

AGENDA

Board Trustees Brandon University Retirement Plan Meeting

Thursday, June 8, 2017
1:00 PM
104 Clark Hall

- 1.0 Call to Order
 - 1.1 Introduction of New Pension Trustees
- 2.0 Approval of Agenda & Minutes
 - 2.1 Approval of Agenda of June 8, 2017
 - 2.2 Approval of Minutes of February 16, 2017
- 3.0 Connor, Clark & Lunn Investment Management Ltd
 - 3.1 Investment Performance Review
- 4.0 New Business
 - 4.1 Approval of the Actuarial Valuation of the Brandon University Retirement Plan as at December 31, 2016 (Eckler Ltd)
 - 4.2 Approval of the Brandon University Retirement Plan Annual Report incorporating the Annual Financial Statements (Todd Birkhan of BDO & Allison Noto of BU)
 - 4.3 Annual Report Mailings
 - 4.4 Election of new Pensioner Representative
- 5.0 Correspondence
 - 5.1 Invoices – CIBC Mellon

CIBC Mellon Invoice 177388. Custodial fees for Jan 2017	\$9,583.19
CIBC Mellon Invoice 178397. Custodial fees for Feb 2017	\$9,322.53
CIBC Mellon Invoice 180264. Custodial fees for Mar 2017	\$9,394.12
CIBC Mellon Invoice 164819. Custodial fees for Apr 2017	\$9,550.71
 - 5.2 Invoices – Eckler Ltd

Eckler Ltd invoice 0194BUN10/17-0106 for Administrative Services For the period covering Dec 15, 2016 to March 31, 2017	\$12,610.34
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Eckler Ltd invoice 0194BUN01/17-0077 for Professional Services \$23,501.49
For the period covering January 1 to March 31, 2017

5.3 Invoices – Connor, Clark & Lunn

CC&L invoice 230249 for Management fees for the period \$114,913.53
Covering January 1 to March 31, 2016

CC&L invoice 227648-1241 for Management fees for the period \$123,542.18
Covering April 1 to June 30, 2017

6.0 For Information

6.1 List of Pension Trustees

7.0 Next Meeting

Thursday, November 23 @ 1:00 PM in Clark Hall Room # 427

8.0 Adjournment



Brandon University Retirement Plan

Board of Trustees

Meeting Minutes

Thursday, February 16, 2017

Present: Heather Gillander (Chair), Tanya Cantlon, Ian Smith, George Manby, John Rice, Scott Lamont (recorder), Sharon Hooper

Regrets: Shawn Chambers, Todd Fugleberg, Becky Lane

Guests: Brent Cuvelier, Lori Satov and Tim Bradshaw of Connor, Clark & Lunn

1.0 Meeting called to order at 1:05 pm

2.0 Approval of Agenda & Minutes

2.1 Approval of Agenda of February 16, 2017

Motion: Moved and Seconded (Cantlon/Manby)

BE IT RESOLVED THAT THE agenda of the meeting of the Brandon University Pension trustees for February 16, 2017 be approved.

CARRIED

2.2 Approval of Minutes of November 17, 2016

Motion: Moved and Seconded (Smith/Rice)

BE IT RESOLVED THAT THE minutes of the Brandon University Pension trustees for the November 17, 2016 meeting be approved.

CARRIED

3.0 Connor, Clark & Lunn Investment Management Ltd (Lori Satov)

3.1 Investment Performance Review

The following points were highlighted in the presentation:

- Markets
 - In 2016, markets fell in the first part of the year and then the market rose to year end.
 - Bonds – people moved out of bonds as interest rates rose, especially in the fourth quarter.
 - Equities – laggards from 2015 outperformed in 2016, such as energy and materials. Dividend paying stocks (defensives) outperformed in 2015 but lagged in 2016. Value stocks have not performed as well since 2008. Value p/e, p/cf, p/bv (p/bv) are the three factors that identify value stocks, such as Magna
 - CC&L will show both the old funds and new ones (per the agreed changes) for the next few periods, for the information of Trustees.
 - Bonds outperformed last quarter, for the year, and more
 - Equities – SRA really outperformed as it is Value based
 - International equities – NS partners performed very poorly – looking for liquidity – over and underweights were wrong calls
 - Asset mix – right on benchmark at quarter end 2016, overweight equities in 2017.
 - Economy had already turned prior to the US election so is not entirely due to the business-friendly President.
 - Markets are expansionary in Developed and Emerging markets.
 - Interest rates are rising and the Fed is looking to raise rates
 - Interest rates are rising because of pick up in the economy and not particularly because of Trump.
 - Risks exist as well and CC&L is watching. Markets have priced in Trumps rhetoric on many business friendly policies. What is not priced in are backlash from protectionist and immigration policies. How will tax cuts to corporations be spent? Companies are cash rich but they are not investing back into the business and instead are rewarding shareholders. Reflects uncertainty in the market.

No significant changes at CC&L have occurred in the last quarter but did mention that Larry Lunn will officially retire in March 2017.

In accordance with what the Pension Trustees and the Board of Governors approved in December 2016, CC&L transitioned the asset mix and the changes are reflected in the current reports.

4.0 New Business

4.1 Brandon University Retirement Plan – Audit Plan 2019

Todd Birkhan of BDO Canada spoke to the pension trustees about the 2016 audit plan. Mr. Birkan represents BDO as well as the Provincial Auditor and they are independent of the University. The following points were highlighted:

- BDO does the front end work following their audit plan and then BDO sends their work to the Provincial Auditor who issues the opinion on the statements, which come back to the Trustees.
- The Auditor General who is governed by the Auditor General Act reports to the Legislative Assembly

- GAAS standards guide the audit process, with room for customization for each business.
- BU has to have systems in place to capture and effectively operate so that information is captured and reported to the BOG, Trustees, etc.
- BDO/AG - are the statements good enough to allow the management and Board to make decisions?
- Test transactions based on size of transactions, and risks (such as disclosures in the Notes of the Statements. Assets and Liabilities are the two major items that are tested. An error a couple of years ago that misstated the discount rate has led to a change in the way the audit is done to ensure that type of error doesn't occur again. Auditor and Actuary work as a team.
- Within Eckler they have checks and balances that ensure error that no one else can catch are caught within Eckler before the numbers leave the firm. Likewise, they rely on the systems in CIBC Mellon that feeds information into the BURP Financial Statements.
- BDO tests Financial and Registration Services systems for BU but relies on the quality of Eckler's processes generally, without testing.
- Materiality has been set at \$1.5 million, the same as for 2015.
- Audit reports are presented to the Trustees at the end of the process, particularly if anything has changed.

The Trustees thanked Mr. Birkan for his presentation and noted that they did not have any questions or concerns.

5.0 Eckler Ltd

5.1 2017 Pension Increase

The Pension Plan provides for an automatic pension increase for pensioners effective July 1, 2017 when the rate of return on the investments in the Plan exceed 6% for the year ended December 31, 2016. The increase is based on the "excess return" up to the rate of CPI, also measured December 31, 2016 for the previous year. In addition, if there is more excess return than what is needed to meet CPI, and if there had been previous years when the pension increases did not meet CPI, a supplementary pension increase may be authorized by the Board of Governors, on the recommendation of the Pension Trustees.

The Pension Trustees recommended a supplementary increase of 0.21% on top of the CPI increase of 1.5% for a total pension increase of 1.71%.

5.2 Updated Financial Position of Plan as at December 31, 2016 & Estimated 2017 University Contributions

Andrew Kulyk of Eckler Ltd prepared an estimate of the going-concern financial position of the Brandon University Retirement Plan as at December 31, 2016 and University contribution for the 2017 calendar year.

Using a 5.55% interest rate, the estimated 2017 University contribution would decrease from 2016. It was noted that the investment asset mix does affect the assumption in the Plan valuation.

5.3 2016 Actuarial Valuation Assumptions

Andrew Kulyk of Eckler Ltd highlighted the following items in a presentation on the process for the upcoming valuation of the Plan:

Valuation refresher

Relevant environment

Valuation assumptions

The following motion was moved and seconded (Rice/Manby)

BE IT RESOLVED THAT THE discount rate be set at 5.55%.

CARRIED

A second motion was moved and seconded (Rice/Lamont)

BE IT RESOLVED THAT THE Brandon University Pension Trustees recommend to the Board of Governors to increase the pension top-up to a maximum of \$100,000.

CARRIED

5.4 CPP Expansion

In October 2016, the federal government introduced Bill C-26, an Act to Amend the Canada Pension Plan, the Canada Pension Plan Investment Board Act and the Income Tax Act.

The expansion will be phased in over seven years starting in 2019. Any changes to the BU Plan in response will have to be negotiated between the employer and BUFA. Without changes to the Plan, pensions will increase, however, both members and employer will have to contribute more to CPP.

5.5 Longevity Risk Management

There is a new plan available to insure for longevity risk in pension plans. Scott, Mike Emsley and Bernie from U of M went to Winnipeg to hear the Eckler expert from Club Vita. The issue is whether the BURP is better to buy an insurance policy to ensure future payments relative to life expectancy or to allow the Plan to fluctuate and absorb it over time. Club Vita will do additional calculations which will help determine whether the insurance premiums are a good deal compared to our estimate of those future payments from the Plan.

6.0 Continuing Business

6.1 Review of Pension Trust Agreement

The sub-committee have met and considered the Trust Agreement.

7.0 Correspondence

Invoices for agenda items 7.1 through 7.3

Motion: Moved and Seconded (Rice/Smith)

BE IT RESOLVED THAT THE Brandon University Pension trustees approve the payment after the fact of the invoices from agenda items 7.1 through 5.3.

CARRIED

8.0 For Information

8.1 February 1, 2017 Engagement Letter from The Office of the Auditor General

Shared with Trustees for information

8.2 List of Pension Trustees

Shared with Trustees for information

9.0 Upcoming Meeting Dates

June 8, 2017

November 23, 2017

10.0 Adjournment

Meeting was adjourned

FIRST QUARTER 2017 REVIEW

Lori Satov
June 8, 2017

BRANDON UNIVERSITY RETIREMENT PLAN

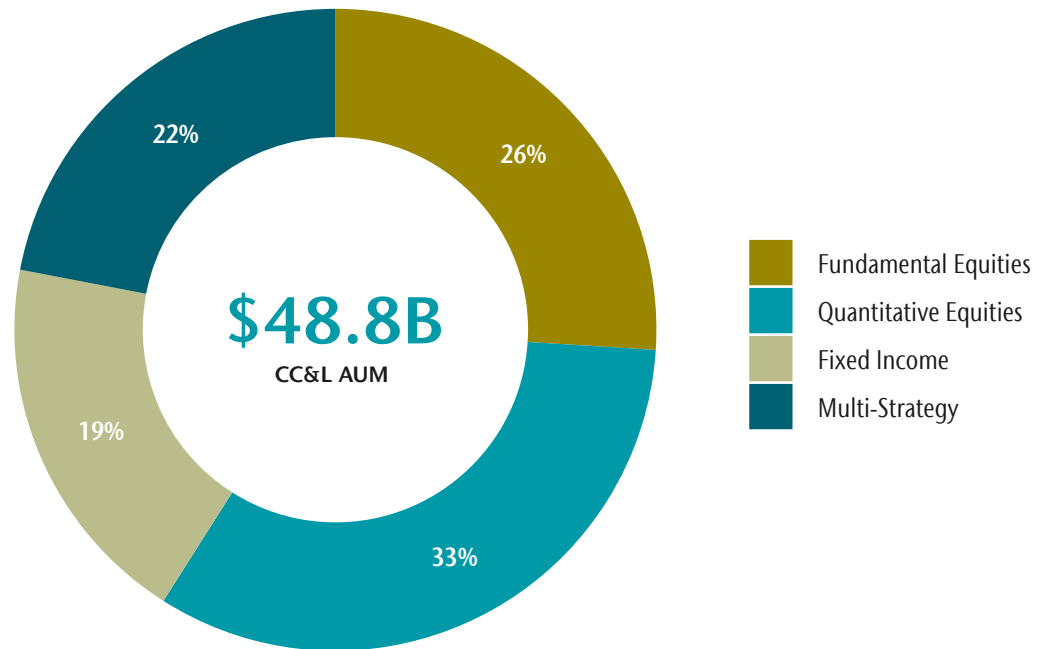
CC&L ORGANIZATIONAL UPDATE

March 31, 2017

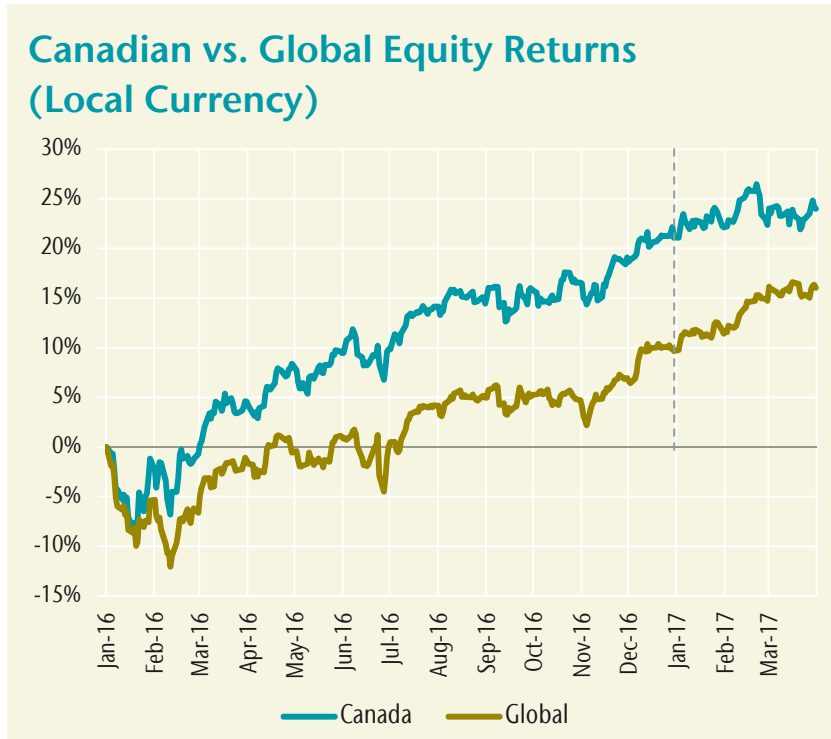
CC&L AUM Breakdown by Strategy

OWNERSHIP

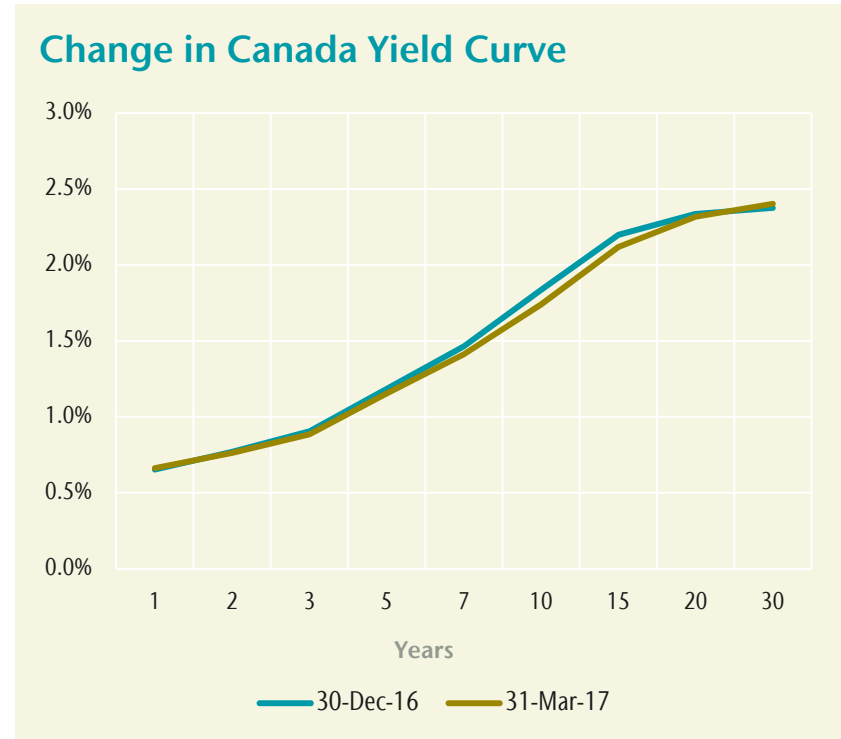
- No changes to structure
- Partner-owned
- Succession plan



MARKETS POST FURTHER GAINS



Source: Thomson Reuters Datastream, MSCI Barra



Source: FTSE TMX Global Debt Capital Markets Inc.



