



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

Travis Shaw  
+1 416 597 7582  
tshaw@dbrs.com

Insight beyond the rating.

## Ratings

Debt	Rating	Rating Action	Trend
Issuer Rating	AA	Confirmed	Stable
Senior Unsecured Debt	AA	Confirmed	Stable

## Rating Rationale

DBRS Limited (DBRS) has confirmed the Issuer Rating and Senior Unsecured Debt rating of Queen's University (Queen's or the University) at AA with Stable trends. The ratings are supported by the University's superior academic profile, strong operating performance and high level of expendable resources and endowment assets. The ratings are constrained by a relatively high level of debt per full-time equivalent (FTE) student for the assigned ratings, a difficult operating environment characterized by constrained funding growth and pension-related liabilities. Despite a weak demographic outlook for university-age students, Queen's strong applicant pool and superior academic profile should support plans for generally stable enrolment over the medium term.

In 2015–16, the University recorded a consolidated surplus of \$39.5 million, down from the prior year's surplus of \$61.9 million, as revenue growth of 7.2% was outpaced by expenses rising by 10.6%. DBRS notes that the majority of the increased revenue and corresponding expense was related to large donations of artwork during the year (\$58.6 million appraised value). In 2016–17, DBRS anticipates that another consolidated surplus will be achieved given the higher-than-budgeted year-over-year (YOY) enrolment growth of 3.3%, including an increase in the proportion of international students. Debt rose in line with expectations, as the University drew down the final tranche of a bank loan facility for two new residences in 2015–16, bringing debt per FTE to \$11,477, up from \$10,242 in 2014–15. Debt per FTE is expected to decline moderately through 2016–17 and 2017–18 because of continued enrolment growth and debt amortization. DBRS does not

expect debt to rise materially over the medium term following the completion of the new residences. Queen's strong balance sheet, including \$931 million in endowment assets, helps to mitigate a relatively high debt burden by providing meaningful support to operations and future capital development.

Pension sustainability challenges have been mitigated somewhat since the time of the last review, with the new round of provincial solvency relief (announced in October 2016) expected to notably reduce special payments to address the solvency deficit, as discussions continue around the establishment of a jointly sponsored pension plan (JSPP) with other universities in the Province of Ontario (Ontario or the Province; rated AA (low) with a Stable trend by DBRS).

The credit profile may come under pressure if debt rises above current levels, if balance sheet flexibility (e.g., expendable resources) deteriorates notably or if operating performance weakens on a sustained basis as a result of negative developments in the operating environment. Upward pressure on Queen's credit profile remains unlikely given the University's current ratings, which are above that of the provincial funder, and its relatively high debt burden. The post-secondary operating environment in the Province remains challenging and is entering a period of transition, although DBRS does not anticipate that upcoming changes to the university funding formula will be materially negative to Queen's because of its leading academic profile and ability to attract students.

## Financial Information

For the year ended April 30

	2016	2015	2014	2013	2012
Operating balance (\$ millions) <sup>1</sup>	39.5	61.9	45.6	22.6	(24.9)
Debt per FTE (\$) <sup>2</sup>	11,477	10,242	9,997	10,048	10,603
Interest coverage ratio (times)	4.6	6.9	6.4	5.3	2.1
Expendable resources to debt (times)	1.37	1.34	1.15	0.92	0.74
Surplus (deficit) to revenue (five-year rolling average)	3.4%	2.2%	0.6%	(2.5%)	(3.8%)

<sup>1</sup> Adjusted to exclude extraordinary or non-recurring items or employee future benefit remeasurements where applicable.

<sup>2</sup> FTE enrolment on a standard credit-load approach.

## Issuer Description

Established in 1841, Queen's is a mid-sized institution based in Kingston, Ontario, a census metropolitan area of about 171,000 residents located at the northeastern end of Lake Ontario. The University is a medical-doctoral institution that offers a comprehensive range of undergraduate, graduate and professional programs, with FTE student enrolment of 25,538 in 2016–17.

## Rating Considerations

### Strengths

#### 1. High level of endowment assets and expendable resources

The University's total endowment assets grew by a modest 1.3% to \$930.9 million as at fiscal YE2016, up from \$919.0 million the previous year. At \$37,671 per student, Queen's has the largest endowment per FTE among DBRS-rated universities, providing considerable support to the credit profile. Unlike many other DBRS-rated universities, Queen's derives a material percentage of its annual revenue from investment and donation income (5.6% in 2015–16, excluding one-time donations of artwork), as well as receives considerable externally restricted endowment contributions and investment income that are recorded directly as an increase to net assets. Expendable resources totalled \$389.5 million or 137% of debt outstanding as at April 30, 2016, up from \$327.8 million the prior year. DBRS defines expendable resources as internally restricted endowment assets and internally restricted net assets (excluding investment in capital and employee future benefits), less the unrestricted deficit.

#### 2. Flagship provincial and national institution

A very strong reputation and a long history of academic excellence provide strong support for enrolment and fundraising activities. The University is internationally known and has some of the highest admission standards in Canada, with an average undergraduate entering average of roughly 89% in 2015–16, which leaves room for enrolment growth if necessary. The University benefits from a solid academic profile and reputation, ranking among the top four medical-doctoral universities in Canada and within the 200 to 300 range globally.

