Task Force to Review Approach to Budgeting

Final Report

January, 2006

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I. Introduction

The academic objectives of the university provide the guiding principles for academic planning, which in turn lead to new initiatives and to decisions to increase or decrease the level of activity in various areas. The President and the Provost assess academic plans and, after a thorough review and consultation, recommend the budgets required to achieve them to Governing Council and its boards and committees.

The university's budget is the mechanism by which operating funds are allocated to various divisions in the university. As such, it is a primary tool in the management of the university and in enabling it to fulfill its mission and achieve its academic goals. The Task Force was asked assess approaches to budgeting for the University of Toronto that would increase the transparency of budget allocations, provide incentives to increase revenues and control expenses, and ensure the best alignment between resources and academic priorities.

To serve the institution well, the budget process should:

- support informed decision making by providing information on the revenues and expenses associated with various activities and the financial implications of new initiatives, and
- provide flexible mechanisms that enable the academic leadership of the institution to make budget allocations in accordance with academic priorities.

The availability of clear information on revenue and expense is essential for the university and its divisions, to ensure that the operation is financially sound. Academic administrators at all levels should be able to assess financial implications and to evaluate various trade-offs as they develop new proposals. The information needed should be available as a matter of course and should be an integral part of the budgeting process.

Since the implementation of academic plans often involves new budget allocations or changes to existing ones, the budgeting process should incorporate mechanisms to support and facilitate these changes. To be responsive to academic planning, the process must not be hampered by formulaic constraints.

There are many possible approaches to budget allocations in a university. At one extreme, budgets could be allocated based on actual or estimated expenses of each division. At the other extreme, the revenues realized on behalf of each division would be the basis for the allocation, with appropriate overhead charges to account for central expenses. Many combinations of these approaches are also possible.

In what follows we examine how the two essential features of providing clear information and flexibility in making budgetary allocations apply to various budgeting schemes, starting with the present system at the University of Toronto.

II. The Present System

In the present system, the expense budget of each division consists of a base allocation and a one-time-only allocation. The base allocation is a historical value that, in a very loose way, is related to the cost of delivering the programs for which that division is responsible. The base budget is adjusted each year to account for changes in authorized expenses, such as:

- Salary increases
- PTR recovery
- Special allocations made by the Provost, e.g. new positions

In addition, when expenses increase faster than revenues, budget reductions are introduced to balance the University's overall budget. One-time-only (OTO) allocations are made for non-recurring expenses, such as the purchase of laboratory equipment or start-up funds for new faculty members. Hence, even though divisional budgets are not based on a detailed assessment of expenses, the present system may be viewed as primarily expense-based, subject to the constraints of available resources.

The concept of a base budget means that funds previously allocated to a division remain with that division in subsequent years. This approach has the advantage of providing divisions with a stable budget, thus facilitating planning and long-term commitments. The University absorbs small year-to-year changes in revenue and central expenses. However, the stability of this approach is more apparent than real as across-the-board expense reductions have to be applied when there is a significant or sustained drop in revenue relative to expense.

Our system of budgeting at the University of Toronto has been evolving rapidly over the past decade, to introduce flexibility and to make budget allocations more responsive to changing academic needs. The Provostial White Paper of 1993 established the Academic Priorities Fund (APF). An annual, across-the-board budget reduction of 1.5% created a central fund that was then distributed as part of a cyclical, five-year academic planning process. In Stepping Up, the APF was replaced by the Academic Initiatives Fund (AIF), which has similar objectives.

Another significant change started in the mid nineties, to accommodate enrolment growth. Provincial programs such as ATOP and the Accessibility Fund provided new funding for increased enrolment. To encourage and support divisions that were able to participate in these programs, the University started to make incremental budget allocations to divisions based on enrolment growth. The Enrolment Growth Fund (EGF) was created for this purpose.

The APF/AIF and the EGF introduced mechanisms that link budget allocations to academic planning and to the new revenues generated by a division. These allocations are a mix of base and OTO funding based on revenue-sharing agreements negotiated with the Provost as part of the academic planning process, and many such arrangements are now in existence. As a result, information about the incremental revenues associated with enrolment growth is now being provided routinely to the divisions, thus creating a much higher level of awareness of the link between revenue and enrolment. Tuition sharing has also led to a much wider participation in decisions to set tuition for different programs.

Revenue-sharing under the Enrolment Growth Fund is based on a detailed accounting of revenues, but the impact of enrolment growth on central expenses is taken into account using a fixed overhead rate. This has the advantage of simplicity. However, because there is no detailed accounting of costs, the system does not provide opportunities or incentives for expense reduction.

The EGF allocations account for about 15% of divisional budgets. They add a measure of revenue-based allocations to what is otherwise a historical, roughly expense-based budgeting system. Unfortunately, the multiplicity of arrangements that have been introduced over the past few years has made budget allocations extremely onerous, both for the Centre and for the Divisions. Also, projection of divisional revenues as enrolments change or when new initiatives are introduced has become a rather challenging task.

A third budgeting scheme is used for self-funded programs. These are programs that do not receive funding from the Government and whose revenues are almost entirely from tuition. A division offering such a program retains all revenues and is charged for central expenses, such as space, library, administration, computing services, etc. A detailed model has been developed for the attribution of central costs to these programs and has been in use for a number of years. Self-funded programs are few and small in size, and they benefit from the fact that their associated costs are incremental. Their overhead rates tend to be low, typically in the range 10-15%.

A few special arrangements have also been put in place in recent years. Funding for the Rotman School has been based on the Responsibility-Centred Management (RCM) scheme since 2002-03, but only for incremental revenue and expense. The OISE/UT budget is also based on a special 10-year agreement that resulted from the merger in 1995. UTSC experimented with the RCM scheme for a few years, and then returned to the general university process.

