# McMASTER UNIVERSITY 

2013/14

## CONSOLIDATED BUDGET

Approved by the Board of Governors
June 6, 2013

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## EXECUTIVE SUMMARY

In 2012/13, the operating fund is projected to run an in-year deficit of $\$ 18.5$ million on a cash basis (compared to an approved operating budget deficit $\$ 27$ million). The in-year deficit is related to net one-time and non-recurring expenditures of $\$ 31.5$ million. The operating fund reflects $58 \%$ of the consolidated budget. Exclusive of one-time and non-recurring expenses the operating fund is balanced.

The consolidated budget for 2013/14 reflects a $\$ 4.6$ million surplus on an accrual basis. This budget incorporates the recently announced tuition framework capping undergraduate tuition at $3 \%$. The tuition framework along with the policy levers, international student recovery and reduced municipal tax grant all introduce considerable downward pressure into the budget and uncertainty into plans for 2014/15 and 2015/16. The significant one-time expenditures over the next several years will draw down accumulated appropriations. The need to continue a number of strategic investments will make it imperative to find new revenues, additional cost savings and greater efficiencies in future years. Historical cost inflation approximates $4.5 \%$ and provincial funding has not traditionally taken inflationary costs into account.

Additional key financial pressures affecting the 2013/14 consolidated budget include pension costs, particularly special payments and solvency costs associated with the pension deficiency as measured using historically low interest rates. Although the University has received Stage 1 solvency relief and will apply for Stage 2 solvency relief to ease the period of time where these special payments are required, the current actuarial measurement methodology for solvency calculations is driving significant cash contribution requirements over the next several years. If unchanged, or if further legislative relief is unavailable, McMaster and peer universities could see as much as $20 \%$ of their annual operating revenues directed into the pension. As interest rates change these contributions need to be monitored annually to ensure the plan does not become over-funded. Overall, this issue is the most significant financial pressure McMaster faces. In addition, deferred maintenance related to the University's physical infrastructure remains a significant priority. A full audit was completed in 2012 resulting in an updated estimate of $\$ 295$ million in deferred maintenance for critical to minor repairs. Included in this budget is an approved base adjustment for deferred maintenance of $\$ 2$ million, resulting in an annual budget of $\$ 4.9$ million. Plans for the next three years include further $\$ 2$ million per year base adjustments to further deal with critical physical infrastructure needs.

Efforts to increase revenues through student growth are currently limited due to capacity issues with our classrooms, housing and other infrastructure. These capacity issues require capital investments. Currently, total capital related plans exceed internal available resources. Further debt has not been factored into this budget, however additional external financing is being considered. The University's goal is to maintain continued financial capacity and flexibility while undertaking a number of strategic priority capital investments.

Overall, continued financial challenges are expected in the years ahead. The reductions in provincial funding along with risks of reduced government and industry research funding create increasingly difficult annual challenges. Many of the challenges will result in departments drawing down, if not fully depleting, accumulated appropriation balances over the next three years. Further cost cutting measures will be necessary in the absence of sufficient revenue offsets.

## INTRODUCTION

This document includes the budget for 2013/14, projections for 2012/13 and high-level plans for 2014/15 and 2015/16. The budget represents concerted efforts across the University.

Accountability for the effective management of the budget is delegated by the Board of Governors to the President. The Budget Committee of the University has the responsibility for oversight of the operating and ancillary funds of the University, which account for two thirds of the annual expenditures, and recommends the annual budget to the President.

Figure 1: Expenditures by Fund - Year Ended April 30, 2014


The Budget Committee has been guided in its budget decisions by McMaster’s strategic priorities, developing a distinct, effective and sustainable undergraduate experience; enhancing the way we see and build connections between McMaster and the community; and supporting continuing excellence in research that informs and integrates with a reconceived educational mission, while incorporating internationalization as an integrated part of these three priorities.

While the focus of this document will be on the operating fund, activities in the other funds impact choices available in the operating fund. The budgets for each of the other funds are consolidated in this document. In addition, the consolidated Statement of Operations on a full accrual basis ${ }^{1}$, Balance Sheet and Statement of Cash Flows have been included. The objective of the Consolidated Budget is to ensure greater transparency and promote improved understanding of University finances. From this report, it should be possible for readers to see the details of the operating fund and how it integrates with the Consolidated Budget, thereby getting a clearer picture of the University's overall financial health.

[^0]
## CONTEXT

Early in the 2012/13 academic year, the Ministry of Training, Colleges and Universities (MTCU) released its discussion paper Strengthening Ontario's Centres of Creativity, Innovation and Knowledge. This paper outlined a vision for the post-secondary education sector to provide the best possible learning experience for an increasing number of students in the context of the ongoing recovery from the recession. At the same time, new technology is driving worldwide transformation in both the way students learn and the way education is delivered, requiring increased investment to improve quality. Although it is recognized that efficiency-focused strategies can reduce critical capacity and may not be sustainable, the Province will employ funding reduction strategies to address fiscal constraints in the short term. We have highlighted the most significant factors that affect the University budgeting process.

## Uncertainty and Timing of Provincial Funding Announcements

When the University budget process began in the fall of 2012 the next phase of the Ontario government's Reaching Higher plan 2012/13 extension had not yet been announced. As the current 2013/14 budget was being finalized, the Province announced a new four-year tuition framework, reducing the overall cap on tuition increases from $5 \%$ to $3 \%$, with differential rates depending on program. The moratorium on increasing or establishing flat or deferral fees will continue.

Although the Province announced funding an additional 41,000 students in the University sector in its 2011 budget, the timelines for funding have been extended to 2017/18. Representatives from MTCU have not yet confirmed whether the additional eligible graduate FTE spaces will be allocated in 2013/14 or beyond. The policy levers, or efficiency targets, and reductions for international students, including the reduction to the municipal tax grant, introduced in the provincial 2012 budget have been incorporated into the 2013/14 budget and future years' plans.

The effect of the provincial deficit and associated policy decisions continue to reduce the University's financial flexibility and ability to maintain its infrastructure, which is already over capacity. This budget and future plans incorporate specifically funded and modest targeted growth.

## Tuition Framework Set by the Provincial Government

The University has limited fee-setting ability and may only increase regulated tuition within the provincial government framework. McMaster's policy is to apply the capped tuition fee increases within the regulations in order to support the quality of education our students receive. The increases in international student fees that began in 2012/13 will continue and be monitored relative to our key peers ${ }^{2}$. No additional increases to offset the grant reduction for international students are included in the 2013/14 budget.

Budget assumptions include:

- Domestic tuition rate increase will match that allowed by the framework (see Table 1).

[^1]International rates are assumed to increase by 6\% per year.

- Enrolment will change by less than 1\% each year, with slight increases in domestic FTE's offset by slight declines in international FTE's.
- New undergraduate intake is assumed to match targets set by the Enrolment Management Team. New graduate enrolments are assumed to remain constant at 2012/13 actual Year 1 intake levels.
- Continuing undergraduate and graduate FTE's are based on estimating the flow-through of new students into continuing years using the probability of transition from year to year by Faculty based on historical averages.

Tuition growth revenue is in the budget allocation framework for 2013/14 at a high level and is not distributed to individual envelopes at this time. Distribution will occur to the Faculties in the summer of 2013.

## Unfunded Liabilities in Pension and Non-Pension Post-Retirement Benefit Programs

McMaster University maintains pension and post-retirement benefit programs for most groups of fulltime employees. Both defined benefit (DB) pension and group RRSP plans exist. Most employees are members of the DB pension plan. Funding the DB pension plans continues to be challenging. Both the hourly and salary pension DB plans have significant funding deficits, as measured by historically low interest rates, resulting in required special payments to the plans. The University has applied for and received approval for temporary relief under the Ontario Temporary Funding Relief Program. The temporary relief program significantly reduces the pressure to fund the pension plan deficits in the short term. However, it does not relieve the University of funding going-concern deficits or of resolving its solvency deficiency. Based on current legislation the University will be required to increased payments to the plan for the foreseeable future. Over the past several years the gap between the assets and the liabilities in the DB plan has increased significantly. This is primarily due to the low interest rate environment and the actuarial measurement methodology that requires a discounting predominantly based upon 10-year Canadian bond rates, which does not match the long-term nature of the liability; nor does it match or reflect the rate of return on the pension assets. As of July 1, 2011, the salaried pension plan funding shortfall was estimated at approximately $\$ 182$ million on a goingconcern basis ${ }^{3}$. The solvency shortfall at that date was $\$ 267$ million. The next salaried pension plan valuation is required as of July 1, 2014 and it is expected that the solvency deficit will increase based upon the current actuarial measurement methodology. The pension plan deficiencies will require the University to make substantial contributions into the plan over the next several years.

Non-pension post-retirement programs (such as extended health and dental benefits) also have an unfunded deficit. As of April 2012, the present value of the expected future cost of non-pension postretirement obligations was estimated at $\$ 219.5$ million ( $\$ 192.5$ million in April 2011.) To help address underfunding in both the pension and non-pension plans, changes in plan design, and increases to both employee contributions and employer-related departmental charges were implemented and will continue in subsequent years. Each budget envelope is required to absorb these cost increases, which is often accomplished through reductions in other budget lines. In turn, given that $70 \%$ of the operating budget represents human resource costs, staff reductions have proved unavoidable in many areas.

[^2]
## Further detail on Post-Retirement Benefit Programs is included in Appendix D.

## Continuing Volatility in Financial Markets

Financial markets have a significant impact on McMaster's financial position through the investment returns on pension plans and both internal and external endowments. The endowment fund investment policy uses a diversified asset allocation strategy that includes a mixture of equities (60\%) and fixed income (40\%). Annual net returns have been volatile over short periods of time (i.e., $-18.9 \%$ in $2008 / 09,+17.5 \%$ in 2009/10, $+11.5 \%$ in 2010/11, $0 \%$ in 2011/12). The University's goal for its endowment funds' annual rate of return is 7.5\%; this reflects our long-term average return objective. The projected 2012/13 annual net rate of return for the long-term investment pool is expected to approximate $6.5 \%$. The fluctuating investment returns continue to affect the University's ability to maintain the annual allocations for spending from some endowments that support strategic areas of expenditures, such as scholarships, research and bursaries. Short-term rates of return are expected to remain low in 2013/14.

## Cost Pressures

Expenses continue to grow at rates faster than revenues. Like other Ontario universities, McMaster faces significant cost pressures, which force us to make difficult choices in order to continue to invest in the quality of our core research-focused student-centered missions. Present and future challenges to operating performance include:

- Inflationary pressures of over $\$ 15$ million per year. Salary and particularly benefit contribution costs continue to rise. Demand for highly qualified faculty, staff and researchers, nationally and internationally, is expected to continue requiring McMaster to compete for talent resulting in pressure on the University's financial position. Other major cost pressures where there is less control include: utilities, additive operating costs related to new buildings, legal costs and copyright fees.
- The costs of maintaining current space to appropriate standards. The University continues to fall behind on deferred maintenance, which now totals approximately $\$ 295$ million (as measured by a full 2012 building audit). This backlog has become an urgent priority. A significant base funding increase has been approved in 2013/14 with additional annual base increases planned to address it.
- The need for increased capacity with increasing enrolment. Space constraints are beginning to impact both admission targets and commitments to research.
- The costs of compliance with increasing regulatory and reporting requirements, such as the Access for Ontarians with Disabilities Act (AODA), for which no external funding has been allocated.
- A need to overhaul the information technology infrastructure supporting McMaster through the Mosaic project. The costs associated with systems renewal are significant involving a 10-year funding plan.


## Funding for Indirect Costs of Research

When government research grants are received they cover the direct costs of research, but only a
portion of the indirect costs ${ }^{4}$. Indirect costs of research are approximately half of direct costs; however overall the University's overhead income is only about $11 \%$ of total research spending.

In addition to supporting the indirect costs of research, matching contributions to the direct costs are a requirement of many grant programs. For example, the Canada Foundation for Innovation will cover $40 \%$ of a research project, with the balance to be provided by the Province, other external partners and University sources.

