

18-19

Fiscal Framework Update

A complement to the 2016-17 Fiscal Framework

A guide for long-term financial planning



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This report contains certain forward-looking information. In preparing the Fiscal Framework, certain assumptions and estimates were necessary. They are based on information available to management at the time of preparation. Users are cautioned that actual results may vary.

Throughout the text in this report, financial values have been rounded to the nearest thousand unless otherwise stated.

On the cover: The butterfly image used on the cover symbolizes transformation, growing and evolving into something new. This past summer, Brock welcomed a new President. In addition, this year Brock's budget is beginning the process of being transformed through the revenue and expense allocation model. Also, the Brock Linc and the Goodman School of Business are two major construction projects underway this year. The use of geometric shapes form one shape/one Brock, and building blocks reflect the construction at Brock. The other sections in the shapes represent the many facets of the University. They morph from flat design to 3D design creating movement, which evokes a feeling of the ever changing and ongoing innovation and emergence of Brock as a leading edge university. The photos are of the last two major projects completed with the Linc in the centre that is in progress.

Overview

The 2018-19 Fiscal Framework Update is an extension of the 2016-17 Fiscal Framework, providing updated guidance where necessary. The focus of this update is to build upon the existing framework and refine guidance where necessary, recognizing that the University operates in a dynamic environment and must address changes to our core funding model to remain competitive.

Figure 1 references the components of the framework and details which of these components will be updated in this document. For those details where there is no change, the page reference to the 2016-17 Fiscal Framework is provided.

Figure 1: The Fiscal Framework Update reference

Framework component	Reference
Tuition: Targeted guidance for tuition remains unchanged from the 2016-17 Fiscal Framework – tuition rates are set at the median of other universities in the province of Ontario.	See page 24 of the 2016-17 Fiscal Framework.
Grant: This Fiscal Framework Update addresses the Ministry of Advanced Education and Skills Development's (MAESD) redesign of the funding model for universities.	See page 10 of this document.
Ancillary and residence: No change from the 2016-17 Fiscal Framework – targeted guidance is to grow the annual contribution to the operating budget by 20 per cent over the next five years.	See page 30 of the 2016-17 Fiscal Framework.
Salary and benefits: This Fiscal Framework updates the targeted guidance for salary and benefits.	See page 12 of this document.
Scholarships: The 2016-17 Fiscal Framework targeted guidance for scholarships, to maintain the budget in the 50 per cent of comprehensive universities as identified by the annual <i>Maclean's</i> survey, remains unchanged. This Fiscal Framework Update addresses funding of this envelope from endowments.	See page 34 of the 2016-17 Fiscal Framework and page 14 of this document.
Capital: This Fiscal Framework Update reaffirms the targeted guidance for capital based on the 2016-17 Fiscal Framework. It updates capital commitments for outgoing funding years and identifies additional uses of the capital funding envelope.	See page 36 of the 2016-17 Fiscal Framework and page 16 of this document.
Debt and borrowing: Targeted guidance for debt and borrowing remains unchanged from the 2016-17 Fiscal Framework but is reaffirmed in this Fiscal Framework Update.	See page 44 of the 2016-17 Fiscal Framework and page 20 of this document.
Utilities: Targeted guidance for utilities remains unchanged from the 2016-17 Fiscal Framework – hold budget flat and absorb increasing water and hydro rates.	See page 48 of the 2016-17 Fiscal Framework.
Library acquisitions: This Fiscal Framework updates the targeted guidance for library acquisitions.	See page 22 of this document.
Unrestricted net assets/reserves: This Fiscal Framework Update reaffirms the targeted guidance for unrestricted net assets/reserves.	See page 22 of this document.
Chargebacks, other revenue and other operating costs: This Fiscal Framework Update reaffirms the targeted guidance for chargebacks, other revenue and other operating costs.	See page 22 of this document.
Financial Risk Framework: There have been no significant changes to the Financial Risk Framework as set out in the 2016-17 Fiscal Framework.	See page 53 of the 2016-17 Fiscal Framework

Financial results

Figure 2 illustrates the financial results of the University presented on a funding basis, which represents committed cash in accordance with accounting standards for not-for-profits (NFPS). A reconciliation of the two presentations can be found starting on page 48 of the 2016-17 Annual Report, found at brocku.ca/about/university-financials/#annual-reports

Figure 2

(\$000s)	Funding		NFPS		Funding	NFPS
	Actual 2016-17	Budget 2016-17	Actual 2016-17	Budget 2016-17	Actual 2015-16	Actual 2015-16
Revenue						
Student fees	158,341	157,635	158,451	157,635	151,382	151,471
Grant revenue	95,009	92,152	94,160	91,288	93,201	92,462
Internal chargebacks	9,703	8,473			7,522	
Inter-fund revenue	4,859	3,658			2,585	
Other revenue	46,182	45,893	71,386	69,987	46,728	69,107
Total revenues	314,094	307,811	323,997	318,910	301,418	313,040
Operating costs						
Personnel costs	(196,994)	(202,903)	(201,124)	(203,690)	(193,777)	(195,754)
Inter-fund expense	(20,965)	(18,785)			(17,700)	
Other operating costs	(90,611)	(90,043)	(114,055)	(118,842)	(85,431)	(110,871)
Total operating costs	(308,570)	(311,731)	(315,179)	(322,532)	(296,908)	(306,625)
Mitigation target		3,920		3,920		
Funding surplus (before discretionary appropriations)	5,524	-	8,818	298	4,510	6,415
Discretionary appropriations	(5,500)				(4,499)	
Funding surplus (after discretionary appropriations)	24	-	8,818	298	11	6,415

Statement of operations metrics

The following metrics were developed to identify areas of strength as well as improvement.

Figure 3

By student headcount (\$000s)	Brock		Median ⁽¹⁾		Average ⁽¹⁾	
	April 2017	April 2016	April 2017	April 2016	April 2017	April 2016
Student fees (primarily tuition) ⁽²⁾	8.47	8.20	8.96	8.59	8.79	8.30
Grant	5.92	5.87	9.68	9.69	10.92	10.79
Personnel costs	10.75	10.60	13.78	13.47	14.05	13.69
Scholarships	1.05	0.99	1.34	1.28	1.42	1.37
Interest on long-term debt	0.39	0.40	0.26	0.27	0.27	0.27
Investment income	0.12	0.06	0.81	0.42	0.82	0.50

(1) Calculated using financial information from 14 other comprehensive universities. Certain 2016 metrics have been updated due to revisions in certain Universities' financial statements.

(2) Brock 2016 metrics have been adjusted to account for reclassifications.

Brock's tuition is in line with the average; however, grant revenue per student continues to be well below the industry average. Naturally, Brock must operate more efficiently with below average funding and this is seen in the lower personnel costs per student. Brock continues to invest in students through increasing scholarships. Interest and investment income metrics are in line with Brock's comparatively weak financial health metrics, as detailed below.

Financial health metrics

Figure 4

	Brock ⁽¹⁾		Median ⁽²⁾		Weighted average ⁽²⁾	
	April 2017	April 2016	April 2017	April 2016	April 2017	April 2016
Primary reserve ratio	14.6%	11.7%	26.4%	24.1%	38.5%	36.1%
Debt burden ratio	3.0%	3.1%	2.6%	2.5%	2.9%	3.0%
Interest burden %	2.5%	2.6%	1.7%	1.7%	1.5%	1.6%
Interest coverage	3.70	3.35	7.89	3.68	7.21	5.93
Viability ratio	31.9%	24.5%	177.4%	189.9%	127.0%	120.1%
Net operating revenues ratio	5.1%	7.5%	7.1%	8.2%	9.1%	8.6%
Employee future benefits per student (\$000s)	\$(0.53)	\$(1.12)	\$(3.03)	\$(3.27)	\$(2.36)	\$(3.24)
Endowment per student headcount (\$000s)	\$5.01	\$4.50	\$8.75	\$6.96	\$7.56	\$6.89

1) Certain ratios have been restated to align with the Council of Ontario Universities (COU) metrics to improve comparability across various reporting agencies.

(2) Calculated using financial information from 14 other comprehensive universities. Certain 2016 metrics have been updated due to revisions in certain Universities' financial statements.

Refer to page 58 of the 2016-17 Annual Report for explanations of the financial health metrics.



Budget environment

Fiscal Framework Update introduction

Demands on the University are unlimited, but the resources available to meet them are not. The University must, therefore, have some means of deciding how much it can afford to spend, what to spend it on and how to get the most for the money spent. The Fiscal Framework (the Framework) is designed to support budgetary planning. The Framework touches everything the University does, since all university activities involve spending. It was never intended that the budget would match or achieve all framework targets immediately. An important distinction between the Budget and the Framework is that the Framework is in essence the lighthouse for guiding budget planning within the University's financial means. To facilitate long-term planning, the framework is expected to remain directionally consistent over time; however, it must also be flexible to adapt with the evolving economic, environmental and strategic developments of the University. The Framework does not drive strategy, rather the Framework is a tool to ensure Brock has a funding model that promotes strategy development in a sustainable, efficient, responsive and accountable manner. The Framework recognizes the distinctive characteristics and contributions of

Faculties and support units and the interdependence of units within Brock's funding model. An effective Framework is essential to getting the results the University wants while also accounting to stakeholders for what is done through University activities.

The 2018-19 Fiscal Framework Update is an extension of the 2016-17 Fiscal Framework document that was developed through a collegial effort on behalf of University stakeholders. Core components of the Framework remain unchanged and this document serves to provide updates where necessary. For example, the revenue and expense allocation model has evolved considerably over the years, with numerous variations in the way the University plans and reports on its spending. This document reports on the Framework as it appears today.

The model below was developed to visualize how the Framework integrates within the larger overall strategy of the University. The centre gold segments represent the Framework where revenue inflation equals expense

inflation. Meeting this goal unlocks the University's resources to invest

enrolment growth in a number of areas throughout the University as identified in the grey components of the model.

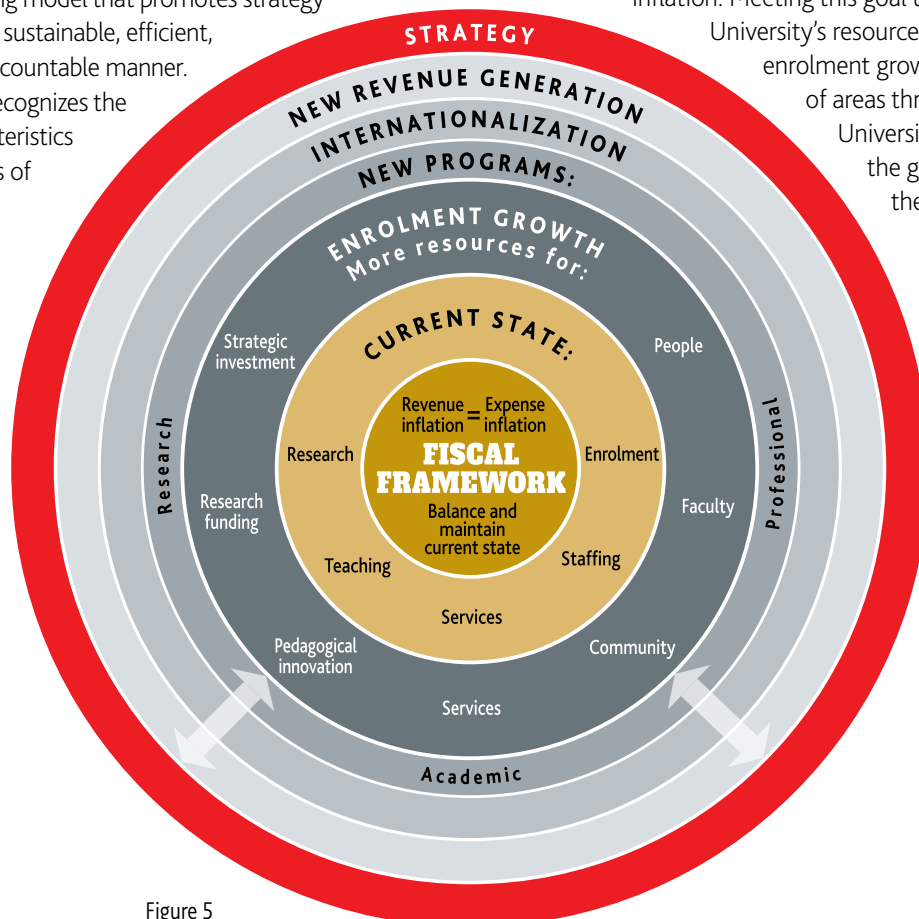


Figure 5

Budget environment

Prior to diving into the updates to our Framework, let's set the context with an update to the budget environment. The budget environment for the University is dominated by government policy, enrolment and the decisions we as a university make. These same factors have been identified in previous budget reports and the 2016-17 Fiscal Framework.

