

# Annual Activity Report 2015-2016

THE MEMORIAL UNIVERSITY PENSION PLAN

DEPARTMENT OF HUMAN RESOURCES, MEMORIAL UNIVERSITY OF NEWFOUNDLAND





# **Annual Activity Report of The Memorial University Pension Plan**

April 1, 2015 to March 31, 2016

Department of Human Resources, Memorial University of Newfoundland St. John's, NL A1C 5S7

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September 2016

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#### Board of Regents

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# Chairperson's Message

September 30, 2016

Honourable Gerry Byrne Minister of Advanced Education, Skills and Labour West Block, Confederation Building P.O. Box 8700 St. John's, NL A1B 4J6

#### Dear Minister Byrne:

I am pleased to submit the 2015-16 Annual Activity Report of the Memorial University Pension Plan. This report covers the period April 1, 2015 to March 31, 2016.

This is the second performance-based report to be presented under the Memorial University Pension Plan's Activity Plan for 2014-2017. This document sets forth in clear language how the University has addressed the objectives that were outlined in the plan.

My signature below is on behalf of the Board of Regents and is indicative of our accountability for the actual results reported.

Respectfully submitted,

Iris Petten

Chair, Board of Regents

#### **Pension Plan Overview**

The three-year Activity Plan prepared for the Memorial University Pension Plan (the "Plan") set out the Plan's objectives for the period April 1, 2014 to March 31, 2017. This Annual Activity Report will discuss the outcome of those objectives for the period April 1, 2015 to March 31, 2016 and provide additional information on the operation of the Plan for the year then ended. The Board of Regents, as trustee of the Fund, is responsible to ensure compliance with the *Memorial University Pensions Act* and operates under its own vision, mission, and mandate.

#### Vision

The vision of the Memorial University Pension Plan is of stable retirement incomes for participating employees.

#### Mission

By 2017, the Memorial University Pension Plan will have ensured the provision of secure, affordable and competitive retirement incomes for employees of Memorial University of Newfoundland.

#### Measure

Ensured the provision of secure, affordable and competitive retirement incomes

#### Indicator

Reduced unfunded liability

#### **Mandate**

The mandate of the Board of Regents of Memorial University, acting as the trustee for the Pension Plan, is set out in the *Memorial University Pensions Act*. In this role, the Board is responsible for the administration of the pension fund and has delegated certain administrative activities to the University's Department of Human Resources. In discharging its role, the University's administration works closely with key stakeholder groups to ensure effective stewardship of the pension plan.

Administration of the pension fund involves:

- collecting and depositing employee and employer contributions into the fund;
- investing funds in accordance with the Act;
- paying pensions to eligible retired employees or their beneficiaries as per the Act; and,
- keeping complete books of account detailing all transactions of the fund.

For further details please refer to the legislation at the following website address: <a href="http://assembly.nl.ca/Legislation/sr/statutes/m08.htm">http://assembly.nl.ca/Legislation/sr/statutes/m08.htm</a>

# **Pension Plan Design**

The Plan is a contributory defined-benefit pension plan, established in 1950 under statute of the provincial legislature. It is designed to provide retirement benefits to full-time permanent

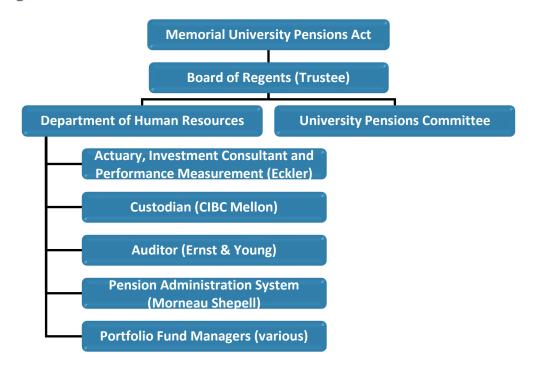
employees and qualifying contractual employees of the University. In addition, employees of certain separately incorporated entities of the University and affiliated employers are eligible to participate in the Plan. Benefits, which are integrated with the Canada Pension Plan, are based upon employees' years of pensionable service, best five-year average pensionable salary, and a two per cent accrual factor.



### **Authority and Administration**

The Plan operates under authority of the *Memorial University Pensions Act*, which prescribes the Board of Regents of the University as trustee. To assist with its responsibilities as trustee, the Board has established a University Pensions Committee to provide advice on matters relating to the Plan. This advisory committee, which has representation from across the entire University community, operates under terms of reference set out by the Board. The actual administration of the Plan is carried out by the University's Department of Human Resources. The administrative and governance structure of the Plan is outlined below:

Figure 1: Organization Chart



#### Investments

All contributions from employees and the University are paid into the Memorial University Pension Fund (the Fund) for investment by external investment managers. The Statement of Investment Policy and Objectives that has been developed to guide the investment of the Fund sets out a policy asset mix with the objective of maintaining predictable and stable benefit costs and contributions.

The Fund is invested in 10 separate investment mandates that include equities, traditional fixed income, real estate and mortgages. Of the total investment, 31 per cent has been allocated to foreign markets. For a more detailed description of the investment structure please refer to Tables 1 and 2 on the following page.

During the 2015-2016 fiscal year, the Pensions Committee reviewed the Fund's Statement of Investment Policy and Objectives and recommended a number of amendments which were approved by the Board. These included: i)

#### INVESTING LOCALLY

Through the Greystone Real Estate Fund, the Pension Plan is invested locally in: "351 Water Street" and "Scotia Place" in St. John's and the "Beclin Business Park" in Mount Pearl

changes to reflect updated expectations about future returns of the investment portfolio; ii) a movement of the policy allocation for cash to the active fixed income mandates for re-balancing purposes and, iii) improved language to enhance flexibility for investment in open and closed end real estate pools.



# **Policy Asset Mix**

The policy asset mix set for the investment of the Fund is set out below:

**Table 1: Policy Asset Mix** 

Asset Class	Percentage Allocation	Benchmark Index
Canadian Equity	25%	S&P/TSX
U.S. Equity	21%	S&P 500
International Equity	10%	MSCI ACWI ex-US
Canadian Fixed Income	25%	FTSE TMX Universe
Cash/Short Term	3% *	n/a
Real Estate	8%	CPI + 4%
Mortgages	8%	60% TMX short + 40%
		TMX mid + 0.5%

<sup>\*</sup> for monthly re-balancing purposes, cash is included with active fixed income.

The actual distribution of assets will vary from the policy asset mix over time due to the impact of market forces. Once an asset class moves outside a pre-determined range a re-balancing will be performed by the University to move funds into or out of that asset class to bring it back in line with investment policy upper or lower limits.

