

The Ontario University Funding Model in Context

Higher Education Quality Council of Ontario

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Introduction

Ontario has launched a review of its university funding model. The “funding model” is the rule set by which the province’s operating grant, managed by the Ministry of Training, Colleges and Universities (MTCU), is distributed to the province’s 20 publicly assisted universities to support their teaching, research and service missions.¹

The government’s recently released University Funding Model Reform Consultation Paper defines the scope of the review as:

“The annual operating grants to universities provided through the university funding model. This represents about \$3.5 billion of government investment.” (MTCU)

The review encompasses the entire amount of annual (and, in recent years, annually increasing) MTCU direct operating support to universities. It includes the variously named “basic operating,” “general purpose” or “enrolment driven” grant universities may expend on their general operations. It includes all of the “special purpose” grants MTCU provides to drive identified policy or programmatic priorities.

There is a parallel funding model in place for colleges of applied arts and technology. Other Ontario ministries and agencies fund the universities for research and other specific purposes. The province also controls the level of domestic tuition fees universities may effectively charge. MTCU indirectly supports universities via students by way of non-repayable student assistance tuition subsidies. While these elements are all outside the scope of the review, they provide important context.

This paper examines the university funding model from two perspectives: the perspective of institutional revenue and the perspective of total government funding in support of universities. The purpose of the paper is to help contextualize and position the funding model within the overall revenue and expenditure mosaic for Ontario universities. That, in turn, will help the reviewers – the government has positioned this as a consultative review, so many are involved – better understand the interplay between the funding model and other revenue sources and behavioural drivers.

¹ For simplicity, in this paper we use the term “funding model” to refer both to the MTCU operating grant itself and to the rule set for its distribution.

A. THE FUNDING MODEL IN CONTEXT OF TOTAL UNIVERSITY REVENUES

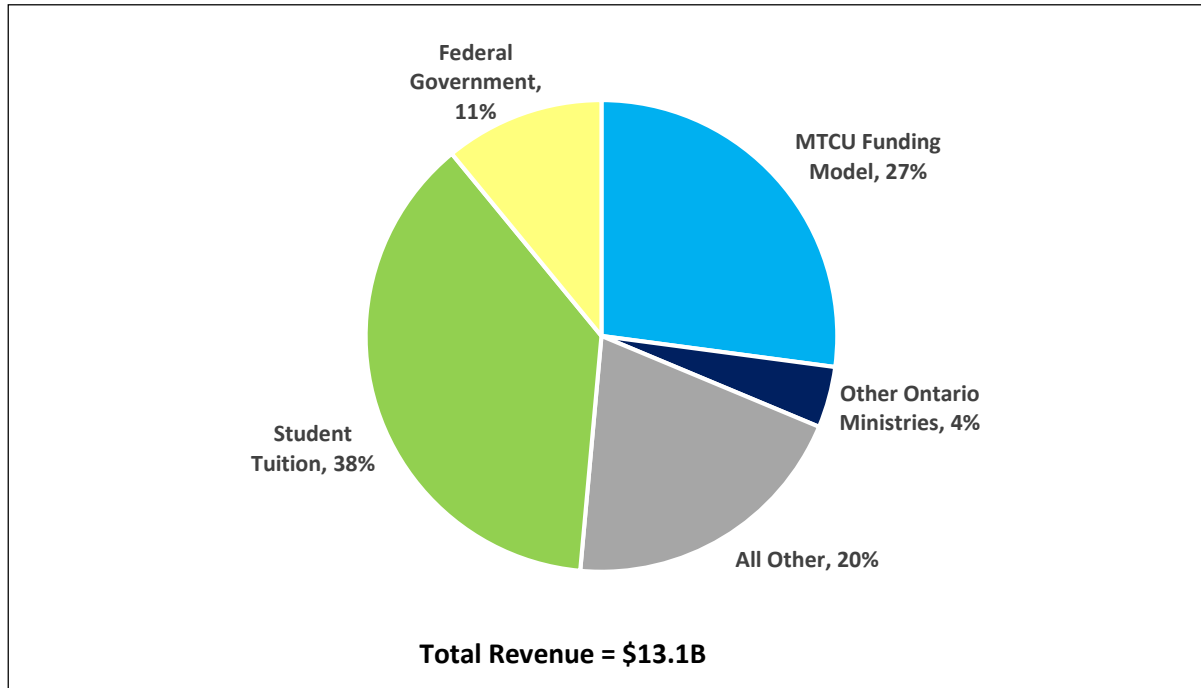
Figure 1 positions the funding model in the context of total annual operating revenues for Ontario's university system.

As of 2013-14, the latest year for which data have been published, the \$3.5B funding model represented 27% of \$13.1B in total annual operating revenues at the system level.

