25
	57,408	57,768	74,376	*					60,588
40 - 44	10	6	4	2	1				23
	42,404	46,315	59,655	*	*				50,143
45 - 49	6	3	3	3		1			16
	45,911	57,768	54,832	61,790		*			54,211
50 - 54	1	2	1	4	1		1		10
	*	*	*	62,228	*		*		64,724
55 - 59	4	3	3	5		5	1		21
	47,759	50,372	56,543	56,468		52,454	*		53,700
60 - 64		1	3	3	3		4	1	15
		*	58,247	49,140	51,624		60,293	*	56,094
65 - 69			1	1		1	1	2	6
			*	*		*	*	*	59,345
70 - 74						2		1	3
						*		*	40,919
Total	41	32	21	19	5	9	7	4	138
	43,988	55,711	63,365	57,357	61,282	53,212	62,917	58,884	54,116

**Earnings in cells with fewer than three members have been suppressed.*

The following table summarizes the distribution of inactive members by age.

Pensioner and Survivor Lifetime Pensions			Deferred Pensioners		
Age	**Count**	**Average Annual Lifetime Pension**	**Age**	**Count**	**Average Annual Deferred Pension Payable at 65**
45 - 49	1	$46,385	35 - 39	4	$3,700
50 - 54	-	-	40 - 44	5	$6,481
55 - 59	5	$21,974	45 - 49	9	$5,123
60 - 64	30	$22,826	50 - 54	11	$12,311
65 - 69	61	$22,809	55 - 59	14	$6,410
70 - 74	84	$29,563	60 - 64	15	$6,287
75 - 79	80	$30,789	65 - 69	7	$4,731
80 - 84	44	$25,701	70+	1	*
85 - 89	27	$28,129			
90 - 94	10	$15,943			
95+	9	$14,537			
Total	351	$26,665	**Total**	66	$6,831

The following table summarizes the changes in membership since the previous valuation.

Reconciliation of Membership

	Active[3]					
	Academic and non-union members	**Non-Academic union members**	**Pensioner**	**Deferred**	**Sessional[4,5]**	**Total**
At December 31, 2019	326	144	342	76	36	924
Data adjustments	(1)					(1)
New entrants	23	7				30
Sessional to active						-
Active to sessional	(11)				11	-
Terminations						
- Deferred	(2)	(1)		3		-
- Paid out	(7)	(1)		(6)	(1)	(15)
- Small Benefit	(1)	(4)			(5)	(10)
Retirements						
- Pension	(6)	(6)	19	(7)		-
Death		(1)	(14)			(15)
Survivors			5			5
At December 31, 2020	321	138	352	66	41	918

[3] Includes sessional employees with earnings in the year prior to the valuation date.

[4] Sessional employees with no earnings in the year prior to the valuation date.

Appendix D. PLAN ASSETS

Assets of the Plan are held in trust with CIBC Mellon. The funds are invested in a number of pooled funds operated by Connor, Clark, & Lunn. We have relied on the draft financial statements for the fund prepared by Brandon University for the December 31, 2020 year-end, as well as information provided by CIBC Mellon to determine the assets of the Plan.

Asset Mix Policy

	Minimum	Maximum	Benchmark
Canadian Equity	15%	35%	25%
U.S. Equity	10%	25%	15%
International Equity	10%	25%	15%
Emerging Markets Equity	0%	10%	5%
High Yield Bond Fund	0%	10%	5%
Long Bond Fund	30%	50%	35%
Cash and Equivalents	0%	5%	0%
Total			100.0%

FINANCIAL STATEMENTS

A summary of the change in assets since January 1, 2018, provided by the University, is summarized below:

	2018	2019	2020
Balance at January 1	185,433,809	176,273,632	203,861,060
Member Contributions	2,314,296	2,521,049	2,349,475
University Contributions	3,289,314	3,256,463	3,356,543
Transfers	53,355	611,601	167,299
Investment Income	4,793,796	4,969,776	6,000,786
Realized Gains + Losses	5,172,202	9,057,882	16,309,964
Change in Market Values	(14,227,750)	17,998,497	5,840,528
Other income	7	0	43
Pensions Paid	(8,683,502)	(8,929,773)	(9,194,105)
Termination Payments	(837,841)	(929,418)	(1,409,139)
Death Payments	(155,733)	0	(657,677)
Expenses	(878,321)	(968,649)	(981,065)
Balance at December 31	176,273,632	203,861,060	225,643,712

The market value of assets as at December 31, 2020 shown above is equal to the invested assets of $225,294,055 plus contributions receivable equal to $5,542,729 minus payables equal to $5,193,072.

ACTUARIAL VALUE OF ASSETS

To place a value on the assets for actuarial valuation purposes, we have used an approach which smooths out the volatility of the market valuation by amortizing excess investment earnings net of expenses over the assumed investment earnings for the same period based on the actuarial valuation in effect at the time. Specifically, net investment earnings in excess of the following assumed rates are amortized over a four-year period. We further restrict the actuarial value of assets to be within 10% of the market value, if required.

Year	Assumed Investment Return		Actual Net Investment Return	Excess Net Investment Return
2017	5.55%	9,346,225	18,585,192	9,238,967
2018	5.55%	10,180,018	(5,140,073)	(15,320,091)
2019	5.55%	9,686,892	31,057,506	21,370,614
2020	5.30%	10,661,865	27,170,213	16,508,348

In practical terms, the actuarial asset value includes 100% of the excess investment earnings from 2017, 75% from 2018, 50% from 2019 and 25% from 2020.

The actuarial asset value is derived as follows:

Market value at Dec. 31, 2020				225,643,712
-75% of 2020 excess investment earnings	0.75 x	16,508,348	=	(12,381,261)
-50% of 2019 excess investment earnings	0.50 x	21,370,614	=	(10,685,307)
-25% of 2018 excess investment earnings	0.25 x	(15,320,091)	=	3,830,023
-0% of 2017 excess investment earnings	0.00 x	9,238,967	=	0
Actuarial value at Dec. 31, 2020				206,407,167
Actuarial value as a percent of market value				91.47%

The actuarial value of assets must be within 10% of the market value of assets. As shown above, the actuarial value before limit is within 10% of the market value and therefore no restriction applies. The actuarial value at December 31, 2020 is $206,407,167 resulting in an actuarial value as a percent of market value of 91.47%.

For the previous valuation the actuarial value of assets was calculated on the basis that it must be within 5% of the market value of assets.

INVESTMENT RETURN

Assuming that all cash flows occurred in the middle of the year, the pension fund earned a rate net of return of expenses of 13.51% based on the market value of assets and 9.49% based on the actuarial value of assets in 2020.

Appendix E. PLAUSIBLE ADVERSE SCENARIOS

A plausible adverse scenario is considered to be one that will occur in the short term (immediately to one year) with a likelihood of occurring between 1 in 10 and 1 in 20 based on the opinion of the actuary. The purpose of the following scenarios is to illustrate the impact on the Plan's financial position of the following adverse but plausible assumptions relative to the best estimate assumptions selected for the Plan's going concern valuation. The purpose of disclosing these results is to demonstrate the sensitivity of the funded status and annual current service cost between the current and the next valuation date to certain key risk factors affecting the Plan. The results of the scenarios selected are shown in the table below, with a description of each scenario following.

	Going Concern Results at 12.31.2020	Plausible Adverse Scenario Results at 12.31.2020		
		Interest Rate Risk	Deterioration of Asset Values	Longevity Risk
Total going concern assets	$206,407,000	$207,193,000	$197,902,000	$206,407,000
Total going concern liabilities	$196,622,000	$200,623,000	$196,622,000	$201,185,000
Going concern excess (unfunded liability)	$9,785,000	$6,570,000	$1,280,000	$5,222,000
Employer current service cost	$3,591,000	$3,796,000	$3,591,000	$3,673,000
Employer current service cost as % of earnings*	8.78%	9.29%	8.78%	8.98%
Discount rate	5.25%	5.07%	5.25%	5.25%
Adjusted market value of assets	$225,644,000	$228,785,000	$191,625,000	$225,644,000

** this is based on estimated capped earnings of $40,883,000*

INTEREST RATE RISK

This scenario illustrates the sensitivity of the funded status of the Plan and current service cost to an immediate change in the market interest rates underlying fixed income investments.

In order to assess the impact of a decrease in interest rates of a magnitude consistent with a 1 in 10 likelihood of occurring, we have used the same stochastic model that is used to determine the going concern discount rate (see Appendix B). The stochastic model is based on 5,000 simulations of projected financial variables, including long term yields on fixed income investments and asset class returns. Our long-term best estimates for these variables, and the going concern discount rate are based on the median values over these 5,000 simulations.

To determine the sensitivity to interest rate risk, and the resulting impact on Plan assets and liabilities, we have:

- considered the hypothetical going concern discount rate over the 500 trials where fixed income yields are lowest at the one-year horizon,

- determined the decrease in median long-term fixed income yields over the 500 trials where fixed income yields are the lowest at the one-year horizon.

As such, under the interest rate risk scenario, the going concern discount rate is decreased by 18 basis points as of December 31, 2020.

