



## Revisiting Ontario College and University Revenue Data – Appendix

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for the Higher Education Quality Council of Ontario



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## Appendix A: Financial and enrolment information: relationship to Statistics Canada information?

How does the data from the Financial Information of Universities and Colleges Survey (FIUC) translate into ***the published financial information on the Canadian Socio-economic Information Management System (CANSIM) of Statistics Canada?***

### Universities

The FIUC is a key source of university financial information used in the compilation of Statistics Canada's information about university expenditures. In addition to regular releases by Statistics Canada, some FIUC information is used in two commonly referenced CANSIM tables:

1. Table 478-0007 – *University education expenditures, by direct source of funds and type of expenditures, annual (dollars);*
2. CANSIM Table 478-0008 – *Total expenditures on university education, by type of expenditure, annual (dollars).*

Both tables provide selective summary data. More detailed information can be obtained directly from Statistics Canada.

Table 478-0007 offers a mix of revenue and expenditure data. Both tables include other expenditures from government sources (such as federal and provincial student aid expenditures and government administrative expenditures) to provide a more complete picture of total expenditures ***on*** university education. The data for the latter expenditures are derived from the Federal Government Expenditures in Support of Education (FEDEX) survey and Provincial Public Accounts. In 2003, the preceding FEDEX and Public Accounts items added approximately \$2 billion to the \$24.5 billion in total expenditures for colleges and universities in Canada.<sup>1</sup>

The CANSIM tables provide data on the “direct source of funds” used for expenditures. When identifying the direct sources of funds, the CANSIM tables identify revenues from a few sources (federal, provincial, tuition, and other fees) and then report other revenue sources together under a single heading. However, the “other revenue” category is actually the difference between the total expenditures of the universities and the sum of the specifically identified revenue sources in the preceding list. Government expenditures are reported as the only sources for student aid and administrative expenditures.

In presenting “expenditures ***on*** university education,” the CANSIM tables follow the “fund accounting” style of reporting in CAUBO reports. However, there are some specific differences between the FIUC information and the information presented in the CANSIM tables.

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<sup>1</sup> Excludes all ancillary enterprises AND estimates of COLLEGE trade, vocational, and continuing education programs.

- The “ancillary” fund expenditures (and revenues) are excluded from the CANSIM based on the rationale that such expenditures do not directly relate to the education and research missions of universities.
- “Operating” fund expenditures and “Special Purpose & Trust” fund are combined and reported as “Operating”.
- The “Sponsored Research” fund expenditures include the expenditures of both *consolidated* and *non-consolidated* entities.<sup>2</sup>
- Finally, total expenditure, as noted previously, is calculated as the sum of the university reported expenditures (Operating + Special Purpose & Trust combined, Sponsored Research including non-consolidated entities, and Capital funds) **plus** the “other” expenditures from government reported sources on student aid and administration.

Individuals contemplating using the university CANSIM Tables, should be aware, therefore, that the “source of funds” information and “expenditure” information differ from the information in the FIUC for the reasons noted above. Similarly, as noted in the body of the report, differences between the FIUC and the CAUBO reports occur because the FIUC information includes all universities while the CAUBO information only includes CAUBO member institutions.

The addition of non-institutional expenditures (i.e., government expenditures on student aid and administration) may, in fact, result in some double-counting of postsecondary expenditures because some of the student aid expenditures from the FEDEX survey and Provincial Public Accounts may be reflected as income and expenditures in universities and colleges.

## Colleges

For Ontario’s colleges, the primary source of financial information is the College Financial Information System (CFIS), maintained and used by the Ministry of Training, Colleges and Universities (MTCU), and also used by the province’s colleges and various external parties. The CFIS is sufficiently detailed to identify tuition revenue by type of program and to differentiate between provincial grants for operating purposes and specific grants for vocational, apprenticeship, and other related programs. The CFIS is also used to check the information prepared by the colleges for the Financial Statistics of Community Colleges and Vocational Schools survey (FINCOL) by Statistics Canada and submitted on behalf of Ontario’s colleges. As part of the survey, colleges are required to provide information about Direct Instruction Expenditures by Program Cost Groups (Schedule 2B), which distinguishes expenditures on postsecondary programs (university transfers and career programs) from trade and vocational programs, and continuing education programs.

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<sup>2</sup> *Consolidated entities* includes all entities in the consolidated financial statements of the institution. *Non-consolidated entities* refers to hospitals or other medical facilities that are not part of the university’s financial operations but where research funding of university faculty may be administered. Such funding, although reported in the FIUC/CAUBO, is not included in university financial statements.

Information about college postsecondary expenditures is presented in a similar fashion as in the FIUC; that is, information about college revenues and expenditures is released based on the information submitted on the survey. However, in the CANSIM table Statistics Canada excludes the latter two categories of expenditures and estimates of the related revenues<sup>3</sup> as well as ancillary expenditures and revenues. At the same time, Statistics Canada's college information on the CANSIM will include "other" government expenditures (student aid and administration) from the FEDEX survey and Public Accounts.

Accordingly, CANSIM Table 478-0004 — *Postsecondary non-university education (college) expenditure, by direct source of funds, type of college and type of expenditures, annual (dollars)* excludes some expenditures (and revenues) that would be included in the financial reports (estimates of Trade and Vocational programs, Continuing Education programs, and ancillary expenditures) of Ontario's CAATs. Additionally, the CANSIM file includes information from other colleges (such as the Michener Institute, the Eastern Ontario School of X-Ray Technology, and the Canadian Memorial Chiropractic College) that are not included in the CAAT.