The discussion above shows that the present system of budgeting at the University of Toronto has evolved into a complex mix of different approaches. The historical component of the funding that each division receives has the advantage of providing stable funding. In recent years, this stability has been at least partially offset by the introduction of the EGF, which can experience significant year-to-year fluctuations. The present system suffers from a number of disadvantages, including:

- Lack of transparency. Because of its historical nature, it is not possible to determine how the budget of a division has been arrived at by examining either the revenues or the expenses of that division.
- Lack of incentives. There are few incentives to divisions either to increase revenues or to reduce expenses. The EGF agreements do reward divisions through the sharing of increases in revenue associated with enrolment growth. However, current arrangements do not include activity-sensitive sharing of central expenses; hence there is limited incentive for cost reduction.
- Complexity. It has become difficult and costly to manage the many different arrangements for revenue sharing under the EGF and to keep track of the associated details.
- The special envelopes that currently fund the EGF are about to disappear. With the end of the double cohort and in response to the Rae Review, the Ministry is expected to end the Accessibility and ATOP programs, and merge these envelopes into a new corridor system, possibly with separate funding for graduate and undergraduate students. Our existing revenue-sharing arrangements under EGF have been modeled to match these special envelopes and will become difficult to maintain after these envelopes disappear.
- The multiplicity of arrangements under EGF makes it difficult for divisions to plan. For example, it is not possible for a division to assess the impact on its budget if it decides to reduce enrolment or change its enrolment mix.

III. Discussion of Alternative Approaches

When examining alternative budgeting systems, we must keep in mind the funding environment in which the University of Toronto exists. The majority of our funding comes from tuition fees and the BIU[1]-based Government grants. Revenue per student is a well-defined and clearly understood parameter in our funding system. Hence, if the availability of clear information is one of the objectives, revenues are an excellent starting point for the budget allocation process.

The observation above suggests that the University should consider a revenue-based system of budgeting. Such a system would be a natural evolution of the existing EGF scheme, with the important difference that all revenues would be accounted for, not just

[1] The Basic Income Unit (BIU) is the unit of a system of weights used by the Provincial Government to determine the per-student funding for different programs.

those due to enrolment growth. This, coupled with a methodology to assess direct and indirect expenses, would make it possible to obtain a realistic and complete financial picture for each of our programs. Consequently, it would become possible to assess the extent to which available funding covers the expenses of any given program — information that is essential to the decision-making process.

The primary criterion that a budgeting system needs to satisfy is flexibility of allocation to meet academic priorities. Thus, a key question is, given revenues and expenses, how should budgetary allocations be made?

In the Responsibility Centered Management system, each division is allocated the net revenues (total revenues less share of central expenses) for the programs for which that division is responsible. Many universities, including Michigan, Minnesota, Indiana, Harvard, New York, and Ohio, use variations of this approach to allocate divisional budgets. However, despite its conceptual simplicity and apparent fairness, the RCM system has many drawbacks that make it unacceptable for the University of Toronto. It should be noted that almost all universities that use RCM operate in an unregulated environment.

The main objection to the RCM approach is that it is formulaic, and hence it reduces the flexibility of allocating budget based on the university's priorities and academic plans. It has the potential for transforming the university into isolated units that are driven more by funding considerations and less by a university-wide academic vision.

Another important drawback of the RCM approach is that the current levels of government funding for different programs have been determined historically and have not changed for many years. They do not necessarily reflect present realities. As a result, some programs might have difficulty surviving in their current form, not because of poor management but because of the nature of the discipline and the funding environment.

Constraints on tuition fees have also introduced distortions in revenue relative to program costs. Some programs have been regulated while others have been allowed to increase tuition levels.

A possible remedy is to develop our own internal BIU weights to better reflect program costs at the University of Toronto. We can then create an expense-based approach to budget allocation. BIU weights would be set according to how much it costs to educate a student in a given discipline, regardless of how much the government actually gives us for that student. The Task Force is not recommending this approach, because the exercise of developing internal BIU weights is difficult and potentially controversial, given the widely varying costs of our programs. We would need to agree on acceptable student-to-faculty ratios, salary levels, space needs, and so on.

Also, what should the relationship be between tuition and BIU weights in such a system? Would we move to a system in which all students pay the same tuition? Would we assign lower BIU weights to programs with high tuition? In attempting to address any of these issues, we would find ourselves returning to the question of how much external funding we are receiving per student in each program.

The most important objection to the use of internal BIU weights is that budget allocations would become formulaic, and as such would violate the fundamental objective that budget allocations be responsive to academic priorities and academic planning. The nature of our programs changes and the University's priorities evolve over time, necessitating funding for new initiatives and changes in allocations to existing programs. An attempt to do that by adjusting the internal BIU weights would be a major and disruptive undertaking. Instead, we would have to return to ad hoc allocations to implement the desired changes. Over time, the transparency of the scheme would be lost.

After considering the merits and drawbacks of revenue- and expense-based alternatives, the Task Force recommends that the University of Toronto adopt an approach to budget allocations that is informed by, but not constrained by the revenue generated by each division. To this end, it has adopted the following principles as a basis for the new budgeting system.

IV. Principles for Budget Allocations

The overriding principle for making budget allocations follows directly from the University's mission:

> *The budget allocation process is a primary tool for the implementation of the university's academic plans and academic priorities*.

With this in mind, the following principles have been adopted by the Task Force to guide the development of a new budget process for the University of Toronto.

1. The university and all its divisions should follow a policy in which major divisional revenues, division-specific operating and overhead costs, central administrative costs, and common facility and overhead costs are all delineated and transparent to the central administration, the divisions, and governance.
2. Record keeping must not become so onerous that accounting becomes an end in itself. As an objective, the administrative costs associated with the implementation of a new budget model should not exceed, and ideally be less than, current costs.
3. Budget allocations should provide incentives for initiatives that generate new revenues and/or lead to savings in the university's operating costs.
4. Divisions should strive to generate revenues to cover division-specific operating and overhead costs, as well as a pro rata share of core services and a fair share of

common facilities that are regarded as university-wide resources. For this purpose, 'core services' consist of services such as snow removal where a specific divisional cost cannot be readily assigned, and 'common facilities' consist of units such as libraries where costing might reasonably occur on the basis of some combination of pro rata share and utilization.