Therefore, the more successful the University is in securing research grants, the more resources are required from elsewhere in the operating and capital budgets to pay for the full cost of research. As a highly research-intensive University, this financial disconnect is a significant pressure for McMaster University.

## Long Term Balance Sheet Challenges and Credit Rating

The 2012 updated credit rating reports have resulted in unchanged credit ratings. S\&P remains at AA(stable), and DBRS remains at AA (low) -stable. Although the financial health of the University has improved over the past three years, the ratings have remained unchanged, due in part to our continuing pension and non-pension cost pressures, and to the credit downgrading of the Province, which provides $42 \%$ of the University's operating budget. A note in the University's DBRS 2012 Credit Rating Report states: "The University has made efforts to change its benefit plans, particularly for new employees, although these changes will have little impact on the near term, as upcoming obligations cannot be easily amended for current pensioners and long-serving staff." S\&P’s June 2012 rating notes: "unrestricted financial resources are likely to remain under pressure in the near term, reflecting continued internal financing of loans for capital projects. While this has kept debt at a relatively low level, financial flexibility has diminished considerably and, in our view, it is not likely to dramatically improve in the next few years". In March 2013 the University updated its Debt Management Policy and completed a Debt Strategy Report to address long-term balance sheet challenges and propose alternatives to further improve financial flexibility and health.

[^3]
## THE BUDGET PROCESS

The process of generating a budget for the University involves many people. This document, as a consolidated budget, reflects decisions made at every level. This process results in a picture of the financial vitality of the institution and its relationship to the wellbeing of its constituent components.

## Principles Used in Generating the Budget

In "Forward with Integrity: A Letter to the McMaster Community," dated September 21, 2011, President and Vice-Chancellor Patrick Deane identified principles to guide the realization of the University's goals in the coming decade:

1. McMaster is an institution devoted to the cultivation of human potential, which cannot be realized by individuals in isolation from one another; its programs and activities will reflect this comprehensive view.
2. The University will adopt a multidisciplinary perspective, recognizing that even the most specialized problem requires an appropriately broad-based approach.
3. McMaster's future shall be continuous and consistent with its past, expanding upon and fulfilling the historic character and distinct identity of the University as an institution while at the same time continuing to recognize the importance of collaboration and dialogue with sister institutions in Ontario, Canada, and abroad.
4. McMaster will place the highest value on original thought and innovation.
5. The University will not only reaffirm the importance of radical questioning at the heart of the academic enterprise, but will ensure the integrity of its work by bringing a critical view to all of its practices - those which bear directly upon education and research, as well as those less directly related to it.
6. Wherever possible, the University will reduce or eliminate obstacles to cooperation.
7. Members of the McMaster community will acknowledge, and seek to integrate in all their work and in ways appropriate to their specific fields, an obligation to serve the greater good of their community - locally, nationally and globally.

The President and Vice-Chancellor identified three strategic priorities for the next decade:

- Developing a distinct, effective and sustainable undergraduate experience
- Enhancing connections between McMaster and the community
- Supporting continuing excellence in research

In the aggregate, these priorities comprise an urgent imperative which frames the University's future and the future of each of its constituent parts, and informs the principles used in generating the budget:

- The academic and research mission of the University is foremost in the development of guidelines to budget managers
- Revenue must be strategically allocated in support of the University mission
- Ongoing and one-time costs need to be identified in order to develop a clear picture of our financial position
- Envelopes must be structurally balanced with ongoing expenditures less than or equal to ongoing revenues
- Priorities must be decided using a rigorous process in a way that is strategic, fair and equitable across the University, and avoids a piecemeal approach


## Uncertainty in Budgeting

All budgets are based on assumptions made about the future, resulting in some uncertainty respecting future events. As outlined above, there is significant uncertainty about our annual operating revenue. Operating fund revenues come from three primary sources: tuition, base funding by the Province, and provincial accessibility funding. Accessibility funding can be variable and has typically been confirmed quite late in the fiscal year. This introduces significant uncertainty into our budgeting process. These unforeseen incremental revenue sources, while welcome, create confusion and lead to disbelief in the budgetary process, especially as they are frequently targeted in application.

As one means of coping with uncertainty, slip-year funding for academic envelopes was introduced in the 2010/11 budget year and is reflected in the current budget. In a period of increasing revenues this has meant a delay in allocation of much-needed funding, to the detriment of the academic mission. The need for the funding outweighs the risk of variability, and there are plans to eliminate slip-year funding with introduction of the new budget model. Allocations to non-academic envelopes are not affected by slip-year funding, and remain frozen except for funding provided to targeted priorities.

## Conservative Budgeting

McMaster uses a conservative approach to producing its budgets. In this budget, the conservative approach has been less rigorously applied to revenues than in the past. Revenue growth that is supported by reasonable plans has been included. In addition to tuition rate increase assumptions, enrolment growth based on planned targets and expected admissions has been factored into tuition and grant revenue.

In recent years and in response to historical trends, vacancy allowances have been included at a consolidated level to offset the tendency of budgeting for a full complement of personnel to overstate compensation expense. For the 2013/14 budget, individual envelope managers have estimated vacancies in their own envelopes. Although no vacancy allowances have been factored into the budget at a consolidated level, an expenditure allowance has been budgeted.

## Budget Development

At the beginning of the budget cycle, the Budget Committee makes assumptions about revenues and expenses for the coming year based on the best information available at the time. The Budget Committee sets allocation levels and issues budget guidelines to envelope managers to provide a uniform basis for development of the budget. For 2013/14, the Budget Committee set envelope allocations unchanged over current 2012/13 levels.

Budgets are developed by envelope managers on the basis of the guidelines. Each of these envelopes is reviewed by the Budget Committee using a standard submission framework, identifying:

- Strategic objectives and their relationship to the Forward with Integrity letter
- Cost pressures, the actions taken to achieve a balanced budget, effects on the University community, and the related risks
- All one-time costs and the related funding sources
- Unfunded priorities
- Capital plans

While receiving all budget submissions, the Budget Committee identified unfunded priorities and potentially unacceptable cost-cutting actions. The Committee explicitly prioritized these items for review by the President, recommending some for funding. In consultation with the Vice-Presidents, the Budget Committee and the President undertook their best efforts to fund as many of these important items as possible. There were concerns about the viability of the budget submitted by the Faculty of Humanities, and the Budget Committee elected not to receive it. In response to the feedback of the Budget Committee, the Acting Dean of Humanities will bring forward a revised plan in 2013/14.

## New Budget Model Implementation

Since 2007/08, work has been progressing on designing a new budget model to replace the current incremental method of sharing revenue. Budget Model Task Force I established a set of principles that would serve as the framework for the examination of any new budget model. These principles state that a budget must:

- Promote transparency, trust and engagement
- Assure financial responsibility, accountability and fairness
- Advance the efficient use of physical and human resources
- Have predictability and stability
- Enable innovation, creativity and change
- Assign fiscal and academic responsibility to the appropriate levels
- Build the student learning experience both inside and outside the classroom
- Enable rapid response to opportunities
- Ensure the sustainability of areas of existing and emerging excellence in keeping with academic priorities

Additional guidelines adopted by Budget Model Task Force II and based upon additional feedback are:

- Support and enhance the academic mission (research and teaching)
- Avoid the creation of "silos" and promote inter-Faculty / departmental cooperation
- Keep things simple, not too many variables
- Utilize the concept of "materiality" - spend time on large items, set a limit under which the item will not form part of the components of a budget model
- Be simple to administer
- New buildings (built after 2012) will be metered and will pay actual utility costs in order to promote LEED compliance
- A research infrastructure fund (RIF) will be established to promote the support of research at McMaster University

President Deane has approved implementation of the new budget model for the 2014/15 fiscal year. As the final shadow year of the current model, the 2013/14 budget represents the "hold harmless" level, or guaranteed minimum allocation, for Faculties during the transition period, as well as the baseline for allocations to support units. With this in mind, the Budget Committee made funding recommendations to ensure that strategic priorities are incorporated into base allocations in the 2013/14 budget.

## Assumptions

What is known at the beginning and the end of the budgeting process often varies substantially. As the budget cycle progressed, more reliable information became available. Table 1 summarizes assumptions at the beginning and end of the 2013/14 budget process. Additional revenue received in 2012/13 will be allocated to faculties during the 2013/14 fiscal year. For fiscal years subsequent to 2013/14, high-level projections were made by the departments and faculties. Should these projections prove too optimistic, additional spending cuts will be required.

Table 1: 2013/14 Budget Assumptions

| Key Assumptions | 2013/14 Budget Guidelines <br> Fall 2012 | $\left\lvert\, \begin{aligned} & \text { 2013/14 Final Budget } \\ & \text { April } 2013\end{aligned}\right.$ | 2014/15 and $2015 / 16$ Plans April 2013 |
| :---: | :---: | :---: | :---: |
| Enrolment | - Undergraduate increase $0.75 \%$ in 2013/14, 0.22\% 2014/15, flat 2015/16 - Graduate to increase by $1 \%$ annually through 2015/16 (19 Masters, 11 PhD, 7 international) | - Undergraduate 1.0\% increase, Year 1 intake 5,250 students <br> - Graduate 2.8\% increase, Year 1 intake at 2012/13 levels | - Undergraduate 0.3\% increase in 2014/15, $0.4 \%$ decrease in 2015/16, Year 1 intake 5,290 students for both years including new MRSc spaces <br> '- Graduate 0.6\% increase in 2014/15, 0.1\% increase in 2015/16, Year 1 intake at 2012/13 levels |
| Operating grants | - Undergraduate Accessibility grant fully funded <br> - Graduate Expansion funding at current rate of $\$ 14,067$ per Masters student and \$27,145 per PhD student <br> - $\$ 2.5 \mathrm{~m}$ decrease for efficiency targets and international student reduction | - Undergraduate Accessibility grant fully funded at BIU rate reduced by $0.72 \%$ <br> - Graduate Expansion grant reduced by $0.96 \%$ per FTE <br> '- Basic Operating grant reduced by 0.94\% for policy levers plus $\$ 750$ for specified international students <br> - Municipal Tax grant reduced by $\$ 75$ for full-time international and Masters/diploma students (PhD excluded) | - Undergraduate Accessibility grant BIU rate further reduced by $0.72 \%$ in 2014/15 - Graduate Expansion grant further reduced by $0.96 \%$ per FTE in 2014/15 <br> '- Basic Operating grant further reduced by $0.94 \%$ for policy levers in 2014/15 |
| Tuition revenues | Domestic rates capped at 3\%, international rate increase 6\%, $4.6 \%$ increase overall from growth and rate increases | Domestic rate increases: <br> - 3\% Arts \& Science undergraduate or other <br> - 5\% Professional undergraduate or any Graduate starting in or after 2013/14 <br> - 4\% Professional undergraduate or any Graduate enrolled in 2012/13 <br> - 3\% overall cap <br> International rate increase 6\% |  |
| Other revenues | Increased contributions from ancillaries | Transition ancillary contributions to a uniform 4.5\% of sales |  |
| Rate of return on long-term investments | 7.5\% | 7.5\% |  |
| Rate of return on short-term investments | 1.0\% | 1.0\% |  |
| Compensation increases | - 0\% increase for all employee groups on expiration of current collective agreements - step and CPM increases included in budgets | - MUFA $1 \%$ in 2013/14, $1 \%+\$ 1,250$ ATB in 2014/15, $1.5 \%+\$ 1,850$ ATB in 2015/16 <br> - 0\% increase for all other employee groups on expiration of current collective agreements <br> - step increases included in budgets |  |
| Employee benefits | Pension solvency relief, post-retirement benefits provision and WSIB NEER surcharge increases included | Pension solvency relief, post-retirement benefits provision and WSIB NEER surcharge increase included <br> PDA increased per MUFA agreement |  |
| Reductions in staffing | None | Critical vacancies to be filled | FTE reductions planned to balance budgets |

## ACTIONS TAKEN TO ACHIEVE BALANCED OPERATING BUDGETS

At the direction of the Board of Governors, the University is required to present a balanced budget. The 2013/14 budget reflects action taken in five main areas:

## 1. Revenue Generation

University-wide strategies to increase the revenue base include but are not limited to:

- Introducing and expanding programs, including but not restricted to Executive Education; Family Medicine Residency; Master of Health Sciences in Education; Bachelor in Justice, Political Philosophy and Law; Bachelor of Professional Communication; joint initiatives with Mohawk College; and co-op and interdisciplinary programs.
- Increasing tuition to the extent allowed within tuition framework, generating $\$ 9$ million in additional funding for 2013/14.
- Increasing recruitment of international students through the development of an ESL-based bridging program and tapping into external sources of support of scholarships.
- Improving student retention through strategies to improve student success as well as early warning systems to identify students at risk.
- Enabling additional growth through off-campus expansion, self-directed learning, and extension of lab times.
- Developing and maintaining strong government relations and pursuing grants to offset special student initiatives.
- Optimizing ancillary price structure to drive sales and maximize revenue while remaining competitive.