## **How does the Ontario enrolment information translate into Statistics Canada's published enrolment information on CANSIM?**

### **Universities**

Statistics Canada collects and publishes information on full-time and part-time university enrolments based on a Fall count date. The Statistics Canada enrolment survey "includes all students enrolled in degree-granting institutions in Canada in programs leading to a degree, diploma, or certificate" (PCEIP 2003, 244) and the information is published in CANSIM Table 477-0011 – *University Enrolments by Registration Status and Program Level*. The limitations associated with the collected information focus on institutional differences in categorizing full-time and part-time students, and the fact the Fall count does not necessarily capture the level of student activity for the full year (all terms).

The reliance on a full-time and part-time count means that a conversion methodology is necessary to produce a FTE count. The Statistics Canada convention is to count one full-time student as 1.0 FTE and to convert part-time students to FTEs by dividing all part-time undergraduate students by 3.5 and multiplying all part-time graduate students by 0.3. The Statistics Canada counts do not capture non-credit activities such as language and skills upgrading, and professional development programs or courses unless the students are enrolled in such activities for credit.

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<sup>3</sup> The related tuition is reported as part of the College survey. Other sources of revenue are deducted according to the pro rata share of expenditures.

## Colleges

College enrolments are complicated by the diverse array of program and service offerings and the nature of the programs. Colleges may be involved in postsecondary transfer programs, career-oriented programs, vocational and training programs under contract to provincial, federal, or private agencies or companies, apprenticeship programs, or more general work or lifelong learning programs aimed at upgrading existing skills and knowledge. The length of such programs may vary from a few weeks to a few years. As is the case with the universities, a point-in-time enrolment count does not necessarily capture the level of student activity in the institution for the full year.

The college data reported to Statistics Canada in CANSIM Table 477-0006 – *Full-time enrolments and graduates in postsecondary community college programs* is full-time enrolment only and refers only to postsecondary transfer and career programs. Hence, the reported information does not provide a full picture of the enrolment activity in community colleges — although those components (postsecondary transfer and career programs) are by far the largest component of enrolment activity. The other components are vocational and trades, apprenticeship training, and continuing education. As noted previously, the survey's coverage extends beyond the CAATs to include other colleges such as the Michener Institute, Eastern Ontario School of X-Ray Technology, and the Canadian Memorial Chiropractic College.

## Appendix B: Cost pressures and Price Changes in Higher Education

### Introduction

This Appendix provides a brief commentary on costs and cost pressures in higher education and examines the factors that would influence the development of a higher education price index (HEPI). Postsecondary finances are relatively complex because they involve revenue from multiple sources (various levels of government, students, donors, sales of services, investments), and some of the revenue is earmarked for special purposes by the funding agency so that the funds must be accounted for separately and reported accordingly. Thus, any attempt to provide a broad brush of postsecondary finances will, inevitably, fall short of capturing the intricacies and complexities that bedevil finance officers across the land.

### Composition of expenditures

The first step in developing a better understanding of cost pressures and price changes involves examining the composition of postsecondary expenditures. In the case of colleges, close to 60 per cent of **total** expenditures are for compensation, that is, salaries and benefits (Colleges Ontario, 2008), and the remaining 40 per cent are for operational expenses noted previously. Approximately 70-75 per cent of revenue comes from grants and fees.

For Ontario's universities, close to 60 per cent of **total** expenditures are for compensation, a figure that is similar to the colleges. The financial activities of universities are governed by an adherence to the principles of fund accounting<sup>4</sup> in support of three main functions — teaching, research, and community service. The Operating Fund supports core activities and services; a set of other funds is used for specific purposes, such as Special Purpose and Trust, Sponsored Research, Capital, and Endowment.

The Operating Fund receives funding from two main sources: the provincial government and students (tuition and other fees). Together, as noted in the main body of the report, these sources represent approximately 90 per cent of the income in the Operating Fund; the remainder is generated from investment income and miscellaneous sources. To shed a little more light on university finances, Table B1 provides a summary of the percentage distribution of expenditures in the Operating Fund, indicates the relative size of the expenditure in the Operating Fund to total expenditures, and provides a percentage distribution of total expenditures.

As illustrated in Table B1, the majority of university expenditures (57.6% in 2006–07) are reflected in the Operating Fund (bottom row, second column). Salaries and benefits represent almost 75 per cent

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<sup>4</sup> For a description of fund accounting refer to the COFO-UO Financial Report *Guidelines*.

of expenditures in the Operating Fund (1<sup>st</sup> column – Total Salaries and Benefits – 74.3%); the remaining 25 per cent is spread over a number of non-salary expenditure items. At the same time, the Salaries and benefit expenditures in the Operating Fund happen to represent almost 75 per cent of the **total** Salaries and benefits expenditures with the remaining 25 per cent reflecting salaries and benefits in the ancillary operations, sponsored research, and special purpose areas. In terms of **total** expenditures (All Funds), Salaries and benefits represent 57.5 per cent of total expenditures.

