

# **ANNUAL FINANCIAL REPORT 2015/2016**

#### SUSTAINABILITY

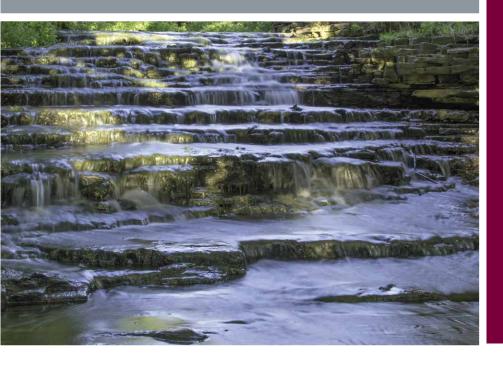
McMaster University's Annual Report theme is Sustainability to reflect its ongoing commitment to integrate sustainable operations and growth into all aspects of the University life cycle. It is these measures which contribute to a healthy community and the enjoyment of our natural surroundings. One of Hamilton's greatest natural treasures is the over 100 waterfalls contained within its city limits, many of which are featured throughout this report.

Highlights of the results of the University's sustainability initiatives are featured on Page 9 of this report.

**Cover:** Great Falls, Smokey Hollow

Pictured below: Billy Monkley Cascade, Mount Albion Trail

**Photography:** Dennis Tavares, Senior Accountant, Financial Services



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# YEAR IN REVIEW

McMaster University completed 2015/16 with a consolidated surplus of \$29.1 million compared to \$78.6 million last year. The decline in results over the prior year relates largely to investment performance during 2015/16. The investment environment was volatile throughout 2015/16, which resulted in an overall performance of -2.8%, compared to 10.1% last year, and a \$43.4 million reduction in investment income. The volatility of the investment environment is managed by diversifying assets across investment classes of fixed income, equities, real estate, and infrastructure within different national and international markets. This diversification approach has been effective over the long term in preserving capital while providing a stable spending rate for trusts, endowments, and operations and pension asset growth. The University's investment strategies also include a growing focus on environmental, social, and governance issues. During the year a President's Advisory Committee on Fossil Fuels Divestment was established that is expected to provide consideration recommendations during 2016/17.

Included within the consolidated results is a small operating fund surplus of \$4.4 million (2014/15 loss \$12.2 million). This surplus relates to a 4.5% growth in operating fund revenue due to increased research overhead

support, other income, and tuition rate increases aligned with the Ministry's tuition framework and other rate changes on nongovernment funded programs. Operating fund expenses grew by 1.6% due primarily to an increase in salaries and benefits expense offset by a reduction in Mosaic related system expenditures. Within the operating fund a number of key strategic priorities were funded in support of McMaster's strategic mandate objectives associated with differentiation goals, enrolment targets, and targeted program outcomes.

In 2015/16 the Paul R. MacPherson Institute for Leadership, Innovation and Excellence in Teaching ("MacPherson Institute", formerly the McMaster Institute for Innovation and Excellence in Teaching and Learning) received University Fund support, through a multi-year commitment to further advance McMaster's experiential learning programs. As well, McMaster increased its base funding allocation to deferred maintenance by \$2 million for the third year in a row, bringing the University's annual deferred maintenance commitment, before residence funding, to \$7.9 million. McMaster's commitment to infrastructure has helped reduce critical maintenance projects and along with the Ministry's commitment of increased future infrastructure funding, McMaster

will substantially address its long standing critical infrastructure project back-log. The facilities condition index improved by 2.6% as a result of both increased deferred maintenance spending and the addition of new capital buildings.

In 2015/16 a number of key capital projects continued toward substantial completion. The most notable is L.R. Wilson Hall, which will provide significant new infrastructure and facilities for students in the Faculties of Humanities and Social Sciences, including space for a number of key liberal arts research centres, new performing arts facilities, and a dedicated home for McMaster's Indigenous Studies Program and Indigenous student support offices. The building is opening in phases, beginning in the fall of 2016. Overall capital spending was less than the previous year, primarily as a result of the substantial completion of a number of large capital projects, including the David Braley Health Sciences Centre in downtown Hamilton and the Mosaic systems renewal project.

Future capital plans incorporated into McMaster's current multiyear financial projection planning necessitated the need for additional debt financing in 2015/16. The University was successful in raising a 50-year debenture at a coupon of 4.105% for \$120 million. A sinking fund has been established to cover

# YEAR IN REVIEW

the principal due on maturity of the bond. The additional debt effectively reduces McMaster's weighted average cost of capital by 1%. This financing will support the University's capital plans, including two residence projects: the Living Learning Centre, a 500bed on-campus undergraduate residence with additional learning, student support spaces, and ancillary services; and an offcampus graduate student and family residence, which will utilize a public-private infrastructure approach to provide housing within the downtown Hamilton core.

The consolidated surplus includes other non-operating fund results from ancillary operations, research, specifically funded activities, trusts and endowments, and capital. During 2015/16 ancillary income increased by 2.4% or \$1.7 million over the prior year. Hosting the Pan Am games during the year positively contributed to Housing and Conference Services and Hospitality revenues and the implementation of debit and credit card payments across Hospitality, as well as the implementation of approved meal plan increases, improved bottom line results. All ancillaries contributed positively to the consolidated bottom line in 2015/16 a success not achieved for several past years.

Research funding receipted during the year increased to \$196.7 million (2014/15 \$194.1 million),

which translated into increased research overhead eligible funding awards and associated revenue. Despite the increase in research funding received, research spending declined to \$159.0 million (2014/15 \$170.6 million) due in part to the timing of awards. As a result \$37.7 million was added to deferred contributions for research during the year (2014/15 \$23.5 million).

The 2015/16 consolidated surplus results outlined above improved debt management metrics and contributed positively to an improved credit rating issued in June 2016 by Standard and Poor's. The University's rating improved from AA-(stable) to AA(stable), two investment grades above the province. While the credit rating improvement is a notable achievement for McMaster, certain risks still require significant strategic financial planning. Risks associated with pension liabilities and special payments associated with solvency measurements becoming due in 2018/19 (following the end of the Province's stage II solvency relief program) pose a significant potential pressure on the operating budget. Existing budgetary plans are based on the last full valuation of the salaried pension plan, but since the last valuation interest rates used for solvency special payment requirements have dropped substantially, which will have a material impact on the payment schedule based on current solvency

requirements. In recognition of this, the province has initiated a solvency measurement and funding rules review involving both private and public defined benefit pension plan stakeholders. In parallel to the provincial review, work continues between university employer and employee groups on the potential plan design for a jointly sponsored pension plan (JSPP). A multi-employer sector JSPP may provide plan employers with an exemption on solvency funding requirements.

While the pension related risks are probably the most pressing issue for McMaster, it is likely that solvency legislation changes will be enacted to reduce the special payments required by the University in the coming year. If such changes are not sufficient to alleviate substantial budgetary pressures, the JSPP will require greater consideration by both employer and employee groups.

McMaster will continue to monitor its strategic priorities and funding risks against the back-drop of sustainable financial health. In relation to the University's future financial health, McMaster remains actively engaged in consultation discussions associated with changes to the funding formula, implementing net tuition for the fall of 2018, future cap-and-trade requirements, and a re-initiated working group on non-profit organizations' accounting standards. All these initiatives are likely to have

a significant impact upon McMaster and upon the post-secondary education sector in general.

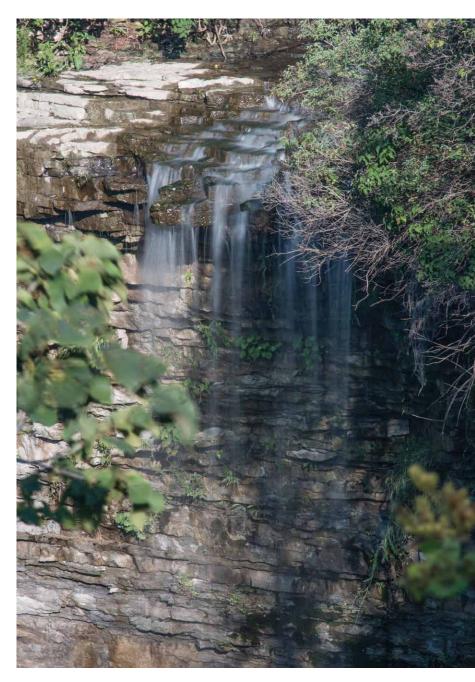
The information contained in this Annual Financial Report is intended to provide the reader with financial information for the fiscal year ended April 30, 2016. While the focus of this document is the consolidated operations of all funds on an accrual basis, information regarding the Operating Fund, which operates on a cash basis for budgeting and accounting purposes, has been included on page 29.

Other documents to which the reader can refer to provide a more in-depth discussion of the University include:

■ SMA – Signed Agreement –
April, 2014
http://www.mcmaster.ca/vpacademic/
documents/SMA\_2014\_McMaster\_
Agreement.pdf
SMA – March, 2014
http://www.mcmaster.ca/vpacademic/

http://www.mcmaster.ca/vpacademic/documents/SMA-McMaster-March,2014.pdf

- Forward with Integrity
  <a href="http://www.mcmaster.ca/presidentsoffice/guidingstrategy.html">http://www.mcmaster.ca/presidentsoffice/guidingstrategy.html</a>
- Consolidated Budget June 2016 http://mcmaster.ca/bms/pdf/2016-17\_ budget.pdf
- State of the Academy Address –
  March 2016
  https://www.youtube.com/
  watch?v=lnAioNes\_Yk&feature=youtu.be
- University Fact Book http://www.mcmaster.ca/vpacademic/documents/FactBook2014-2015.pdf



Borer's Falls, Borer's Falls Conservation Area

# BY THE NUMBERS

\$447,400,000

Available expendable resources vs. \$322,100,000 last year

\$954,400,000

Total revenue vs. \$990,800,000 last year

\$925,300,000

Total expenses vs. \$912,200,000 last year

\$29,100,000

Excess of revenues over expenses vs. \$78,600,000 last year

Employee future benefit unfunded obligation non-pension vs. \$217,200,000 last year

Employee future benefit unfunded obligation pension vs. \$63,300,000 last year

**\$94,400,0** Capital spending vs.

\$4,400,000

Excess (deficit) of revenues over expenses operating fund only vs.\$(12,200,000) last year \$135,900,000 last year

\$784,50

Total net assets vs. \$892,700,000 last year

\$22,617

Endowment per FTE students vs. \$23,281 last year

\$34,173

Revenue per FTE students vs. \$35,189 last year

Enrolment (full time equivalent (FTE)) vs. 28,157 last year

Staff and Faculty head count vs. 7,460 last year

# SUSTAINABILITY

# ABB Lab Ventilation Retrofit – 307 metric tonnes of CO<sub>2</sub> avoided

# **Chasing the Peak 2016**

- avoided 41.47 metric tonnes of CO<sub>2</sub>



# **LED Lighting Retrofit** –

Annual CO<sub>2</sub> reduction of 100 metric tonnes

# **Glove Box** Retrofit

- Annual water reduction of 700 m<sup>3</sup>



# **Water Pump** Replacement

- Annual water reduction of 6,700 m<sup>3</sup>



# **Shut the Sash Initiative**

- 13% improvement in fume hood energy consumption



# Rain Water Program - Annual water reduction of 200 m<sup>3</sup>

# **Water Fountain Retrofits**

(111 water fountains have been retrofitted with a refilling station) - Saved 4,230,810 plastic water bottles in 2015



### **REVENUES**

In 2015/16, total revenue decreased by 3.7% to \$954.4 million (2014/15 – \$990.8 million) and revenue per FTE¹ enrolment was \$34,192 (2014/15 – \$35,189). The revenue decrease of \$36.4 million relates primarily to a decrease of \$43.5 million in investment income and a decrease of 11.6 million in research revenue recognized, offset by an increase in tuition revenue of \$12.9 million due to increases in fees not included in the overall cap.