With respect to the impact on fixed income assets, the scenario results in a decrease in long term yields on fixed income investments of 0.44%.

Based on the estimated duration of the Plan assets, liabilities and the current service cost, we have then determined the estimated change to the Plan's funded status under the interest rate risk scenario.

DETERIORATION OF ASSET VALUES

This scenario illustrates the sensitivity of the funded status of the Plan to short-term shock which causes a reduction in the market value of assets, with no change to the liabilities of the Plan. This scenario is assumed not to impact the current expectation of the long-term rate of return, and consequently, the going concern discount rate.

In order to assess the impact of a decrease in asset values of a magnitude consistent with a 1 in 10 likelihood of occurring, we have used the same stochastic model that is used to determine the going concern discount rate (see Appendix B). The stochastic model is based on 5,000 simulations of projected financial variables, including long term yields on fixed income investments and asset class returns.

To determine the sensitivity to a deterioration in asset values, based on the Plan's target asset mix, we have determined the decrease in median investment returns over the 500 trials where investment returns are the lowest at the one-year horizon.

As such, under the deterioration of asset values scenario, the market value of assets is decreased by 15.10% as of December 31, 2020.

LONGEVITY RISK

This scenario illustrates the sensitivity of the funded status of the Plan to pension plan members living longer than expected. The impact of this scenario was determined using more conservative mortality assumption than currently employed, resulting in a one-year increase to the average life expectancy of the Plan as of December 31, 2020.

Appendix F. CERTIFICATE OF TRUSTEES

With regards to the December 31, 2020 actuarial report for the Brandon University Retirement Plan, we hereby certify that, to the best of our knowledge and belief:

- A copy of the official Plan document and all amendments made to December 31, 2020 were provided to the actuary;
- The membership data provided to the actuary includes a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to December 31, 2020; and
- All events subsequent to December 31, 2020 that may have an impact on the valuation have been communicated to the actuary.
- The valuation reflects the terms of the engagement with the actuary, in particular the use of a 5.25% valuation interest rate.

Signature	Signature
Title	Title
Date	Date

ECKLER

Brandon University

Actuarial Valuation as at December 31, 2020

June 23, 2021

Agenda

- Valuation Overview
- 2020 Highlights
- Retirement Study
- Going Concern valuation
  - Financial position
  - Current service cost
  - Gain and loss analysis
- Solvency and Wind-up valuations
- Bill 8
- Next Steps

Valuation Results

- Going Concern Valuation
  - Minimum University contributions
- Wind-up Valuation
  - Maximum University contributions
- Solvency Valuation
  - Filing frequency

Going Concern Valuation

- Long-term view
- Projections
  - Economic assumptions
  - Demographic assumptions
  - Benefits are projected (earnings at retirement or termination, retirement pension increases, etc.)
- Establishes funding requirements
  - Canadian actuarial standards
  - Pension legislation (PBA & ITA)

Wind-up Valuation

- Based on a “Hypothetical” Plan Wind-up
- Required by actuarial standards
- Used to establish the maximum contribution permitted by CRA
- Benefits are assumed to be fully settled
  - Annuities Purchased
  - Lump Sum Commuted Values paid out
- Assets are measured at market value

Solvency Valuation

- Required by Manitoba pension legislation
- Similar to Wind-up Valuation, except for smoothed value of assets can be used
- Solvency deficiency must be amortized by special payments
  - The Plan is exempt from solvency funding
- Solvency ratio <90% means annual filing frequency and restriction on benefit improvements

2020 Highlights

2020 Highlights

- 2020 was a volatile year for many asset classes
  - COVID-19 pandemic resulted in sharp equity losses in Q1, followed by strong recovery to end of year
  - Bond yields also fell sharply in Q1 and only rebounded slightly as the year progressed
- Fund earned a net return of 13.51%
  - (Market return – before smoothing)
- The return net of all expenses was 9.49% on the actuarial (smoothed) value of assets
  - This is the basis on which investment gains are measured

2020 Highlights

- Valuation Interest Rate
  - Reduced to 5.25% from 5.30%
- Solvency annuity purchase rate decreased by approximately 0.46%
- Commuted Value interest rates down sharply
  - Based on long term Gov. of Canada bond yields
  - Short term rate down approximately 1.0%, long term rate up approximately 0.4%
- New Commuted Value Standard implemented December 1, 2020
  - Increased interest rates; reduced Commuted Values

Retirement Experience Study

Retirement Study

- Large gains in several years indicated retirement assumption needed to be updated
- Study completed based on years 2010 – 2020

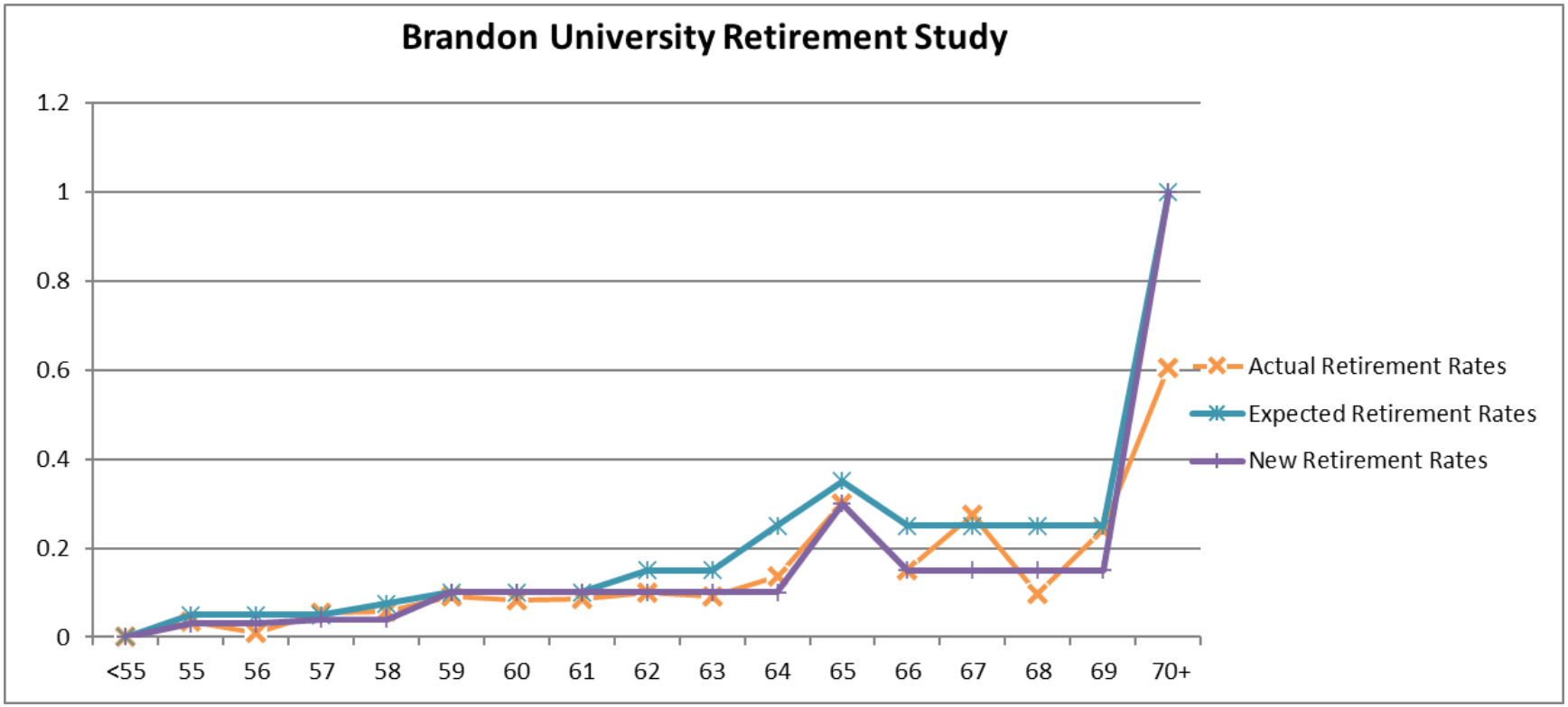
  (10 years)
- Dollar weighted experience
- New retirement assumption used in 2020 valuation

Retirement Study – Results

- Members retiring at rates different than previously expected:
  - Less retirements than previously expected:
    - Ages 55 to 58
    - Ages 62 to 70
  - Retirements as previously expected:
    - Ages 59 to 61

- Rates dropped for ages 55 to 58 and 62 to 70
- Rates remain the same for ages 59 to 61

Retirement Study – Results



Retirement Study – New Assumption

- Impact on December 31, 2020 Funding Valuation
  - Decrease liabilities by $2.628M (1.3%)

Previous Retirement Assumption:

Age	Probability of Retirement
<55	0.0%
55 – 57	5.0%
58	7.5%
59 – 61	10.0%
62 – 63	15.0%
64	25.0%
65	35.0%
66 – 69	25.0%
70+	100.0%

Revised Retirement Assumption:

Age	Probability of Retirement
<55	0.0%
55 – 56	3.0%
57 – 58	4.0%
59 – 64	10.0%
65	30.0%
66 – 69	15.0%
70+	100.0%