Table B1: Percentage Distribution of Operating Expenditures by Type, as a percentage of Total Expenditures and Distribution of Total Expenditures by Type.

| <b>University Expenditures<br/>2006-07 COFO-UO Report</b> | Distribution of<br><b>Operating</b><br>Expenditures<br>% | Operating<br>as % Total<br>Expenditures<br>% | Distribution of<br><b>Total</b><br>Expenditures<br>% |
|---|--|--|--|
| Academic Ranks  | 29.4   | 91.1   | 18.6   |
| Other Instruction & Research                              | 5.4  | 36.9   | 8.4  |
| Other Salaries & Wages                                    | 26.3   | 71.2   | 21.3   |
| <b>Total Salaries and Wages</b>                           | <b>61.0</b>  | <b>72.9</b>                                  | <b>48.2</b>  |
| Employee Benefits   | 13.3   | 82.3   | 9.3  |
| <b>Total Salaries and Benefits</b>                        | <b>74.3</b>  | <b>74.4</b>                                  | <b>57.5</b>  |
| Library Acquisitions                                      | 2.4  | 66.6   | 2.1  |
| Furniture and Equipment Purchases                         | 2.6  | 32.9   | 4.6  |
| Equipment and Furniture Purchase                          | -  | -  | -  |
| Equipment Rental and Maintenance                          | 1.3  | 63.7   | 1.2  |
| Operational Supplies and Expenses                         | -  | -  | -  |
| Printing and Duplicating                                  | 0.4  | 66.0   | 0.6  |
| Materials and Supplies                                    | 3.3  | 33.0   | 5.7  |
| Communications  | 0.6  | 65.3   | 0.6  |
| Professional Fees   | 1.0  | 55.5   | 1.1  |
| Cost of Goods Sold  | 0.0  | 0.0  | 2.1  |
| Travel  | 1.8  | 41.7   | 2.4  |
| Utilities   | 3.4  | 77.7   | 2.5  |
| Renovations and Alterations                               | 1.5  | 38.1   | 2.3  |
| Externally Contracted Services                            | 1.3  | 36.8   | 2.0  |
| Scholarships, Bursaries, etc.                             | 6.6  | 68.2   | 5.6  |
| Debt Repayments   | 0.2  | 14.3   | 0.9  |
| Principal and Interest Payments                           | -  | -  | -  |
| Interest  | 1.0  | 32.5   | 1.7  |
| Building, Land and Site Services                          | 0.4  | 4.1  | 5.1  |
| Other Operational Expenditures                            | 3.3  | 46.1   | 4.1  |
| <b>Subtotal</b>   | <b>105.7</b>   | <b>59.7</b>                                  | <b>102.1</b>   |
| Internal Cost Allocations                                 | -2.6   | 0.0  | 0.0  |
| External Cost Recoveries                                  | -3.1   | 85.5   | -2.1   |
| <b>Total</b>  | <b>100.0</b>   | <b>57.6</b>                                  | <b>100.0</b>   |



## Cost Pressures in Higher Education

*Trends*, (AUCC, 2008) identified two key drivers of change: i) growing demand for a university education and ii) growing demand for university research. A third driver is the increasing demand for universities to be regional social and economic catalysts. The preceding three drivers represent the major activities in universities — teaching, research, and service. The service activity has traditionally encompassed service to the discipline and/or the institution.

The annual *Environmental Scan* published by Colleges Ontario points to key factors that influence college developments — the increased demand for apprenticeship training, skills upgrading, and retraining; the need to address skills shortages; and the growing interest in developing capacity in applied research. Colleges have long been expected to play a major role in regional economic development, and that expectation has been heightened in more recent times.

Knowing the major activities of both colleges and universities and the factors that influence demand for their services, we can identify the following reasons for the cost pressures that arise:

- changes in the volume of activities — more students, more research, and more community service
- changes in the mix of students (program, level, and profile)
- changes in research emphasis as a result of new knowledge
- continual interest in improving the overall learning experience
- changes in accreditation or certification requirements
- government regulation
- technological advances affecting all resources (such as the infrastructure of people, space, utilities, peripheral devices, and software)

In addition to these, the changes in funding structures and funding practices have an impact on costs; for example, the changes in capital funding (greater reliance on institutional cost-sharing) and student assistance (set-aside and student access guarantee) essentially transfer more responsibility and costs onto institutions.

New funding programs established by governments also have cost implications for institutions. For example, one might argue that the Canada Research Chair program has contributed to pressure for increased compensation for faculty and for reduced teaching loads in universities — two factors that have direct cost implications. Similarly, the change in college mandates (applied research, applied degrees) carries with it increased costs.

The preceding list is not intended to be exhaustive, but simply to illustrate the many factors that contribute to cost pressures in postsecondary education.<sup>5</sup>

Finally, higher education institutions are faced with changes in the price of goods and services they purchase including labour (faculty, staff, and students) and a host of non-salary items such as utilities; library books, periodicals, and databases; laboratory supplies; equipment; travel; professional services; printing services; and communication services. It is to such price changes that we now turn our attention.

### Price changes and a higher education price index — taking stock

Currently there is no specific price index in Canada for higher education, although Statistics Canada does compute an education price index (EPI) for K-12 described as follows:

The Education Price Index (EPI) is an annual input price index that measures changes of a fixed basket of goods and services purchased by public school boards in Canada excluding the territories. It compares current salary grids of teachers with those in a base year and uses selected sub-indices from the Consumer Price Index and the Industry Product Price Index as proxies for price increases of non-salary items of school board's expenses. It also uses the federal government's General Services GS-04 category's salaries as a proxy for the non-teaching salaries component. It tracks changes over time in the level of real resources used by school boards, and the net of the effect of changes in prices. The EPI results are published in the Daily and are also available on CANSIM.

The EPI is heavily weighted toward teachers' salaries (~70%) with a further 8.5% related to non-teaching salaries and the remainder reflecting all non-salary expenses such as utilities, classroom supplies, and transportation costs.