Despite the negative investment returns in 2015/16 McMaster University continues to focus on new revenue generation opportunities across all areas of the University while actively managing existing revenue streams to optimize investments in the student experience, academic and research mission. Key investment priorities include differentiation through experiential learning programs and technology and infrastructure transformations.

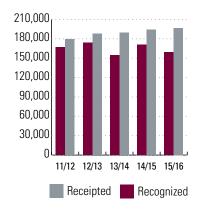
#### **Operating Grants Income**

Government operating grants decreased by \$0.6 million or 0.2% over 2014/15 primarily due to a decline in the Accessibility Grant, partially offset by an increase in the Grant for Expanded Nursing Program.

#### **Research Grants and Contracts**

Research revenue is recognized as income in the year the related expense occurs. Unspent research funding and funds spent on capital are recorded as Deferred Contributions on the Statement of Financial Position. Research revenue recognized by the University does not include research funding directly received and administered by affiliated hospitals or funding for Networks of Centres of Excellence, such as the Centre for Probe Development and Commercialization hosted by McMaster University. Research funding received increased to \$196.7 million (2015/16 - \$194.1 million) despite this increase research expenditures declined by 6.8% resulting \$159.0 million in research revenue recognition compared to \$170.6 million last year.

### Research Revenue: Receipted vs Recognized in Income – \$ thousands



As shown in the table below, research receipts grew, however due in part to timing of research funding receipts the amount expended in the year of receipt declined.

#### **Research Overhead Grants**

Research overhead grants increased to \$13.4 million in 2015/16 related to an increase in overhead eligible awards received by the University (2014/15 – \$13.2 million). Overhead grants assist the University in partially defraying indirect costs associated with hosting research activities. The federal and provincial governments contribute indirect costs based upon a portion of the total direct federal research grants and eligible provincial research programs.

**1** FTE enrolment is as reported to MTCU as of November 1 each year.

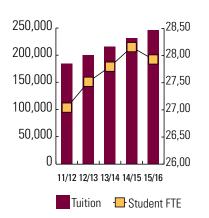
	\$ mi	llions
RESEARCH REVENUE RECOGNIZED	2016	2015
Total research funds received	196.7	194.1
Less: amount deferred to future	(37.7)	(23.5)
	159.0	170.6

### **REVENUES**

#### **Tuition Fees**

Revenue from tuition fees increased by 5.5% in 2015/16 resulting from an allowable legislative program specific tuition fee increases between 3% and 5%. In 2015/16, the University adjusted fees by the allowable increase for each regulated program and remained within the overall cap of 3% for domestic students. Contributing to increased tuition revenue are increases in fees not included in the overall cap. These include non-government funded programs and international student fees. International students pay fees that are higher than domestic rates and account for approximately 8.6% (2014/15 - 8.8%) of the total student population.

# Total Tuition – \$ thousands and Number of FTE Students



#### **Ancillary Operations**

Ancillary operations provide essential academic and student support services across the University. Ancillary units enhance the student experience and contribute funding to both direct student support and the operating budget to support the core University mission. Ancillaries provide efficient and affordable services while covering all related operating and capital costs and contributing approximately 4.5% of sales to student support and the operating fund. In order to generate revenue, it is critical that ancillary departments provide relevant valueadded services, deliver excellent quality, remain competitively-priced and contain costs wherever possible. To deliver on these objectives ongoing student, faculty and staff

feedback is sought through surveys and advisory committees.

A detailed breakdown of ancillary sales is shown in the table below.

Net Ancillary sales revenue increased by 2.4% to \$70.3 million in 2015/16 (2014/15 – \$68.6 million). Hospitality Services was the largest contributor to this growth, increasing sales by 9.2%, primarily due to increased revenue from debit and credit card transactions, the Pan Am Games and meal plan price changes. Housing and Conference Services and Media Production services also provided growth, with sales increases of 2.7% and 1.6%, respectively. The increase for Housing and Conference Services resulted from increased conference sales relating in part to the Pan Am Games. Media Production Services

	\$	thousands	
SALES BY ANCILLARY OPERATIONS	2015/16	2014/15	
Campus Store	15,552	15,622	
Hospitality Services	23,764	21,753	
Housing and Conference Services	24,705	24,051	
Media Production Services	3,958	3,896	
Parking	5,016	5,314	
Continuing Education	6,740	6,708	
Miscellaneous	144	139	
	79,880	77,483	
Less: internal sales	(9,573)	(8,848)	
	70,307	68,635	

increased sales while also reducing pricing due to a change in cost structure. Ancillary sales increases are partially offset by a decline in Parking revenue of approximately 5.6% associated with a decrease in the number of Main Campus parking permits sold compared to prior year.

#### **Investment Income**

Global markets in 2015/16 were more volatile than the prior year. While market volatility is still a key management concern the diversification within the long term Investment Pool helps protect capital in down markets. The long-term investment pool rate of return (after expenses) for 2015/16 was -2.8%, compared to 10.1% in 2014/15. Management conservatively budgets investment income each year (at 6.0%) and provides multi-year financial projections that include investment income sensitivity analysis to highlight the potential variances in investment income that can occur due to market fluctuations.

The endowment funds are invested applying an asset mix of

60% equities and 40% fixed income, real estate, and infrastructure. As at April 30, 2016 the endowment fund achieved a rate of return of -2.5%, which was below the benchmark return of -1.0%

Total investment income, summarized in the table below, includes both short-term and long-term investment earnings that are allocated between income in the Statement of Operations and as direct increases to endowment balances as preservation of capital adjustments in the Statement of Changes in Net Assets.

Investment returns on endowed funds are used in accordance with the purposes set out by donors or, where discretionary, by the Board of Governors. Annual endowment spending is targeted at a rate of 4% determined using a five-year average market rate of return. In 2015/16 approximately \$18.7 million (2014/15 – \$17.4 million) of expenses were funded from the external endowment of which a significant portion is directed towards student scholarships, bursaries and funding of chairs and professorships.

	\$ thousands		
INVESTMENT INCOME/(LOSS)	2015/16	2014/15	
Recognized in income	12,855	56,332	
Net posted directly to external endowments	(31,467)	24,400	
	(18,612)	80,732	



SPENCER CREEK, CROOKS' HOLLOW CONSERVATION AREA



# COMPENSATION AND BENEFITS

McMaster University provides competitively benchmarked compensation and benefit plans for faculty and staff for both career and retirement phases of life. McMaster manages both current and future costs associated with total compensation plans to ensure a long term sustainable financial environment.

Salary and wage expenses are shown together in the Statement of Operations, with related employee benefit costs identified separately. The employee benefit expenses include statutory benefit costs, other current benefit costs, and accruals for pension and other non-pension benefits (primarily medical benefits and dental care) that are earned in relation to current year service. Additional information related to the current year expenses, total pension and non-pension liabilities and the unfunded deficit are included in this section.

#### **Expense**

Total compensation-related expenses account for over 61% of total expenditures and represent a total of 7,450 permanent faculty and staff members as of October 2015 (October 2014 – 7,460).

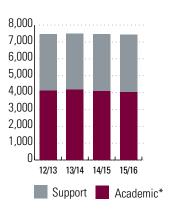
Salary and wage expenses increased by 0.8% (compared to 3.0% growth last year). Employment expenses represent \$566 million (7,450 employees) this year compared to \$561.3 million (7,460 employees) and \$558.0 million (7,501 employees) in 2014/15 and 2013/14 respectively.

# Employee Future Benefit Obligations (Pension and Other)

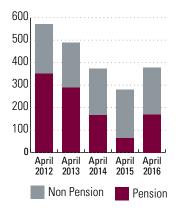
Included in total compensation expenses are defined benefit pension, group RRSP and nonpension benefit costs. The nonpension benefit costs include extended health, dental and life insurance for most employees of the University. In fiscal 2014/15, the university adopted the new pension accounting rules (Section 3463, Reporting employee future benefits by not-for-profit organizations). Under the new rules, annual remeasurements and other items specifically related to employee future benefits are recorded directly in the Statement of Changes in Net Assets, rather than the Statement of Operations. Only current year benefit costs are expensed in the Statement of Operations and all changes in investment gains and losses are reflected in the Statement of Changes in Net Assets.

The pension and non-pension plan obligations continue to be one of the University's greatest challenges, causing a significant draw on university resources. Several cost balancing measures have been taken including plan design changes and increased employee contributions. The financial challenges could be further eased in future years by interest rate improvements. However, changing mortality tables used to measure the liability, resulting from individuals living longer, are a permanent

Staff & Faculty – 7,450
\*Academic includes Faculty, Post Doctoral
Fellows, Librarians, Teaching Assistants



Post Retirement Unfunded Obligations – new basis April 2014 onward (includes Pension and Non Pension Benefits) (\$ millions)



# COMPENSATION AND BENEFITS

increase in obligations. The pension and non-pension obligations continue to receive ongoing management monitoring and long-term strategic financial planning. McMaster continues to deploy a cost smoothing approach to charging benefit expenses to Faculties and Departments; the University charged an average benefit rate of 29% in 2015/16 although annual benefit cash outflows can vary year-over-year by more than \$30 million.

#### **Pension**

Several positive steps have been taken over the last few years to manage the pension liability, such as revised eligibility rules for some groups, increased employee contributions and the introduction of a defined contribution group RRSP plan for new employees in some groups. The group RRSP now includes approximately 293 employees (2014/15 - 259) full time employees. Additional funding contributions to the defined benefit plans from employees and the university will be required to address the plan shortfalls and will continue to place significant pressure on all programs for many years to come.

The provincial focus continues on publicly funded organizations' pension plan assets with specific interest toward shifting employer pension risk to a shared risk within single or multi-employer jointly sponsored pension plans. Work by universities and employee groups

together are investigating the future feasibility of jointly sponsored or shared plans, including a review of transitional issues. In 2015/16, the Province issued several documents to assist public institutions in transitioning to a jointly sponsored pension plan. However, further work is needed to address transitional measurement and funding issues. As work progressed in 2015/16 on a shared plan design in parallel the province launched a review of solvency measurement and funding rules affecting private and public defined benefit plans. In the absence of a jointly sponsored pension plan outcome for McMaster's defined benefit plans or changes to current solvency rules, McMaster will have to significantly increase its benefit rate

charged to employer departments across the university in order to cover plan special payments.

During the year, the pension expense decreased by 14.95% from \$42.7 million to \$36.3 million, due to a reduction in the interest cost for the year as a result of the reduced opening obligation balance.

The funded status of the defined benefit pension plans is summarized in the chart below.

Investment losses reduced assets by \$34.1 million for the year ended April 30, 2016. Further increasing the loss on plan assets were interest costs on liabilities. The net deficit increased by \$106 million.

The basis of this deficit is a roll forward of the July 1, 2014 funding valuation for the Salary Plan,

	<b>APRIL 30, 2016</b> \$ millions	APRIL 30, 2015 \$ millions
Funded status, opening balance	(63.3)	(165.9)
Costs in the period:		
Current service cost	(32.5)	(32.7)
Interest on liabilities	(108.7)	(103.5)
Actual gain (loss) on plan assets	(34.1)	190.6
	(175.3)	54.4
Other		
Change in mortality assumptions	4.7	(1.1)
University contributions	64.6	49.3
Funded status, closing balance	(169.3)	(63.3)

which accounts for over 96% of the assets. This tri-annual funding plan was based on successful qualification for Stage 2 of the provincial government's solvency relief program. The solvency relief program for universities allows for solvency deficit payments to be spread over a longer period once the university has demonstrated that steps have been taken to ensure the long-term sustainability of the plans. Solvency relief does not relieve the University from funding going concern deficits or from resolving its solvency deficiencies; it merely allows the contributions to be made over a longer period. In fact, the University will require increased payments to the plan for the foreseeable future.

### Other Post-Retirement and Post-Employment Benefit Plans

The deficit status of the non-pension post-retirement benefit plan as at April 30, 2016 totalled \$208.0 million, a decrease of \$9.2 million from April 30, 2015. The significant changes in each of the last two years are outlined in the following chart.