Going Concern Valuation

Going Concern Valuation

Going Concern Valuation	12.31.2020	12.31.2019
Going Concern Assets		
Actuarial value of Plan assets	$206,407,000	$193,668,000
Going Concern Liabilities		
Retired members and survivors	$112,294,000	$109,885,000
Terminated vested members	$5,244,000	$5,454,000
Active members – Academic and non-union members	$63,144,000	$62,124,000
Active members – Non-Academic union members	$15,426,000	$15,972,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total going concern liabilities	$196,622,000	$193,842,000
Surplus / (unfunded liability)	$9,785,000	($174,000)
Funded Ratio	1.050	0.999

Going Concern Valuation
Contribution requirements

2021	Dollar	% of Earnings
Estimated 2021 pensionable earnings	$40,883,000	
Current service cost		
Total current service cost	$5,887,000	14.40%
Estimated employee contributions	($2,596,000)	(6.35%)
Employer current service cost (A)	$3,291,000	8.05%
Total special payments (B)	$0	0.00%
Total minimum contribution required by the Act and Regulations	**$3,291,000**	**8.05%**
Plan Provision Contribution		
Employer formula contribution	$2,855,000	6.98%
Additional current service cost	$736,000	1.80%
Total minimum contribution required by the Plan provisions (C)	**$3,591,000**	**8.78%**
Employer current service cost (A)	$3,291,000	8.05%
Total special payments (B)	$0	0.00%
Employer additional contribution (C - A - B)	$300,000	0.73%
Total Employer required contribution	**$3,591,000**	**8.78%**

Going Concern Valuation
Plan experience 2020

Going concern surplus (unfunded liability) at Dec. 31, 2019		($174,000)
Special payments to eliminate the unfunded liability		$26,000
Interest on surplus (unfunded liability), special payments and transfers in for 2020 at 5.30%		($9,000)
Expected surplus (unfunded liability) at Dec. 31, 2020		($157,000)
Plus actuarial gains(losses) due to experience differing from the actuarial assumptions in 2020:		
▪ Gain/(loss) on terminations other than assumed	($507,000)	
▪ Gain/(loss) on active and deferred member retirements other than assumed	$874,000	
▪ Gain/(loss) on mortality other than assumed	$1,154,000	
▪ Gain/(loss) on salaries and the YMPE increasing at different rates than assumed	($1,076,000)	
▪ Gain/(loss) attributable to net investment experience	$8,005,000	
▪ Gain/(loss) attributable to pension increases other than assumed	$180,000	
▪ Gain/(loss) attributable to service accrued different than expected	$9,000	
Net actuarial experience gain/(loss)		$8,639,000
Gain/ (loss) due to data corrections		($233,000)
Gain/ (loss) due decreasing the discount rate to 5.25%		($1,092,000)
Gain/ (loss) due to change in retirement scale		$2,628,000
Other experience resulted in a net gain/(loss) of approximately		$0
Going concern surplus (unfunded liability) at Dec. 31, 2020		**$9,785,000**

Solvency and Wind-up Valuations

Solvency Valuation

Solvency Valuation	12.31.2020	12.31.2019
Solvency Assets		
Actuarial value of Plan assets (A)	$206,407,000	$193,668,000
Present value of the first five years of special payments to eliminate the going concern unfunded actuarial liability	$0	$121,000
Allowance for wind-up expenses (B)	($300,000)	($305,000)
Total solvency assets	$206,107,000	$193,484,000
Solvency Liabilities		
Retired members and survivors	$134,326,000	$124,497,000
Terminated vested members	$7,227,000	$7,169,000
Active members – Academic and non-union members	$95,120,000	$86,418,000
Active members – Non-Academic union members	$21,569,000	$21,467,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total solvency liabilities (C)	$258,756,000	$239,958,000
Solvency excess/ (shortfall)	($52,649,000)	($46,474,000)
Solvency ratio [(A + B) ÷ C]	0.797	0.806

Solvency Valuation

- New Commuted Value Standard reflected as at December 31, 2020
- In the absence of the solvency exemption, the solvency special payment would be an additional $11.96M per year, for 5 years
- Solvency ratio < 0.90
  - next valuation due to be filed as at December 31, 2021

Wind-up Valuation

Wind-up Valuation	12.31.2020	12.31.2019
Wind-up Assets		
Market value of Plan assets	$225,644,000	$203,861,000
Allowance for wind-up expenses	($300,000)	($305,000)
Total wind-up assets	$225,344,000	$203,556,000
Wind-up Liabilities		
Retired members and survivors	$134,326,000	$124,497,000
Terminated vested members	$7,227,000	$7,169,000
Active members – Academic and non-union members	$95,120,000	$86,418,000
Active members – Non-Academic union members	$21,569,000	$21,467,000
Other benefits outstanding	$391,000	$298,000
Additional voluntary contributions	$123,000	$109,000
Total wind-up liabilities	$258,756,000	$239,958,000
Wind-up excess/ (shortfall)	($33,412,000)	($36,402,000)

Wind-up Valuation

- The wind-up liabilities are the same as the solvency liabilities
- Unlike the solvency assets, the wind-up assets are valued on a market value basis, and do not include the present value of special payments (if any).
  - This is the “true” wind-up position of the Plan.

Bill 8

- Bill 8 received royal assent on May 8, 2021
- Significant changes include:
  - Allowing plan members who transfer a pension benefit credit to a locked-in retirement account or life income fund to unlock amounts under certain financial hardships and fully unlock amounts at age 65
  - Allowing plans to permit members who continue to be employed after normal retirement age to stop contributing to the plan and to stop accruing benefits
  - Permitting the use of solvency reserve accounts to fund plan solvency deficiencies
  - Introducing amendments to permit specified multi-employer pension plans
  - Allowing greater flexibility when dividing pension assets on relationship breakdown

Next Steps

- Approval of Report
  - Filing with MB Superintendent and CRA
  - University implementation of contribution requirements
  - Determination of any retroactive contribution adjustment based on 2021 funding requirements

ECKLER

Independent Auditor's Report

To the Board of Governors of the Brandon University Retirement Plan

Opinion

We have audited the financial statements of Brandon University Retirement Plan (the "Organization"), which comprise the statement of financial position as at December 31, 2020, and the statements of changes in net assets available for benefits and changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Organization as at December 31, 2020, and the changes in its net assets available for benefits and changes in its pension obligations for the year then ended in accordance with 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 Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Organization 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.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do 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 and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. 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 these financial statements in accordance with 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 Organization'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 Organization or to cease operations, or has no realistic alternative but to do so.

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

Auditor's 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 auditor's 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 these 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 Organization's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 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 Organization's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Organization 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.

We 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.

Chartered Professional Accountants
Brandon, Manitoba

June 23, 2021

BRANDON UNIVERSITY RETIREMENT PLAN

ANNUAL REPORT - 2020

Incorporating the Annual Financial Statements

BRANDON UNIVERSITY

June 2020

Dear Member:

Enclosed is a detailed report on the operation of the Brandon University Retirement Plan this past year. Its purpose is to provide general information to the membership, particularly with regard to the financial operation and performance of the Plan. Full audited financial statements for the year ended December 31, 2020 are included in this report.

The Plan, under the guidance of Connor, Clark & Lunn Investment Management Ltd., had a positive rate of return of 14.2% in 2020 (18.3% in 2019).

The December 31, 2020 Brandon University Retirement Plan valuation completed by the Plan actuary, Eckler Ltd. determined that the Plan had a solvency deficiency of Plan assets over calculated Plan obligations (liabilities) of $52,649,000 in 2020 ($46,474,000 in 2019). The solvency ratio was 0.797 in 2020 (0.806 in 2019). In January 2009, Brandon University filed an election to be exempt from the requirement to make solvency deficiency special payments in accordance with the Solvency Exemption for Public Sector Pension Plans Regulation. As a result of the election, the University is not required to make special payments into the Plan related to the solvency deficiency.

The Going-Concern funding method shows a surplus of $9,785,000 on December 31, 2020 ($174,000 unfunded liability in 2019). Annual special payments are required when there is an unfunded liability, and paid over a maximum of 15 years. As the University is currently in a surplus position, an annual special payment is not required for 2021. The annual cost of this special payment for 2020 was $26,000 ($21,000 in 2019). A "Going-Concern Valuation" assumes Brandon University will continue to operate, the Retirement Plan will continue to operate, and pension benefit obligations will come due through member retirement, termination of employment, or death.

As the solvency ratio of the plan is less than 0.90, the Pension Benefits Act of Manitoba requires the next valuation be effective no later than December 31, 2021. This valuation will be completed in 2022.

Subsequent to year-end, the impact of the COVID-19 pandemic increased significantly in Canada and globally. Although the disruption of the virus is expected to be temporary, given the dynamic nature of these circumstances, the duration and related financial impact cannot be reasonably estimated at this time. Investment returns contribute to financing the obligations of the Retirement Plan. However, returns are "smoothed" over a four-year period, which minimizes the shock of a single bad (or good) year. The Plan is a defined benefit plan, which means that pensions should not be affected by periodic market fluctuations. Brandon University is also responsible, as the residual funder of the Plan, to cover periodic shortfalls that may arise.