INVESTMENT PERFORMANCE

	Q1 2017	Annualized Returns to March 31, 2017 (%)					
		1 yr	2 yr	3 yr	4 yr	5 yr	10 yr
Brandon University Retirement Plan	3.6	12.1	5.2	7.1	9.2	9.3	5.8
Benchmark*	3.7	12.8	5.1	7.2	8.7	8.5	5.4
Added Value	-0.2	-0.7	0.0	-0.1	0.5	0.8	0.4
Fixed Income**	1.9	3.0	2.1	4.8	3.9	4.3	5.2
CC&L Long Bond Fund	1.9						
FTSE TMX Canada Long Term Overall Bond Index	1.9						
CC&L High Yield Bond Fund	1.6						
High Yield Benchmark***	1.9						

All returns are gross of fees. Added Value may differ due to rounding to one decimal.

*Benchmark effective December 19, 2016: 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\$) & 1.5% FTSE TMX Canada Universe BBB Bond Index & 0.5% Merrill Lynch Canada BB-B High Yield Index & 35% FTSE TMX Canada Long Term Overall Bond Index. Prior Benchmark: 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 TMX Canada 91 Day Tbill Index.

**CC&L Bond Fund transitioned to CC&L Long Bond Fund & CC&L High Yield Bond Fund on December 19, 2016.

*** 30% Merrill Lynch US High Yield Cash Pay BB Index (CAD\$) & 30% Merrill Lynch US High Yield Cash Pay BB Index (USD\$) & 30% FTSE TMX Canada Universe



INVESTMENT PERFORMANCE CONT'D

	Q1 2017	Annualized Returns to March 31, 2017 (%)					
		1 yr	2 yr	3 yr	4 yr	5 yr	10 yr
Canadian Equities	2.7	19.5	6.5	6.1	9.4	9.3	5.4
CC&L Q Equity Extension Fund*	4.3	22.2	9.0	10.9	13.8	14.0	
SRA Canadian Equity Fund	2.4	22.6	9.6	6.3	8.8	8.5	4.4
PCJ Canadian Equity Fund	1.3	16.0	3.5	4.9	8.0	7.9	5.1
S&P/TSX Composite Index	2.4	18.6	5.3	5.8	8.3	7.8	4.7
CC&L US Equity Fund	5.0	20.5	11.8	17.4	21.8	21.0	9.5
S&P500 Index (CAD\$)	5.5	20.8	12.1	17.6	21.1	20.0	9.1
NS Partners International Equity Fund A	5.1	8.1	1.8	5.7	10.8	11.4	2.8
MSCI EAFE Index (CAD\$)	6.8	15.7	4.4	7.5	12.4	12.6	3.0
CC&L Q Emerging Markets Equity Fund**	13.6						
MSCI Emerging Markets Net	10.8						

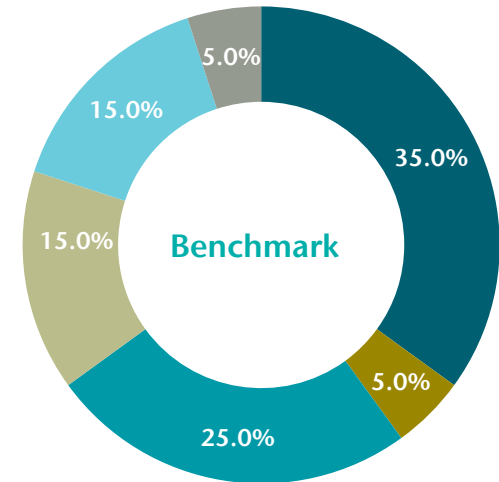
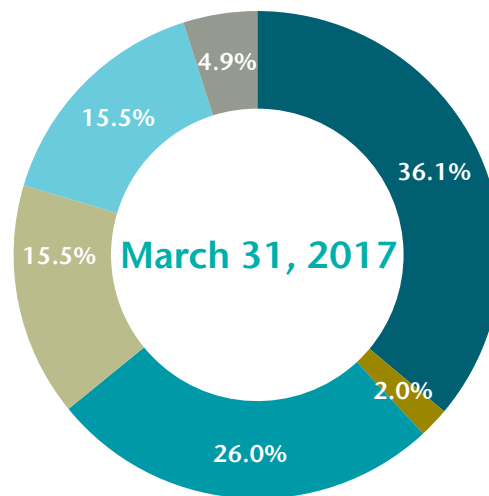
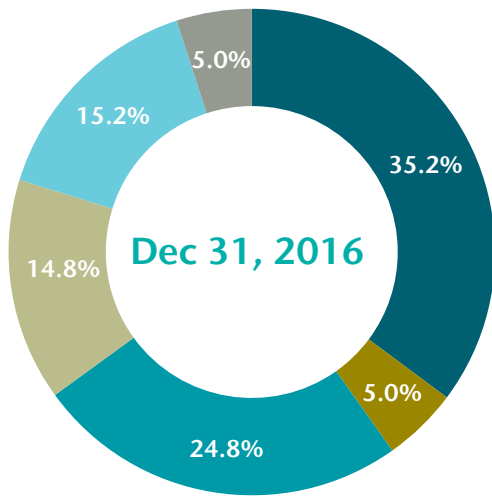
All returns are gross of fees. Added Value may differ due to rounding to one decimal.

*CC&L Canadian Q 120/20 Fund transitioned into CC&L Q Equity Extension Fund on December 19, 2016.

**CC&L Q Emerging Markets Equity Fund mandate added on December 19, 2016.



PORTFOLIO STRUCTURE – ASSET MIX STRATEGY



Source: Connor, Clark & Lunn Financial Group Ltd.



CHANGES TO ASSET MIX

(Returns in CAD)

	Previous Portfolio	Current Portfolio	Change	+/-
Canadian Equity	35.0%	25.0%	-10%	+
▪ Growth (PCJ)	11.67%	8.33%		
▪ Value (SRA)	11.67%	8.33%		
▪ Quantitative (CC&L120/20*)	11.67%	8.33%		
International Equities	25.0%	35.0%	+10%	+
EAFE Equity (NS Partners)	12.5%	15.0%		
Q US Equity (CC&L)	12.5%	15.0%		
Q EM Equity (CC&L)	0%	5.0%		
Fixed Income	35.0%	40.0%	+5%	+
Universe Bonds	35.0%	0%		
Long Bonds	0%	35.0%		
High Yield Bonds	0%	5.0%		
Cash	5.0%	0%	-5%	+

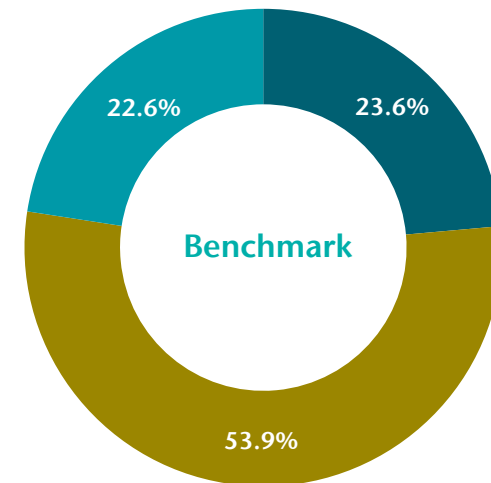
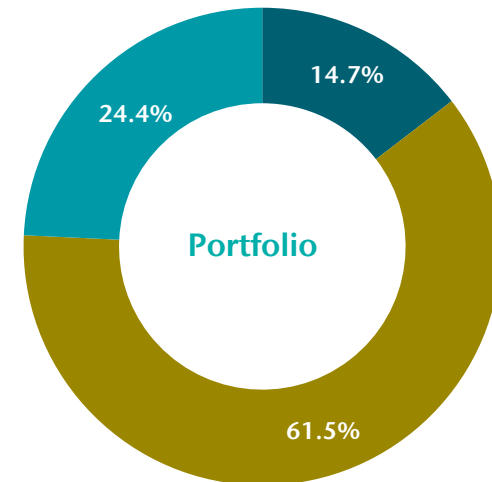
* CC&L Q 160/60 for the proposed portfolio



Q1 FIXED INCOME STRATEGY REVIEW

Investment Themes

- Interest rates range-bound, but risks remain
 - » Will hard data follow through, or will soft data turn lower?
 - » Financial conditions have tightened
- Yield curve steepening expected
- Credit premium
 - » Near term benefits from nominal GDP growth
 - » Valuations look stretched
 - » Favour provincials



Q1 HIGH YIELD BOND FUND STRATEGY REVIEW

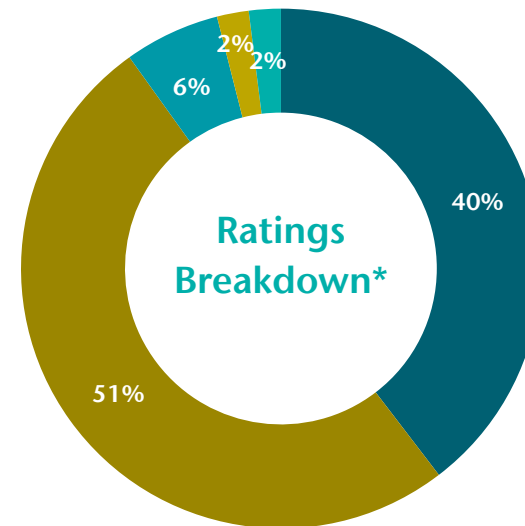
As of March 31, 2017

REVIEW

- Lower quality credits outperformed in January and February; high yield sector looked expensive
- Following Fed rate hike, spreads widened out in March
- Lower oil prices negatively led to spread widening in the energy sector

STRATEGY

- Economic outlook remains supportive for corporate spreads
- Focus on companies that offer attractive risk/reward opportunities in the BBB and BB rating categories



Effective Portfolio Yield	4.1%
Weighted Average Maturity	6.97 years
Weighted Average Rating	BB High

* As of March 31, 2017



Q1 CANADIAN EQUITY STRATEGY REVIEW

PCJ – Growth Strategy

- Anticipating pro-growth reflationary policies will benefit economically cyclical sectors.
 - » Underweight defensive sectors (telecom and utilities)
 - » Overweight banks due to steeper yield curve and deregulation
 - » Overweight exploration and production companies

SRA – Value Strategy

- Anticipating increased equity market volatility
- Portfolio positioned to benefit from strong U.S. economic growth and rising rates
 - » Overweight the basic materials, integrated energy, banks and consumer discretionary sectors
 - » Avoiding overvalued perceived safety stocks: pipelines, utilities, and REITs

CC&L Q Equity Extension Fund

- Continued decline in industry-level momentum
- Increased exposure to quality, particularly in the energy, utilities and materials sectors



Q1 US/INTERNATIONAL/EM STRATEGY REVIEW

CC&L – US

- Reduced exposure to measures capturing company's foreign revenue contribution as opportunities created following US election diminished
- Change in sector positioning
 - » new overweight in technology due to improved outlook
 - » Reduced overweight to regional banks due to declining growth outlook

NS Partners – International

- More defensive positioning as deterioration in liquidity backdrop sending a more cautious message for markets
- Expecting better performance from Europe and EM
- Remain underweight energy, underweight utilities and real estate

CC&L – Emerging Markets

- Continued decline in industry-level momentum
- Increased exposure to value – particularly at the country level (Taiwan and Korea)