Through the Council of Ontario Universities, the Ontario Universities Non-Salary Price Index (OUNSPI) was developed in the latter part of the 1970s and, with periodic reviews, has provided estimates of various components of non-salary inflation. In the case of the majority of non-salary items, the OUNSPI provides a reasonable proxy for those expenditure items as an aggregate. What it does not cover, in addition to compensation, is student awards and some services (e.g., professional fees, externally contracted services) as well as financing costs (interest on debt) — the latter emerging as a relatively new cost pressure in light of the change in capital financing and the inability of some institutions to generate donations sufficient to meet capital expenditure requirements.

In the United States, the higher education price index (HEPI) reflects changes in aggregate non-salary costs, much like the OUNSPI mentioned previously, that is, it uses a number of specific

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<sup>5</sup> Chronicle of Higher Education, *Support-Staff Jobs Double in 20 Years, Outpacing Enrollment*, April 20, 2009 points to number of reasons for the reported expansion in support staff jobs in the United States. Many of the same factors would apply to Canadian universities and colleges.

price indices from the U.S. consumer price index and the producer price index. In the case of compensation costs, the HEPI tracks changes in faculty salaries using the annual survey of the American Association of University Professors (AAUP) and the changes in staff salaries using information collected by the College and University Personnel Association (CUPA). Information collected by the Bureau of Labor Statistics is also part of the HEPI exercise.

The major criticism of HEPI (in addition to criticism about price indices in general) focuses on the self-referential nature of the measurement of changes in faculty salaries.<sup>6</sup> To address that shortcoming the State Higher Education Executive Officers (SHEEO) developed the higher education cost adjustment (HECA) that uses two measures — the employment cost index (ECI) and the implicit price deflator (IPD) — to estimate price changes for the higher education sector. The HECA approach weights the ECI at 75 per cent, representing the basket of labour-related expenditures in higher education, and the IPD at 25 per cent representing the basket of other non-compensation goods and services. HECA assumes that the composition of expenditures in each basket is similar to the economy as a whole. A criticism of HECA is that the ECI may not adequately capture a major shift in faculty labour markets or specific staff markets.

## Considerations

The preceding review of costs, cost pressures, and price changes leads to a number of observations about the development of a Canadian HEPI and, perhaps, a provincial one.

As noted previously, compensation is by far the largest cost component in colleges and universities. Price changes in compensation are usually a function of general inflation and the market, and there are quite distinct markets for faculty and staff, the former influenced by national and, in some cases, international considerations, and the latter more geared to local labour conditions. Markets for faculty also vary significantly by discipline or subdiscipline. Over the past decade in Ontario, a number of factors have influenced the demand for faculty: the double cohort enrolment expansion, the general expansion of higher education, increased research activity, and reduced teaching loads (resulting from the increased research demands). On the supply side, for part of the period in question the production of PhDs actually declined. Coupled with an increased requirement for post-doctoral experience as a prerequisite to a career in academe, the impact on faculty supply was significant although there was considerable variation among the disciplines. The result was increased pressure for higher compensation (starting salaries and retention) and a somewhat greater reliance on recruitment of individuals from outside Canada (foreign students, foreign faculty, or Canadian students studying in other countries, or Canadian faculty working in other countries).

Staff salary levels are influenced by compensation increases for faculty (economic/scale/across-the-board increase) and local market considerations. The major expansion in higher education activities over the past decade or so has led to increased demand for staff — especially skilled

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<sup>6</sup> See, "Appendix III, Rationale for Preference for the Higher Education Cost Adjustment (HECA)" in National Association of State Universities and Land Grant Colleges, *University Tuition, Consumer Choice and Affordability*, November 2008

research personnel and areas demanding professional or technical qualifications, e.g., accounting, financial reporting, student counselling, learning specialists, information technology services — with a predictable impact on compensation requirements.

Considerable effort could be devoted to developing various internal sub-indices of compensation — faculty salaries (major disciplines), staff salaries (professional/non-professional), and benefits (perhaps sub-divided into statutory benefits, i.e., government regulated, and non-statutory). If that were to happen, the resulting products could be subject to the same self-referential criticism levelled at the HEPI in the United States. To avoid this, consideration could be given to using an external labour cost reference — perhaps linked to the broader public sector (BPS) compensation indices or a more general labour cost index.<sup>7</sup> While that approach may miss the impact of labour market dynamics within the postsecondary sector, it would capture the labour market in the public sector as a whole. To the extent that compensation changes in the postsecondary sector are heavily dependent on public financing (directly or indirectly through regulated tuition frameworks and grants), the link to a broader public sector compensation index may be quite appropriate. However, to the extent that faculty labour markets are different from the general BPS, there would be a case for establishing a separate index, perhaps based on educational attainment or occupations deemed to be similar. For example, earnings data from the Labour Force Survey suggest “that in several sectors of the economy, pay rates rose substantially for some highly skilled workers over the last decade” (Morrisette, 2008). Faculty and certain specialized technical jobs in the university and college sectors would fall into the highly skilled category.

With respect to non-salary costs, a major portion is related to a limited number of expenditure categories. The major missing non-salary pieces in the OUNSPI are student awards (which could be based on a calculated change in student costs) and interest costs.

## Summary

In sum, the preceding overview of factors affecting cost pressure and price changes underscores some of the complexity associated with defining cost pressures and price change measurement. With respect to price change measurement, it is important to note that any price index represents an *approximation* of price changes. Accordingly, considerable time and effort could be devoted to fine-tuning the approximation. While a higher education index would be a considerable improvement over simply using the CPI, some effort should be devoted to determining whether existing compensation-related reference points could be used as a proxy index for the 60 per cent of college and university expenditures devoted to salaries and benefits. For example, data from the Labour Force Survey (LFS) might provide the basis of an earnings index that would recognize the characteristics of the higher education labour force.<sup>8</sup>

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<sup>7</sup> Recently, the Advisory Panel on Labour Market Information has suggested Canada develop a Labour Cost Index similar to Australia's.