In 2020, the Pension Trustees conducted a review of the performance of the Investment Manager, Connor Clark & Lunn. Eckler was contracted to conduct the review through a request for proposals process. Eckler was chosen in part because they do not manage funds and were seen to be able to provide an objective view of the performance of the investment manager. In summary, Eckler found that CC&L exceeded the objectives of earning CPI plus 3%, outperforming the benchmark and placing in the top 33% of peer investment managers in rolling four-year periods over the last four years. They have a wide range of investment products with the potential to build a well-diversified balanced portfolio. The company is well structured and stable. Eckler indicated satisfaction with the performance of CC&L overall and they recommend considering adding a further diversification of investment asset mix to include alternative investments, such as real estate and infrastructure. There are a number of smaller recommendations as well that are being considered by the Pension Trustees.

The Board of Trustees of the Retirement Plan welcomes any comments or questions from all members.

Sincerely,

Dr. Todd Fugleberg
Chair, Board of Trustees
Brandon University Retirement Plan

Mr. Scott J.B. Lamont, FCPA, FCGA, MBA
Vice-President (Administration & Finance)
Brandon University

BRANDON UNIVERSITY RETIREMENT PLAN

Annual Report for the year ended December 31, 2020

Members of the Board of Trustees (as of December 31, 2020):

Todd Fugleberg	BUFA
David Taylor	BUFA
Eric Raine	MGEU
Becky Lane	MGEU
Brent Cuvelier	IUOE "A"
Kim Meadows	IUOE "D"
Allison Noto	Exempt Staff
Scott Lamont	Board of Governors
Shawn Chambers	Board of Governors
Maurice Koschinsky	Pensioners

Consultant/Actuary	Eckler Ltd.
Investment Manager	Connor, Clark & Lunn Investment Management Ltd.
Investment Sector Managers	Connor, Clark & Lunn High Yield Bond Fund I Connor, Clark & Lunn Long Bond Fund Class A Connor, Clark & Lunn Emerging Markets Equity Fund Connor, Clark & Lunn Q Equity Extension I Connor, Clark & Lunn Q US Equity Extension Fund Scheer Rawlett & Associates Canadian Equity Fund PCJ Canadian Equity Fund NS Partners International Equity Fund A
Custodian	CIBC Mellon Global Securities Services Company
Plan Administrator	Trustees of the Brandon University Retirement Plan

General Information

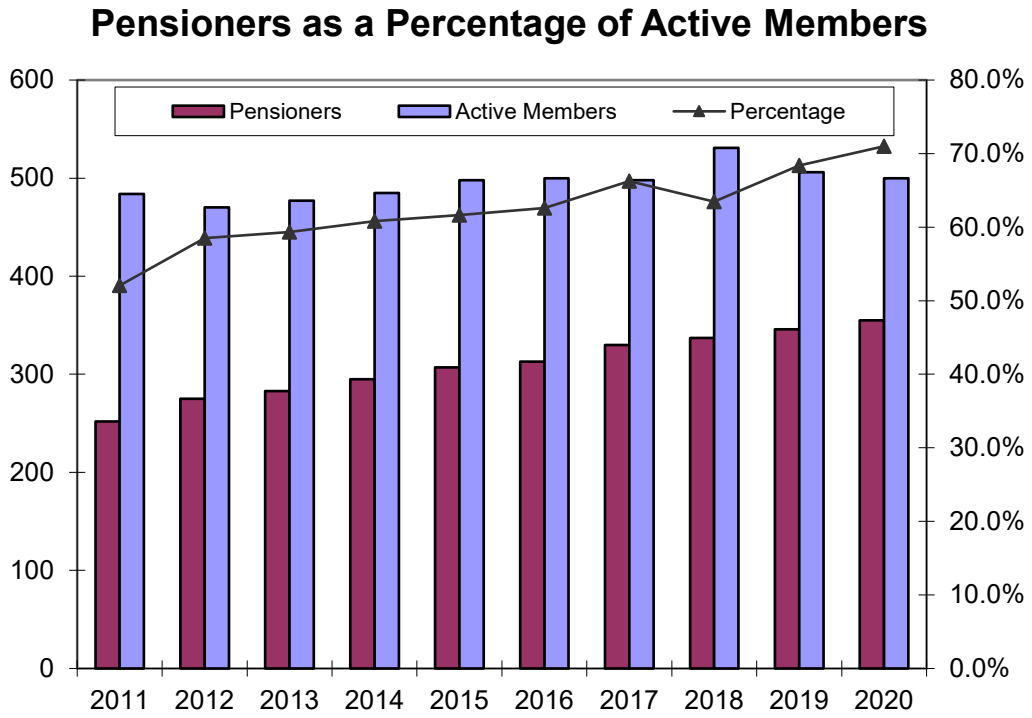
a) The Brandon University Retirement Plan is a final average, defined benefit plan, which provides a benefit to all eligible employees of Brandon University upon retirement, termination, or death. The Plan is administered by the Trustees of the Brandon University Retirement Plan. A full description of the Plan is contained in the official Plan document and is available on the Brandon University website or from the Human Resources Office.

b) The Plan is funded by contributions from Plan members and the University, as well as the income from investments. Net assets in the plan, at market value, at December 31 were:

2020	$225.6 million
2019	$203.9 million
2018	$176.3 million
2017	$185.4 million
2016	$169.9 million

c) Similar to many other maturing pension plans in Canada, the number of pensioners is increasing relative to the number of active contributing members of the Plan. Over the past ten years, the number of pensioners has increased from 52% of the active members to 71% in 2020. Brandon University Retirement Plan membership at December 31:

	2020	**2019**
Active members	502	506
Pensioners	355	346
Deferred, inactive and Pending Election	93	110



An impact of increasing numbers of pensioners relative to active contributing members is the increasing need for investment income of the Plan to fund future income requirements. Pensions paid annually to retirees are 162% of the annual regular contributions from Plan members and the University. In addition, the University has been making unfunded liability special payments to make up the unfunded liability shortfall calculated by the Plan actuaries. That is no longer the case in 2021.

Plan member transactions:	**2020**	**2019**
Member and University regular contributions to the plan	$5,680,018	$5,756,512
Unfunded liability special payments to the plan	26,000	21,000
Transfers from other plans	167,299	611,601
Pensions paid to retired members	9,194,105	8,929,773
Death benefits and refund settlements due to terminations	2,066,816	929,418

d) The Brandon University Retirement Plan is subject to a periodic valuation by an independent actuary to determine whether the current Plan assets and contributions from members and the University will adequately fund future benefits. The Pension Benefits Act of Manitoba requires that such a study be done at least every three years as long as the solvency ratio of the Plan is greater than 0.90. The most recent valuation was performed by Eckler Ltd. as at December 31, 2020. Using the solvency valuation method, the Plan had a deficiency of assets over actuarial (calculated) liabilities of $52,649,000 ($46,474,000 in 2019). Using the going-concern or aggregate method, the Plan had a surplus of $9,785,000 in 2020 ($174,000 unfunded liability in 2019).

The University is required to make special payments to fund the unfunded liability over a maximum 15 year amortization period. The annual special payment for 2020 was $26,000 (2019 $21,000). No additional special payment is required to be made for the solvency deficiency because the University is exempted under the Solvency Exemption for Public Sector Pension Plans Regulation. However, since the solvency ratio of the plan is less than 0.90, the Pension Benefits Act of Manitoba requires that the next valuation be effective no later than December 31, 2021. It will be completed in 2022.

e) If the average net investment return on the Fund during the last four years exceeds 6.0% per annum, each pensioner who was receiving a pension at the end of that year, is entitled to receive an increase in that pension effective from July 1 in the following calendar year. The details of this entitlement are recorded in article 7.3 of the Brandon University Retirement Plan document, as amended April 11, 2013. The result of this calculation over the past 6 years is as follows:

Brandon University
Historical Increases (Article 7.3 - Supplementary Pension)

Brandon University Pension Increases - Post 2013 amendment						
	(1)	(2)	(3)	(4)	(5)	
Year	Net Investment Return (market value)**	Four-year Geometric Average Return	Excess of Average return over 6%	Increase in CPI	Actual COLA given	Effective Date of COLA Increase
2015	3.93%	9.43%	3.43%	1.60%	1.60%	1 July 2016
2016	7.90%	9.06%	3.06%	1.50%	1.50%	1 July 2017
2017	11.04%	7.82%	1.82%	1.90%	1.82%	1 July 2018
2018	-2.80%	4.89%	0.00%	2.00%	0.00%	1 July 2019
2019	17.79%	8.23%	2.23%	2.20%	2.20%	1 July 2020
2020	13.51%	9.60%	3.60%	0.70%	0.70%	1 July 2021

COLA = lower of columns (3) or (4)