In 2015/16, non-pension employee benefit expenses represented \$19.9 million, a \$0.1 million increase from 2014/15 primarily due to the interest cost on the liabilities. The long term funding strategy put into place in 2011/12 for this benefit cost is monitored annually and continues to be an effective strategy toward managing and containing this cost.

McMaster
manages both
current and
future costs
associated with
total compensation
plans to ensure
a long term
sustainable
financial
environment.

	<b>APRIL 30, 2016</b> \$ millions	APRIL 30, 2015 \$ millions
Funded status, opening balance	(217.2)	(206.8)
Costs in the period:		
Current service cost	(7.0)	(7.5)
Interest on liabilities	(12.9)	(12.3)
	(19.9)	(19.8)
Plan amendments		
Change in mortality assumptions	20.8	-
Other	1.5	1.9
University contributions	6.8	7.5
Funded status, closing balance	(208.0)	(217.2)



# CAPITAL PROJECTS AND FINANCING

McMaster University is committed to technology transformation, building purpose-focused spaces, and renewing existing infrastructure to ensure its research-focused student-centred identity is maintained in support of an environment of excellence.

The McMaster Campus Plan and annual Capital Plan provide a comprehensive framework guiding campus capital development. The University's capital objectives are to preserve and enhance a high quality campus while meeting McMaster's changing needs.

#### **Capital Projects**

The L.R. Wilson Hall project continued development through 2015/16 and is set for a phasedin opening September 2016. This new building developed on the former Wentworth House main campus location will be the new home for the Liberal Arts, which will accommodate the Faculties of Humanities and Social Sciences. This LEED-certified building includes teaching and learning spaces, gardens, and public gathering spaces. L.R. Wilson Hall will also house liberal arts research centres, such as the Wilson Institute for Canadian History and the Gilbrea Centre for Health and Aging, as well as McMaster's Indigenous Studies program and Indigenous student support offices.

Planning and development is underway for the Living and

Learning Centre (LLC) a 500-bed undergraduate residence on campus adjacent to the Ron Joyce Stadium. The LLC also includes teaching and learning spaces, expanded study and collaborative student spaces, a new home for both the Student Wellness Centre, the McMaster Child Care Centre, underground parking, and new hospitality services. This multi-purpose building maximizes the use of campus lands, while positioning McMaster for future success. Other capital projects underway in 2015/16 include the Fraunhofer-IZI Centre for Biomedical Engineering & Advanced Manufacturing and the Gerald Hatch Center for Engineering Experiential Learning.

In addition to these capital building projects, the university spent approximately \$32 million on equipment and furnishings. This represents a decrease of \$25 million over last year due to the completion of the Mosaic Project which included significant capital spending on hardware and software in 2014/15.

The University's capital objectives are to preserve and enhance a high quality campus while meeting McMaster's changing needs.

The University's total capital expenditures for 2015/16 totalled \$94.4 million (2014/15 – \$135.9 million) and are summarized in the table below. The increase in library materials represents an adjustment for library materials which were not appropriately capitalized in prior years. Building and Construction in Process expenditures have decreased largely due to the completion of the David Braley Health Sciences Centre.

CAPITAL ASSET ADDITIONS	2015/2016	2014/2015
Completed building projects and construction in process	44,631	73,698
Computers, software, furnishings and other equipment	31,502	56,696
Library materials	18,264	5,482

# CAPITAL PROJECTS AND FINANCING

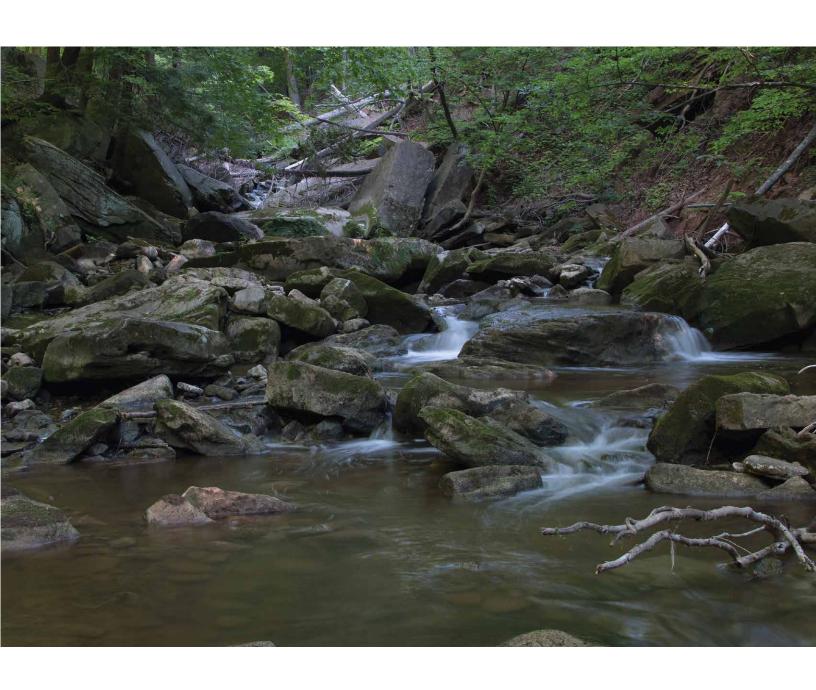
#### **Capital Financing**

Building projects with longterm funding sources such as user fees, parking levies and future fundraising continued to be financed through internal central bank loans. In 2015/16, all scheduled loan repayments were received. The internal central bank capital loans decreased to \$58.5 million in 2015/16 from \$63.8 million last year. The loans have varying repayment terms and interest rates which reflect the date of issue and the project income stream.

The University's Debt Policy ratios provide a framework for monitoring the University's ability to undertake additional external or internal debt to carry out strategic investments. In fiscal 2015/16, the University completed a 50-year debenture call for \$120 million, which was fully subscribed at a coupon of 4.105%. The long-term

bond issuance is supporting capital plans included in the multi-year projections, most notably the Living Learning Centre and a graduate residence public-private style project. A sinking fund was established in the year to provide for the debt retirement in 2065. The additional debt effectively reduced McMaster's weighted average cost of capital by 1% from 6.75% to 5.75% with stabilization factored in.

McMaster University is committed to technology transformation, building purpose-focused spaces, and renewing existing infrastructure to ensure its research-focused student-centred identity is maintained in support of an environment of excellence.





# FINANCIAL HEALTH AND SUSTAINABILITY METRICS

In fiscal 2015/16 the Ministry of Advanced Education and Skills Development, formerly the Ministry of Training Colleges and Universities, developed financial health metrics. The metrics will form a part of the next Strategic Mandate Agreement requiring annual reporting along with other

Leverage

Leverage

annual updates like enrolment, goal attainment, and legislative compliance. The inclusion of financial health metrics recognizes financial health and sustainability are critical to achieving institutional mandates. McMaster's strong financial health, as indicated also by its strong credit rating, is

supported by the Ministry selected metrics outlined in the table below. The Ministry has not established any metric targets or acceptable ranges at this time, however McMaster does include related targets in its Debt Management Strategy and views the results below positively.

1.01%

2.2

1.17%

1.7

Financial Healt	h and Sustainability Metrics					
METRIC	KEY RATIOS	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Performance	Net Income/Loss Ratio	1.03%	6.47%	8.90%	7.93%	3.05%
Performance	Net Operating Revenues Ratio <sup>1</sup>	6.68%	7.57%	12.50%	14.75%	7.08%
Liquidity	Primary Reserve Ratio (days) <sup>2</sup>	94	102	120	129	176

1.07%

1.06%

1.7

1.05%

2.0

Instant Burden Ratio

Viability Ratio<sup>3</sup>

McMaster's strong financial health, as indicated also by its strong credit rating, is supported by the Ministry selected metrics.

<sup>&</sup>lt;sup>1</sup>Measures cash flow from operating activities as a proportion of revenues.

<sup>&</sup>lt;sup>2</sup>Measures the number of days university reserves can cover its operating expenses.

<sup>&</sup>lt;sup>3</sup>Measures the proportion of long term debt that could be settled using unrestricted assets.



# ENTERPRISE RISK MANAGEMENT

The Enterprise Risk Program made substantial progress during 2015/16 with a continued focus on collaboration and dialogue regarding the University's key opportunities and risks in support of *Forward with Integrity*, aligned also with the strategic mandate agreement and the University's core mission. In June 2015, the Enterprise Risk Steering Committee, composed of the President/Vice-Presidents (PVP), completed a detailed review and discussion with two Risk Leaders

responsible for risks of: Attracting Undergraduate Students and Mental Wellness. In addition to regular Enterprise Risk Program progress update reports presented to the Audit Committee, detailed risk review discussions with Risk Leaders in attendance were introduced into the 2015/16 Audit Committee work plan. The risks presented in 2015/16 included the two noted above plus Information Security. The University's Mental Wellness Strategy was also presented and discussed at the April

2016 Board of Governors meeting.

The annual Opportunities and Risks Review and Assessment session held by the Enterprise Risk Steering Committee (PVP) in February 2016 resulted in fourteen key risks being identified and assessed based on residual (net) risk levels. The majority of risks from the last PVP review were retained, however, changes were made to the relative rankings of the various risks as a result of the impact of risk mitigation strategies and other initiatives in progress.

2016 Key Risks:	Human Capital	Research Infrastructure
Attract Undergraduate Students	Information Availability and Quality	Research
Attract Graduate Students	Information Security	Student Experience,
Financial	Mental Wellness Physical Infrastructure	Satisfaction & Retention
Government Policy	Reputation and Brand	Technology

The annual Opportunities and Risks Review and Assessment session held by the Enterprise Risk Steering Committee (PVP) in February 2016 resulted in fourteen key risks being identified and assessed based on residual (net) risk levels.

# FINANCIAL ANALYSIS

#### **Total Revenue**

- Revenues decreased 3.7% to \$954.4 million from \$990.8 million.

  Research grants and contracts revenue recognized decreased 6.8% based on a decrease in research spending during the year and tuition income increased 5.5% (related to rate changes within the legislated cap).
- Investment income declined to \$12.9 million (2014/15: \$56.3 million) related to a -2.8% rate of return in the investment pool versus 10.1% last year.

### **Total Expenses**

- Expenses increased 1.4% to \$925.3 million from \$912.2 million last year.
- Salary and wages increased by \$3.5 million (0.8%) and benefits increased by \$1.2 million (1%).
- Supplies and services decreased by 3.7% primarily due to the decrease in research fund spending.

#### **Total Assets**

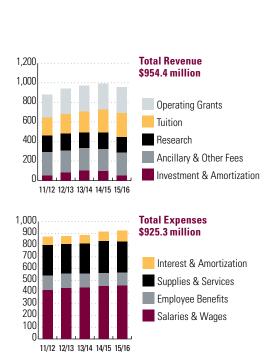
- Assets grew by 6.0%, a net growth primarily related to investment holdings increasing by 18.8% due to the debenture proceeds received and not yet expended on related capital projects; growth is offset by a decline in current assets of 20.7% which has a smaller overall impact when compared to long term asset holdings.
- Capital assets grew by a net of \$8.4 million, resulting from \$94.4 million in capital additions and \$86.0 million in amortization.

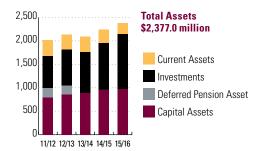
#### **Total Liabilities**

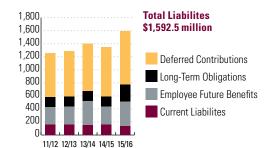
- Liabilities increased 18%, half of this increase is attributable to a debenture issued in 2015 maturing in 2065 for \$120 million an increase of 81.4% in long-term obligations.
- Deferred contributions increased by 6.7%, primarily due to additional deferrals of research grants and contracts.
- Employee future benefits increased by 34.5% primarily as a result of the interest rate environment translating into a negative remeasurement adjustment.