# **Investment Manager Benchmark Distribution**

The Fund is invested by external institutional investment management firms. Their mandates and fund allocations are detailed in the table below:

Table 2: Benchmark Distribution

Manager	Mandate	Benchmark Allocation	Actual Allocation March 31, 2016
Jarislowsky Fraser Limited	Canadian Equity	12.5%	14.5%
Connor Clark & Lunn	Canadian Equity	6.25%	5.7%
Fidelity Investments Canada *	Canadian Equity	6.25%	6.1%
Greystone Managed Investments Inc.	Canadian Fixed Income	7.75%	7.5%
Jarislowsky Fraser Limited	Canadian Fixed Income	7.75%	5.9%
CIBC Global Asset Management Inc.	Indexed Bonds	12.5%	13.4%
Alliance Bernstein	US Equity	21%	22.0%
Aberdeen Managed Investments	International Equity	10%	10.1%
IAM Real Estate Group **	Real Estate	3.2%	2.3%
Greystone Managed Investments Inc.	Real Estate	4.8%	4.9%
Greystone Managed Investments Inc.	Mortgage	8%	7.6%

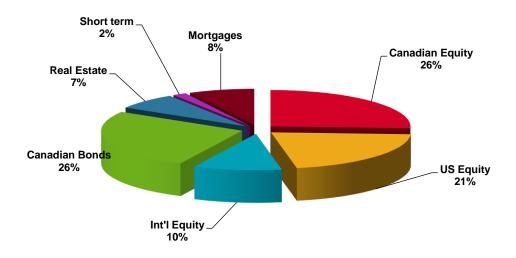
<sup>\*</sup> previously referred to as Pyramis Global Advisors

<sup>\*\*</sup> previously referred to as Greiner-Pacaud Management Associates

The relative distribution of assets across the entire Fund, as at March 31, 2016, is illustrated in the following chart:

Figure 2: Distribution of Assets





#### **Investment Performance**

For the year ended March 31, 2016 the Fund achieved an annual return of 0.88 per cent. Despite such a low absolute return, the Fund performed quite well compared to other Canadian pension funds. In a universe of similarly invested funds it ranked in the 10th percentile where the 1st percentile represents the top performer and the 100th percentile, the worst. On a longer term annualized basis, the Fund has been a top performer within its peer comparator group. Over a five year period it has earned an annualized return of 9.02 per cent surpassing its benchmark by 1.84 percentage points. On a ten year basis the Fund has generated an annualized return of 6.43 per cent, an excess of 0.96 percentage points over the benchmark ranking it in the 26th percentile. Selected performance metrics are as follows:

**Table 3: Investment Performance** 

	1 year	4 years	5 years	10 years
Annualized Return	0.88%	10.24%	9.02%	6.43%
Benchmark Return *	(0.55%)	8.24%	7.18%	5.47%
Value Added	1.43%	2.00%	1.84%	0.96%
Percentile Ranking	10	11	11	26

<sup>\*</sup> The benchmark is the expected return of the Fund based upon a passive investment in the indices underlying the policy asset mix.

Figure 3: Rate of Return

Annual fund returns over the period 1999 to 2016 are presented in the chart below. The annualized return over this period was 6.3 per cent.

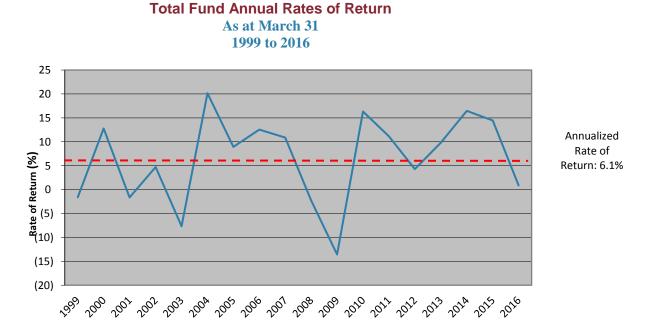
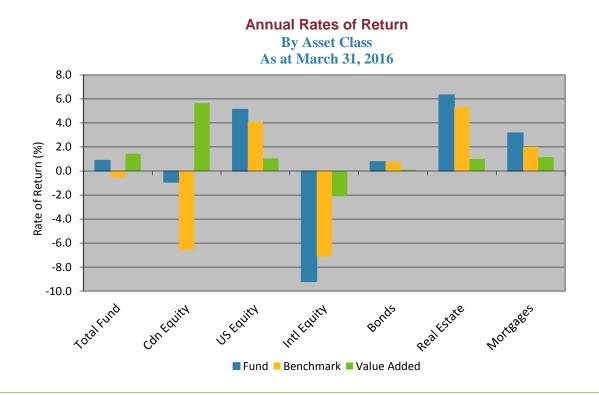


Figure 4: Asset Class Rate of Return

Annual returns by asset class for the one year period ended March 31, 2016 are shown below:



#### **Actuarial Valuation**

An actuarial valuation of the Pension Plan was performed as at December 31, 2015 and the results have been extrapolated to March 31, 2016 for reporting purposes. The valuation is the basis for Pension Plan funding up to the date of the next valuation for funding purposes, due no later than December 31, 2018. While an actuarial valuation of the Pension Plan is normally required at least once every three years for funding purposes, annual valuations have been performed since 2006. These valuations have been requested by the provincial Office of the Superintendent of Pensions as a condition of granting a solvency funding exemption under the *Pension Benefits Act*, 1997, *Regulations*. The current exemption was in effect to March 31, 2016.

In addition to reporting on the solvency position of the Pension Plan, an actuarial valuation is performed to determine the ability of the Pension Plan to meet its obligations or "pension promises" on a going-concern basis. It is also used to project the cost of benefits that will accrue to active plan members in the years following the valuation. The results of the December 31, 2015 valuation and extrapolation to March 31, 2016 are highlighted in the following table together with comparative figures for an extrapolation of the Pension Plan's financial position to March 31, 2015:

**Table 4: Balance Sheet Valuation** 

Actuarial Balance Sheet							
March 31, 2016 (\$ Millions)				December 31, 2015 (\$ Millions)		March 31, 2015 (\$ Millions)	
	Going Solvency Concern		Going Concern <sup>1</sup>	Solvency <sup>2</sup>	Going Concern	Solvency	
Actuarial Value							
of Assets	1,373.8	See Note 3)	1,337.3	1,498.0	1,263.3	See Note 3)	
Actuarial		below				below	
Liabilities	1,657.1		1,634.5	1,995.8	1,465.9		
Unfunded							
Liability	(283.3)		(297.2)	(497.8)	(202.6)		

#### Notes:

- 1) The going concern unfunded liability, as at December 31, 2015 includes approximately \$78.8 million related to the introduction of indexing in July 2004. A financing plan is in place to amortize this portion of the unfunded liability over a remaining period of 28.5 years from December 31, 2015.
- 2) Solvency assets at December 31, 2015 include the present value of five years' worth of going concern special payments (\$130.0 million).
- 3) An extrapolation of the solvency position was not performed as at March 31, 2015 or March 31, 2016.