Recent HEQCO research has revealed considerable differentiation among Ontario's universities with respect to their missions, research intensity, program mix, and undergraduate-to-graduate enrolment weightings (HEQCO, 2012, 2013). These differences are reflected in the revenue composition for each of the individual institutions represented collectively in Figure 1. Figure 2 shows the same 2013-14 total university revenue for the institution with the highest share (Nipissing University – 45%²) and lowest share (University of Toronto – 20%) coming from the MTCU funding model.

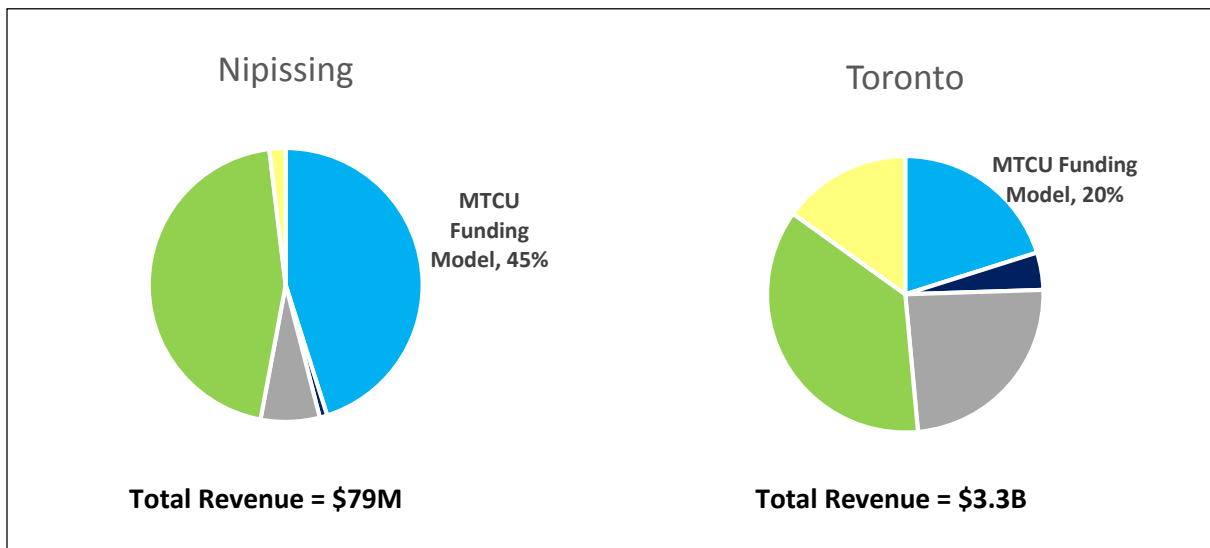
² Algoma posted a slightly higher dependency on MTCU funding model revenue than did Nipissing in 2013-14. However, given Algoma's status as a new university still in receipt of transitional funding, we have eliminated it from the comparative analysis.

Figure 1: Ontario Universities Total Revenue, 2013-14



Source: Council of Ontario Universities (COU), Council of Ontario Finance Officers (COFO). Excludes Capital.

Figure 2: Total Revenue for Nipissing University and the University of Toronto, 2013-14



Source: COU, COFO. Excludes Capital.

An alternate view of revenues: The unfettered “operating fund”

Figure 1 above shows all university revenues, which is important to fully situate and scale the share contributed by the funding model. Another commonly applied approach to presenting the funding model in context is to show it as a share of the university *operating fund*. This is the approach used in the MTCU Consultation Paper.

The operating fund is a defined \$8.8B subset of the \$13.1B total revenue shown in Figure 1. It focuses specifically on university revenue “that accounts for the institution’s primary operating activities of instruction and research, other than sponsored research” (CAUBO, 2012-13).³ The principal revenue sources within the operating fund are the provincial funding model and student tuition fees. The operating fund represents 2/3rd of total university system revenue. For greater clarity, Appendix A describes the other funds in the universities accounting model, and illustrates the intersection between total revenue (Figure 1) and the operating fund.

Expenditure of operating fund revenue is largely unfettered, providing universities with maximal spending flexibility to meet their teaching, research and community service missions, each in accordance with its differentiated capacities and priorities. By contrast, the remaining \$4.3B of total revenue is tied to specific expenditures. For example, sponsored research revenue must be expended on identified research projects and activities. Trust revenues are gifts which must be spent in accordance with the donors’ specific instructions. Revenues from ancillary operations (such as the bookstore, residences) are generally offset by the cost of providing those services.