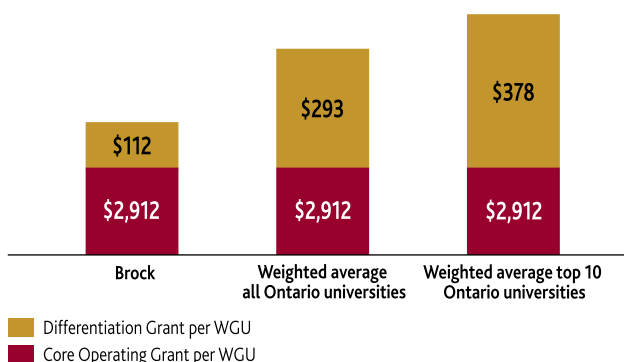
Government policy

Since the 2016-17 Fiscal Framework was written, the Province of Ontario (the Province) has redesigned the funding model for Universities, see pages 32-36 in the 2017-18 Budget Report for a detailed explanation of these grants. Brock remains the lowest funded university in the province on a per student basis, which is demonstrate through the level of differentiation funding Brock receives relative to our peers, as shown in Figure 6.

The Province has also removed automatic funding for enrolment growth of undergraduate students, previously funded through the Undergraduate Accessibility grant. Since the Framework is a financial model that does not assume enrolment growth, which will be more fully discussed in the following enrolment section, this change would only impact the additional revenue that would be realized from strategies to increase enrolment. That said, the Province did increase the number of funded master's and PhD students through Brock's Strategic Mandate Agreement 2 (SMA2) negotiations. Overall increases in funded graduate spaces included 17.8 per cent in 2017-18, 7.8 per cent in 2018-19 and 5.2 per cent in 2019-20. This was an important investment Brock achieved in the SMA2 negotiations as 104 master's FTEs went unfunded in the past two years.

Figure 6

2015-16 Core operating and differentiation grants per weighted grant unit (WGU)⁽¹⁾
Brock vs Ontario universities

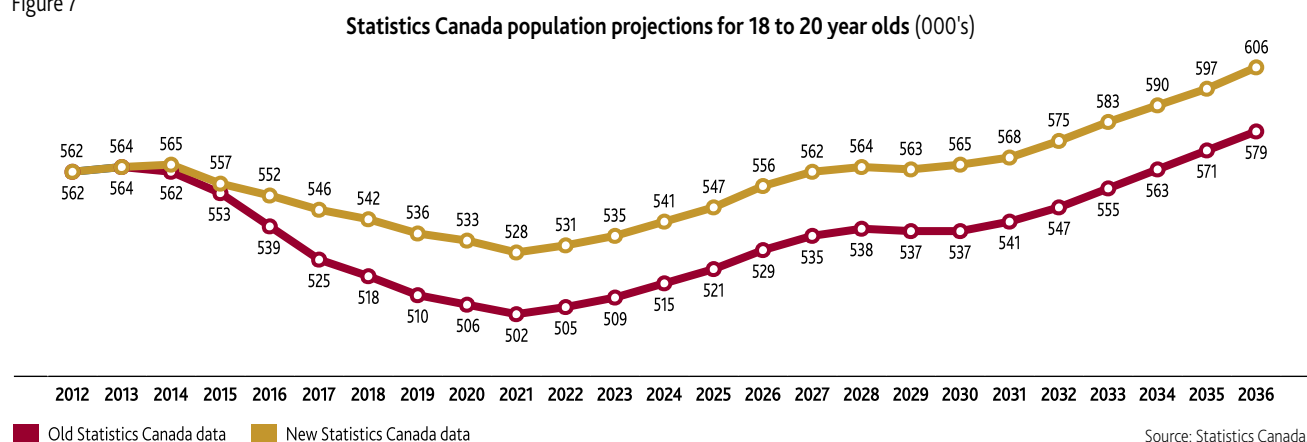


Source: MAESD's Feb. 2017 technical release of the funding model.



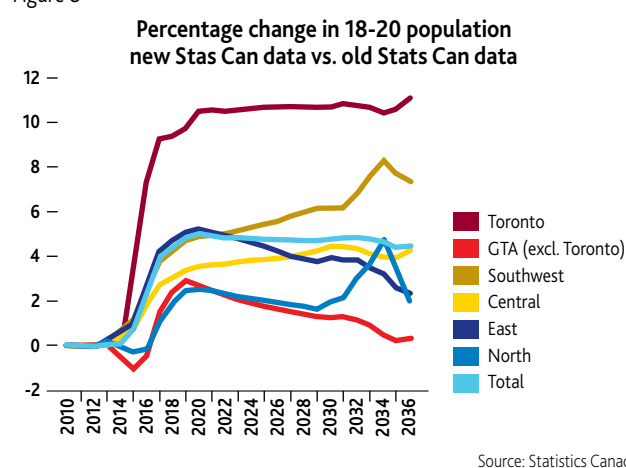
Enrolment

Figure 7



The 2016-17 Fiscal Framework reported on the Statistics Canada (Stats Can) forecast for 18 to 20 year olds, suggesting a decline in this demographic group in the order of 10 per cent over 10 years. Stats Can has recently revised their projection for this demographic group and the change is significant. The new forecast for 18 to 20 year olds (Figure 7) is flat over the next 10 years with modest growth in Brock's regional catchment area. Figure 8 details the percentage change in the old Stats Can data compared to the new data from various areas in our catchment. Enrolment generates the majority of the University's revenue and is the focus of our planning process. Every unit's budget is influenced to some extent by enrolment projections; yet, the University's current budgetary model relies on enrolment growth to offset our increasing costs. Therein lies the most significant gap in our budgetary model, having to teach and service more students each year without being able to fund increasing resources for these additional students.

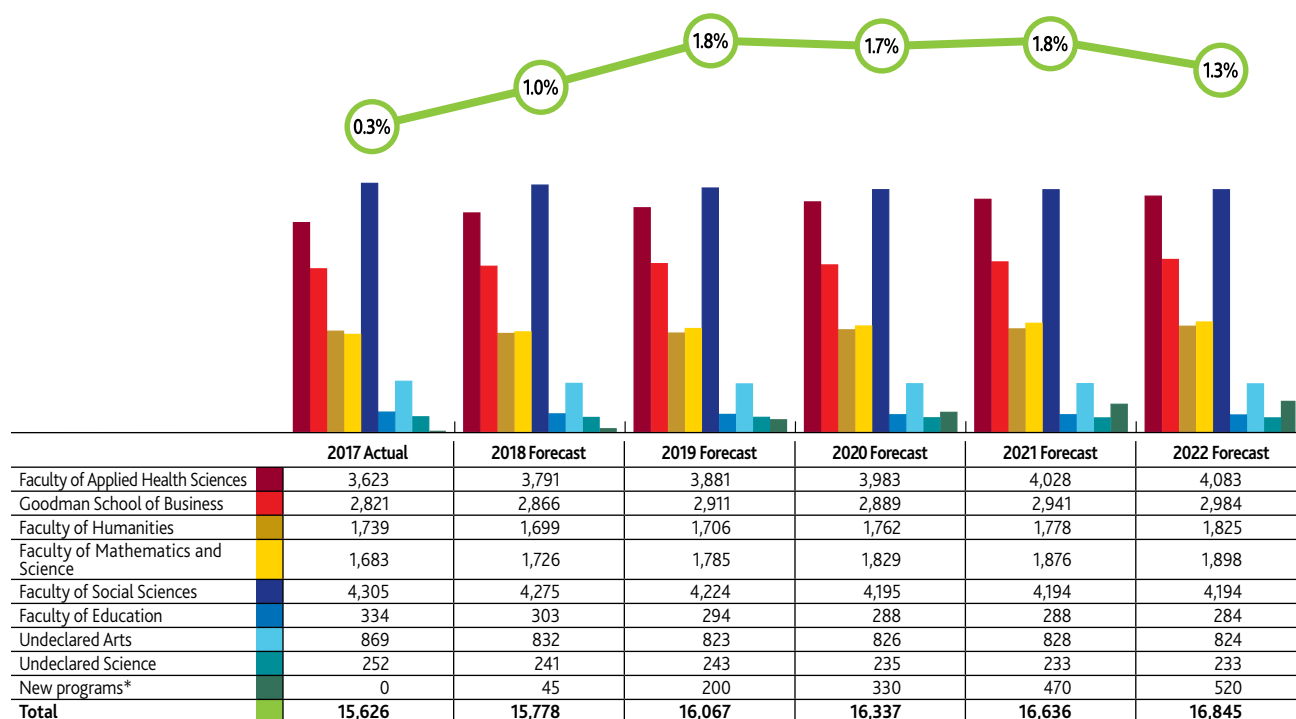
Figure 8



The University has currently updated its forecast for degree seeking undergraduate students as detailed in Figure 9.

Figure 9

Undergraduate degree-seeking student enrolments – Nov. 1 headcount (excludes Teacher Education)



*2018/19: Critical Criminology and Data Science and 2019/20: Forensic Psych and Earth and Planetary Science.

The undergraduate enrolment scenarios in Figure 10 are intended to encourage an open and transparent examination of the sustainability of the University's budgetary cost model in comparison to our ability to generate revenue from fees and enrolment growth. These scenarios demonstrate the shortfall in revenues to cover the inflation on our costs, assuming no increase in faculty and support staff levels. With no enrolment growth, our costs will outpace our revenue generation resulting in a deficit of \$18 million by 2022-23. Even with the University's current enrolment forecast, we find ourselves coming up short \$7 million by 2022-23. In order to cover our cost inflation, we are required to grow enrolment by 2 per cent a year (See scenario 3 in Figure 10); however, it is important to recognize that the budgetary model is only balanced with 2 per cent enrolment growth if we do not increase our faculty and support staff levels.

A fourth scenario is provided to outline a required growth rate of 9 per cent in enrolment necessary for the University to maintain the current student to faculty and staff ratio. This scenario is detailed in Appendix B.

The results of this analysis informs the direction of the framework to find a sustainable model where cost inflation would be offset by revenue inflation, assuming no increase to enrolment or faculty and support staff levels. A foundational model where both revenue and cost inflations offset each other would unlock the funding realized from enrolment growth to invest strategically in more faculty and support staff, research and academic enhancements, and more. The Framework is the guidance to achieve this budgetary flexibility.

Figure 10: Undergraduate (UG) enrolment scenarios

	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast
Scenario 1					
Enrolment growth	0.0%	0.0%	0.0%	0.0%	0.0%
Forecasted surplus/(deficit) (\$000s)	(3,307)	(6,760)	(10,364)	(14,128)	(18,059)
Scenario 2					
Enrolment growth UG degree seeking (current forecast)	1.0%	1.8%	1.7%	1.8%	1.3%
Forecasted surplus/(deficit) (\$000s)	(2,086)	(3,189)	(4,364)	(5,339)	(6,983)
Scenario 3					
Enrolment growth UG degree seeking (break-even)	2.0%	2.0%	2.0%	2.0%	2.0%
Forecasted surplus/(deficit) (\$000s)	(96)	(20)	246	720	1,422

Ourselves

As detailed in Figure 11, going forward we are looking at revenue growth of 2.4 per cent and operating costs of 3.4 per cent if enrolment remains constant. This creates a requirement to find \$3 million annually in mitigation to balance our budget. If the decisions we make going forward address this gap through reducing cost inflation to match revenue inflation, then we will successfully unlock the funding realized from enrolment growth or new revenue streams. This funding could be used for enhancing the academic and research activities at the University, rather than relying on the incremental revenue to cover our ongoing costs, as is our reality today.

So why talk about “ourselves” as an aspect of the current fiscal environment? It’s because we all ultimately have

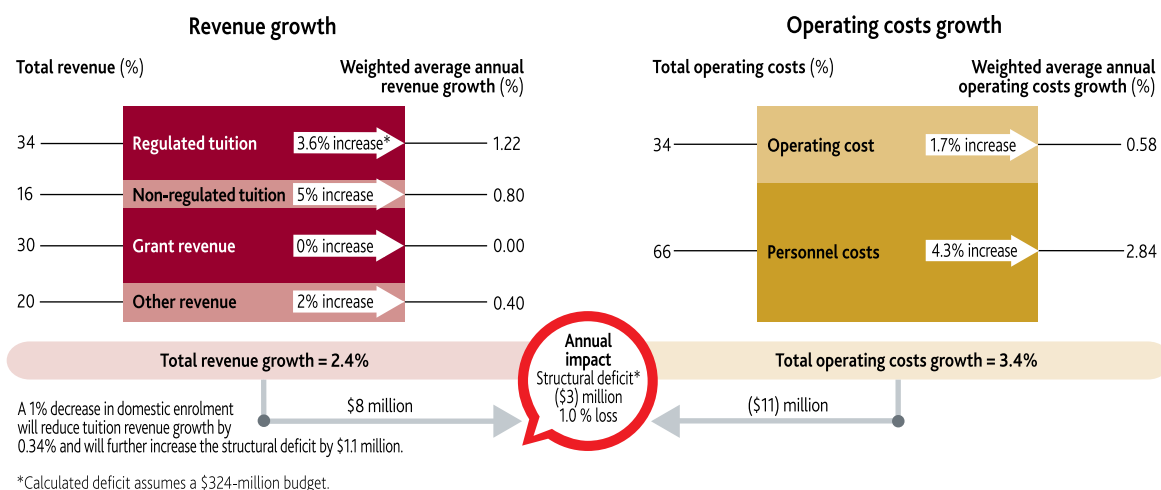
the power to recommend changes to the programs we offer and how we offer them, our areas of focus, the compensation we seek, and how resources are allocated.