In accordance with the *Pension Benefits Act*, 1997 (the PBA), Memorial University, as employer, is required to liquidate going-concern deficiencies within 15 years of the valuation date. The total going-concern deficiency identified in the December 31, 2015 valuation was calculated by the University's actuary, Eckler Limited, to be \$297.2 million. Of this amount, approximately \$78.8 million was in respect of past service costs associated with the introduction of indexing in 2004. By special provision of the PBA, the University and employees are financing the indexing liability over a remaining period of 28.5 years from December 31, 2015 through contributions equivalent to 1.2 per cent of pensionable payroll (shared equally by the University and employees). The balance, namely \$218.4 million (\$297.2 - \$78.8), will be liquidated by the University through special payments of 8.6 per cent of payroll over a period of 15 years. The special payment required for 2016-2017 is \$27.5 million.

For the period April 1, 2015 to March 31, 2016 the University was exempt from the going concern funding requirements of the PBA thereby allowing deferral of the 2015-16 special payment against the Plan's unfunded liability. The exemption was granted on the condition that the University engage in pension reform discussions with its stakeholder groups. The special payment schedule is expected to resume effective April 1, 2016. Upon resumption, the special payment schedules that were in effect on April 1, 2015 will be based upon the Plan's December 31, 2013 actuarial valuation, adjusted to add one year of accrued interest at 6.3 per cent and one additional year for payment.

#### **Current Service Cost**

Current service cost is the basis upon which the Pension Plan's contribution rate for both employees and the University is determined. The December 31, 2015 valuation of the Plan showed that the cost of pension benefits being earned by members had increased by 1.5 per cent. A contribution rate increase for both employees and the University is planned for January 1, 2017.

The current contribution rate together with the proposed increased rate is shown below:

**Table 5: Contribution Rate** 

Rate Structure	Current Contribution Rate	Proposed Contribution Rate
Earnings up to Year's Basic Exemption under Canada Pension Plan	9.9%	11.4%
Earnings between Year's Basic Exemption under Canada Pension Plan and the Year's Maximum Pensionable Earnings under Canada Pension Plan	8.1%	9.6%
Earnings above Year's Maximum Pensionable Earnings under Canada Pension Plan	9.9%	11.4%

# **Pension Plan Membership Statistics**

Information on the composition of active, retired and deferred members is shown in the table and charts below:

**Table 6: Plan Member Statistics** 

	March 31				
	2016	2015	2014	2013	2012
Active Members	3,961	3,907	3,966	3,823	3,863
Average Age of Active Members	46.6	46.5	46.4	46.2	46.2
Retirees (incl. survivors)	1,961	1,796	1,688	1,637	1,549
Deferred Pensioners	268	362	314	292	287
Average Age at Retirement	61.02	60.97	60.94	60.90	60.49

**Figure 2: Membership Distribution** 

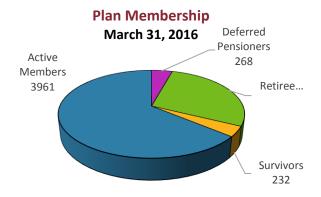
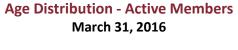
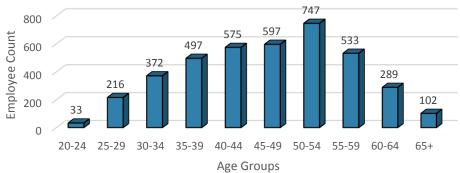


Figure 3: Age Distribution





# **Outcome of Objectives 2015-16**

The two primary issues and related objectives identified in the 2014-17 Activity Plan are set out below:

**Issue One:** Responsible stewardship in the collection, investment and disbursement of the

The Board of Regents, as trustee of the Fund, is responsible to ensure that funding objectives for the Plan are met and that contributions are invested in a prudent and timely manner. It must further ensure that the Plan is administered in accordance with the *Memorial University Pensions Act* and other governing legislation. Over the past two years of the Plan, the Board of Regents ensured that the funding objectives of the Plan were met and that contributions were invested in a timely and prudent manner in accordance with all governing legislation. In doing so, they successfully achieved their objective as outlined in the 2014-17 Activity Plan. During the period April 1, 2015 to March 31, 2016 a total of \$59.8 million in contributions from the University and its employees were paid into the pension fund for investment while the plan paid out a total of \$67.5 million in benefits to eligible retired employees and their beneficiaries. Over that same period, \$5.8 million in administrative expenses were paid. The following details the Plan's successful achievement of the indicators, and therefore the objective presented in the activity plan for the 2015-16 fiscal year.

**Objective:** By March 31, 2016, the Memorial University Pension Plan will have met its funding

objectives including the awarding of monies to eligible retired members or their

survivors and the payment of associated administrative expenses

**Measure:** Met its funding objectives

#### **Indicators:**

#### • Collected and invested contributions

During the 2015-16 fiscal year, the Plan collected a total of \$59,811,000 in contributions, representing amounts paid by the University and its employees and funds transferred from other employers' plans. All contributions are paid into the Pension Fund for investment by external investment managers. Summary information on the Plan's investment structure and performance has been included in this Report under the "Investments" section.

- <u>Eligible retired members/survivors are receiving pension benefits</u>
  The Plan paid out a total of \$67,486,000 in benefits to eligible retired employees or their beneficiaries in 2015-16.
- <u>Paid associated administrative expenses</u> During 2015-16, the Plan paid a total in \$5,823,000 in administrative expenses.

#### **Issue Two:** Unfunded Liability

As employer, Memorial University must comply with the pension plan funding requirements of the Pension Benefits Act, 1997 (PBA). When the Pension Plan experiences funding deficiencies, as measured by periodic actuarial valuations, the University must make additional special payments into the Pension Plan. The PBA requires that going-concern deficiencies be amortized over a period not greater than 15 years, while solvency deficiencies must be paid over not more than 5 years. The University has been granted exemptions from certain funding provisions of the PBA, including the solvency funding requirement up to March 31, 2016 and the going concern funding requirement for the fiscal year April 1, 2015 to March 31, 2016. With respect to going concern, the exemption was granted on the condition that the University engage in pension reform discussions with its stakeholder groups. The special payment otherwise due for 2015-16 has been deferred by one year. The special payment schedule will resume on April 1, 2016 and upon resumption, it will be adjusted to add one year's interest at 6.3 per cent and one additional year for payment. In addition to the funding exemptions, the University is amortizing past service costs associated with indexing, introduced in 2004, over a remaining period of 28.25 years from March 31, 2016. An actuarial valuation of the Pension Plan was performed as at December 31, 2015 and this will be the basis for funding until the date of the next funding valuation, due no later than December 31, 2018.