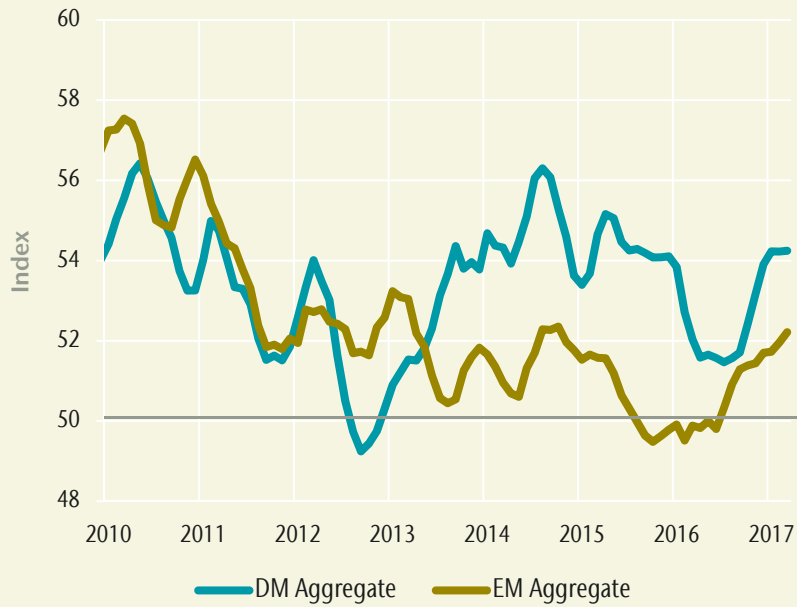




ECONOMIC & MARKET OUTLOOK

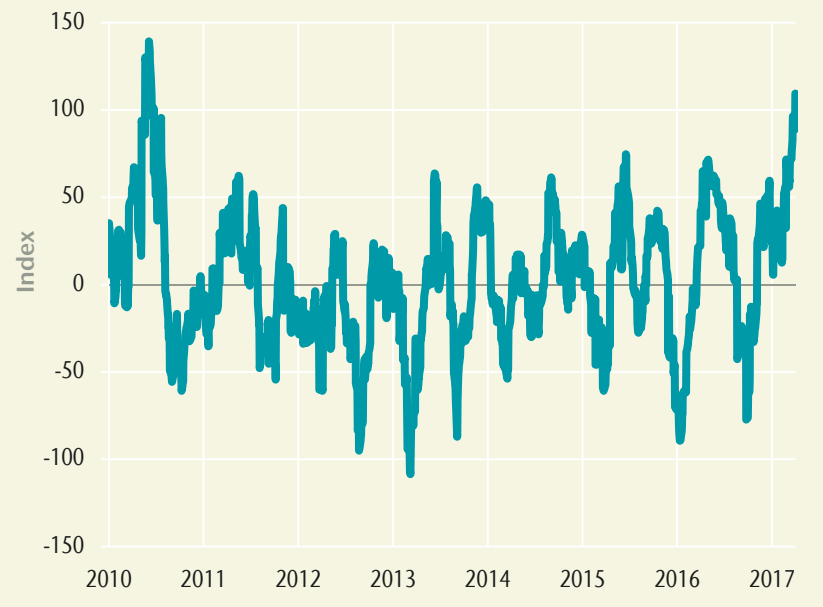
GROWTH UPSWING HAS BEEN SYNCHRONIZED

Activity Picking Up Everywhere ... Markit Purchasing Managers Indices



Source: IHS Markit Economics

... Even in Canada Citigroup Economic Surprise Index, Canada

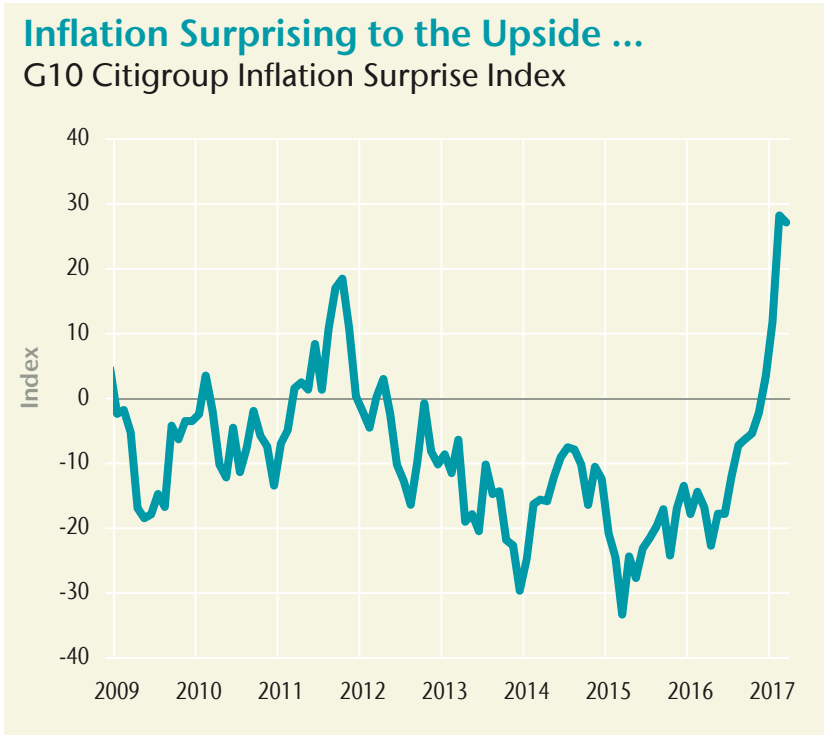


Source: Citigroup Global Markets Inc., Bloomberg

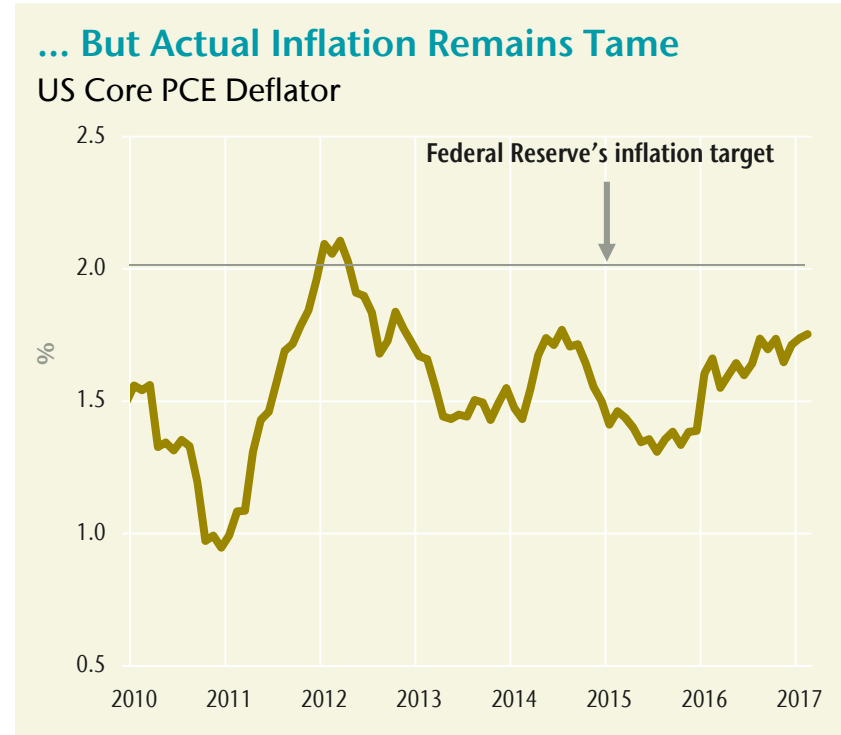
Growth has trended higher for several months



DEFLATION WORRIES MELT, INFLATION ON THE HORIZON



Source: Citigroup Global Markets Inc., Bloomberg



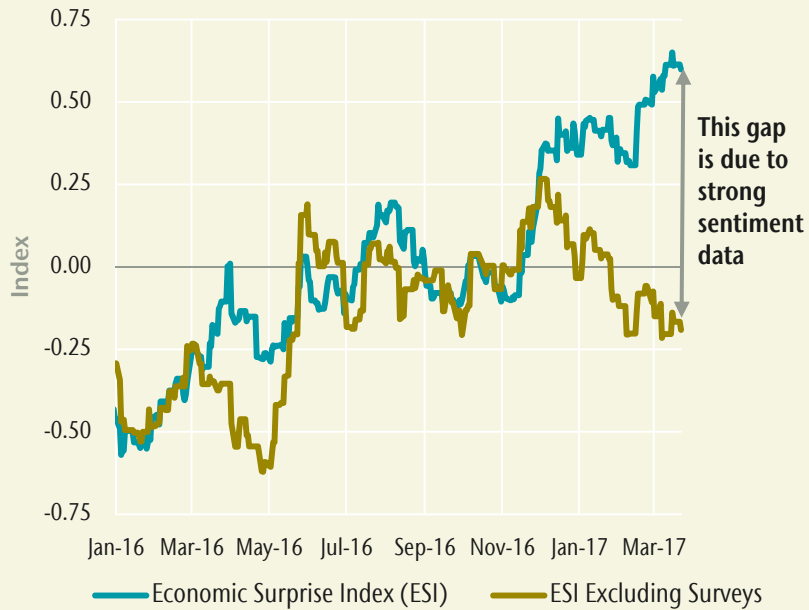
Source: Bureau of Economic Analysis

Inflation environment improving; concerns about inflation are premature



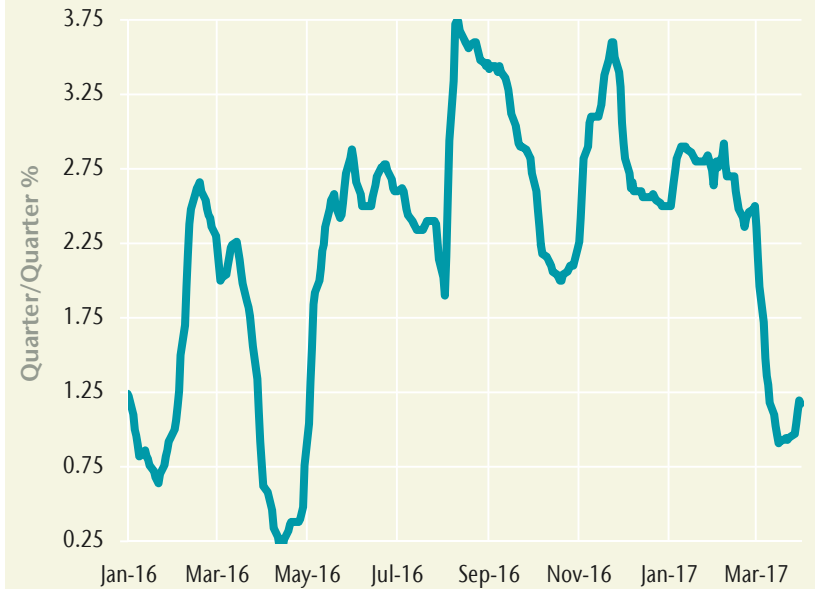
MARKETS WAITING FOR EVIDENCE

Survey Data is Stellar, Actual Activity Less So
 Bloomberg Surprise Index vs “Hard Data” Surprises



Source: Bloomberg, CC&L IM

Q1 GDP Looks Quite Weak So Far
 Atlanta Fed GDP Tracker



Source: Atlanta Federal Reserve Bank

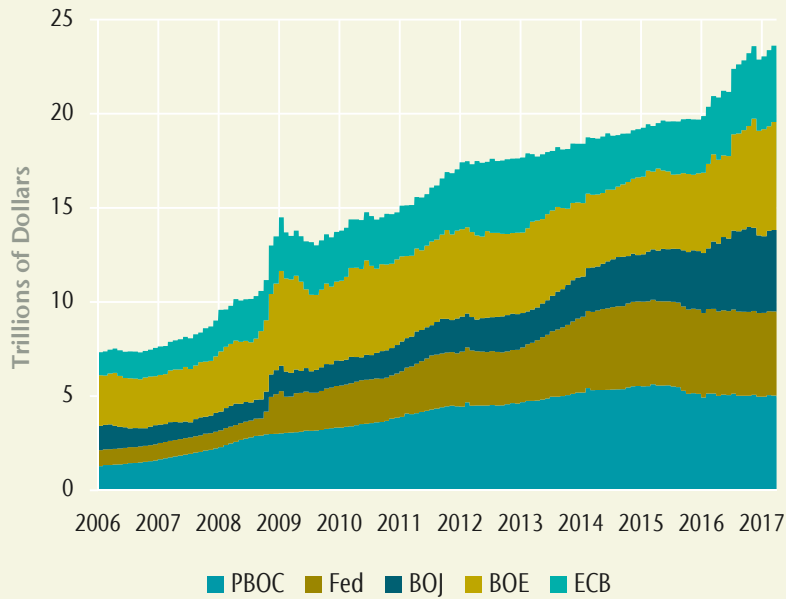
Evidence of reacceleration in US economic activity is yet to come



POLICY NO LONGER A TAILWIND

Central Banks to Ease Off Accelerator

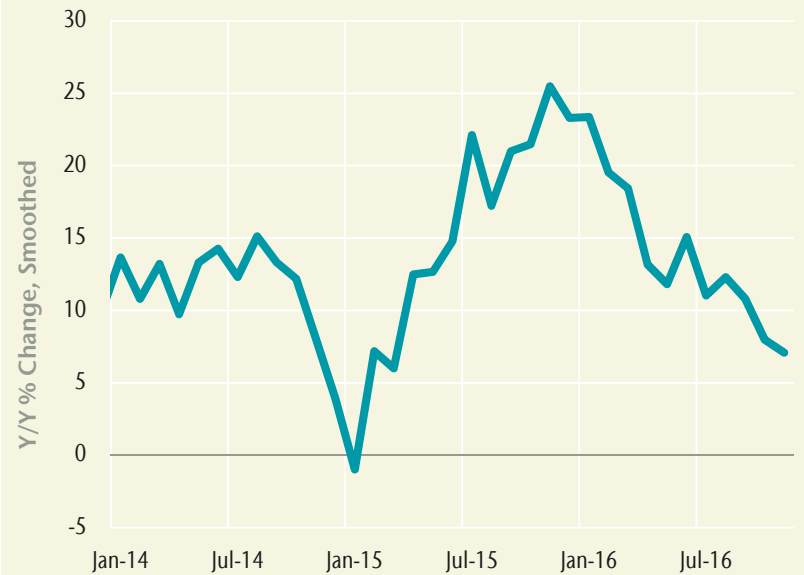
Central Bank Balance Sheets



Source: PBoC, Fed, BoJ, BoE, ECB

Fiscal Spending Also Slowing

Government Spending, China



Source: National Bureau of Statistics of China

2017 will be the first year this cycle with no major policy stimulus



APPENDIX



BRANDON UNIVERSITY RETIREMENT PLAN CASH FLOWS

January 2, 2017 Market Value	\$	169,190,463.99
Contributions	\$	1,367,354.61
Withdrawals	\$	-2,179,379.95
Investment Gains	\$	6,039,819.78
March 31, 2017 Market Value	\$	174,418,258.43
Total Rate of Return		3.57%
Investment Management Fees:		123,542.18



Q1 CANADIAN EQUITY STRATEGY POSITIONING

March 31, 2017

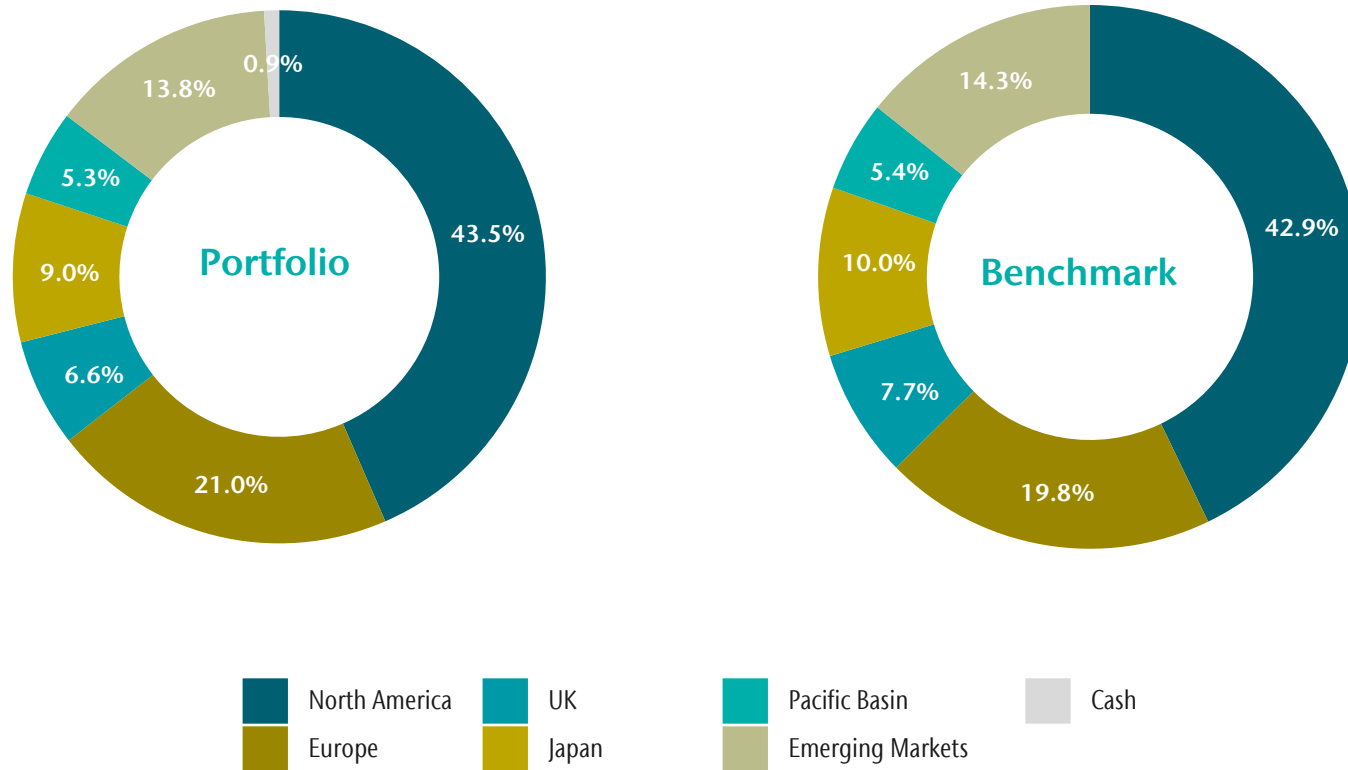
	Portfolio Weight	Index Weight Under/Over
Energy	19.5%	-1.8%
Materials	13.7%	1.6%
Industrials	10.6%	1.7%
Consumer Discretionary	5.9%	0.7%
Consumer Staples	2.8%	-1.0%
Health Care	0.1%	-0.5%
Financials	38.6%	4.1%
Technology	2.2%	-0.7%
Communication	4.7%	0.0%
Utilities	1.0%	-2.0%
Real Estate	0.6%	-2.4%

Benchmark: S&P/TSX Composite Index. Cash = 0.3%

Source: Connor, Clark & Lunn Financial Group Ltd.