Using the term insolvency may be a bit extreme; however, if our growth in costs continues, and declining enrolment materializes, it could be a risk. Working towards a structurally balanced budget will minimize this risk.

The Framework is designed to help guide the distribution of resources, but it is not designed to make decisions by itself.

Going forward, we must look to ourselves to make real decisions that will take us out of the repetitive process of budget mitigation. We have a great University with amazing programs and research. We need to ensure we don’t stand in our own way.

Figure 11



Fiscal Framework forecast

A strong core financial model for Brock's not-for-profit operations matches expense inflation with revenue inflation without any enrolment growth. If inflation on our existing expenses is offset with inflation from revenue without enrolment growth, then any new

revenues generated from growth would be available for strategic investments. Therefore, the Fiscal Framework forecast, as detailed in Figure 12, is built on flat enrolment projections as well as a number of other assumptions and estimates based on information

Figure 12: Fiscal Framework forecast

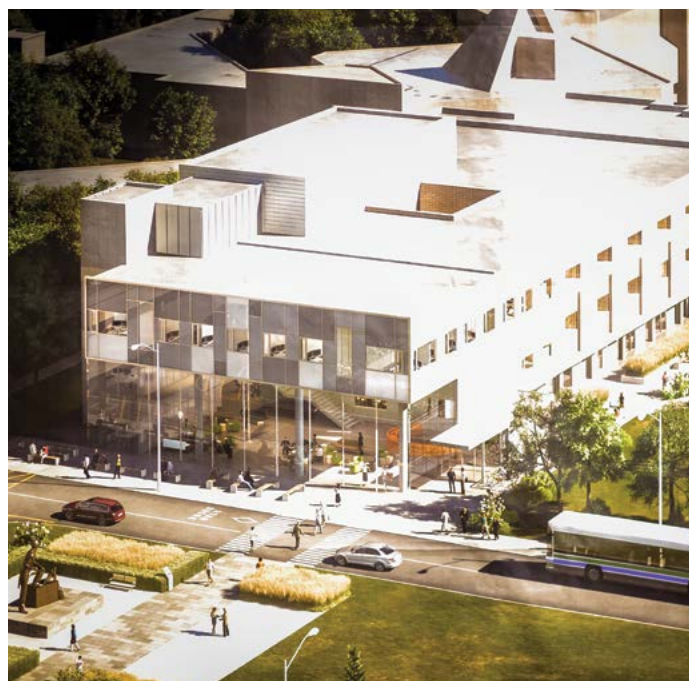
(\$000s)	2016-17 Actual	2017-18 T2 Forecast	2018-19 Fiscal Framework	2019-20 Fiscal Framework	2020-21 Fiscal Framework	2021-22 Fiscal Framework	Figure 13 Note #
Revenue							
Student fees	158,341	167,116	174,027	180,174	186,566	193,216	(1)
Grant revenue	95,009	96,926	97,389	97,815	97,815	97,815	(2)
Ancillary revenue	31,329	33,029	33,690	34,364	35,051	35,752	(3)
Endowment inter-fund revenue		1,784	1,842	1,934	2,031	2,133	(4)
Other operations	29,415	26,213	26,736	27,271	27,816	28,372	(5)
Total operating revenue	314,094	325,068	333,684	341,558	349,279	357,288	
<i>Year-over-year change</i>			<i>2.7%</i>	<i>2.4%</i>	<i>2.3%</i>	<i>2.3%</i>	
Expenses							
Personnel costs	(196,994)	(207,233)	(212,828)	(218,574)	(224,475)	(230,536)	(6)
Financing costs							
External financing costs (excluding bank charges)	(9,591)	(9,574)	(9,556)	(8,651)	(8,472)	(8,472)	(7)
Debt payment reserve	(1,945)	(1,022)	(1,303)	(2,480)	(2,937)	(3,222)	(8)
Financing costs total	(11,536)	(10,596)	(10,859)	(11,131)	(11,409)	(11,694)	
Repairs and maintenance and capital related costs							
Deferred maintenance (FM) ⁽¹⁾	(3,305)	(7,096)	(4,720)	(7,787)	(8,440)	(8,596)	(9)
New capital (FM) ⁽¹⁾	(5,958)	(2,449)	(5,650)	(3,239)	(2,809)	(2,879)	(9)
Core applications (ITS) ⁽¹⁾	(3,177)	(576)	(1,615)	(1,655)	(1,696)	(1,738)	(9)
New capital (ITS) ⁽¹⁾	(1,500)	(2,832)	(3,523)	(4,832)	(4,953)	(5,077)	(9)
Repairs, maintenance and capital replacement costs	(7,680)	(9,660)	(9,853)	(10,050)	(10,251)	(10,456)	(10)
Repairs and maintenance and capital related costs total	(21,620)	(22,613)	(25,361)	(27,563)	(28,149)	(28,746)	
Scholarships							
Scholarships – operating	(17,356)	(18,357)	(19,119)	(19,445)	(19,777)	(20,111)	(11)
Scholarships – endowment		(1,784)	(1,842)	(1,934)	(2,031)	(2,133)	(12)
Scholarships total	(17,356)	(20,141)	(20,961)	(21,379)	(21,808)	(22,244)	
Library acquisitions	(3,893)	(4,260)	(4,701)	(4,795)	(4,891)	(4,989)	(13)
Other operating costs							
Purchased services	(14,168)	(14,174)	(14,457)	(14,746)	(15,041)	(15,342)	(14)
Utilities and taxes	(8,052)	(8,621)	(8,621)	(8,621)	(8,621)	(8,621)	(15)
Cost of sales	(6,979)	(6,536)	(6,667)	(6,800)	(6,936)	(7,075)	(16)
Transfer of operating-funded capital management and licensing				1,000	1,555	2,029	(17)
Other operating	(33,472)	(27,866)	(28,401)	(28,949)	(29,504)	(30,070)	(18)
Other operating costs total	(62,671)	(57,197)	(58,146)	(58,116)	(58,547)	(59,079)	
Total non personnel costs	(117,076)	(114,807)	(120,028)	(122,984)	(124,804)	(126,752)	
Total operating expenses	(314,070)	(322,040)	(332,856)	(341,558)	(349,279)	(357,288)	
<i>Year-over-year change</i>			<i>3.4%</i>	<i>2.6%</i>	<i>2.3%</i>	<i>2.3%</i>	
Budget Surplus / (Deficit)	24	3,028	828	-	-	-	

(1) FM – Facilities Management and ITS – Information Technology Services.

available to Financial Services at the time of preparation. These estimates are detailed in Figure 13. Users should understand that this Fiscal Framework forecast represents an ideal state and is a financial structure for the University to work towards. It is not intended to represent actual expected results for the next four years. We reiterate that this framework contains future oriented information and users of this information are cautioned that actual results may vary.

Figure 13: **Assumptions** (\$000s)

Note #	2018-19	2019-20	2020-21	2021-22
(1)	Provincial regulated – 3% domestic, 5% international. From 2017-18 flat enrolment.			
(2)	Flat plus additional Facilities Renewal Program Funds			Flat
(3)		2.0% annual increase		
(4)		5.0% annual increase		
(5)		2.0% annual increase		
(6)		2.7% annual increase		
(7)	Based on actual debt payment requirements.			
(8)	Represents the difference to ensure overall financing costs increase by 2.5% annually.			
(9)	See the capital and support costs section of this report starting on page 18.			
(10)		2.0% annual increase		
(11)	Based on Board approved budget	Represents the difference to ensure overall scholarships increase by 2.0% annually.		
(12)	Growth per endowment investment gains			
(13)	2% increase plus an additional \$355	2% annual increase		
(14)		2.0% annual increase		
(15)		Flat		
(16)		2.0% annual increase		
(17)	Nil	Represents a reallocation of operating costs included in the capital and related project budget. For further information, see the capital and support costs section of this report starting on page 16.		
(18)		2.0% annual increase		



Grant

Targeted guidance

To receive in the range of the average operating grant per student of the other universities in the province of Ontario.

Adherence to government policy and regulation with the direction to maximize the grant where appropriate. Constructive dialogue with the province of Ontario regarding the subject of operating grants is a priority.

Ensure all graduate funded allotments are filled.

Update



The University continues to appreciate its strong and positive relationship with the Province and acknowledges the necessity of many of the decisions the Province has had to make, given its fiscal constraint. These decisions do impact the University's fiscal environment and inform our financial planning, so it is worthwhile reviewing the history of government support and how recent decisions on the funding model will inform our Fiscal Framework.

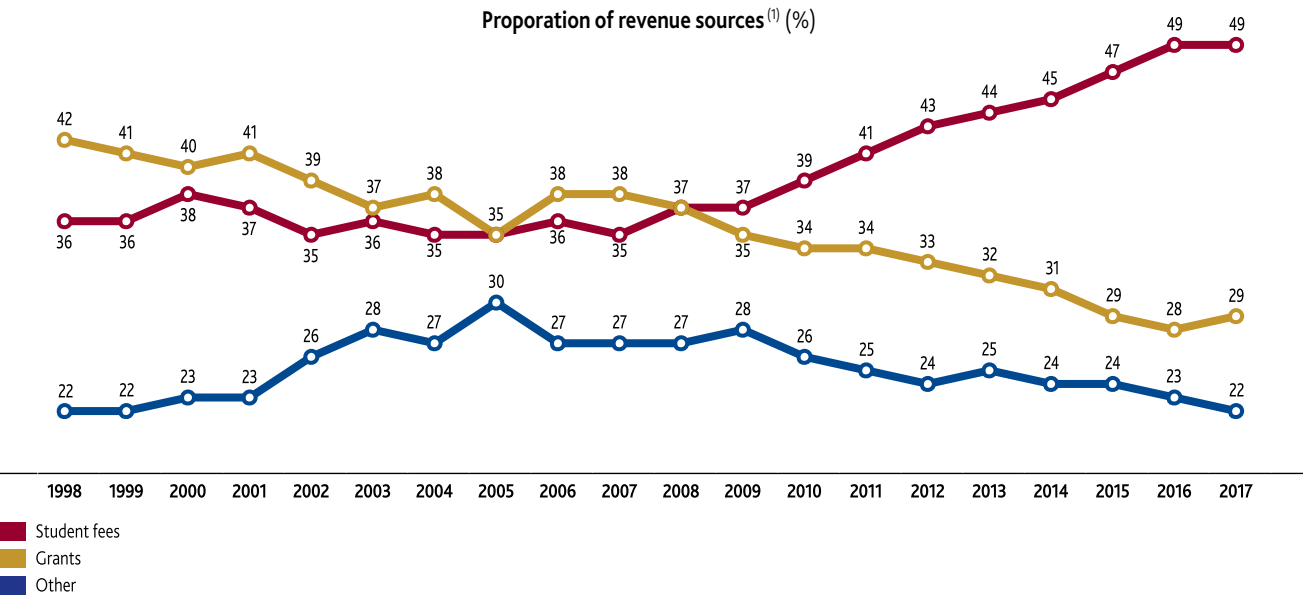
Twenty years ago, government grants represented 42 per cent of the University's revenue while student fees represented 36 per cent, with the difference from other revenues such as ancillary. These proportions remained constant for about a decade as the government kept up funding with inflation. However, a significant shift in government policy was implemented in 2008-09 and as a result, government grants no longer covered the cost of inflation. Figure 14 outlines the impact of this trend on our revenue streams. For the last decade, the University has been relying less and less on government funding. With the implementation of the new government funding model, a continuation of this trend is expected. The corridor funding model provides funding protection for declining enrolment; however, it continues to omit funding for inflation and now eliminates automatic incremental funding for undergraduate enrolment growth. Any growth above the corridor would require additional negotiations



with the Province. That said, the Province did increase the number of funded master's and PhD students through Brock's Strategic Mandate 2 agreement. It is Brock's goal to ensure all funded allotments are filled. However, for the purpose of the Fiscal Framework enrolment model, enrolment growth is modelled at 0 per cent and, therefore, the Province's grants have been held flat in the Fiscal Framework forecast.