During the past year, the Board of Regents authorized a request to government for a one year deferral of the 2015-16 special payment against the Pension Plan's unfunded liability. While Memorial University did not meet the objective of making a special payment against the unfunded liability as set out in the 2014-2017 Activity Plan, the financial integrity of the Pension Plan was maintained by the addition of interest to the deferred payment schedule and by extending the amortization period by one year. Legislative authority for the funding deferral was granted under the regulations to the PBA.

**Objective:** By March 31, 2016, Memorial University will have made special payments against

the unfunded liability as per the latest funding valuation, in accordance with

legislative requirements.

Measure: Made special payments, as per the latest funding valuation, in accordance with

legislative requirements.

**Indicator:** Made annual special payment of 7.2 per cent of pensionable payroll towards

liability (\$23.5 million in 2015-16).

The 2015-16 annual special payment towards the Pension Plan's unfunded liability was deferred by one year in accordance with an exemption granted under the Pension Benefits Act, 1997, Regulations. Upon resumption of the special payment schedule on April 1, 2016, interest will be added to the outstanding amount and the amortization schedule extended by one year.

The December 31, 2015 valuation disclosed that the Plan's going-concern unfunded liability was \$297.2 million and the portion (after accounting for the indexing liability) to be funded by the University was \$218.4 million. This amount will be amortized over a 15 year period with annual special payments of 8.6 per cent of pensionable payroll.

The indexing liability is being financed by ongoing contributions from the University and employees at a combined rate of 1.2 per cent of pensionable payroll.

#### 2016-17 Objectives

The aforementioned objectives, measures and indicators will also be reported upon in the 2016-17 Annual Activity Report of the Pension Plan.

# **Highlights and Accomplishments**

# **Financial Highlights**

Selected financial highlights for the Plan are shown in the table below. More detailed information can be found in the audited financial statements, beginning on page 21 of this report.

**Table 7: Financial Highlights** 

			March 31
		2016	2015
Net Assets Available for	Benefits	1,358,381,000	1,359,270,000
One-Year Annual Rate of	Return	0.88%	14.46%
Realized Investment Inco	me	116,326,000	123,258,000
Pensions Paid		60,065,000	54,938,000
Current Contributions:	Employee	26,338,000	25,352,000
	University	26,344,000	25,342,000
University special payments:			
	Going Concern	Nil	22,638,000
	Solvency deficit (refunds)	3,118,000	2,750,000

# **Benefit Provisions – Indexing**

On July 1, 2015, 1430 retirees and survivors received a 1.2 per cent indexing adjustment to their pensions. Indexing was introduced under the Plan in July 2004, with yearly adjustments calculated as 60 per cent of the annual change in the consumer price index, as measured by Statistics Canada, to a maximum yearly increase of 1.2 per cent.

#### **Actuarial Valuation of Pension Plan and Financial Position**

A full valuation of the Plan was performed at December 31, 2015 and extrapolated to March 31, 2016 for financial reporting purposes. The results of this valuation are reported upon in an earlier section.

#### Financial Position / Funded Ratios

On a market value basis, the funded ratio of the Pension Plan steadily increased for a number of years following the 2008-09 global financial crisis. The Plan's financial position declined as at March 31, 2016; however, due to the combined influence of low market returns and a strengthening of a key valuation assumption, namely the discount rate which was lowered to 5.8 per cent (previously 6.3 per cent). Selected periods are shown below:

**Table 8: Financial Position** 

	March 31					
	2016	2015	2014	2013	2012	2009
	(000s)	(000s)	(000s)	(000s)	(000s)	(000s)
Net Assets at Market						
Value	1,358,381	1,359,270	1,176,485	994,461	886,376	620,939
Pension Obligations	1,657,148	1,465,989	1,399,236	1,262,133	1,185,201	954,041
Deficit	298,767	106,719	222,751	267,672	298,825	333,102
Funded Ratio	82%	93%	84%	79%	75%	65% global financial crisis

- ❖ Annual valuations have occurred at December 31 since 2012. Previously, valuations were prepared as at March 31.
- Results of December 31 valuations are extrapolated to March 31 for financial reporting.

# **Retirement Planning Seminars**

To help Memorial employees plan for their retirement, full day retirement planning seminars are held annually. With almost 1,000 employees eligible for unreduced retirement by 2019, this year's seminar had approximately 180 participants. The seminar was open to employees and their spouses and was attended both by those who anticipate retiring in the next few years and those who are planning ahead for their retirement in years to During come. the seminar. learned about the participants



university's pension and post-retirement benefits, the Canada Pension Plan and Old Age Security Benefits. Presentations were also provided by a representative of Memorial University of Newfoundland Pensioners' Association (MUNPA) and from a financial planning and consulting firm. This year's seminar was held on the St. John's campus in February 2016, with a similar seminar held on the Grenfell campus in September 2015. The University also provides pension information sessions at the request of individual departments.

# **Opportunities and Challenges**

The following areas of opportunity have been identified for 2016-17

- Exploration of alternative investment strategies; and,
- Providing retirement planning seminars.

The following challenges have been identified for 2016-17

- Continued monitoring of the investment performance of fund managers and review of the Statement of Investment Policy and Objectives;
- Continued transition of funds into the real estate and mortgage portfolios;
- Review of Pension Plan governance structure, funding and plan design.

# Conclusion

Fiscal year 2015-16 was a challenging one for the Pension Plan, as it faced multiple headwinds to funding, including deferral of the special payment, low absolute fund returns and a lowering of the key discount rate assumption. Despite these challenges, the Pension Plan is well positioned to meet its objective of providing retirement income security for employees of the University. The Board, through the work of the University administration and stakeholder groups, will continue its efforts to ensure that funding goals are achieved and that the Pension Plan remains competitive and affordable for its constituent groups.

With respect to the objectives set out in the Board of Regents' three-year activity plan intended to guide the Plan for the fiscal years 2014-15 to 2016-17, the University met the funding objective relative to the collection, investment, and disbursement of the fund. As for the objective dealing with special payments into the Fund against the unfunded liability, the University was exempted from making the going concern special payment for the fiscal year 2015-16 by special provision of the *Pension Benefits Act, 1997 Regulations* and the payment was deferred. Special payments are prescribed by the regulations to resume on April 1, 2016 and the payment schedules, inclusive of the deferred amount for 2015-16, will be adjusted by adding one year's worth of interest at 6.3 per cent and by extending the amortization period by one year.