#### 3. Prudent management practices

Queen's has introduced several key measures to entrench prudent fiscal management practices and encourage departmental spending restraint. These measures include a three-year budget-planning framework and the adoption of an activities-based budget model in 2013–14. The budget model attributes revenues to individual faculties based on enrolment and teaching after a deduction for the broader University Fund and other indirect costs. Queen's focused approach to labour relations is evident in its more sustainable collective agreements as well as its adjustments to pension contribution rates in recent years.

#### 4. Successful fundraising and advancement operations

The University has built up its fundraising capacity through leadership, an increased workforce and more sophisticated data-mining techniques to tap its alumni base. Queen's has raised \$640 million from its Initiative Campaign — well above the \$500 million target. Fundraising efforts are aided by the University's status as one of Canada's oldest universities with alumni in all career and life stages, and an increasingly sophisticated advancement operation.

### Challenges

#### 1. Sizable employee future benefit liabilities

The latest filed valuation of the University's hybrid pension plan as at August 31, 2014, showed an estimated going-concern deficit of \$176 million and a solvency deficit of \$285 million. Queen's was approved for Stage 2 provincial solvency relief and elected to defer solvency deficit payments for three years, with the remaining deficit amortizing over the following seven years beginning in 2018–19. The University had been making going-concern payments totalling \$14.4 million per year for three years and commenced making annual special going-concern payments totalling \$20.7 million as at September 1, 2015, which were set to rise by a further \$19.0 million in September 2018. In October 2016, a third round of provincial solvency relief was announced; it is expected to significantly lower the amount of required solvency payments. The University will file an updated valuation on or before December 31, 2018, that will determine the amount of payments required to fund a modified solvency deficiency under the revised regulations. DBRS notes that as at September 2015, Queen's has prudently enacted an additional 4.5% pension charge to fund a reserve fund to cover the higher going-concern payments and future solvency payments.

#### 2. Relatively high debt burden

At \$11,477 per FTE in 2015–16, the University's debt burden is high for the assigned ratings and among the highest of DBRS-rated universities. Queen's has finalized construction on two new residences, using an amortizing bank loan facility of \$70 million. While the residences generate increased ancillary revenues to service associated borrowing, the increased debt burden has exhausted much of the debt flexibility within the current ratings.

#### 3. Salary and wage pressures

The University must compete with other high-profile institutions in North America for faculty, which leads to significant salary pressures. As the largest expense category, salary and benefit expenses are a source of significant budgetary pressure. In 2015–16, compensation expense rose by 4.0% YOY. The aging faculty demographic, the new collective bargaining cycle and elevated pension costs will only exacerbate this pressure in the years ahead.

#### 4. Limited tuition and fee-setting autonomy

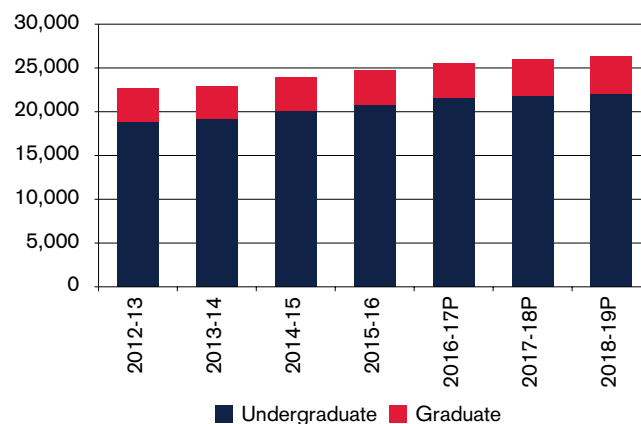
In the face of escalating costs, tuition fee revenues remain a key source of incremental revenue for universities. Average annual undergraduate tuition fee increases have been capped at 3% since 2013–14 for regulated programs, and this framework was recently extended for an additional two years as the sector transitions to net tuition billing.

## Operating Performance

Queen's reported a solid surplus of \$39.5 million in 2015–16, down from the prior year's surplus of \$61.9 million, as revenue growth of 7.2% was outpaced by expenses rising by 10.6%, although DBRS notes that the majority of the increased revenue and corresponding expense was related to large donations of artwork during the year (\$58.6 million appraised value). Within the operating fund, comprising the vast majority of University spending, a surplus of \$32.6 million was generated before transfers to various reserves and to reduce the unrestricted deficit, which is well ahead of the budget expectation of an \$11.7 million operating fund deficit because of higher-than-budgeted student enrolment and expense-management efforts.

Revenues were up by 0.4% YOY, excluding donations of artwork, largely reflecting higher tuition fee revenues and modest grant growth, offset by lower investment income and research grants and contracts. Tuition fee revenues were up a notable 8.8%, reflecting a 3.1% increase in FTE enrolment, an increased proportion of international students and increased tuition fees under the provincial framework, which permits a global average increase of 3.0% for regulated undergraduate programs. Government operating grants rose by 1.2% YOY, reflecting higher accessibility grant revenues to fund enrolment growth. The current funding formula does not include inflationary increases, a challenge for institutions with persistent inflationary pressures from a labour-intensive cost base, such as Queen's. Ancillary operations reported strong growth in revenue of nearly 12%, mostly reflecting the two new residence facilities coming on line. Investment income fell on account of weaker capital market performance compared with the prior year, while research grants and contracts declined with lower research activity and the timing of expenditures.

**Exhibit 1: Total Enrolment (FTE)**



P = Projected.