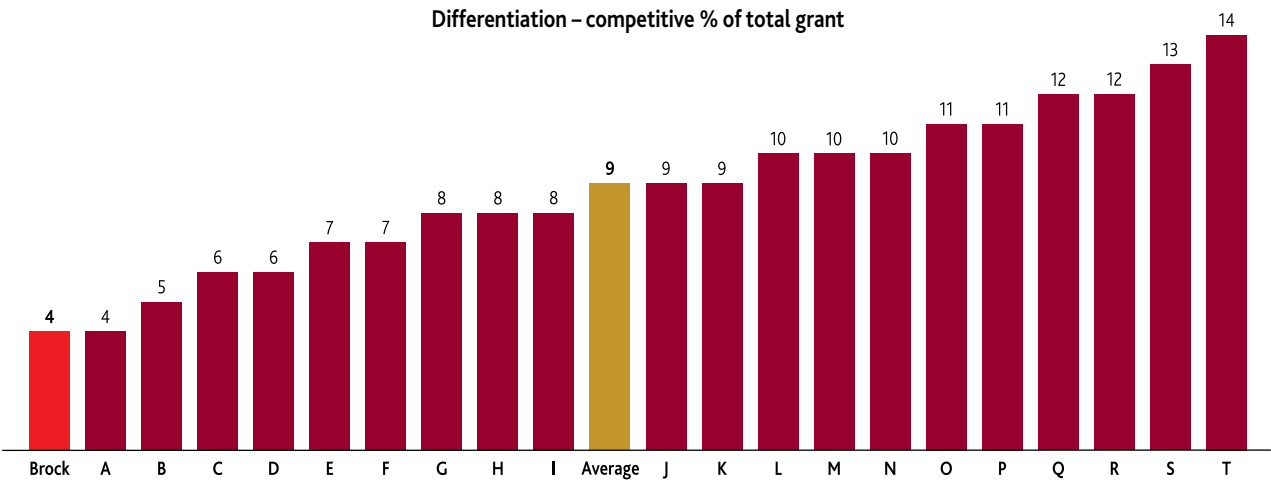
As previously discussed in the Budget Environment section of this report, with the new funding model, Brock remains the lowest funded University in the province on a per student basis as identified in Figure 15, which details that Brock's differentiation grant is only 4 per cent of our total operating grants. It continues to be an objective of Brock to move our funding levels closer to the average of Ontario Universities through continued dialogue with MAESD.

Figure 14



(1) The figures were obtained from the audited financial statements of Brock University, which were prepared in accordance with the Canadian generally accepted accounting principles for not-for profit organizations (1998-99 to 2010-11) and in accordance with Canadian accounting standards for not-for-profit organizations (2011-12 to 2016-17).

Figure 15



Source: MAESD's Feb. 2017 technical release of the funding model.

Salary and benefits

Targeted guidance

Achieve salary and benefit growth of 2.7 per cent or lower annually.

Establish compensation and hiring strategies that support engagement and productivity while working towards and maintaining salary and benefit rate growth of 2.7 per cent or lower annually.

Where obligations for post-employment benefits exist, a funding strategy is required to maintain generational equity.

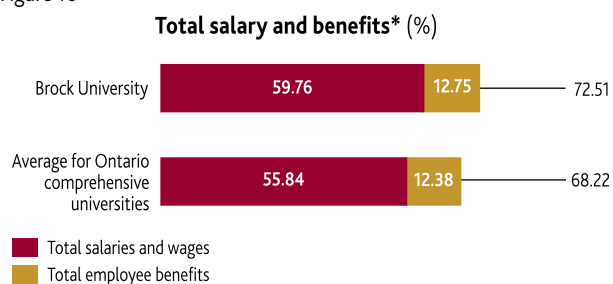
Maintain a funding envelope no lower than \$900,000 per year to establish a fund, much like the pension fund, to pay for future retirees' post-retirement benefits. This \$900,000 envelope must be over and above what is included in each year's budget to cover current post-retirement benefits to support the fund accumulations. Any investment income earned on the fund is to be reinvested in the fund. When the fund equals 100 per cent of the liability, the funding model of post-employment benefits should be reviewed.

Update



The 2016-17 Fiscal Framework set guidance to achieve a ratio of salary and benefit expense as a percentage of total operating expenses of 70 per cent or lower. See Figure 16. Consultation with University budget committees and stakeholders has led us to reconsider this metric for several reasons.

Figure 16



*Based on 2014-15 Council of Ontario Finance Officers (COFO) reporting of expenses.

Namely, the benchmark includes universities with operating budgets ranging from over \$1 billion to just over \$300 million annually, with Brock falling at the low end of the range. The use of this benchmark also suggests that the University's financial strategy should follow our peers, which may not fit within the University's strategic plan. The benchmark is also challenging to report in a transparent manner as it is calculated from institutional reported data to the Council of Ontario Financial Officers group (COFO) under the Council of Ontario Universities (COU) where data could be subject to real or perceived interpretation differences impacting comparability.

To improve the understandability of Brock's Fiscal Framework, we move towards focusing on ourselves in an effort to develop a model that will work for Brock and be flexible enough to invest strategically with the resources we have available. More importantly, the single most important component of this Fiscal Framework Update is the matching of revenue and cost growth rates under a no enrolment growth scenario. We understand revenue growth is for the most part restricted by inflation and regulations outside of our control. We also understand non-personnel expenses are subject to inflationary pressures and there is a limit to how much we can continue to cut from these expenses year over year. The remaining component of our Fiscal Framework is our personnel costs. Aligning personnel cost inflation with our revenue inflation, assuming constant enrolment, is a model that would, for the first time in over a decade, end the requirement to cut our budgets to mitigate costs growing at a faster rate than

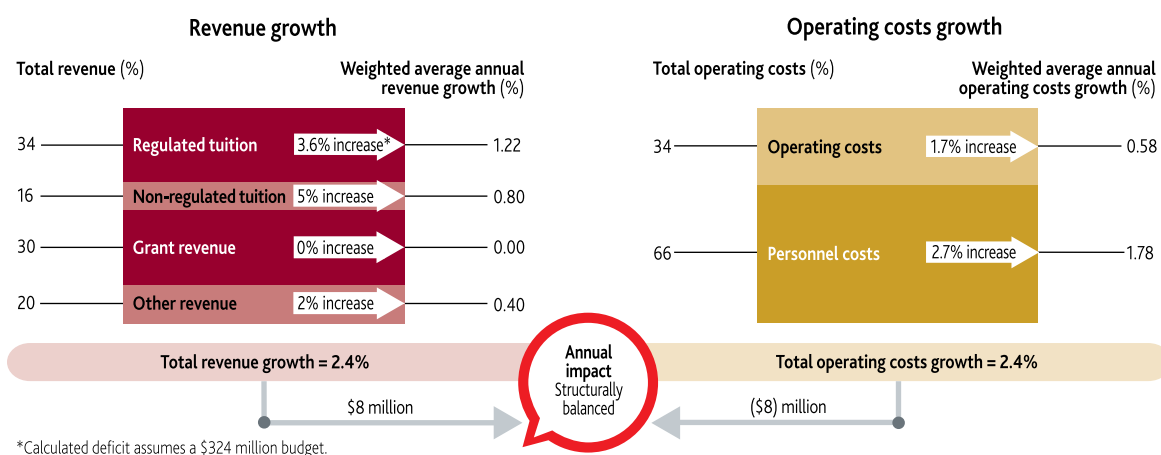


revenues, or rely on enrolment growth revenue to fill this gap. A model that balances revenue inflation with cost inflation, excluding enrolment growth, would unilaterally transform our strategic planning process as we would find ourselves in a situation where revenues generated from any incremental enrolment growth would be unencumbered in the budget model and would be immediately available for prioritization for investments in additional Faculty, academic, research or service investments. Probably the most important statement of a model where there is a matching of revenue inflation and cost inflation, excluding enrolment growth, is that we would no longer be in a situation where any unit would be required to do more with less or no additional funding. That said, the University recognizes the significant and valuable contributions of all of its faculty and staff represented by both unionized and non-unionized groups.

Figure 17 was previously presented in the Budget Environment section of this report, illustrating a structural imbalance with revenues growing at 2.4 per cent annually and expenses at 3.4 per cent. This model built in personnel costs growing at approximately 4.3 per cent, which represents the reality of our current budgeted compensation rate growth. Figure 17 presents an updated model, building in personnel growth at 2.7 per cent annually. This model creates balance, with expenses growing proportionally with revenue.



Figure 17



Scholarships, fellowships, bursaries and awards

Targeted guidance

Maintain a fellowships, scholarships, bursaries and awards budget in the top 50 per cent of comprehensive universities as identified in the annual *Maclean's* survey.

Establish a fellowships, scholarships, bursaries and awards budget that celebrates student successes and talents and is reflective of program supply and demand dynamics to support recruitment and retention. When setting the fellowships, scholarships, bursaries and awards strategy, all laws and regulations must be followed.

Achieve an endowment per student ratio closer to the average comprehensive university.

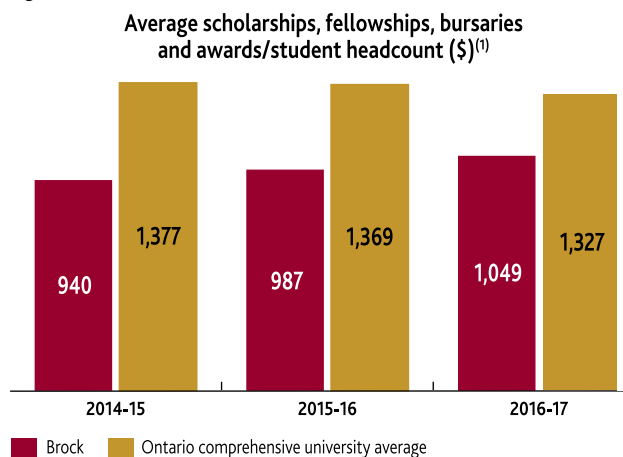
Brock has achieved its Fiscal Framework goal, as set out in the 2016-17 Fiscal Framework, to be in the top 50 per cent of comprehensive universities. The 2017 *Maclean's* survey placed Brock sixth out of 15 comprehensive universities in the scholarships category. Furthermore, while Brock has been increasing its investment in scholarships, our peer universities have been decreasing their scholarship budgets. Figure 18 highlights the trend in scholarships, fellowships, bursaries and awards on a per student basis. The comprehensive university average funding has been declining on a per student basis, which suggests Brock will be able to maintain its ranking with its current funding per student.

Update



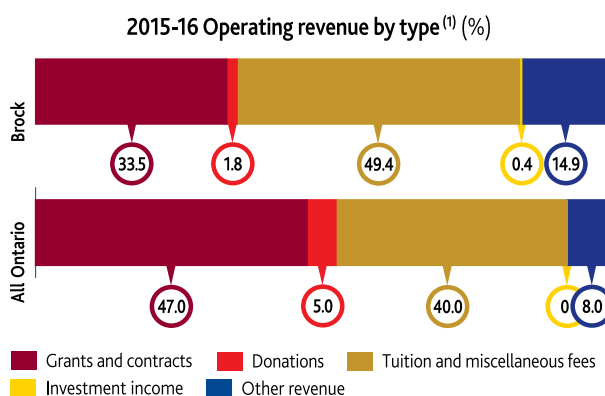
This Fiscal Framework Update incorporates fundraising, specifically for endowments and trusts, as a funding source for student awards. As the value of Brock's endowments and trusts grows, it will relieve some of the pressure on the operating budget to fund scholarships, fellowships, bursaries and student awards. Brock's endowment per student is \$5,009 as of April 30, 2017, as compared to the comprehensive university average of \$7,558 per student. Brock has one of the highest proportions of its student support spending funded from the operating budget, whereas our peers benefit from endowments subsidizing the need to fund student support from operating revenues. In addition, Figure 19 shows that of Brock's operating revenue only 1.8 per cent is funded through donations, whereas the average of Ontario universities is 5.0 per cent. Therefore, Brock should be working towards increasing our endowment per student closer the comprehensive university average.

