



**Paul LeBane**  
+1 416 597 7478  
plebane@dbrs.com

**Scott Cherry**  
+1 416 597 7343  
scherry@dbrs.com

*Insight beyond the rating.*

## Ratings

Debt	Rating	Rating Action	Trend
Issuer Rating	AA (low)	Confirmed	Stable
Senior Unsecured Debt	AA (low)	Confirmed	Stable

## Rating Update

DBRS Limited (DBRS) has confirmed McMaster University's (McMaster or the University) Issuer Rating and Senior Unsecured Debt rating at AA (low). Both trends are Stable. The ratings reflect the University's strong academic profile, proactive and effective financial management, positive enrolment outlook and considerable financial flexibility.

McMaster continues to post strong operating results. The University recorded a consolidated surplus of \$29.1 million in 2015–2016, which was weaker than in prior years but was largely the result of weaker investment earnings. The outlook for 2016–2017 suggests a similarly sized result with modest growth in revenue being offset by inflationary cost pressures.

The operating environment for Ontario universities remains challenging; however, the University's operating outlook remains positive and DBRS expects the University to fare well in the coming years. McMaster has strong research and academic profiles that are oriented toward high-demand disciplines. Its programs generally rank well in Canadian and international surveys and the University is favorably located in a high-growth region with close proximity to the Greater Toronto Area. As such, student demand has remained resilient and McMaster is planning to increase enrolment by 800 full-time equivalents (FTEs)

per year over the next four years. These efforts are being reinforced by transformative capital projects, enhancements to student aid and general student supports as well as new program offerings and pathways.

Ongoing capital renewal and new capital projects have and will continue to increase capacity and alleviate some of the University's deferred maintenance pressures. To support these efforts, the University issued \$120 million in long-term debentures in 2015. With the issuance, McMaster's debt burden rose to \$9,185 per FTE at April 30, 2016, from \$4,872 per FTE the year prior. At the same time, interest coverage weakened to 7.1 times (x) and the ratio of expendable resources to debt fell to 143%. Nevertheless, the University continues to have ample financial flexibility at the current rating. DBRS expects McMaster's credit metrics to remain relatively stable over the medium term.

DBRS expects the ratings to remain stable. A positive rating action could occur with improvements in the provincial funding and tuition frameworks and additional balance sheet flexibility. A negative rating action, though highly unlikely, could occur if enrolment declined sharply or if changes to the operating framework led to a significant deterioration in operating results.

## Financial Information

	For the year ended April 30				
	2016	2015	2014	2013	2012
Consolidated operating result (DBRS-adjusted, \$ millions)	29.1	78.6	86.6	60.7	9.1
Surplus-to-revenue (five-year average)	5.5%	5.4%	4.1%	0.8%	-0.8%
Debt per FTE (\$)	9,185	4,872	4,957	5,028	5,155
Interest coverage (times)	7.1	14.6	14.6	12.5	6.4
Expendable resources-to-debt (times)	1.4	1.7	1.7	1.6	1.6

## Issuer Description

McMaster was founded in 1887 by the merger of the Toronto Baptist College and Woodstock College and is located in Hamilton, Ontario, a city of 756,200 residents that is 60 kilometres west of Toronto. The University is a comprehensive, research-intensive institution offering a broad range of undergraduate, graduate and continuing education programs. In 2015–2016, McMaster had enrolment of 27,929 students.

## Rating Considerations

### Strengths

#### 1. Strong academic profile

The University benefits from a strong academic profile and reputation, ranking among the top universities in Canada and among the top 150 globally across a range of university rankings. McMaster offers programming in all of the major high-demand disciplines (except law) and boasts the second-largest medical school in Ontario, the largest co-operative education Master of Business Administration program in the country and a top-ranked school of engineering.

#### 2. Stable revenue base

Universities are stable institutions that are a critical component of the public sector. They benefit from stable revenue sources, which include significant funding from the provincial and federal governments as well as the tuition revenue associated with their broad mix of undergraduate and graduate programs. For McMaster, these revenue sources accounted for about 75% of total revenue in 2015–2016. Over time, constrained provincial operating grants have led to a relative increase in the portion of operating expenses funded by tuition fees.

#### 3. Effective financial management

McMaster has an established history of proactive and effective financial management. It has been responsive to operating challenges that have emerged over time and has implemented systems and processes to improve resource allocation and cost control. In recent years, the University has identified opportunities to generate new revenue and contain costs, implemented changes to improve the sustainability and affordability of the pension plan and introduced a new budget model to improve allocative efficiency.