2. Reallocation of Resources to Support the Academic Mission of Teaching and Research

Revenue-sharing arrangements in which enrolment-related incremental revenues are shared between faculties and non-academic envelopes were suspended for non-academic envelopes in $2007 / 08$. This suspension has continued through 2013/14, and the non-academic share has been reallocated and used for funding strategic priorities identified through the budgeting process. Revenue sharing with academic areas has continued and is in place in 2013/14. Non-academic areas have been required to find efficiencies and reduce services to accommodate inflationary cost increases through implied reductions.

All ancillary operations, such as graphic design services, printing, campus stores, housing, and hospitality, must cover all direct costs incurred while earning revenue, while also paying market rate rent and a sales contribution to the operating budget of the University and Student Affairs. In addition, ancillary operations must offer goods and services at competitive rates offering value to faculty, students and staff. A review of ancillary contributions to the operating fund has revealed an uneven contribution burden on some units. Equalization in contribution rates is planned beginning in 2014/15.

## 3. Budget Freezing or Reducing Envelope Allocations

In 2007/08, all envelopes received a base budget allocations reduction of $1 \%$. Since then, no general increases have been provided, all budget envelopes have needed to absorb inflationary costs. This has required actions such as:

- Where possible, delaying, reducing or eliminating expenditures (e.g., vacancies, lab renewal, equipment replacement, research support, memberships)
- Streamlining programs and optimizing class sizes to reduce teaching costs from sessional faculty and teaching assistants
- Identification of critical positions and ideal staffing levels, utilizing attrition to achieve them
- Reviewing and simplifying significant administrative processes and implementing best practices
- Increasing electronic communications, allowing reduction of printing and mailing
- Targeting expenditures to areas of greatest priority
- Closing and rationalizing facilities
- Implementing cost recovery, reducing services or introducing fees for new services

While some of these measures allow for balanced budgets in the short term, the amount they contribute to savings in the operating budget is limited, and they do not always contribute significantly to long-term financial viability. Several of them require action over a number of years to be successful.

In 2013/14, the provincial grant policy levers totaling $\$ 1.8$ million will be distributed as a reduction across all envelopes. As well, the international student recovery will be allocated across all faculties with the policy levers at the same time as the slip-year allocations. The municipal tax grant reduction has been applied to the general university envelope where the grant and expense have typically been recorded.
4. Addressing Specific Challenges through Strategic Investments

The Budget Committee manages unallocated funds tightly and makes allocation recommendations based on strategic (e.g., "Forward with Integrity" initiatives) or unavoidable (e.g., deferred maintenance) priorities. Increasingly, with the allocation to non-academic envelopes frozen for seven years, ongoing investments must be made in units that can no longer balance their budgets, having exhausted prior years' savings and eliminated all non-critical services. Key investments in 2013/14 include:

- Multi-year allocations to build a base level of funding to address the backlog of deferred maintenance
- Forward with Integrity initiatives
- Strategic space expansion for research and technology development
- Additional library information resources
- Funding to reduce the liability for post-retirement benefits


## 5. Strategic Labour Negotiations

Employee costs account for $70 \%$ of our operating costs and are therefore the major focus of our
cost-reduction strategies. Historically, these costs have been rising faster than revenues, as compensation increases and the costs of absorbing pension payments into the operating budget has taken effect. For some years, McMaster has been pursuing strategies in our labour negotiations, targeted at reducing the rate of increase and establishing greater cost certainty while being mindful of the need to be competitive in the market to ensure effective retention and recruitment. Our partners have responded productively to bring significant change leading to better financial outcomes. Key successes have included changes to pension benefits and post-retirement benefits, including substantial employee contribution increases.

## Envelope Highlights

Leadership across the faculties has changed, with a new Dean of Engineering starting in 2012/13 and decanal vacancies to be filled in 2013/14 in Business, Humanities, and Science. What follows is a brief description of the actions of the major envelopes to maintain quality, contain costs and strengthen their financial position.

## Faculty of Business

The DeGroote School of Business is focused on refining a new strategic direction for the school that will lead to the fulfillment of the planned Executive MBA program along with an updated curriculum for MBA and Commerce programs. Growth will be fueled by new and increased enrolment from these activities. The strategy also includes enhancing undergraduate retention and student engagement. The Faculty is also committed to enhancing its outreach activities to alumni and community partners and to leveraging our existing strengths in experiential learning.

Significant in-year and cumulative deficits are forecast. Static undergraduate enrollment, increased faculty salaries and greatly increased benefit costs are the primary drivers of these increased deficits. Strategic fundraising, improved student retention, revenue-generating programming and ongoing cost reductions will need sustained effort to resolve the financial situation of the Faculty.

Plans have been put in place for significant cost reductions including controllable teaching costs, staff costs and non-salary costs. By the end of the 2014/15 fiscal year $\$ 1.5$ million in savings is expected to be achieved from these measures.

## Faculty of Engineering

The Faculty of Engineering is projected to end the current fiscal year with a significant surplus. Engineering has been actively recruiting new faculty members with 11 hires (3 in BTech) in the past year, but continued attrition through resignations and retirements has slowed the net growth. Once the current phase of hiring is complete, the faculty complement (not including those associated with the new BTech program) will have grown by about $3.5 \%$ over its previous peak, a modest increase when compared to the much larger growth in both undergraduate and graduate student enrolments.

The primary strategic initiative related to Forward with Integrity is the ExCEL building and the related program developments to enable that building to serve effectively as a centre for experiential learning.

## Faculty of Health Sciences

The Faculty of Health Sciences continues to sustain success by absorbing planned enrolment increases, particularly with distributed learning opportunities; enhancing prospects for inter-professional education and research while stabilizing research capacity growth and developing flexibility in a time of fiscal challenges.

Faculty of Health Sciences program expansion has been designed to have minimal impact on other areas of the University, as most of the additional students are off campus, particularly at self-sustaining regional campuses. However, rising competition for research funding and continued fiscal stress on hospital partners are hard realities that present financial risk in the long term.

The Faculty's major capital initiatives in 2013/14 are the construction of the McMaster Health Campus in downtown Hamilton and the Halton McMaster Family Health Centre with Joseph Brant Hospital in Burlington. Both facilities will provide capacity for commitments to the Ministry of Health and LongTerm Care for growth of post-graduate medical programs, particularly family medicine. As well, construction of the Boris Family Clinic, a partnership with Hamilton Health Sciences, and the creation of the Boris Family Centre in Stem Cell Therapies in MDCL will be exciting developments in 2013/14.

## Faculty of Humanities

The Faculty of Humanities at McMaster constantly strives to maintain a teaching and research environment reflecting the highest standards of its disciplines. The Faculty's strategic focus seeks to deepen commitment to four priority areas consistent with Forward with Integrity: education, research, community engagement and internationalization. Humanities students receive a high quality learning experience, enabling them to participate as full partners in their learning.

The transformation of the Faculty is the overriding objective for 2013/14 and has six major areas: reimagining the learning experience in the Humanities; knowledge mobilization and impact in the Humanities; interdisciplinary programs and models; experiential and community service learning; reconfiguring the Humanities; and the financial health of the Faculty. In 2013/14 the Faculty of Humanities will be taking significant steps to reduce its structural deficit in the budget while continuing to maintain quality and commitment to Forward with Integrity ideals.

## Faculty of Science

Science is capitalizing on its proven success in Introductory Psychology courses by creating new blended learning models for courses in Chemistry, Biology and perhaps Physics. The creation of the Life Sciences Council has provided a governance model that will ensure the appropriate interdisciplinarity of the Life Sciences Program, as well as a mechanism for the proper resourcing of the program that is currently home to over one third of all Science registrants.

Science was very successful in receiving Forward with Integrity funding, and has directly supported the University's mission by providing matching funds for all successful Forward with Integrity submissions in response to the President's 2012/13 calls for proposals.

Science continues to reduce the Faculty's accumulated debt and to build a sustainable financial model by the elimination of non-core operations that are not cost recoverable; by implementing new models to recover direct costs of research; and by increasing cost-effective activities such as Co-operative Education. These actions will reduce staff FTE's by eight and the in-year deficit by $\$ 300,000$ to \$400,000.

## Faculty of Social Sciences

The Faculty of Social Sciences welcomed the President’s Letter, Forward with Integrity as it validated many initiatives already underway in the Faculty, and also gave faculty license to pursue new creative ideas in teaching and research. Integrating the Institute on Globalization and the Human Condition and the Indigenous Studies Program into the Faculty enhances the Faculty's commitment to, and capacity for, innovative global interdisciplinary research and teaching. Interdisciplinary research and education will be advanced through new strategic collaborations with other Faculties and through the proposed Centre for Asian Studies.

A hallmark feature of the Faculty is its commitment to community engagement which is central to enriching the student experience, inspiring innovative research and improving access to University for traditionally excluded populations. The Faculty intends to adapt active learning strategies for Social Sciences and experiment with the learning portfolio. Finally, the Faculty is working to build a major qualitative and quantitative data lab, $\mathrm{IQ}^{2}-\mathrm{R}$, which will attract the best faculty and graduate students, encourage methodological innovation, and deepen interdisciplinary research collaborations.

The Faculty of Social Sciences has implemented and continues to implement an aggressive recruitment campaign in order to increase the number and quality of its students, while continuing to work on balancing its in-year deficit under the current budgetary funding formula. Forward with Integrity has heightened the central importance of Experiential Education in the Faculty. This resulted in undergraduate students voting in 2011 to increase their Experiential Education levy, which was matched by a Faculty investment.

## University Library

The University Library has plans to support experiential, self-directed learning through the expansion of enriched online learning modules and through refinements to its blended service desk model. The Library will enhance access to research through the further development of its digitization program and through the newly-launched Lewis \& Ruth Sherman Centre for Digital Scholarship.

The University Library faces significant pressures on both its salary and acquisition budgets. The cost of scholarly resources climbs far faster than inflation. McMaster is ranked as a top-tier university in terms of research intensity and pays higher rates for its key information resources as a result of this prestigious ranking.

The University Library has undertaken an internal review of its services and staffing and has formulated a plan focused on the critical changes required to prepare the organization to continue to deliver a reasonable level of service. A search is underway and a permanent University Librarian is expected to be appointed in summer 2013.

## Student Affairs

Student Affairs submitted a balanced operating budget for 2013/14 while continuing to lead in the area of best practices and peer recognition. Student Affairs aligns to the guiding principles contained in President Deane’s letter Forward with Integrity. Focus will continue on enhancement of Student Life and Student Development programming, specifically contributions to provide students with opportunities to discover, learn and grow.