# Financial statements Memorial University of Newfoundland Pension Plan

March 31, 2016

#### Independent auditors' report

To the Board of Regents of **Memorial University of Newfoundland** 

We have audited the accompanying financial statements of the **Memorial University of Newfoundland Pension Plan**, which comprise the statement of financial position as at March 31, 2016 and 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.

#### Auditors' 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 auditors' 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 auditors consider 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 in our audit 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 **Memorial University of Newfoundland Pension Plan** as at March 31, 2016, and the changes in its net assets available for benefits and changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

St. John's, Canada

Crost & Young LLP

Chartered Professional Accountants

July 7, 2016

# Statement of financial position

As at March 31 [thousands of dollars]

	2016	2015
Assets		
Receivables		
Contributions receivable	4,221	8,078
Accrued interest and dividends	2,132	2,257
Amounts due from pending trades	8,133	862
Due from Memorial University of Newfoundland [note 4]	4,018	1,349
	18,504	12,546
Investments [note 5]		
Cash and short-term investments	18,882	26,169
Bonds and debentures	357,977	350,112
Equities	773,619	802,311
Real estate	97,822	89,009
Mortgages	102,247	88,407
	1,350,547	1,356,008
Intangible assets	306	349
Total assets	1,369,357	1,368,903
Liabilities		
Accounts payable and accrued expenses	1,198	947
Accrued pension refunds	2,203	2,273
Amounts payable from pending trades	7,575	6,413
Total liabilities	10,976	9,633
Net assets available for benefits	1,358,381	1,359,270
Pension obligations [note 6]	(1,657,148)	(1,465,989)
Deficit	(298,767)	(106,719)

See accompanying notes

On behalf of the Board:

hair of the Board of Regents

hair of the Finance Committee

# Statement of changes in net assets available for benefits

Year ended March 31 [thousands of dollars]

	2016	2015
Increase in assets		
Investment income		
Interest income	15,535	14,400
Dividend income	23,820	25,827
Current-period (decrease) increase in fair value of investments	(103,717)	47,875
Realized gain on sale of investments	76,971	83,031
	12,609	171,133
Contributions [note 7]		
Employee - current service	26,338	25,352
- past service	3,810	2,664
Employer - current service	26,344	25,342
- past service	201	197
- special payments	3,118	25,388
	59,811	78,943
Total increase in assets	72,420	250,076
Decrease in assets		
Benefits paid	60,065	54,938
Refunds of contributions	5,078	6,401
Death benefits	2,343	717
Administrative expenses [note 8]	5,823	5,235
Total decrease in assets	73,309	67,291
(Decrease) increase in not assets	(990)	100 705
(Decrease) increase in net assets	(889) 1,359,270	182,785
Net assets available for benefits, beginning of year		1,176,485
Net assets available for benefits, end of year	1,358,381	1,359,270

See accompanying notes

# Statement of changes in pension obligations

Year ended March 31 [thousands of dollars]

	2016	2015
Actuarial present value of accrued pension benefits, beginning of year	1,465,989	1,399,236
Experience losses (gains)	9,253	(13,070)
Changes in actuarial assumptions/methodology	98,400	_
Interest accrued on benefits	92,768	88,743
Benefits accrued	58,224	53,136
Benefits paid, death benefits and refunds of contributions	(67,486)	(62,056)
Actuarial present value of accrued pension benefits, end of year [note 6]	1,657,148	1,465,989

See accompanying notes

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### 1. Description of plan

The following description of the Memorial University of Newfoundland Pension Plan [the "Plan"] is a summary only. For more complete information, reference should be made to the *Memorial University Pensions Act (the Act)*.

#### General

The Plan is a contributory defined benefit pension plan covering eligible employees of Memorial University of Newfoundland [the "University"] in accordance with the Act.

Where differences exist between the provisions of the Act and the Newfoundland *Pensions Benefits Act, 1997* [the "PBA"], the minimum standards prescribed by the PBA will prevail unless the Plan provisions exceed these standards.

#### **Funding policy**

The Plan is subject to the funding provisions of section 35 of the PBA and section 12 of the PBA Regulations which require that the employer contribute an amount equal to the normal actuarial cost allocated to the employer in the most recently filed actuarial valuation. In addition, where the Plan experiences a solvency deficiency, the employer is required to contribute an amount sufficient to liquidate the solvency deficiency within five years of the solvency valuation date. Likewise, going concern unfunded liabilities are required to be liquidated by the employer over a period not exceeding 15 years.

#### **Provincial guarantee**

The Plan is being underwritten by the Province of Newfoundland and Labrador. Section 6 of the Act states:

All pensions, payments, and refunds and all expenses of the administration of this Act are a charge upon and payable out of the fund and if at any time there is not sufficient money at the credit of the fund for those purposes as they fall due for payment the Minister of Finance shall pay to the board an amount to cover the deficiency, and the board shall deposit that amount to the fund.

#### Service pensions

A service pension is available based on the number of years of service times two percent of the best five-year average pensionable salary. Pensions are indexed from age 65 at the rate of 60% of the annual change in the Consumer Price Index, as measured by Statistics Canada, to a maximum annual increase of 1.2%.

#### Survivors' pensions

A survivor pension is paid to a surviving principal beneficiary or dependent child, as defined in the Act, of a member who has a minimum of two years' credited service.

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### Death refunds

A death refund is payable to the estate of a pensioner or survivor where such pensions have not been paid to the full extent of the individual's contributions plus interest. In a similar manner, a death refund is payable to the estate of a contributor where no survivor pension is paid. A death refund may also be paid to a surviving principal beneficiary who elects to transfer the commuted value of their survivor pension from the Plan where the death of a contributor precedes the commencement of their pension.

#### Refunds

Upon application and subject to locking-in provisions, a terminated employee may withdraw their contributions and accumulated interest.

#### Income taxes

The Plan is a Registered Pension Trust as defined in the *Income Tax Act* and is not subject to income taxes.

#### 2. Basis of presentation

These financial statements have been prepared on a going concern basis as set out in Section 4600, Pension Plans, in Part IV of the Chartered Professional Accountants of Canada ["CPA Canada"] Accounting Handbook. They employ accounting policies that do not relate to the Plan's investment portfolio to comply on a consistent basis with International Financial Reporting Standards in Part I of the CICA Handbook, to the extent that those standards do not conflict with the requirements of Section 4600. These financial statements present the information of the Plan as a separate reporting entity independent of the sponsor and participants of the Plan.