Expenses rose by 3.2% YOY, excluding the corresponding expense for the fair value of donated artwork. Spending growth largely reflected a 4.0% increase in employee salaries and benefit expense from the compensation increases in collective agreements and from new staff additions, as well as modestly higher pension-financing costs. Spending was also driven higher by a modest increase in student aid support, above the level mandated under the tuition fee framework; supplies and minor equipment purchases; and higher interest expense, as the final draw was made on the long-term credit facility for new residence buildings during the year. Utilities, taxes and insurance costs fell by over 16%, reflecting energy efficiency and conservation measures and property tax amendments.

## Operating Outlook

### Budget 2016–17

Queen's operating budget for 2016–17 projected a deficit of \$4.1 million before transfers to the capital budget totalling \$12.3 million, resulting in a net budget deficit of \$16.4 million, to be primarily offset by drawdowns of carry-forward reserves. The drawdown of \$15.5 million in carry-forwards reflects expenses budgeted by academic units in excess of their base budget allocations, to be used to transition to a sustainable balanced budget or for other strategic priorities, including capital renewal.

Revenues were budgeted to rise by 4.2% or \$21.3 million (excluding non-centrally budgeted revenues) versus the prior year's budget plan. The budget was based on projections developed by the Strategic Enrolment Management Group, which projected that annualized total enrolment would rise by 1.8%, reflecting undergraduate growth of 1.3% and a larger increase of 4.9% in graduate enrolment. The higher enrolment reflects the higher intake of undergraduate students in 2016–17 (made possible with

the increased physical capacity of the new student residences), which will flow through to reach a steady state in 2018–19. The budget assumed that the increase in enrolment and change in student mix would generate a 7.4% increase in student fee revenue from the 2015–16 budget and a 1.9% increase in government grants (including special-purpose and federal research grants). Based on 2015–16 actual grants received, the 2016–17 budget includes growth in total government grants of 1.1%.

The budget plan forecast expense growth of 4.4% or \$21.9 million (excluding non-centrally budgeted expenses) versus the prior year's budget, largely driven by higher salary and benefit costs within the faculties and schools as well as a moderate increase in shared services expenses, such as libraries, occupancy costs, information technology and student aid. There were no major labour agreements up for renewal in 2016–17.

## Operating Outlook (CONTINUED)

Overall, the budget plan is on track with no major deviations identified by Queen's management. Actual enrolment of FTE students on a standard credit-load approach (as tracked by DBRS) rose by an estimated 3.3% to 25,658 FTEs, which is above the budget projection. The University has not had to relax entrance standards to generate incremental enrolment growth. Entering averages remain among the highest in the country and application and yield rates remain robust. As a result, DBRS anticipates that the draw-down of carry-forwards in 2016–17 will be considerably less than budgeted, if required at all, as has been the case in recent years. DBRS expects that the University will record another consolidated surplus in 2016–17 based on the higher level of enrolment and continued efforts to maintain spending discipline.

### Medium-Term Outlook

DBRS anticipates that the operating environment will remain challenging over the budget-planning horizon, although Queen's is well positioned with a strong academic profile, a high level of expendable resources that will enable it to withstand a period of weaker demographics and continued funding restraint. Queen's current budget outlook points to a balanced operating budget through 2018–19; however, key assumptions, including an anticipated update to the current Ontario university funding formula that is expected to be introduced for the 2017–18 academic year, are not known and have not been fully incorporated into planning assumptions.

In DBRS's view, the new funding model should simplify the grant system, reduce the incentive for some universities to increase enrolment at the expense of other institutions and provide a mechanism for targeted differentiation funding for individual institutions. The formula is expected to introduce enrolment-based funding corridors, wherein the University will negotiate an enrolment level for which it will receive stable enrolment-based operating grants for the duration of the next three-year Strategic Mandate Agreement (SMA), providing enrolment remains within a pre-defined corridor. The new formula is also expected to shift a small share of current enrolment-based funding to a quality- or performance-based stream, although under the upcoming round of SMAs, this stream is expected to be relatively safe and stable. Under future SMAs, the Province intends to tie some of this funding to the achievement of specific performance outcomes. The anticipated changes do not alter DBRS's view on the overall adequacy of post-secondary funding in the Province, and the changes are considered credit neutral for Queen's. The funding model is an allocative mechanism; it is not determinative of the total amount of funding to be provided to the sector. Over the medium term, the funding outlook remains uncertain, although DBRS expects that growth in funding will be modest.

Queen's currently anticipates that enrolment will remain relatively stable over the medium term (once steady-state enrolment is achieved in 2018–19), reflecting the increased capacity afforded by the new student residences in high-demand areas such as

business, engineering and computing. The share of international students at the University is expected to rise somewhat from the current level of 8% of incoming undergraduate students to the target of 10% set by the Board of Trustees (the Board). The University's negotiated enrolment corridor is likely to reflect the outlook of very modest enrolment growth, which is expected to reach a steady state in 2018–19, as physical-capacity constraints are reached.

Labour relations at the University are also relatively stable, with collective agreements in place for the majority of labour groups, including the Queen's University Faculty Association (until April 2019) and USW 2010 General Support Staff (until December 2018). All salary and wage provisions within existing collective agreements have been factored into the balanced budget outlook. For outstanding agreements or those set to be negotiated over the planning horizon, 2% annual increases are assumed, in line with broader public-sector trends. The University has relative cost certainty for the majority of the current budget outlook, which provides comfort that growth in the primary cost driver will remain reasonably contained and that labour unrest is unlikely.