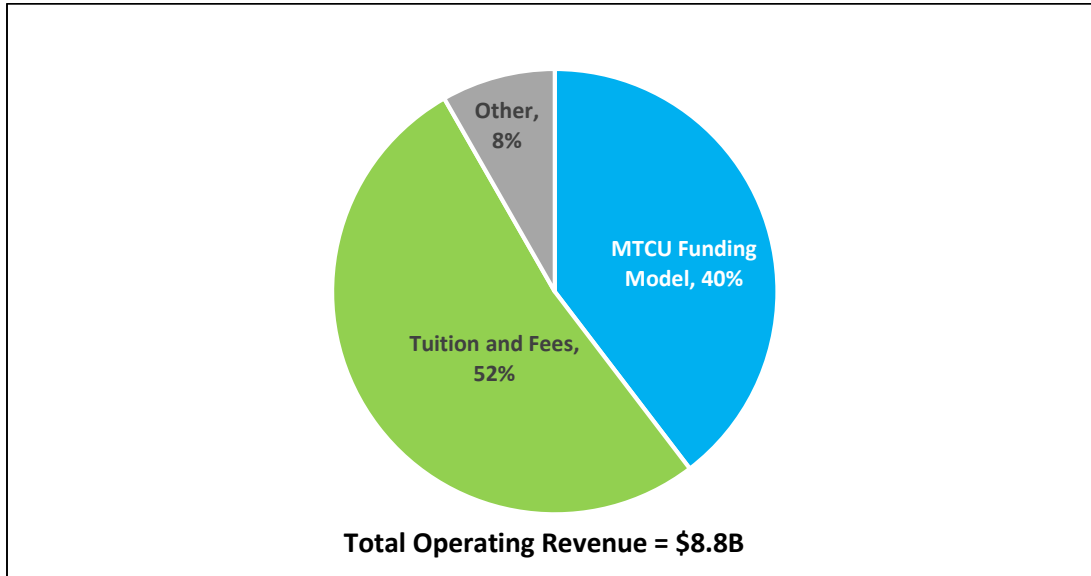
Figure 3 shows the operating fund by source of revenue for the university system. Even on this “tighter zoom” on the unfettered revenue available to each university to support teaching and (non-sponsored) research, the MTCU funding model represents a smaller share of revenue than does tuition fee revenue.⁴

To illustrate again the diversity of the system, Figure 4 shows the composition of the operating fund for the two respective universities whose operating fund revenue is most reliant (Laurentian – 54%) and least reliant (Toronto – 34%) on the funding formula.

³ We quote here the concise definition supplied by the Canadian Association of University Business Officers. However, the data we have used to construct Figures 3 and 4, consistent with the data source used in the MTCU Consultation Paper, are from the Council of Ontario Universities (COU)/Council of Ontario Finance Officers (COFO). COU/COFO data roll up to CAUBO with relatively minor adjustments that do not impact the overall revenue picture.

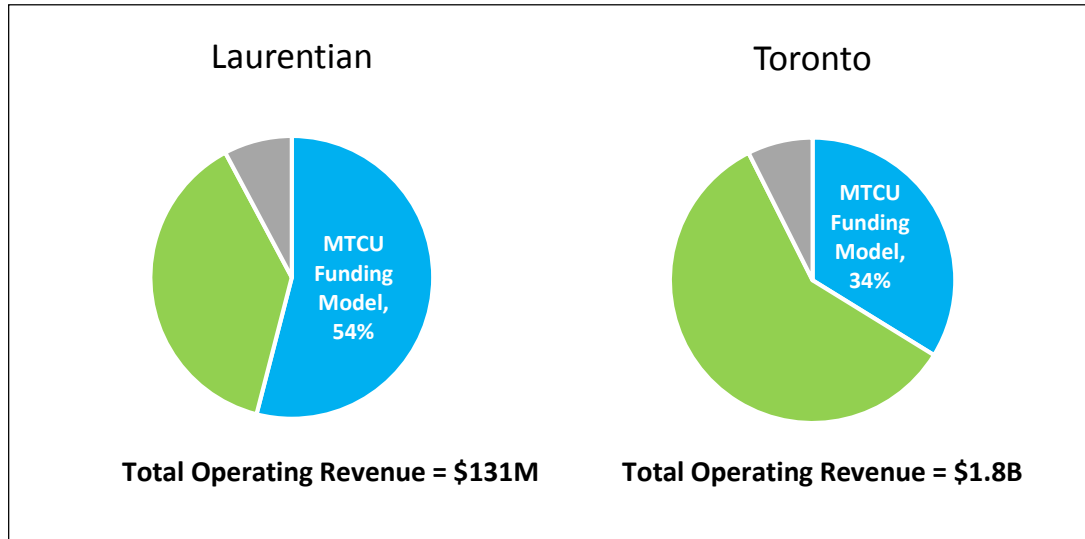
⁴ Figure 3 is similar to the revenue chart on page 10 of the MTCU Consultation Paper, though we have aggregated the revenue sub-sources in order to highlight the key revenue sources at play within the fund: the funding model and tuition.