** Net investment return is net of expenses. Therefore returns are lower than those reported by the investment manager.

Investment Management Objectives

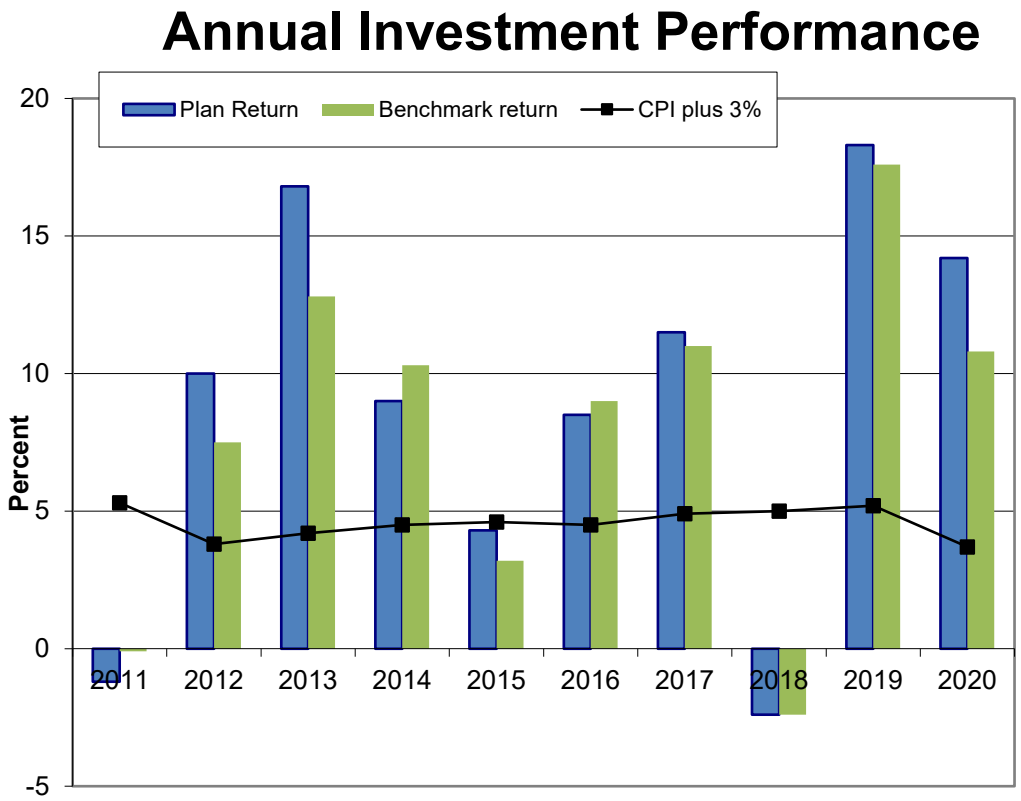
The current investment manager, Connor, Clark & Lunn, Investment Management Ltd. (CC&L), was appointed December 30, 1994. Since that time, the plan investment management has been diversified by making use of several investment sector specialists within the family of companies working with CC&L, under the general management of CC&L.

The Investment Manager operates with the general objective to maximize long-term total returns while protecting the capital value of the fund. The Manager seeks to attain an average rate of return of 3% over the CPI increase for the same period. Secondary objectives are to generate returns in excess of the return of the Benchmark Fund over rolling four-year periods and to perform in the top third of investment managers as measured by a nationally recognized service. RBC Investor & Treasury Services was used as the measurement service for this report.

The Brandon University Retirement Plan annual investment performance (14.2%) did exceed the objective of CPI plus 3% (3.7%) for 2020, and the four year rolling average ending in 2020 did as well. (BU Plan was 10.1% vs. 4.7%). The Plan exceeded the rolling four year average benchmark return (BU Plan 10.1% vs. Benchmark 9.0%). Although the top third of managers is not reported by BIA, the BU Plan annual return (14.2%) was higher than the median (8.4%) and higher than the top 25% (10.5%) of balanced fund investment managers in 2020. The BU Plan four year rolling average return (10.1%) was higher than the median (7.1%) and higher than the top 25% (8.5%) of balanced fund investment managers.

Investment Performance

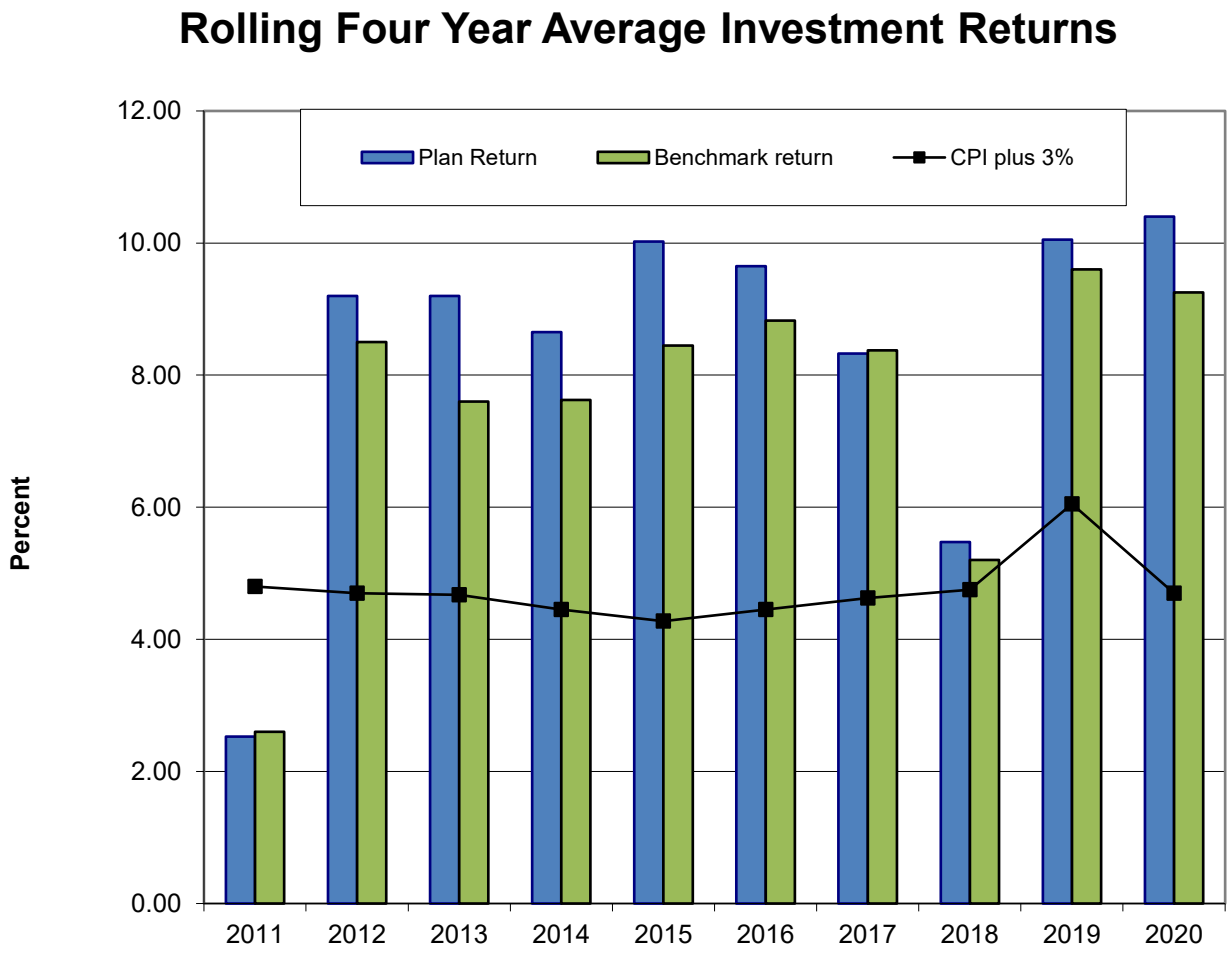
Period Ending December 31	Total Return	Annual Rate of Increase in CPI
2020	14.2%	0.7%
2019	18.3%	2.2%
2018	-2.4%	2.0%
2017	11.5%	1.9%
2016	8.5%	1.5%
Benchmark return for 2020		10.8%
Four year rolling average ending 2020		
Retirement plan performance		10.1%
Benchmark performance		9.0%