<sup>8</sup> See, for example, Morisette, René. 2008. "Earnings in the last decade." *Perspectives on Labour and Income*. Vol. 9, no. 2. February. Statistics Canada Catalogue no. 75-001-XIE.

For purposes of this study, we have chosen to use two price deflators — the Ontario CPI and an adjusted HEPI deflator similar to that described in Appendix E of AUCC's *Trends in higher education, Volume 3, Finance*.

The following table summarizes the various components:

Table B2: Summary of Ontario CPI, U.S. HEPI and CPI, and Adjustments to Create an Ontario Based HEPI

Consumer Price Index (Ontario) HEPI and Ontario based HEPI

| FY Ending   | A                 |                           | D                    |                     | E                              |              | G                               |                        | H |
|-------------|-------------------|---------------------------|----------------------|---------------------|--------------------------------|--------------|---------------------------------|------------------------|---|
|             | Ontario All-items | All-Items rebased to 2008 | CommonFund U.S. HEPI | CommonFund U.S. CPI | Rebase HEPI and US CPI to 2008 | to 2008      | Difference Between HEPI and CPI | Ontario based HEPI B*G |   |
| 1979        | 39.00             | 34.4                      | 70.5                 | 69.8                | 26.1                           | 32.4         | 0.8078                          | 27.8                   |   |
| <b>1980</b> | <b>43.00</b>      | <b>38.0</b>               | <b>77.5</b>          | <b>79.1</b>         | <b>28.7</b>                    | <b>36.7</b>  | <b>0.7836</b>                   | <b>29.7</b>            |   |
| 1981        | 48.20             | 42.5                      | 85.8                 | 88.2                | 31.8                           | 40.9         | 0.7780                          | 33.1                   |   |
| 1982        | 53.30             | 47.0                      | 93.9                 | 95.8                | 34.8                           | 44.4         | 0.7839                          | 36.9                   |   |
| 1983        | 56.60             | 50.0                      | 100                  | 100                 | 37.1                           | 46.4         | 0.7998                          | 40.0                   |   |
| 1984        | 59.40             | 52.4                      | 104.8                | 103.7               | 38.9                           | 48.1         | 0.8083                          | 42.4                   |   |
| 1985        | 61.80             | 54.5                      | 110.8                | 107.7               | 41.1                           | 49.9         | 0.8228                          | 44.9                   |   |
| 1986        | 64.60             | 57.0                      | 116.3                | 110.8               | 43.1                           | 51.4         | 0.8395                          | 47.9                   |   |
| 1987        | 67.80             | 59.8                      | 120.9                | 113.3               | 44.8                           | 52.5         | 0.8534                          | 51.1                   |   |
| 1988        | 71.00             | 62.7                      | 126.2                | 118                 | 46.8                           | 54.7         | 0.8554                          | 53.6                   |   |
| 1989        | 75.10             | 66.3                      | 132.8                | 123.5               | 49.2                           | 57.3         | 0.8600                          | 57.0                   |   |
| 1990        | 78.70             | 69.5                      | 140.8                | 129.4               | 52.2                           | 60.0         | 0.8702                          | 60.4                   |   |
| 1991        | 82.40             | 72.7                      | 148.2                | 136.4               | 54.9                           | 63.2         | 0.8690                          | 63.2                   |   |
| 1992        | 83.20             | 73.4                      | 153.5                | 140.8               | 56.9                           | 65.3         | 0.8719                          | 64.0                   |   |
| 1993        | 84.70             | 74.8                      | 157.9                | 145.2               | 58.5                           | 67.3         | 0.8697                          | 65.0                   |   |
| 1994        | 84.70             | 74.8                      | 163.3                | 148.8               | 60.5                           | 69.0         | 0.8777                          | 65.6                   |   |
| 1995        | 86.80             | 76.6                      | 168.1                | 153.2               | 62.3                           | 71.0         | 0.8776                          | 67.2                   |   |
| 1996        | 88.20             | 77.8                      | 173                  | 157.4               | 64.1                           | 73.0         | 0.8790                          | 68.4                   |   |
| 1997        | 89.80             | 79.3                      | 178.4                | 161.9               | 66.1                           | 75.1         | 0.8813                          | 69.8                   |   |
| 1998        | 90.60             | 80.0                      | 184.7                | 164.8               | 68.5                           | 76.4         | 0.8964                          | 71.7                   |   |
| 1999        | 92.40             | 81.6                      | 189.1                | 167.6               | 70.1                           | 77.7         | 0.9024                          | 73.6                   |   |
| 2000        | 95.10             | 83.9                      | 196.9                | 172.5               | 73.0                           | 80.0         | 0.9129                          | 76.6                   |   |
| 2001        | 98.00             | 86.5                      | 206.5                | 178.4               | 76.6                           | 82.7         | 0.9258                          | 80.1                   |   |
| 2002        | 100.00            | 88.3                      | 215                  | 181.6               | 79.7                           | 84.2         | 0.9469                          | 83.6                   |   |
| 2003        | 102.70            | 90.6                      | 221.2                | 185.5               | 82.0                           | 86.0         | 0.9537                          | 86.4                   |   |
| 2004        | 104.60            | 92.3                      | 231.5                | 189.6               | 85.8                           | 87.9         | 0.9765                          | 90.2                   |   |
| 2005        | 106.90            | 94.4                      | 239.8                | 195.3               | 88.9                           | 90.5         | 0.9820                          | 92.7                   |   |
| 2006        | 108.80            | 96.0                      | 251.8                | 202.7               | 93.4                           | 94.0         | 0.9935                          | 95.4                   |   |
| 2007        | 110.80            | 97.8                      | 260.3                | 208                 | 96.5                           | 96.4         | 1.0009                          | 97.9                   |   |
| <b>2008</b> | <b>113.30</b>     | <b>100.0</b>              | <b>269.7</b>         | <b>215.7</b>        | <b>100.0</b>                   | <b>100.0</b> | <b>1.0000</b>                   | <b>100.0</b>           |   |