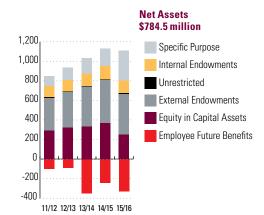
#### **Net Assets**

- Net assets decreased by 12.1% due to an increase in the accumulated deficit associated with employee future benefits.
- Specific purpose net assets grew by 75.6% primarily related to unallocated debenture proceeds for planned capital projects and an increase in debenture related sinking funds.
- Internal and external endowments decreased by 6.4% and 5.8% respectively, as a result of a loss in investment income.









#### **Long-term Debt**

- New bond borrowing of \$120 million (coupon rate 4.105%) offset by debt repayment of \$0.7 million accounts for a net increase in external long term debt of \$119.3 million.
- The debt service coverage ratio decreased due to the decrease in excess revenues over expenditures and an increase in interest expense.

#### **Available Expendable Resources (AER)**

- AER represents funds held that are not externally committed, such as unrestricted net assets, specific purpose reserves and appropriations and internally restricted endowments.
- AER increased to \$447.4 million from \$322.1 million, primarily as a result of the increase in the central bank reserve related to the new borrowing earmarked for new capital projects.

#### **Endowment Funds**

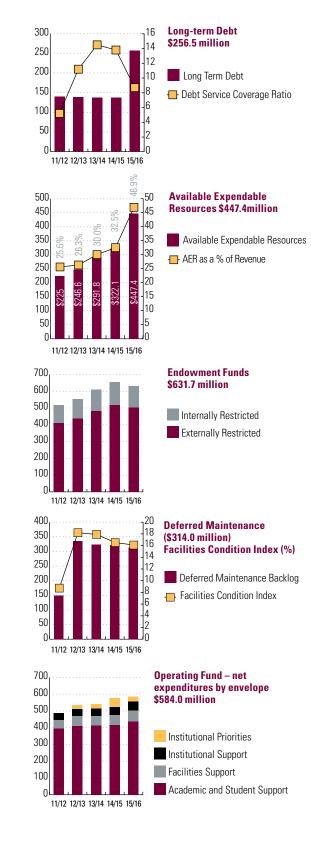
- McMaster's internal and external endowments decreased by 3.6%, primary due to the investment loss of 2.8% experienced in the long term investment pool.
- The endowment funds per student decreased from \$23,281 to \$22,617 year over year.

#### **Deferred Maintenance**

- McMaster's deferred maintenance backlog decreased from \$322 million to approximately \$314 million.
- McMaster's Facilities Condition Index (FCI) is 16.1% an improvement from 16.5% in 2014/15.
- The decrease in deferred maintenance backlog and the University FCI is attributed to an increase in base operating support for deferred maintenance projects and the addition of new buildings.

#### Operating Fund – expenditures by envelope

- Net expenditures increased by 1.6% over the prior year driven by:
  - Academic and student support increasing by 5.3% over the prior year.
  - Facilities support increasing 8.4% from the previous year, primarily due to additional funding provided for deferred maintenance and slightly higher utility costs.
  - Institutional support increased 9.9% from the previous year related to costs associated with sustaining resources for Mosaic.
  - Institutional priorities decreased 42.9% from the previous year as the majority of the Mosaic implementation expenses were covered in prior years' operating budgets.





# SUPPLEMENTAL INFORMATION: OPERATING FUND AND OPERATING BUDGET

The audited financial statements are prepared as required by statute in accordance with accounting standards for not-for-profit organizations as prescribed by Chartered Professional Accountants of Canada using the Deferral Method of accounting ("deferral method") and consolidation of all activity. For external reporting under the deferral method, all funds are consolidated in a single column on the Statement of Operations.

In contrast, the University's internal reports and budgets are prepared on a cash basis and pursuant to the concepts of fund accounting. Under this method, separate budgets and funds are set up for fund activities, with each fund comprised of its own revenues and expenses.

Fund accounting enhances accountability and budgetary control of resources by ensuring that restricted grants and contributions are spent only for the purposes intended. To maintain control, the following segregated funds have been developed: General

Operating, Specifically Funded Research, Capital, Externally Restricted Trusts and Endowments, Internally Restricted Endowments and Ancillary Operations. The Operating Fund includes all revenue and expenses related to annual activities for academic program delivery and accounts for approximately 60% of all spending. The 2015/16 Operating Fund Statement of Operations includes the full cost of related pension plan contributions, deficit payments and the cost of funding accrued costs of post-retirement benefits.

Considerable attention and effort is focused on the allocation and use of resources to build a structurally balanced operating budget. The original budget reflected a net deficit of \$12.7 million attributed to \$19.2 million in net one-time planned expenditures. The University finished the year with a \$4.4 million surplus as shown in the chart below.

Total operating fund revenues were \$589.1 million as compared to the projected funding of \$581.7 million. The favourable variance of

\$7.4 million (1.3%) is attributable to greater research overhead from contracts and royalties, increased revenue from McMaster Innovation Park, and external utility recoveries, as well as inclusion of income previously classified as specifically externally funded.

The favourable revenue variance of \$12.6 million (2.2%) compared to the original budget relates to the same factors as the variance to projection, with the additional \$5.2 million resulting from additional research overhead.

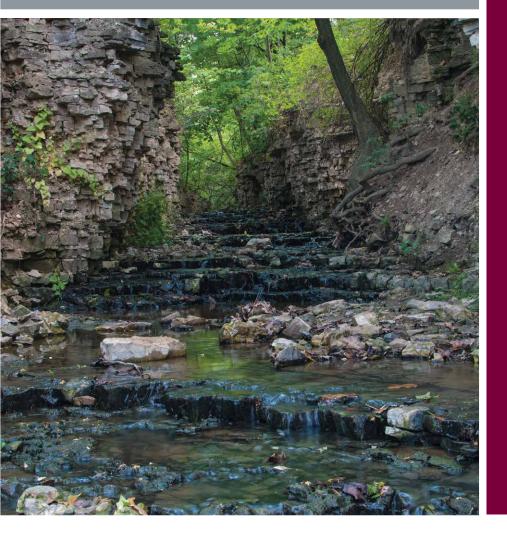
Operating fund expenditures net of transfers and recoveries were \$584.1 million as compared to projected net expenditures of \$587.3 million. The favourable variance of \$4.5 million (0.5%) was due to a reduction in non-salary spending.

The surplus of \$4.4 million results in closing appropriations of \$72.6 million, up from \$68.2 million at April 30, 2015. Appropriations are available to provide funds to offset one-time spending and investments in deficit-reducing strategies.

	Varia						ance		
	Budge	t Pi	rojectior	1	Actual	Bu vs. A	ıdget ctual	Proje vs. A	
Sources of revenue	\$ 576.4	\$	581.7	\$	589.1	\$	12.6	\$	7.4
Less: net expenditures	588.6	j	587.3		584.1		4.5		3.2
Excess (deficiency) of revenue over net expenditures	(12.2		(5.6)		4.9		17.1		10.6
Add amount funded by (transferred to) unrestricted net assets	s <b>(0.5</b>		(0.5)		(0.5)		_		_
Net surplus (deficit)	(12.7		(6.1)		4.4		17.1		10.6
Fund balance, beginning of year*	68.2	)	68.2		68.2		_		_
Fund balance, end of year	\$ 55.!	\$	62.1	\$	72.6	\$	17.1	\$	10.6

# FINANCIAL STATEMENTS, APRIL 30, 2016

Pictured below: Chedoke Creek, Chedoke Radial Trail
Photography: Dennis Tavares, Senior Accountant, Financial Services



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- Statement of Operations
- Statement of Changes in Net Assets
- Statement of Cash Flows
- Notes to Financial Statements





### Statement of Management Responsibility

Management of the University is responsible for the preparation of the financial statements, the notes thereto and all other financial information contained in this Annual Financial Report.

Management has prepared the financial statements in accordance with Canadian accounting standards for not-for-profit organizations. Management believes the financial statements present fairly the University's financial position as at April 30, 2016 and the results of its operations, changes in net assets and its cash flows for the year ended April 30, 2016. In order to achieve the objective of fair presentation in all material respects, the use of reasonable estimates and judgements were employed. Additionally, management has ensured that financial information presented elsewhere in this Annual Financial Report has been prepared in a manner consistent with that in the financial statements.

In fulfilling its responsibilities and recognizing the limits inherent in all systems, management has developed and maintains a system of internal controls designed to provide reasonable assurance that University assets are safeguarded from loss and that the accounting records are a reliable basis for the preparation of financial statements.

Mercer (Canada) Limited has been retained by the University in order to provide an estimate of the University's current year position for pension and other employee future benefits. Management has provided the valuation actuary with the information necessary for the completion of the University's report and retains ultimate responsibility for the determination and estimation of the pension and other employee future benefits liabilities reported.

The Board of Governors carries out its responsibility for review of the financial statements and this Annual Financial Report principally through the Finance Committee and its Audit Committee. No members of the Audit Committee are officers or employees of the University. The Audit Committee meets regularly with management, as well as the internal auditors and the external auditors, to discuss the results of the audit examinations and financial reporting matters, and to satisfy itself that each party is properly discharging its responsibilities. The auditors have full access to the Audit Committee with and without the presence of management.

The financial statements for the year ended April 30, 2016 have been reported on by KPMG LLP, Chartered Professional Accountants, the auditors appointed by the Board of Governors. The Independent Auditors' Report outlines the scope of their audit and their opinion on the presentation of the information included in the financial statements.

Vice-President, Administration October 20, 2016

President

AVP (Administration) & CFO



#### **INDEPENDENT AUDITORS' REPORT**

To the Board of Governors of McMaster University

We have audited the accompanying financial statements of McMaster University (the "University"), which comprise the statements of financial position as at April 30, 2016, the statements of operations, changes in net assets, and cash flows for the year then ended, and notes, comprising 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 not-for-profit organizations, 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 an 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 our 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, we consider internal control relevant to the University'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 University'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 McMaster University as at April 30, 2016 and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Chartered Professional Accountants, Licensed Public Accountants

Hamilton, Canada October 20, 2016

KPMG LLP

# McMASTER UNIVERSITY

Statement of Financial Position April 30, 2016, with comparative figures for 2015 (thousands of dollars)

		2016		2015
Assets				
Current assets:	¢	00 170	¢	160 604
Cash and equivalents Government grants and other accounts receivable (note 2)	\$	89,172 31,479	\$	162,624 36,670
Research grants receivable		101,460		86,201
Inventories		4,337		4,674
Prepaid expenses and deposits		8,277		5,907
		234,725		296,076
Investments (note 3)		1,148,681		967,009
Other investments (note 4)		24,938		18,787
Loans receivable (note 4)		904		891
Capital assets (note 5)		967,709		959,316
	\$	2,376,957	\$	2,242,079
Liabilities, Deferred Contributions and Net Assets				
Current liabilities:				
Accounts payable and accrued liabilities (note 6)	\$	108,726	\$	126,861
Deferred revenue	Ψ	21,910	Ψ	28,940
Current portion of long-term obligations (note 7)		622		655
		131,258		156,456
Accrued employee future benefits (note 8)		377,255		280,492
Long-term obligations (note 7)		267,927		147,726
Deferred contributions (note 9):				
Deferred for future expenses		353,923		308,958
Deferred capital contributions		462,144		455,778
Net assets:		816,067		764,736
Unrestricted		10,081		9,262
Internally restricted (note 10):		(000 000)		(005.444)
Employee future benefits		(326,090)		(235,414)
Specific purpose		309,463 249,943		176,220
Equity in capital assets (note 11) Endowments (note 12):		249,943		367,568
Internal		127,872		136,609
External		413,181		438,424
		784,450		892,669
Commitments and contingencies (note 13)	\$	2,376,957	\$	2,242,079
	Ф	2,310,931	φ	2,242,019

On behalf of the Board of Governors:

Chair, Board of Governors

Chair, Audit Committee

# McMASTER UNIVERSITY

Statement of Operations

Year ended April 30, 2016, with comparative figures for 2015 (thousands of dollars)

	2016	2015
Revenues:		
Operating grants	\$ 264,645	\$ 265,214
Research grants and contracts	159,007	170,576
Tuition fees	246,275	233,343
Other (note 14)	104,362	96,416
Ancillary sales and services	70,307	68,635
Investment income, net	12,855	56,332
Donations and other grants	44,193	49,171
Research overhead grants	13,425	13,247
Amortization of deferred capital contributions	39,340	37,897
	954,409	990,831
Expenses:		
Salaries and wages	453,576	450,040
Employee benefits	112,476	111,304
Supplies and services	263,406	273,517
Interest on long-term obligations	9,851	8,537
Amortization of capital assets	86,004	68,844
	925,313	912,242
Excess of revenues over expenses	\$ 29,096	\$ 78,589

# McMASTER UNIVERSITY

Statement of Changes in Net Assets Year ended April 30, 2016, with comparative figures for 2015 (thousands of dollars)

	Un	restricted	Internally Employee future benefits	restricted Specific purposes	Equity in capital assets	Endo Internal	owments External	2016 Total	2015 Total
Net assets, beginning of year (note 4):	\$	9,262	\$(235,414)	\$ 176,220	\$ 367,568	\$ 136,609	\$ 438,424	\$ 892,669	\$ 683,570
Excess (deficiency) of revenues over expenses		75,760	-	-	(46,664)	-	-	29,096	78,589
External endowment contributions: Contributions Protection of capital		- -	- -	- -	- -	- -	6,224 (31,467)	6,224 (31,467)	8,358 24,400
Transfers and adjustments: Transfers for specific purposes Capital transactions from operating (note 11)		(34,639) (49,039)	21,396	133,243	(120,000) 49,039	-	-	-	-
Transfer from internal endowmen  Remeasurements and other items (note 8)	ts	8,737	(112,072)	-	-	(8,737)	-	(112,072)	97,752
(Hote o)		819	(90,676)	133,243	(117,625)	(8,737)	(25,243)	(108,219)	209,099
Net assets, end of year	\$	10,081	\$ (326,090)	\$ 309,463	\$ 249,943	\$ 127,872	\$ 413,181	\$ 784,450	\$ 892,669

Statement of Cash Flows

Year ended April 30, 2016, with comparative figures for 2015 (thousands of dollars)

	2016	2015
Cash provided by (used in):		
Operating activities:		
Excess of revenues over expenses	\$ 29,096	\$ 78,589
Adjustments for non-cash items:		
Amortization of deferred capital contributions	(39,340)	(37,897)
Amortization of capital assets	86,004	68,844
Employee future benefits	(15,309)	5,542
Equity earnings of other investments	(1,431)	(360)
Increase in decommissioning obligation	823	1,596
	59,843	116,314
Net change in contributions deferred for future expenses	44,965	(5,392)
Net change in other non-cash working capital	(37,266)	35,217
	67,542	146,139
Financing and investing activities:		
Purchase of capital assets	(94,397)	(135,876)
Net change in investments	(181,672)	(122,767)
Net change in other investments	(4,720)	(2,689)
Net change in loans receivable	(13)	-
Net change in external endowments	(25,243)	32,758
Deferred capital contributions	45,706	73,382
Issuance of long-term debt	120,000	-
Principal repayments on long-term obligations	(655)	(617)
	(140,994)	(155,809)
Net decrease in cash and equivalents	(73,452)	(9,670)
Cash and equivalents, beginning of year	162,624	172,294
Cash and equivalents, end of year	\$ 89,172	\$ 162,624

Notes to Financial Statements Year ended April 30, 2016

McMaster University (the "University"), which operates by authority of The McMaster University Act, 1976, is governed by a Board of Governors (the "Board") and Senate, the powers and responsibility of which are set out in the Act. The University is a comprehensive research institution offering a broad range of undergraduate, graduate and continuing education programs and degrees. The University is exempt from income taxes.

### 1. Significant accounting policies:

The financial statements have been prepared by management in accordance with Canadian accounting standards for not-for-profit organizations in Part III of the CPA Canada Handbook.

#### (a) Basis of presentation:

These financial statements include the accounts, transactions and operations for which the University has jurisdiction. They do not include the accounts, transactions and operations of the following entities which are independently governed and managed, and certain other related entities which carry out fundraising and other activities and are not material to these financial statements:

#### Independent entities:

- McMaster Divinity College
- McMaster Students Union, Inc.
- McMaster University Centre Incorporated
- McMaster Children's Centre, Inc.
- McMaster Association of Part-Time Students (MAPS)
- Graduate Students Association (GSA)

#### Other entities:

- The McMaster University Trust
- The McMaster University Hong Kong Foundation
- Friends of McMaster Incorporated

#### McMaster Innovation Park:

The investment in the related entity, McMaster Innovation Park ("Park") is accounted for by the equity method (note 4). Since the Trusts which form the Park have fiscal year ends of December 31st, the University records its share of the operating results effective on that date.

The following joint ventures are accounted for by using the equity method of accounting:

Adiga Life Sciences Inc. ("ALS"):

These financial statements include the University's 50% interest in ALS (note 4). ALS is a joint venture with an unrelated pharmaceutical research company to commercialize intellectual property. ALS has a fiscal year end of August 31st and the University records its share of the operating results on that date.

#### The Director's College:

These financial statements include the University's 50% interest in The Director's College (note 4). This joint venture is a project with The Conference Board of Canada to form the first university accredited corporate director development program. The Director's College has a fiscal year end of May 31st and the University records its share of the operating results on that date.

### Halton McMaster Family Health Centre:

These financial statements include the University's 50% contribution to the Halton McMaster Family Health Centre (note 4). This joint venture is a project with Joseph Brant Hospital involving the construction and establishment of a family health centre and hospital clinical and administration building. The joint venture is in the process of registering the constructed building as a leasehold condominium corporation.

Notes to Financial Statements Year ended April 30, 2016

# 1. Significant accounting policies (continued):

(a) Basis of presentation (continued):

OSCAR EMR:

OSCAR EMR ("OSCAR") is a not-for-profit technology/software company incorporated under the Ontario Corporations Act, controlled by McMaster University. OSCAR has a fiscal year end of December 31st. Financial information is disclosed in Note 4. OSCAR has not been consolidated in the University's financial statements.

### (b) Revenue recognition:

The University follows the deferral method of accounting for contributions which include donations and government grants. The principles under this method are summarized as follows:

- Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received
  can be reasonably estimated and collection is reasonably assured.
- Contributions externally restricted for purposes other than endowment and capital assets are deferred and recognized as revenue in the year in which the related expenses are recognized.
- Contributions externally restricted for capital asset purchases are deferred and amortized to operations on the same basis as the related capital asset.
- External endowment contributions and income preserved under the endowment capital protection policy (note 1(m)) are recognized as a direct increase in endowment net assets. Income earned from the investment thereof, to the extent it is allocated, is recorded as deferred contributions and recorded as revenue in the periods in which the related expenses are incurred.

Tuition fees which relate to academic terms or parts thereof occurring after April 30th are recorded as deferred revenue. Gifts-in-kind are recorded at their fair market value on receipt, or at nominal value when fair market value cannot be reasonably determined. Pledges from fundraising and other donations are recorded in the period in which they are collected. Ancillary sales and services revenue is recognized at point of sale or when the service has been provided.

# (c) Financial instruments:

Financial instruments are recorded at fair value on initial recognition. Freestanding derivative instruments that are not in a qualifying hedging relationship and equity instruments that are quoted in an active market are subsequently measured at fair value. All other financial instruments are subsequently recorded at cost or amortized cost, unless management has elected to carry the instruments at fair value. The University has elected to carry investments in equity instruments, fixed income and other securities at fair value.

Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred. All other financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using the straight-line method.

Financial assets are assessed for impairment on an annual basis at the end of the fiscal year if there are indicators of impairment. If there is an indicator of impairment, the University determines if there is a significant adverse change in the expected amount or timing of future cash flows from the financial asset. If there is a significant adverse change in the expected cash flows, the carrying value of the financial asset is reduced to the highest of the present value of the expected cash flows, the amount that could be realized from selling the financial asset or the amount the University expects to realize by exercising its right to any collateral. If events and circumstances reverse in a future period, an impairment loss will be reversed to the extent of the improvement, not exceeding the initial impairment charge.

Notes to Financial Statements Year ended April 30, 2016

# 1. Significant accounting policies (continued):

# (d) Derivative financial instruments:

The University is party to an interest rate swap agreement which is used to manage the exposure to fluctuations in interest rates. The University uses the accrual basis of accounting for hedges. Gains or losses realized on the settlement of the hedging item are deferred until the settlement of the hedged item.

At the inception of the hedging relationship, the University designates that hedge accounting will be applied. The University formally documents the hedging relationship between the hedging instruments and hedged item. At the inception of the hedge and throughout its term, the terms of the hedging item and hedged item are the same.

Hedge accounting is used only when the notional amount of the swap matches the principal amount of the hedged item, the fair value of the swap at the inception is nil, the fixed rate is the same throughout the swap and the variable rate is based on the same index and includes the same or no adjustment and the debt instrument cannot be settled before maturity and the swap matures within two weeks of the maturity date of the debt.

#### (e) Investments:

Investments with a term to maturity of 90 days or less on acquisition are included with cash and equivalents and are recorded at cost plus accrued income.

Long-term investments are carried at fair values. Changes in fair values are included in investment income.

Externally restricted investment income to the extent it is allocated is included with deferred contributions and recognized as revenue when the related expenses are incurred.

Unrestricted investment income is recognized as revenue during the period in which it is earned. Investment income from internal endowments is recorded as unrestricted revenue and transferred to internal endowments.

### (f) Inventories:

Bookstore and nuclear reactor inventories are recorded at the lower of cost and net realizable value. Other inventories are recorded at cost which is a reasonable estimate of net realizable value.

# (g) Capital assets:

Capital assets are recorded at cost, or if donated, at fair value on the date of receipt. Amortization is recorded on the straight-line basis at the following annual rates:

Buildings	2.5% to 10%
Decommissioning retirement costs	4%
Site improvements	5%
Library materials	20%
Computing systems	5% to 10%
Equipment, furnishings and vehicles	20%
Computing equipment	33.3%
Leasehold improvements	term of lease

Capital assets in progress are carried at cost, with no amortization recorded until such time as the assets are available for their intended use.

Notes to Financial Statements Year ended April 30, 2016

# 1. Significant accounting policies (continued):

(h) Collections and works of art:

The McMaster Museum of Art has significant collections of works of art and coins. Donations of works of art amounted to \$383,000 (2015 - \$274,000) and are recorded in operations in the year of acquisition.

Contributed services:

The University acknowledges the receipt of donated services. Because of the difficulty of determining their fair value, donated services are not recognized in the financial statements.

(j) Ancillary enterprises:

Ancillary enterprises are self-sustaining operations which fund their own replacements and renovations of equipment and facilities. Substantially all of the net operating results are transferred annually from unrestricted net assets to specific purpose net assets.

(k) Employee future benefits:

The University maintains defined benefit registered and non-registered pension plans, retirement incentive program and group registered retirement savings plans. Non-pension post-retirement and post-employment benefits plans are also provided. Financial information is disclosed in Note 8.

- The University accrues its obligations for the defined benefit plans as the employees render the services necessary to earn the pension benefits. The current service cost and the finance cost for the year are charged to excess of revenues over expenses. The actuarial determination of the accrued benefit obligations for funded defined benefit plans uses the funding valuation method. This cost reflects management's estimates of investment yields, salary escalation, health care trend rates and other factors.
- The University has elected to accrue its obligations and related costs for unfunded plans on a basis consistent with funded plans.
- Remeasurement and other items are recognized as a direct increase (decrease) to net assets and are not
  reclassified to the statement of operations in subsequent periods. Remeasurement and other items comprise
  the aggregate of: the difference between the actual return on plan assets and the return calculated using the
  discount rate used to determine the defined benefit obligation; the actuarial gains and losses; the effect of any
  valuation allowance in the case of a net defined benefit asset; past service costs; and any gains and losses
  arising from settlements and curtailments.