Q1 INTERNATIONAL EQUITY STRATEGY POSITIONING



Benchmark: 42.9% S&P500 Index (CAD\$) & 42.9% MSCI EAFE Index (CAD\$) & 14.3% MSCI Emerging Markets Net (CAD\$)

Source: Connor, Clark & Lunn Financial Group Ltd.





CELEBRATING
90 YEARS OF

**PEOPLE
PASSION
INSIGHT**

Brandon University

**Actuarial Valuation as at December 31, 2016
Presentation to Trustees**

June 8, 2017

Eckler *90* 1927-2017
CONSULTANTS + ACTUARIES

eckler.ca

Valuation Results

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

Going Concern Valuation

From page 8 of the Report:

Going Concern Valuation	12.31.2016	12.31.2015
Going Concern Assets		
Actuarial value of Plan assets	\$167,465,000	\$155,802,000
Going Concern Liabilities		
Retired members and survivors	\$93,562,000	\$90,117,000
Terminated vested members	\$4,907,000	\$5,269,000
Active members – Division 1	\$58,818,000	\$56,546,000
Active members – Division 2	\$14,921,000	\$13,651,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total going concern liabilities	\$172,682,000	\$166,128,000
Surplus / (unfunded liability)	(\$5,217,000)	(\$10,326,000)
Funded Ratio	0.970	0.938

Going Concern Valuation Contribution requirements

From page 15 of the Report:

	Total
Total Current Service Cost	\$5,503,000
Estimated Employee Contributions	\$2,395,000
Employer Current Service Cost	\$3,108,000
Estimated 2017 Pensionable Earnings	\$36,566,000
Employer Current Service Cost as a percentage of Earnings	8.50%
Special Payments	
Unfunded liability (12.31.2010)	\$21,000
Unfunded liability (12.31.2011)	\$657,000
Solvency deficiency	-
Total Special Payments	\$678,000
Total Minimum University Contribution	\$3,786,000

Going Concern Valuation

Plan experience 2016

From page 9 of our report:

Going concern surplus (unfunded liability) at Dec. 31, 2015	(\$10,326,000)
Special payments to eliminate the unfunded liability	\$1,291,000
Transfers in for reciprocal transfers	\$34,000
Interest on surplus (unfunded liability), special payments and transfers in for 2016 at 5.55%	(\$536,000)
Expected surplus (unfunded liability) at Dec. 31, 2016	(\$9,537,000)
Plus actuarial gains(losses) due to experience differing from the actuarial assumptions in 2016:	
▪ Gain/(loss) on terminations other than assumed	(\$207,000)
▪ Gain/(loss) on active and deferred member retirements other than assumed	\$832,000
▪ Gain/(loss) on mortality other than assumed	(\$367,000)
▪ Gain/(loss) on salaries and the YMPE increasing at different rates than assumed	\$223,000
▪ Gain/(loss) attributable to net investment experience	\$4,861,000
▪ Gain/(loss) attributable to pension increases other than assumed	(\$726,000)
Net actuarial experience gain/(loss)	\$4,616,000
Net gain/loss attributable to additional pension increase of 0.21% for eligible retirees and deferred members	(\$101,000)
Net gain/loss attributable to data changes	(\$162,000)
Other experience resulted in a net gain/(loss) of approximately	(\$33,000)
Going concern surplus (unfunded liability) at Dec. 31, 2016	(\$5,217,000)

Solvency Valuation

From page 13 of our report:

Solvency Valuation	12.31.2016	12.31.2015
Solvency Assets		
Actuarial value of Plan assets (A)	\$167,465,000	\$155,802,000
Present value of the first five years of special payments to eliminate the going concern unfunded actuarial liability	\$3,149,000	\$6,008,000
Allowance for wind-up expenses (B)	(\$295,000)	(\$290,000)
Total solvency assets	\$170,319,000	\$161,520,000
Solvency Liabilities		
Retired members and survivors	\$107,576,000	\$104,765,000
Terminated vested members	\$6,219,000	\$6,730,000
Active members – Division 1	\$77,468,000	\$74,197,000
Active members – Division 2	\$19,614,000	\$17,808,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total solvency liabilities (C)	\$211,351,000	\$204,045,000
Solvency excess/ (shortfall)	(\$41,032,000)	(\$42,525,000)
Solvency ratio [(A + B) ÷ C]	0.791	0.762

- > In the absence of the solvency exemption, the solvency special payment would be an additional \$8.8M per year, for 5 years
- > Solvency ratio < 0.90 --> next valuation due to be filed as at December 31, 2017

Wind-up Valuation

From page 12 of our report:

Wind-up Valuation	12.31.2016	12.31.2015
Wind-up Assets		
Market value of Plan assets	\$169,953,000	\$159,208,000
Allowance for wind-up expenses	(\$295,000)	(\$290,000)
Total wind-up assets	\$169,658,000	\$158,918,000
Wind-up Liabilities		
Retired members and survivors	\$107,576,000	\$104,765,000
Terminated vested members	\$6,219,000	\$6,730,000
Active members – Division 1	\$77,468,000	\$74,197,000
Active members – Division 2	\$19,614,000	\$17,808,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total wind-up liabilities	\$211,351,000	\$204,045,000
Wind-up excess/ (shortfall)	(\$41,693,000)	(\$45,127,000)

- > 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.
 - > This is the "true" wind-up position of the Plan.

Next Steps

- > Edits to and/or approval of Report
- > Filing with MB Superintendent and CRA
- > University implementation of contribution requirements
- > Determination of any year-to-date over/under contribution made based on 2017 funding requirements

Questions?

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**Report on the Actuarial Valuation of The
Brandon University Retirement Plan
As At December 31, 2016**

Registration Number 0206078

June 8, 2017

Prepared by:

Eckler

CONSULTANTS + ACTUARIES

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**Report on the Actuarial Valuation of the Brandon
University Retirement Plan as at December 31, 2016****SUMMARY OF RESULTS**

	12.31.2016	12.31.2015
Going Concern Financial Position		
Going concern assets	\$167,465,000	\$155,802,000
Going concern liabilities	<u>\$172,682,000</u>	<u>\$166,128,000</u>
Going concern surplus/(unfunded liability)	(\$5,217,000)	(\$10,326,000)
Going concern funded ratio	0.970	0.938
Windup Financial Position		
Market value of assets net of provision for wind-up expenses	\$169,658,000	\$158,918,000
Windup liability	<u>\$211,351,000</u>	<u>\$204,045,000</u>
Windup excess/(deficiency)	(\$41,693,000)	(\$45,127,000)
Solvency Financial Position		
Solvency assets net of provision for wind-up expenses	\$170,319,000	\$161,520,000
Solvency liabilities	<u>\$211,351,000</u>	<u>\$204,045,000</u>
Solvency excess/(deficiency)	(\$41,032,000)	(\$42,525,000)
Solvency ratio	0.791	0.762
Minimum Contributions in Year Following valuation		
Estimated employer's current service cost	\$3,108,000	\$3,004,000
Minimum special payments	<u>\$678,000</u>	<u>\$1,291,000</u>
Total minimum required contributions	\$3,786,000	\$4,295,000

Section 1. EXECUTIVE SUMMARY

This report presents the results of a valuation of the Brandon University Retirement Plan as at December 31, 2016. The valuation was undertaken at the request of Heather Gillander, Chair of the Pension Trustees, in order to determine the funded position of the Plan as at December 31, 2016 and to satisfy the requirements of the Pension Benefits Act of Manitoba and the Income Tax Act. The previous valuation of the Plan was performed as at December 31, 2015.

1. Using the projected unit credit accrued benefit funding method the Plan has an unfunded liability equal to \$5,217,000 at December 31, 2016. This must be funded by special payments at least equal to the amounts shown, for the applicable period, outlined in the following table.

Effective Date	Amortization Period	Annual Special Payment
December 31, 2010	Jan 2011 – Dec 2025	\$21,000
December 31, 2011	Jan 2012 – Dec 2026	\$657,000
Total		\$678,000

2. The decrease in unfunded liability from \$10,326,000 at December 31, 2015 to \$5,217,000 at December 31, 2016 is mainly due to the net effect of (i) investment returns greater than expected based on a smoothed asset valuation method, and ii) special payments made in 2016 to fund the unfunded liability.
3. After including the present value of special payments due in the next five years, there is a solvency deficiency of \$41,032,000. The solvency ratio is 0.791.

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 Manitoba Pension Commission 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, 2016	Jan 2017 – Dec 2021	\$8,839,000

These payments would be in addition to those required to fund the going concern unfunded liability.

4. If the Plan was wound-up on the valuation date the liabilities would exceed assets by \$41,693,000.
5. 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, 2017 and the next valuation	8.50%	\$3,108,000
Unfunded liability special payments	-	\$678,000
Total		\$3,786,000

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

6. 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, 2017.
7. Based on the Plan's investment experience from 2013-2016, retired and deferred members are eligible for a supplementary pension increase effective July 1, 2017. The amount of the increase, capped by the increase in the Consumer Price Index, is 1.5%. In addition, the University, based on a recommendation of the Board of Trustees, has approved an additional pension increase of 0.21% for eligible retired and deferred members, for a total increase of 1.71% (1.50% plus 0.21%). The effect of these increases are reflected in the going concern valuation results at December 31, 2016.
8. This report should be filed with the Office of the Superintendent – Pension Commission (Manitoba), to meet the filing requirements of the Pension Benefits Act (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, 2017.

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 2013-2016, retired and deferred members are eligible for a supplementary pension increase in 2017 effective July 1. The amount of the increase is capped by the increase in the Consumer Price Index and is equal to 1.5%.

In addition, the University, based on a recommendation of the Board of Trustees, has approved an additional pension increase of 0.21% for eligible retired and deferred members, for a total increase of 1.71% (1.51% plus 0.21%).

The pension increases effective July 1, 2017 are reflected in our going concern valuation.

SUBSEQUENT EVENTS

We are not aware of any other events that occurred between the valuation date and the date this report was completed that 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 (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 (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.

FILING REQUIREMENTS

The last filed actuarial report was effective December 31, 2015. 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.

Section 3. DATA

The valuation was based on data as of the valuation date, December 31, 2016, supplied to us by Brandon University. This data is summarized in Appendix C. We note that while the December 31, 2016 valuation includes the pension increases effective July 1, 2017, the pensions summarized in Appendix C do not reflect the increase.

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;
- a member's gender did not change;
- 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 draft financial statements for the fund prepared by Brandon University for the December 31, 2016 year end.

Section 4. GOING CONCERN VALUATION

VALUATION BALANCE SHEET

The following is the going concern valuation balance sheet as at December 31, 2016 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	12.31.2016	12.31.2015
<u>Going Concern Assets</u>		
Actuarial value of Plan assets	\$167,465,000	\$155,802,000
<u>Going Concern Liabilities</u>		
Retired members and survivors	\$93,562,000	\$90,117,000
Terminated vested members	\$4,907,000	\$5,269,000
Active members – Div 1 - Academic and non-union members	\$58,818,000	\$56,546,000
Active members – Div 2 – Non-Academic union members	\$14,921,000	\$13,651,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total going concern liabilities	\$172,682,000	\$166,128,000
Surplus / (unfunded liability)	(\$5,217,000)	(\$10,326,000)
Funded Ratio	0.970	0.938

The liability as at December 31, 2016 for Other Benefits Outstanding includes:

- \$98,000 for lump sum benefit payments that came due prior to December 31, 2016 and were paid in 2017, and other small benefit payouts to terminated members that are pending settlement,
- \$225,000 for sessional employees with no pensionable earnings in 2016.

The present value at December 31, 2016 of previously established special payments is \$9,574,000, which exceeds the going concern unfunded liability at December 31, 2016 of \$5,217,000. Due to the going concern actuarial gain and in accordance with Pension Benefits Act of Manitoba and Regulations, special payments may be reduced, beginning with the earliest established special payment. As such, the annual going-concern special payment established effective December 31, 2010 may be reduced from \$634,000 to \$21,000.

Required special payments, for the applicable periods, are outlined in the following table.

Effective Date	Amortization Period	Annual Special Payment
December 31, 2010	Jan 2011 – Dec 2025	\$21,000
December 31, 2011	Jan 2012 – Dec 2026	\$657,000
Total		\$678,000

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EXPERIENCE GAIN AND LOSS

The Plan has a going concern unfunded liability of \$5,217,000 at December 31, 2016. Our previous valuation of the Plan showed the Plan had an unfunded liability of \$10,326,000. The approximate derivation of the going concern unfunded liability at December 31, 2016 is as follows:

Going concern surplus (unfunded liability) at Dec. 31, 2015	(\$10,326,000)
Special payments to eliminate the unfunded liability	\$1,291,000
Transfers in for reciprocal transfers	\$34,000
Interest on surplus (unfunded liability), special payments and transfers in for 2016 at 5.55%	(\$536,000)
Expected surplus (unfunded liability) at Dec. 31, 2016	<u>(\$9,537,000)</u>
Plus actuarial gains(losses) due to experience differing from the actuarial assumptions in 2016:	
▪ Gain/(loss) on terminations other than assumed	(\$207,000)
▪ Gain/(loss) on active and deferred member retirements other than assumed	\$832,000
▪ Gain/(loss) on mortality other than assumed	(\$367,000)
▪ Gain/(loss) on salaries and the YMPE increasing at different rates than assumed	\$223,000
▪ Gain/(loss) attributable to net investment experience	\$4,861,000
▪ Gain/(loss) attributable to pension increases other than assumed	(\$726,000)
Net actuarial experience gain/(loss)	<u>\$4,616,000</u>
Net gain/loss attributable to additional pension increase of 0.21% for eligible retirees and deferred members	(\$101,000)
Net gain/loss attributable to data changes	(\$162,000)
Other experience resulted in a net gain/(loss) of approximately	(\$33,000)
Going concern surplus (unfunded liability) at Dec. 31, 2016	<u>(\$5,217,000)</u>

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

- The University made special payments to eliminate the unfunded liability equal to \$1,291,000.
- The actual net investment return earned by the Plan in 2016, based on smoothed asset values, was 8.69% compared to an expected return of 5.55% per year resulting in a gain of \$4,861,000.

- There were fewer retirements from active membership (9) than expected (25).

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 5.55% to 4.55% is an increase in the total going concern liability of \$21,278,000.

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 2017, the Yearly Maximum Contributory Earnings (YMCE) is \$115,340.

Based on the assumptions and membership data described herein, we estimate that the University's current service cost from December 31, 2016, until the effective date of the next valuation, is 8.50% 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, 2015 was 8.65% of pensionable earnings. The decrease in the current service cost from 8.65% to 8.50% of pensionable earnings is primarily due to plan member experience in 2016.

The table below summarizes the University's estimated current service contribution for 2017. The actual dollar amount of current service contribution for 2017 may be higher or lower than the amount indicated below if the actual pensionable earnings are different than estimated.

	2017
Total Current Service Cost	\$5,503,000
Estimated Employee Contributions	\$2,395,000
Employer Current Service Cost	\$3,108,000
Estimated 2017 Pensionable Earnings	\$36,566,000
Employer Current Service Cost as a percent of Earnings	8.50%

INTEREST RATE SENSITIVITY OF THE CURRENT SERVICE COST

The effect of decreasing the interest rate used to determine the current service cost by 1% from 5.55% to 4.55% is an increase in the total current service cost of \$1,024,000, or an increase in the 2017 employer current service cost as a percent of pensionable earnings from 8.50% to 11.30%.