Sources:

1. Statistics Canada, Consumer price index, historical summary, by province or territory, <http://www40.statcan.gc.ca/l01/cst01/econ150c-eng.htm>, retrieved May 21, 2009.
2. Commonfund Institute, 2008 Higher Education Price Index Update, PDF HEPI 2008 Table, [http://www.commonfund.org/Commonfund/CF+Institute/CI>About\\_HEPI.htm](http://www.commonfund.org/Commonfund/CF+Institute/CI>About_HEPI.htm), retrieved May 21, 2009.

## Appendix C: A Methodology for Accounting for “Missing” Ineligible Enrolment

The goal is to produce full-time equivalent (FTE) and weighted enrolment counts, basic income units (BIU), that reflect the level of enrolment activity at Ontario’s universities. Until recently, institutions did not have to report ineligible FTEs and BIUs to the Ministry of Training, Colleges and Universities (MTCU) and it appears a number of institutions chose to report only eligible FTEs and BIUs. The absence of the ineligible FTEs and BIUs understates the total level of activity. However, ineligible headcounts were recorded and thus form the basis for deriving estimates of FTEs and BIUs.

In determining a methodology to account for the missing ineligible enrolment at the aggregate system level, a complicating factor is the declaration of additional qualifications courses (AQC) as ineligible in 1993–94. Institutions appear to have chosen quite different paths for reporting the AQC students and recording the associated fees.

- Some institutions chose **to continue to report AQC enrolments** (headcounts, FTEs, BIUs) but changed the funding status to “ineligible” and continued to record the fees as tuition revenue in the Operating Fund.
- Some chose to **report only AQC headcounts** (no FTEs or BIUs) and treated the fees as either non-credit tuition in the Operating Fund (Other) or as tuition credit in the Operating Fund.
- Some chose to **stop collecting the AQC enrolments** in the university student information system and thereby stopped reporting AQC enrolments (meaning no headcounts, FTEs, or BIUs). Associated tuition may have been counted as either non-credit tuition in the Operating Fund (Other), tuition credit in the Operating Fund, or netted against the operation of the program(s).
- At least one major institution adopted more than one approach in the period since the AQCs were declared ineligible.

For those institutions that stopped collecting and/or reporting AQC enrolments, it means the reported headcounts are not in the MTCU file, nor were the enrolments reported to Statistics Canada (Fall – probably part-time). Accordingly, it is difficult to determine an appropriate reference to calculate a proxy FTE and BIU for the missing AQC enrolments.

### Suggested approach

Notwithstanding the problem associated with the AQC, the proposed approach for the missing ineligible FTEs and BIUs is to

- i) calculate an average conversion ratio — headcount to All terms FTE and FTE to BIU — for the institutions that reported ineligible FTEs and BIUs (aggregate sum)
- ii) apply the ratios to the sum of the reported headcounts of institutions where the institutional information was not reported.

The *calculated* FTEs and BIUs would then be added to the reported ineligible figures to provide a total FTE and BIU count for ineligible enrolments.

There are other methods that could be applied, including calculating the conversion separately for undergraduate and graduate enrolment. However, when comparing the actual enrolments in 2007–08 (ineligible and eligible combined) with the imputed number for that year, the figures are very close.

The following table summarizes the effect of applying the ratios of the select years to the actual data in the intervening years. Although the estimates of unreported data seem reasonable, they have not been incorporated into the funding per student analysis. Rather, only the reported enrolments are included.