#### 3. Summary of significant accounting policies

#### Use of estimates

The preparation of financial statements in conformity with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Actual results could differ from these estimates. These estimates are reviewed periodically and, as adjustments become necessary, they are reported in earnings in the period during which they become known. Areas of key estimation include the actuarial assumptions for the determination of the pension obligations.

#### Investments

Investments are stated at fair value and transactions are recorded as of the trade date. Fair value is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable willing parties who are under no compulsion to act. In determining fair value, adjustments have not been made for transaction costs as they are not considered to be significant. The change in the difference between the fair value and cost of investments, at the beginning and

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

end of each fiscal year, is reflected in the statement of changes in net assets available for benefits as current-period change in fair value of investments.

Fair value of investments is determined as follows:

Bonds, debentures and equities are valued at year-end quoted market prices where available. Where quoted prices are not available, estimated fair value is calculated using comparable securities. In the case of bonds and debentures, fair value measurement is based upon the bid price whereas equities are valued at the mid-point of the bid-ask spread.

Short-term notes, treasury bills and term deposits maturing within a year are valued at amortized cost, which, together with accrued interest income, approximates fair value given the short-term nature of these instruments.

Guaranteed investment certificates and term deposits maturing after one year are valued at the present value of estimated future cash flows discounted at interest rates in effect on the last business day of the year for investments of a similar type, quality, and maturity.

The investment in real estate is comprised of shares and units in both open-end and closed-end real estate funds. The investment in the open-end fund is comprised of an equity position in shares of a corporation ("the Fund"). The Fund invests in a portfolio of diversified Canadian real estate investments permitted by section 149(1)(0.2) of the Income Act (Canada). The fair value of these real estate investments is determined based upon their year-end net asset value. With respect to the closed end funds, the investments are in equity positions of limited partnerships having fixed terms to maturity. For financial reporting purposes, the fair value of these real estate investments is determined annually.

#### Investment income

Investment income, which is recorded on the accrual basis, includes realized gains (losses) on the sale of investments, interest income, dividends and unrealized changes in fair value.

#### Gain on sale of investments

The realized gain on the sale of investments is the difference between proceeds received and the average cost of investments sold.

#### Recognition of contributions and benefits

Contributions and benefits are recognized on the accrual basis of accounting.

All current service and required contributions from the University and Plan participants, respectively, are reflected in the year of the Plan participant's earnings.

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### Foreign currency translation

The fair value of foreign currency denominated investments, included in the statement of net assets available for benefits, is translated into Canadian dollars at year-end rates of exchange. Gains and losses arising from translations are included in the current-period increase (decrease) in fair value of investments. Foreign currency denominated transactions including cost amounts, are translated into Canadian dollars at the rates of exchange in effect on the dates of the related transactions.

#### Intangible assets

Intangible assets are amortized on the basis of their estimated useful lives using the straight line method and the following duration:

Software 10 years

#### Fair value of financial instruments

Investment assets and liabilities are measured at fair value as disclosed elsewhere in these financial statements. Other assets and liabilities do not have significant fair value risk as they are all due within twelve months.

#### 4. Due from Memorial University of Newfoundland

The treasury function of the Plan is administered by the University and, therefore, the Due from Memorial University of Newfoundland account represents funds owed to the Plan by the University.

## **Notes to financial statements**

March 31, 2016 [tabular amounts in thousands of dollars]

#### 5. Investments

[a] The following table summarizes investments at fair value:

Cash and short-term investments       18,882       26,169         Canadian bonds and debentures:       39,690       40,011         Federal       39,690       55,201       52,578         Corporate       82,351       81,483         Pooled funds       180,735       176,040         357,977       350,112         Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         Pooled funds       95,028       98,933         Foreign equities:       287,258       307,734         Pooled funds       136,904       136,511         Pooled funds       136,904       136,511         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407         1,350,547       1,356,008		2016	2015
Federal       39,690       40,011         Provincial       55,201       52,578         Corporate       82,351       81,483         Pooled funds       180,735       176,040         357,977       350,112         Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         349,457       358,066         Foreign equities:       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Cash and short-term investments	18,882	26,169
Provincial         55,201         52,578           Corporate         82,351         81,483           Pooled funds         180,735         176,040           357,977         350,112           Canadian equities:         254,429         259,133           Pooled funds         95,028         98,933           349,457         358,066           Foreign equities:         287,258         307,734           Pooled funds         136,904         136,511           424,162         444,245           Canadian Real estate         97,823         89,009           Canadian Mortgages         102,246         88,407	Canadian bonds and debentures:		
Corporate       82,351       81,483         Pooled funds       180,735       176,040         357,977       350,112         Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         Poreign equities:       349,457       358,066         Foreign equities:       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Federal	39,690	40,011
Pooled funds       180,735       176,040         357,977       350,112         Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         Poreign equities:       349,457       358,066         Foreign equities:       287,258       307,734         Pooled funds       136,904       136,511         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Provincial	55,201	52,578
357,977       350,112         Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         349,457       358,066         Foreign equities:       287,258       307,734         Common stock       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Corporate	82,351	81,483
Canadian equities:       254,429       259,133         Pooled funds       95,028       98,933         349,457       358,066         Foreign equities:       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Pooled funds	180,735	176,040
Common stock Pooled funds       254,429 95,028 98,933         Pooled funds       95,028 98,933         349,457 358,066         Foreign equities: Common stock Pooled funds       287,258 307,734 136,511         Pooled funds       136,904 136,511         424,162 444,245         Canadian Real estate       97,823 89,009         Canadian Mortgages       102,246 88,407		357,977	350,112
Pooled funds       95,028       98,933         349,457       358,066         Foreign equities:       287,258       307,734         Common stock       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Canadian equities:		
Foreign equities:	Common stock	254,429	259,133
Foreign equities:       287,258       307,734         Common stock       136,904       136,511         Pooled funds       424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Pooled funds	95,028	98,933
Common stock       287,258       307,734         Pooled funds       136,904       136,511         424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407		349,457	358,066
Pooled funds         136,904         136,511           424,162         444,245           Canadian Real estate         97,823         89,009           Canadian Mortgages         102,246         88,407	Foreign equities:		
424,162       444,245         Canadian Real estate       97,823       89,009         Canadian Mortgages       102,246       88,407	Common stock	287,258	307,734
Canadian Real estate         97,823         89,009           Canadian Mortgages         102,246         88,407	Pooled funds	136,904	136,511
Canadian Mortgages 102,246 88,407		424,162	444,245
	Canadian Real estate	97,823	89,009
	Canadian Mortgages	102,246	88,407
		1,350,547	

<sup>[</sup>b] Realized losses arising from foreign currency translation amounted to \$13,944 for the year ended March 31, 2016 [2015 – loss of \$20,124]. For financial statement presentation purposes, these amounts have been included in realized gain on sale of investments.