Figure 18

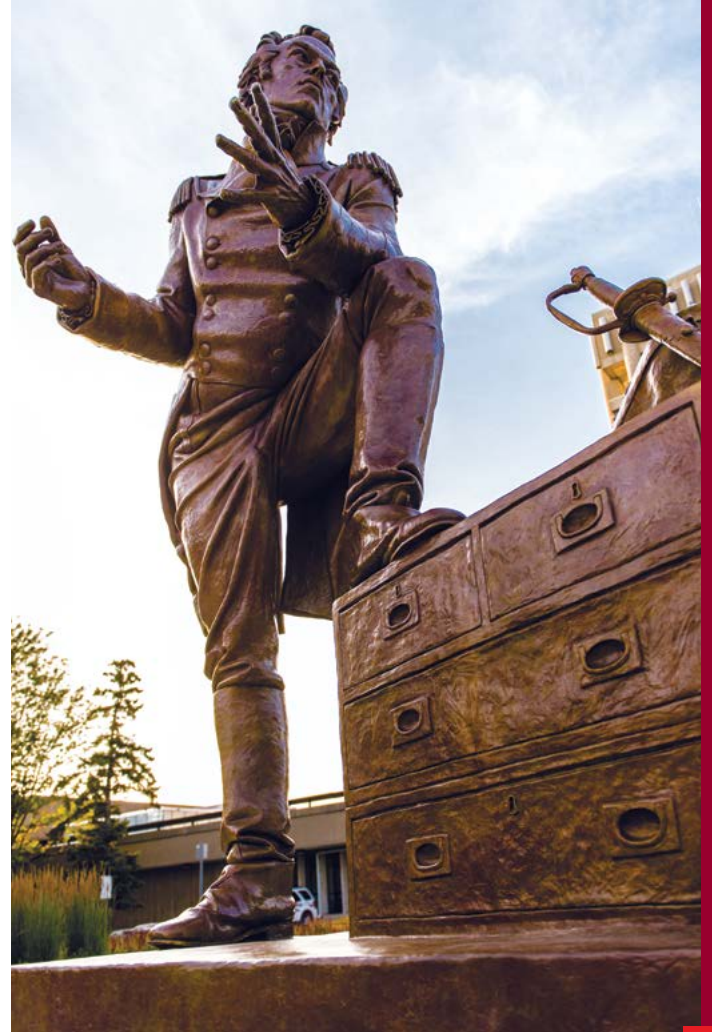


(1) Information based on the Council of Ontario Finance Officers (COFO) reporting.

Figure 19



(1) Information based on the Council of Ontario University Finance officers (COFO) reporting.



Capital and support costs

Targeted guidance

To increase the contribution to the capital and related project program for Facilities Management annually by a minimum of the construction price index plus new government funding identified for capital.

Improve Brock's Facilities Condition Index (FCI).

Providing and maintaining infrastructure that meets the needs of students and staff is critical. In establishing the long-term capital and related projects plan for infrastructure, a ranking system is to be utilized to support the selection of projects and communication of that selection. Projects selected must tie into an integrated infrastructure strategy that reduces risk and supports students, faculty and staff while working towards the FCI target.

To increase the contribution to the capital and related project program for Information Technology annually.

In establishing the long-term capital and related projects plan for information technology, a ranking system is to be utilized to support the selection of projects and communication of that selection. Projects selected must tie into an integrated information technology strategy that reduces risk and supports students, faculty and staff. When setting this strategy, all laws and regulations must be followed.

Update



The capital and deferred maintenance funding guidance remains intact with this update to the Fiscal Framework; however, the use of the capital envelope is being expanded to include 'soft capital costs'. Soft capital costs in this context represents capital project support costs and in some cases leasing arrangements where there has been a purposeful shift away from future capital replacement costs for a similar asset or system.

The Fiscal Framework continues to recognize the University's history of under-investing in the maintenance of our facilities. The capital and related projects budget process was developed in 2013-14. The Board of Trustees recognized the University was not investing enough in maintaining its facilities and began a process to establish and improve the capital funding envelope within the University's budget process. For the 2014-15 budget, the Board of Trustees endorsed a motion to invest \$6 million in deferred maintenance. The reality that the University did not contribute any funding to deferred maintenance beyond the Provincial Facilities Renewal Program Funds (historically close to \$600,000 annually) prior to 2013-14 made this transition towards building a sustainable facilities renewal investment into the budget a challenging endeavour. In May 2017, VFA Inc. (through the Council of Ontario Universities) performed a condition assessment which determined that Brock has \$167 million in deferred maintenance requirements that have accumulated over a number of years of under-investing. At the same time, it was determined Brock's overall Facility Condition index (FCI)*, which determines the relative condition of the asset, was 0.18, which translates to "poor" and compares to other Ontario universities with an average FCI of 0.10.

Therefore, going forward, it is important to recognize that this investment is an investment not only in maintaining our facilities but also the ability to teach future generations in a safe, secure and modern environment. If the University was to revert into past practice by reducing or eliminating our annual contribution to deferred maintenance, we would likely find ourselves requiring debt financing to renew or replace our facilities in the future when major failures occur. Our ability to borrow is also limited given our high debt burden relative to our peers – making that strategy a risky alternative to the current model. This Fiscal

*FCI represents deferred maintenance divided by the current replacement value.



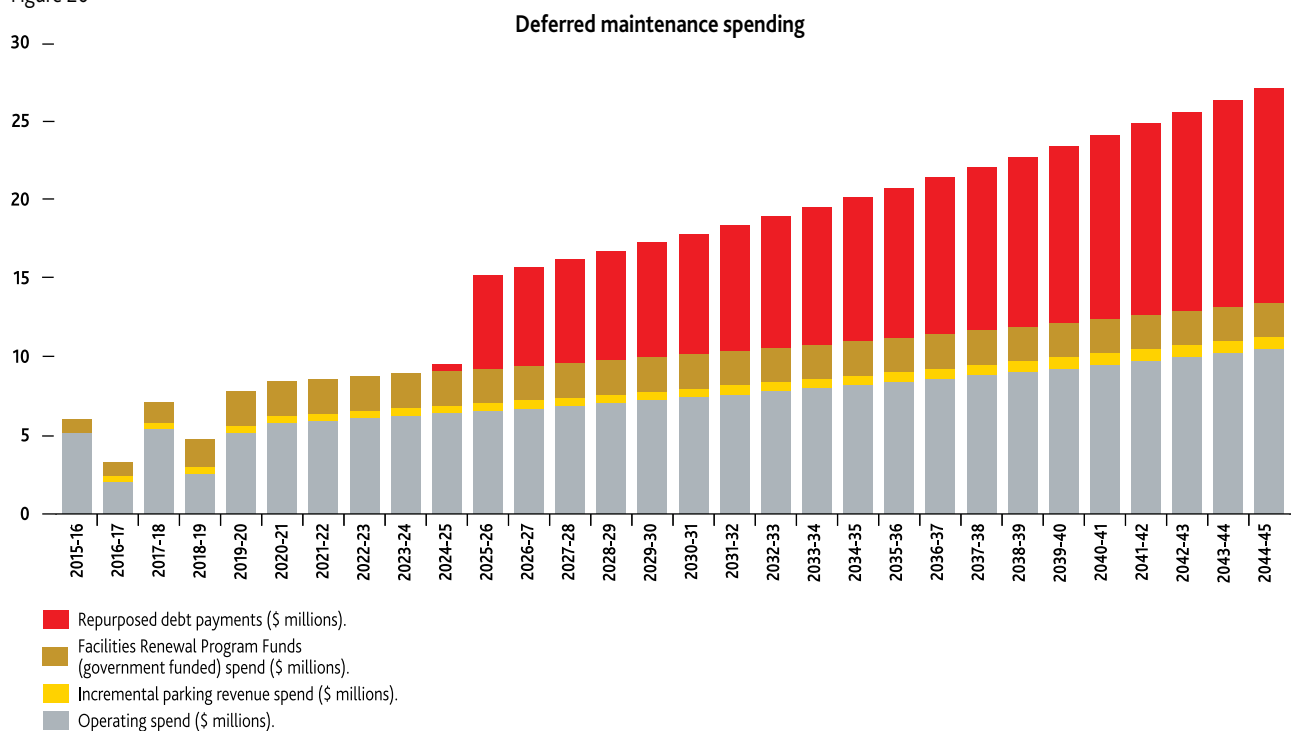
Framework Update maintains the targeted guidance as set out in the 2016-17 Fiscal Framework, to increase the capital and related project program for Facilities Management annually by a minimum of the construction price index plus new government funding identified for capital with the goal of improving Brock's FCI. Figures 20 and 23 were previously presented in the 2016-17 Fiscal Framework and have been updated for this document. Figure 20 details the outgoing deferred maintenance spending. While Figure 23 outlines our current and forecasted funding model. As more analysis is performed on the deferred maintenance backlog, we expect the funding from the operating budget as outlined in this Fiscal Framework Update will not be sufficient to improve our

facilities condition index. As a result, Facilities Management is developing an action plan to address larger segments of the deferred maintenance portfolio by leveraging additional government funding programs and comprehensive Energy Performance Contracts to enhance the funding model.

Capital support costs

With the growth in funding of the capital and related projects budget each year, the University must be able to manage this increased project load. Investments in project management staff to ensure projects are supervised and completed on time and on budget are necessary. Given the operating budget would be challenged to support

Figure 20



incremental operating costs to manage these projects, the Fiscal Framework will now allow for the funding of operating costs that are primarily dedicated to managing projects to be funded from the capital budget.

Capital and major operating leasing arrangements

Investment in information technology has shifted from infrastructure-based investment to a focus on software as a service (SaaS) computing, and through these investments traditional costs of purchasing and maintaining physical equipment is being replaced with lease payments. For example, the recent implementation of Workday, a SaaS product, as Brock's new finance system and soon to be human resources and payroll system was a decided move away from the home-grown enterprise software, requiring on premise infrastructure. The Fiscal Framework will ensure any future leasing costs that result from transitions to SaaS computing have a sustainable funding source, namely the information technology capital budget.

This same rationale will apply for Facilities Management, where a case is made to lease equipment instead of purchasing or renewing the asset. Under some circumstances, leasing may prove to be more cost effective as compared to buying an asset, and the Fiscal Framework should facilitate this type of analysis and decision making. With leasing costs traditionally included in Facilities Management operating budgets, our Facilities Management decision makers would find it challenging to absorb the costs of leasing previously owned equipment into their operating budget envelope. For this reason, leasing costs for capital assets where appropriate will also be funded

through the capital budget. These costs, as well as the capital support costs, are included in the Fiscal Framework forecast on page 8 under the category "transfer of operating – funded capital management and licensing."

Capital and related projects budget

The 2016-17 Fiscal Framework set out the capital and related projects budget for both Facilities Management and information Technology Services to 2020-21. This Fiscal Framework update extends the guidance to 2021-22 as follows: Figures 21 and 22 below detail these funding envelopes for the Facilities Management (FM) and Information Technology (ITS) capital and related project budgets. The funding envelopes for deferred maintenance increases as described in Figure 23, while the funding for the other segments increase at 2.5 per cent annually (proxy for the construction price index) with the following exceptions:

- In 2017-18, as part of the budget preparation, \$1.0 million of the capital and related projects budget was funded by savings from prior year approved projects and removed from the operating budget.
- In 2018-19, almost \$3.0 million of the FM deferred maintenance budget is being repurposed for new capital to fund the Brock Linc and Brock District Energy Project.
- In 2019-20, \$0.5 million of the FM deferred maintenance budget is being repurposed to fund the addition to the Walker Complex tentatively called the "Brock Active Living Complex".
- In 2019-20, there is a one-time increase to the ITS core application funding as a result of the Workday student information system implementation.

Figure 21: Facilities Management capital and related debt project budget

(\$000s)	2016-17 Actual	2017-18 T2 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast
New or "flexible"	5,958	2,449	5,650	3,239	2,809	2,879
Deferred maintenance	3,305	7,096	4,720	7,787	8,440	8,596
Total	9,263	9,545	10,370	11,026	11,249	11,475

Figure 22: Information Technology Services capital and related debt project budget

(\$000s)	2016-17 Actual	2017-18 T2 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast
New or "flexible"	1,500	2,832	3,523	4,832	4,953	5,077
Core applications	3,177	576	1,615	1,655	1,696	1,738
Total	4,677	3,408	5,138	6,487	6,649	6,815

Deferred maintenance funding

The following figure was developed as a forecasted funding plan for deferred maintenance to work towards established targets. While the 2016-17 Fiscal Framework forecasted both deferred maintenance and the resulting facilities condition index, work is currently underway to update the University's deferred maintenance project costs, recognizing that replacement costs also require more than physical asset replacement. Architecture and engineering design costs, project management costs and surrounding facilities requiring outdated building code upgrades for approved work permits need to be included in the overall project costs. For this reason, the forecasted impact on the FCI has been removed while work on an updated plan to address the full cost of the deferred maintenance backlog is developed. Increased funding to address the deferred maintenance backlog is expected and plans to secure funding from beyond the operating budget from third parties such as government and energy performance contractors will address this increase.

Figure 23

Deferred maintenance funding includes the following:

- Funded by operating (starting at \$5.1 million in 2015-16 and growing at Construction CPI each year) with the exception of 2016-17 (funding the post-MIWSFPA space moves and repurposing) and 2018-19 (funding the Brock Linc project and the Brock District Energy Efficiency project).
- Funded by parking revenue (starting at \$0.4 million in 2016-17 and growing by Construction CPI each year).
- Funded by increase in Facilities Renewal Program funds grant (additional \$0.4 million in each of 2017-18, 2018-19 and 2019-20).
- Repurpose of debt payments (starting in 2024-25).



Debt and borrowing

Targeted guidance

No new debt.