Eligible and Ineligible FTEs and BIUs by Year (Unadjusted)  
1979-80 to 2007-08

| Year    | Reported Enrolment |            |         |         | Totals for Analysis |           |       | Estimates of Unreported Data |       |         | Grand Total Adjusted |         |
|---------|--------------------|------------|---------|---------|---------------------|-----------|-------|------------------------------|-------|---------|----------------------|---------|
|         | A                  | B          | C       | D       | A + C               | B + D     | F/E   | Missing                      | Ratio | Missing | FTEs                 | BIUs    |
|         | Inelig FTE         | Inelig BIU | FTE     | BIU     | Total FTE           | Total BIU | Ratio | FTEs                         | BIUs  | FTEs    | BIUs                 |         |
| 1979/80 | 2,067              | 6,854      | 186,778 | 319,948 | 188,845             | 326,802   | 1.73  | 1,025                        | 1.5   | 1,538   | 189,870              | 328,340 |
| 1980/81 | 2,036              | 7,260      | 193,229 | 330,926 | 195,265             | 338,187   | 1.73  | 1,060                        | 1.5   | 1,591   | 196,326              | 339,777 |
| 1981/82 | 2,442              | 7,560      | 202,671 | 346,926 | 205,113             | 354,486   | 1.73  | 1,114                        | 1.5   | 1,671   | 206,227              | 356,157 |
| 1982/83 | 2,505              | 7,846      | 213,907 | 365,280 | 216,413             | 373,127   | 1.72  | 1,175                        | 1.5   | 1,763   | 217,588              | 374,890 |
| 1983/84 | 2,274              | 7,843      | 220,821 | 375,796 | 223,095             | 383,638   | 1.72  | 1,211                        | 1.5   | 1,817   | 224,307              | 385,456 |
| 1984/85 | 2,350              | 8,053      | 221,914 | 377,853 | 224,265             | 385,906   | 1.72  | 1,218                        | 1.5   | 1,827   | 225,483              | 387,733 |
| 1985/86 | 2,546              | 8,628      | 220,201 | 375,784 | 222,747             | 384,413   | 1.73  | 1,210                        | 1.5   | 1,861   | 223,956              | 386,273 |
| 1986/87 | 2,548              | 9,021      | 221,020 | 376,720 | 223,568             | 385,741   | 1.73  | 1,048                        | 1.6   | 1,677   | 224,617              | 387,418 |
| 1987/88 | 2,688              | 9,630      | 227,241 | 387,358 | 229,929             | 396,989   | 1.73  | 1,078                        | 1.6   | 1,725   | 231,007              | 398,714 |
| 1988/89 | 2,952              | 10,301     | 235,903 | 402,392 | 238,854             | 412,692   | 1.73  | 1,120                        | 1.6   | 1,792   | 239,974              | 414,484 |
| 1989/90 | 3,102              | 10,975     | 243,734 | 415,840 | 246,836             | 426,815   | 1.73  | 1,157                        | 1.6   | 1,879   | 247,994              | 428,695 |
| 1990/91 | 3,240              | 11,619     | 253,384 | 433,463 | 256,625             | 445,082   | 1.73  | 1,641                        | 1.6   | 2,626   | 258,266              | 447,708 |
| 1991/92 | 3,711              | 12,703     | 263,467 | 451,398 | 267,178             | 464,102   | 1.74  | 1,836                        | 1.6   | 2,937   | 269,014              | 467,039 |
| 1992/93 | 3,968              | 13,732     | 267,031 | 457,578 | 270,999             | 471,310   | 1.74  | 2,015                        | 1.6   | 3,202   | 273,015              | 474,512 |
| 1993/94 | 4,116              | 14,476     | 264,017 | 452,345 | 268,134             | 466,821   | 1.74  | 6,839                        | 1.6   | 10,942  | 274,972              | 477,763 |
| 1994/95 | 4,453              | 15,654     | 258,278 | 445,556 | 262,730             | 461,211   | 1.76  | 6,701                        | 1.6   | 10,721  | 269,431              | 471,932 |
| 1995/96 | 5,152              | 17,134     | 255,667 | 440,179 | 260,818             | 457,313   | 1.75  | 6,652                        | 1.6   | 10,643  | 267,470              | 467,956 |
| 1996/97 | 12,360             | 34,861     | 242,131 | 411,798 | 254,490             | 446,659   | 1.76  | 6,491                        | 1.6   | 10,385  | 260,981              | 457,044 |
| 1997/98 | 12,553             | 35,596     | 241,916 | 412,838 | 254,468             | 448,434   | 1.76  | 6,490                        | 1.6   | 10,384  | 260,958              | 458,819 |
| 1998/99 | 13,477             | 37,733     | 242,889 | 415,773 | 256,367             | 453,506   | 1.77  | 7,871                        | 1.6   | 12,593  | 264,237              | 466,099 |
| 1999/00 | 14,426             | 39,251     | 248,688 | 425,823 | 263,114             | 465,074   | 1.77  | 8,078                        | 1.6   | 12,761  | 271,192              | 477,835 |
| 2000/01 | 16,419             | 43,158     | 252,727 | 434,912 | 269,145             | 478,070   | 1.78  | 8,726                        | 1.6   | 13,961  | 277,871              | 492,031 |
| 2001/02 | 19,170             | 48,087     | 263,492 | 456,398 | 282,662             | 504,485   | 1.78  | 9,164                        | 1.6   | 14,636  | 291,826              | 519,121 |
| 2002/03 | 22,630             | 56,701     | 283,512 | 493,500 | 306,142             | 550,201   | 1.80  | 10,546                       | 1.6   | 16,874  | 316,688              | 567,076 |
| 2003/04 | 25,416             | 63,977     | 315,258 | 545,587 | 340,674             | 609,564   | 1.79  | 11,736                       | 1.6   | 19,029  | 352,410              | 628,594 |
| 2004/05 | 27,204             | 68,797     | 330,374 | 580,836 | 357,578             | 649,632   | 1.82  | 10,164                       | 1.6   | 16,262  | 367,742              | 665,895 |
| 2005/06 | 28,470             | 73,104     | 344,521 | 607,841 | 372,992             | 680,945   | 1.83  | 10,602                       | 1.6   | 17,485  | 383,594              | 698,430 |
| 2006/07 | 36,362             | 89,721     | 354,349 | 631,862 | 390,710             | 721,583   | 1.85  |                              |       |         | 390,710              | 721,583 |
| 2007/08 | 36,659             | 92,234     | 357,936 | 646,913 | 394,595             | 739,147   | 1.87  |                              |       |         | 394,595              | 739,147 |
|         |                    |            |         |         | 109%                | 126%      |       | based on                     |       |         |                      |         |
|         |                    |            |         |         |                     |           |       | actual calculation           |       |         |                      |         |