Figure 3: Ontario Universities Operating Fund, 2013-14



Source: COU, COFO

Figure 4: Operating Fund for Laurentian University and the University of Toronto, 2013-14



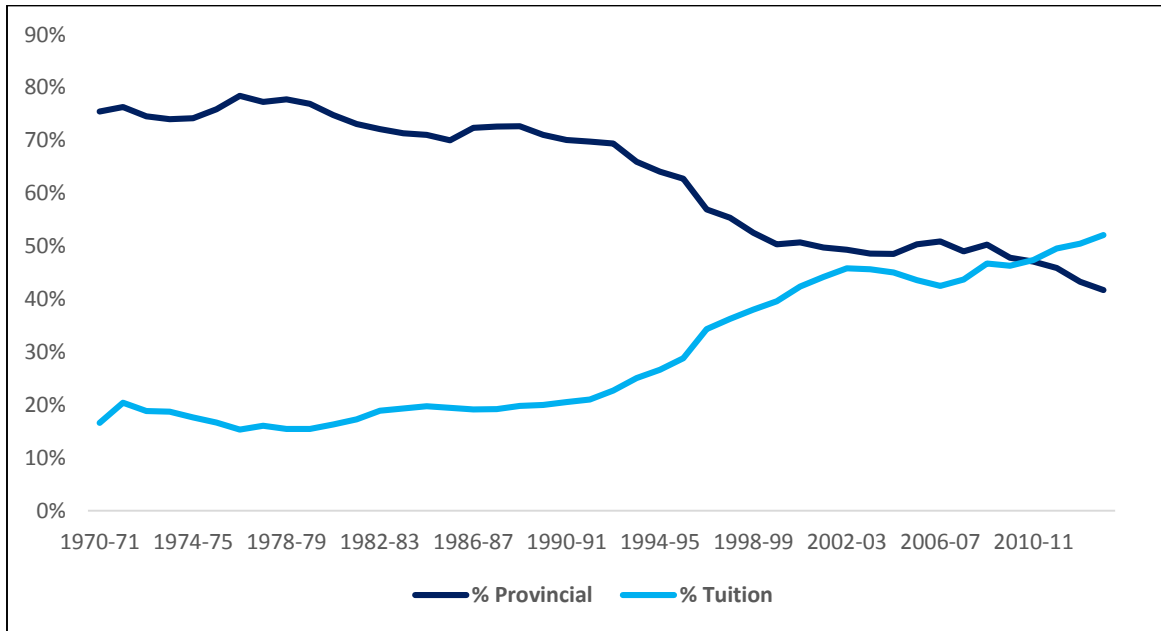
Source: COU, COFO

What drives the distribution of the operating fund in Ontario?

Tuition and the funding formula, the dominant sources of revenue in the operating fund, are both enrolment-driven.

Tuition is inherently so, without buffers, time lags or averaging mechanisms to mitigate the annual revenue impact of enrolment changes. As recently as 1991-92, the funding model provided 70% of total operating fund revenue. Its share has been decreasing steadily, offset by an increase in the share of total operating fund revenue provided through tuition. To illustrate this trend, Figure 7 shows the proportions of system-wide operating fund revenue from the funding model and from tuition for the period 1970-71 to 2013-14. Looking ahead over the near term, the Ontario tuition policy framework, in place until 2017-18, permits tuition revenue increases of 3% annually (plus or minus changes in enrolments). Given that the annual increase of moneys available for the funding model announced in the 2015 Ontario Budget is lower than this, the trend shown in Figure 5 will likely continue.