The University also makes regular contributions to its Group Registered Retirement Savings Plan ("RRSP"), administered by a third party, on behalf of each eligible employee. Group RRSP contributions are charged to operations in the year made.

Notes to Financial Statements Year ended April 30, 2016

# 1. Significant accounting policies (continued):

#### Net assets:

Net assets are classified as follows:

Unrestricted: operating funds available without specific restrictions.

Internally restricted:

- Employee future benefits: unfunded portion of pension and other non-pension retirement and postemployment benefits, net of funds set aside to meet estimated future obligations.
- Specific purpose: as approved by the Board, unexpended departmental budgets carried forward for subsequent expenditures and other portions of net assets reserved for specific purposes.

Equity in capital assets: funds invested in capital assets, exclusive of capital assets financed through long-term obligations or deferred capital contributions.

Internal endowments: unrestricted contributions including unspent investment income which have been restricted by action of the Board.

External endowments: external contributions, the principal of which is non-expendable pursuant to the restrictions by the donor, and income retained under the endowment capital protection policy.

# (m) Endowment capital protection policy:

In order to protect the capital value of endowment investments, an endowment capital protection policy limits the amount of investment income allocated for spending to 4% and requires the reinvestment of excess income earned (interest, dividends, realized and unrealized capital gains, net of expenses).

Should endowment spending commitments exceed allocated income, amounts will be drawn from accumulated net investment income balances to fund deficiencies.

For endowments without sufficient accumulated investment income, temporary encroachment on capital is permitted. The encroached amounts will be recovered from future investment returns.

# (n) Decommissioning obligation:

The fair value of a future asset retirement obligation is recognized when a legal obligation for the retirement of tangible long-lived assets is incurred and a reasonable estimate thereof can be determined. Concurrently, the associated decommissioning costs are capitalized as a part of the carrying amount of the asset and amortized over its remaining useful life. The liability and the related asset may be adjusted periodically due to changes in estimates until settlement of the obligation.

### (o) Foreign currency translation:

The University accounts for transactions in foreign currencies at the exchange rates in effect at the time of the transactions. At year end, monetary assets and liabilities in foreign currencies are translated at year end exchange rates. Foreign exchange gains and losses on investments have been included in investment income.

### (p) Change in estimate:

During the year, management reviewed the estimated useful life of Library materials. Effective May 1, 2015, the University changed its estimate of the useful life of Library materials from 10 years to 5 years. The changes have been applied prospectively. The change in the basis of depreciation had the effect of increasing depreciation expense by \$13,399,000 for the year ended April 30, 2016.

Notes to Financial Statements Year ended April 30, 2016

# 2. Government grants and other accounts receivable:

(thousands of dollars)	2016	2015
Government grants Other	\$ 5,377 31,250	\$ 5,428 36,685
Less allowance for doubtful accounts	36,627 5,148	42,113 5,443
Balance, end of year	\$ 31,479	\$ 36,670

# 3. Investments:

Details of investments are as follows:

(thousands of dollars)	2016				2015			
		Fair value		Cost		Fair value		Cost
Equities:								
. Canadian	\$	162,338	\$	151,156	\$	172,607	\$	145,022
United States		188,613		102,123	•	189,475		96,716
Non-North American		164,626		168,337		179,563		161,428
	;	515,577		421,616		541,645		403,166
Fixed income	!	594,857		592,953		388,924		379,779
Other		38,247		33,151		36,440		29,803
	\$ 1,	148,681	\$ ^	1,047,720	\$	967,009	\$	812,748

Investments are exposed to foreign currency risk, interest rate risk, and market volatility. The University manages these risks through policies and procedures in place governing asset mix, equity and fixed income allocations, and diversification among and within categories.

# 4. Other investments:

Details of other investments are as follows:

(thousands of dollars)	2016	2015
McMaster Innovation Park (a) Adiga Life Sciences Inc. (b) The Director's College (c) Halton McMaster Family Health Centre (d)	\$ 19,945 1,355 (1,082) 4,720	\$ 18,831 938 (982)
	\$ 24,938	\$ 18,787

Details of loans receivable are as follows:

(thousands of dollars)	2016	2015
Graduate Students Association (e) Other (h)	\$ 554 350	\$ 722 169
	\$ 904	\$ 891

Notes to Financial Statements Year ended April 30, 2016

# 4. Other investments (continued):

# (a) McMaster Innovation Park:

The First Longwood Innovation Trust and The Gore District Land Trust ("Park") were created by the University in 2006 to develop an entity for research, education, training, innovation and commercialization.

Details of the investment are as follows:

(thousands of dollars)	2016	2015
Balance, beginning of year	\$ 18,831 1,114	\$ 15,863 279
Equity earnings Investment in the year	1,114	2,689
Balance, end of year	\$ 19,945	\$ 18,831

The University is party to a Debt Service Deficiency Agreement as disclosed in Note 13(c). As part of the agreement, the University receives a fee of 0.5% on the monthly outstanding balance. For the year ended April 30, 2016, \$111,106 (2015 - \$108,921) in income was recorded by the University.

Included in rent expense for the University for the year ended April 30, 2016 is \$2,529,630 (2015 - \$1,004,262). Included in accounts receivable at April 30, 2016 is \$2,304,895 (2015 - \$2,180,745) receivable from the Park. Included in Note 13(f) are \$4,653,827 (2015 - \$2,303,301) in operating lease commitments with the Park.

During the year the University provided payroll services at a fee which amounted to \$13,200 (2015 - \$13,200).

Pertinent information from the Park's combined financial statements are as follows:

(thousands of dollars)	Dec	ember 31, 2015	Dece	ember 31, 2014
Total assets	\$	109,309	\$	109,269
Total liabilities Total deferred capital grants Total trusts' equity	\$	83,652 5,742 19,915	\$	86,219 6,908 16,142
	\$	109,309	\$	109,269
Results of operations: Total revenues Total expenses	\$	12,272 11,159	\$	11,645 11,366
Net earnings	\$	1,113	\$	279
Cash flows: Used in operating activities From financing and investing activities	\$	(2,777) 1,322	\$	(1,271) 1,657
Increase (decrease) in cash	\$	(1,455)	\$	386

In 2013, the Park substantially completed construction of approximately 88,000 square feet of space for the McMaster Automotive Resource Centre (MARC). Construction costs incurred to April 30, 2016 amounted to \$21,761,000 (2015 - \$21,734,531) and are included in the University's capital assets. Included in Note 10(b) are \$9,728,000 (2015 - \$9,238,000) in internally financed capital projects for MARC.

Notes to Financial Statements Year ended April 30, 2016

# 4. Other investments (continued):

# (b) Adiga Life Sciences Inc.:

Financial information from Adiga Life Sciences Inc.'s financial statements are as follows:

(thousands of dollars)		August 31, 2015	August 31, 2014		
Total assets	\$	3,889	\$	3,414	
Total liabilities Total equity	\$	1,178 2,711	\$	1,538 1,876	
	\$	3,889	\$	3,414	
Results of operations:					
Total revenue	\$	8,027	\$	10,602	
Total expenses		7,192		10,358	
Net earnings	\$	835	\$	244	

### (c) The Director's College:

The University share of cash distributions from The Director's College during the year ended April 30, 2016 amounted to \$nil (2015 - \$nil). Cumulative distributions since inception amount to \$1,200,000 and are included in cash and equivalents in the statement of financial position. Discussions are in process regarding restructuring the ownership of the Director's College.

Financial information from The Director's College financial statements are as follows:

(thousands of dollars)	May 31, 2015	May 31, 2014
Total assets	\$ 676	\$ 748
Total liabilities Total equity	\$ 441 235	\$ 312 436
	\$ 676	\$ 748
Results of operations:		
Total revenue	\$ 1,700	\$ 1,725
Total expenses	1,900	1,807
Net loss	\$ (200)	\$ (82)

# (d) Halton McMaster Family Health Centre:

The investment in the Halton McMaster Family Health Centre represents the University's contribution of the base costs to construct the building.

# (e) Graduate Students' Association:

The University has a loan receivable from Graduate Students' Association in the amount of \$554,373 at April 30, 2016 (2015 - \$721,534). The loan bears interest at a fixed rate of 6.75%, repaid lump sum payments due and payable within sixty days of the closing of each of the trimestrial graduate registration periods.

Notes to Financial Statements Year ended April 30, 2016

# 4. Other investments (continued):

### (f) OSCAR EMR:

Financial information from OSCAR EMR's financial statements are as follows:

(thousands of dollars)		ember 31, 2015	December 31, 2014		
Total assets	\$	186	\$	74	
Total liabilities Total equity	\$	1,824 (1,638)	\$	1,500 (1,426)	
	\$	186	\$	74	
Results of operations:					
Total revenue	\$	523	\$	207	
Total expenses		735		1,020	
Net loss	\$	(212)	\$	(813)	

# (g) Downtown Land Holdings Ltd.:

During the year, the University recast the comparative financial statements for an immaterial error to include in Land the amount previously recorded as a Loan receivable from Downtown Land Holdings Ltd. The impact to the comparative figures at April 30, 2015, is a decrease in loans receivable of \$3,947,000, an increase in capital assets and equity in capital assets of \$3,947,000, a decrease in internally restricted net assets of \$4,750,000 and an increase in unrestricted net assets of \$803,000. There is no impact to the previously recorded excess of revenues over expenses for the year ended April 30, 2015.

### (h) Other:

The University has a loan receivable from a lessee in the amount of \$350,000 for lease fit out costs as at April 30, 2016 (2015 - \$169,500). The loan bears interest at a rate of 0% per annum and is payable over 10 years beginning in February 2016.

# 5. Capital assets:

(thousands of dollars)	Cost	Accumulated amortization	2016 Net
Land	\$ 64,544	\$ -	\$ 64,544
Buildings	1,090,987	384,259	706,728
Decommissioning retirement costs	3,240	529	2,711
Site improvements	26,302	11,014	15,288
Leasehold improvements	40,660	6,092	34,568
Library materials	167,577	147,549	20,028
Equipment, furnishings and vehicles	439,050	375,572	63,478
Computing systems and computing equipment	142,387	82,023	60,364
	\$ 1,974,747	\$ 1,007,038	\$ 967,709

# 5. Capital assets (continued):

(thousands of dollars)	Cost	umulated ortization	2015 Net
Land	\$ 58,622	\$ -	\$ 58,622
Buildings	1,079,349	362,222	717,127
Decommissioning retirement costs	2,943	422	2,521
Site improvements	26,302	9,946	16,356
Leasehold improvements	13,589	3,666	9,923
Library materials	149,849	122,782	27,067
Equipment, furnishings and vehicles	438,651	368,530	70,121
Computing systems and computing equipment	147,255	89,676	57,579
	\$ 1,916,560	\$ 957,244	\$ 959,316

Included in buildings is \$91,026,587 (2015 - \$92,122,006) representing buildings currently under construction and not available for use or subject to amortization. Included in computing systems and computing equipment is \$1,220,000 (2015 - \$1,720,000) representing software currently under development and not available for use or subject to amortization.

# 6. Accounts payable and accrued liabilities:

Included in accounts payable and accrued liabilities are government remittances payable, which includes amounts payable for payroll related taxes of \$3,920,000 (2015 - \$6,103,000).