#### 4. Financial flexibility

The University's history of strong operating results, prudent management practices and past fundraising success has led to balance-sheet flexibility. DBRS estimates that McMaster's expendable financial resources were \$367.9 million at April 30, 2016. This equates to 143.4% of debt and 39.8% of total expenses.

### Challenges

#### 1. Limited tuition flexibility and funding restraint

The current tuition fee framework limits universities to an average annual increase of 3.0%. The framework is set to expire at the end of the 2016–2017 academic year. The Province of Ontario (the Province) has not provided guidance, but DBRS expects that the next iteration will not provide universities with more flexibility to raise fees than what is provided under the existing framework. At the same time, provincial operating grant funding remains restrained. The Province has continued to fund enrolment growth, but operating grants were reduced in recent years and have not been adjusted for inflationary pressures. The Province is currently reviewing the operating grant framework.

#### 2. Steady expense pressures

In the constrained funding environment, cost control is increasing in importance. Inflationary pressures related to employee compensation will continue to pressure operating budgets, thus necessitating management efforts to identify alternate sources of revenue and cost savings.

#### 3. Large backlog of deferred maintenance

The University has a considerable amount of deferred maintenance that will need to be addressed in the coming decades. Current estimates suggest that deficiencies total \$314 million, though DBRS notes that this estimate has fallen in recent years as McMaster has increased and continues to increase its budget allocation for deferred maintenance.

## Operating Performance

### 2015–2016 Results

In 2015–2016, the University posted a consolidated surplus of \$29.1 million, which was notably lower than those recorded in previous years and largely the result of external factors or the timing of revenue recognition. On a narrower operating-fund basis, McMaster posted a \$4.4 million surplus, which well surpassed the \$12.7 million deficit originally expected.

Total revenue fell 3.7% from the prior year, the main drivers of which were: (1) modestly weaker enrolment, (2) investment losses resulting from weak equity markets and (3) reduced research activity. The University increased tuition fees to the extent permitted under the provincial framework, which led to tuition revenue growth (+5.5%); however, this growth was not sufficient to offset reduced provincial operating grants (-0.2%), the sharp reduction in investment income (-77.2%) and less research grant revenue recognized during the year (-6.2%).

Expense growth was well contained during the year (+1.1%), though this was in part a reflection of reduced research activity. Universities recognize research grants as revenue when associated research expenses are incurred. Compensation-related costs were modestly higher (+0.80%) as the impact of reduced research activity partially offset the impact of negotiated wage settlements, benefit pressures and workforce growth.

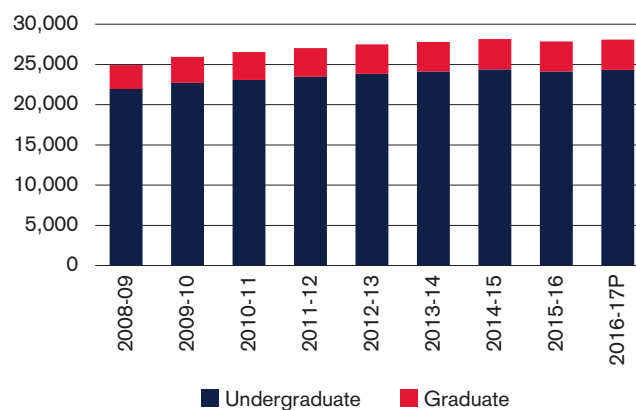
### 2016–2017 Budget

The University presents a consolidated budget that includes all of its funds: operating, ancillary, research, trust, endowment and capital. The operating fund is the largest of the funds, accounting for about 60% of total revenue and expense. The 2016–2017 budget projects a consolidated surplus of \$26.9 million and a narrower operating-fund deficit of \$17.8 million.

McMaster's budget envisioned modest enrolment growth – offsetting the decline experienced in 2015–2016 – and increases in tuition fees to the extent permitted by the Province's tuition framework for domestic students in regulated programs (3.0% overall) and more strongly for international students (6.0%). Overall, these, along with improved investment returns and greater recognition of capital and research contributions, are expected to support a moderate increase in total revenue (+6.4%).

Total expense growth is expected to rise moderately (+6.9%) in 2016–2017 after very modest growth in 2016–2017. While inflationary pressures associated with staff compensation and university operations will contribute to the growth, research-related spending is expected to rise more strongly following the reduction in the prior year. These costs will be offset by the recognition of greater research grant and contract revenue.