### Employee Future Benefit Liabilities

The University's pension plan liabilities, previously identified as the most significant financial risk, has been somewhat mitigated since the time of the last review. The most recent official valuation of the University's hybrid pension plan revealed a solvency shortfall of \$285.4 million. Since September 2015, Queen's has been required to make going-concern special payments of \$20.7 million annually. Under Stage 2 provincial solvency relief regulations, the University opted to defer solvency payments for three years, until September 2018. Based on the last valuation, Queen's would be required to commence making solvency payments of roughly \$19.0 million at that time. DBRS notes that Queen's has prudently established a reserve fund to cover the higher going-concern payments and future solvency payments (if required), charging all academic and service units an additional 4.5% pension charge as at September 2015.

Based on the new solvency relief measures announced in October 2016 for plans in Stage 2, the regulations set out a formula for calculating a modified solvency deficiency formula that reduces the size of required special payments to roughly one quarter of what would have been required under the prior regulations, plus additional interest payments in respect of liabilities. Updated valuations are required to be filed on or before December 31, 2018. Although no updated valuation has yet been completed and filed, DBRS does not expect that Queen's payments will rise substantially from current special going-concern payments based on recent upward movement in long-term interest rates and the updated solvency relief regulations. Any incremental increase in special payments are expected to be fully covered by the pension charge implemented in 2015.

## Operating Outlook (CONTINUED)

Sector-wide negotiations are ongoing in respect of a JSPP, which would be potentially exempt from solvency funding requirements. Moreover, a broader review of the solvency regime for all defined benefit plans in the Province is underway that may result in permanent changes to solvency requirements or a shift to an enhanced going-concern regime, which, in DBRS's view, could

weaken the incentives for the creation of a JSPP for the sector. DBRS does not expect that a new plan would be established for several years, given the challenge in agreeing on a plan design and administrative structure and of negotiated acceptance from employee groups at universities across the Province.

## Capital Plan

The University made \$49.4 million in gross capital acquisitions in 2015–16. This was below the five-year average following the completion of the two new residence facilities opened in fall 2015 and the major upgrade to Richardson Memorial Stadium completed in September 2016, which created a modern multi-purpose facility with stands capable of seating 10,000 spectators.

Following the completion of the residences and stadium upgrades, the capital plan has shifted to projects to be funded in part through the Government of Canada's \$2.0 billion Post-Secondary Institutions Strategic Investment Fund (SIF). Projects to be funded through the SIF program include a new \$95.5 million Queen's Innovation and Wellness Centre and a \$31.9 million revitalization of the University's biomedical research facilities. The SIF program will contribute \$31.0 million to the projects, along with \$4.9 million from the Government of Ontario, nearly \$51.9 million in University reserve contributions and \$38.9 million in donor pledges. DBRS has no concerns with respect to the donor pledge targets given the University's history of fundraising results.

The Innovation and Wellness Centre will be home to a new Innovation Connector incubator, experiential learning spaces, engineering facilities, the Queen's University International Centre and a new exam centre, along with an integrated Wellness Centre with co-located student services, including mental health and accessibility supports, three gymnasiums and other athletic and recreational facilities. The University commenced construction in September 2016, and the Innovation and Wellness Centre is

expected to be completed by September 2018. The revitalization and upgrades to the biomedical research facilities will support a number of top-level research teams at the University in areas such as cardiovascular, neurological and cancer research. The capital plan also includes a major Energy Performance Contract Partnership of \$10.7 million in funding by residence operations and physical plant services utilities operations, which will guarantee savings through energy-efficiency savings over the life of the contract.

The University makes an interfund transfer each year from the operating fund to the capital fund to support the repayment of internal capital loans and for deferred maintenance spending. For both 2015–16 and 2016–17, this transfer is budgeted at \$12.3 million. For 2016–17, the University has budgeted a total of \$9.7 million for deferred maintenance spending to address a backlog estimated at \$235.0 million for campus, residence and underground infrastructure. Spending on deferred maintenance has risen as a result of higher contributions from the University and increases in provincial funding through the Facilities Renewal Fund, which rose for 2016–17 to \$3.5 million from \$1.1 million the prior year, reflecting an increase in the base grant amount of \$0.5 million and a one-time top up of \$1.8 million. Going forward, base grants should continue to increase as the Province decides how to allocate a budgeted increase in sector-wide spending on deferred maintenance from \$40 million per annum currently to \$100 million per annum by 2019–20. The University also budgets for \$4.2 million in deferred maintenance spending through normal occupancy costs and \$2.1 million through the University Fund.