Section 5. WIND-UP VALUATION

The purpose of the 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. 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 Between December 31, 2016 and December 30, 2017* dated March 2017. These assumptions are described in detail in Appendix B.
4. In accordance with the CIA Educational Note, the spread above the unadjusted CANSIM series V39062 was determined to be 88 basis points based on a duration of 10.77 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 3.09%.

Based on the Plan provisions in effect on December 31, 2016, 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, 2016:

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Wind-up Valuation	12.31.2016	12.31.2015
Wind-up Assets		
Market value of Plan assets	\$169,953,000	\$159,208,000
Allowance for wind-up expenses	(\$295,000)	(\$290,000)
Total wind-up assets	\$169,658,000	\$158,918,000
Wind-up Liabilities		
Retired members and survivors	\$107,576,000	\$104,765,000
Terminated vested members	\$6,219,000	\$6,730,000
Active members – Div 1 - Academic and non-union members	\$77,468,000	\$74,197,000
Active members – Div 2 – Non-Academic union members	\$19,614,000	\$17,808,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total wind-up liabilities	\$211,351,000	\$204,045,000
Wind-up excess/ (shortfall)	(\$41,693,000)	(\$45,127,000)

As shown above, if the Plan had been wound-up as at December 31, 2016, the wind-up liabilities would have exceeded the wind-up assets by \$41,693,000.

Section 6. SOLVENCY VALUATION

The table below shows the solvency position of the Plan as at December 31, 2016. 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	12.31.2016	12.31.2015
<u>Solvency Assets</u>		
Actuarial value of Plan assets (A)	\$167,465,000	\$155,802,000
Present value of the first five years of special payments to eliminate the going concern unfunded actuarial liability	\$3,149,000	\$6,008,000
Allowance for wind-up expenses (B)	(\$295,000)	(\$290,000)
Total solvency assets	\$170,319,000	\$161,520,000
<u>Solvency Liabilities</u>		
Retired members and survivors	\$107,576,000	\$104,765,000
Terminated vested members	\$6,219,000	\$6,730,000
Active members – Div 1 - Academic and non-union members	\$77,468,000	\$74,197,000
Active members – Div 2 – Non-Academic union members	\$19,614,000	\$17,808,000
Other benefits outstanding	\$323,000	\$416,000
Additional voluntary contributions	\$151,000	\$129,000
Total solvency liabilities (C)	\$211,351,000	\$204,045,000
Solvency excess/ (shortfall)	(\$41,032,000)	(\$42,525,000)
Solvency ratio [(A + B) ÷ C]	0.791	0.762

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 3.09% p.a. to 2.09% and a corresponding decrease in the commuted value rates, is an increase in the liability of approximately \$28,694,000.

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.

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The total estimated incremental cost between the valuation date, December 31, 2016 and the date of the next valuation, December 31, 2017, is \$10,643,000.

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 be 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 Manitoba Pension Commission 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) of \$41,032,000. 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, 2021. Accordingly, the minimum solvency special payment would be \$8,839,000 per year, payable monthly from 2017 to 2021 inclusive.

The following schedule summarizes the special payments that would normally be required to liquidate both the unfunded liability and solvency deficiency as at December 31, 2016. The payments to liquidate the 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, 2016 for purposes of*	
			Solvency Valuation (Next 5 Years)	Going Concern Valuation
<u>Unfunded Liability</u>				
12.31.2010	\$21,000	12.31.2025	\$99,000	\$152,000
12.31.2011	\$657,000	12.31.2026	\$3,050,000	\$5,065,000
<u>Solvency Deficiency</u>				
12.31.2016	\$8,839,000	12.31.2021	\$41,032,000	-
Total	\$9,517,000		\$44,181,000	\$5,217,000

*The present value of payments for the Solvency Valuation reflects only the next five years of payments, discounted at the weighted average solvency interest rate of 3.00% per year. The present value of payments for the Going Concern Valuation reflects all years of payments, discounted at the going concern interest rate of 5.55% per year.

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, University required contributions may be higher than 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 8.50% of pensionable earnings for the period from January 1, 2017 to the effective date of the next valuation, as well as special payments for the unfunded liability as at December 31, 2016.

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	\$5,503,000
Estimated Employee Contributions	\$2,395,000
Employer Current Service Cost	\$3,108,000
Estimated 2017 Pensionable Earnings	\$36,566,000
Employer Current Service Cost as a percentage of Earnings	8.50%
Special Payments	
Unfunded liability (12.31.2010)	\$21,000
Unfunded liability (12.31.2011)	\$657,000
Solvency deficiency	-
Total Special Payments	\$678,000
Total Minimum University Contribution	\$3,786,000

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

MAXIMUM CONTRIBUTIONS

The University may choose to fund at a higher level than the minimum 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 \$41,693,000 – the greater of the unfunded actuarial liability of \$5,217,000 and the windup deficiency of \$41,693,000 as of December 31, 2016; plus

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2. The current service contributions of 8.50% of pensionable earnings for the period ending December 31, 2016, 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, 2016:

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, 2016 to the date of the next valuation. The effective date of the next valuation must be no later than December 31, 2017 in order to comply with applicable legislation.
- b. Based on the projected unit credit accrued benefit funding method the Plan has an unfunded liability of \$5,217,000.
- c. In order to satisfy the funding requirements of the Pension Benefits Act, the University must amortize the unfunded liability according to the following schedule:

	Effective Date	End of Amortization Period	Annual Special Payment (payable monthly)
Unfunded Liability	12.31.2010	12.31.2025	\$21,000
Unfunded Liability	12.31.2011	12.31.2026	\$657,000
Total			\$678,000

- 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 8.50% of pensionable earnings for the period from January 1, 2017 to the date of the next valuation. The estimated cost of benefits for 2017 is \$5,503,000 of which \$2,395,000 will be paid by the members and \$3,108,000 will be paid by the University.
- e. The minimum University contribution required by the Pension Benefits Act exceeds the University contribution otherwise required by the provisions of the Plan.
- f. 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, 2016. The estimated shortfall would be approximately \$41,693,000.
- g. After taking into account the present value of the next five years of special payments to amortize the unfunded liability, the Plan has a solvency shortfall at December 31, 2016 of \$41,032,000 and the solvency ratio is 0.791. Excluding the present value of five years special payments (\$3,149,000), the shortfall is \$44,181,000.

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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

Andrew Kulyk
Fellow of the Canadian Institute of Actuaries

June 8, 2017

Date

DRAFT

Shannon Tesluck
Fellow of the Canadian Institute of Actuaries

June 8, 2017

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.

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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 10 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.

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.

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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 1,000 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	6.30%
Provision for investment management and administration expenses	(0.50%)
Provision for adverse deviations	(0.25%)
Going concern discount rate	<u>5.55%</u>

For the previous valuation an interest rate of 5.55% per year net of expenses was also used.

Expenses:

The interest rate assumption includes an implicit provision for investment and administration expenses paid from 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 2016 levels as follows:

- i. General - 3.0% per year. This rate is based on an allowance for market implied inflation at December 31, 2016 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%

A review of the salary increase experience for gain and loss analysis does not indicate a need to revise this assumption.

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%

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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. We have developed the following table based on 5 years of retirement experience in the Plan from 2011 to 2015. 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 - 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%

Deferred plan members are assumed to retire at age 55.

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 2017 level of \$55,300 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 2016 level of \$54,900 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 5.55% 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 are to be increased in 2017 by 1.71% for eligible retired and deferred

members. We have assumed that pensions will subsequently increase by 0.75% per year thereafter.

Future increases in respect of pensions paid by Great-West Life:

Pension are to be increased in 2017 by 1.71% for eligible retired and deferred members. We have assumed pensions will subsequently increase 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
2013	5.25%
2014	5.75%
2015	5.65%
2016	5.55%

We further restrict the actuarial value of assets to be within 5% of the market value of assets, if required.

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 2016 is determined to be two times their accumulated contributions with interest as at December 31, 2016.

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: <ul style="list-style-type: none">• 2013: 5.25% per year• 2014: 5.75% per year• 2015: 5.65% per year• 2016: 5.55% per year
	Wind-up: Market value
Interest:	3.09% per year for annuity purchase ¹ 2.10% per year for 10 years and 3.50% 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:	\$295,000 (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.

¹ In accordance with the CIA Educational Note, the spread above the unadjusted CANSIM series V39062 was determined to be 88 basis points based on a duration of 10.77 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 3.09%.

Pension Increase

We have not reflected the actual July 1, 2017 pension increase in our solvency and wind-up valuations and have made no allowance for any assumed future pension increases.

The liability for sessional employees who had no pensionable earnings in 2016 is determined to be two times their accumulated contributions with interest as at December 31, 2016.

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)

- (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. 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, 2016. 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.

The membership data summarize below does not reflect the pension increase effective July 1, 2017.

Active Members²	12.31.2016	12.31.2015
Number of Members	456	446
Average Pensionable Earnings ³	\$76,606	\$74,370
Average Credited Service	10.5	10.3
Average Age	49.1	49.1
Total Required Contributions with Interest	\$22,418,836	\$21,125,920
Total Additional Voluntary Contributions with Interest	\$150,870	\$128,944

Deferred Pensioners	12.31.2016	12.31.2015
Number of Members	73	71
Average Age	52.9	52.6
Average Annual Deferred Pension Payable at 65	\$6,041	\$6,565

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.

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Pensioners and Survivors	12.31.2016	12.31.2015
Number of Lifetime Pensions	310	303
Average Age (Lifetime Pensions)	74.7	74.3
Average Annual Lifetime Pension ⁴	\$24,963	\$24,317
Number of Certain Only Pensions	1	1
Average Annual Certain Only Pension	\$11,024	\$10,850
Number of Great-West Life Pensions	13	15
Average Age (Great-West Life Pensions)	92.9	92.6
Average Annual Great-West Life Pension	\$8,319	\$9,758
Sessional Employees⁵	12.31.2016	12.31.2015
Number of Members	44	52
Total Required Contributions with Interest	\$112,385	\$146,022

⁴ Includes one member who returned to work and has suspended pension payments

⁵ Sessional Members includes sessional employees that did not have any pensionable earnings in the calendar year prior to the valuation date.

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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 2016.

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	4								4
	53,114								53,114
30 - 34	21	1							22
	68,197	*							68,634
35 - 39	27	8	3						38
	60,984	86,949	78,061						67,798
40 - 44	25	4	3	2					34
	66,488	90,605	90,114	*					72,766
45 - 49	12	6	15	5		1			39
	59,209	96,277	99,481	111,740		*			88,016
50 - 54	16	11	12	10	3	1			53
	63,330	105,504	103,565	117,681	98,995	*			94,155
55 - 59	16	5	12	11	7	2	2		55
	62,515	90,711	111,719	120,336	131,070	*	*		99,880
60 - 64	10	8	10	7	4	2	2	1	44
	101,767	100,129	94,938	106,557	136,078	*	*	*	106,006
65 - 69	3	2	2	5	1	4	1	3	21
	34,102	*	*	126,793	*	116,615	*	138,756	108,967
70 - 74	1			1			1	1	4
	*			*			*	*	93,905
Total	135	45	57	41	15	10	6	5	314
	65,253	96,498	99,727	113,855	126,912	116,376	132,967	129,580	\$89,227

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

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Non-Academic Union Members

Age Group	Credited Service								Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	
20 - 24	2								2
	*								*
25 - 29	7								7
	42,395								42,395
30 - 34	17	5	1						23
	41,598	57,120	*						45,209
35 - 39	10	6	1	2					19
	47,484	50,651	*	*					50,616
40 - 44	4	4	3	1	1				13
	36,610	53,688	53,218	*	*				48,437
45 - 49	2	2	3	3	1				11
	*	*	61,513	49,859	*				55,369
50 - 54	4	4	2	2	4	1			17
	35,754	46,624	*	*	48,032	*			45,401
55 - 59	1	4	4	4	4	7	3		27
	*	50,149	45,366	45,367	43,442	61,585	59,703		51,518
60 - 64		3	1		3	4	4	1	16
		42,632	47,047		52,960	55,517	53,121	*	51,138
65 - 69	1	1			3			1	6
	*	*			47,535			*	44,520
70 - 74							1		1
							*		*
Total	48	29	15	12	16	12	8	2	142
	42,989	50,256	50,837	50,594	48,513	59,538	54,887	*	\$48,698

*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
55 - 59	3	\$16,120	30 - 34	3	\$3,825
60 - 64	23	\$21,463	35 - 39	4	\$3,718
65 - 69	69	\$26,124	40 - 44	10	\$4,649
70 - 74	70	\$32,367	45 - 49	7	\$5,950
75 - 79	61	\$24,316	50 - 54	11	\$6,124
80 - 84	44	\$24,039	55 - 59	17	\$6,200
85 - 89	19	\$18,087	60 - 64	16	\$7,465
90 - 94	16	\$14,162	65 - 69	4	\$8,198
95+	5	\$3,401	70+	1	\$1,522
Total	310	\$24,963	Total	73	\$6,041

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

Reconciliation of Membership

	Active ⁶		Pensioner ⁷	Deferred	Sessional ⁸	Total
	Academic and non-union members	Non-Academic union members				
At December 31, 2015	311	135	304	71	52	873
New entrants	29	13				42
Active to sessional	(7)				7	-
Terminations						
- Deferred	(3)	(1)		4		-
- Paid out	(7)	(5)		(1)	(15)	(28)
Retirements						
- Pension	(9)		10	(1)		-
Death			(6)			(6)
Survivors			3			3
At December 31, 2016	314	142	311	73	44	884

⁶ Includes sessional employees with earnings in the year prior to the valuation date.

⁷ Includes one member who has returned to work and has suspended pension payments

⁸ Sessional employees with no earnings in the year prior to 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, 2016 year-end, as well as information provided by CIBC Mellon to determine the assets of the Plan.

Asset Mix Policy

	Minimum	Maximum	Benchmark
Canadian Equities	25%	55%	35%
U.S. Equities	0%	30%	12.5%
International Equities	0%	30%	12.5%
Bonds	30%	70%	35%
Real Estate	0%	5%	0%
Cash and Equivalents	0%	40%	5%
Total			100.0%

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

FINANCIAL STATEMENTS

A summary of the change in assets since January 1, 2014, provided by the University, is summarized below:

	2013	2014	2016
Balance at January 1	144,430,417	155,728,123	159,207,717
Member Contributions	2,169,040	2,225,165	2,313,213
University Contributions	4,451,339	4,223,538	4,292,569
Transfers	0	9,152	34,244
Investment Income	3,956,986	4,335,585	4,285,567
Realized Gains + Losses	8,719,088	12,263,985	12,000,480
Change in Market Values	286,263	(9,858,227)	(3,004,792)
Pensions Paid	(6,305,515)	(7,066,574)	(7,518,346)
Termination Payments	(1,057,722)	(900,148)	(916,346)
Death Payments	(238,653)	(1,080,545)	0
Expenses	(683,120)	(672,337)	(741,790)
Balance at December 31	155,728,123	159,207,717	169,952,516

The market value of assets as at December 31, 2016 shown above is equal to the invested assets of \$169,737,075 plus contributions receivable equal to \$249,242 minus payables equal to \$33,801.

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 5% of the market value, if required.

Year	Assumed Investment Return	Actual Net Investment Return	Excess Net Investment Return
2013	5.25%	6,502,968	20,090,334
2014	5.75%	8,276,531	12,279,217
2015	5.65%	8,725,488	6,069,006
2016	5.55%	8,786,226	12,539,465

In practical terms, the actuarial asset value includes 100% of the excess investment earnings from 2013, 75% from 2014, 50% from 2015 and 25% from 2016.