5. The nature of the university's operation and funding environment is such that revenue and expense cannot and should not always be balanced at the level of program or division. When justified by the university's academic priorities, budgetary mechanisms should make it possible to support a program or activity where revenues and costs are not matched.
6. The assignment of revenues and costs must be done in a fashion that encourages and supports inter-divisional activity at all levels of teaching and research, rather than reinforcing the creation or maintenance of a series of isolated academic units.
7. Divisions are accountable for ensuring compliance with statutory obligations and University policies. Cost reduction measures must be consistent with academic plans and the objective of maintaining excellence in all aspects of the University's operation.

V. Recommended Model

The discussion above indicates that there are beneficial aspects to both the revenue-based and expense-based models for budget allocations. At the same time, each has some significant shortcomings. The Task Force is recommending an Academic Drivers Budget Model (ADBM) that captures the key benefits of each. The recommended model has been developed recognizing the unique circumstances that exist at the University of Toronto, which include:

- The university's highly-developed academic planning process
- The nature of the Provincial funding formula
- Variability of tuition fees among programs
- The large, decentralized nature of the university

To provide incentives for revenue generation, divisions should receive a significant portion of the revenues they generate. At the same time, it should be possible to fund programs and activities based on the University's academic plans and priorities, even when these activities do not generate sufficient revenues to cover costs. To accommodate these objectives, budget allocations under the recommended model consist of two components. The first is a revenue-based component that includes a proper accounting for the costs of central services and overhead. The second is a non-formulaic component that is based on academic plans.

The following is an overview of the recommended model for determining divisional expense budgets.

1. Gross revenue is the total revenue attributed to a Division from all sources.
2. A portion of the gross revenue is allocated to a central fund to be known as the University Fund. It is estimated that in the initial implementation the University Fund will be in the range 10-12% of Gross Revenue. This amount may change over time as the University gains experience with the new budget model.
3. Each division receives a net revenue equal to the remaining portion of its gross revenue less its share of central administrative costs, common facilities costs, and student aid.
4. Net revenue is adjusted to account for inter-divisional teaching and other inter-divisional activities.
5. The expense budget of a division is equal to its adjusted net revenue plus an allocation from the University Fund, as described below.
6. The University Fund is to be allocated according to the university's multi-year academic plans and academic priorities, as approved by Governing Council. It is intended to maintain and strengthen academic quality and to ensure the viability and stability of academic programs, consistent with the University's academic plans. It is also a source of funding for university-wide services and initiatives.
7. For the purposes of making University Fund allocations, each division prepares a multi-year budget plan to provide the Provost with an in-depth understanding of the financial position of the division and any special circumstances it may be facing. These plans should be developed at the beginning of each planning cycle and updated as needed, and they become the basis for making multi-year allocations from the University Fund.
8. The first year of implementation of the proposed budget model should be a special transition year. Allocation of the University Fund in that year should be used to maintain historical integrity and to ensure that there no disruptions or sudden changes in divisional funding. For a smooth transition, it is proposed that allocations from the University Fund in the first year of implementation be set to provide each division with exactly the same funding it would receive under the present system.
9. As an additional provision to maintain stability, the University Fund allocation to each division during the transition year should be regarded as a baseline. Barring exceptional circumstances that would be identified in the University's multi-year budget plans, allocations in future years should not drop below that baseline.

10. In keeping with the objective of transparency and openness, it is recommended that the Provost establish an appropriate and transparent process for making University Fund allocations.
11. An equally transparent process should be put in place for dealing with university-wide and central expenses. It is recommended that the mandate of the present Budget Planning Secretariat be broadened and its membership expanded to include decanal representation and other interested parties. The expanded committee should review all overhead expenses regularly and make recommendations to the Provost and the President.

VI. Observations

The following comments are intended to provide clarifications about the proposed budget model, how it will work, what it is and what it is not, and to highlight some of the benefits to the institution that the Task Force believes adoption of the proposed approach would bring. In addition to the clarifications below, Appendix A provides answers to several questions that have arisen during discussions with Principals and Deans and the broader university community.

a) The proposed model is fundamentally different from RCM, because allocations from the University Fund are substantial and not formulaic. They would be made based on the academic needs of each division. It should be emphasized that the Task Force is not of the view that the budget process should force a balance between revenue and expense for each program. Divisional budgets must always be the result of academic decisions. The budget process provides the information needed and the mechanisms to implement such decisions.

b) An annual review of divisional budgets with the Provost should enhance the University's academic planning process.

c) The proposed process provides for a much higher level of engagement by the academic leadership of the University than at present. Details of revenue sources will be provided in annual budget letters, as will the breakdown of each division's share of university-wide expenses. There will also be a meaningful opportunity to participate in central service planning through the expanded Budget Planning Secretariat.

d) Revenue and expense assessments include a recognition of inter-divisional teaching. Where cost savings exist, all participating divisions benefit, thus encouraging collaboration through financial incentives. The availability of clear information about revenues and expenses should make it easier for divisions to reach agreements on collaborative initiatives, whether in teaching or in research.

e) In the proposed model, the notions of "base budget" and centrally imposed "budget cuts" are no longer applicable. When projected expenses exceed projected revenues of a division, internal expense reduction measures would have to be introduced. The University Fund may be used to cushion sharp year-to-year changes in revenue for a given division, when such action is justified by academic considerations.

f) The practice of PTR recovery does not exist in the new budget model. At the same time, there are no central allocations for salary increases or for new faculty or staff positions. Budget planning to ensure that salary commitments are met is a divisional responsibility and is an important component of the multi-year plans submitted to the Provost. Complement planning and advertising of faculty positions continue to be academic matters for which Provostial approval is required.

g) The introduction of the University Fund does not preclude the continued existence of the Academic Initiatives Fund. Allocations from the University Fund constitute an integral part of divisional expense budgets and are not designated to any particular purpose. On the other hand, the AIF is intended to fund new initiatives in response to specific proposals. Under the new model, the AIF would continue to be part of the central overhead component of the budget.

h) Subject to Governing Council guidelines, deficit budgeting is allowed in the University's long-range budget planning process. The deficit amount represents an authorization to increase the University's expense budget above available revenue in a given year. Under the new model, deficit budgeting could be used in the same manner when needed. Each division would receive an expense budget that is higher than its net revenue. The accumulated deficit would be paid off in years of surplus, during which the amount of the surplus would be deducted from the net revenue.

i) The proposed budget model is intended for use in the allocation budgets to academic divisions only. Internal allocations within division are the responsibility of that division, and they may continue to be made using existing procedures.