## Debt and Liquidity

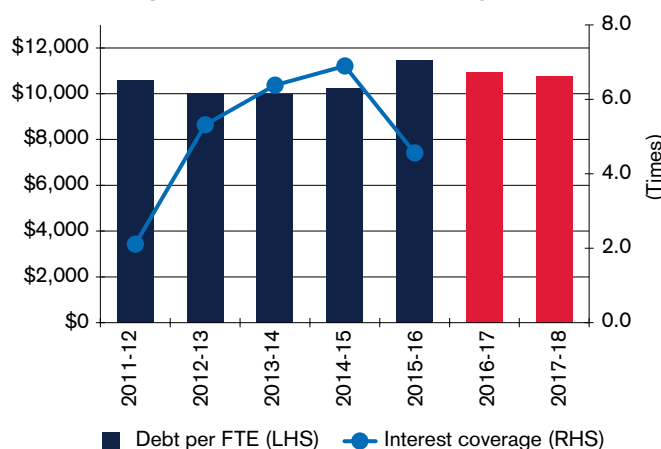
Queen's debt burden rose in line with DBRS's expectations since the last review, as the University drew down the final \$40 million tranche of the bank loan facility for the two new residence buildings. Long-term debt rose to \$283.6 million, translating to \$11,477 per FTE, up from \$10,242 the prior year. To reduce interest rate risk, Queen's has obtained a total return swap with an effective annual interest rate of 3.18% for the loan. The balance of the University's debt burden comprises a \$90 million Series A senior unsecured bullet debenture maturing in 2032 and two senior unsecured bullet debentures totalling \$75 million and \$50 million maturing in April 2040 and June 2040, respectively. Queen's has established a sinking fund to repay the debentures upon maturity, with a balance of \$74.3 million as at year-end 2015-16, up \$7.5 million from the prior year.

Interest coverage, as measured by DBRS, remained very comfortable for the ratings at 4.6 times in 2015-16, supported by still-solid cash flows from operations from the sizable operating surplus. DBRS anticipates that interest coverage will likely remain comfortable for the rating with the expectation of another consolidated surplus in 2016-17 and a balanced budget outlook over the medium term.

The University's expendable resources stood at \$389.5 million or 137% of debt, among the highest of DBRS-rated institutions. Expendable resources are defined by DBRS as internally restricted endowment funds and internally restricted net assets (excluding investment in capital assets and employee future benefits), less the unrestricted deficit. DBRS notes that historical figures for expendable resources have been restated for consistency and comparability across DBRS-rated universities. The University had \$155.5 million in liquid cash and cash equivalents as at April 30, 2016.

The size of the University's endowment remains a notable strength of the credit profile and helps to offset the elevated debt burden. The value of endowment funds grew by a very modest 1.3% YOY on weaker market performance to \$930.9 million as at April 30, 2016, or \$37,671 per FTE, the highest on a per-student

**Exhibit 2: Debt per FTE and Interest Coverage**



basis of DBRS-rated universities and second highest after the University of Toronto (rated AA with a Stable trend by DBRS) on a gross basis. Queen's targets a long-term drawdown rate of 4.0% on the endowment, releasing \$33.6 million for spending in 2015-16.

### Outlook

The University is not planning for additional debt over the medium term, and DBRS takes comfort in the University's debt-management policy and robust framework for the approval of major capital projects, requiring a full business case and committed funding for projects in excess of \$2.5 million. The debt burden is expected to fall just below \$11,000 per FTE through 2016-17 based on a forecast of modest enrolment growth (+1.7%) and the amortization of the unsecured bank loans.

As noted in previous reports, DBRS views Queen's debt burden as relatively high for the assigned ratings. If the University proceeds to take on additional debt or if the level of expendable resources on the balance sheet weakens considerably, the credit profile may come under pressure if key financial risk metrics tracked by DBRS worsen materially.

## 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) donation and investment income. For Queen's, these accounted for approximately 84% of total revenues in 2015–16 (including one-time donations of artwork).

Provincial government funding remains one of the primary sources 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.

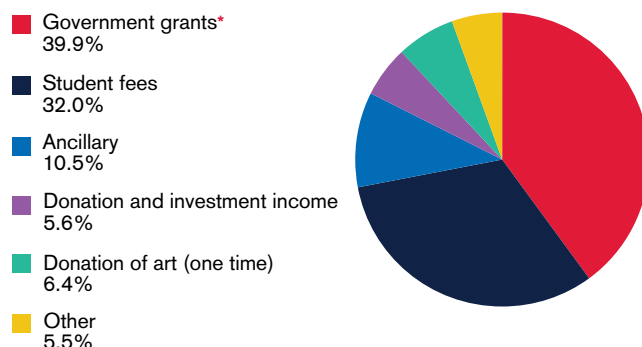
### Government Funding (Provincial and Federal; 39.9%)

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 the expansion and renewal of campus infrastructure and 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 students' experiences, potentially in the form of a negotiated enrolment corridor approach with envelopes of "at-risk" funding tied to differentiation and other special-purpose grants.

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

**Exhibit 3: 2015–16 Consolidated Revenue Sources**  
(\$912.4 million)

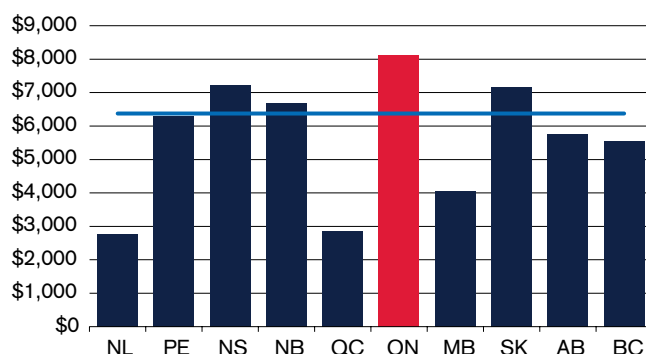


50% of eligible costs for shovel-ready projects that will enhance research and innovation capacity or improve environmental performance and can be completed within two years. The federal SIF program will contribute \$31 million to the new Queen's Innovation and Wellness Centre and the revitalization of biomedical research facilities at the University, along with provincial funds, internal contributions and significant donor support.