# 7. Long-term obligations:

Details of long-term obligations are as follows:

(thousands of dollars)								2016		2015
	Maturity	Interest rate	Curi por			urrent ortion	ou	Total tstanding	0	Total utstanding
Long term debt:										
Mortgage	Oct 2016	5.38%		73		-		73		213
Bank term loan (a)	May 2033	floating		549	1	15,898		16,447		16,962
Debentures (b)	Oct 2052	6.15%		-	12	20,000		120,000		120,000
Debentures (c)	Nov 2065	4.105%		-	12	20,000		120,000		-
				622	25	55,898		256,520		137,175
Decommissioning obligations (	d)			-	1	12,029		12,029		11,206
			\$	622	\$ 26	67,927	\$	268,549	\$	148,381

Principal payments due in each of the following five years are as follows (in thousands of dollars):

2017	\$ 622
2018	586
2019	624
2020	665
2021	709

# 7. Long-term obligations (continued):

- (a) The bank term loan is unsecured and is being amortized over 30 years. The outstanding loan amount is subject to a 30 year interest rate swap agreement on an original notional principal of \$20,954,441 with the banker whereby the University receives a floating interest rate while paying a fixed (10 year) rate of 6.384%.
- (b) The debentures, which are unsecured, bear interest at 6.15% payable semi-annually in April and October. The proceeds of the issue are being used to finance various capital projects.
  - A voluntary sinking fund has been established to provide funds to repay the debenture principal upon maturity. Increases to the sinking fund are charged to operations. The value of the fund at April 30, 2016 amounted to \$14,628,000 (2015 \$15,054,000).
- (c) The debentures, which are unsecured, bear interest at 4.105% payable semi-annually in May and November. The proceeds of the issue are being used to finance various capital projects.
  - A voluntary sinking fund has been established to provide funds to repay the debenture principal upon maturity. Increases to the sinking fund are charged to operations. The value of the fund at April 30, 2016 amounted to \$9,786,000 (2015 \$nil).
- (d) It is expected that the nuclear reactor will be decommissioned at some undeterminable future date. Under an agreement with the Canadian Nuclear Safety Commission (CNSC), a trust fund has been established which requires annual funding contributions to provide for the decommissioning costs. During the year, the estimated decommissioning costs were reviewed. As a result, an additional Asset Retirement Obligation in the amount of \$599,000 was recognized.

As at April 30, 2016, the fair value of the trust funds amounted to \$10,872,000 (2015 - \$10,801,000). The net present value of the estimated cost for decommissioning, at April 30, 2016 is \$11,214,000 (2015 - \$10,089,000) using risk free rates ranging between 4.0% and 5.1%.

During fiscal 2015, an additional decommissioning obligation related to non-reactor radioactive materials was recognized. The obligation recognized was \$1,117,000 based on an estimated useful life of 25 years and using a risk free rate of 4.0%. During the year, the amount of the obligation was reduced by \$302,000 to reflect changes in the number of non-reactor radioactive materials in service. The CNSC does not require that a trust fund be established to satisfy this obligation.

(e) The University has in place an interest rate swap agreement for 30 years which expires in 2033. Under the terms of the agreement, the University agrees to receive a floating interest rate on the loan (note 7(a)) while paying a fixed rate of 6.384%. The use of the agreement effectively enables the University to convert the floating rate interest obligation of the loan into a fixed rate obligation and thus manage its exposure to interest rate risk.

The notional and fair values of the interest rate swap agreement is as follows:

(thousands of dollars)		2016			2015	
	Notional		Fair	Notional		Fair
	value		value	value		value
30-year interest rate swap	\$ 16,447	\$	(6,952)	\$ 16,962	\$	(6,870)

The change in fair value of the swap for the year ended April 30, 2016 is (\$82,000) (2015 - (\$1,041,000)).

# 8. Employee future benefits:

The University maintains three contributory defined benefit registered pension plans, one for full-time hourly employees and two for salaried employees. The plan for hourly employees was closed to new members on March 15, 2010, one of the salaried plans was closed to new members on January 14, 2003 and the other salaried plan remains open to new members. The defined benefit registered pension plans provide a pension for life based on the best average earnings of the member and years of pensionable service in the plan. The University also maintains both contributory defined contribution and non-contributory defined benefit supplementary non-registered pension plans, a retirement incentive program and a group RRSP.

The University additionally maintains a non-pension post-retirement benefit plan which provides health, dental and life insurance benefits to retirees, a post-employment benefit plan which provides health benefits to employees on long-term disability and a special retirement arrangement for some senior administrators.

The accrued benefit obligations as determined by independent actuaries and the fair values of the plans' assets are recorded as at April 30th.

### (a) Information on the accrued benefit liability is as follows:

(thousands of dollars)	2016							
	Pe	nsion						
	Registered	Supplemental	Other	Total				
Accrued benefit obligation	\$ 1,822,251	\$ 71,378	\$ 207,963	\$ 2,101,592				
Fair value of plan assets	1,724,337	-	-	1,724,337				
Funded status - surplus (deficiency)	\$ (97,914)	\$ (71,378)	\$ (207,963)	\$ (377,255)				

(thousands of dollars)					2015		
	Pension						
	F	Registered	Sup	plemental		Other	Total
Accrued benefit obligation	\$ 1	,744,210	\$	72,882	\$	217,194	\$ 2,034,286
Fair value of plan assets	1	,753,794		-		-	1,753,794
Funded status - surplus (deficiency)	\$	9,584	\$	(72,882)	\$	(217,194)	\$ (280,492)

# (b) Information on the benefit expense is as follows:

(thousands of dollars)	2016							
		Pension						
		Registered	Sup	plemental		Other		Total
Current service cost	\$	32,467	\$	48	\$	6,954	\$	39,469
Interest cost		(554)		4,347		12,947		16,740
	\$	31,913	\$	4,395	\$	19,901	\$	56,209

(thousands of dollars)				2015		
	Pe	nsion				
	Registered	Sup	plemental		Other	Total
Current service cost	\$ 32,155	\$	593	\$	7,475	\$ 40,223
Interest cost	5,816		4,128		12,324	22,268
	\$ 37,971	\$	4,721	\$	19,799	\$ 62,491

# 8. Employee future benefits (continued):

(c) Information on remeasurements and other items is as follows:

(thousands of dollars)				2016		
	Pei					
	Registered	Supp	lemental		Other	Total
Investment gains/(loss) Actuarial gain on accrued benefit	\$ (139,042)	\$	-	\$	-	\$ (139,042)
obligation	4,375		299		22,296	26,970
	\$ (134,667)	\$	299	\$	22,296	\$ (112,072)

(thousands of dollars)	2015							
		Pe						
	•	Registered	Sup	plemental		Other		Total
Investment gains	\$	96,994	\$	-	\$	-	\$	96,994
Past service credit		-		(4,928)		-		(4,928)
Actuarial gain on accrued benefit								
obligation		3,554		276		1,856		5,686
	\$	100,548	\$	(4,652)	\$	1,856	\$	97,752

(d) Information on the pension plan assets includes the following:

	Percentage of fair value of total plan	Target allocation percentage
Equity securities	67.8%	65.0%
Debt securities	31.5%	35.0%
Other	0.7%	0%

(e) The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	Pension	Other
Discount rate	6.00%	6.00%
Expected long-term rate of return on plan assets	6.00%	-
Rate of compensation increase	3.97%	4.00%

(f) The significant actuarial assumptions adopted in measuring the net benefit expense are as follows:

	Pension	Other
Discount rate	6.00%	6.00%
Expected long-term rate of return on plan assets	6.00%	-
Rate of compensation increase	3.97%	4.00%

(g) Details of annual contributions and benefits paid are as follows:

(thousands of dollars)	2016			2016			
	Pension		Other		Pension		Other
Employer contributions	\$ 64,582	\$	6,836	\$	49,469	\$	6,690
Employee contributions	23,659		-		23,272		-
Benefits paid	83,970		6,836		73,001		6,690

# 8. Employee future benefits (continued):

- (h) For measurement purposes, a 5.63% annual rate of increase in per capita medical cost was assumed for 2016, grading down to 4.0% per annum in and after 2030. For per capita dental costs, an annual rate of increase of 4.0% per annum was assumed.
- (i) Details of actuarial valuation completion for funding purposes and filing dates of the respective plans are as follows:
  - hourly rated employee pensions: completed as at July, 2013, the next required filing date is July, 2016.
  - salaried employees pensions (Plan 2000): completed as at July, 2014, the next required filing date is July, 2017
  - other benefit: completed as at March 31, 2016; the next required filing date is March 31, 2019.
  - post-employment and retirement allowance: completed as at April 30, 2014.

The results of valuations not completed as of April 2016, have been extrapolated to April 30, 2016, which is the measurement date used to determine the accrued benefit obligation for all employee future benefit plans.

(j) In 2008 the University created a group RRSP for certain types of new employees. University and employees' contributions in 2016 amounted to \$1,084,000 (2015 - \$965,176).

### 9. Deferred contributions:

### (a) Deferred for future expenses:

Deferred contributions represent external contributions restricted for research and trust expenses to be incurred in subsequent fiscal years. Details of the change in deferred contributions are as follows:

(thousands of dollars)	2016	2015
Balance, beginning of year	\$ 308,958	\$ 314,350
Deferred and capital contributions received	358,468	341,577
	667,426	655,927
Less:		
Amounts recognized as revenue	(267,797)	(273,587)
Deferred capital contributions transfer	(45,706)	(73,382)
Balance, end of year	\$ 353,923	\$ 308,958

### Deferred contributions consist of the following:

(thousands of dollars)	2016	2015
Research grants and contracts Donations, other grants and investment income Capital grants and donations Other restricted funds	\$ 198,518 90,606 39,963 24,836	\$ 177,320 80,477 33,225 17,936
	\$ 353,923	\$ 308,958

Notes to Financial Statements Year ended April 30, 2016

# 9. Deferred contributions (continued):

# (b) Deferred capital contributions:

Deferred capital contributions represent the unamortized amount of donations and grants received for the purchase of capital assets. Unspent deferred capital contributions are included in deferred contributions for future expenses until such time as capital expenditures are incurred. Details of the change in the unamortized deferred capital contributions are as follows:

(thousands of dollars)	2016	2015
Balance, beginning of year Add: contribution transfers Less: amount amortized to revenue	\$ 455,778 45,706 (39,340)	\$ 420,293 73,382 (37,897)
Balance, end of year	\$ 462,144	\$ 455,778

# 10. Internally restricted net assets:

# (a) Employee future benefits:

Details of employee future benefits internally restricted net assets are as follows:

(thousands of dollars)	2016	2015
Pensions Other retirement and post employment benefit plans	\$ (178,559) \$ (147,531)	(69,502) (165,912)
	\$ (326,090) \$	(235,414)

# (b) Specific purpose:

Details of specific purpose internally restricted net assets are as follows:

(thousands of dollars)	2016	2015
Unexpended departmental carryforwards	\$ 72,623	\$ 68,199
Research Ancillaries	26,925 12,399	22,942 6,559
Other	82,980	101,819
	194,927	199,519
Sinking funds	24,414	15,054
Internally financed capital projects	(58,463)	(63,753)
Capital reserves	124,019	16,524
Facilities services projects	24,566	8,876
	\$ 309,463	\$ 176,220

Included in unexpended departmental carryforwards is a \$1,500,000 (2015 - \$2,000,000) advance to the Faculty of Science from unrestricted net assets for which arrangements for recovery are in place.