VII. Inter-Divisional Teaching

The Faculties and Colleges that comprise the University of Toronto have created undergraduate, graduate and second-entry programs of outstanding quality, attracting some of the strongest students in the nation, taught by excellent faculty and using space and teaching resources that are some of the best in the world. Programs offered to students registered in a given division are often interdisciplinary in nature, and are best staffed by teaching staff drawn from several divisions. The University's budget model must respond positively to such inter-divisional teaching activity.

Having faculty teach across divisions should also be cost effective, ensure hiring is done where the expertise lies, lead to further interdisciplinary interaction, and increase the knowledge one division has about another; thus enriching our university.

This section summarizes the principles that should underlie the attribution of revenues and expenses to the divisions involved in inter-divisional teaching, as well as some guidelines for how such activities should be coordinated.

Principles

1. Academic quality and goals should be the primary consideration in who teaches what subject matter, in order to maximize the educational experience of our students.
2. Financial arrangements between divisions should recognize the actual revenue and costs associated with the activity within each division, and preferably provide financial incentives for inter-divisional teaching. They should recognize the total revenue that is associated with the teaching activity (usually collected by the division in which the student is registered) and the proportional costs of supporting the activity in the respective divisions.
3. The divisions involved in inter-divisional teaching should have documented agreements on how responsibility for academic decision-making will be shared, how revenues and expenses will be monitored and how any funding arrangements will be implemented. Specific enrolment planning should be done collaboratively.
4. Agreements should minimize the transaction costs associated with management of the activity. Where practical, these agreements should be reflected in the revenue and expense model used to allocate net revenue to divisions.
5. Inter-divisional teaching should be a component of the academic planning process within each division. Divisions should put in place mechanisms that provide for collegial consultation and planning for such inter-divisional teaching.
6. The faculty members involved in a teaching assignment that crosses divisional boundaries should receive appropriate recognition for these activities, and mechanisms should be put in place to ensure appropriate merit review.

Appendix B discussed a suggested approach to the allocation of revenues and expenses associated with inter-divisional teaching.

VIII. Revenue and Expense Attribution Models

The new budget model is predicated on our ability to attribute revenues and central expenses to divisions. Fortunately, much of the work needed to develop financial models for this purpose has already been done in conjunction with self-funded programs and existing EGF and RCM agreements. The Task Force examined the existing models and developed them further. This aspect of the review will need to be continued with wider participation across the university to ensure that all relevant parameters are being accounted for, as described under Section XI.

The revenue and expense attribution models should strike a balance between the need for detailed accounting on the one hand and the associated complexity and administrative costs on the other. It would be counter-productive to allow administrative costs to rise uncontrollably.

Revenue

The main sources of revenue for the University are Government grants and tuition fees. Additional sources include donations, research overhead, returns on investments, applications fees, and so on. For the majority of these sources attribution to divisions is straightforward, except in a few cases where simplifying assumptions need to be made. These include:

- Government grants are calculated using the Basic Income Unit (BIU) and the Formula Fee. The nominal values of these parameters need to be adjusted to account for a variety of special grants, unfunded students, and the fact that Provincial grants are based on an enrolment corridor and as such are insensitive to small changes in enrolment.
- A simple measure is needed for the attribution of investment income, which is not directly associated with the divisions.

Appendix C provides a brief description of all revenue sources and the proposed methodology for their attribution to divisions.

Expense

Expense attribution is much more involved. A key issue in expense attribution is to identify appropriate measures, which will be referred to as cost drivers, on the basis of which central costs can be allocated to divisions. Usage statistics are readily available for some central services, such as utilities, making direct attribution of costs possible. For other services, such as grounds maintenance or the University's computer network, costs would have to be attributed on a pro rata basis using suitable measures.

For yet other services, a mix of pro rata and usage-based charging is appropriate. The cost of the library system is a case-in-point. The Library is a flagship facility that is a source of pride for the entire university. The level of use varies significantly from one division to another, but maintaining detailed statistics would be quite costly, particularly in an increasingly digital world. Also, some parts of the library, such as the rare-book collection, provide very high value to a relatively small number of users for whom it would be practically impossible to carry the entirety of the associated cost.

An expense-attribution model has been developed as described briefly in Appendix D taking these factors into account. It is recommended that working groups consisting of financial and business officers from academic divisions, appropriate personnel from nonacademic divisions and Planning and Budget staff examine this model in detail and make adjustments as needed to ensure accuracy and fairness. This review process will also provide an opportunity for all concerned to become familiar with the new budget model and with the expense attribution methodology.

IX. Implementation Issues

A change to the budget model proposed in this report is not only a change in procedures but, more importantly, a change in culture and in our approach to planning and budget management. The apparent stability implied by the notion of a base budget ─ artificial as it is given the never-ending budget cuts ─ will be replaced by a more realistic and on-going examination of revenue and expense.

Many implementation issues will need to be examined in detail as part of the transition to the new budget model. It is proposed that a Steering Committee be established to guide the implementation process. Two issues, however, deserve special attention, salary administration and staff training.

All matters related to compensation and salary administration will continue as at present, except that the corresponding funds will part of the divisional budgets. This means that there will be no PTR recovery. Each division will manage its own PTR pool. Division with a small number of faculty may wish to form a common PTR pool, perhaps using a central fund, to avoid large fluctuations in compensation costs.

The second issue relates to the resources needed to implement the proposed budget model. Administration of the new model requires financial and business officers to become thoroughly familiar with the new approach. Long-term financial planning at the divisional level will be required at a higher level of sophistication than it is today. Hence, a training program must be put in place.

Starting soon after a decision is made to adopt the new budget process; divisional financial officers will participate in a detailed review of the revenue and expense attribution models. In doing so, they will help fine tune the models and at the same time acquire in-depth understanding of their details.