Figure 5: Tuition and Government Grants as a Share of Operating Fund Revenue



Source: Statistics Canada, CANSIM table 478-0007 and COFO

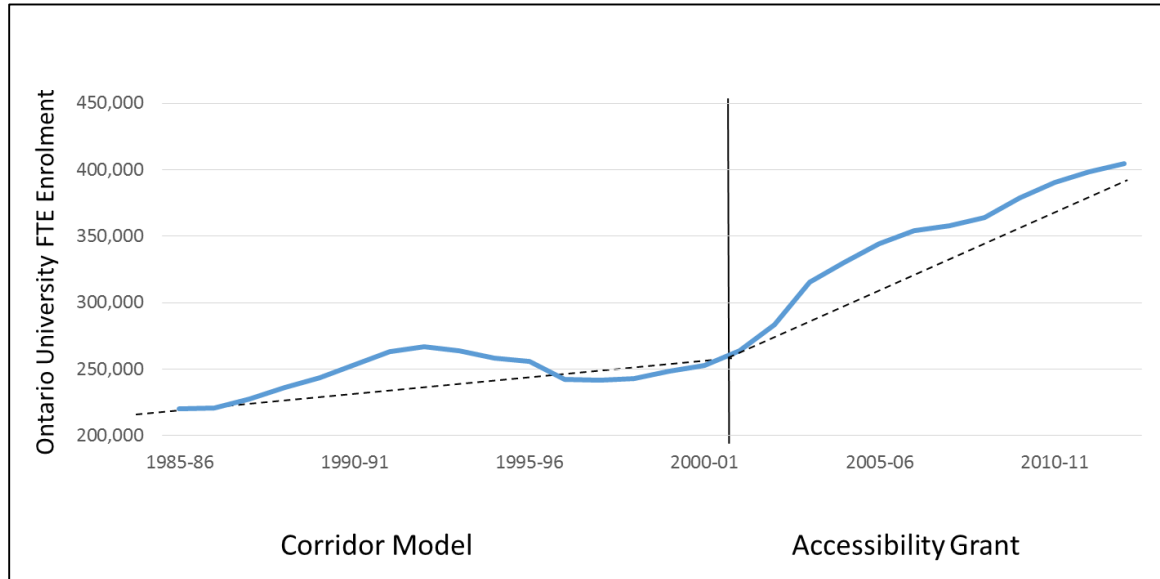
As noted in the MTCU Consultation Paper, the current funding model is also predominantly enrolment-based. In fact, the only significant change to the formula in recent years has been to make it more enrolment-sensitive. Prior to 2001, funding “corridors”, negotiated with and assigned to each university, mitigated the impact of enrolment changes on institutional shares of the funding model. The result was an emphasis on share stability over enrolment responsiveness. Funding shares to individual institutions did not automatically adjust as enrolment levels at the institution and across the system changed.

Beginning in 2001, the government superimposed an enrolment-driven accessibility envelope on top of the then existing model, to prepare the sector to accommodate the double-cohort of high school graduates resulting from the elimination of grade 13. Variants of this envelope have remained in place

ever since. Ontario has added sufficient additional moneys to the funding model each year to pay for the measured increases in enrolment. The model has not had to deal with the question of how it might respond in a situation where enrolment growth outpaces growth in additional new funding.⁵

Figure 6 illustrates the change in the funding model beginning in 2001 and superimposes the trend in actual measured full-time equivalent university enrolment.

Figure 6: Recent Changes to the Funding Model



Source: MTCU

Very little of the MTCU funding model is distributed based on performance or outcomes other than enrolment. The MTCU Consultation Paper formally identifies \$154M or 4% of the total distributed on performance. \$23M is distributed on measured graduation and graduate employment performance. The balance, \$131M, is technically held back each year from each institution until it completes its annual Multi-Year Accountability Agreement (MYAA). MYAAs are predominantly reporting instruments absent performance expectations, and no institution has ever had its enrolment-based share of this fund withheld.

⁵ A funding model could work in both directions: distributively, to determine the share of available funding earned by each institution, and summatively, to determine the overall level of funding to be made available to share. An example is the province's funding model for school boards. The university model is a distributive one only. However, in recent years it has behaved summatively as well, as the annual amount available has been adjusted fully for enrolment growth. It is difficult to imagine that this state of balance can be maintained into the future, given the province's fiscal challenges.

How do other provinces' funding models work?

Through the coordinated efforts of the Canadian Association of University Business Officers, all Canadian universities and provincial systems report operating fund revenue on a comparable basis.

Across Canada tuition, which is a smaller share of operating fund revenue in all other provinces than it is in Ontario, is of course enrolment-driven.

Two provinces (Prince Edward Island and Newfoundland and Labrador) are single university jurisdictions, and thus have no need for a funding model to distribute provincial funding among institutions. In the remaining seven other provinces, the funding model is anchored on one of two approaches:

- On the basis of enrolment, as it is in Ontario. Examples are: Quebec and Saskatchewan
- As a fixed share grant, which simply means that each institution's annual share is locked and moves up or down by the same percentage as the overall provincial quantum available for distribution. The shares themselves may at some point in time have been generated based on enrolment, but those shares are not regularly re-calculated as enrolment changes through time. Examples are: Manitoba and British Columbia

The distinction between fixed share and enrolment sensitive models is never absolute. Historically, provinces running fixed share models have eventually re-examined and adjusted the shares, perhaps after several years or as the result of a negotiation process. Or, they have switched back and forth between an enrolment sensitive and a fixed share model. Thus, even under a fixed share funding model, the promise of funding rewards for enrolment growth continues to be a behavioural driver.

A recent report published by HEQCO finds only two examples of performance based funding in Canada. The first is Ontario, discussed above. The second is Alberta, which tied a small proportion of government funding to performance indicators for a number of years, but has recently suspended its performance envelope. (Zuskin)

How do Ontario universities expend their funding model revenue? Teaching and research missions

Universities have two principal missions: teaching and research.⁶ The government's articulated focus is primarily on the funding model's role as a source of teaching revenues and as a tool for teaching mission outcomes. It is also important to recognize its important role in supporting the research mission.