The Student Wellness Centre, created in 2011, will be complemented by a new Wellness Lounge, currently under construction, renewing focus on wellness programming. In 2013/14, additional construction will provide a shared reception and waiting area to serve both the Student Accessibility Office and the Student Wellness Area, providing one stop for our students. Commencing in July 2013, the Office of the Registrar and Enrolment Services and the office of Financial Aid and Scholarships will report to the new Associate Vice-President (Students and Learning.) Although synergies and some economies may result from reporting changes it will not be sufficient. Resources are very constrained in these areas.

Moving forward, the ability to sustain current levels of service will be compromised without additional base revenue. Currently a number of positions are on limited contracts and do not have permanent status. The issue of addressing fees equity for all groups of students, including part-time and graduate students, remains a critical priority. Negotiations are currently underway with the graduate students.

## Other Academic Support Units

Every academic support unit was challenged to control costs and explore new sources of revenue generation. What follows illustrates issues faced by these units.

## Office of the Registrar

Staffing reductions, modest revenue increases and cautious spending have left the Office of the Registrar and Enrolment Services in a fiscally balanced position in 2012/13. Continuous review of the departments' business processes has allowed the Office to initiate many operational changes to create efficiencies and improve customer satisfaction. These initiatives include the discontinuation of many paper-based mailings; reduction of printed recruitment materials; development of a new website for prospective students and for current students, including simplified student access to services; support of the Chief Information Officer's strategic plan including renewal of core student systems.

These initiatives have allowed the departments to meet and exceed student, faculty and staff service expectations. The departments are committed to managing budgetary pressures without compromising their mission and overall objectives: a positive customer experience; a positive working environment; and greater efficiency and innovation in processes, services and structures.

The Office of the Registrar has identified three main budget challenges: continually increasing salary and benefit costs; the impact of the new budget model; and additional resources that may be required as a result of the Mosaic project and system changes. Positions within the departments are continually evaluated to determine fit within the unit once the new Mosaic system has been implemented. Since 2011/12, three positions within the Office have already been transformed to better suit the changing needs of the departments.

## School of Graduate Studies

In his letter, Forward with Integrity, President Deane notes that graduate students are at the heart of McMaster's academic and research missions. The School of Graduate Studies has set priorities to uphold that assessment, while supporting the overarching goals of Forward with Integrity: to support and facilitate the quality and diversity of our graduate education programs; to ensure that all members of the graduate community are valued for their contributions; to provide an innovative and stimulating learning environment and student life experience; to build strong intellectual communities within the University and linked to local and global partners; and to maintain the direct support of graduate students.

While Graduate Studies is building successful initiatives, future financial pressures will make it difficult to sustain increasingly critical student life and research training initiatives, as well as required support for postdoctoral fellows. Similarly, without increases in the scholarship envelope in the new budget model, McMaster will be less likely to provide competitive financial offers to incoming graduate students in support of McMaster's academic and research missions. This will have to be monitored as the budget model is implemented.

Over the next two years, the School of Graduate Studies will capitalize on the momentum already created to support existing and newly developed graduate programs, while improving the student experience and opportunities for research training. Graduate Studies will enhance the support of undergraduate research training and postdoctoral fellows; develop strategies to improve recruitment, retention and diversity of our graduate programs; enhance opportunities and support for international students; and work toward building strong intellectual communities among our graduate students and the faculty and staff who support them.

## Museum of Art

The McMaster Museum of Art is ideally situated to fulfill the intentions of Forward with Integrity: to expand and broaden the student experience; to engage with the community; and to champion original interdisciplinary and collaborative research.

Budget challenges remain twofold: covering the costs associated with increasing staff salaries and benefits, and covering the insurance policy premium for the University's permanent collection. The Museum will continue to operate in a fiscally responsible manner by applying for grants where available and practicing cost containment efforts. In 2013/14, the Museum will eliminate a 0.57 FTE. Moving forward, the Museum hopes to develop its donations stream in order to curtail the need to cut programs, collections growth, staff training and development, travel and staff (1 FTE) in 2014/15.

## Centre for Leadership in Learning (CLL)

CLL continues to develop and enhance a number of teaching and learning partnerships, particularly at the faculty and the department levels. Additional collaborations have also been developed both locally and globally as CLL forms more relationships with community clients, Canadian institutions and other countries including Brazil and the Netherlands. These partnerships are resulting in increased interest in and awareness of evidence-informed pedagogy at McMaster and leading to CLL participating in many different projects such as the ISSOTL 2012 Conference. As demand increases there is
significant risk that CLL will not have the resources or funding to sufficiently support the University's objectives.

CLL successfully launched the ePortfolio module within Avenue to Learn. This application allows users to store, organize, share and reflect on artifacts that represent the learner's personal journey. Further investigation is taking place into the potential of this application becoming the campus-wide student learning portfolio. This may have budget implications if a customized approach is required.

CLL is working on developing on an online learning project. The focus of this project will be to develop a model for the transition of traditionally instructed classroom courses to a blended learning or fully online learning format. The process and subsequent findings will allow McMaster University to develop the skills and expertise required to build the necessary capacity for future online initiatives.

Directly supporting the goals of Forward with Integrity, the McMaster Institute for Innovation and Excellence in Teaching and Learning (MIIETL) will increase focus on the scholarship of teaching and learning to develop the next generation of best practices, broaden CLL's reach and scope, and provide the McMaster community with greater infrastructure and increased access to tools and expertise. The Institute will build on the substantial work and existing support offered by CLL, providing more early training for new faculty members and refresher programs for the benefit of both faculty and students.

## Other Budget Areas

## Research Envelope

This budget submission for the Research Envelope includes a reduction of 18 staff positions. Every effort has been made to protect the individuals in this envelope; nonetheless, some reductions were required. Reduced sales in the McMaster’s Nuclear Reactor necessitated a reduction in staff. The Brockhouse Institute for Materials Research experienced some retirements and, given the current economic conditions in the University, has not opted to replace retiring personnel at this time. In addition, some positions have been moved to other units as follows:

- In spite of efforts to set appropriate prices and optimize staff resources, the Animal Imaging facility accumulated a significant deficit over the years. The possibility of obtaining outside support through research funding and other measures was also explored. In the spring of 2012, the Vice-President Research and International Affairs (VPR\&IA) transitioned this facility to a number of researchers who formed a conglomerate with the support of the Faculty of Health Sciences.
- The McMaster Institute of Applied Radiation (McIARS) is also in a state of transition. The mandate for McIARS is to promote research in radiation science and engineering applied to biology, medicine and industry. That being the case, the Associate Vice-President Research is working in consultation with the Faculties of Science and Engineering to develop the most appropriate approach to reorganization.
- The McMaster Institute for Molecular Biology and Biotechnology (MOBIX) has undergone a reorganization and is now part of the McMaster Genome Facility within the Faculty of Health Sciences. It is expected that personnel within MOBIX will be officially transferred to the Faculty in the coming year.

McMaster University consistently ranks in the country's top six research universities, scores well in world rankings and is known for its culture of innovation and entrepreneurship. Success in the research
funding environment does, however, require significant support from the office of the VPR\&IA. The principles of Forward with Integrity have been maintained in managing staff reductions, and have implemented new initiatives and streamlined processes to obtain greater efficiencies. It is anticipated however that reduction of the remaining five positions will have significant impact on service levels and, ultimately, research funding levels. We will of course continue to support McMaster researchers as they strive for research excellence and continue to pursue opportunities in strategic areas and areas of research strength.

## University Technology Services (UTS)

A key principle of Forward with Integrity states: "Wherever possible, we will reduce or eliminate obstacles to cooperation." The Mosaic project is an opportunity to rethink how the University operates and to introduce efficiencies to overcome traditional silos of operations. The most significant cost pressure on UTS remains annual maintenance and support contracts for both hardware and software. In the long term, the incremental costs of supporting a leading class ERP implementation in terms of infrastructure, licensing and personnel will add to budget challenges.

The Mosaic project will be the top priority for UTS through 2016. During this period, UTS will be under increasing pressure to support the implementation of all phases of the Mosaic project while maintaining existing legacy systems until such time they can be decommissioned. In response to the Disaster Resource Planning and Information Technology Security audits of UTS in the previous year, UTS has been making steady progress on the approved action plans to address the findings. It should be recognized that a substantial amount of the effort will be done in conjunction with the Mosaic project. Our pilot project to upgrade and expand the wireless coverage across campus has proceeded in the over the winter semester. Additional funding allows UTS to continue the improvements and expansion of our wireless infrastructure, upgrade the backup circuit to provide a more responsive and reliable internet service across campus, and upgrade six of the seven existing labs across campus by utilizing virtualization technology.

## Administration and Facility Services

Following seven years without incremental budget allocations, the division has exhausted all reserves in support of maintaining a minimum level of service during this budget period. An ongoing cost exposure of substance exists. The core mission of teaching and research has placed increased demands on the division with growth and complexity requirements at the same time as the division has contracted. Demand growth in the range of $25 \%$ has been accommodated while human resources have reduced by $10 \%$. The division is embarked on a policy and process simplification strategy concurrent with the implementation of the new budget model and Mosaic which promises administrative process relief.

## University Advancement (UA)

There were many great examples of activities in support of Forward with Integrity including the establishment of the Renaissance Awards which help to enhance the student experience; Suzanne Labarge's $\$ 10$ million gift to fund interdisciplinary research in healthy aging; and McMaster’s 125th anniversary celebration events which engaged community members across the country, and provided many opportunities to share the tenets of Forward with Integrity with our key alumni, government, donor and community constituencies.

UA continues to be in a position to use savings to sustain the operation despite a structural deficit, however this is not a sustainable model. The savings generated in 2012/13 are a result of ongoing FTE vacancies due to a highly competitive labour market, as well as unanticipated leaves and retirements and an internal reorganization of two departments. In 2013/14 we anticipate filling our FTE complement which will draw on existing savings and eliminate the potential for additional savings.

UA will focus on retaining and strengthening key staff complement in order to deliver the expected $\$ 21.5$ million annually to McMaster. We will continue to work to find solutions to the fiscal challenges that will face UA in 2015/16 which include a substantial operating shortfall with concomitant revenue implications.

## RESULTS

## Operating Fund

## Outlook for 2012/13

As shown in Table 2, in 2012/13, the operating fund is projected to run an in-year deficit of $\$ 18.5$ million attributed to net one-time and non-recurring expenditures of $\$ 31.5$ million (refer to Appendix A for details of these expenditures). The deficit has been reduced by $\$ 8.5$ million compared to the original budget. This positive variance was caused by actual revenues greater than the approved conservative budget methodology by $\$ 16.7$ million, offset partially by greater-than-expected spending of $\$ 8.2$ million.

Total additional revenues of $\$ 16.7$ million relate to $\$ 11.4$ million in general revenues received and allocated through the budget framework, plus $\$ 5.3$ million received directly by budget units. The additional framework revenues are the sum of:

- An increase of $\$ 5.2$ million for tuition due to increased growth.
- Accessibility funding of $\$ 2.9$ million for undergraduate enrolment growth, offset by $\$ 1.2$ million due to lower-than-expected graduate growth.
- An increase of $\$ 2.0$ million in the basic operating grant as the Province rolled in the 2010/11 accessibility funding.
- Greater-than-expected quality and performance funding of $\$ 0.8$ million.
- Increased medical grants of $\$ 0.5$ million.
- An increase of $\$ 1.2$ million in other framework revenue is primarily due to additional Ontario Universities' Application Centre (OUAC) fee revenue and interest on student accounts.

Other revenue received directly by budget units is favourable by $\$ 5.3$ million, primarily in the Faculty of Health Sciences due to increased revenue from Ministry of Health grants.

The higher rate of expenditure is primarily due to increased one-time expenses of $\$ 5.7$ million, which is primarily related to spending against additional revenue, as well as a $\$ 1.0$ million contribution to the post-retirement benefits reserve as part of a multi-year funding strategy for this plan.

There is no significant difference compared to the projection completed in November 2012. The framework surplus of $\$ 7.8$ million has been fully allocated to one-time priorities. After providing for mandatory University-wide obligations, which have no source of funding, the remaining surplus was allocated equally to the post-retirement benefits reserve, deferred maintenance, and the reporting strategy.