Source: MTCU

## Appendix D: Miscellaneous Fees Income

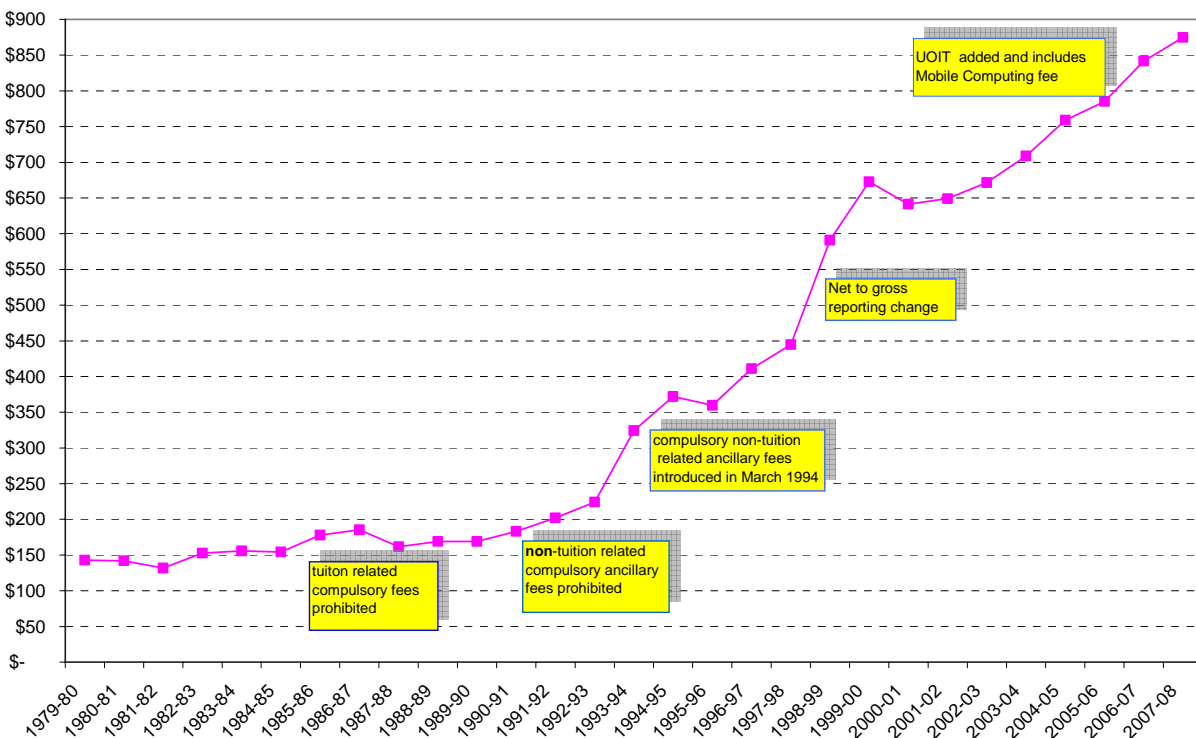
The Miscellaneous fees category of income is sometimes referred to as a key source of revenue and thus seen, by some, as a source of discretionary income to the institution. The category includes a host of fees such as late payment fees, interest on unpaid fees, Ontario Universities' Application Centre (OUAC) application fee revenue, fees associated with health services, athletics, career placement, some student services, and other compulsory and non-compulsory fees levied by and retained by the institution.

The following figure illustrates the level and change in income from Miscellaneous fees since the early 1970s. There appears to have been a marked increase over the period. Expressed in 2008 dollars (inflation adjusted) per FTE, miscellaneous fees have increased by a factor of 6. Over the same period, tuition per FTE increased by a factor of 3.

As evidenced in the following chart, virtually all the apparent increase has occurred since 1990 with two distinct spikes — one in 1993–94 and the other in the years 1998–99 and 1999–2000. The latter spike from, about \$450 to \$675, coincided with the change in reporting from net to gross noted in the body of the report.

Source FIUC, Ontario Operating Fund

**Miscellaneous Fees per FTE**  
Adjusted for inflation (2008 \$) only





The former spike was related to the first major cutbacks of the Social Contract and institutional attempts to develop comprehensive strategies to address the government funding cutbacks. These attempts by institutions triggered a regulatory response that resulted in the imposition of the compulsory non-tuition-related ancillary fee policy. The introduction of that policy established the framework for introducing further ancillary fees and protocols for annual increases in such fees. Essentially, the policy mandated an approvals process that would ensure the ancillary fee was used to provide specific services or service enhancements. Accordingly, while those fees may increase on a regular basis the level of the increase is directly related to the provision of approved services and service levels.

The preceding regulatory framework remains in place. While there are clear differences in the allowable ancillary fees between the college and university sectors, both sectors are governed by regulations pertaining to ancillary fees. At the same time, the government's regulatory regime exempted specific services from the regulations thus, in effect, sanctioning ancillary fees for activities such as career placement and field trips.

In addition to the preceding, the miscellaneous fees category includes a host of administrative fees, often set on a cost-recovery basis, for specific administrative services (additional transcripts, supplemental examinations, late payment, late registration, application fees, etc.). The miscellaneous fees data are also affected by the inclusion of UOIT and its apparent unique approval for a mobile computing fee that adds to the overall increase in miscellaneous fees.

In sum:

- A major part of the apparent increase in miscellaneous fees coincides with the change from net to gross reporting. Of the increase per FTE from \$150 to \$875, approximately \$225 (~30%) coincided with the reporting change.
- Increases in fees for services and service enhancements in areas such as student health, athletics, and other student services are subject to government regulation that prescribes a process for determining the use of the funds and the processes for fee changes.
- Administrative fees are levied on a cost-recoverable basis.
- Revenue increases in areas such as field trips and placement are directly related to student demand.
- The inclusion of UOIT inflates the miscellaneous fees figure.

The preceding information helped inform the decision to exclude miscellaneous fees from the revenue per FTE analysis.