Of the total \$13.1B in overall operating revenue, we have identified \$8.8B in unfettered operating fund revenue. The remaining \$4.3B is restricted in various ways. Of that \$4.3B, universities receive \$2.6B specifically earmarked for research activity. This "sponsored research" revenue must be expended on research contracted for moneys received. It represents 20% of total revenue, though again with

⁶ We acknowledge the third mission, community service. Community service is smaller in terms of activity and expenditure levels. In order to focus the discussion, we set it aside for the balance of this paper.

considerable differentiated weighting between institutions, from a high of 31% at Toronto to a low of 3% at Nipissing. The principal sources for dedicated or sponsored research funding are:

| | | |
|------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------|
| Federal research funding | \$1.3B | Includes granting councils, Canada Research Chairs, Canada Foundation for Innovation, and other programs |
| Ontario research funding | \$0.3B | Includes the Ministries of Research and Innovation, Health, Agriculture and Food, and others |
| Donations, non-government grants and contracts | \$0.8B | Predominantly grants and contracts between universities and for-profit and not-for-profit organizations |

Appendix B provides an illustration of which portions of the revenue shown in Figure 1 are sponsored research revenue.

Sponsored research revenue offsets some, but not all, of universities' research expenditures. Sponsored research contracts typically do not pay for the salaries of principal investigators, nor for all associated overhead costs. They do not pay for the research activity of faculty above and beyond what was secured through sponsored research funding.

These additional research mission costs are supported from the operating fund. Further, if one assigns tuition fee revenue, paid by students, entirely to expenditures in support of the learning mission, then these additional costs of research are entirely born by the \$3.5B funding model.

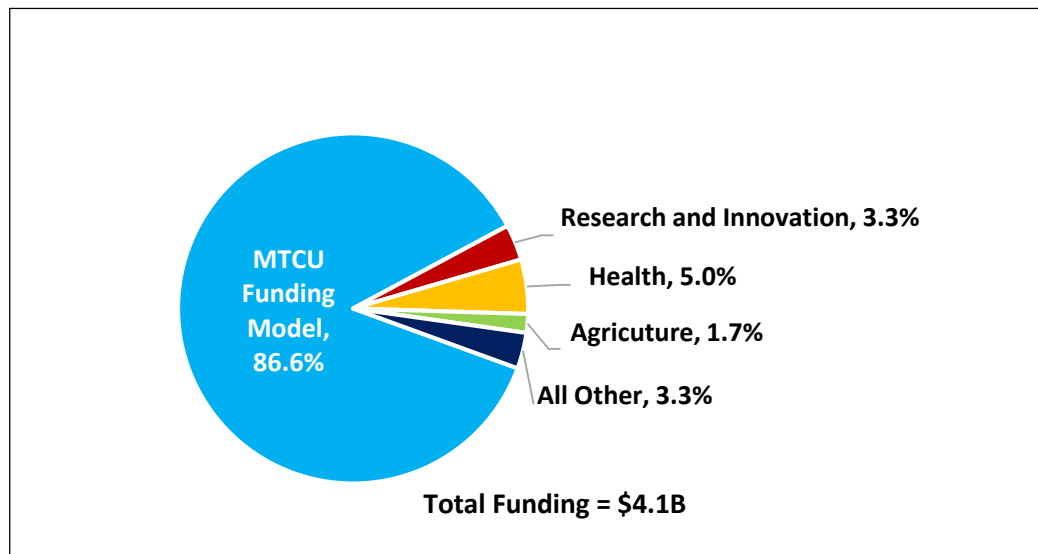
In 1994-95, the Ontario Council on University Affairs analyzed then-existing revenue and expenditure patterns and faculty workload data to estimate the proportion of the funding model that supported research activity. OCUA's estimate was about half, with considerable variance between institutions reflecting their differentiated activities. Given that tuition is today a much larger share of the operating fund than it was in 1994-95 (see Figure 5), it is likely that a larger share of the funding model can be attributed to the support of the research mission today.⁷

⁷ The OCUA methodology mapped 95% of tuition revenues to expenditures on the teaching mission. The underlying logic is that students pay tuition in exchange for teaching services. The consequence is that all of the research expenditure from the operating fund must be supported by the funding model. Alternatively, one could assign both tuition and funding model revenues across the teaching and research missions proportionally. The expenditure of tuition revenue is, after all, equally unfettered. The underlying finding is fundamentally the same: that considerable research expenditures, specifically those above and beyond the levels of sponsored research revenue received by universities, are supported out of the operating fund, either from the funding model or from a combination of tuition and the funding model.