Table 2: University Operating Revenues and Expenditures 2012/13

| (\$ thousands) |  |  |  | Varia | ances |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline 2012 / 13 \\ & \text { Budget } \\ & \hline \end{aligned}$ | 2012/13 Projection |  | 8 Month vs. 8 Month vs.Budget 5 Month |  |
|  |  | 5 Month | 8 Month |  |  |
|  |  |  |  | Fav (Unfav) |  |
| Ongoing: |  |  |  |  |  |
| Allocations | 420,447 | 425,663 | 425,736 | 5,289 | 73 |
| Other income | 86,513 | 89,513 | 89,025 | 2,511 | (489) |
| Total revenue | 506,960 | 515,176 | 514,761 | 7,800 | (416) |
| Expenditures | 499,263 | 498,932 | 501,757 | $(2,494)$ | $(2,825)$ |
| Surplus (deficit) | 7,697 | 16,244 | 13,003 | 5,306 | $(3,240)$ |
| One-time: |  |  |  |  |  |
| Allocations | 13,574 | 10,311 | 19,673 | 6,099 | 9,362 |
| Other income | 3,385 | 4,701 | 6,182 | 2,797 | 1,481 |
| Total revenue | 16,959 | 15,012 | 25,855 | 8,896 | 10,843 |
| Expenditures | 51,676 | 56,722 | 57,385 | $(5,710)$ | (664) |
| Surplus (deficit) | $(34,717)$ | $(41,710)$ | $(31,530)$ | 3,187 | 10,180 |
| Framework under (over) allocation | 0 | 7,788 | 0 | 0 | $(7,788)$ |
| Total surplus (deficit) | $(27,020)$ | $(17,678)$ | $(18,527)$ | 8,493 | (849) |
| Opening appropriations | 80,334 | 93,845 | 93,845 | 13,511 | (0) |
| Ending appropriations | 53,313 | 76,167 | 75,318 | 22,004 | (849) |

## 2013/14 Budget

The Operating Fund Summaries in Tables 3 and 4 provide the projected 2012/13 year-end results and the 2013/14 budget, along with plans for 2014/15 and 2015/16. Highlights compared to 2012/13 projection are:

- Total sources of funding will increase by $\$ 7.7$ million (1.4\%) primarily due to tuition growth ( $\$ 10.6$ million or $5.5 \%$ ).
- Operating expense will increase by $\$ 15.4$ million (2.7\%) due to:
o Growth in compensation and benefits of $\$ 22.1$ million (5.6\%), primarily due to an average increase in benefits of $5.8 \%$ caused by pension costs and increased provision for postretirement benefits
o Decreased expenditure on equipment and renovations of $\$ 11.7$ million due to completion of contributions to major capital projections in 2012/13 is offset by increased expenditure of $\$ 6.6$ million in the other expenses category due to accelerated spending on technology renewal
- The in-year operating deficit will be $\$ 26.2$ million ( $4.8 \%$ of revenue)
- Of this amount, one-time net expenditures account for $\$ 32.5$ million, i.e., the operating fund is balanced before one-time expenses
- Allocations to critical priorities will exceed available funding in 2014/15, creating a deficit in the budget framework of $\$ 3.7$ million. Across-the-board adjustments to allocate the grant
decreases due to policy levers and international student reductions are planned to bring the framework back into balance.
- Appropriations decline 34.8\% to reach \$49.1 million at April 2014.

Table 3: Operating Fund Summary - Year Ending April 30, 2014

| (\$ thousands) | Operating Fund |  | 2012/13 Variance |  | Operating Fund |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2012/13 Budget | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | Favour (Unfavo |  | 2013/14 Budget | 2014/15 Plan | $\begin{gathered} \hline 2015 / 16 \\ \text { Plan } \\ \hline \end{gathered}$ |
| Sources of Funding: |  |  |  |  |  |  |  |
| Provincial Grants | 224,741 | 229,680 | 4,939 | 2.2\% | 229,572 | 227,936 | 227,134 |
| Tuition | 188,681 | 193,889 | 5,208 | 2.8\% | 204,468 | 215,551 | 224,983 |
| Research Overhead Income | 21,828 | 21,914 | 87 | 0.4\% | 21,439 | 20,833 | 20,936 |
| Investment Income | 9,467 | 9,467 | - | 0.0\% | 9,467 | 9,467 | 9,467 |
| Other income | 79,202 | 85,665 | 6,463 | 8.2\% | 83,320 | 83,210 | 83,800 |
| Total sources of funding | 523,919 | 540,616 | 16,697 | 3.2\% | 548,266 | 556,998 | 566,320 |
| Expenditure: |  |  |  |  |  |  |  |
| Salaries, wages and benefits | 384,736 | 391,382 | $(6,645)$ | -1.7\% | 413,468 | 414,221 | 420,071 |
| Utilities and maintenance | 32,490 | 33,605 | $(1,115)$ | -3.4\% | 33,091 | 34,777 | 36,837 |
| Equipment and renovations | 21,587 | 22,851 | $(1,264)$ | -5.9\% | 11,112 | 10,847 | 9,813 |
| Scholarships, bursaries and work study | 29,491 | 28,109 | 1,382 | 4.7\% | 28,161 | 27,736 | 27,140 |
| Library acquisitions | 9,542 | 9,612 | (70) | -0.7\% | 9,650 | 9,975 | 10,311 |
| Debt and financing charges | 11,005 | 11,654 | (649) | -5.9\% | 10,505 | 10,505 | 10,505 |
| All other expenses | 62,087 | 61,929 | 158 | 0.3\% | 68,514 | 51,164 | 47,239 |
| Total expenditures | 550,939 | 559,143 | $(8,204)$ | -1.5\% | 574,502 | 559,224 | 561,916 |
| Total surplus (deficit) | $(27,020)$ | $(18,527)$ | 8,493 | 31.4\% | $(26,235)$ | $(2,227)$ | 4,404 |
| Fund balances, beginning of year | 80,334 | 93,845 | 13,511 | 16.8\% | 75,318 | 49,082 | 46,856 |
| Fund balances, end of year | 53,313 | 75,318 | 22,004 | 41.3\% | 49,082 | 46,856 | 51,260 |

Supporting details are available in Appendix A as follows:

- Tables 20 through 24 show a breakdown of the sources of funding and resource allocation for each operating budget envelope, together with variances between the 2012/13 projection and original budget and one-time items for 2012/13 and 2013/14.
- Table 25 shows the annual net change in operating envelopes for 2012/13 through 2015/16.
- The financial position of budget envelopes in Tables 26 and 27 provides the budget and a twoyear financial plan for the operating fund. For each envelope, the report highlights the opening appropriations balance at May 1, 2012, and projected/planned net expenditures for 2012/13 through 2015/16.


## 2013/14 One-time Costs

As shown in Appendix A, Table 24, one-time expenditures have been budgeted for 2013/14 including the following areas:

- $\quad \$ 24.7$ million for system renewal and other technology costs throughout the University
- $\$ 8.9$ million for expansion, laboratory and equipment renewal
- $\$ 2.7$ million on specifically funded expenses
- $\$ 2.0$ million for initiatives related to the Forward with Integrity strategy
- $\$ 1.1$ million to support research
- $\$ 1.1$ million in special graduate scholarships

Table 4: Operating Fund Revenues and Expenditures Showing Ongoing and One-time Expenditures - Year Ending April 30, 2014

| (\$ thousands) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2012 / 13$ <br> Budget | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 2013 / 14 \\ & \text { Budget } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 2014 / 15 \\ \text { Plan } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2015 / 16 \\ \text { Plan } \\ \hline \end{gathered}$ |
| Ongoing: |  |  |  |  |  |
| Allocations | 420,447 | 425,736 | 445,935 | 460,750 | 472,087 |
| Other income | 86,513 | 89,025 | 89,694 | 88,122 | 88,532 |
| Total revenue | 506,960 | 514,761 | 535,629 | 548,872 | 560,619 |
| Expenditures | 499,263 | 501,757 | 530,851 | 538,228 | 548,974 |
| Surplus (deficit) | 7,697 | 13,003 | 4,778 | 10,644 | 11,645 |
| \% of revenue | 1.5\% | 2.5\% | 0.9\% | 1.9\% | 2.1\% |
| One-time: |  |  |  |  |  |
| Allocations | 13,574 | 19,673 | 7,584 | 8,538 | 1,206 |
| Other income | 3,385 | 6,182 | 3,564 | 3,245 | 3,411 |
| Total revenue | 16,959 | 25,855 | 11,148 | 11,783 | 4,617 |
| Expenditures | 51,676 | 57,385 | 43,651 | 20,996 | 12,942 |
| Surplus (deficit) | $(34,717)$ | $(31,530)$ | $(32,502)$ | $(9,214)$ | $(8,324)$ |
| Framework under (over) allocation | 0 | 0 | 1,489 | $(3,657)$ | 1,084 |
| Total surplus (deficit) | $(27,020)$ | $(18,527)$ | $(26,235)$ | $(2,227)$ | 4,404 |
| Opening appropriations | 80,334 | 93,845 | 75,318 | 49,082 | 46,856 |
| Ending appropriations | 53,313 | 75,318 | 49,082 | 46,856 | 51,260 |

## Revenue

Table 5: Growth and Diversification of the Operating Revenue Base

| (\$ thousands) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2012/13 <br> Budget | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | $2013 / 14$ <br> Budget | $\begin{gathered} 2014 / 15 \\ \text { Plan } \end{gathered}$ | $\begin{gathered} \hline 2015 / 16 \\ \text { Plan } \end{gathered}$ |
| Provincial Grants | 224,741 | 229,680 | 229,572 | 227,936 | 227,134 |
| Tuition | 188,681 | 193,889 | 204,468 | 215,551 | 224,983 |
| Research Overhead Income | 21,828 | 21,914 | 21,439 | 20,833 | 20,936 |
| Investment Income | 9,467 | 9,467 | 9,467 | 9,467 | 9,467 |
| Other Income | 79,202 | 85,665 | 83,320 | 83,210 | 83,800 |
| Total Sources of Funding | 523,919 | 540,616 | 548,266 | 556,998 | 566,320 |
| Percentage change |  | 3.2\% | 1.4\% | 1.6\% | 1.7\% |

Strengthening and diversifying the operating revenue base continues to be an important financial objective for McMaster University. Total 2012/13 operating revenue is currently projected to be $\$ 540.6$ million, up by $3.2 \%$ over the original 2012/13 budget. This is due mainly to increased funding for undergraduate, graduate and medical enrolment growth, as well as greater-than-expected income from other sources. With domestic tuition capped at $3 \%$ and grants declining, the rate of revenue growth decreases to $1.4 \%$ in 2013/14 and to $1.6 \%$ in 2014/15.

As indicated above, the two main sources of operating funding are grants from the provincial government and tuition fees paid by students. As more of the grant income has been targeted to specifically funded activities, less grant funding, in real terms has been available to support base operations and associated inflationary increases. Such targeted specifically funded activities include the Accessibility Fund, the continued expansion of the MD program, and the expansion of our nursing program.

## Provincial Government Grants

 \$229.6 millionTable 6 shows the budgeted year-over-year change in the various provincial grant income items in the operating budget. As the largest component of operating funding, changes in the components of the provincial grant can have a significant impact on McMaster's level of revenue. Operating grants are projected to decline slightly in 2013/14, with increases budgeted for undergraduate accessibility and graduate expansion offset by cuts for policy levers and international student reductions.