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### 6. Pension benefits

The present value of accrued pension benefits was determined using the projected benefits method prorated on service and the administrator's best estimate assumptions. The Actuary performed an actuarial valuation as at December 31, 2015 and extrapolated the results to March 31, 2016.

The actuarial present value of benefits as at March 31, 2016 was estimated to be \$1,657,148,000 [2015 – \$1,465,989,000]. The statement of changes in pension obligations outlines the principal components of change in actuarial present value from one year to the next.

The assumptions used in determining the actuarial value of accrued pension benefits were developed by reference to expected long-term market conditions. Significant long-term actuarial assumptions used in the December 31, 2015 valuation were:

Discount rate Salary escalation rate

5.8% [2015 – 6.3%] pre- and post-retirement

4.0% [2015 - 4.0%] per annum

The actuarial value of net assets available for benefits has been determined at amounts that reflect long-term market trends [consistent with assumptions underlying the valuation of the accrued pension benefits]. The fair value is the underlying basis and incorporates an investment reserve calculated as the unamortized difference between expected and actual investment returns over a period of three years.

The actuarial asset values used in the extrapolations for 2016 and 2015 were as follows:

	2016	2015
Net assets available for benefits Actuarial value changes not reflected in fair value of net	1,358,381	1,359,270
assets	15,377	(95,925)
Actuarial value of net assets available for benefits	1,373,758	1,263,345

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### 7. Funding policy

Pursuant to the Act, employees are required to contribute to the Plan in accordance with the following schedule:

9.90% of pensionable earnings up to the Year's Basic Exemption ["YBE"] under the Canada Pension Plan Act;
8.10% of pensionable earnings above the YBE up to and including the Year's Maximum Pensionable Earnings ["YMPE"] under the Canada Pension Plan Act;
9.90% of pensionable earnings above the YMPE.

The December 31, 2015 valuation of the Plan revealed that the current service cost of benefits accruing to members had increased by 1.5%. A contribution rate increase is scheduled for implementation effective January 1, 2017.

The University is required to contribute an amount equal to the contributions paid by employees and any additional amounts required to be paid by an employer under the PBA. For the period April 1, 2015 to March 31, 2016 the University was exempt from the going concern funding requirements of the PBA thereby allowing deferral of the 2015/16 special payment against the Plan's unfunded liability. The special payment schedule will resume effective April 1, 2016. Upon resumption, the special payment schedules that were in effect on April 1, 2015 will be based upon the Plan's December 31, 2013 actuarial valuation, adjusted to add one year of accrued interest at 6.3% and one additional year for payment.

With respect to solvency, the University was exempt to March 31, 2016 from the PBA requirement to liquidate solvency deficiencies within five years of the solvency valuation date. Where the solvency ratio is below prescribed limits the University will, however, make special payments into the fund representing the solvency deficiency on refunds and transfers paid out of the fund.

A valuation of the Plan was performed as at December 31, 2015 and the results have been extrapolated to March 31, 2016 for financial statement reporting. The extrapolation revealed that the going concern unfunded liability is \$283.4 million at March 31, 2016 based on current Plan provisions and PBA requirements. A portion of the unfunded liability relates to the past service cost of indexing, introduced under the Plan, effective July 1, 2004. A funding arrangement was implemented coinciding with the introduction of indexing to liquidate this unfunded liability over a period of 40 years. At March 31, 2016, approximately 28.25 years are remaining in the amortization schedule. The indexing liability is amortized on a declining balance basis along with recognition that if the indexing contributions (i.e., an additional 0.6% of payroll being made by both the University and Employees) exceed the originally scheduled amortization payment, then 15 years' worth of these excess contributions can be accounted for when determining the University's special payments.

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

The University is required to make special payments to fund the going concern unfunded liability revealed in the December 31, 2015 actuarial valuation. As at December 31, 2015 the going concern unfunded liability was \$297.2 million. The portion of the going concern unfunded liability (after accounting for the indexing liability) to be amortized was \$218.4 million and the required amortization payment for fiscal 2016/2017 is \$27.5 million [or 8.6% of pensionable payroll]. University special payments will continue at this level [i.e. 8.6% of pensionable payroll] until the next actuarial valuation for funding purposes, which is due no later than December 31, 2018 [i.e. within three years of the December 31, 2015 actuarial valuation].

#### 8. Administrative expenses

Administrative expenses are paid by the University on behalf of the Plan. The Plan then reimburses the University on a monthly basis. A detailed breakdown of these expenses is as follows:

	2016	2015
Administrative expenses:		
Actuarial fees	323	229
Administrative services	246	255
Audit fees	9	16
Custodial fees	283	259
Investment management fees	4,504	4,134
Salaries and benefits	406	277
Amortization	44	44
Other fees	8	21
	5,823	5,235

#### 9. Intangible assets

	2016		2015	
	Cost	Accumulated Amortization	Net Book Value	Net Book Value
Software	437	131	306	349

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### 10. Fair value measurements, financial risks and risk management

The fair value of investments is as described in notes 3 and 5[a]. The fair value of other financial assets and liabilities, namely contributions receivable [employees], accrued interest and dividends, due from Memorial University of Newfoundland, accounts payable and accrued expenses, and accrued pension refunds are measured at amortized cost. The fair value of amounts due from pending trades and amounts payable from pending trades is represented by the fair value of the underlying securities.

#### Fair value hierarchy

	2016	2015
Level 1		
Cash & short term investments	18,882	26,169
Equities	541,686	567,536
	560,568	593,705
Level 2		
Equities	231,933	234,775
Bonds & debentures	357,977	350,112
Mortgages	102,246	88,407
	692,156	673,294
Level 3		
Real estate	97,823	89,009
	1,350,547	1,356,008

Financial instruments measured at fair value are classified according to a fair value hierarchy that reflects the importance of the data used to perform each valuation. The fair value hierarchy is made up of the following levels:

Level 1- valuation based on quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2- valuation techniques based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly;

Level 3- valuation techniques using inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value hierarchy requires the use of observable data on the market each time such data exists. A financial instrument is classified at the lowest level of hierarchy for which significant input has been considered in measuring fair value. There have been no significant transfers between Levels for all reporting periods presented.