### Student Fees (32.0%)

The current tuition-fee framework was introduced by the Province in 2013–14 and covered the subsequent four-year period. The framework placed a cap on annual undergraduate tuition-fee increases of 3.0% for most programs. Additionally, tuition-fee increases for graduate and professional programs were capped at 5.0%. The current academic year, 2016–17, was to be the final year of the tuition-fee framework, but the Province has recently extended the framework for a subsequent two-year period.

**Exhibit 4: 2016–17 Average Undergraduate Tuition Fees**



### Donation and Investment Income (12.0%)

Donations and investment income recognized on the Statement of Operations totalled a combined 12.0% in 2015–16, up from 9.5% the prior year. The increased share largely reflects non-recurring donations of artwork to the University (\$58.6 million), partially offset by a decline in investment income recognized on

## University Funding in Ontario (CONTINUED)

the Statement of Operations from the prior year. Excluding donations of artwork, combined donation and investment income for the year totalled 5.6% of consolidated revenue.

DBRS notes that the endowments funded by unrestricted donations are recorded as unrestricted revenue on the Statement of Operations and transferred to internal endowments, while endowed funds accepted with external restrictions are added directly as endowment contributions on the Statement of Net Assets. Unrealized gains and losses on investments (excluding externally restricted endowments) are recognized on the Statement of Operations as investment income, while gains and losses on external endowments are recorded directly as a change in net assets.

In 2015–16, investment income on externally restricted endowments totalled \$8.6 million, which is less than the amount made available for spending by business units of \$26.4 million. Contributions to externally restricted endowments for the year totalled \$30.9 million, equating to a net increase of \$13.2 million, bringing the balance of external endowments to \$731.5 million as at YE2016. Internally restricted

endowments generated \$3.4 million in investment income, while \$7.2 million was made available for spending. As at YE2016, internally restricted endowments totalled \$199.4 million. The endowment capital preservation policy allows the amount made available for spending from the Pooled Endowment Fund to be maintained, despite lower investment income, by utilizing gains from prior years invested in the preservation of capital, smoothing the effects of volatility in investment performance. As at December 31, 2016, the Pooled Endowment Fund returned 8.1% and stood at \$995.1 million, while the Pooled Investment Fund returned 6.1% and stood at \$227.5 million.

Queen's total endowments (internal and external) as at YE2016 amounted to \$930.9 million or \$37,671 per FTE student, the highest among DBRS-rated universities. These endowment assets provide meaningful ongoing financial support to the University's operating budget and longer-term support for strategic priorities and capital development, potentially avoiding the use of debt financing. DBRS considers Queen's endowment resources, long history of fundraising and sophisticated advancement function as a credit positive.



**Consolidated Financial Summary**

For the year ended April 30

(DBRS adjusted)	<b>2015-16</b>	<b>2014-15</b>	<b>2013-14</b>	<b>2012-13*</b>	<b>2011-12*</b>
(\$ thousands)					
Total operating revenue	853,779	850,794	835,410	799,164	743,436
Total expenditures	814,237	788,853	789,823	776,603	768,306
Recurring operating balance	39,542	61,941	45,587	22,561	(24,870)
Employee future benefit remeasurements and other items <sup>1</sup>	n/a	n/a	n/a	n/a	5,234
Non-recurring revenue <sup>2</sup>	58,607	--	--	--	--
Non-recurring expense <sup>2</sup>	(58,607)	--	--	--	--
Surplus/deficit as reported	39,542	61,941	45,587	22,561	(19,636)

**Revenue**

Student fees <sup>3</sup>	292,239	268,548	244,534	233,095	214,468
Government operating grants	199,330	196,930	196,041	187,472	187,127
Other grants and contracts	164,982	169,228	161,244	169,029	177,310
Ancillary operations	95,464	85,401	81,149	77,841	72,765
Investment income <sup>4</sup>	30,369	73,357	64,958	62,033	27,570
Donations	20,781	7,413	39,896	21,496	20,757
Amortization of deferred capital contributions	26,112	26,130	24,797	26,676	25,587
Other revenue	24,502	23,787	22,791	21,522	17,852
<b>Total Revenue</b>	<b>853,779</b>	<b>850,794</b>	<b>835,410</b>	<b>799,164</b>	<b>743,436</b>

**Expenditures**

Salaries and benefits	445,919	428,570	434,425	433,581	424,122
Student aid	60,437	57,564	55,396	53,001	55,134
Supplies and minor equipment	127,992	126,027	133,887	118,164	122,081
Utilities, taxes and insurance	20,856	24,875	23,828	20,870	18,584
Interest	13,895	12,885	12,562	12,371	12,606
Amortization	49,863	51,828	52,201	57,186	57,792
Other expenses	95,275	87,104	77,524	81,430	77,987
<b>Total Expenditures</b>	<b>814,237</b>	<b>788,853</b>	<b>789,823</b>	<b>776,603</b>	<b>768,306</b>

<b>Gross Capital Expenditures</b>	<b>49,385</b>	<b>52,288</b>	<b>71,026</b>	<b>70,997</b>	<b>73,219</b>
-----------------------------------	---------------	---------------	---------------	---------------	---------------

\* In 2012-13, the University adopted Canadian accounting standards for not-for-profit organizations, moving to the immediate-recognition approach for its employee future benefit plans. This moved the recognition of investment and actuarial gains and losses on plan assets to the income statement. In 2013-14, Queen's early-adopted Section 3463 moved the recognition of these investment and actuarial remeasurements as a charge directly to net assets, reducing volatility in reported results. The standards were retroactively applied to the transition date of May 1, 2013.