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Thus the actuarial asset value is derived as follows:

Market value at Dec. 31, 2016				169,952,516
-75% of 2016 excess investment earnings	0.75 x	3,753,239	=	(2,814,929)
-50% of 2015 excess investment earnings	0.50 x	(2,656,482)	=	1,328,241
-25% of 2014 excess investment earnings	0.25 x	4,002,686	=	(1,000,672)
-0% of 2013 excess investment earnings	0.00 x	13,587,366	=	0
Actuarial value at Dec. 31, 2016, before limit				167,465,156
Actuarial value as a percent of market value				98.5%

As shown above, the actuarial value is more than 95% of the market value and therefore the 95% of market value restriction on the actuarial value does not apply.

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 7.92% based on the market value of assets and 8.69% based on the actuarial value of assets in 2016.

Appendix E. CERTIFICATE OF TRUSTEES

With regards to the December 31, 2016 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, 2016, 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, 2016; and
- All events subsequent to December 31, 2016 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 5.55% valuation interest rate.

Signature

Signature

Title

Title

Date

Date



OFFICE OF THE
AUDITOR GENERAL
MANITOBA

**Brandon University Retirement Plan
Audit Results Memo
December 31, 2016**

**Brandon University Retirement Plan
Audit Results Memo**

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Brandon University Retirement Plan Audit Results Memo

Status of audit

We have substantially completed the audit of the financial statements.

We plan on issuing the draft auditor's report in Appendix 1, once the following outstanding items have been completed:

1. Investment confirmation.
2. Management's representations.
3. Board of Trustees approval of your financial statements.

Our responsibilities and audit limitations

1. We performed the audit using Canadian generally accepted auditing standards (GAAS). They require us to meet ethical requirements, and plan and perform the audit to obtain reasonable (not absolute) assurance on whether financial statements are free from material misstatement, due to error or fraud.
2. The audit process has inherent limitations, such as the use of judgment and selective testing of data. And collusion and forgery may hide material error, fraud, or illegal acts. So the audit may not have found every material misstatement in the financial statements.
3. The audit was not designed to detect immaterial fraud or error.
4. We considered your internal controls during our audit, but we do not express an opinion on their effectiveness.
5. Our responsibility under GAAS for expressing an opinion on the financial statements does not relieve management and governance authorities of their responsibilities.
6. As required by *The Auditor General Act*, we will report anything we consider necessary to the Legislative Assembly; and we will keep all other non-public information confidential.

Brandon University Retirement Plan Audit Results Memo

Significant matters

Below are our comments on the key risk areas identified in the audit plan and any other significant issues which arose during the audit.

Key Risk Area or Other Significant Issue	Our comments
Investments The Plan's investments are the most significant asset class and are carried at fair value. CIBC Mellon is the custodian of the investments and Connor, Clark & Lunn Investment Management Ltd is the Investment Managers for the Brandon University Retirement Plan. They provide the fair value of investments based on International Financial Reporting Standards (IFRS 13).	 We confirmed balances, including cost and fair value, with the custodian and investment manager. We reviewed reconciliations – manager to custodian to general ledger. We compared fair values reported by the custodian and the investment manager. We have no issues to report. We used the CSAE 3416 Audit Report on Controls at a Service Organization (CIBC Mellon - custodian). The pooled funds in which the Plan invests are priced by their respective fund managers and CIBC Mellon uses that pricing. Although these fund managers have not yet adopted IFRS 13, they used pricing methodology consistent with IFRS 13.
Pension Obligations Obligations for pension benefits are the most significant liability of the Plan and are determined using an actuarial valuation. The valuation is used as an accounting estimate and requires significant management judgment regarding the assumptions adopted, including the discount rate. In the prior year an incorrect discount rate was used in the valuation prepared by the actuary. As a result, a new valuation was prepared and the necessary corrections were made to the financial statements.	 We used the work of the Plan's actuaries for the December 31, 2016 actuarial valuation. We reviewed the reasonableness of the actuarial assumptions used. We performed tests on the plan data provided to the actuaries. We have no issues to report.
Management override of internal controls Under Canadian assurance and auditing standards, the risk of management override of internal controls is assessed as a significant risk.	 We tested journal entries, management estimates and any significant unusual transactions regarding management's ability to override internal controls. We have no issues to report.

**Brandon University Retirement Plan
Audit Results Memo**

Auditor communication

Area	Our comments
Audit plan	There have been no significant changes in our audit approach. Our audit plan was previously communicated to you.
Accounting policies	We are satisfied with your significant accounting policies. There were no significant accounting policy changes during the year.
Financial statement disclosures	We are satisfied with your financial statement disclosures.
Accounting estimates	We have concluded that your financial statement estimates are reasonable.
Related party transactions	No significant issues were identified during our audit in connection with your related parties.
Uncorrected misstatements	There were no uncorrected misstatements identified during the audit by us.
Significant difficulties	No significant difficulties were encountered during the audit. Management and staff gave us their full cooperation.
Significant matters	The significant matters arising from the audit that were discussed, or subject to correspondence with management, are included in our transmittal letters (Appendix 2).
Management representations	Copies of the management representation letters are included in Appendix 3.
Annual report	We will review your annual report based on GAAS. This includes: <ul style="list-style-type: none">• ensuring that the financial statement and our auditor’s report on it have been accurately reproduced.• reading the other information in the annual report and considering whether any information is inconsistent with the financial statements—and if so, suggesting corrections.• notifying management of any information that, although not inconsistent with the financial statements has material misstatement of fact.
Other matters	There are no other matters to report at this time.

**Appendix 1:
Auditor's report**

Brandon University Retirement Plan Audit Results Memo

INDEPENDENT AUDITOR'S REPORT

To the Legislative Assembly of Manitoba
To the Board of Trustees of the Brandon University Retirement Plan

We have audited the accompanying financial statements of the Brandon University Retirement Plan, which comprise the statement of financial position as at December 31, 2016, the statements of changes in net assets available for benefits and changes in pension obligations for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Brandon University Retirement Plan as at December 31, 2016 and the changes in net assets available for benefits and changes in pension obligations for the Plan for the year then ended in accordance with Canadian accounting standards for pension plans.

Office of the Auditor General
[Date]
Winnipeg, Manitoba

**Appendix 2:
Transmittal letters**

**Brandon University Retirement Plan
Audit Results Memo**

June, 2017

Honourable Ian Wishart
Minister of Education and Training
Room 168, Legislative Building
Winnipeg, Manitoba R3C 0V8

Dear Minister Wishart:

Re: 2016 Brandon University Retirement Plan

We have completed our audit and have issued an unqualified audit opinion on Brandon University Retirement Plan's financial statements. The opinion was provided to Brandon University's Director, Financial and Registration Services.

We reviewed the audit results, including the draft audit opinion, with the Brandon University Retirement Plan's Board of Trustees.

A copy of this letter has been provided to the Minister of Finance and his officials.

If you wish to discuss any matters, we would be pleased to do so at your convenience.

Best regards,

Norm Ricard, CPA, CA
Auditor General

NR/tm

cc: Fred Meier, Acting Clerk of the Executive Council
Heather Gillander, Chair, Board of Trustees, Brandon University Retirement Plan
Derrick Stewart, Chair, Board of Governors, Brandon University
Dr. Gervan Fearon, President and Vice-Chancellor, Brandon University
Bramwell Strain, Deputy Minister, Education and Training

**Brandon University Retirement Plan
Audit Results Memo**

June, 2017

Honourable Cameron Friesen
Minister of Finance
Room 103, Legislative Building
Winnipeg, Manitoba R3C 0V8

Dear Minister Friesen:

Re: 2016 Brandon University Retirement Plan Audit Results

We have completed our audit and have issued an unqualified audit opinion on Brandon University Retirement Plan's financial statements. Attached is a copy of our letter to the Minister of Education and Training.

If you wish to discuss any matters, we would be pleased to do so at your convenience.

Best regards,

Norm Ricard, CPA, CA
Auditor General

NR/tm

Encl.

cc: Giselle Martel, Acting Secretary to Treasury Board
Jim Hrichishen, Deputy Minister, Finance
Aurel Tess, Provincial Comptroller, Finance

**Brandon University Retirement Plan
Audit Results Memo**

June, 2017

Ms. Heather Gillander
Chair, Board of Trustees
Brandon University Retirement Plan
270 – 18th Street
Brandon, Manitoba R7A 6A9

Dear Ms. Gillander:

Re: 2016 Brandon University Retirement Plan Audit Results

We have completed our audit and have issued an unqualified audit opinion on the Brandon University Retirement Plan's financial statements. The opinion was provided to Brandon University's Director, Financial and Registration Services.

We appreciate the assistance provided by senior officials and other employees of the University during our audit. If you wish to discuss any matters, we would be pleased to do so at your convenience.

Yours sincerely,

Brendan Thiessen, CPA, CA
Principal

BT/tm

**Brandon University Retirement Plan
Audit Results Memo**

June, 2017

Ms. Allison Noto, CPA, CGA
Director, Financial and Registration Services
Brandon University
270 – 18th Street
Brandon, Manitoba R7A 6A9

Dear Ms. Noto:

Re: 2016 Brandon University Retirement Plan Audit Opinion

Included is our audit opinion on Brandon University Retirement Plan's financial statements.

We appreciate your cooperation and the cooperation of your staff during our audit.

Please let me know if you would like to discuss any matters.

Yours sincerely,

Brendan Thiessen, CPA, CA
Principal

BT/tm

Encl.

**Appendix 3:
Management representations**

Brandon University Retirement Plan Audit Results Memo

ENTITY'S LETTERHEAD

[Date (same date as Auditor's Report)]

Office of the Auditor General
500 – 330 Portage Avenue
Winnipeg, Manitoba R3C 0C4

Dear Sir/Madam:

This representation letter is provided in connection with your audit of the financial statements of Brandon University Retirement Plan for the year ended December 31, 2016 for the purpose of expressing an opinion as to whether the financial statements are presented fairly, in all material respects, in accordance with Canadian accounting standards for pension plans.

We acknowledge our responsibility for the design, implementation and maintenance of internal controls to prevent and detect fraud.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves:

Financial Statements

We:

- have met our responsibilities outlined in the audit engagement letter dated February 13, 2017.
- understood that there are no uncorrected misstatements identified by the auditors.

We have, under Canadian accounting standards for pension plans:

- prepared and presented fairly our financial statements.
- used reasonable significant assumptions in making accounting estimates.
- accounted for and disclosed appropriately related-party relationships and transactions.
- accounted for or disclosed appropriately all events occurring subsequent to the date of the financial statements.
- accounted for or disclosed appropriately all known actual or possible litigation and claims.

Brandon University Retirement Plan Audit Results Memo

Information Provided

All transactions have been recorded in the accounting records and are reflected in the financial statements.

We have provided you with:

- prompt access to all relevant information used to prepare the financial statements, such as records, documentation and other matters.
- additional information that you requested.
- unrestricted access to our people.

We disclosed to you:

- the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.
- all information on fraud or suspected fraud, involving or communicated by:
 - management.
 - employees
 - other parties, if the fraud could affect the financial statements.
- all known or suspected non-compliance of laws and regulations whose effects should be considered when preparing financial statements.
- the identity of our related parties and all the related-party relationships and transactions of which we are aware.
- all known actual or possible litigation claims.
- all liabilities and contingencies arising from environmental matters.

Sincerely,

Scott Lamont, FCPA, FCGA, Vice-President (Administration and Finance)
Brandon University

Allison Noto, CPA, CGA, Director, Financial and Registration Services
Brandon University

Brandon University Retirement Plan Audit Results Memo

ENTITY'S LETTERHEAD

[Date (same date as Auditor's Report)]

BDO Canada LLP
Chartered Accountants
148 - 10th Street
Brandon, Manitoba R7A 4E6

Dear Sir/Madam:

This representation letter is provided in connection with your audit of the financial statements of Brandon University Retirement Plan for the year ended December 31, 2016 for the purpose of expressing an opinion as to whether the financial statements are presented fairly, in all material respects, in accordance with Canadian accounting standards for pension plans.

We confirm that to the best of our knowledge and believe, having made such inquiries as we consider necessary for the purpose of appropriately informing ourselves:

Financial Statements

- We have fulfilled our responsibilities, as set out in the terms of the audit engagement dated February 13, 2017, for the preparation of the financial statements in accordance with Canadian accounting standards for pension plans; in particular the financial statements are fairly presented in accordance therewith.
- Significant assumptions used by us in making accounting estimates, including those measured at fair value are reasonable.
- Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the requirements of Canadian accounting standards for pension plans.
- All events subsequent to the date of the financial statements and for which Canadian accounting standards for pension plans require adjustment or disclosure have been adjusted or disclosed.
- The financial statements of the pension plan use appropriate accounting policies that have been properly disclosed and consistently applied.
- The effects of uncorrected misstatements are immaterial, both individually and in the aggregate, to the financial statements as a whole. A list of the uncorrected misstatements is attached to the representation letter.

Brandon University Retirement Plan Audit Results Memo

- We have reviewed and approved all journal entries recommended by the auditor during the audit.

Information Provided

- We have provided you with:
 - access to all information of which we are aware that is relevant to the preparation of the financial statements, such as records, documentation and other matters;
 - additional information that you have requested from us for the purpose of the audit; and
 - unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
- We are responsible for the design, implementation and maintenance of internal controls to prevent, detect and correct fraud and error, and have communicated to you all deficiencies in internal control of which we are aware.
- All transactions have been recorded in the accounting records and are reflected in the financial statements.
- We have disclosed to you all known instances of non-compliance or suspected non-compliance with laws and regulations whose effects should be considered when preparing financial statements.

We have disclosed to you the identity of the entity's related parties and the related party relationships and transactions of which we are aware.

Fraud and Error

- We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.
- We have disclosed to you all information in relation to fraud or suspected fraud that we are aware of and that affects the entity and involves:
 - management;
 - employees who have significant roles in internal control; or
 - others where the fraud could have a material effect on the financial statements.
- We have disclosed to you all information in relation to allegations of fraud, or suspected fraud, affecting the entity's financial statements communicated by employees, former employees, analysts, regulators, or others.

Existence, Completeness and Valuation of Specific Financial Statement Balances

- There are no pledges or assignment of assets as security for liabilities except as disclosed in the financial statements.
- All financial instruments have been appropriately recognized and measured in accordance with Canadian accounting standards for pension plans.

Brandon University Retirement Plan Audit Results Memo

- Significant assumptions used in arriving at fair value of financial instruments are reasonable and appropriate in the circumstances.
- Where the value of any asset has been impaired, an appropriate provision has been made in the financial statements or has otherwise been disclosed to you.

General Representations

- The nature of all material uncertainties have been appropriately measured and disclosed in the financial statements, including all estimates where it is reasonably possible that the estimate will change in the near term and the effect of the change could be material to the financial statements.
- There were no direct contingencies or provisions (including those associated with guarantees or indemnification provisions), unusual contractual obligations nor any substantial commitments, whether oral or written, other than in the ordinary course of business, which would materially affect the financial statements or financial position of the pension plan, except as disclosed in the financial statements.
- We confirm that there are no derivatives or off-balance sheet financial instruments held at year end that have not been properly recorded or disclosed in the financial statements.
- We have disclosed to you all significant customers and/or suppliers of the pension plan who individually represent a significant volume of business with the pension plan. We are of the opinion that the volume of business (sales, services, purchases, borrowing and lending) done by the pension plan with any one party is not of sufficient magnitude that discontinuance would have a material negative effect on the ongoing operations of the pension plan.
- There have been no plans or intentions that may materially affect the carrying value or classification of assets and liabilities.
- No significant matters, other than those disclosed in the financial statements, have arisen that would require a restatement of the comparative financial statements.