B. OTHER GOVERNMENT FUNDING PROVIDED TO UNIVERSITIES

From the province's perspective, the funding model represents 87% of total Ontario revenues to universities, as shown in Figure 7.

Figure 7: Ontario Government Funding for Universities, 2013-14



The federal government contributes 11% to total university revenue (see Figure 1), predominantly for sponsored research. In all, the two orders of government directly contribute 41% of total university revenue. The province has indirect control over a further 24% of total revenue, representing the domestic share of tuition revenue⁸.

In addition to these direct funding supports, Ontario in partnership with the federal government indirectly subsidizes university tuition revenue through its student assistance program. In an analysis last year, HEQCO estimated that up to 40% of university tuition revenue is underwritten by non-repayable OSAP and tax-credit assistance (HEQCO, 2014).

C. HEQCO COMMENTARY

The funding model is a relatively small source of operating revenue, as small as 20% of total institutional revenue in the most extreme case. Its leverage to drive outcomes is necessarily limited and contextualized by the influences of the balance of funding. Since the current review is an exercise in how to allocate the funding model only and not the other 80% (again, in the most extreme case), it is

⁸ Based on just the reported core domestic tuition revenue, excluding miscellaneous fees. Legally, universities may charge whatever level of tuition they wish for both domestic Canadian and international students. Practically, the government controls the level of domestic tuition fees by reducing the funding model allocation, dollar for dollar, if a university exceeds the level of domestic tuitions established by government.

important that this smaller slice of funding be used in a focused and strategic way to drive towards desired system and institutional goals.

Currently, the funding formula has considerable leverage because it moves in perfect alignment with tuition. Both drive enrolment growth, and only enrolment growth. Together, they exert inescapable financial incentive on individual institutions and the system to grow.

This has been successful. Government's long-term goal of achieving a 70% adult population postsecondary attainment rate is at hand. Globally, Ontario boasts one of the highest adult attainment rates in the OECD.⁹ Ontario's funding arrangements have been aligned on a single outcome, and that outcome has been achieved.

Government is signalling appetite for a reconsideration of enrolment's dominance. There are good reasons to do so. Demographics in large portions of the province, especially outside major urban centres, will make it challenging if not impossible for many institutions to continue to grow. The cost of growth to government, which has increased the funding model allocation to keep pace, is high. And, most importantly, there is consensus that more emphasis ought to be placed on creating conditions that foster quality improvements and support institutional differentiation.

Tuition, the largest single source of institutional revenue, will necessarily remain enrolment-driven. For the funding model to introduce other, balancing drivers successfully, it must therefore do so boldly. A small reduction in enrolment sensitivity or a diversion of marginal funding model dollars to other outcomes will not induce change.

When examining other drivers and outcomes, it is important to remember that the funding formula supports both the teaching and research missions and expenditures of universities. The volume of research supported through the funding model is larger than the province's dedicated research funding through the Ministry of Research and Innovation, and rivals the research funding provided by the federal government.

The Ontario government wants the funding model to better support differentiation. Even at the highest level of overall revenue shares and sources, differentiation among Ontario's universities is clearly evident. Some institutions are more dependent on the funding model, others much less so. Each institution has a customized balance between its teaching and research missions and expenditures. Some are positioned for continued enrolment growth, but many are not. This level of differentiation has emerged within a "one size fits all" enrolment-centric model. For differentiation to be more aggressively supported, the funding model review will need to examine approaches that can reward institutions for their differentiated contributions to the system's overall needs.

Lastly, the unfettered expenditure rules underlying the funding model also contribute to differentiation. The funding model is part of the \$8.8B operating fund that universities expend with local discretion in support of their teaching and research missions and in accordance with their strategic priorities. The review process will undoubtedly canvass new approaches to how universities might earn their share of funding model revenue. If not enrolment, then what drivers and outcomes? That done, it will be

⁹ Ontario's high adult attainment rate is a result of the combined enrolment performance of both its universities and its colleges. The Ontario college funding model is also enrolment sensitive.

important not to over-eagerly also restrict the expenditure of those earned revenues, so that universities continue to have the flexibility to make unique institutional contributions to shared provincial goals.

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APPENDIX A: Total Revenue and the Operating Fund

What is the relationship between Figure 1 (total university revenue, excluding capital) and Figure 3 (the operating fund)? Why are there two different revenue representations?

Every year, the Council of Ontario Universities / Council of University Finance Officers publish *Financial Reports* which document revenues and expenditures for each university and for the system. The most recent year available is 2013-14.

To understand the MTCU funding model in its broadest context, it is helpful to situate it in the total mix of operating revenue from all sources received by universities. This is the purpose of Figure 1. Capital is the only thing excluded. Total revenue is \$13.1B, the funding model at \$3.5B represents 27% of total revenue.