The financing model and funding envelopes allotted in the capital program are based on a pay-as-you-go model that forecasts no new debt. New capital requirements are highly dependent on donations and/or other incremental sources of funding not already worked into the Fiscal Framework. The intent of this target is not to limit flexibility, as from time to time there may be requirements to temporarily cash flow a capital project or even a contingency. The intent is to identify that long-term structural debt is not forecasted in the framework.

To repay the loan on the Marilyn I. Walker School of Fine and Performing Arts (MIWSFPA) by 2019-20; the loan on the Cairns Family Health and Bioscience Research Complex (Cairns) building by 2024-25; the debt (other than the bond) on residence loans by 2029-30.

The financing model emphasizes debt repayment with increasing contributions to debt repayment equal to the construction consumer price index. The increase is applied to accelerate the debt repayment so that funds can be repurposed to tangible investments and to ensure when the debts are repaid that the funds repurposed maintain their purchasing power.

An annualized rate of return on the sinking fund of 5 per cent from 2015-16 to final payment in 2045-46.

In 2005, we took out a 40 year bullet for \$93 million. This means in 2045, we need to repay the loan. The funding plan in this framework is based on a 5 per cent annualized rate of return plus additional payments starting when the debt (other than the bond) on residence loans is fully paid in 2029-30.

Update



As detailed in the 2016-17 Fiscal Framework, generally speaking there exists a concept of “good” debt and “bad” debt. The term “good” debt normally refers to situations where funds are borrowed to produce a positive financial return on investment, such as building a residence. The term “bad” debt normally refers to situations where funds are borrowed with no financial return on investment. A relevant example would be to cover operating losses. When an organization begins borrowing to cover operating losses, the organization's ability to continue operating comes into question. For this reason, most public sector organizations limit borrowing only for the purpose of raising funds for capital and related projects. As such, this Fiscal Framework Update reaffirms the targeted guidance set out in the 2016-17 Fiscal Framework, that long-term structural debt is not forecasted in the framework. As well, this update reaffirms to reinvest the debt payments back into capital preservation to maintain the buildings once the debt has been paid off. Figure 24 details the outstanding debt to 2023, including debt and net debt per student (fiscal full-time enrolment). Figure 25 shows the balances of Brock's current debt until they are fully paid and debt free in 2045.

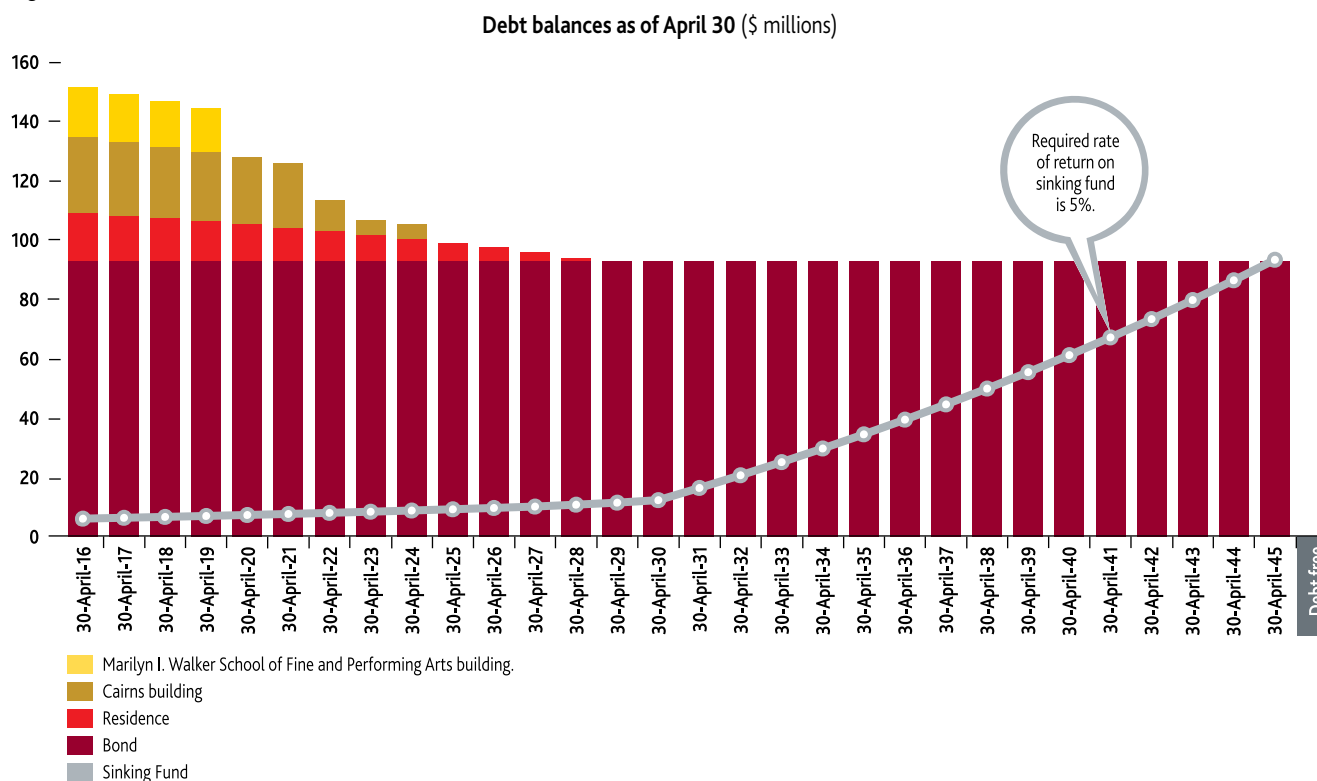


Figure 24: Outstanding debt

(\$000s) (unless otherwise noted)	April 30, 2015	April 30, 2016	April 30, 2017	Budget April 30, 2018	Forecast April 30, 2019	April 30, 2020	April 30, 2021	April 30, 2022	April 30, 2023
Bond	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000
Cairns building	26,269	25,583	24,863	24,109	23,319	22,491	21,623	20,714	10,154
Residence	16,801	16,037	15,215	14,333	13,385	12,366	11,271	10,095	8,931
Marilyn I. Walker School of Fine and Performing Arts (MIWSFPA)	17,400	16,680	15,960	15,240	14,520				
Total debt	153,470	151,300	149,038	146,682	144,224	127,857	125,894	123,809	112,086
Total student FFTE⁽¹⁾	20,056	19,885	20,086	19,983	20,780	21,309	21,822	22,368	22,848
Total debt/FFTE (in dollars)⁽¹⁾	7,652	7,609	7,420	7,340	6,941	6,000	5,769	5,535	4,906
Debt reduction strategy									
Sinking fund	5,462	5,647	6,413	6,322	6,639	6,970	7,319	7,685	8,069
Debt repayment reserve	475	950	2,895	3,917	5,220		2,937	6,159	
M. Walker donation – MIWSFPA	5,045	5,181	5,326	5,465	5,612				
Other donations – MIWSFPA	250	324	399	473	548				
Total assets for debt reduction	11,232	12,102	15,033	16,177	18,019	6,970	10,256	13,844	8,069
Net debt	142,238	139,198	134,005	130,505	126,205	120,887	115,638	109,965	104,017
Net debt/FFTE (in dollars)⁽¹⁾	7,092	7,000	6,672	6,531	6,073	5,673	5,299	4,916	4,553

(1) Fiscal full-time enrolment (FFTE) – used for tuition and grant forecasting. For a definition, refer to page 89 of the 2017-18 Budget Report.

Figure 25



Other salient guidance

The intent of the framework is not to establish guidance for every type of financial transaction and/or line in the financial statements, but to create guidelines for many of the major financial activities. The preceding pages identified a number of areas of guidance. This section highlights some additional areas which need specific mention.

Library acquisitions

The acquisition budget has increased from \$2,986,000 (2014-15) to \$4,216,000 (2017-18). This budget is forecast to increase further to \$4,841,000 by 2019-20. Over the course of five years, this represents an increase of approximately 62 per cent.

In 2009, Brock's Library became a member of the Canadian Association of Research Libraries (CARL), which includes 29 Canadian academic research libraries. In 2014-15, before any increases to the budget, Brock's Library had the smallest acquisitions budget in CARL. When adjusted for size of institution, Brock's Library ranked second last (\$179 per student). If all else remains constant with our comparators, by 2019-20 Brock will rise from 28th position to roughly 19th position (out of 29).

The 2016-17 Fiscal Framework set a target based on the *MacLean's* ranking to support additional investments in library acquisitions. While no changes to the actual funding plan for library acquisitions are expected, (i.e. growth at 2 per cent annually), Brock's Library is supportive of changing the benchmark metric in this Fiscal Framework Update to the CARL comparison. The rationale for this change is based on the reality that the *Maclean's* ranking awards points for the proportion of the library budget allocated to

acquisitions. One could improve the *Maclean's* ranking by simply cutting the non-acquisition costs of Brock's Library budget. While it is important to manage efficiencies in operating costs, the *Maclean's* metric does not facilitate Brock's aspiration to provide a competitive compliment of Library resources to students and researchers. Benchmarking our acquisitions on a per student basis against our association peers is strategically desirable, as this metric will ensure Brock's Library remains competitive with our peers.

Unrestricted net assets/reserves

The Framework supports the reinvestment of year-end surpluses back into the University. With the implementation of the revenue and expense allocation model, starting in 2018-19 all surpluses will be shared with the Faculties, which will be further explained in the revenue and expense allocation model section of this report. The portion that remains in central will be used to support initiatives related to University priorities.

Chargebacks, other revenue and other operating costs

Chargebacks, other revenue and other operating costs have been forecasted in this report at a 2 per cent increase annually. Budget developers are asked to take a bottom-up approach and review these revenues and expenses to ensure revenue is maximized and other operating costs are not higher than required. Going forward, chargebacks continued to be reviewed for elimination where appropriate. For example, in 2016-17, land line chargebacks were eliminated; in 2017-18, the majority of the Facilities Management charges were eliminated; and in 2018-19 photocopying chargebacks will be eliminated.





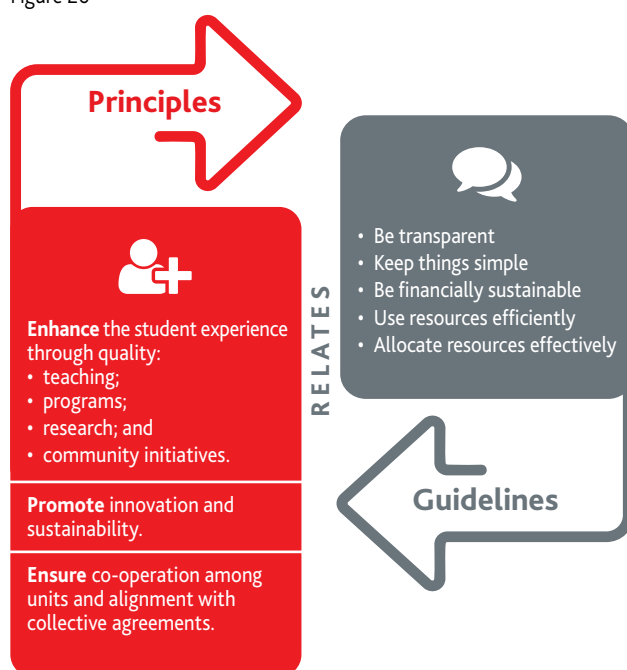
Revenue and expense allocation model

The Board of Trustees is committed to balanced budgets, increased investment in infrastructure renewal, continued support for key functions of shared services, while also ensuring that sufficient incremental revenue remains in the Faculties to support the academic and research missions of the University.

The revenue and expense allocation model (the model) is an enabling tool that will facilitate planning and enhance accountability in the budget process. The model assists in guiding strategic planning within the University's financial means. The model is not intended to replace policy or discretionary investment in institutional priorities. The model will not, in and of itself, increase net revenue for the University; it is simply a different method of revenue and cost allocation. However, it is expected to encourage Faculties and units to increase revenue and constrain costs, enhancing financial opportunities within their academic units and to the University as a whole.

The following three principles and related guidelines were adopted for the development of a new fair and equitable revenue and expense allocation model:

Figure 26



Universities adopting methods of allocating revenue and expense have increasingly adopted hybrids of Activity Based Management (ABM), also known as Responsibility Centred Management (RCM). RCM is not a new idea. Many other universities have implemented RCM, such as the University of Michigan (1998), University of New Hampshire (2001), University of Minnesota (2006), Syracuse University (2006), University of Toronto (2007), Ohio State University (2007), Kent State University (2009), Iowa State University (2010), University of Oregon (2010), University of Florida (2011), Saskatchewan University (2012), Cornell University (2013), University of Washington (2013), Queens University (2013), McMaster University (2014), University of Virginia (2014), and University of Arizona (2015).