Table 6: Provincial Grants - 2012/13 to 2015/16

| (\$ thousands) | 2012/13 <br> Budget | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | 2013/14 <br> Budget | $\begin{gathered} 2014 / 15 \\ \text { Plan } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2015 / 16 \\ \text { Plan } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Basic Grant | 180,061 | 182,078 | 179,915 | 177,818 | 177,527 |
| Accessibility Grant | 3,621 | 6,495 | 7,733 | 8,030 | 7,412 |
| Graduate Expansion | 9,319 | 8,140 | 8,823 | 8,967 | 9,074 |
| Performance Fund | 1,745 | 1,969 | 1,969 | 1,969 | 1,969 |
| General Quality Fund | 8,600 | 9,139 | 9,139 | 9,139 | 9,139 |
| MD and Post Graduate Expansion | 18,057 | 18,631 | 18,631 | 18,631 | 18,631 |
| MD Enhanced Funding | 1,901 | 1,901 | 2,035 | 2,055 | 2,055 |
| Grant for Expanded Nursing Program | 1,113 | 1,003 | 1,003 | 1,003 | 1,003 |
| Clinical Education Grant | 324 | 324 | 324 | 324 | 324 |
| Total Grant Income | 224,741 | 229,680 | 229,572 | 227,936 | 227,134 |
| Percentage change |  | 2.2\% | 0.0\% | -0.7\% | -0.4\% |

Tuition Income
$\$ 204.5$ million
Based on the enrolment targets outlined previously, total 2013/14 tuition income is projected to increase by $\$ 10.6$ million (5.5\%) from the 2012/13 projection. For 2013/14, undergraduate enrolments are expected to increase by $1.0 \%$ while graduate enrolments increase $2.8 \%$. The University, through the Enrolment Management Team, is reviewing undergraduate enrolment targets and forecasting models to ensure McMaster sets reasonable targets and achieves them.

Table 7: Tuition Income - 2012/13 to 2015/16

## (\$ thousands)

| (\$ | 2012/13 Budget | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | 2013/14 <br> Budget | $\begin{gathered} \hline 2014 / 15 \\ \text { Plan } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2015 / 16 \\ \text { Plan } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Undergraduate | 158,710 | 161,482 | 170,327 | 179,807 | 187,830 |
| Graduate | 29,971 | 32,407 | 34,141 | 35,744 | 37,153 |
| Total Tuition Income | 188,681 | 193,889 | 204,468 | 215,551 | 224,983 |
| Percentage change |  | 2.8\% | 5.5\% | 5.4\% | 4.4\% |

Funding toward the indirect costs of research is received from both federal and provincial governments, as well as industry funding partners as shown in Figure 2.

Figure 2: Research Overhead Income - Year Ending April 30, 2014


Investment and Other Income $\$ 92.8$ million

The University's operating fund includes other income derived from sources such as interest earned on working capital balances, investment income, donations and grants. Other income is primarily received directly by budget envelopes, and includes cost-recovery programs, targeted grants, income from the nuclear reactor, and costs recovered for utilities and staffing from partners.

## Expenditures

Expenditures budgeted for 2013/14 total $\$ 574.5$ million, of which $72.0 \%$ relates to compensation costs.
Figure 3: Operating Fund Expenditures - Year Ending April 30, 2014


- Salaries, wages and benefits represent $72.0 \%$ of the University's total operating budget expenditures and will increase by $\$ 22.1$ million (5.6\%) in 2013/14 over the 2012/13 projection predominately due to the benefit related costs.
- Attention continues to be focused through labour negotiations on controlling increasing postretirement benefit and pension costs.
- Benefit costs continue to rise at a greater rate than inflation as a result of additional employer contributions to pension plans based on current actuarial measurement methodology, WSIB surcharge, and an increased provision for post-retirement benefits.
- As shown in Figure 4, projected FTE’s in 2012/13 were greater than originally budgeted in academic envelopes, primarily due to an increase in both faculty and staff in the Faculty of Health Sciences. Projected FTE's in 2012/13 in non-academic envelopes were less than originally budgeted due to vacancies, primarily in the University Library and Research envelopes.
- Increases in FTE's in non-academic envelopes 2013/14 reflect additional temporary resources associated with the Mosaic project. Declines in 2014/15 and 2015/16 represent a return to steady state staffing.

Figure 4: Total FTE's - Year Ending April 30, 2014


Utilities and Maintenance
$\$ 33.1$ million

- The cost of maintaining and operating the physical infrastructure represents $5.8 \%$ of the operating budget. This is expected to grow to $6.6 \%$ in $2015 / 16$ as an additional $\$ 2$ million per year is allocated to deferred maintenance.
- One-time costs of $\$ 0.6$ million have been budgeted related to accessibility compliance and renovations to additional space to house the Mosaic team.
- Utilities costs have been minimized by achieving favourable rates for purchased utilities.

Equipment and Renovations

- Infrastructure spending and transfers to the capital fund for equipment and renovations include:
o $\$ 3.7$ million in Health Sciences for the McMaster Health Campus, Halton McMaster Family Health Centre
o $\$ 3.6$ million in Engineering for expansion into McMaster Innovation Park
o $\$ 2.3$ million for technology renewal
o $\$ 0.9$ million for the Student Wellness Lounge
Scholarships, Bursaries and Work Study
- McMaster has been very successful in attracting and retaining top-quality students. McMaster University's entrance scholarships program provides "automatic" scholarship awards based on a student's high-school average. The program is very attractive to students, and we believe it
has helped to raise entering averages for first-year students in almost all programs. The program has reached steady state.

Library Acquisitions
$\$ 9.7$ million

- The purchase price of resources is linked to "research intensity" level. As a research-intensive University, our cost of acquisitions is higher than some of our counterparts.
- Despite inflation in the price of journals, acquisition costs have increased only modestly due to a strong Canadian dollar.
- Additional allocations to the Library over the next three years will allow the maintenance of acquisitions despite inflation.

Debt and Financing Costs
$\$ 10.5$ million

- In 2002 McMaster issued $\$ 120$ million in debentures. $\$ 7.4$ million represents the interest-only payment.
- The principal will be repaid in fifty years as a bullet payment.
- A sinking fund of $\$ 6.1$ million was established in 2002. The sinking fund is invested in the investment pool and is expected to be sufficient to repay the principal in 2052.
- Payments on internal loans for the David Braley Athletic Centre and the Ron Joyce Centre are included (refer to Tables 12 and 13).

All Other Expenses $\$ 68.5$ million

- This line represents $11.9 \%$ of the operating budget, and includes a broad range of supplies and other expenses not categorized elsewhere.
- The 2013/14 budget increased $\$ 6.6$ million over 2012/13 projection related to technology renewal and spending on delayed projects carried over from 2011/12. Excluding these special one-time projects, the planned level of expenditure is flat to 2012/13 and returns to normalized levels in 2014/15 and 2015/16.


## Operating Fund: Conclusions - 2013/14 Budget

The deficit in the operating fund reflects major one-time investments in initiatives that are critical to the University's future success. Technology renewal is long overdue and will create efficiencies to reduce costs and allow greater concentration on the academic and research mission. Expansion of capacity is essential to capitalize on increased demand and provincial funding opportunities. Forward with Integrity initiatives will achieve priority goals centered on the student experience, research, the community, and internationalization. This budget also contains ongoing measures to address two of the most significant challenges - deferred maintenance and post-retirement benefits.

These initiatives, along with provincial funding cuts, will significantly draw down appropriated surpluses. This is possible because of restraint in allocating revenue over the last few years, resulting in a surplus in the budget framework available for allocation. Individual envelope managers have now exhausted their savings, and proposed cuts to balance the budget jeopardize delivery of essential services. It has become necessary to utilize some of the framework surplus to provide base funding in strategically important areas, which will become the starting point for implementation of the new
budget model in the 2014/15 fiscal year. These base allocations do not address all funding requirements, and difficult choices amongst competing priorities will continue.

Operating Fund Conclusions - 2014/15 and 2015/16
The expected provincial cost-saving measures along with the new tuition framework introduce considerable uncertainty into the plans for 2014/15 and 2015/16. Using conservative assumptions and incorporating plans for staffing reductions, the budget is structurally balanced. However, the significant one-time expenditures over the next six years will draw down appropriations. The need to continue these strategic investments will make it imperative to find new revenues, additional cost savings and greater efficiencies in future years.

In addition to the operating fund, the University's financial position must incorporate the budgets of other funds to be complete. These budgets are also prepared on a cash basis.

## Ancillary Fund

The Budget Committee reviews and approves the budgets of the University's ancillary departments. The 2013/14 review included an evaluation of each area's three-year plan. The chart below shows actual gross ancillary income for fiscal 2010/11 and 2011/12, and the projected income for 2012/13 through 2015/16. Gross sales for 2013/14 are estimated to be $\$ 73.2$ million, a $1.4 \%$ increase over the 2012/13 projection.

Figure 5: Gross Sales by Ancillary Operations


Ancillary operations provide invaluable services and financial support to the University community. In addition to covering their increasing direct and indirect costs, ancillaries are required to contribute $3 \%$ of sales to the operating fund while covering the cost of standard space and facilities charges at market rates. Many ancillaries have made additional direct contributions to the operating fund over and above a percentage of sales, which has created an unequal burden of support. Plans are in place to transition the contribution rate to $4.5 \%$ of sales to replace these direct contributions and equalize the operating fund and Student Affairs support across the units. Operating highlights and individual budgets for each ancillary are shown in Appendix B.

Table 8: Ancillary Fund Summary - Year Ending April 30, 2014

|  | Ancillary Fund |  |
| :---: | :---: | :---: |
|  | 2012/13 | 2013/14 |
|  | Projection | Budget |
| Revenue |  |  |
| Ancillary sales and services | 66,429 | 67,028 |
| Other revenues | 5,694 | 6,129 |
| Total revenues | 72,123 | 73,157 |
| Expenses |  |  |
| Salaries, wages and benefits | 25,489 | 26,195 |
| All other expenses, including capital | 34,949 | 35,800 |
| Transfers to (from) other funds | 7,455 | 8,659 |
| Debt and financing charges | 4,801 | 4,248 |
| Total expenses | 72,694 | 74,902 |
| Excess of revenues over expenses | (571) | $(1,745)$ |
| Fund balances, beginning of year | 3,586 | 2,139 |
| Fund balances, end of year | 3,014 | 394 |

## Research Fund

The forecast for the 2012/13 research budget (research revenue receipted, including revenue received for future periods) is $\$ 186.1$ million. The budget for 2013/14 is $\$ 184.0$ million. This forecast reflects the current research funding landscape as outlined in Appendix C.

Figure 6: Research Revenue Received


Table 9: Research Fund Summary - Year Ending April 30, 2014
(\$ thousands)

|  | Research Fund |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \end{gathered}$ | 2013/14 <br> Budget |
| Revenue |  |  |
| Research grants and contracts | 186,147 | 184,005 |
| Total revenues | 186,147 | 184,005 |
| Expenses |  |  |
| Salaries, wages and benefits | 113,231 | 112,028 |
| All other expenses, including capital | 87,391 | 84,522 |
| Transfers to (from) other funds | $(7,698)$ | $(5,676)$ |
| Total expenses | 192,923 | 190,874 |
| Excess of revenues over expenses | $(6,776)$ | $(6,869)$ |
| Fund balances, beginning of year | 178,293 | 171,517 |
| Fund balances, end of year | 171,517 | 164,647 |

## Trust Funds and Internally Restricted Endowment Funds

Trust funds include accounts that hold donations or bequests received by the University that have conditions or legal requirements for use agreed upon by the donor and the University. Of the $\$ 49.9$ million in donations and grants budgeted for fiscal 2013/14, almost $90 \%$ are expendable and will be spent in the year received. The remaining $10 \%$ are endowed and will remain in perpetuity.

Highlights of the 2013/14 trust funds budget include:

- Investment income earned on endowed trust funds of 6.5 \% in 2012/13 and 7.5\% thereafter (net of investment management fees).
- The budget includes endowed trust fund donations of approximately $\$ 6.3$ million, expendable donations of $\$ 15.2$ million and $\$ 28.4$ million from the Regional Medical Associates (RMA), totaling $\$ 49.9$ million in donations.
- Budgeted 2013/14 donations are lower than 2012/13 projected by approximately $\$ 7.2$ million. The budget includes $\$ 2$ million in donations from the Boris Family compared to $\$ 5.5$ million in the projection as a result of updated timing estimates. Expendable donations are budgeted at $\$ 2.5$ million less than projected. Also contributing to the reduction in donations is the elimination of the Ontario government's OTSS program which resulted in reduced budgeted donations of \$0.7 million.
- Scholarship and bursaries provided from trust income and other specifically designated funds are budgeted at approximately $\$ 20$ million.