Exhibit 1: Enrolment (FTEs)



### Medium-term Outlook

The operating environment remains challenging for Ontario universities because of limited growth in government operating grants and a decreasing university-aged population in the Province. This has led to increasing competition among Ontario universities for domestic undergraduate students, necessitating a growing reliance on international students by some institutions. Despite the challenges, DBRS expects McMaster to fare relatively well over the medium term. Student demand has remained strong with applicant numbers remaining relatively stable in recent years and entering averages continuing to rise, while international enrolment has been stable as a share of total enrolment. The University expects moderate enrolment growth over the medium term as new capacity is added in high-demand program areas.

The Province is currently reviewing the provincial funding and tuition frameworks. At this time, there is little public information about possible changes to either framework, though DBRS expects that (1) operating grant funding will remain relatively stable over the near term and (2) the Province would provide transitional support to universities that are adversely affected by changes to the grant system. At the same time, the existing tuition fee framework, which limits annual increases, is set to expire at the end of the current academic year. DBRS expects that the next iteration of the tuition fee framework is unlikely to provide the universities with greater flexibility than what is already provided under the current system, but could conceivably allow for some one-time adjustments. Ontario universities have among the highest tuition fees in the country. The Province and the Universities provide considerable amount of student aid and supports, including the introduction of net tuition billing, which support higher participation rates. However, ongoing tuition increases are likely to be unpopular.

## Operating Performance (CONTINUED)

A further area of uncertainty is the next round of Strategic Mandate Agreements (SMAs). Ontario universities signed SMAs with the Province in 2014 covering the 2014–2015 to 2016–2017 academic years. These agreements set out broad priorities for the various universities within the context of the Province's objective to see greater differentiation and specialization by the universities. The SMAs also imposed specific reporting requirements. It is expected that the next round of SMAs will be more specific and targeted and that some portion of university funding will be at risk if specific objectives or targets are not met. DBRS expects at-risk funding to remain a relatively small share of total funding and that transitional measures will be in place. DBRS does not expect McMaster to be materially affected, given ongoing efforts to further align with the existing SMA objectives.

Pension solvency payments represent a risk for McMaster over the medium term. The University filed its 2014 pension valuation with the Provincial regulator, which identified a solvency deficit of \$197 million. Notwithstanding the changes in plan design and funding, the declines in long-term yields since 2014 and ongoing improvements in longevity could result in an even larger solvency deficiency at the time of 2017 valuation. The 2017 valuation will have to be filed with the Provincial regulator and could impose considerable pressure on the University's operating budget as the deferral period for temporary solvency relief comes to an end. DBRS views this risk as low.

The Province is reviewing pension solvency relief measures for private- and public-sector plans. The Province has undertaken a consultation process and is expected to consult further in 2017. With the persistence of low interest rates, pension solvency deficits remain widespread in the sector and many universities will be required to start making special payments against these solvency deficits when the deferral periods provided by temporary solvency relief end in the coming years. These payments could be large for some and may require significant adjustments to operations. Given the importance of post-secondary education to the Province, DBRS expects that further temporary solvency relief or permanent changes to pension funding requirements are likely forthcoming. With the potential changes to the pension solvency funding requirements in the near term, DBRS expects progress to slow on a sector-wide jointly sponsored pension plan.

In light of the challenging operating environment, McMaster has been proactive in identifying opportunities to support revenue growth and limit cost escalation. This has enabled the University to maintain favourable operating results and provided some flexibility for McMaster to pursue strategic priorities. Among others, these include:

- Student demand – The University has introduced new programs and new pathways to post-secondary education. The University is also seeking to improve the overall student experience, which is intended to support initial applications and admissions as well as improve retention in later years.
- Donations/Endowments – The University has increased resources to support efforts to increase annual giving. McMaster is now targeting \$21.5 million in annual gifts and pledges.
- Efficiencies – The University is conducting an Information Technology (IT) Services Review to identify efficiencies and implementing a multi-year energy management plan intended to reduce energy costs. McMaster is increasing online delivery of the curriculum to reduce costs related to classroom instruction.
- Controlling faculty budgets – The University has, in some years, constrained growth in faculty budgets. In 2016–2017, for instance, faculties were required to absorb compensation-related inflationary pressures, though strategic priorities were funded. Ultimately, with the activity-based budget model, the process should drive further efficiency gains and improved resource allocation.