By longstanding convention, COU / COFO disaggregate total revenues into defined “funds”. The largest of these is the \$8.8B operating fund. The operating fund pools those moneys that the universities receive without specific expenditure restrictions. These can therefore be used relatively freely to deliver the primary missions of teaching and research. The operating fund is mostly tuition revenue and MTCU funding model revenue, as well as a small amount of revenue from other sources.

The funds making up the total revenue picture are:

| | |
|--------------------|------------------------------------------------------|
| Operating Fund | \$8.8B unfettered, supports learning and research |
| Ancillary Services | \$1.0B offset by the costs of providing the services |
| Sponsored Research | \$2.6B restricted |
| Trust | \$0.7B restricted |
| TOTAL | \$13.1B |

Source: 2013-14 COU/COFO. Excludes capital

The figure following shows what portions of Figure 1 are included in the operating fund shown in Figure 3.

Figure 1: Universities Total Revenue, 2013-14

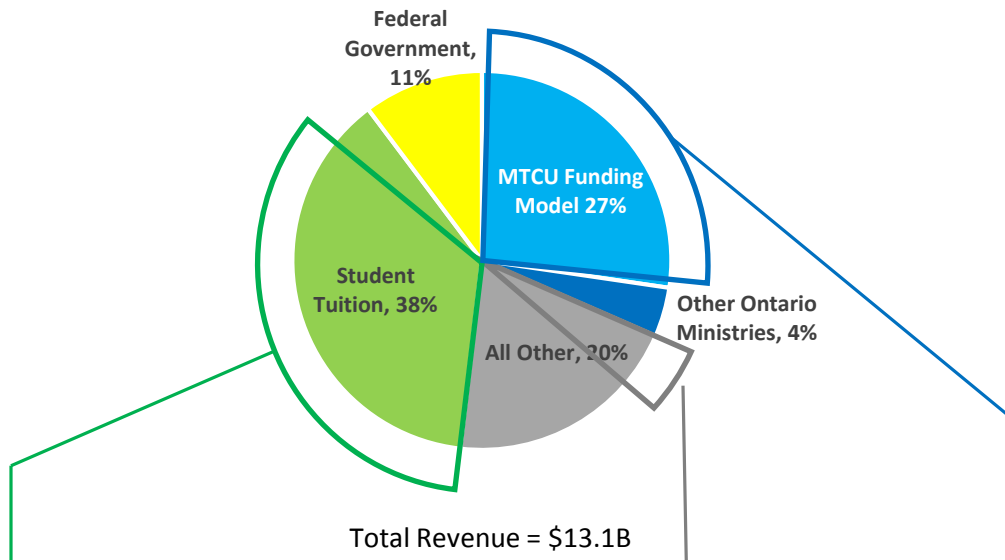
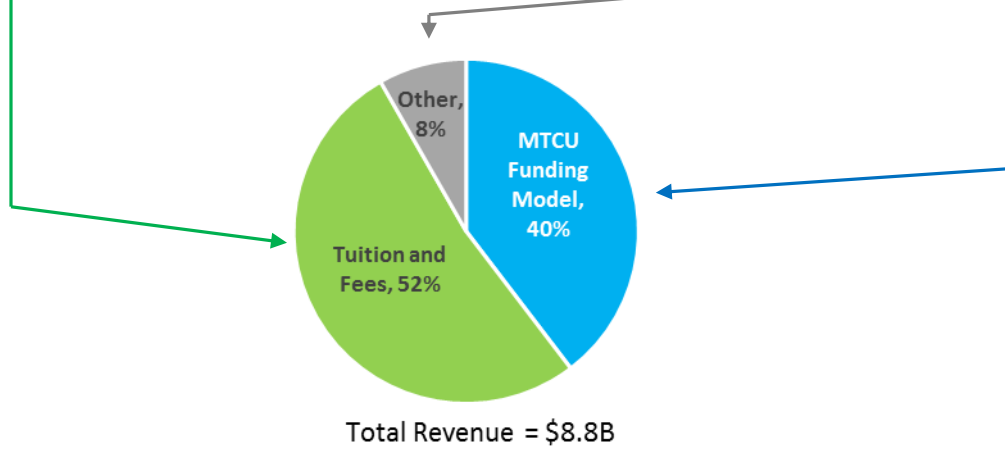


Figure 3: Ontario Universities Operating Fund 2013-14



APPENDIX B: Total Revenue and Sponsored Research

Appendix A provides the briefest introduction to the “fund” accounts used by COU / COFO to organize university revenues. One of those funds is the \$2.6B sponsored research fund. This money is “fettered”. Universities must spend the revenue on the research related projects and activities for which they have contracted. Sponsored research revenue comes from a variety of sources, and the relationship between total revenue (Figure 1) and the \$2.6B research fund is as follows:

Figure 1: Ontario Universities Total Revenue, 2013-14