As described in Section VII, it is recommended that the implementation of the new budget process starts with a transitional year, during which the present and the new budget models would be run in parallel. Divisional budgets would be set using the present system. At the same time, a shadow budget would be prepared using the new model, with allocations from the University Fund adjusted to yield exactly the same divisional budgets as obtained under the present system,. This process will serve as a real-life test and training exercise for all involved and will illustrate how the two models compare. It will also provide an opportunity for any necessary adjustments to be made to the new model and to the supporting business processes.

Most of the information needed for the new budget model is already available. In a few cases, either system changes or better procedures for data entry should be introduced to ensure consistency and integrity of the data. For example, changes to ROSI are currently being implemented to provide more complete information on inter-divisional teaching.

X. Concluding Remarks

The proposed budget model increases the University's ability to make budget decisions based on academic planning. It provides a clear link between divisional budgets, the revenues divisions generate, and the expenses incurred centrally on their behalf. At the same time, the flexibility built into the allocation mechanism through the University Fund makes it possible to make budgetary allocations based on academic priorities. The initial allocation of the University Fund maintains historical integrity and ensures stability of divisional budgets.

A transition year is proposed to provide an opportunity for staff training, for testing implementation details, and for all members of the university community to become familiar with the new model. During the transition period, there will be no change to divisional budgets as a result of the implementation of the new budget model.

Appendix A

Q&A re Budget Review Task Force Recommendations

Much of the discussion about the proposed budget model has been around the question: *Is this a form of RCM?* The short answer is *No.*

The Task Force rejected the RCM model for many reasons, as described in the Draft Final Report. The proposed model has been designed to be consistent with our vision of what the University of Toronto is about. On the one hand, the model recognizes the realities of our funding environment, and on the other it is fully consistent with the principle that the budget model must be responsive to the university's academic priorities and academic planning process.

Like RCM, the proposed model takes into account each division's share of revenues and university-wide expenses, thus providing incentives to increase revenues and reduce costs. At the same time, it incorporates a large University Fund which is to be allocated in its entirety on the basis of planning decisions. Thus, unlike under an RCM model, divisional budgets may differ substantially from the net revenues that each division generates.

The size of the University Fund is such that allocations to divisions will far exceed any inaccuracies in the attribution of revenues and expenses. Thus, in addition to making the budget model responsive to academic planning, it becomes possible to simplify the attribution methodology to keep administrative and transaction costs to a minimum. The Task Force is not recommending any increase in transaction accounting beyond current levels.

Another view of the difference between RCM and the proposed model is that under RCM the total budget of a division is determined by its net revenue. Under the proposed model, the total budget is determined by an academic decision; but, if new initiatives enable a division to increase its revenues or reduce the central expenses incurred on its behalf, its budget would increase.

In comparison with our present system for budget allocations, key advantages of the proposed model include:

- A stronger mechanism for linking budgets to academic plans
- A higher degree of control over revenue and expense at the divisional level
- A higher degree of engagement of the divisions in decisions related to university-wide costs

The remainder of this document addresses some specific questions that have arisen in recent discussions.

1. ***Is the role of the Centre being reduced and will the University become a collection of independent units?***

Divisions will have more control over their revenues and expenses. At the same time, the budget process will lead to a higher degree of interaction between division heads and the central administration, both in relation to the University Fund and to central services and university-wide costs.

2. ***Will political pressure eventually drive allocations from the University Fund to be equal to what each division has contributed, thus turning the model into RCM?***

The University Fund is an integral and essential component of the proposed budget model. Only a portion of the University's gross revenue (initially set at about 90%) is deemed to be "earned" by the divisions. The remaining portion is considered to be university-wide revenue to be allocated according to academic plans and priorities, regardless of the level of contribution made by each division.

Some may wish to view the UF as a recognition of the fact that in an institution as complex as U of T, it is impossible to attribute revenues and central costs to divisions with a high degree of accuracy. The UF provides the means to compensate for these inaccuracies and for any inconsistencies in BIU weights.

In the view of the Task Force, the main reason for maintaining a significantly-sized UF is more fundamental. The University of Toronto must continue to operate as a single entity that makes decisions to serve the best interests of the institution as a whole. By distributing a portion of the revenue formulaically, the University provides incentives to the divisions to strengthen their individual financial positions, hence that of the University. The remaining portion — the University Fund — makes it possible to invest in university-wide priorities, which do not necessarily align with revenue sources.

3. ***Can allocations from the UF be reduced over time?***

Allocations from the University Fund during the first year in which the proposed model is implemented will be set to provide exactly the same divisional budget as each division would have received under the present model. This will provide historical integrity and a reference level for future allocations.

Consistent with the view that the UF is the mechanism that links budget allocations to academic priorities, the initial allocation is, in effect, a reflection of the academic decisions that have been made in the past. In subsequent years, allocations from the UF will not drop below the reference level established in the first year of implementation.

4. ***What is the role of the AIF in the new model?***

AIF will continue to exist and it will continue to be used primarily to fund new initiatives in divisional academic plans. Allocations from the University Fund, on the other hand, constitute an integral part of the expense budget of any division and are not limited in what they would support.

5. ***How can we justify that externally set BIU weights drive internal funding, particularly since we know that the weights used are not appropriate for some programs?***
   - Recognition of the revenue generated by divisions, including BIU revenue, in budget allocations is not new to the University of Toronto. For the past ten years, almost all new initiatives have had associated revenue-sharing agreements.
   - The proposed model builds on these agreements, but offers stronger links to academic planning by introducing the University Fund. It also proposes a single, transparent and coherent arrangement for revenue-sharing.
   - The Task Force discussed the issue of BIU weights at length. We even considered setting internal BIU weights, but rejected this approach because it would still be formulaic. The Task Force is strongly in favour of a system that on the one hand recognizes the realities of our revenue sources and on the other is guided by the University's academic plans.
6. ***What will happen to the funding that divisions currently receive from the EGF, ATOP, Tuition Sharing or any other revenue-sharing arrangements?***

These funds will no longer exist. They will be replaced entirely by the revenue and expense attributions under the new model.