## Capital Plan

The University continues to make significant investment in facilities, IT and equipment guided by McMaster's multi-year capital plan (2014). The University is one of Ontario's most research-intensive universities and is located in one of the fastest-growing regions of the Province. The capital budget for 2016–2017 totals \$101.6 million, which is similar to past years in which capital investment has typically ranged between \$95.0 million and \$135.0 million.

McMaster continues to face research- and enrolment-related capacity constraints. In light of this, the University has and is undertaking a number of projects intended to increase capacity. While many of the projects are relatively modest in scope relating to the reconfiguration or upgrades of buildings/facilities, acquisition of equipment/IT, energy-conservation initiatives and deferred maintenance, McMaster is also undertaking a number of major capital projects that will dramatically alter campus. These include:

- L.R. Wilson Hall Liberal Arts Building (\$66 million) – Completed in 2016. The building includes new classrooms, a 350-seat lecture theatre as well as research and administrative space. The building is expected to increase enrolment capacity by 1,200 FTEs.
- Living Learning Centre (\$118 million) – Expected completion in 2019. The multi-purpose building will include a 500-bed residence, classroom and learning facilities as well as space for ancillary operations and administrative functions.

The University is also involved with the development of two new residence buildings. Unlike most universities in Ontario, McMaster is not able to guarantee residence space for all first-year students. As such, the University has sought to increase residence capacity in recent years. The facilities are at varying stages of development, but are effectively being done using public-private partnership models with relatively limited risk to the University.

- Graduate Residence – The University issued a request for proposals for the design, build, finance and management of a graduate, off-campus residence with up to 500 beds.
- Traymore Residence – The University is evaluating a third party proposal to construct a 700-bed off-campus, undergraduate residence. Under the proposal, the University would provide an upfront equity injection, which would be recouped over time along with an annual levy.

In the near term, DBRS expects the announcement of further capital projects. The federal government has been systematically announcing post-secondary capital projects to receive funding from the \$2.0 billion Post-Secondary Institutions Strategic Investment Fund (SIF). In September, the federal government announced \$37.5 million in funding, matched by \$5.5 million from the Province, for science and engineering teaching and research labs at the University. DBRS understands that the University submitted a number of proposals for consideration and, given the relatively modest announcement in September, DBRS expects that further funding may be forthcoming given the University's strong research profile, particularly in the fields of science, technology and engineering. The University's multi-year Capital Plan (2014) envisioned a \$100 million Science, Technology, Engineering and Mathematics facility. DBRS expects that additional investment in the University's research and teaching capacity will support further improvement in the University's academic profile.

The University has estimated its deferred maintenance needs at \$314 million, which is about \$20 million lower than the estimate from three years earlier. The decline reflects the University's concerted effort to address its deferred maintenance needs through increased annual spending on deferred maintenance. At the same time, the Facilities Condition Index (FCI), which is a measure of deferred maintenance relative to the current replacement value of the facilities, has been tracking lower. While the FCI remains elevated in the Provincial context (average 12% in 2014), it has fallen to 16.1% in 2015–2016 from 18.2% in 2012–2013. The decline reflects the modest reduction in deferred maintenance and ongoing growth in the underlying facilities base.

As noted in previous reports, the University has been increasing its funding allocation to deferred maintenance. McMaster announced that it would increase the annual allocation by \$2.0 million annually through to 2016–2017 when the allocation would reach \$10.2 million. The increases have, in part, been supported by increased provincial support for facilities renewal. DBRS expects deferred maintenance to decline modestly in the coming years.

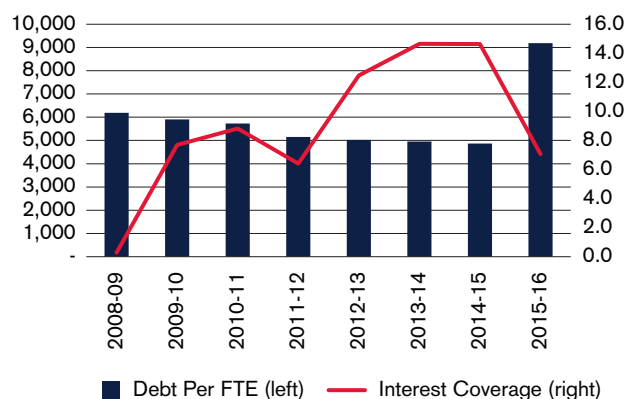
## Debt and Liquidity

The University's debt burden rose during the year with the issuance of \$120.0 million in 50-year senior unsecured debentures. At April 30, 2016, the University's debt burden was \$256.5 million, or \$9,185 per FTE. With the issuance, McMaster has ample liquidity available on its balance sheet to meet its medium-term capital priorities. As such, DBRS expects total debt to remain relatively stable over the medium term and debt burden per FTE to gradually decline with the amortization of existing loans and modest growth in enrolment.