<sup>1</sup> Comprising actuarial gains and losses on pension and other benefit plans, investment gains and losses and plan amendments. In 2013-14, these remeasurements began being recognized directly on the Statement of Net Assets.

<sup>2</sup> Non-recurring revenue and expense related to donations of artwork in 2015-16.

<sup>3</sup> Includes fees for continuing education.

<sup>4</sup> Investment income includes unrealized gains and losses on investments, excluding externally restricted endowments.

## Consolidated Balance Sheet

For the year ended April 30

	<u>2015-16</u>	<u>2014-15</u>	<u>2013-14</u>	<u>2012-13*</u>	<u>2011-12</u>
<b>Assets</b>					
Cash	146,736	95,959	84,010	46,797	46,136
Short-term investments	8,756	23,808	3,026	59,309	32,506
Receivables	36,081	37,648	41,553	46,798	45,604
Deferred and prepaid expenses	9,086	6,784	7,646	9,525	6,404
Long-term investments <b>1</b>	1,216,287	1,180,189	1,029,856	871,781	802,251
Capital assets <b>2</b>	840,954	841,432	840,972	822,147	808,336
Other assets <b>3</b>	6,544	3,476	1,228	4,803	1,484
<b>Total Assets</b>	<b>2,264,444</b>	<b>2,189,296</b>	<b>2,008,291</b>	<b>1,861,160</b>	<b>1,742,721</b>
<b>Liabilities and Equity</b>					
Payables and other current liabilities	302,518	301,882	286,458	284,377	288,905
Deferred capital contributions	371,106	373,919	375,658	352,043	329,806
Employee future benefit obligations <b>4</b>	130,759	111,441	67,298	150,017	220,172
Long-term debt	283,600	245,373	228,821	225,325	231,623
Other liabilities <b>5</b>	--	--	885	15	8
<b>Total Liabilities</b>	<b>1,087,983</b>	<b>1,032,615</b>	<b>959,120</b>	<b>1,011,777</b>	<b>1,070,514</b>
<b>Net Assets</b>					
Unrestricted net assets	(116,393)	(148,600)	(162,050)	(169,058)	(165,912)
Internally restricted net assets <b>6</b>	175,731	164,181	174,491	63,410	(25,585)
Endowment – internally restricted <b>7</b>	199,376	200,742	183,780	162,501	143,238
Endowment – externally restricted <b>7</b>	731,492	718,236	616,458	547,750	473,559
Equity in capital assets	186,255	222,122	236,492	244,780	246,907
<b>Total Liability and Equity</b>	<b>2,264,444</b>	<b>2,189,296</b>	<b>2,008,291</b>	<b>1,861,160</b>	<b>1,742,721</b>
<b>Other Obligations</b> (\$ thousands)					
	<u>2015-16</u>	<u>2014-15</u>	<u>2013-14</u>	<u>2012-13*</u>	<u>2011-12</u>
Capital commitments	18,209	23,325	49,004	127,878	106,846
Other	1,000	1,000	1,000	1,000	1,000
	<b>19,209</b>	<b>24,325</b>	<b>50,004</b>	<b>128,878</b>	<b>107,846</b>

\* In 2013-14, the University adopted Section 3463 of Canadian accounting standards for not-for-profit organizations, which requires the use of the immediate-recognition approach for employee benefit plans. The University elected to account for all employee future benefit plans using funding valuation assumptions rather than accounting assumptions, resulting in an increase and restatement in net assets reported as at May 1, 2012.

**1** Market value.

**2** As at May 1, 2011, land assets were revalued at fair value.

**3** Includes unamortized issue costs and derivative assets for interest rate hedging purposes.

**4** Total funded status of pension and non-pension benefit plans. Prior to fiscal 2011-12, represents accrued benefit liability after unamortized actuarial gains/losses and past service costs.

**5** Includes unrealized losses on derivatives for currency hedging purposes.

**6** Funds set aside for specific purposes (e.g., departmental carry-forwards, the sinking fund, other internal reserves, etc.). Excludes equity investment in capital assets, which is presented separately.

**7** Externally restricted endowment assets consist of funds that are subject to restrictions imposed by the donors. Internally restricted endowment assets are funds whose use is restricted internally by the Board.

## Statement of Cash Flow (DBRS adjusted)

For the year ended April 30

	<u>2015-16</u>	<u>2014-15</u>	<u>2013-14</u>	<u>2012-13</u>	<u>2011-12</u>
Operating balance before fund contributions	39,542	61,941	45,587	22,561	(19,636)
Amortization	49,863	51,828	52,201	57,186	57,792
Other non-cash adjustments <b>1</b>	(39,960)	(37,779)	(30,167)	(26,371)	(24,207)
<b>Cash Flow from Operations</b>	<b>49,445</b>	<b>75,990</b>	<b>67,621</b>	<b>53,376</b>	<b>13,949</b>
Change in non-cash working capital	(547)	18,940	9,876	(9,429)	(9,034)
<b>Operating Cash Flow after Working Capital</b>	<b>48,898</b>	<b>94,930</b>	<b>77,497</b>	<b>43,947</b>	<b>4,915</b>
Net capital expenditures <b>2</b>	(26,086)	(27,897)	(22,614)	(22,084)	(26,130)
<b>Free Cash Flow</b>	<b>22,812</b>	<b>67,033</b>	<b>54,883</b>	<b>21,863</b>	<b>(21,215)</b>

**1** Includes unrealized gains and losses on investments, excluding externally restricted endowments after the transition date of May 1, 2011.