BIA Balanced Fund Performance Summary

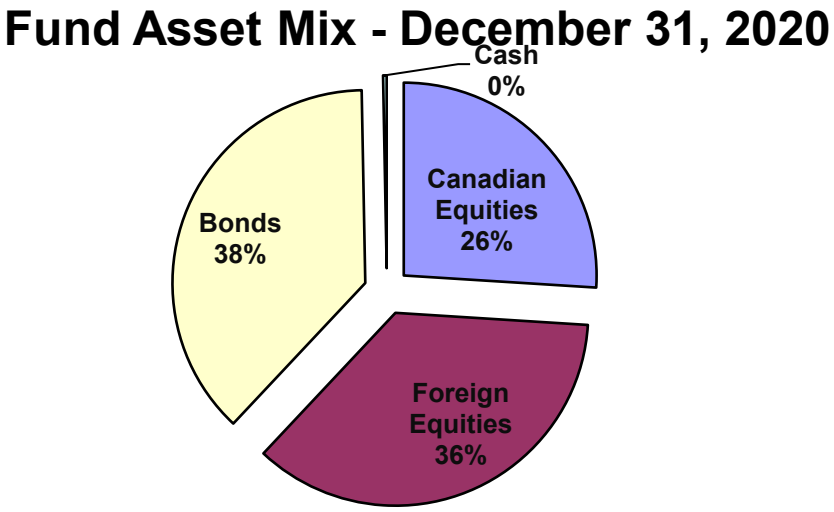
For the Period Ending December 31, 2020

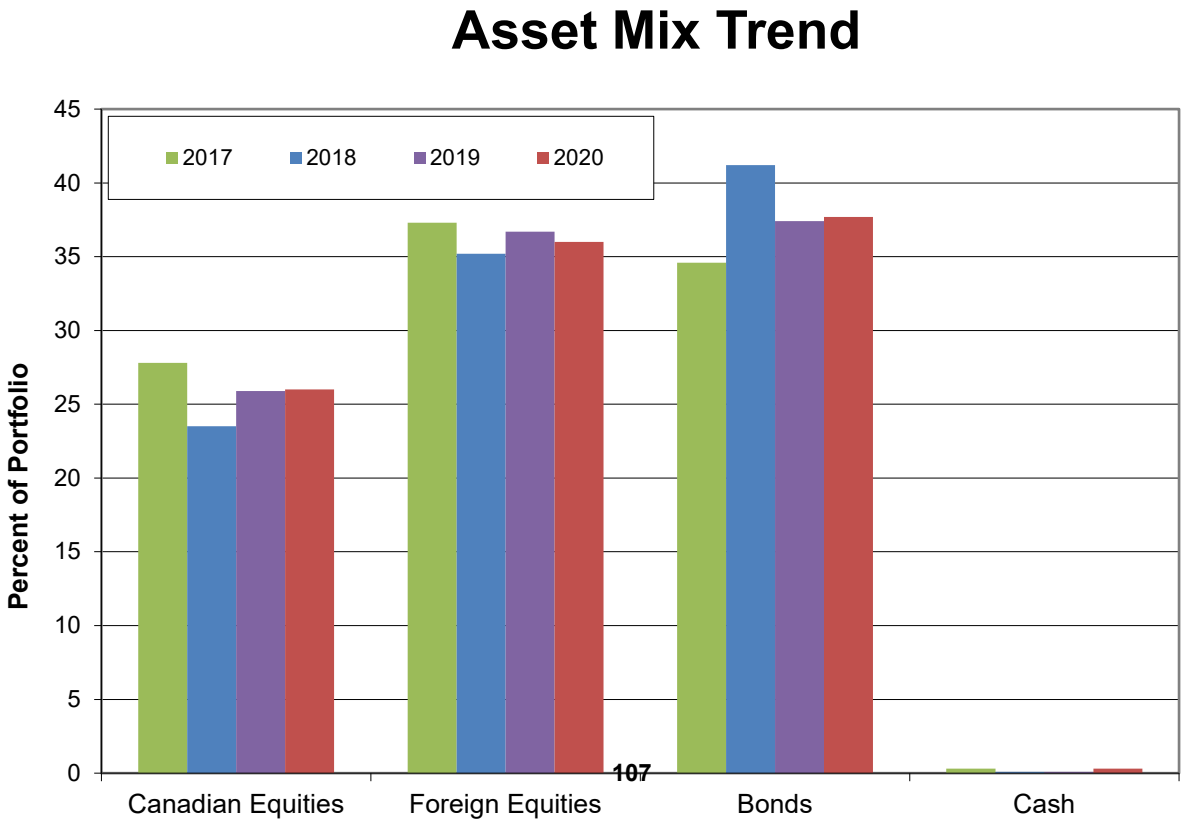
Top quartile (12 months)	10.5%
Median (12 months)	8.4%
BU Retirement Plan (12 months)	14.2%
Top quartile (4 year rolling)	8.5%
Median (4 year rolling)	7.1%
BU Retirement Plan (4 year rolling)	10.1%



The investment mix of the Brandon University Retirement Plan is established by the investment manager based on market expectations within guidelines authorized by the Trustees of the Plan. On December 31, 2020 the asset mix and the annual performance in each sector follows:

	% of Portfolio	12 month Portfolio return	12 month Benchmark return
Canadian Equities	26.0%	5.7%	5.6%
Foreign Equities	36.0%	20.5%	14.8%
Bonds	37.7%	12.4%	8.1%
Cash	0.3%	1.0%	0.7%
TOTAL FUND	100.0%	12.4%	8.1%





Responsibility for Financial Reporting

The Board of Trustees of the Brandon University Retirement Plan is responsible for the preparation and presentation of the financial statements and the accompanying notes. The Board of Trustees relies upon the accounting and financial systems established by Brandon University. The financial statements are prepared in conformity with the accounting policies noted in the financial statements, and are reviewed and approved by the Board of Trustees of the Brandon University Retirement Plan. An independent financial auditor whose opinion is included herein examines the statements.

To fulfil its responsibility, Brandon University maintains internal control systems to provide reasonable assurance that relevant and reliable financial information is produced.

Dr. Todd Fugleberg, PhD
Chair, Board of Trustees
Brandon University Retirement Plan

Scott J. B. Lamont, FCPA, FCGA, MBA
Vice-President (Administration & Finance)
Brandon University

June 2021

BRANDON UNIVERSITY RETIREMENT PLAN

Statement of Financial Position
as at December 31, 2020

	2020	2019
ASSETS		
Accounts receivable	$ 5,542,729	$ 933,775
Investments (Note 2 b)		
Cash and short-term investments	743,292	-
Bonds and debentures	84,981,004	75,998,702
Canadian equities	58,491,367	52,664,038
Foreign equities	81,078,392	74,486,663
	225,294,055	203,149,403
Total Assets	230,836,784	204,083,178
LIABILITIES		
Accounts payable	5,193,072	222,118
Total Liabilities	5,193,072	222,118
Net assets available for benefits	**225,643,712**	**203,861,060**
Pension obligations	**196,622,000**	**193,842,000**
Plan surplus (going concern basis)	**$ 29,021,712**	**$ 10,019,060**

The accompanying notes are an integral part of the financial statements.

BRANDON UNIVERSITY RETIREMENT PLAN

Statement of Changes in Net Assets Available for Benefits
for the year ended December 31, 2020

	2020	2019
CONTRIBUTIONS		
Members	$ 2,349,475	$ 2,521,049
University	3,330,543	3,235,463
University special payments (Note 9)	26,000	21,000
Transfers from other plans	167,299	611,601
	5,873,317	6,389,113
OTHER INCOME		
Investment income		
Interest	2,501,723	2,791,858
Dividends	3,499,063	2,177,918
	6,000,786	4,969,776
Change in fair value		
Realized	16,309,964	9,057,882
Unrealized	5,840,528	17,998,497
	22,150,492	27,056,379
Other income	43	-
Total Increase in Net Assets	34,024,638	38,415,268
PAYMENTS		
Benefit payments		
Retirements	9,194,105	8,929,773
Refunds	1,409,139	929,418
Deaths	657,677	-
	11,260,921	9,859,191
Administrative expenses		
Actuarial and consulting fees	118,591	114,919
Custodian and plan administration fees	202,856	230,555
Legal and audit fees	9,710	9,520
Investment management fees	662,066	625,242
Trustee expenses	127	227
GST rebate	(12,285)	(11,814)
	981,065	968,649
Total Decrease in Net Assets	12,241,986	10,827,840
Net Increase in Assets Available for Benefits	**21,782,652**	**27,587,428**
Net Assets Available For Benefits, beginning of year	**203,861,060**	**176,273,632**
Net Assets Available For Benefits, end of year	**$ 225,643,712**	**$ 203,861,060**

The accompanying notes are an integral part of the financial statements.

BRANDON UNIVERSITY RETIREMENT PLAN

Statement of Changes in Pension Obligations
for the year ended December 31, 2020

	2020	2019
Interest accrued on benefits	$ 10,125,000	$ 10,019,000
Transfers	167,000	612,000
Benefits accrued	5,482,000	5,605,000
Benefits paid	(11,261,000)	(9,859,000)
Experience (gain)/loss	(197,000)	5,120,000
Changes in actuarial assumptions	(1,536,000)	-
Net Change in Pension Obligations	**2,780,000**	**11,497,000**
Pension Obligations, beginning of the year	**193,842,000**	**182,345,000**
Pension Obligations, end of year	**$ 196,622,000**	**$ 193,842,000**

The accompanying notes are an integral part of the financial statements.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

1. Description of the Plan

The following description of the Brandon University Retirement Plan is only a summary. More complete information is contained in the official Plan document.

a) General

The Brandon University Retirement Plan is a final average contributory defined benefit pension plan established April 1, 1974 for the benefit of the employees of Brandon University. The assets of the Plan are held in trust in the name of ten Trustees - eight elected by and from the Plan membership and two appointed by the Board of Governors. The Trustees oversee the administration of the Plan and set forth the investment guidelines. Their obligations and responsibilities are defined in a trust agreement with Brandon University. An asset manager invests the Plan assets based on the approved investment guidelines and according to the terms of the Managed Account Agreement. The Plan is registered with the Pension Commission of Manitoba and meets the requirements of the Pension Benefits Act of Manitoba and the Income Tax Act (Canada).

b) Membership

Unless otherwise stated, all Brandon University employees are eligible to become members of the Plan on their date of employment. Full-time and certain part-time employees are required to join the Plan. Membership is optional for other part-time and certain specified employees.

c) Funding

The Plan receives its funds from:

i) The contributions of members - Members of the University are each required to contribute at the rate of 8.0% of salary up to the Year's Basic Earnings (YBE), 6.2% between the YBE and the Year's Maximum Pensionable Earnings (YMPE) and 8.0% in excess of the YMPE. Members contribute only on the amount earned up to the Year's Maximum Contributory Earnings.
ii) The required and special contributions of the University - The University is required to contribute at the rate of 8.0% of salary up to the YBE, 6.2% between the YBE and the YMPE and 8.0% in excess of the YMPE with no salary limitations applied, plus any special payments for the unfunded liability required under the Pension Benefits Act of Manitoba.
iii) the income from investments

An actuarial valuation is performed at least once every three years to determine the adequacy of the funding for pension benefits (see note 2g).

d) Plan Benefits

The Plan provides for the payment of benefits to a member upon retirement, death, or termination of employment with Brandon University.