Notes to Financial Statements Year ended April 30, 2016

# 10. Internally restricted net assets (continued):

# (b) Specific purposes (continued):

Details of the internally financed capital projects which have various recovery terms and periods are as follows:

(thousands of dollars)		Apr	il 30, 2016
Project	Funding source		balance
Stadium and Parking Project	Parking fees, pledges, fundraising	\$	(17,893)
Ron Joyce Centre - Burlington	Fundraising, Region of Halton, City of Burlington		(3,965)
Les Prince Residence	Ancillary operations		(15,510)
David Braley Athletic Centre	Student levies, pledges, fundraising		(8,312)
McMaster Automotive Resource Centre (MARC)	Various		(9,728)
McMaster University Medical Centre (MUMC)	Various		(3,031)
Internal equipment loans	Various		(24)
			(58,463)

(thousands of dollars)		Apr	il 30, 2015
Project	Funding source		balance
Stadium and Parking Project	Parking fees, pledges, fundraising	\$	(18,963)
Ron Joyce Centre - Burlington	Fundraising, Region of Halton, City of Burlington		(5,314)
Les Prince Residence	Ancillary operations		(16, 137)
David Braley Athletic Centre	Student levies, pledges, fundraising		(9,369)
McMaster Automotive Resource Centre (MARC)	Various		(9,238)
McMaster University Medical Centre (MUMC)	Various		(4,538)
Internal equipment loans	Various		(194)
			(63,753)

# 11. Equity in capital assets:

The equity in capital assets is calculated as follows:

(thousands of dollars)	2016	2015
Capital assets	\$ 967,709	\$ 959,316
Less amounts financed by:		
Net long-term debt	(255,622)	(135,970)
Unamortized deferred capital contributions	(462,144)	(455,778)
	\$ 249,943	\$ 367,568

Details of the transfer for capital transactions are as follows:

(thousands of dollars)	2016	2015
Repayment of long-term debt Capital asset purchases from operating	\$ 655 48,384	\$ 617 61,382
	\$ 49,039	\$ 61,999

Notes to Financial Statements Year ended April 30, 2016

#### 12. Endowments:

#### (a) Internal:

Details of the change in internally restricted endowments are as follows:

(thousands of dollars)	2016	2015
Balance, beginning of year Donations Investment income (loss) Net transfers and expenses	\$ 136,609 114 (4,318) (4,533)	\$ 127,746 58 12,935 (4,130)
Balance, end of year	\$ 127,872	\$ 136,609

Included in internal endowments is an amount of \$60,065,000 (2015 - \$64,458,000) reflecting the legacy of Dr. H. L. Hooker. The income generated from this capital is used to fund programs that enrich the academic achievements of the University as approved annually by the Board.

#### (b) External:

Details of the change in externally restricted endowments are as follows:

(thousands of dollars)	2016	2015
Balance, beginning of year External contributions Income (used from) retained - capital protection policy	\$ 438,424 6,224 (31,467)	\$ 405,666 8,358 24,400
Balance, end of year	\$ 413,181	\$ 438,424

Investment (loss) income on external endowments amounted to \$(15,950,000) (2015 - \$38,284,000). In accordance with the endowment capital protection policy, this (loss) income plus (less) the amount made available for spending of \$14,597,000 (2015 - \$13,552,000) and net transfers of \$(920,000) (2015 - \$(332,000)) were (used from) added to endowment net assets. The amount made available for spending is recorded as investment income in the statement of operations.

# 13. Commitments and contingencies:

### (a) Canadian Universities Reciprocal Insurance Exchange:

The University is a member of the Canadian Universities Reciprocal Insurance Exchange "CURIE", a self-insurance cooperative comprised of approximately sixty Canadian universities and colleges. CURIE insures property damage, general liability and errors and omissions risks. If premiums collected are insufficient to cover expenses and claims, the University may be requested to pay additional amounts.

# (b) Legal claims:

The University is involved in certain legal matters and litigation in the normal course of operations, the outcomes of which are not presently determinable. The loss, if any, from these contingencies will be accounted for in the periods in which the matters are determined. Management is of the opinion that these matters are mitigated by adequate insurance coverage.

Notes to Financial Statements Year ended April 30, 2016

# 13. Commitments and contingencies (continued):

### (b) Legal claims (continued):

On October 12, 2007, the University was served with a Class Action Claim ("Claim") on behalf of certain retired and active Clinical Faculty members who were, or are, members of the University's defined benefit pension plans for salaried employees ("Plan") during the period from 1973 to-date. The Claim alleged certain breaches of trust and fiduciary responsibilities in the administration of the Plan. The Ontario Superior Court of Justice ("Court") approved a settlement agreement between the University and the representative plaintiffs effective May 15th, 2015. The University is in the process of implementing the terms of the settlement agreement, including payments to class members who execute a full and final release in favour of the University. A provision consistent with the Court approved settlement agreement, is recorded in the financial statements.

### (c) Debt Service Deficiency Agreement:

The University has guaranteed the scheduled principal and interest payments, up to \$23 million of long-term debt extended to The First Longwood Innovation Trust, in the event of default. The total amount of debt outstanding and subject to the Debt Service Deficiency Agreement at April 30, 2016 was \$22.7 million (2015 - \$22.1 million). Since the agreement may expire without being drawn upon, it does not necessarily represent future cash requirements. As of April 30, 2016, no obligation exists under the agreement and as a result, no amount has been recognized as a liability on the statement of financial position.

# (d) Capital commitments:

The estimated cost to complete approved major capital and system projects amounted to \$223.8 million at April 30, 2016 (2015 - \$221.2 million). The major commitments are as follows: David Braley Health Sciences Centre (\$6.3 million), L.R. Wilson Hall (\$18.8 million), Gerald Hatch Centre for Engineering Experiential Learning (\$9.4 million), The Living Learning Centre (\$116.3 million), Combined Heat and Power Plant (\$21.8 million), and Biomedical Engineering & Advanced Manufacturing (\$17.9 million).

#### (e) Energy Retrofit Agreement:

In 2007, the University signed a multi-year agreement with Hamilton Health Sciences Corporation ("HHSC") when HHSC undertook a significant energy retrofit project at the McMaster University Medical Centre. Under the terms of the agreement, the University is required to pay approximately 40% of the related costs of the retrofit project. At April 30, 2016, the University's remaining share of the costs are estimated to be \$12.4 million (2015 - \$25.0 million). Payments to HHSC will take place up to 2029.

#### (f) Leases:

The University has entered into operating lease agreements for office equipment and buildings. The total annual minimum lease payments in each of the next five years are approximately as follows:

### (thousands of dollars)

2017	\$ 2,842
2018	2,449
2019	1,900
2020	1,719
2021	1,689

#### (g) McMaster Health Campus:

The University entered into a Conditional Financial Contribution Agreement with the City of Hamilton which requires the University to meet certain milestones in order to receive grant installments totaling \$20 million between now and 2020, of which \$19 million has been received.

# Notes to Financial Statements

Year ended April 30, 2016

#### 14. Other income:

Details of other income are as follows:

(thousands of dollars)	Major Sources	2016	2015
Faculty of Health Sciences	Non-degree educational fees, specifically funded programs, international postgraduates stipends, space/equipment rentals, other student fees	\$ 52,009	\$ 48,253
Other Faculties	Non-degree educational fees, international postgraduate stipends, space/equipment rentals, other student fees	5,966	7,448
Academic Services	Contracts and patent royalties, registrar administration fees	11,169	5,858
Student Services	Athletics and Recreation memberships and user fees	17,490	17,513
Miscellaneous	Nuclear reactor sales, application fees, late payment fees, sales of utilities and other departmental sales	17,411	17,253
Other Investment Income	The Director's College, Adiga Life Sciences Inc.	317	91
		\$ 104,362	\$ 96,416

### 15. Related party transactions:

In addition to certain transactions and balances disclosed in note 4, the University received funds of approximately \$1,348,000 (2015 - \$216,000) during the year from fundraising entities.

#### 16. Financial risks and concentration of credit risk:

# (a) Liquidity risk:

Liquidity risk is the risk that the University will be unable to fulfill its obligations on a timely basis or at a reasonable cost. In managing liquidity risk, the University focuses on liquid resources available for operations. The University's objective is to have sufficient liquid resources to continue operating even if adverse financial events were to occur and to provide it with the flexibility to take advantage of opportunities that will advance its mission. The need for sufficient liquid resources is considered in the preparation of its annual and capital budgets and by monitoring and forecasting of cash flows. The University maintains a line of credit of \$15 million which can be used in the event of a short term deficiency in cash flow. The line of credit was not used in 2016. In addition, the University could issue unsecured debentures or enter into other long-term debt to assist in the financing of capital projects. There has been no change to the risk exposure from 2015.

### (b) Credit risk:

Credit risk refers to the risk that a counterparty may default on its contractual obligations resulting in a financial loss. The University is exposed to credit risk with respect to accounts receivable. The University assesses, on a continuous basis, accounts receivable and provides for any amounts that are not collectible in the allowance for doubtful accounts (note 2).

#### (c) Interest rate risk:

The University is exposed to interest rate risk on its fixed interest rate financial instruments. Further details about the fixed rate investments are included in note 3 and the long term obligations are included in note 7.

### (d) Currency risk:

Investments that trade in foreign markets are exposed to currency risk as the price in local terms on the foreign stock exchange is converted to Canadian dollars to determine fair value. The University's overall currency positions are monitored on a daily basis by the portfolio manager. There has been no change to the risk exposure from 2015.

Notes to Financial Statements Year ended April 30, 2016

# 17. Ontario student opportunity trust fund:

External endowments include grants for funding student aid provided by the Government of Ontario's Student Opportunity Trust Fund matching program. Under the program, the Province has matched qualifying external endowment donations received with equal contributions.

# (a) Ontario Student Opportunity Trust Fund - Phase I

The following schedule represents the changes for the years ended April 30, 2016 and 2015 in the first phase of the Ontario Student Opportunity Trust Fund (OSOTF I) balance:

(thousands of dollars)	2016	2015
Endowment balance, beginning of year Investment income retained for protection of capital	\$ 32,611 582	\$ 30,808 2,108
Investment income transferred to expendable income	(351)	(305)
Endowment balance, end of year	32,842	32,611
Funds available for awards, beginning of year Investment income	1,306	1,243
Bursaries awarded (2016 - 1,361 awards; 2015 - 1,451 awards) Investment income transferred from endowment balance	(1,657) 351	(1,548) 305
Funds available for awards, end of year	-	
Total funds at book value	\$ 32,842	\$ 32,611

The market value of the endowment as at April 30, 2016 was \$34,768,000 (2015 - \$37,112,000).

# (b) Ontario Student Opportunity Trust Fund - Phase II

The Ontario government requires separate reporting of balances as at April 30th, and details of the changes in the balances for the period then ended with respect to the second phase of the Ontario Student Opportunity Trust Fund (OSOTF II) of McMaster University including Divinity College.

The following is the schedule of changes for the years ended April 30th:

(thousands of dollars)		2016	2015
Endowment balance, beginning of year	\$	5,961	\$ 5,771
Investment income retained for protection of capital	·	132	190
Endowment balance, end of year		6,093	5,961
Funds available for awards, beginning of year		34	37
Investment income for expenditures	239		221
Bursaries awarded (2016 - 247 awards; 2015 - 263 awards)		(229)	(224)
Funds available for awards, end of year		44	34
Total funds at book value	\$	6,137	\$ 5,995

The market value of the endowment as at April 30, 2016 was \$6,570,000 (2015 - \$7,042,000).

Notes to Financial Statements Year ended April 30, 2016

# 18. Ontario trust for student support:

External endowments include grants for funding student aid provided by the Government of Ontario's Ontario Trust for Student Support (OTSS) matching program. Under the program, the Province will provide an equivalent matching contribution for external endowment contributions made to a specified ceiling.

The following is the schedule of changes in the endowment and expendable balances for the years ended April 30th:

(thousands of dollars)	2016	2015
Endowment balance, beginning of year Investment income retained for protection of capital	\$ 38,134 892	\$ 36,910 1,224
Endowment balance, end of year	39,026	38,134
Funds available for awards, beginning of year Investment income for expenditures Bursaries awarded (2016 - 489 awards; 2015 - 428 awards)	1,284 1,425 (1,454)	1,296 1,289 (1,301)
Funds available for awards, end of year	1,255	1,284
Total funds at book value	\$ 40,281	\$ 39,418

The market value of the endowment as at April 30, 2016 was \$45,652,000 (2015 - \$48,370,000).

# 19. Pledges:

Outstanding but unrecorded pledges for donations and other fund raising amounted to approximately \$94,000,000 (2015 - \$75,000,000).

# 20. Comparative figures:

Certain comparative figures for 2015 have been reclassified to conform with the financial statement presentation adopted in the current year.