7. ***What controls will there be on central costs?***

Increased transparency will provide strong incentives to all units to manage operations in a cost-effective manner, which in turn will lead to a higher level of engagement in decisions regarding university-wide expenses and central services.

In our present system, the mandate of the Budget Planning Secretariat (BPS) is limited to the central expenses included in the COPC list (Contractual Obligations and Policy Commitments). The committee reviews these expenses annually to ensure that expenditure projections on items such as utilities, library book acquisitions, insurance and legal fees are reasonable and consistent with University policy.

The Task Force is recommending a major revision of both the membership and mandate of the Budget Planning Secretariat. Membership of the committee should be expanded to include decanal representation and other interested parties, and appropriate subcommittees should be established as needed. The mandate of the committee should be broadened to include a review of all central costs, leading to recommendations to the Provost and the President. These recommendations would then inform the budget allocation process for all senior portfolios in the University.

8. Will divisions be able to opt out of central services they do not wish to use?

The University incurs central costs for the benefit of the institution as a whole. Divisions will share these costs using both usage-based and pro rata attribution, as appropriate. The focus of our efforts should be on reducing costs to all divisions through increased efficiencies and better business processes. This is consistent with the intent of maintaining a strong university as opposed to creating a collection of independent entities. Certain adjustments will be made for UTM and UTSC to account for their physical separation and the fact that they are not able to share in some of the St. George services.

9. How will the long-range budget planning process work under the new model?

We will continue to prepare a university-wide, long-range budget, showing projected revenues and expenses. When projected expenses significantly exceed projected revenues, deficit/surplus planning over the budget cycle will be implemented, in the same manner as under the present model.

When a decision is made to incur a university-wide deficit, the amount of this deficit will be allocated to divisions as additional revenue. Conversely, surpluses will be charged as additional expense. Thus, a university-wide deficit could be viewed as a zero-interest loan to divisions, to be repaid in years of surplus.

Divisions will prepare their own long-range budget plans as an integral part of the university-wide budget planning process. While the details are still being worked out, the process is envisioned to proceed as follows. The Planning and Budget Office will work closely with divisional staff to prepare enrolment projections and to provide the relevant revenue and expense information. Appropriate templates will also be provided to assist divisional staff in preparing their own budget plans to be submitted to the Provost's office. After University Fund allocations are finalized, the university-wide long-range plan will be prepared.

The objective of the process being designed is to achieve a higher level of engagement of the divisions in the planning process than at present and to ensure that the resulting plans are better tuned to the circumstances of individual divisions. The new model will only be used to shadow the present system during the first year of implementation. This will provide an opportunity for familiarization and training for all involved, as well as for making any necessary process adjustments.

Appendix B

Inter-Divisional Teaching
Suggested Approach

While inter-divisional teaching arrangements vary widely, they may be viewed as comprising the following three broad categories:

a) Division *T* offers a course for its own students; a few students from another division, *S*, also take that course.

b) Division *T* offers a course or participates in the delivery of a course that is primarily intended for students in division *S*.

c) Two divisions collaborate to offer a joint program.

Consistent with the principles above, cost and/or revenue sharing arrangements in any of these cases must not influence decisions regarding teaching responsibilities or which courses students choose. These decisions must be based on academic merit. However, financial arrangements should be designed to provide incentives for increased collaboration whenever possible. They should not introduce impediments or perverse incentives that are likely to cause isolation of programs or divisions.

Each of the three cases is discussed briefly below and a model is proposed for sharing revenues and/or expenses.

a) Students taking a course in another division

This is a common occurrence when students have elective courses in their programs that they are either required or choose to take outside the division in which they are registered. They choose from a wide range of courses that exist across the university, subject only to pre-requisite requirements and availability of space. The courses involved in this case are not specifically intended for students outside the division offering the course. This form of inter-divisional teaching offers a significant and enriching experience to all students.

Consider the case in which a few students from Division *S* are attending a course offered by division *T*. As a minimum, Division *T* should recover all its incremental costs associated with teaching these students. Thus, an estimate of the incremental cost provides a lower bound for the per-student charge that Division *S* should pay. At the same time, this charge should not be so high as to cause Division *S* to withdraw from this form of collaboration and offer alternative courses to its students. Thus, an upper bound of the charge for inter-divisional teaching in this case is what it would cost division *S* to offer an alternative course.

A charge that is higher than the upper bound or lower than the lower bound as defined above would introduce a perverse incentive that may reduce inter-divisional collaboration in teaching. Therefore, a fair charge, and one that would provide a positive financial incentive to both sides, is somewhere between these two bounds.

A suitable mechanism for cost sharing in this case is based on the unit known as Full Course Equivalent (FCE), where one FCE corresponds to one student taking a full-year course. The charge per FCE may be derived from course enrolment and course cost after accounting for all cost components, including central and divisional overheads. A course costing example is given below.

Because of the wide variety of circumstances that exist in the University, it is suggested that the division heads involved develop an appropriate formula for estimating a charge per FCE that they would recommend to the Provost for approval. Once developed, this formula would be used each year to adjust divisional budgets based on FCE statistics, which are available centrally.

In situations where students from Division *S* form a significant percentage of course enrolment, financial arrangements should follow the approach recommended under category (*b*).

b) A course offered for students in another division

Courses in this category are likely to be specialty courses that introduce an inter-disciplinary component in a program of study. The costs involved in delivering such courses are often shared between the divisions involved. For example, teaching may be shared between instructors from the two divisions, or one division may be responsible for teaching while the other may provide space and administrative support. For this reason, a formulaic approach is not suitable. The two divisions should develop a bilateral agreement on how costs are shared.

c) Joint Programs

The case of a joint program offered by two or more divisions is quite different from cases (*a*) and (*b*) above. The recommended model in this case is for the participating divisions to share revenues rather than charge each other expenses. The model should account for central overheads as well as expenses such as the cost of a Director's office. Consider the case of a program jointly offered by two divisions. The following approach should provide a fair sharing of both costs and revenues.