Table 10: Trust Fund Summary - Year Ended April 30, 2014

|  | Trust Fund |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 2013 / 14 \\ & \text { Budget } \end{aligned}$ |
| Revenue |  |  |
| Other revenues | 57,108 | 49,881 |
| Investment income (loss) | 21,812 | 26,471 |
| Total revenues | 78,920 | 76,352 |
| Expenses |  |  |
| Salaries, wages and benefits | 16,029 | 16,317 |
| All other expenses, including capital | 21,389 | 22,195 |
| Transfers to (from) other funds | 15,639 | 8,844 |
| Total expenses | 53,057 | 47,356 |
| Excess of revenues over expenses | 25,863 | 28,996 |
| Fund balances, beginning of year | 409,377 | 435,240 |
| Fund balances, end of year | 435,240 | 464,236 |

## Internally Restricted Endowment Funds

Table 11: Endowment Fund Summary - Year Ended April 30, 2014

| (\$ thousands) |  |  |
| :---: | :---: | :---: |
|  | Endowment Fund |  |
|  | $\begin{gathered} 2012 / 13 \\ \text { Projection } \end{gathered}$ | $2013 / 14$ <br> Budget |
| Revenue |  |  |
| Other revenues | 100 | 200 |
| Investment income (loss) | 7,137 | 8,433 |
| Investment income transfer | $(4,521)$ | $(4,521)$ |
| Total revenues | 2,716 | 4,112 |
| Expenses |  |  |
| Transfers to (from) other funds | 803 | 793 |
| Total expenses | 803 | 793 |
| Excess of revenues over expenses | 1,913 | 3,319 |
| Fund balances, beginning of year | 109,806 | 111,719 |
| Fund balances, end of year | 111,719 | 115,038 |

## Capital Projects and Financing

## Capital Fund Projects ${ }^{5}$

There are three major academic capital projects currently underway that are included in the capital fund budget tables below. These include the McMaster Health Campus (total cost $\$ 84.6$ million), the L.R. Wilson Hall Building and parking garage (total cost $\$ 69$ million), and the Halton McMaster Family Health Centre (total cost $\$ 6.2$ million).

The consolidated budget includes capital projects with planned cash outflows over the next year. In March 2013 a number of strategic and capital plans were presented to Finance Committee, along with funding alternatives to achieve all or a subset of these plan priorities. The figures in the consolidated budget represent projects funded from external and internal resources without additional debt. Further prioritization will occur in 2013/14 by the President, Vice-Presidents, and Deans to prioritize the plans and finalize the associated funding alternative to achieve the priorities, which may or may not include additional external debt in 2014/15 or beyond.

Tables 12 and 13 below summarize the total expected capital funding and spending by project for fiscal 2012/13 and 2013/14.

[^4]Table 12: 2012/13 Updated Capital Projection
2012/13 Major Capital Projects -
(\$ thousands)

Project
L.R. Wilson Hall

Undergraduate Residence Study
Childcare Centre
Excel Building
McMaster Health Campus
MUMC Infrastructure Projects (incl. CAF)
MARC (McMaster Automotive Resource Centre)
Btech at MIP
CFI 2009
Energy Management
Campus Backflow Preventers
Halton McMaster Family Health Centre
Boris Family Stem Cell Projects
Contingency
Btech equipment
Burlington Land
2012/13 Def. Maintenance \& Renovation Conting
Estimates for other small projects (<\$1 million)
Capital Projects


Table 13: Capital Budget 2013/14
2013/14 Major Capital Projects -
(\$ thousands)

| Project | In Year Source of Funds by type |  |  | Total Sources of Funds | In Year Expenditure | Net -In Year Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Operating Grants | $\begin{gathered} \hline \text { Other } \\ \text { external } \\ \text { sources } \end{gathered}$ | Transfers From/(to) Other Funds |  |  |  |
| Energy Management |  | 560 |  | 560 | 3,682 | $(3,122)$ |
| Btech equipment |  | - |  | - | 240 | (240) |
| Burlington Campus - 4th Floor (approval pending) |  |  |  |  | 4,500 | $(4,500)$ |
| McMaster Health Campus |  | 3,228 | 114 | 3,342 | 30,472 | $(27,130)$ |
| MUMC Infrastructure Projects (incl. CAF) |  | - |  | - | 1,879 | $(1,879)$ |
| Childcare Centre |  | 345 |  | 345 | 4,550 | $(4,205)$ |
| Excel Building |  | 2,400 |  | 2,400 | 2,400 | - |
| Other |  |  | - | - | 4,000 | $(4,000)$ |
| L.R. Wilson Hall |  | 34,250 |  | 34,250 | 33,800 | 450 |
| Backflow Preventers |  |  |  | - | 1,311 | $(1,311)$ |
| Halton McMaster Family Health Centre |  | 500 |  | 500 | 3,121 | $(2,621)$ |
| CFI 2009 |  | 1,382 | - | 1,382 | 1,728 | (346) |
| Btech at MIP |  | 0 | 1,300 | 1,300 | 435 | 865 |
| 2012/13 Def. Maintenance \& Renovation Conting. | 1,155 |  | 5,231 | 6,386 | 7,834 | $(1,448)$ |
| Boris Family Stem Cell Projects |  | 3,591 |  | 3,591 | 3,591 | - |
| Estimates for other small projects (<\$1 million) |  | 345 | 715 | 1,060 | 715 | 345 |
| Capital Projects | 1,155 | 46,601 | 7,360 | 55,116 | 104,258 | $(49,142)$ |
|  |  |  |  | - |  | - |
| Annual Repayments of Internal Capital Loans |  |  | 6,373 |  |  | 6,373 |
| Contribution from Strategic Reserve |  |  | 3,763 |  |  | 3,763 |
| Net Change to Capital Funds |  |  |  |  |  | $(39,005)$ |

## Capital Financing

As noted above, not all projects are fully funded at the time of construction. Interim and long-term financing is offered through the University's central bank. The central bank is funded by a portion of the University's $\$ 120$ million bond and other reserves.

Table 14: Capital Fund - Year Ending April 30, 2014

|  | Capital Fund |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \hline 2012 / 13 \\ \text { Projection } \\ \hline \end{gathered}$ | 2013/14 <br> Budget |
| Revenue |  |  |
| Operating grants | 1,155 | 1,155 |
| Research grants and contracts |  |  |
| Tuition fees | - | - |
| Ancillary sales and services | - | - |
| Other revenues | 27,163 | 46,602 |
| Investment income (loss) | - |  |
| Investment income transfer | - | - |
| Total revenues | 28,318 | 47,757 |
| Expenses |  |  |
| Salaries, wages and benefits | - | - |
| All other expenses, including capital | 65,759 | 104,258 |
| Transfers to (from) other funds | $(17,113)$ | $(11,123)$ |
| Debt and financing charges | $(8,075)$ | $(6,373)$ |
| Total expenses | 40,571 | 86,762 |
| Excess of revenues over expenses | $(12,253)$ | $(39,005)$ |
| Fund balances, beginning of year | $(3,403)$ | $(15,656)$ |
| Fund balances, end of year | $(15,656)$ | $(54,660)$ |

## Consolidated Results - Full Accrual Basis

In this section of the budget document, we take the cash-based fund-by-fund results which we have discussed to this point and convert them at a high level to be consistent with the accrual accounting basis. The audited financial statements are prepared on the accrual accounting basis. The comparisons that follow relate, as appropriate, to the audited financial statements.

To convert to the accrual accounting basis, the following five key changes must be made as shown in Table 15 below:

- Capital expenditures are added back, and depreciation expense is deducted.
- All investment income earned/lost on internal endowments is added.
- The portion of investment income earned on trust funds is excluded to the extent that it is not spent and added directly to the net assets of the trust funds, along with endowed donations.
- Accruals for pension and non-pension employee future benefit costs are added.
- Reclassifications to offset internal transactions between departments affecting revenues and expenditures are performed.

Table 15: Accrual Adjustments
RECONCILIATION - OPERATING FUND BUDGET TO AUDITED STATEMENT OF OPERATIONS
(IN THOUSANDS OF DOLLARS)

|  | 2012/13 |  | 2013/14 |  | 2014/15 |  | 2015/16 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Excess of I(deficiency) revenue over expenses per Operating Budget | \$ | $(18,527)$ | \$ | $(26,235)$ | \$ | $(2,227)$ | \$ | 4,404 |
| Add back capital expenditures/deduct depreciation (net) | \$ | 24,958 | \$ | 24,120 | \$ | 12,331 | \$ | 11,866 |
| Investment Income on internal endowments (net) | \$ | 2,616 | \$ | 3,913 | \$ | 4,206 | \$ | 4,522 |
| Deduct employee future benefit costs accrual | \$ | $(4,622)$ | \$ | 261 | \$ | 338 | \$ | 401 |
| Add investment gain/(losses) not recognized elsewhere | \$ | 3,661 | \$ | 2,587 | \$ | (125) | \$ | $(1,406)$ |
| Accrual Adjustment | \$ | 26,614 | \$ | 30,880 | \$ | 16,750 | \$ | 15,383 |
| Excess/(deficiency) of revenues over expenses (accural basis) | \$ | 8,087 | \$ | 4,645 | \$ | 14,523 | \$ | 19,787 |

In 2012/13, and 2013/14 increased capital expenditures reflect the expected spending on the Systems Renewal Project. These capital expenditures are expensed as paid in the operating fund contributing to the large deficits in 2012/13 and 2013/14 but are amortized over multiple years on an accrual basis.

In past years, the full costs for pension and non-pension post-retirement benefits have been greater than the amounts charged to the operating and other funds, resulting in an adjustment for the additional expense and increasing the deficit on an accrual basis. As the more of the full costs of these benefits are covered through increased department benefit charges, the extra expense recorded on an accrual basis disappears. This ensures the full cost of employee benefit programs are absorbed by departments as they are incurred and not left for future generations.

In summary, the accrual adjustments expected in the forecast periods are positive, which will result in projected surpluses in the consolidated accrual based Statements of Operations.

The projected accrual-based Statement of Operations is shown in Table 16 below. The Statement of Financial Position (Balance Sheet) and Statement of Cash Flows follow in Tables 17 and 18.