The University has established internal sinking funds to accumulate assets for the eventual repayment of the \$240.0 million in debentures. At April 30, 2016, the sinking funds totalled \$24.4 million and, with moderate long-term investment returns, will be sufficient to retire the debentures in 2052 and 2065.

More broadly, the University's balance sheet continues to retain considerable financial flexibility within the current rating category. While the overall net asset balance does exhibit volatility from year to year, much of this is attributable to remeasurement gains and losses on the University's pension plan. As such, DBRS estimates McMaster's expendable resources as a sub-set of net assets, which include unrestricted net assets, internally restricted endowments and most internally restricted net asset accounts, to better understand the level and changes in the University's financial flexibility. DBRS's estimate of expendable resources for McMaster exclude amounts committed to near-term capital projects. DBRS's estimate of expendable resources was \$367.9 million at April 30, 2016, which was relatively stable year over year after strong growth in prior years. The ratio of expendable resources to debt was 143.4% at April 30, 2016, while the ratio of expendable resources to total expense was 39.8%.

**Exhibit 2: Debt and Interest Coverage**



The University's credit profile continues to benefit from McMaster's history of strong operating results. Despite weaker cash flow from operations and higher interest costs in 2015–2016, the University's interest coverage ratio remains elevated at 7.1x. DBRS expects interest coverage to remain stable over the medium term.

McMaster has significant employee future benefit liabilities associated with its three defined benefit pension plans and non-pension post-retirement benefits. Only one of the defined benefit pension plans remains open to new members and the University also has a group RRSP for some employees. The most recent actuarial valuation for the pension plan was in 2014 and indicated that the pension plan had a going-concern deficit of \$253 million and a solvency deficit of \$197 million. The next actuarial valuation will be conducted in 2017. On an accounting statement basis, the University's total accrued future benefits obligation for pensions and other post-retirement employee benefits is estimated at \$377 million.

## University Funding in Ontario

Canadian universities generally have access to three key sources of revenue for their core teaching and research activities: (1) government grants, (2) student fees and (3) fundraising/endowment income. For McMaster, these accounted for approximately 75% of total revenues in 2015–2016.

Provincial government funding remains the primary source of revenue for universities across the country, although its relative importance remains under pressure in most provinces as a result of accelerating costs in competing areas of provincial responsibility, notably health care. In Ontario, the lack of indexation in base operating grants has also contributed to this trend. Over time, this has led to a gradual shift in the relative shares of revenue provided by operating grants and tuition. With constrained provincial funding, the share of University operations funded by operating grants has declined while that funded by tuition fees has increased.

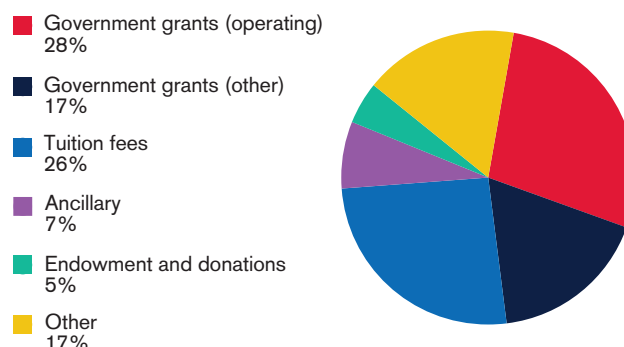
### Government Funding (provincial and federal, 45.2%)

This includes operating grants, research grants and contracts as well as capital grants, of which operating grants are the most important and stable revenue source. They are provided exclusively by the Province, primarily through a formula that allocates a certain number of basic-income units to each student based on the program in which they are enrolled. Targeted funding, which is aimed at expanding enrolment in high-demand programs, and performance-based grants also account for a small portion of provincial operating funding. No inflation adjustment is provided for base operating funding in Ontario, although the Province continues to provide full average funding for enrolment growth.

In recent years, the Ontario government has introduced refinements to its post-secondary education plan that embrace a number of priorities, including additional student spaces, tuition and financial assistance for students, long-term capital funding to support expansion and renewal of campus infrastructure as well as renegotiation of multi-year accountability agreements. Furthermore, the government has expressed its intention to reform the current enrolment-based university funding model with a focus on improving quality and student experience.