**2** Defined as gross capital expenditures less contributions restricted for capital purposes.

**Summary Statistics** (DBRS adjusted)

For the year ended April 30

	<u>2015-16</u>	<u>2014-15</u>	<u>2013-14</u>	<u>2012-13</u>	<u>2011-12</u>
<b>Total Enrolment (FTE) <sup>1</sup></b>	24,711	23,958	22,888	22,425	21,845
Undergraduate	84%	84%	84%	84%	84%
Graduate	16%	16%	16%	16%	16%
Total annual change	3.1%	4.7%	2.1%	2.7%	-0.6%
Domestic (headcount, %)	93.3%	93.8%	94.4%	94.5%	94.2%
International (headcount, %)	6.7%	6.2%	5.6%	5.5%	5.8%
<b>Total Employees (FTE) <sup>2</sup></b>	4,115	4,039	3,978	4,022	4,095
Faculty	1,601	1,610	1,594	1,582	1,630

**Operating Results**

Surplus (deficit) (\$ millions) <sup>3</sup>	39.5	61.9	45.6	22.6	(24.9)
– As % of revenues	4.6%	7.3%	5.5%	2.8%	(3.3%)
– As % of revenues (five-year rolling average)	3.4%	2.2%	0.6%	(2.5%)	(3.8%)

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

Government funding (federal + provincial)	42.7%	43.0%	42.8%	44.6%	49.0%
Student fees	34.2%	31.6%	29.3%	29.2%	28.8%
Ancillary	11.2%	10.0%	9.7%	9.7%	9.8%
Donation and investment income	6.0%	9.5%	12.6%	10.5%	6.5%
Other	5.9%	5.9%	5.7%	6.0%	5.8%

**Debt and Liquidity Analysis**

Total debt (\$ millions)	283.6	245.4	228.8	225.3	231.6
– Per FTE student (\$)	11,477	10,242	9,997	10,048	10,603
Debt, contingencies and commitments (\$ millions) <sup>4</sup>	433.6	381.1	346.1	504.2	559.6
– Per FTE student (\$)	17,546	15,909	15,122	22,484	25,618
Cash and cash equivalents (\$ millions)	155.5	119.8	87.0	106.1	78.6
– As % of total expenses	19.1%	15.2%	11.0%	13.7%	10.2%
– As % of current liabilities	51.4%	39.7%	30.4%	37.3%	27.2%
Expendable resources (\$ millions) <sup>5</sup>	389.5	327.8	263.5	206.9	171.9
– As % of total debt	137%	134%	115%	92%	74%
Interest costs as % of total expenditures	1.7%	1.6%	1.6%	1.6%	1.6%
Interest coverage ratio (times)	4.6	6.9	6.4	5.3	2.1

**Endowment Funds**

Total market value (\$ millions)	930.9	919.0	800.2	710.3	616.8
– Per FTE student (\$)	37,671	38,358	34,963	31,672	28,235
– Annual change	1.3%	14.8%	12.7%	15.2%	10.6%

Note: Payout ratio: Long-term target of 4.0%, based on the formula of 70% of the prior year's payout plus inflation and 30% of the most recent calendar year's ending market value.

<sup>1</sup> FTE enrolment excludes continuing education. In 2015, DBRS shifted reporting of FTE enrolment to a standard credit-load approach to better reflect the revenue potential of enrolment and to provide greater consistency across the sector.

<sup>2</sup> FTE excludes teaching assistants and sessional lecturers.

<sup>3</sup> Excludes employee future benefit remeasurements and other non-recurring items.

<sup>4</sup> Includes long-term debt, capital commitments and guarantees.

<sup>5</sup> Expendable resources have been restated historically in 2016–17 for comparability across DBRS-rated institutions. Expendable resources include internally restricted endowments, internally restricted net assets (excluding investment in capital assets and employee future benefits) and the unrestricted surplus (deficit).

## Rating History

	Current	2016	2015	2014	2013	2012
Issuer Rating	AA	AA	AA	AA	AA	AA
Senior Unsecured Debt	AA	AA	AA	AA	AA	AA

## Related Research

- “DBRS Comments on Pension Solvency Funding Requirements of Ontario Universities,” October 31, 2016.
- “DBRS Comments on Ontario’s New University Funding Model,” March 9, 2017.
- *Rating Public Universities*, June 2016.

## Previous Report

- Queen’s University: Rating Report, March 11, 2016.

### 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.

The DBRS group of companies consists of DBRS, Inc. (Delaware, U.S.)(NRSRO, DRO affiliate); DBRS Limited (Ontario, Canada)(DRO, NRSRO affiliate); DBRS Ratings Limited (England and Wales)(CRA, DRO affiliate); and DBRS Ratings México, Institución Calificadora de Valores S.A. de C.V. (Mexico)(CRA, NRSRO affiliate, DRO affiliate). Please note that DBRS Ratings Limited is not an NRSRO and ratings assigned by it are non-NRSRO ratings. For more information on regulatory registrations, recognitions and approvals, please see: <http://www.dbrs.com/research/225752/highlights.pdf>.

© 2017, 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>.