Other Representations Where the Situation Exists

- We have informed you of all known actual or possible litigations and claims, whether or not they have been discussed with legal counsel. Since there are no actual, outstanding or possible litigation and claims, no disclosure is required in the financial statements.

**Brandon University Retirement Plan
Audit Results Memo**

Yours truly,

Scott Lamont, FCPA, FCGA, Vice-President (Administration and Finance)
Brandon University

Allison Noto, CPA, CGA, Director, Financial and Registration Services
Brandon University

**BRANDON UNIVERSITY
RETIREMENT PLAN**

ANNUAL REPORT - 2016

Incorporating the Annual Financial Statements



**BRANDON
UNIVERSITY**

June 2017

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, 2016 are included in this report.

The Plan, under the guidance of Connor, Clark & Lunn Investment Management Ltd., had a rate of return of 8.5% in 2016 (4.3% in 2015). The December 31, 2016 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 \$41,032,000 in 2016 (\$42,525,000 in 2015). The solvency ratio is 0.791 in 2016 (0.762 in 2015). 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 an unfunded liability of \$5,217,000 on December 31, 2016 (\$10,326,000 in 2015). The University is required to make special payments to fund this unfunded liability over a maximum 15 year amortization period. The existing unfunded liability will be funded over 10 years. The annual cost of this special payment for 2017 is \$678,000 (\$1,291,000 in 2016). 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.

The improvement of the financial position of the Plan is mainly due to greater than expected investment returns based on a smoothed asset valuation method and special payments made in 2016 to fund the unfunded liability.

Since 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, 2017. This valuation will be completed in 2018.

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

Sincerely,

Ms. Heather Gillander, CPA, CA, CMA
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, 2016

Members of the Board of Trustees (as of December 31, 2016):

Heather Gillander	BUFA
Todd Fugleberg	BUFA
Tanya Cantlon	MGEU
Becky Lane	MGEU
Ian Smith	IUOE "A"
George Manby	IUOE "D"
Sharon Hooper	Exempt Staff
Scott Lamont	Board of Governors
Shawn Chambers	Board of Governors
John Rice	Pensioners

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

General Information

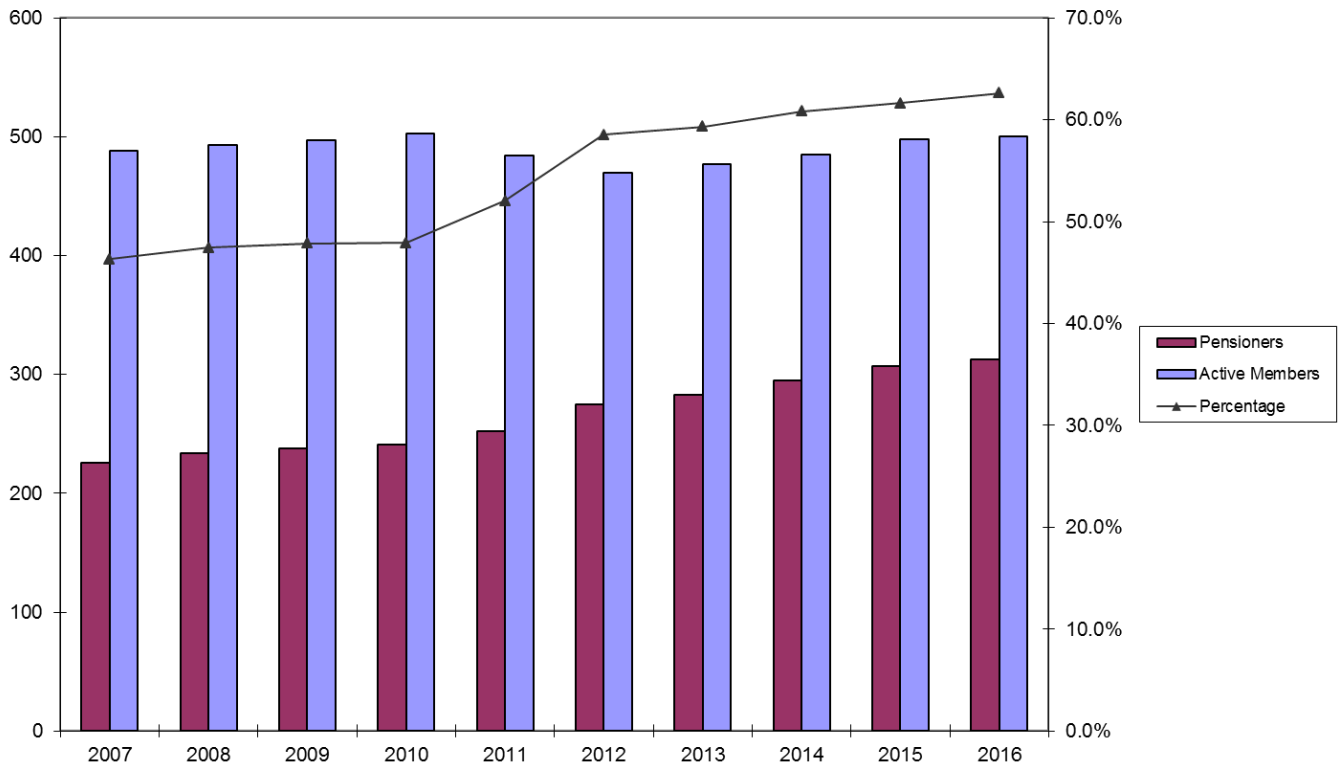
- a) The Brandon University Retirement Plan is a final average, defined benefit plan, which provides a benefit to all eligible employees of Brandon University upon retirement, termination, or death. The Plan is administered by the Board of Trustees of the Brandon University Retirement Plan. A full description 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:

2016	\$169.9 million
2015	\$159.2 million
2014	\$155.7 million
2013	\$144.4 million
2012	\$123.4 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 43% of the active members to 63% in 2016. Brandon University Retirement Plan membership at December 31:

	2016	2015
Active members	500	498
Pensioners	313	307
Deferred, inactive and Pending Election	86	81

Pensioners as a Percentage of Active Members



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 141% of the annual regular contributions from Plan members and the University. In addition, the University is making unfunded liability special payments to make up the unfunded liability shortfall calculated by the Plan actuaries.

Plan member transactions:

	2016	2015
Member and University regular contributions to the Plan	\$5,314,782	\$4,975,703
Unfunded liability special payments to the plan	1,291,000	1,473,000
Transfers from other plans	34,244	9,152
Pensions paid to retired members	7,518,346	7,066,574
Death benefits and refund settlements due to terminations	916,346	1,980,693

- 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, 2016. Using the solvency valuation method, the Plan had a deficiency of assets over actuarial (calculated) liabilities of \$41,032,000. Using the going-concern or aggregate method, the Plan had an unfunded liability of \$5,217,000.

The University is required to make special payments to fund the unfunded liability over a maximum 15 year amortization period. The remaining existing unfunded liability will be funded over 10 years. The annual cost of this special payment for 2017 is \$678,000 (\$1,291,000 in 2016). 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, 2017. It will be completed in 2018.

- 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 10 years is as follows.

**Brandon University
Historical Increases (Article 7.3 - Supplementary Pension)**

Brandon University Pension Increases - Pre 2013 amendment						
	(1)	(2)	(3)	(4)	(5)	
Year	Gross Actuarial Return	Net Actuarial Return	Excess of Net over 6%	Increase in CPI	Actual COLA given	Effective Date of COLA Increase
2006	16.80%	16.30%	10.30%	1.60%	1.60%	1 July 2007
2007	9.20%	8.68%	2.68%	2.40%	2.40%	1 July 2008
2008	-11.42%	-11.85%	Nil	1.20%	Nil	1 July 2009
2009	16.71%	16.15%	10.15%	1.30%	1.30%	1 July 2010
2010	3.73%	3.23%	Nil	2.40%	Nil	1 July 2011
2011	-1.63%	1.38%	Nil	2.30%	Nil	1 July 2012

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
2009	16.20%					
2010	10.62%					
2011	-1.63%					
2012	9.38%	8.45%	2.45%	0.80%	1.39%	1 July 2013
2013	16.22%	8.45%	2.45%	1.20%	1.70%	1 July 2014
2014	8.53%	7.93%	1.93%	1.50%	1.50%	1 July 2015
2015	3.93%	9.43%	3.43%	1.60%	1.60%	1 July 2016
2016	7.90%	9.06%	3.06%	1.50%	1.71%	1 July 2017

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

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 (8.5%) did exceed the objective of CPI plus 3% (4.5%) for 2016 as well as the four year rolling average ending in 2016 did. (BU Plan was 9.7% vs. 4.5%). The Plan also exceeded the rolling four year average benchmark return (BU Plan 9.6% vs. Benchmark 8.7%). Although the top third of managers is not reported by BIA, the BU Plan annual return (8.5%) was lower than the median (9.5%) and lower than the top 25% (11.8%) of balanced fund investment managers in 2016. The BU Plan four year rolling average return (9.7%) was higher than the median (9.3%) but lower than the top 25% (10.4%) of balanced fund investment managers.

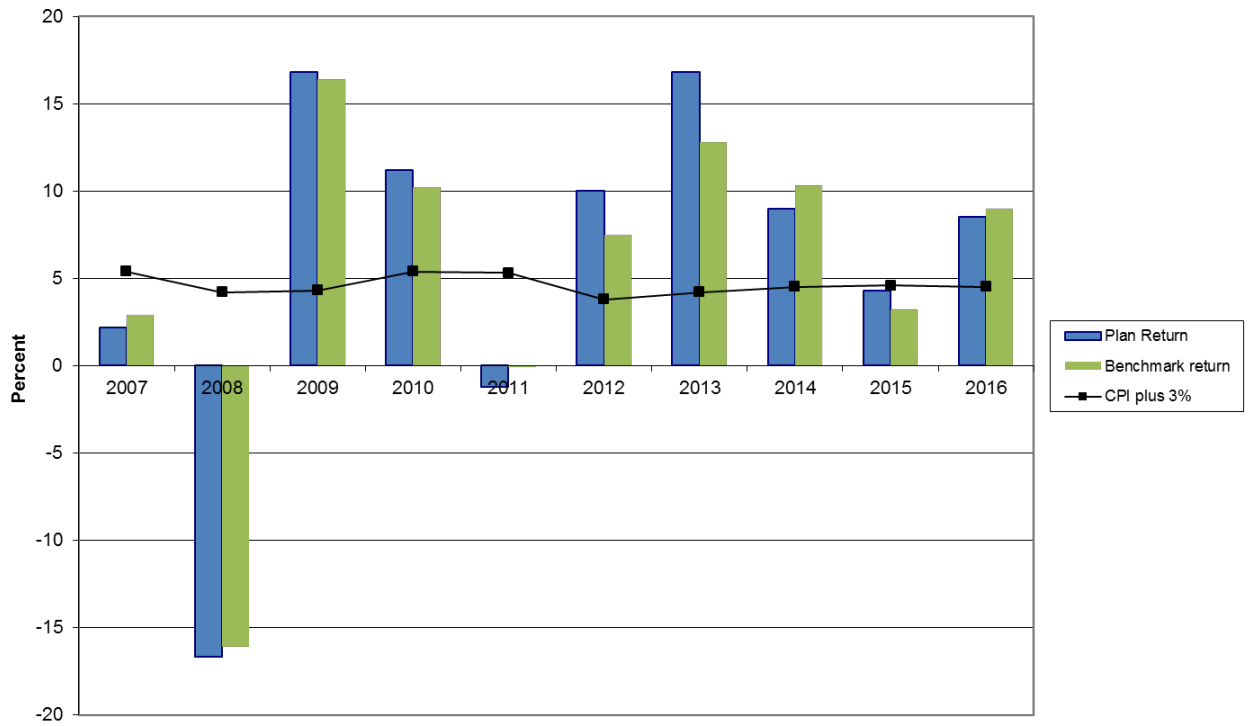
Investment Performance

<u>Period Ending December 31</u>	<u>Total Return</u>	<u>Annual Rate of Increase in CPI</u>
2016	8.5%	1.5%
2015	4.3%	1.6%
2014	9.0%	1.5%
2013	16.8%	1.2%
2012	10.0%	0.8%
Benchmark return for 2016		9.0%
Four year rolling average ending 2016		
Retirement plan performance		9.6%
Benchmark performance		8.7%

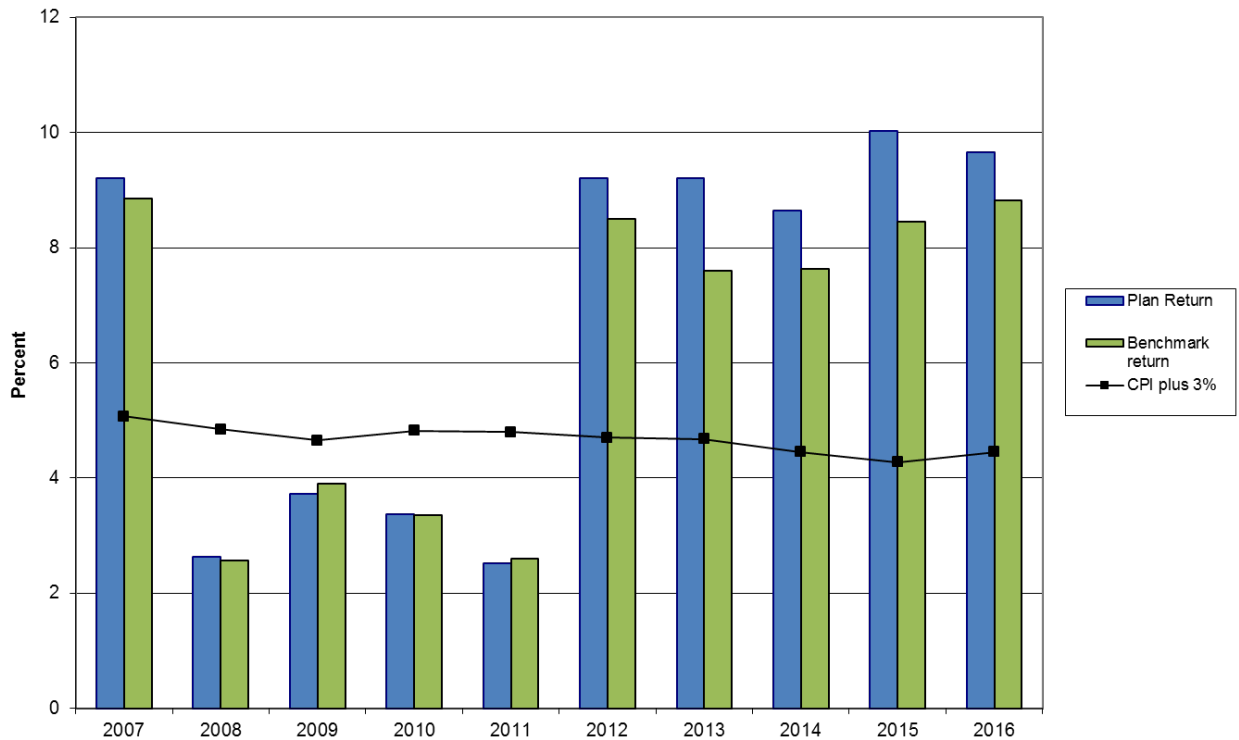
BIA Balanced Fund Performance Summary For the Period Ending December 31, 2016