Government grants for research and capital projects are also an important source of funding. The federal government typically provides 65% to 75% of all public research funding whereas the Province provides the bulk of capital funding; however, the provincial government’s increased emphasis on spending restraint to address its own budgetary challenges suggests limited flexibility for funding increases, which makes cost containment at universities that much more crucial. In the 2016 federal budget, a new \$2.0 billion SIF was announced that will support up to 50% of eligible costs for shovel-ready projects that will enhance research and innovation capacity or improve environmental performance and can be completed within two years.

**Exhibit 3: 2015-2016 Consolidated Revenue Sources**  
(Total: \$954.7 million)

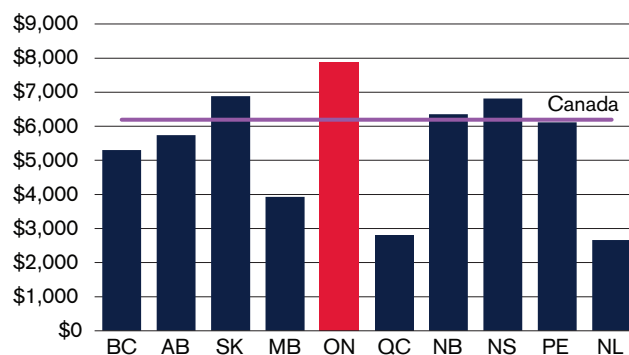


### Student Fees (25.8%)

From 2006–2007 to 2012–2013, the Province permitted universities to raise average tuition fees by 5.0% annually with fee-increase limits varying across programs and years of study. For example, arts and sciences tuition could be increased by 4.5% for the first year of study and 4.0% for the following years while graduate and professional program tuition fees could be increased by 8.0% for the first year of study and 4.0% per year for the remaining years.

In 2013–2014, the Province introduced an updated framework for the next four years. The new framework placed a cap on annual undergraduate tuition fee increases to 3.0% for most programs. Additionally, tuition fee increases for graduate and professional programs were also reduced and are now capped at 5.0%. The current academic year, 2016–2017, is the final year of the tuition framework. The Province has not provided any guidance for the tuition fee framework beyond 2016–2017.

**Exhibit 4: 2015–2016 Average Undergraduate Tuition Fees**



Source: Statistics Canada.

## University Funding in Ontario (CONTINUED)

### Fundraising and Endowment Contributions (4.6%)

Unrestricted donations are recognized as revenue when received while funds accepted with external restrictions or designated by the University's Board are added directly to endowments and reported as revenue when related expenses are incurred.

The University's internally and externally restricted endowments totalled \$541.1 million at April 30, 2016, or \$19,372 per FTE, down from \$575.0 million the prior year. The University's endowment has a policy payout ratio of 4.0%, which provides a relatively stable, though small, source of funding for University operations. McMaster has the third-largest endowment in Ontario after the University of Toronto and Queen's University.

### McMaster University

#### Statement of Financial Position (DBRS-Adjusted)

(\$ thousands)

As of April 30

Assets	2016	2015	2014 <sup>1</sup>	2013	2012
Cash and short-term investments	89,172	162,624	172,294	156,914	184,153
Receivables	133,843	123,762	155,205	158,553	140,888
Inventories and prepaid expenses	12,614	10,581	11,597	11,412	12,447
Deferred pension asset <sup>1</sup>	-	-	-	197,356	200,230
Long-term investments	1,148,681	967,009	844,242	740,359	673,311
Other investments	24,938	18,787	15,738	14,888	14,687
Capital assets	967,709	959,316	888,337	854,422	789,980
<b>Total Assets</b>	<b>2,376,957</b>	<b>2,242,079</b>	<b>2,087,413</b>	<b>2,133,904</b>	<b>2,015,696</b>

#### Liabilities and Net Assets

##### Liabilities and Deferred Contributions

Payables and other current liabilities	130,636	155,801	149,096	156,975	156,365
Employee future benefits <sup>1</sup>	377,255	280,492	372,702	280,894	273,156
Deferred contributions - endowment <sup>2</sup>	90,606	80,477	75,559	72,617	73,815
Other deferred contributions	263,317	228,481	238,791	232,951	244,492
Deferred capital contributions	462,144	455,778	420,293	399,105	362,589
Long-term debt	256,520	137,175	137,792	138,371	139,400
Decommissioning obligation <sup>3</sup>	12,029	11,206	9,610	9,155	8,720
<b>Total liabilities</b>	<b>1,592,507</b>	<b>1,349,410</b>	<b>1,403,843</b>	<b>1,290,068</b>	<b>1,258,537</b>