1. The revenue for all students enrolled in the program in the two divisions less all central overheads and student aid is identified.
2. Agreed upon common administrative and/or infrastructure costs in each of the two divisions are subtracted from the net revenue and credited to the division where the overhead is incurred.

3. The remaining revenue is distributed between the two divisions based on their respective academic effort. In most cases this is likely to mean that revenue is distributed in the ratio of the number of courses offered by each division.

Course Costing Examples

This example is given for illustrative purposes only. The numbers used are approximate, based on enrolments and expenses in 2002-03.

Using one FCE as the unit of measurement, where one FCE corresponds to one student taking a full-year course, students are taking about 6400 FCEs in divisions other than their own. This represents about 4% of the 230,000 FCEs offered university wide. These figures don include courses under categories *b* and *c* in Section IX of the report.

The expenses associated with one course may be estimated by considering typical components, as given in Table A1. The numbers given are approximate and are given for illustration purposes only. These parameters may then be combined to estimate the cost of a course and the cost per FCE as illustrated in Table A2.

Table A1. Course Cost Parameters

Course enrolment	50
Average instructor salary + benefits	$ 122,400
Central OH per instructor	$ 7,074
Admin FTE per instructor	0.200
Average administrative salary + benefits	$ 50,000
Central OH per admin FTE	$ 6,425
Teaching component of faculty appointment	40%
Average teaching course load	1.5
Instructor office space (nasm)	14
Lecture space (nasm) (50 - 100 students)	80
Lecture space utilization: 3 hours per week	7.5%
Average TA stipend rate per course	$ 5,000
Students per TA	30
Tutorial space (nasm)	50
Space cost per NASM (lecture/office)	$ 150

Table A2. Full Course Costs		
Instructor		
Salary	$ 122,400	
Space	$ 2,100	
Admin support	$ 10,000	
Central overhead	$ 8,360	
Subtotal	$ 142,860	
Instructor cost per course		$ 38,096
Lecture Space		$ 900
Tutorial Cost		
TA stipend	$ 8,333	
Central OH on tutorial space	$ 7,500	
Subtotal	$ 15,833	$ 15,833
Total		$ 54,829
Cost per FCE		$ 1,097

Appendix C

Attribution of Operating Revenue to Divisions

There are eight major sources of revenue in the operating budget. Of these eight, six will be attributed to academic divisions as described below. Two sources of revenue, Endowment Revenue and Canada Research Chair Revenue, are already included in academic divisional income and therefore further attribution is unnecessary.

1. Provincial Operating Grants

The Provincial Operating grant is based on the unit known as the Basic Income Unit, or BIU, and the enrolment for which universities receive funding are defined in each university's "enrolment corridor." Funding is based on the midpoint of the corridor, but actual enrolment may fluctuate within ±3% of the midpoint without a change in funding. Because of this and a number of other special circumstances, such as capped funding for graduate students, the effective BIU value for the university differs from the nominal value used by the Government.

The revenue attribution methodology will start by estimating an effective BIU value for the university, including all targeted envelopes. Then, each division will be attributed their portion of the operating grant revenue based on the number of BIUs generated by that division. The assumption underlying this approach is that eventually all targeted envelopes will disappear and will be rolled into the university's base operating grant. Also, within each targeted envelope the government funding per BIU is approximately the same. This methodology effectively spreads the University's unfunded BIUs evenly across all BIUs, with one exception: Revenue generated by TST is flowed directly to TST, which means that their unfunded BIUs are attributed directly to them.

2. Tuition Fees

Revenue from tuition fees will be attributed to each division based on divisional student FTEs and tuition fee levels. Adjustments will be made to account for funds set aside for student aid and other variations such as uncollected fees and surcharges on unpaid fees.

- ***Inter-Divisional Teaching Adjustment: Grants and Fees***

Total revenue from undergraduate operating grants and tuition fees will be adjusted to reflect inter-divisional teaching as described in the main body of the report. This will be done only for inter-divisional teaching under Category A. Categories B and C will be handled at the divisional level.

No adjustments are proposed at this time for inter-divisional teaching at the graduate level. Activity in this area will continue to be monitored.

3. Overhead on Research

Revenue from research overhead is generated from four sources and will be attributed by the following methods. In each case, the methodology followed is exactly the same as that used by the institution that provides the funds.

- ***Research Overhead Infrastructure Grant***

This grant will be distributed to each division based on the divisional share of the total federal grants received from CIHR, NSERC & SSHRC during the most recent three-year period.

- ***Overhead on Federal Research Grants***

Revenue will be distributed to each division based on the divisional share of the total federal grants received from CIHR, NSERC & SSHRC during the most recent three-year period.

- ***Ontario Research Performance Fund/ Ontario Research Fund***

Revenue will be distributed to each division based on the divisional share of the total provincial grants received, including ORDCF, OIT and PREA during the most recent three-year period

- ***Overhead on Research Contracts***

The full amount of research contract overhead will be attributed to the division in which the research is carried out.

4. Revenue from Investment Management Fees

The University's operating budget includes central revenue earned from fees charged to cover the costs of managing investments. This revenue will be attributed to divisions in proportion to each division's share of investment revenue. For further detail on the allocation of investment revenue, see # 5 below.

5. Investment Income

Investment income, net of amortization of investment loss, is attributed to divisions based on their share of total attributed revenue, which includes: attributed central revenue, research funds and divisional income (excluding recoveries.)

6. Other Income

Revenue in the Other Income category of the University's budget is generated from two main sources and will be attributed to divisions as follows:

- ***Application Fees***

Revenue from application fees will be attributed based on the number of applications to each division.

- ***Miscellaneous***

This revenue source is a relatively small amount and includes bank machine fees, depreciation recovery, parking recovery, overhead from real estate and ancillaries. It will be attributed based on each division's share of total attributed revenue from all other sources.

Appendix D

Allocation of Central Administrative and University-Wide Costs

Introduction

According to the proposed budget model, all university revenues will be attributed to academic divisions. Hence, all university-wide expenses must also be attributed to the academic divisions, as there are no other sources of revenue that can pay any of these costs.

The allocation methodology proposed below is a preliminary suggestion by the Task Force and is subject to final review and approval by the Budget Model Steering Committee.