Top quartile (12 months)	11.8%
Median (12 months)	9.5%
BU Retirement Plan (12 months)	8.5%
Top quartile (4 year rolling)	10.4%
Median (4 year rolling)	9.3%
BU Retirement Plan (4 year rolling)	9.6%

Annual Investment Performance



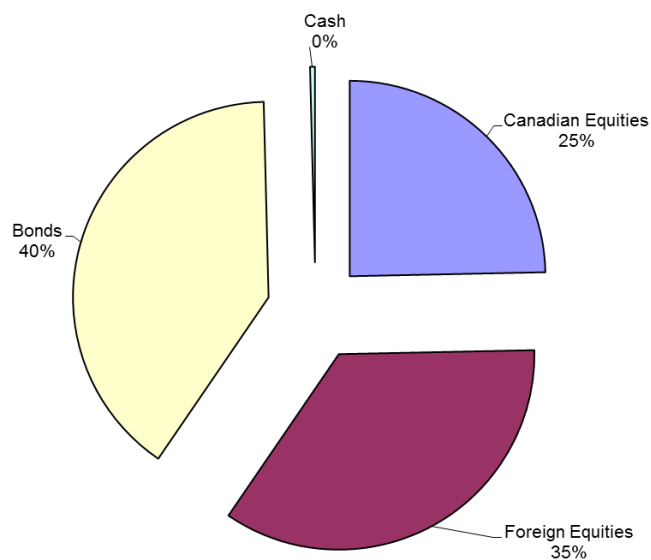
Rolling Four Year Average Investment Returns



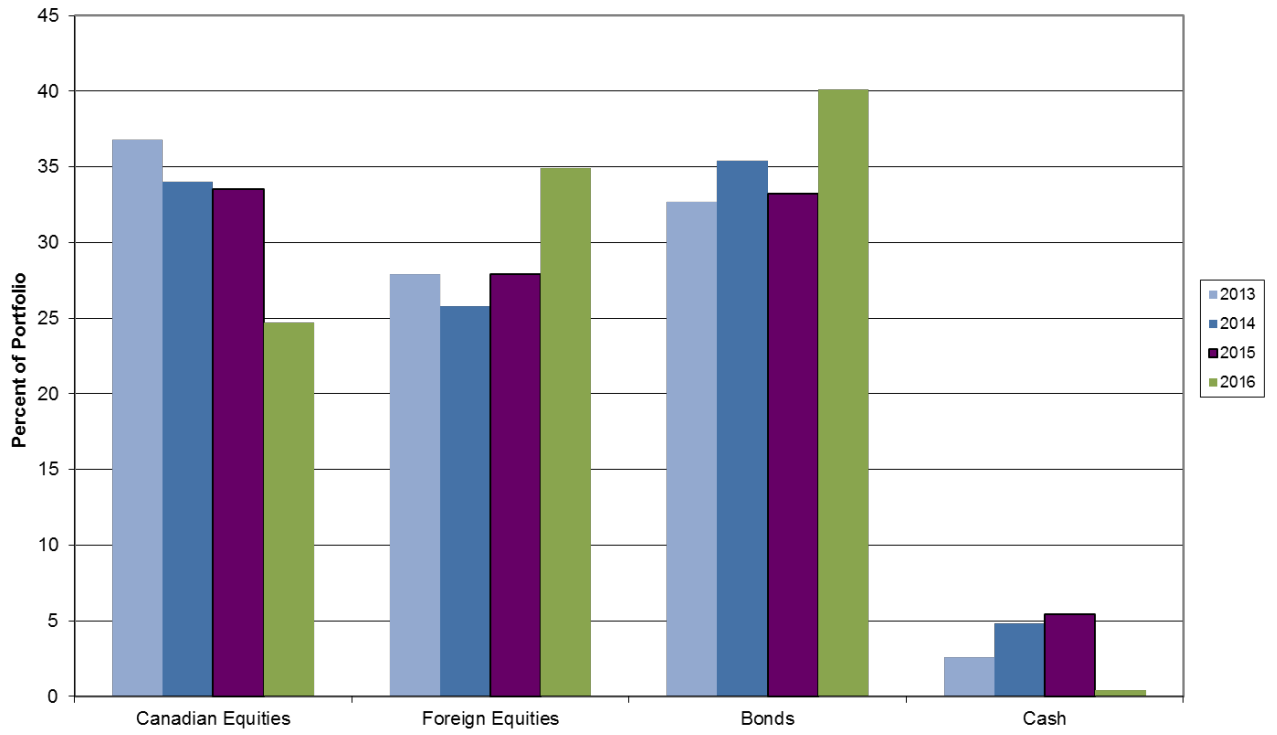
The investment mix of the Brandon University Retirement Plan is established by the investment manager based on market expectations within guidelines authorized by the Trustees of the Plan. On December 31, 2016 the asset mix and the annual performance in each sector follows:

	% of Portfolio	12 month Portfolio return	12 month Benchmark return
Canadian Equities	24.7%	21.9%	21.1%
Foreign Equities	34.9%	0.6%	3.7%
Bonds	40.1%	2.9%	2.3%
Cash	0.3%	0.9%	0.5%
TOTAL FUND	100.0%	8.5%	9.0%

Fund Asset Mix - December 31, 2016



Asset Mix Trend



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.

Heather Gillander
Chair, Board of Trustees
Brandon University Retirement Plan

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

June 8, 2017

BRANDON UNIVERSITY RETIREMENT PLAN

Statement of Financial Position as at December 31, 2016

	2016	2015
ASSETS		
Accounts receivable	\$ <u>249,242</u>	\$ <u>93,114</u>
Investments (note 2 b)		
Cash and short-term investments	592,222	8,395,962
Bonds and debentures	67,998,648	52,900,923
Canadian equities	41,974,661	53,346,955
Foreign equities	<u>59,171,544</u>	<u>44,504,241</u>
	<u>169,737,075</u>	<u>159,148,081</u>
Total Assets	<u>169,986,317</u>	<u>159,241,195</u>
LIABILITIES		
Accounts payable	<u>33,801</u>	<u>33,478</u>
Total Liabilities	<u>33,801</u>	<u>33,478</u>
Net assets available for benefits	<u>169,952,516</u>	<u>159,207,717</u>
Pension obligations	<u>172,581,000</u>	<u>166,128,000</u>
Plan deficit (going concern basis)	<u>\$ (2,628,484)</u>	<u>\$ (6,920,283)</u>

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, 2016

	2016	2015
CONTRIBUTIONS		
Members	\$ 2,313,213	\$ 2,225,165
University	3,001,569	2,750,538
University special payments (Note 9)	1,291,000	1,473,000
Transfers from other plans	<u>34,244</u>	<u>9,152</u>
	<u>6,640,026</u>	<u>6,457,855</u>
OTHER INCOME		
Investment income		
Interest	1,768,082	1,664,893
Dividends	<u>2,517,485</u>	<u>2,670,692</u>
	<u>4,285,567</u>	<u>4,335,585</u>
Change in fair value		
Realized	12,000,480	12,263,985
Unrealized	<u>(3,004,792)</u>	<u>(9,858,227)</u>
	<u>8,995,688</u>	<u>2,405,758</u>
Total Increase in Net Assets	<u>19,921,281</u>	<u>13,199,198</u>
PAYMENTS		
Benefit payments		
Retirements	7,518,346	7,066,574
Refunds	916,346	900,148
Deaths	<u> </u>	<u>1,080,545</u>
	<u>8,434,692</u>	<u>9,047,267</u>
Administrative expenses		
Actuarial and consulting fees	69,981	71,070
Custodian and plan administration fees	156,148	138,007
Legal and audit fees	8,984	8,814
Investment management fees	513,891	461,807
Trustee expenses	1,446	1,306
GST rebate	<u>(8,660)</u>	<u>(8,667)</u>
	<u>741,790</u>	<u>672,337</u>
Total Decrease in Net Assets	<u>9,176,482</u>	<u>9,719,604</u>
Net Increase in Assets Available for Benefits	10,744,799	3,479,594
Net Assets Available For Benefits, beginning of year	<u>159,207,717</u>	<u>155,728,123</u>
Net Assets Available For Benefits, end of year	<u>\$ 169,952,516</u>	<u>\$ 159,207,717</u>

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, 2016

	2016	2015
Interest accrued on benefits	\$ 9,136,000	\$ 8,951,000
Transfers	34,000	9,000
Benefits accrued	5,369,000	5,052,000
Benefits paid	(8,435,000)	(9,047,000)
Experience loss	349,000	1,843,000
Changes in actuarial assumptions	<u>-</u>	<u>(1,102,000)</u>
Net Change in Pension Obligations	6,453,000	5,706,000
Pension Obligations, beginning of the year	<u>166,128,000</u>	<u>160,422,000</u>
Pension Obligations, end of year	<u><u>\$ 172,581,000</u></u>	<u><u>\$ 166,128,000</u></u>

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, 2016

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, 2016

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, 2016

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.

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

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements for the year ended December 31, 2016

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)			
	<u>2016</u>		<u>2015</u>	
Canadian cash and short-term investments	\$ 592	0.3 %	\$ 8,396	5.4 %
Canadian bonds	67,999	40.1 %	52,901	33.2 %
Canadian equities	<u>41,974</u>	<u>24.7 %</u>	<u>53,347</u>	<u>33.5 %</u>
	110,565	65.1 %	114,644	72.1 %
US equities	25,043	14.8 %	22,189	13.9 %
Non-North American equities	<u>34,129</u>	<u>20.1 %</u>	<u>22,315</u>	<u>14.0 %</u>
	<u>\$ 169,737</u>	<u>100.0 %</u>	<u>\$ 159,148</u>	<u>100.0 %</u>

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 12.28% or \$8,353,438 (2015 - 7.33% or \$3,875,687).

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 \$5,917,154 (2015 - \$4,450,424). 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.

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.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements for the year ended December 31, 2016

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)	
	<u>2016</u>	<u>2015</u>
Term to Maturity		
Less than one year	\$ 1,650	\$ 165
One to five years	2,422	12,631
Over five years	<u>63,927</u>	<u>40,105</u>
Total bonds and debentures	<u>\$ 67,999</u>	<u>\$ 52,901</u>

e) 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, 2016, the Plan's maximum credit risk exposure related to cash and short-term investments and bonds and debentures is \$68,590,870 (2015 - \$61,296,885), and accounts receivable is \$249,242 (2015 - \$93,114). 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, 2016

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

	(in thousands of dollars)			
	<u>2016</u>		<u>2015</u>	
Bonds and debentures investments				
Credit Rating				
AAA	\$ 10,761	15.8 %	\$ 12,114	22.9 %
AA	22,882	33.7 %	19,178	36.3 %
A	21,075	31.0 %	14,219	26.9 %
BBB	<u>13,281</u>	<u>19.5 %</u>	<u>7,390</u>	<u>14.0 %</u>
	67,999	100.0 %	52,901	100.1 %
Cash and short-term investments	<u>592</u>		<u>8,396</u>	
	<u>\$ 68,591</u>		<u>\$ 61,297</u>	

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, 2016

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

	(in thousands of dollars)				
	<u>2016</u>			<u>2015</u>	
	Level 2	Level 3	Total	Level 2	Total
Cash	\$ 31	-	\$ 31	\$ 30	\$ 30
Short-term investments	561	-	561	8,366	8,366
Bonds and debentures	67,999	-	67,999	52,901	52,901
Canadian equities	27,945	14,029	41,974	53,347	53,347
Foreign equities	<u>50,680</u>	<u>8,492</u>	<u>59,172</u>	<u>44,504</u>	<u>44,504</u>
	<u>\$ 147,216</u>	<u>\$22,521</u>	<u>\$ 169,737</u>	<u>\$ 159,148</u>	<u>\$ 159,148</u>

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:

	<u>2016</u>
Bonds and debentures:	
Connor, Clark & Lunn Bond Pool Fund Class A	\$ 59,542,538
Connor, Clark & Lunn High Yield Bond Fund I	\$ 8,456,111
Canadian equities:	
Connor, Clark & Lunn Equity Extension I	\$ 14,029,588
PCJ Canadian Equity Fund	\$ 13,975,455
SRA Canadian Equity Fund	\$ 13,969,618
US equities:	
Connor, Clark & Lunn Q US Equity Fund	\$ 25,042,687
Non-North American equities:	
NS Partners Int'l Equity Fund A	\$ 25,637,152
Connor, Clark & Lunn Emerging Markets Equity	\$ 8,491,705

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, 2015 and completed in May 2016, by Eckler Ltd., a firm of consulting actuaries. Those results provide the present value of accrued pension benefits as at December 31, 2015 and accruing cost in 2016. A second actuarial valuation was prepared by Eckler Ltd. as at December 31, 2016 to determine the present value of accrued pension benefits as at December 31, 2016. The valuation as at December 31, 2016 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, 2016

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:

	<u>2016</u>	<u>2015</u>
Discount rate	5.55 %	5.55 %
Rate of salary increase	3.00 %	3.00 %
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).

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

	<u>2016</u>	<u>2015</u>
Market value of net assets available for pension benefits	\$ 169,953,000	\$ 159,208,000
Market value of changes not reflected in the actuarial value of net assets	<u>(2,488,000)</u>	<u>(3,406,000)</u>
Actuarial value of net assets available for pension benefits	<u>\$ 167,465,000</u>	<u>\$ 155,802,000</u>
Actuarial value as a percentage of market value	98.5 %	97.8 %

The actuarial valuation indicates an actuarial deficit of \$5,217,000 as at December 31, 2016 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 next required valuation of the plan will be as at December 31, 2017 and will be completed in 2018.

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, is being prepared as at December 31, 2016 and will be filed with the Manitoba's Office of the Superintendent - Pension Commission in 2017. The results of that valuation are presented in these financial statements.

BRANDON UNIVERSITY RETIREMENT PLAN

Notes to the Financial Statements for the year ended December 31, 2016

The University will be 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 10 years. Special payments totaling \$678,000 will be made in 2017 (2016- \$1,291,000).

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.

11. Comparative Figures

Comparative figures for the year ended December 31, 2015 have been reclassified where necessary to conform with the presentation adopted for the year ended December 31, 2016.

Pension Board Trustees (June 2017)

Name	Address	Phone	Email
Sharon Hooper (Exempt) May 2015 to April 2018	Human Resources	204-727-7416	hoopers@brandonu.ca
Heather Gillander (Chair) (BUFA) May 2015 to April 2018	Arts (Business Administration)	204-727-9792	gillanderh@brandonu.ca
Todd Fugleberg (BUFA) June 2015 – May 2018	Science (Physics & Astronomy)	204-571-8577	fuglebergt@brandonu.ca
Becky Lane (MGEU) Feb 2016 – Jan. 2019	Ancillary Services	204-727-7394	laneb@brandonu.ca
Kim Nguyen (IUOE D) May 2017 – April 2020	Physical Plant	204-727-9620	nguyenk@brandonu.ca
Shawn Chambers (BOG) Sept 2016 – Aug 2017		204-988-6742	shawn.chambers@rbc.com
Scott Lamont (BOG) Sept 2016 – Aug 2017	Administration & Finance	204-727-9707	lamont@brandonu.ca
Brent Cuvelier (IUOE A) May 2014 – April 2017	Physical Plant	204-727-9620	cuvelierb@brandonu.ca
John Rice (Pensioner Representative) Sept 2014 – Aug 2017	Science	204-727-9693	rice@brandonu.ca
Tanya Cantlon (MGEU) February 2015 – January 2018	Library	204-727-9747	cantlont@brandonu.ca

Susan Smale (Resource)	Administration & Finance	204-727-9723	smale@brandonu.ca
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