##### Net Assets

Unrestricted	10,081	9,262	8,188	8,125	8,298
Internally-restricted <sup>4</sup>	(16,627)	(59,194)	(190,599)	35,978	13,187
Endowment - internally restricted	127,872	136,609	127,746	115,733	109,806
Endowment - externally restricted	413,181	438,424	405,666	364,739	335,562
Equity in capital assets	249,943	367,568	332,569	319,261	290,306
<b>Net Assets</b>	<b>784,450</b>	<b>892,669</b>	<b>683,570</b>	<b>843,836</b>	<b>757,159</b>
<b>Total Liabilities and Net Assets</b>	<b>2,376,957</b>	<b>2,242,079</b>	<b>2,087,413</b>	<b>2,133,904</b>	<b>2,015,696</b>

##### Contingencies and Commitments

Capital commitments	223,800	221,200	240,700	208,187	208,240
Legal claims		31,000	31,000	31,000	31,000
	<b>223,800</b>	<b>252,200</b>	<b>271,700</b>	<b>239,187</b>	<b>239,240</b>

<sup>1</sup> As of May 1, 2014, the University adopted accounting standards for not-for-profit organizations, moving to an immediate recognition approach for employee future benefits with annual actuarial gains and losses flowing through the Statement of Net Assets and the full funded status of plans reported on the Statement of Financial Position.

<sup>2</sup> Endowment-related deferred contributions represent expendable externally restricted grants and donations.

<sup>3</sup> The University is required to recognize an asset retirement obligation for the eventual decommissioning of the University's nuclear reactor.

<sup>4</sup> Funds set aside for specific purposes (e.g., employee future benefits, departmental carry-forwards, sinking funds etc.).



**Statement of Operations** (DBRS-Adjusted)

(\$ thousands)

For the year ended April 30

	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Total revenue	954,409	990,831	972,903	938,829	880,532
Total expense	925,313	912,242	886,332	878,114	871,429
<b>Consolidated operating result</b>	<b>29,096</b>	<b>78,589</b>	<b>86,571</b>	<b>60,715</b>	<b>9,103</b>
<b>Revenue</b>					
Tuition fees	246,275	233,343	215,691	200,140	184,275
Government operating grants	264,645	265,214	267,881	259,485	237,248
Research grants and contracts	172,432	183,823	167,450	186,536	180,165
Ancillary operations	70,307	68,635	67,161	68,123	68,006
Investment income	12,855	56,332	63,353	47,103	18,428
Donations and other grants	44,193	49,171	58,000	44,789	44,903
Earned capital contributions	39,340	37,897	37,604	35,779	33,840
Other revenue	104,362	96,416	95,763	96,874	113,667
<b>Total Revenue</b>	<b>954,409</b>	<b>990,831</b>	<b>972,903</b>	<b>938,829</b>	<b>880,532</b>
<b>Expense</b>					
Salaries and benefits	566,052	561,344	558,048	558,420	539,317
Student aid	43,266	47,893	42,519	48,236	42,970
Cost of goods sold	11,627	10,942	14,298	14,365	11,972
Utilities	23,805	25,931	27,272	25,290	24,276
Other supplies and expenses	184,708	188,751	168,961	159,866	183,201
Amortization	86,004	68,844	66,659	63,317	60,999
Interest	9,851	8,537	8,575	8,620	8,694
<b>Total Expense</b>	<b>925,313</b>	<b>912,242</b>	<b>886,332</b>	<b>878,114</b>	<b>871,429</b>
Gross Capital Expenditures	94,397	135,876	100,574	127,759	62,293

**Statement of Cash Flows** (DBRS-Adjusted)

(\$ thousands)

For the year ended April 30

	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Operating balance before fund contributions	29,096	78,589	86,571	60,715	9,103
Amortization	86,004	68,844	66,659	63,317	60,999
Other non-cash adjustments	(55,257)	(31,119)	(36,204)	(25,167)	(23,061)
<b>Cash flow from operations</b>	<b>59,843</b>	<b>116,314</b>	<b>117,026</b>	<b>98,865</b>	<b>47,041</b>
Change in working capital	7,699	29,825	4,956	(28,026)	12,621
<b>Operating cash flow after working capital</b>	<b>67,542</b>	<b>146,139</b>	<b>121,982</b>	<b>70,839</b>	<b>59,662</b>
Net capital expenditures <sup>1</sup>	(48,691)	(62,494)	(41,782)	(55,464)	(20,843)
<b>Free cash flow</b>	<b>18,851</b>	<b>83,645</b>	<b>80,200</b>	<b>15,375</b>	<b>38,819</b>

<sup>1</sup> Defined as gross capital expenditures less contributions restricted for capital purposes.