RCM allocates revenue to the faculties that generate them, and direct and indirect costs are charged to the faculties that incur them, creating accountability for both academic and financial performance. The first step in RCM is to group units into responsibility centres, which typically include faculties, administrative service centres, and ancillary centres. These responsibility centres keep the majority of the revenue they earn while funding their direct costs and a share of central overhead and space utilization costs (indirect costs).

At the core of RCM is Activity Based Costing (ABC), which was developed by Cooper and Kaplan (1988) and the work of the Texas-based Consortium for Advanced Manufacturing-International (CAM-I). Under ABC, costs are assigned based on the activity that drives the cost. In the context of the education sector, a university's shared services are grouped together into similar cost bins and allocated to the faculty on the basis of the activity that drives the costs. For example, the costs associated with student services may be allocated based on the headcount of students in each faculty.

In the public sector, ABC is an option to build up accountability as the generated information can help the organization to explain, justify and take responsibility for every action taken. In turn, the quality and quantity of information needed for informed decision-making is improved, which can align faculty and unit spending with major strategic goals. ABC provides greater transparency, resulting in higher accountability for academic and administrative units.

That said, there is no perfect accounting model and there are no perfect ways of allocating revenues or expenses. The following cost drivers described in Figure 27 have been developed over the past three years by the Provost in consultation with Faculty Deans and University stakeholders.

Figure 27: Revenue and expense allocation – allocation methods

Units/Revenue/Costs allocated	Method	Source
Revenue for service teaching	50 per cent of the difference between tuition by Teaching Faculty (where courses are taught) and tuition by Faculty of major.	Revenue by Teaching Faculty from Power BI and tuition by Faculty of major general ledger.
Core Operating Grant	Weighted grant units (WGU's) of Faculty of major	MAESD
Other MAESD grants	International student headcount (Faculty of major) and Graduate Student FTE by Faculty	2017-18 Budget Report/Institutional Analysis
Graduate Studies	Graduate student headcount (Faculty of major)	2017-18 Budget Report/Institutional Analysis
Library	Faculty FTE and student headcount (Faculty of major)	2017-18 Budget Report/Institutional Analysis
Research Services	Three year rolling average of External Research Grants	2017-18 Budget Report/Research Services
CPI, Leadership ⁽¹⁾ , Marketing and Communications ⁽¹⁾ , Shared Service Support (Secretariat Office, Government Relations, Internal Audit, Institutional Analysis and Human Rights and Equity Services) ⁽¹⁾ , Capital, ITS ⁽¹⁾	Faculty/Librarian and staff FTE and student headcount (Faculty of major)	2017-18 Budget Report/Institutional Analysis
Student specific units (The Office of the Registrar, Student Life and Community Experience, Student Wellness Centre, Student Success Centre, Brock International, Co-op, Career and Experiential Education and Brock Sports) Ancillary Operations, Youth University, Department of Residence and University Global	Student headcount (Faculty of major)	2017-18 Budget Report
Financial Services (including procurement, SAFA and mail services) ⁽¹⁾	Three year rolling average of operating costs	2017-18 Budget Report
Human Resources ⁽¹⁾	Faculty/Librarian and staff FTE	2017-18 Budget Report
Development and Alumni Relations ⁽¹⁾	10-year rolling average of funds raised	Development and Alumni's Raiser's Edge tracking system
Facilities Management, Campus Security, Heritage Place Plaza and Community Agreements, Utilities, taxes and insurance, Financing	Net Assignable Square Metres (NASM)	Facilities Management
Scholarships, bursaries and student awards	2016-17 Scholarships, bursaries and students awards by student recipient (Faculty of major)	Student Awards and Financial Aid office and the Faculty of Graduate Studies

(1) Shared Services units.

The Figure 28 reports Brock's 2017-18 operating budget using the revenue and expense allocation methods. The results demonstrate revenues generated by each teaching Faculty offset by the direct costs within those Faculties, as well as allocations of all the remaining costs of the University. As an alternative view, Appendix A shows the same information including Research Services and the Faculty of Graduate Studies as revenue centres and transfers out to the Faculties.

Figure 28: Full revenue and expense allocation model – based on the 2017-18 Budget

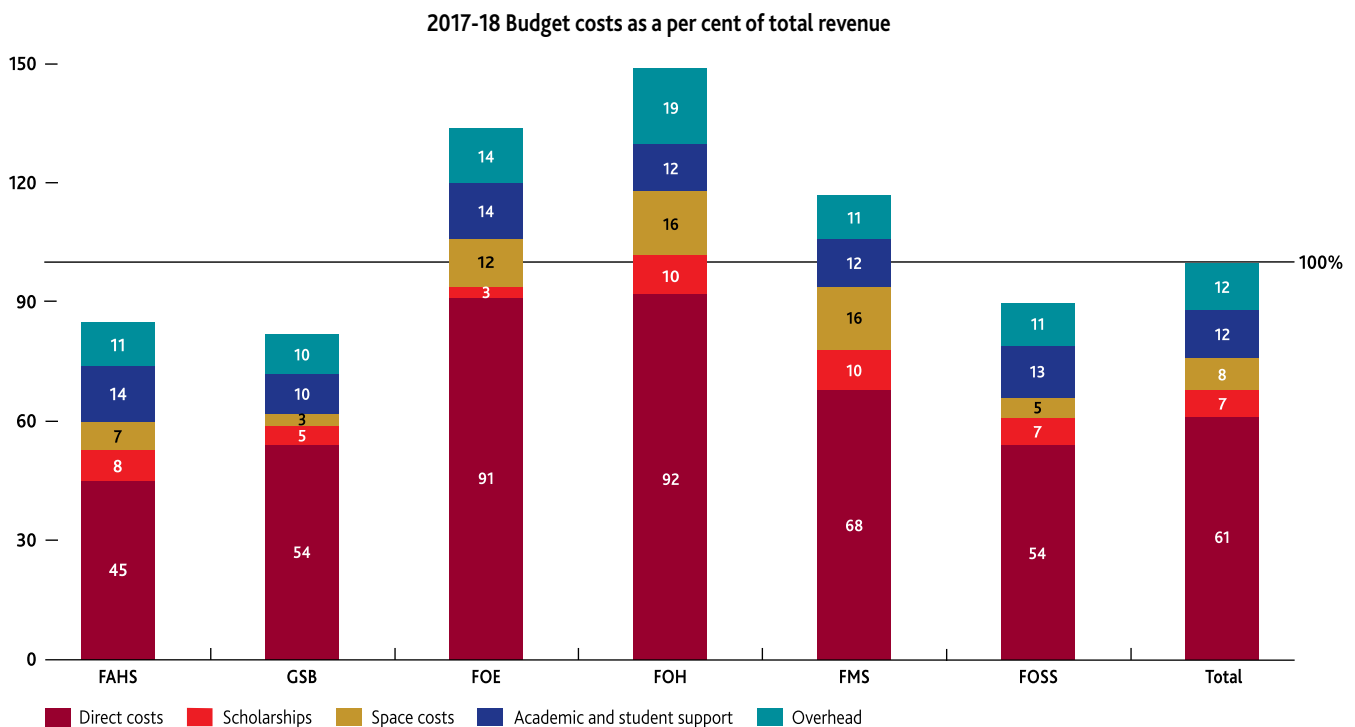
(\$000s)	Faculty of Applied Health Sciences	Goodman School of Business	Faculty of Education	Faculty of Humanities	Faculty of Mathematics and Science	Faculty of Social Science	Total
Revenue							
Global tuition by major (undergraduate)	25,018	31,325	5,875	10,280	13,991	40,431	126,920
Global tuition by major (graduate)	1,450	2,887	1,299	634	2,085	3,391	11,746
Service teaching adjustment (50%)	(4,174)	(4,438)	1,860	2,840	4,559	(647)	
Direct revenue	340	11,870	4,021	616	658	432	17,937
Grant	24,468	14,213	7,632	9,053	10,662	24,069	90,097
Total revenue	47,102	55,857	20,687	23,423	31,955	67,676	246,700
Contribution margins							
Faculty on-going personnel costs	17,267	22,393	12,103	16,814	18,384	29,300	116,261
Faculty temporary personnel costs	3,028	3,633	4,823	3,663	2,621	6,217	23,985
Faculty operating costs	839	4,040	1,887	1,165	740	1,179	9,850
Contribution margin (before scholarships and bursaries)	25,968	25,791	1,874	1,781	10,210	30,980	96,604
Fellowships, scholarships, bursaries and student awards	3,719	2,995	592	2,280	3,313	4,442	17,341
Contribution margin (after scholarships and bursaries)	22,249	22,796	1,282	(499)	6,897	26,538	79,263
Space costs							
Space costs	3,349	1,403	2,484	3,634	4,987	3,432	19,289
Net contribution (after space costs)	18,900	21,393	(1,202)	(4,133)	1,910	23,106	59,974
Academic and student specific support units							
Research Services (included TDIs, CCOVI, etc.)	534	73	70	78	931	425	2,111
Faculty of Graduate Studies	158	407	225	65	132	347	1,334
Library	2,684	2,313	1,103	1,169	1,276	3,401	11,946
Centre for Pedagogical Innovation	220	190	92	97	106	279	984
Student Specific ⁽¹⁾	3,222	2,759	1,308	1,359	1,506	4,045	14,199
Net contribution (before overhead allocations)	12,082	15,651	(4,000)	(6,901)	(2,041)	14,609	29,400
Overhead allocations							
Shared services	4,938	5,231	2,541	3,833	3,038	6,713	26,294
Ancillary operations contribution	(1,184)	(1,014)	(481)	(499)	(553)	(1,487)	(5,218)
Capital	1,704	1,474	712	750	824	2,159	7,623
University Global	(189)	30	172	360	262	66	701
Net contribution	6,813	9,930	(6,944)	(11,345)	(5,612)	7,158	0
Transfer receipts/(payments)	(6,813)	(9,930)	6,944	11,345	5,612	(7,158)	(0)

(1) Includes Brock Sports, Brock International, Co-op, Career and Experiential Education, Registrar, Student Life and Community Experience, Student Success Centre and Student Wellness and Accessibility.

Figure 29 details a visual representation of the data shown in Figure 28. It portrays expenses as a percentage of revenues allocated by each Faculty and in total. The model identifies three Faculties generating net positive contributions and three Faculties requiring additional funding from these positive contributions to support their operations. This visual is not intended to suggest there is a problem with the current funding model, rather this visual is intended to encourage thoughtful dialogue on funding allocations, provide awareness of the interdependencies across Faculties and support longer-term planning and budget allocations. Figure 30 depicts how this model could be used to facilitate longer-term planning. Notice the end goal is not to achieve perfect balance between revenue and expense allocations for each Faculty. In other words, the University recognizes certain programs and Faculties will always require transfer funding to support their operations. The Council of Academic Deans under the

leadership of the Provost and Vice-President Academic have committed to a 5 per cent reduction in transfer payments, per year, over a 10-year period. While challenging in the early phases to gain momentum, should these reallocations materialize, Faculties with the capacity to grow will unlock the resources to embrace this growth and in turn generate more revenue for the institution. This model also facilitates the establishment of Faculty Deans' surplus accounts that will share in the year-end surpluses of the University and allow for strategic reinvestments directly into the Faculties to support their academic and research missions. Adoption of this model is one of many decisions we can make to improve our financial independence and flexibility to grow as a world class comprehensive university.