At retirement, the member is entitled to an annual pension equal to 2% of final average earnings multiplied by the member's years of credited service less 0.6% of CPP average earnings multiplied by the member's years of service since January 1, 1990. Final average earnings are the average of the best 5 years earnings

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

in the last 12 years prior to retirement. CPP average earnings are the member's average earnings up to the YMPE in the 5 years prior to retirement. Full benefits are payable (a) upon normal retirement; (b) upon early retirement for members who qualify. Reduced benefits are provided to members who retire early and do not qualify for full benefits.

Pensions are increased automatically on July 1 of each year by the amount the net four-year geometric average investment return on the fund, as determined by the actuary, exceeds 6.0% per annum, subject to a maximum increase of CPI for the previous year.

Death and termination benefits are based on the value of the member's pension as determined by the Plan Administrator at the time of death or termination of employment. The options available to beneficiaries and terminating members are outlined in the official Plan document.

2. Significant Accounting Policies

a) General

The Brandon University Retirement Plan prepares its financial statements in accordance with Canadian accounting standards for pension plans. The Plan has adopted Part II (Private Enterprises) accounting standards for all accounting policies that do not relate to the valuation of the investment portfolio or pension obligations.

b) Financial Instruments

The financial instruments of the Plan consist of accounts receivable, investments, and accounts payable. The Plan recognizes and derecognizes all financial assets and liabilities in accordance with Financial Instruments, Section 3856, of Part II of the CPA Canada Handbook.

Initially, all financial assets and liabilities are recorded at fair value on the Statement of Financial Position. Subsequent measurement is determined by the classification of each financial asset and liability. Investments assets and liabilities are measured at fair value based on International Financial Reporting Standards (IFRS 13) with the change in fair value recognized in the Statement of Changes in Net Assets Available for Benefits. Financial instruments classified as accounts receivable and accounts payable are measured at amortized cost using the effective interest method.

Investments are recorded at market value on a trade date basis.

Fair values of investments (including the underlying assets of investments held in pooled funds) are determined as follows:

Fixed Income:
Short-term investments are recorded at cost which approximates market value. Bonds and debentures are valued at market by an independent securities valuation company.
Equity:
Publicly traded securities are recorded at year end market prices.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

c) Investment Income

Dividend income is recognized on the ex-dividend date and interest income is recognized on the accrual basis as earned.

d) Foreign Currency Translation

The fair value of investments denominated in foreign currencies is translated into Canadian dollars at the exchange rate in effect at year end and the resulting change is included in the change in fair value of investments. Revenue and expense transactions are translated at the exchange rates prevailing on the dates of the transactions and are included in investment income or the change in fair value of investments (realized gains or losses) at the translated amounts.

e) Contributions

Contributions from the members and the University are recorded on an accrual basis. Cash received from members as transfers from other pension plans is recorded when received.

f) Use of Estimates

Preparation of the financial statements requires management to make estimates and assumptions that primarily affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of changes in net assets available during the year. Actual results could differ from these estimates.

g) Pension Obligations

The pension obligations of the Brandon University Retirement Plan are the actuarial present value of accrued pension benefits determined by applying the best estimate assumptions and the projected benefit method prorated on services.

3. Financial Risk Management

Management of investments is governed by the managed account agreement between the Brandon University Retirement Plan and Connor, Clark & Lunn Management Ltd. The investment management objective of the Plan is to maximize the long-term total return while protecting the capital value of the fund from major market fluctuations through prudent management of asset allocation and prudent selection of investments. The investment manager is to attain an average rate of return of 3% over the CPI increase for the same period.

The Plan's investments are publicly traded.

There have been no substantive changes in the Plan's exposure to financial instrument risks, its objectives, policies and processes for managing those risks or the methods used to measure them from the previous period unless otherwise stated in this note.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

a) Market Risk

Market risk is the risk the value of an investment will fluctuate as a result of changes in market prices whether those changes are caused by factors specific to an individual investment or volatility in interest rates, foreign currencies or other factors affecting similar securities traded in the market.

The Plan's cash and investments, including investments denominated in foreign currencies, are reported in Canadian dollars as follows:

	(in thousands of dollars)			
	2020		**2019**	
Canadian cash and short-term investments	$ 743	0.3 %	$ -	- %
Canadian bonds	84,981	37.7 %	75,999	37.4 %
Canadian equities	58,491	26.0 %	52,664	25.9 %
	144,215	64.0 %	128,663	63.3 %
US equities	35,061	15.6 %	31,718	15.6 %
Non-North American equities	46,018	20.4 %	42,768	21.1 %
	$ 225,294	100.0 %	$ 203,149	100.0 %

i) Interest rate risk is the risk that fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The value of the Plan's fixed income investments is directly affected by changes in nominal and real interest rates. There are guidelines in the managed account agreement for the fixed income investment portfolio related to permitted investments, diversification, and quality, and duration management which are designed to mitigate the risks of interest rate volatility.

Duration is the most common measure used to quantify the impact of changes in bond prices due to change in interest rates. Using this measure it is estimated that a one percent increase or decrease in interest rates, with all other variables held constant, would result in a change in fair value on Canadian bonds of 15.7% or $13,314,878 (2019 - 14.6% or $11,121,231).

ii) Currency risk is the risk that the value of non-Canadian investments measured in Canadian dollars will fluctuate due to changes in foreign exchange rates primarily related to foreign equity holdings. In some instances, forward foreign exchange contracts are used to manage currency exposure in connection with securities purchased in foreign currency. Forward foreign exchange contracts are contractual agreements that establish an agreed upon exchange rate at a settlement date in the future for the purpose of protecting future cash flows from adverse price movements.

A 10 percent increase or decrease in exchange rates, with all other variables held constant, would result in a change in unrealized gains/(losses) of $8,107,839 (2019 - $7,448,666). Generally when there is a 10% strengthening (weakening) of the Canadian dollar versus the corresponding currency, there would be a 10% decrease (increase) in the value of the corresponding country's portion of the portfolio from this currency movement.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

iii) Other price risk is the risk that the fair value or future cash flows from portfolio holdings fluctuate because of changes generally, in market prices, other than those arising from interest rate risk or currency risk or as a result of a deterioration in the outlook for a specific issuer. To manage its price risk arising from investments in equity securities, by policy, the portfolio is well diversified. The managed account agreement sets out the limits of investments in any one security as well as concentration within market sectors.

The Plan's target asset allocation based on fair value is:

Fixed income	35 %
Canadian equity	35 %
Foreign equity	25 %
Cash	5 %

Total exposure to equities is to be no less than 35% of the Pension Fund and no more than 70% of the Pension Fund.

b) Liquidity Risk

Liquidity risk is the risk that the Plan will encounter difficulty in having available sufficient funds to meet its commitments as they come due. It is the Pension Plan's policy to ensure that it will have sufficient cash and short-term investments to allow it to meet its liabilities when they come due.

The term to maturity and the related market values of bonds and debentures are as follows:

	(in thousands of dollars)	
	2020	**2019**
Term to Maturity		
Less than one year	$ 357	$ 1,392
One to five years	73,553	8,386
Over five years	11,071	66,221
Total bonds and debentures	$ 84,981	$ 75,999

c) Credit Risk

Credit risk arises from the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract. Credit risk is the risk the issuer of the debt security or a counter party to a derivative contract is unable to meet its financial obligation. Credit risk encompasses the risk of a deterioration of credit worthiness and concentration risk. The Plan limits credit risk through a managed account agreement with its investment manager that details the specific quality and concentration constraints.