The purpose of the expense attribution model is to allocate to divisions the central expenses incurred on behalf of different units across the University. The Operating Budget groups these expenses according to the University's administrative structure, i.e. by division or department. For the purpose of expense attribution, it is more convenient to group these expenses in terms of function.

Central expenses are organized in functional groupings, or expense bins, as follows:

1. Occupancy Costs – Caretaking, Utilities, Repairs and Maintenance
2. Information Technology: Systems Operations and Maintenance / Telecommunications
3. University Management
4. Financial Management
5. Human Resources
6. Pension Amortization
7. University Advancement
8. Library
9. Research Administration
10. Student Recruitment and Registrarial Services
11. University-Wide Academic Funds
12. University-Wide General Expenses

Appropriate cost drivers will be identified for each expense category. These are the measures on which the expenses in each bin will be attributed to various units. Cost drivers include such measures as number of undergraduate or graduate students, number of faculty members, area of space occupied, or gross revenue.

The first step in the expense attribution process is to determine the true cost of each activity. The direct cost of any activity is equal to the funds allocated to that activity in the University's budget. However, before attributing these costs to academic divisions, adjustments are made to account for the fact that each activity carries overhead. For example, the Human Resources Department occupies space; so the total expenses of that unit should include the cost of the space it occupies. The units that provide computing and communications services have employees, and hence they use Human Resources services. Similarly, Human Resources staff use various IT systems and their resources. After adjusting for these inter-dependencies, the total expense in each of the bins is known.

Comments on Specific Expenses

The following are brief descriptions of the expenses in each bin and the suggested cost drivers for allocating these costs among various units in the University. As described in the main report and above, it is recommended that a Steering Committee be established to study these cost drivers further and to determine the appropriateness and accuracy of the corresponding data sources. The Steering Committee should consult widely, particularly with the divisional financial officers, as it guides the implementation of the new budget model.

1. Occupancy Costs

- ***Caretaking and Utilities***

Space costs for caretaking and utilities vary from one building to another. These costs will be calculated by Facilities and Services based on gross square meters (GSMs) but will be assigned to various units according to building occupancy based on net assignable square meters (NASMs), excluding UTSC and UTM who pay for their own space costs directly. Thus, the space cost attributed to a division is calculated as the total NASMs occupied in each building times the caretaking and utilities costs (including deferred maintenance on utilities infrastructure) specific to that building. The cost of space managed by the Office of the Space Management is excluded from the above and is attributed separately to academic divisions based on student FTEs.

- ***Repairs and Maintenance***

Repairs and maintenance for buildings fall into two main categories: ongoing annual repairs and maintenance and deferred maintenance. These costs are often unpredictable and highly variable and therefore it is more effective for divisional planning purposes to smooth these costs over time and across buildings; an average cost across the university as a whole will be calculated and assigned to various units according to building occupancy (NASMs).

2. Information Technology: Systems Operations & Maintenance / Telecommunications

The Systems Operations and Maintenance/Telecommunications cost bin includes the following expense categories:

- Computing Network Support (CNS): costs will be allocated on the basis of share of staff and student FTE.
- Administrative Management Systems (AMS): costs will be allocated on the basis of share of total attributed revenue.
- Student Information Services (SIS): costs will be allocated on the basis of share of student FTE.
- Telecommunications: costs will be allocated on the basis of share of number of telephone lines

3. University Management

This cost bin includes the costs of the Office of Governing Council and Ombudsperson, the President's office, the office of the Vice President and Provost and Other Institutional Costs. These costs will be allocated on the basis of share of total attributed revenue.

4. Financial Management

This cost bin includes the costs of Financial Services, Insurance, Internal Audit, the Procurement Office and Audit Fees. These costs will be allocated on the basis of share of total attributed revenue.

5. Human Resources

The costs for central Human Resources will be allocated based on divisional share of faculty, administrative and union FTEs. Budgets in the two decentralized Human Resources offices (Professional Faculties North and South) will be taken into account in the total cost for allocation purposes.

6. Pension Amortization

The cost of Pension Amortization will be allocated based on divisional share of faculty, administrative and union FTEs.

7. University Advancement

The expenses in this bin are divided into three components: Public Affairs, Alumni Relations and Development. Because most of the effort of the Public Affairs office is directed towards publicizing research, the costs of this office will be allocated based on a three-year rolling average of total research funding received by a division. Expenses of the Alumni Relations office will be distributed based on active alumni headcount, and Development costs will be attributed based on the total funds raised by divisions during a ten-year rolling window.

8. Library

The Library cost bin includes the following expense categories:

- Reader Services: costs will be allocated on the basis of share of weighted-use undergraduate and graduate student FTE
- Collection Development: costs will be allocated on the basis of share of weighted-use undergraduate and graduate student FTE and faculty FTE.
- Information Commons, Technical Services and Rare Books: costs will be allocated on the basis of share of total student FTE.

9. Research Administration

The cost of Research Administration will be allocated to divisions based on their share of a three-year rolling average of total research funding received.

10. Student Recruitment and Registrarial Services

This cost bin includes the following expense categories:

Undergraduate

- Admissions: costs will be allocated based on number of applications for those programs that use the central admissions office.
- Financial Aid and Awards: costs will be allocated based on number of OSAP applications. This office administers OASP for all divisions and UTAP for all undergraduate programs excluding Law, Medicine and Rotman.
- Recruitment: costs will be allocated based on number of applications for each division.

Graduate (SGS)

- Administration costs will be allocated based on share of graduate student headcount.
- Bursary costs will be allocated based on share of full time graduate student headcount.

11. University-Wide Academic Funds

Several funds, such as APF and AIF, are held centrally to support academic and administrative initiatives. These funds will be initially charged to divisions as overhead on the basis of gross attributed revenue. Later they will be flowed to divisions based on academic priorities

12. University-Wide General Expenses

This bin includes expenses such as legal fees, costs related to UTFA and various unions, centrally held debt costs, membership fees for organizations such as COU and AAU, etc. These costs will be allocated to divisions on the basis of gross attributed revenue.