Figure 29



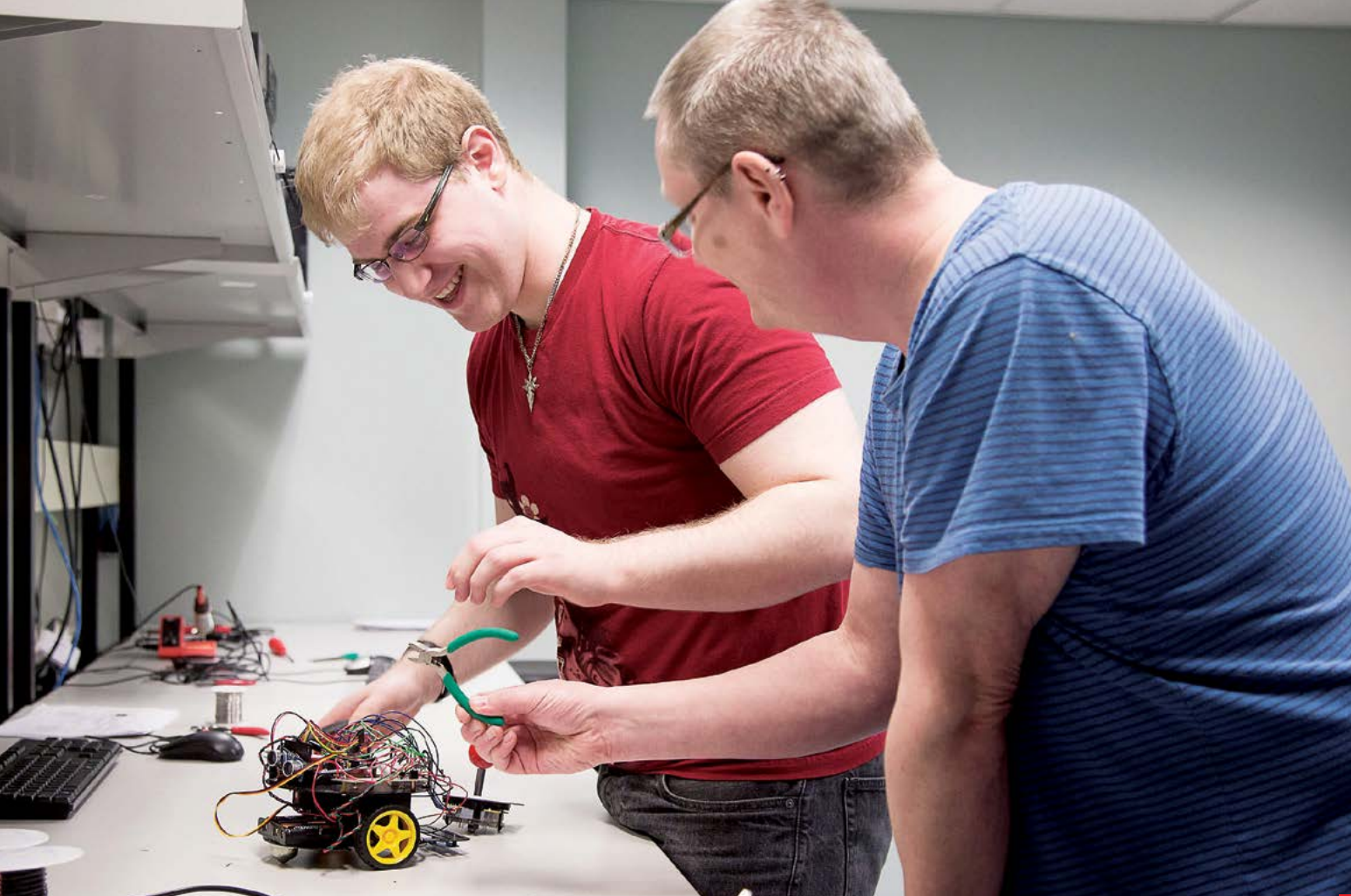
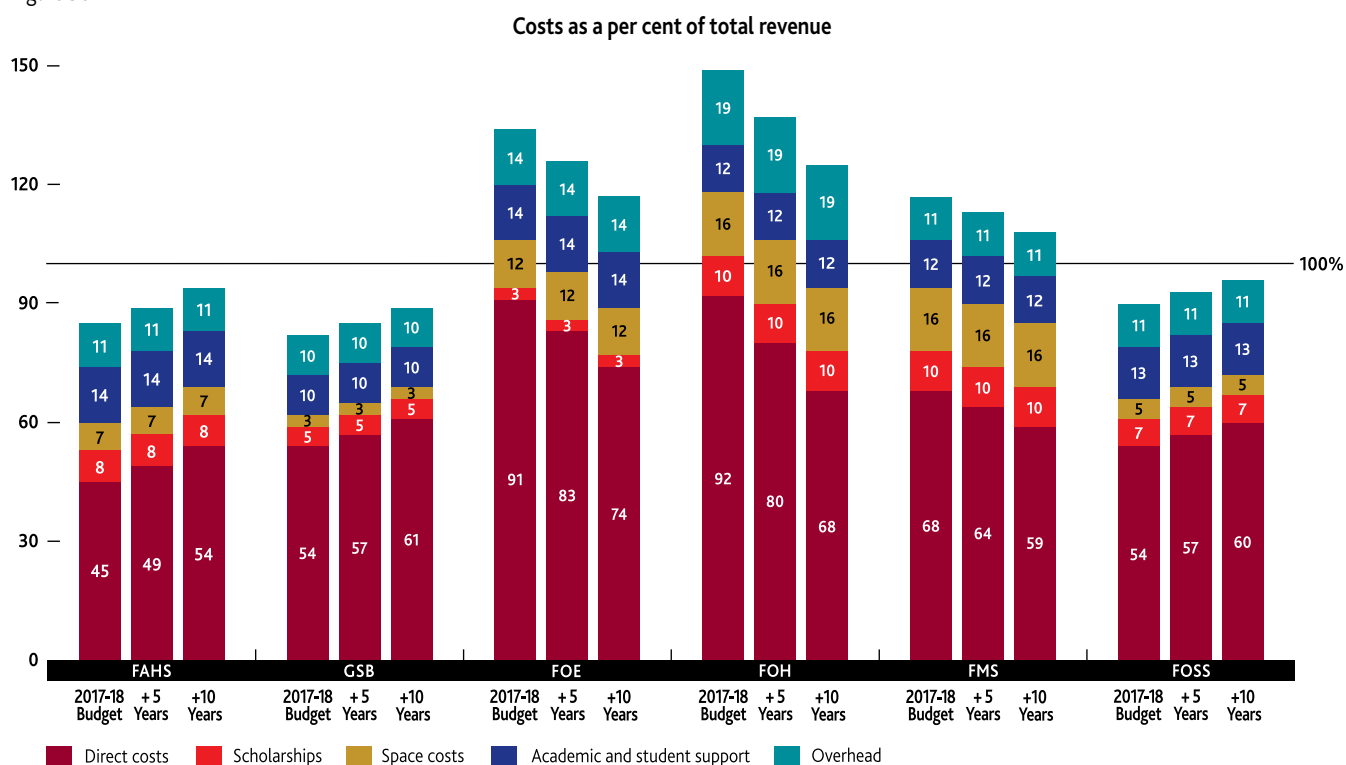


Figure 30





Next steps in budgeting

It can be just as important to structure the planning process and provide updates to the process as the actual planning that takes place. The following table illustrates a number of projects currently underway within the University that will impact the Fiscal Framework and future budget development:

Figure 31

Projects	Comments	Enabler
Revenue and expense allocation	<p>In-progress: This project was started in early 2015, some may argue it was actually started back in 2008. The most recent reports can be found at brocku.sharepoint.com/Financial-Services/Pages/Revenue-and-Expense-Allocation-Project.aspx. Currently, an effort is being made to obtain better data on the drivers of the model, such as space utilization, and the Deans are reviewing the tuition and grant allocations.</p> <p>Impact for future budgets and the Fiscal Framework: While the current project was designed to look at revenue and expense allocations, it was always identified that this information could be used by the Provost and the Deans to establish a budget model for the Teaching Faculty's envelope of the budget. The Deans have commented at previous Council of Academic Deans – Finance (CAD Finance) meetings that they are interested in pursuing this as a model. As this develops, the Teaching Faculties' envelope of the budget will certainly become more defined.</p>	Financial Services through CAD Finance
Multi-year budgeting	<p>In-progress: The new accounting system, Workday, went live in May 2016. Its budget module supports multi-year budgeting, which is an activity already done by several universities to support financial planning.</p> <p>Impact for future budgets and the Fiscal Framework: The forecast provided on page 8 is prepared at a level called the object of revenue and expense level, which provides a directional view, but a less accurate one at that. The introduction of multi-year budgeting through Workday at the unit level will enhance financial planning through more timely and accurate forecasts and scenario development to support decision making.</p>	Financial Services: Workday
Senate program prioritization	<p>In-progress: Senate completed a process of reviewing academic programs in 2015.</p> <p>Impact for future budgets and the Fiscal Framework: This document could impact how the Teaching Faculties' budget envelope and perhaps others are allocated.</p>	Senate
SIS	<p>In-progress: Included in the approved 2016-17 capital budget was initial funding to research and initiate the process of obtaining a new student information system. At a minimum, it is expected this system would include standard registration capabilities along with customer relationship management software, student billing and financial awards modules.</p> <p>Impact for future budgets and the Fiscal Framework: Initial discussions with the Registrar's Office and Information Technology indicate a new system is required; from a financial planning perspective, the benefits extend from billing, processing financial awards to more timely and accurate forecasts, scenario development support decision making, and enhanced student experience.</p>	Registrar's Office: Core Application Committee

Critical Thinking and Research: Issues

- Was the research funded? By whom?
- Are key concepts defined? ("A study of loyal fans.")
- How did you pick your research sample? (Resulting in bias?)
- Did the researchers "lead" the participants? (Ex. "Waste tax dollars" vs. "Improve our quality of life.")
- Was it published in a peer-reviewed journal? (Only after other researchers are satisfied it's of quality.)
- Did the researcher use statistics appropriately? (Ex. Reporting the "average" is meaningless if everyone is at one extreme or the other.)



Figure 32: Alternate representation of revenue and expense allocation model – based on the 2017-18 Budget

(\$000s)	Faculty of Applied Health Sciences	Goodman School of Business	Faculty of Education	Faculty of Humanities	Faculty of Mathematics and Science	Faculty of Social Science	Faculty of Graduate Studies	Research Services ⁽¹⁾
Revenue								
Global tuition by major	25,018	31,325	5,875	10,280	13,991	40,431	11,746	
Graduate teaching allocation (100%)	1,450	2,887	1,299	634	2,085	3,391	(11,746)	
Teaching Faculty service teaching adjustment (50%)	(4,174)	(4,438)	1,860	2,840	4,559	(647)		
Direct revenue	340	11,870	4,021	616	658	432	310	236
Grant	24,468	14,213	7,632	9,053	10,662	24,069		1,750
Total revenue	47,102	55,857	20,687	23,423	31,955	67,676	310	1,986
Expenses								
Faculty on-going personnel costs	17,267	22,393	12,103	16,814	18,384	29,300	1,234	1,534
Faculty temporary personnel costs	3,028	3,633	4,823	3,663	2,621	6,217	50	11
Faculty operating costs	839	4,040	1,887	1,165	740	1,179	256	1,645
Total Faculty expenses	21,134	30,066	18,813	21,642	21,745	36,696	1,540	3,190
Contribution margin (excluding scholarships)	25,968	25,791	1,874	1,781	10,210	30,980	(1,230)	(1,204)
Fellowships, scholarships, bursaries and student awards	2,594	2,572	47	1,565	1,534	2,652	6,377	
Fellowships, scholarships, bursaries and student awards allocation	1,125	423	545	715	1,778	1,791	(6,377)	
Contribution margin (including scholarships)	22,249	22,796	1,282	(499)	6,898	26,537	(1,230)	(1,204)
Space costs	3,349	1,403	2,484	3,634	4,987	3,432	104	907
Research Services allocation	534	73	70	78	931	425		(2,111)
Faculty of Graduate Studies allocation	158	408	225	65	132	347	(1,335)	
Remaining support/capital costs	11,395	10,982	5,477	7,068	6,460	15,175		
Net contribution	6,813	9,930	(6,944)	(11,345)	(5,612)	7,158	-	-
Transfer receipts/(payments)	(6,813)	(9,930)	6,944	11,345	5,612	(7,158)	-	-

(1) Includes funding of the Cool Climate Oenology and Viticulture Institute, the Jack and Nora Walker Canadian Centre for Lifespan Development Research, the Niagara Community Observatory as well as Brock's five transdisciplinary hubs.

Appendix B

The following represents a fourth enrolment scenario along with the supporting calculations detailing that the required growth rate of 9 per cent in enrolment is necessary for the University to maintain the current student to faculty and staff ratio.

- The marginal revenue per student is \$11,978, assuming current mix of students.
- The marginal cost per student, if we wish to hire additional faculty and support staff to maintain the current ratio of student to faculty and support staff, is \$9,868⁽¹⁾.

With an \$18-million deficit to 2022-23, we can solve for the required growth in students over the same period to break-even, where x represents the increase in the number of students required.

$$\begin{aligned} \$9,868x + \$18,059,000 &= \$11,978x \\ \$18,059,000 &= \$2,110x \\ \$8,559 &= x \end{aligned}$$

Therefore, the result is that enrolment would need to grow by **9%⁽²⁾** per year for the University to maintain the current student to faculty and staff ratio.

1. Currently, we have 588 faculty members or 27 (15,626 / 588) degree seeking UG students per faculty member. A 2 per cent growth for 5 years $15,626 \times 1.02^5 = 17,252$ degree seeking students in 5 years from now (1,626 increase in students). If we were to maintain the same student to faculty ratio we would need to hire an additional 61 faculty members. $17,252 / x = 27$ (solving for x Faculty required is 649). The incremental Faculty cost and overhead support costs to service the additional 1,626 students is assumed to be \$16,048,295 based on projected average faculty salaries and currently negotiated salary increases. Therefore we can assume the marginal cost of an additional student is $\$16,048,295 / 1,626 = \$9,868$ per student.

2. $[(15,626 + 8,559) / 15,626]^{1/5} - 1$

Inside back cover: Close-up photo of the Lime butterfly wing, which is also shown as a ghosted image on the cover.



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