**Summary Statistics** (DBRS-Adjusted)

For the year ended April 30

	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>Total Enrolment (FTE) <sup>1</sup></b>					
- Undergraduate	27,929	28,157	27,796	27,518	27,042
- Graduate	87%	87%	87%	87%	87%
- Total annual change	13%	13%	13%	13%	13%
Total Enrolment (FTE) <sup>1</sup>	-0.8%	1.3%	1.0%	1.8%	1.9%

<b>Total Employees <sup>3</sup></b>	5,220	5,171	5,120	5,041
- Full-time faculty	1,432	1,425	1,394	1,377

**Operating Results**

Surplus (deficit) (\$ millions)	29.1	78.6	86.6	60.7	9.1
- As % of revenues	3.0%	7.9%	8.9%	6.5%	1.0%

**Revenue Mix** (as % of total DBRS-adjusted revenue)

- Government funding (federal and provincial)	45.2%	44.6%	43.8%	45.8%	46.9%
- Tuition fees	25.8%	23.6%	22.2%	21.3%	20.9%
- Ancillary	7.4%	6.9%	6.9%	7.3%	7.7%
- Endowment and expendable donations	4.6%	7.6%	9.1%	7.2%	6.4%
- Other	17.0%	17.3%	18.0%	18.5%	18.0%

**Debt and Liquidity Analysis**

Total long-term debt (\$ millions)	256.5	137.2	137.8	138.4	139.4
- Per FTE student (\$) <sup>2</sup>	9,185	4,872	4,957	5,028	5,155
- Per FTE student (\$) - previous method <sup>2</sup>	n/a	n/a	n/a	5,251	5,376
Long-term debt, contingencies & commitments (\$ millions)	857.6	669.9	782.2	658.5	651.8
- Per FTE student (\$)	30,706	23,790	28,141	23,928	24,103
Cash and cash equivalents (\$ millions)	89.2	162.6	172.3	156.9	184.2
- As % of total expenditures	10%	18%	19%	18%	21%
- As % of current liabilities	68%	104%	116%	100%	118%
Expendable Resources <sup>4</sup>	367.9	228.3	229.9	216.0	222.7
- As % of total debt	143%	166%	167%	156%	160%
Interest costs as % of total expenditures	1.1%	0.9%	1.0%	1.0%	1.0%
Interest coverage ratio (times)	7.1	14.6	14.6	12.5	6.4

**Endowment Funds**

Total market value (\$ millions)	541.1	575.0	533.4	480.5	445.4
- Per FTE student (\$)	19,372	20,422	19,190	17,460	16,469
- Annual change	(5.9%)	7.8%	11.0%	7.9%	0.3%
- Payout ratio (% of three-year average market value)	4.0%	4.0%	4.0%	4.0%	4.0%

<sup>1</sup> FTE, excluding continuing education.

<sup>2</sup> In 2015, DBRS shifted reporting of FTE enrolment to a standard credit load approach to better reflect revenue potential of enrolment and to provide greater consistency across the sector. This has resulted in an adjustment to ratios linked to enrolment, including debt per FTE. Historical figures for the previous Statistics Canada calculation method are included for reference.

<sup>3</sup> Headcount; excludes teaching assistants and sessional lecturers.

<sup>4</sup> DBRS has changed its calculation of expendable resources beginning in 2015–2016. Estimates for prior years have not been restated.

## Rating History

	Current	2015	2014	2013	2012	2011
Issuer Rating	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)	NR
Senior Unsecured Debt	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)

## Previous Action

- Confirmed, October 27, 2015.

## Related Research

- *Rating Public Universities*, June 27, 2016.
- Canadian University Peer Comparison Table, July 28, 2016.

## Previous Report

- McMaster University: Rating Report, November 30, 2015.

### Notes:

All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on [www.dbrs.com](http://www.dbrs.com).

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

© 2016, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT <http://www.dbrs.com/about/disclaimer>. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON <http://www.dbrs.com>.