At December 31, 2020, the Plan's maximum credit risk exposure related to cash and short-term investments and bonds and debentures is $85,724,296 (2019 - $75,998,702), and accounts receivable is $5,542,729 (2019 - $933,775). The Plan limits credit risk by acquiring high quality securities and following the managed account agreement. The managed account agreement establishes limits for ownership of investments and acceptable credit ratings. In the case of bonds and debentures, all must be rated BBB or higher.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

The breakdown of the fixed income investment portfolio by credit rating from various rating agencies are as follows:

	(in thousands of dollars)			
	2020		**2019**	
Bonds and debentures investments				
Credit Rating				
AAA	$ 16,182	19.0 %	$ 13,339	17.5 %
AA	32,565	38.3 %	38,575	50.8 %
A	20,893	24.6 %	12,385	16.3 %
BBB	15,341	18.1 %	11,700	15.4 %
	84,981	100.0 %	75,999	100.0 %
Cash and short-term investments	-		-	
	$ 84,981		$ 75,999	

4. Capital Management

The capital of the Brandon University Retirement Plan is comprised of the net assets available for benefits. The combined assets of the Plan are held in the name of the Trustees of the Plan as described in Note 1 a).

The Trustees, as the administrators of the Plan, on behalf of Brandon University, have developed appropriate risk management strategies, as described in Note 3, to preserve the net assets available for benefits. In accordance with the provisions of The Pension Benefits Act of the Province of Manitoba and the provisions of the Income Tax Act (Canada) a Statement of Investment Policies and Procedures (SIPP) has been established. The SIPP states the investment objectives and investment guidelines by class of investment. The objective when managing capital is to maximize the long-term total return through prudent selection of investments in compliance with the investment rules under the respective federal and provincial Pension Benefits Acts.

There have been no significant changes to the University's capital management objectives, policies and processes in the year nor have there been any changes in what the Trustees consider to be the Plan's capital. The Pension Plan has complied with externally imposed capital requirements during the year.

5. Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair value measurements are based on the assumptions that market participants would use when pricing the item being measured under current market conditions, including assumptions about risk.

The Plan uses a fair value hierarchy under which the inputs to valuations techniques used to measure fair value are categorized into three levels. They are as follows:

Level 1: Inputs are quoted market prices (unadjusted) in active markets for identical assets or liabilities the Plan can access at the measurement date.
Level 2: Inputs are inputs other than quoted prices included within Level 1 that are observable for the assets or liability, either directly (prices) or indirectly (derived from prices).

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

Level 3: Inputs are unobservable inputs for the asset or liability.

(in thousands of dollars)

	2020			2019		
	Level 2	Level 3	Total	Level 2	Level 3	Total
Cash	$ 192	-	$ 192	$	-	$
Short-term investments	552	-	552		-	
Bonds and debentures	84,981	-	84,981	75,998	-	75,998
Canadian equities	58,491	-	58,491	84,383	-	84,383
Foreign equities	46,018	35,060	81,078	42,768	-	42,768
	$ 190,234	$35,060	$ 225,294	$ 203,149	$ -	$ 203,149

6. Investments

Section 3.29 of the Pension Benefits Act Regulations requires disclosure of each investment that has a fair value greater than 1% of the fair value of all investments. The investments, including pooled funds, are as follows:

		2020
Bonds and debentures:		
Connor, Clark & Lunn Long Bond Fund Class A	$	77,104,413
Connor, Clark & Lunn High Yield Bond Fund I	$	7,876,591
Canadian equities:		
Connor, Clark & Lunn Q Equity Extension I	$	19,440,404
PCJ Canadian Equity Fund	$	19,432,605
Scheer Rowlett & Associates Canadian Equity Fund	$	19,618,358
US equities:		
Connor, Clark & Lunn Q US Equity Extention Fund	$	35,060,605
Non-North American equities:		
NS Partners Int'l Equity Fund A	$	34,621,521
Connor, Clark & Lunn Emerging Markets Equity	$	11,396,267

7. Actuarial Valuation

The actuarial present value of accrued pension benefits was determined using the accrued benefit method prorated on service and using assumptions recommended by the actuary and approved by the Trustees. An actuarial valuation was prepared as at December 31, 2019 by Eckler Ltd., a firm of consulting actuaries. Those results provide the present value of accrued pension benefits as at December 31, 2019 and accruing cost in 2020. A second actuarial valuation was prepared by Eckler Ltd. as at December 31, 2020 to determine the present value of accrued pension benefits as at December 31, 2020. The valuation as at December 31, 2020 has not yet been filed with Manitoba's Office of the Superintendent - Pension Commission.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

The assumptions used in determining the actuarial value of accrued pension benefits were developed by reference to expected long-term market conditions. Significant actuarial assumptions used in the valuations were:

	2020	2019
Rate of return on investments	5.25 %	5.30 %
Rate of general wage increase	3.00 %	3.00 %
Average rate of salary increase	3.00 % for increases in general wage growth plus a merit and promotion component *, if applicable	3.00 % for increases in general wage growth plus a merit and promotion component*, if applicable
Post retirement cost of living increase	0.75 %	0.75 %
Mortality rate	RPP 2014 Public Sector with Mortality Table (CPM-RPP2014Publ) with full generational improvements in mortality using CPM improvement Scale B (CPM-B)	RPP 2014 Public Sector with Mortality Table (CPM-RPP2014Publ) with full generational improvements in mortality using CPM improvement Scale B (CPM-B)

*Salaries are assumed to increase in accordance with general wage increases in Canada at the rate of 3.0% per year for all members.

Salaries for Academic and Non-union plan members are assumed to increase by an additional merit and promotion component in accordance with the following table:

Age	Average Annual Increase over next 5 years	Average Annual Increase to age 65
30	3.3%	2.3%
35	2.8%	2.2%
40	2.5%	2.0%
45	2.2%	1.9%
50	2.0%	1.8%
55	1.8%	1.7%
60	1.7%	1.7%

The actuarial value of net assets available for pension benefits has been determined reflecting long-term market trends (consistent with the assumptions underlying the valuation of accrued pension benefits). The valuation is based on a four year moving average market method with the market value being the underlying basis. The market value is adjusted by amortizing over a four year period the differences in each year between the fund's actual return and the long term expected return applicable for that year. The long term expected returns on plan assets for the smoothing period was 5.55% in 2017, 5.55% in 2018, 5.55% in 2019, and 5.30% in 2020. However, the excess of the actuarial value over the market value, positive or negative, is limited to 10%.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

The actuarial value of net assets as at December 31 were:

	2020	2019
Market value of net assets available for pension benefits	$ 225,644,000	$ 203,861,000
Market value of changes not reflected in the actuarial value of net assets	(19,237,000)	(10,193,000)
Actuarial value of net assets available for pension benefits	$ 206,407,000	$ 193,668,000
Actuarial value as a percentage of market value	91.5 %	95.0 %

The next required valuation of the Plan will be as at December 31, 2020 and will be completed in 2021.

8. Election for Exemption from Special Payments

The Brandon University Retirement Plan is subject to the Manitoba Pension Benefits Act and Regulations. The University Pension Plans Exemption Regulation 141/2007 allowed the University to make an election to be exempt from solvency and transfer deficiency payments. "2(1) An employer in relation to a university plan may, by filing a written election with the plan administrator, elect to be exempt from the solvency and transfer deficiency provisions."

On January 19, 2009 the University filed such an election.

With the exemption, the Plan will continue to be subject to the going-concern funding provisions of the Act.

9. Going-Concern Deficit Funding

An actuarial valuation performed by the Plan's actuary, Eckler Ltd., to determine the Plan's funding status as required by the Pension Benefits Act of Manitoba, was prepared as at December 31, 2019 and was filed with the Manitoba's Office of the Superintendent - Pension Commission in 2020.

The actuarial valuation indicates an actuarial deficit of $174,000 as at December 31, 2019 using the accrued benefit method. The valuation is based on actuarial assumptions with regard to demographics, rate of return on investments and salary increases to compare the Plan's actuarial assets with its actuarial liabilities

The University is required to fund the matching contributions, as well as the actuarial cost of the defined benefits in excess of the matching costs. A funding deficit is required to be funded over a maximum period of 15 years. The existing funding deficit will be funded over 14 years. The annual special payments required total $26,000 in 2020 (2019 - $21,000). The next actuarial valuation of the Plan is required as at December 31, 2020 and will be completed during 2021.

10. Contributed Services

Brandon University provides staff and miscellaneous administrative services at no charge to the Plan. The cost of these services is not reflected in the Financial Statements.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements
for the year ended December 31, 2020

11. Subsequent Event - COVID-19 Pandemic

As of December 31, 2020 and subsequent to year end, COVID-19 continues to significantly impact Canada and the global economy. The global pandemic has disrupted economic activities and supply chains. Although the disruption from the virus is expected to be temporary, given the dynamic nature of these circumstances, the duration of business disruption and the related financial impact cannot be reasonably estimated at this time. The Brandon University Retirement Plan's ability to continue to meet obligations as they come due is dependant on the continued ability to generate cash flows. Brandon University Retirement Plan's investment revenue may fluctuate with changes in market rates due to the economic changes of COVID-19. Management is actively monitoring the effect on its financial condition, liquidity, operations, industry and workforce.

12. Comparative Figures

Comparative figures for the year ended December 31, 2019 have been reclassified where necessary to conform with the presentation adopted for the year ended December 31, 2020.