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

The following table summarizes the changes in the fair value of financial instruments classified in Level 3 for the year ended March 31:

Level 3

	2016	2015
Real estate		
Balance at beginning of year	89,009	83,992
Net purchases	4,000	1,040
Net dividends earned	1,558	1,424
Net dividends transferred out	(1,529)	(1,385)
Net unrealized gains	4,814	3,977
Administrative expenses	(29)	(39)
	97,823	89,009

Fair values of investments are exposed to price risk, liquidity risk and credit risk.

#### Price risk

Price risk is comprised of currency risk, interest rate risk, and market risk.

[a] **Currency risk:** Currency risk relates to the possibility that the investments will change in value due to future fluctuations in the U.S., Euro, and other international foreign exchange rates. For example, a 5% strengthening of the Canadian dollar against the U.S. dollar at March 31, 2016 would have decreased the U.S. investment value by approximately \$14,900,000. Conversely, a 5% weakening of the Canadian dollar against the U.S. dollar at March 31, 2016 would have increased the U.S. investment value by approximately \$14,900,000.

A 5% strengthening of the Canadian dollar against the U.K. Pound at March 31, 2016 would have decreased the U.K. investment value by approximately \$1,600,000. Conversely, a 5% weakening of the Canadian dollar against the U.K. Pound at March 31, 2016 would have increased the U.K. investment value by approximately \$1,600,000.

A 5% strengthening of the Canadian dollar against the Euro at March 31, 2016 would have decreased the European investment value by approximately \$700,000. Conversely, a 5% weakening of the Canadian dollar against the Euro at March 31, 2016 would have increased the European investment value by approximately \$700,000.

A 5% strengthening of the Canadian dollar against the Swiss Franc at March 31, 2016 would have decreased the Swiss investment value by approximately \$800,000. Conversely, a 5% weakening of the Canadian dollar against the Swiss Franc at March 31, 2016 would have increased the Swiss investment value by approximately \$800,000.

[b] Interest rate risk: Interest rate risk relates to the possibility that the investments will change in value due to future fluctuations in market interest rates, thereby impacting pension liabilities

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

which are exposed to longer-term fixed-income instruments. Duration is an appropriate measure of interest rate risk for fixed-income funds as a rise in interest rates will cause a decrease in bond prices: the longer the duration, the greater the effect. At March 31, 2016, the average duration of the bond portfolio was approximately 7.5 years. Therefore, if interest rates were to increase by 1%, the value of the bond portfolio would drop by approximately 7.5%.

	Within 1-year	1-5 years	5-10 years	Over 10 years	No specific maturity	Total
Cash and short-term investments	18,882	_	_	_	_	18,882
Bonds and debentures						
Federal	5,706	24,827	_	9,157	_	39,690
Provincial	_	8,458	21,215	25,528	_	55,201
Corporate	2,716	40,061	17,255	22,319	_	82,351
Pooled funds		_		_	180,735	180,735
Total bonds and debentures	8,422	73,346	38,470	57,004	180,735	357,977
Total fixed income	27,304	73,346	38,470	57,004	180,735	376,859

[c] Market risk: Market risk relates to the possibility that the investments will change in value due to future fluctuations in market prices. This risk is reduced by the Plan's investment policy which incorporates diversification of the investment portfolio across various asset classes and within each asset class. Equity price risk is managed by investing in Canadian, U.S. and international equities through the use of five external investment managers utilizing differing investment styles. The equity portfolio is diversified across a range of economic sectors and companies and is limited to stocks traded on recognized stock exchanges.

Fixed-income market risk is managed by diversifying across various government and corporate issuers and by maintaining minimum quality ratings of "A" as determined by recognized bond rating agencies. The minimum quality rating for the pooled index bond fund is "BBB".

Price risk can be measured in terms of volatility, i.e., the standard deviation of change in the value of a financial instrument within a specific time horizon. Based on the volatility of the Plan's current asset class holdings shown below, the expectation is that over the long term (15 years), the Plan will return approximately 5.9%, with a 95% probability of the 15 year annualized return falling within the range of 1.8% to 9.9%.

## **Notes to financial statements**

March 31, 2016 [tabular amounts in thousands of dollars]

	Estimated volatility %
Asset class	
Canadian equities	+/- 17.30
U.S. equities	+/- 17.40
International equities	+/- 16.40
Real estate	+/- 11.20
Mortgages	+/- 3.80
Cash and short-term investments	+/- 2.20
Canadian bonds and debentures	+/- 4.70
Market value at	
March 31, 2016	Investments %
Held-for-trading securities	
Cash and short-term investments 18,882	1.4
Canadian bonds and debentures 357,977	26.5
Canadian equities 349,457	25.9

287,258

136,904

97,822

102,247

1,350,547

	% change	Net impact on market value
Benchmark for investments		
S&P/TSX Composite Index	+/- 17.30	+/- 60,458
S&P 500	+/- 17.40	+/- 49,980
MSCI EAFE (net noon)	+/- 16.40	+/- 22,452
CPI	+/- 11.20	+/- 10,954
Blended FTSE TMX (60% short; 40% mid)	+/- 3.80	+/- 3,885
FTSE TMX Universe	+/- 4.70	+/- 16,825

#### Liquidity risk

U.S. equities

Total

International equities

Canadian real estate

Canadian mortgages

Liquidity risk is the risk of being unable to generate sufficient cash or its equivalent in a timely and cost-effective manner in order to meet commitments as they come due. The primary liabilities in the Plan are future benefit obligations [see note 6] and operating expenses. Liquidity requirements are managed through net monthly contributions and by investing in sufficiently liquid [e.g., publicly traded] equities, pooled funds and other easily marketable instruments.

21.3

10.1

7.2

7.6

100.0

#### Notes to financial statements

March 31, 2016 [tabular amounts in thousands of dollars]

#### Credit risk

Credit risk relates to the possibility that a loss may occur from failure of a fixed-income security issuer. At March 31, 2016, the maximum risk exposure for this type of investment amounts to \$357,977. The Plan limits credit risk by purchasing individual fixed-income instruments that have a credit rating of "A" or higher as rated by recognized Canadian bond rating services. The Plan also owns units of an indexed bond fund which may hold fixed-income instruments with credit ratings of "BBB" and above.

The following table shows the percentage of fixed-income holdings in the portfolio by credit rating:

Rating	%
AAA	35.2
AA	30.5
Α	27.3
BBB	7.0

#### 11. Capital disclosures

The purpose of the Plan is to provide pension benefits to Plan members. The Plan's objective when managing capital is to preserve assets in a manner that provides it with the ability to continue as a going concern. To accomplish this objective, a broadly diversified investment portfolio is utilized to achieve the highest rate of return within an acceptable level of risk. With the assistance of an outside consultant, the Plan's pension advisory committee and the University's administration department regularly monitor the asset mix to ensure compliance with the Statement of Investment Policies and Objectives.

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