## Statement of Operations

Table 16: Accrual Basis Statement of Operations

| \$ thousands | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
| :---: | :---: | :---: | :---: | :---: |
| [NCONE STATEVENT |  |  |  |  |
| REVENUE |  |  |  |  |
| Operating Grants | 246,738 | 253,153 | 254,735 | 256,358 |
| Research Grants \& Contracts | 168,410 | 172,115 | 175,902 | 179,772 |
| Tuition Fees | 194,410 | 205,180 | 216,547 | 228,544 |
| Ancillary Sales \& Services | 71,018 | 72,296 | 73,598 | 74,923 |
| Other Revenues | 180,788 | 192,390 | 204,509 | 213,563 |
| Investment Income (Net) | 34,682 | 35,647 | 34,130 | 34,558 |
| Amortization of Deferred Capital Contributions | 34,532 | 36,331 | 41,798 | 45,124 |
| TOTAL REVENUES | 930,579 | 967,113 | 1,001,219 | 1,032,842 |
| EXPENSES |  |  |  |  |
| Salaries \& Wages | 422,869 | 435,462 | 440,926 | 448,773 |
| Employee Benefits | 145,636 | 161,204 | 176,174 | 186,734 |
| Supplies \& Services | 282,581 | 291,080 | 289,964 | 294,039 |
| Interest on Long-Term Debt | 8,529 | 8,501 | 8,471 | 8,439 |
| Amortization of Capital Assets | 62,877 | 66,222 | 71,161 | 75,070 |
| TOTAL EXPENSES | 922,492 | 962,468 | 986,696 | 1,013,055 |
| EXCESS OF REVENUES OVEREXPENSES | 8,087 | 4,645 | 14,523 | 19,787 |

## Statement of Financial Position (Balance Sheet)

Table 17: Balance Sheet - As At April 30
(\$ thousands)

|  | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
| :---: | :---: | :---: | :---: | :---: |
| BALANCESHEET |  |  |  |  |
| ASSETS |  |  |  |  |
| Cash Equivalents \& ST Investments | 255,414 | 175,137 | 138,573 | 161,844 |
| Other Current Assets | 161,777 | 169,787 | 178,285 | 187,305 |
| Investment in McMaster Innovation Park | 15,187 | 15,687 | 16,187 | 16,687 |
| Deferred Pension Asset | 200,230 | 200,230 | 200,230 | 200,230 |
| Capital Assets | 783,011 | 864,967 | 911,078 | 946,169 |
| Investments | 583,721 | 581,638 | 594,577 | 618,355 |
| TOTAL ASSETS | 2,012,676 | 2,039,236 | 2,096,155 | 2,171,892 |
| UABIUTES \& DEFERRED CONIRIBUTIONS |  |  |  |  |
| Other Liabilities and Deferred Contributions | 989,036 | 982,852 | 995,407 | 1,020,855 |
| Accrued Employee Future Benefits | 282,990 | 293,177 | 303,732 | 314,666 |
| Decommissioning Obligation | 9,583 | 10,532 | 11,575 | 12,721 |
| TOTAL LABIUTIES | 1,281,609 | 1,286,561 | 1,310,713 | 1,348,242 |
| NET ASSETS |  |  |  |  |
| Pension \& EFB Reserve (Deficiency) | $(98,360)$ | $(98,099)$ | $(97,762)$ | $(97,361)$ |
| Available Expendable Resources | 210,994 | 190,244 | 192,634 | 192,249 |
| Externally Restricted Endowments | 352,950 | 369,913 | 388,157 | 406,578 |
| Net Investment in Plant, Adjusted | 265,483 | 290,617 | 302,412 | 322,183 |
| TOTAL NET ASSEIS | 731,066 | 752,675 | 785,442 | 823,650 |

## Statement of Cash Flows

Table 18: Statement of Cash Flows - Year Ended April 30

| (in \$ 000's) |
| :--- |
| STATEMENT OF CASH FLOWS |
| Excess of revenue over expenses (expenses over revenues) |
| Add (deduct) non-cash items: |
| (Increase) decrease in deferred pension asset |
| Increase in accrued employee future benefits |
| Amortization of capital assets |
| Earned capital contributions |
| Change in deferred contributions for future expenses |
| Increase in provision for decommissioning nuclear reactor |
| Net change in non-cash working capital (reduction) |
| Increase in deferred contributions restricted for capital assets |
| Net increase to externally restricted endowments |
| Repayment (additional) long-term debt |
| Acquisition of capital assets |
| Net decrease (add) to long-term investments |
| Cash and cash equivalents, beginning of year |
| Cash and cash equivalents, end of year |

NET (DECREASE) INCREASE IN CASH

| 2012/13 |  | 2013/14 |  | 2014/15 |  |  | 2015/16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 8,087 | \$ | 4,645 | \$ | 14,523 | \$ | 19,787 |
|  | - |  | - |  | - |  | - |
|  | 9,834 |  | 10,188 |  | 10,554 |  | 10,934 |
|  | 62,877 |  | 66,222 |  | 71,161 |  | 75,070 |
|  | $(34,532)$ |  | $(36,331)$ |  | $(41,798)$ |  | $(45,124)$ |
|  | $(22,979)$ |  | $(74,161)$ |  | $(33,782)$ |  | $(2,829)$ |
|  | 863 |  | 949 |  | 1,043 |  | 1,146 |
|  | $(11,902)$ |  | $(15,824)$ |  | $(22,432)$ |  | 19,333 |
|  | 53,415 |  | 93,733 |  | 76,729 |  | 61,100 |
|  | 17,388 |  | 16,963 |  | 18,244 |  | 18,421 |
|  | $(1,028)$ |  | (580) |  | (616) |  | (655) |
|  | $(100,360)$ |  | $(148,178)$ |  | $(117,272)$ |  | $(110,162)$ |
|  | 10,590 |  | 2,083 |  | $(12,939)$ |  | $(23,778)$ |
|  | 263,153 |  | 255,414 |  | 175,137 |  | 138,573 |
|  | 255,414 |  | 175,137 |  | 138,573 |  | 161,844 |
| $(7,739)$ |  |  | $(80,277)$ |  | $(36,563)$ |  | 23,271 |

## ANALYSIS

## Key Financial Metrics of the Consolidated Budget

The University has four key financial goals:

- Achieve strong demand for programs
- Increase and diversify revenues
- Strategically deploy financial resources
- Maintain a strong financial position and manage business risks

In order to measure progress against these goals, several key financial metrics are reported in the Annual Financial Report each year. Included in the table below are the projected and budgeted results of these key metrics.

Table 19: Key Financial Metrics at a Glance

|  | $\mathbf{2 0 1 1 / 1 2}$ <br> Actual | 2012/13 <br> Projected | $\mathbf{2 0 1 3 / 1 4}$ <br> Budget |
| :--- | ---: | ---: | ---: |
| Total Net Assets (\$ millions) | 706 | 731 | 753 |
| Available Expendable Resources (\$ millions) | 218 | 211 | 190 |
| Capital Spending (\$ millions) | 62 | 100 | 148 |
| Total Revenue (\$ millions) | 878 | 931 | 967 |
| Total Expenditures (\$ millions) | 869 | 922 | 962 |
| Excess (Deficiency) of Revenues over Expenses <br> (\$ millions)- GAAP | 9 |  | 8 |
| Excess (Deficiency) of Revenues over Expenses <br> Operating Fund only (\$ millions) | 9 | $(19)$ | 5 |
| Long Term Investment Pool Return | $0.0 \%$ | $6.5 \%$ | $7.5 \%$ |
| Employee Future Benefit (EFB) Unfunded <br> Obligation - Registered Pension (\$ millions) | $(296)$ | See Note | See Note |
| Employee Future Benefit (EFB) Unfunded <br> Obligation - Non Pension (\$ millions) | $(204)$ | See Note | See Note |
| Enrolment (Full Time Equivalent (FTE)) | 25,929 | 26,353 | 26,551 |

Note: These obligations require actuarial calculations which cannot be reliably estimated before the completion of the actuarial work in September each year.

The financial metrics above are a result of the planning and assumptions used in the 2012/13 projections and the 2013/14 budget. These are in line with expectations.

## Credit Management Ratios/Indicators

In addition to these key metrics, the University monitors additional financial health indicators as outlined in its Debt Management Policy (updated June 2012). When these indicators were analyzed in 2013, based on actual financial results as of April 30, 2012, management concluded that the University was in 'reasonable financial health'. It is important to measure the impacts that future financial plans
(such as the annual budget) and the subsequent projections for future years will have on the University's financial health. Figures 7 to 10 estimate these financial health indicators for the fiscal years ending 2013 to 2016.

## Expendable Resources to Debt (Viability Ratio)

This ratio measures balance sheet leverage by comparing University unrestricted equity to outstanding debt obligations. As shown above, this ratio is projected to remain in compliance (greater than 0.6 ) for the proforma period.

Figure 7: Expendable Resources to Debt


## Interest Coverage Ratio

This ratio quantifies the ability of operating revenues to repay the university's current and potential interest burden. Note that in the years modeled no additional external debt is projected, therefore this ratio improves as expenditures and revenues grow.

Figure 8: Interest Coverage


## Available Expendable Resources (AER) as a Percent of Revenue

AER represent funds the University holds that do not have an externally committed purpose, such as unrestricted net assets, specific purpose reserves and appropriations and internally restricted net assets. These funds provide operating flexibility, support debt management and provide the ability to take advantage of opportunities as they arise. McMaster's AER were seriously depleted in 2008/09 as a result of the economic crisis and had only partially recovered in 2009/10 (\$170 million). Surpluses generated in the 2010/11 and 2011/12 fiscal years along with improved investment returns mitigated the decline of AER so that the balance at the end of $2011 / 12$ was $\$ 213$ million, or approximately $23 \%$ of revenues which is above the policy level of $15 \%$. For 2012/13 the projection is $\$ 211$ million. In 2013/14, AER are expected to decline, primarily due to the large one-time expenditures planned in the operating fund. AER will stabilize and remain at approximately $19 \%$ for the proforma period.

Figure 9: AER as Percent of Revenues


## Liquidity Ratio

This ratio measures the University's ability to pay off its short-term debt obligations. A ratio result of greater than one is required to ensure a margin of safety for payment of short-term obligations. As shown in Figure 10 below this ratio does not dip below 1.7 for the proforma period.

Figure 10: Liquidity Ratio


In summary, the University's credit management ratios are projected to remain in compliance during the proforma period based on the assumptions and plans in the Consolidated Budget. Additional analysis with respect to long-term strategic and capital priorities, financial health, external financial markets, and the need for potential additional borrowing will continue in 2013/14 as a follow-on to the Debt Management Strategy Report issued to the Finance Committee in April 2013.

## Risks to the 2013/14 Budget

- The size of the provincial deficit and its 2012 downgrade from all three credit rating agencies to AA- may result in a change to funding assumptions for 2013/14 and future fiscal years and may affect the University's current AA- (stable) rating potentially increasing the cost of external debt.
- Staffing cuts have resulted in high key-person dependency. In many areas a single person is responsible for key deliverables with no back-up. Senior staff and many TMG (The Management Group) staff are committing work schedules that are not sustainable over the long term.
- In spite of significant additional annual contributions to deferred maintenance of an approved \$2 million in additional base funding for 2013/14, and planned additional base increases of $\$ 2$ million per year for the next three years, increased operating cost risk may result due to infrastructure failures and breakdowns.


## Conclusions on the 2013/14 Budget

Excluding one-time expenditures (funded through appropriations), the operating budget growth is flat.

The operating budget is absorbing all operating costs (with the exception of a small amount of future post-retirement benefit costs for which a funding plan has been approved). The combination of conservative budgeting, consistently spending less than budgeted levels and history of unplanned revenues would suggest that the 2013/14 budgeted deficit is not cause for concern.

Any further provincial funding announcements relating to strategies to reduce the provincial deficit through funding reductions to universities may affect the 2013/14 budget.

## Appendix A - Operating Fund Tables

Table 20: Sources of Funding and Resource Allocation - 2012/13 Projection




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 UTS/Technology Fund
University Secretariat Presidential Budget
University Advancement
Genal University General University
Sub-total 7. Institutototal Priority allocations
Technology Renewal Technology Renewal
Strategic Priorities
Sub-total Surplus/(Deficit)
Under/(over)allocated
Total Surplus/(Deficit)
*To be allocated to Faculties

Table 21：Sources of Funding and Resource Allocation－2012／13 Variances－Projection vs． Budget





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Business
Engineering
Faculties（Academic Programmes）
Business

 | Faculty Recruiting |
| :--- |
| Academic Priorities Allocation |
| Sub－total |



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Sub－total
6．Institutional Support
Administration／Institutional Support
Administration／nstituional Support
UTS／Technology Fund
University Secretariat UTS／Techinology
University Secretariat
Presidential Budget University Advancemen
General University Sub－total
7．Institutional Priority allocations
Technology Renewal Technology Renewal
Strategic Priorities
Sub－total Surplus／（Deficit）
Under／（over）allocated
Total Surplus／（Deficit）
＊To be allocated to Faculties

Table 22: One-time Sources of Funding and Resource Allocation - 2012/13 Projection









$\rightarrow$.


 | 1. Faculties (Academic Programmes) |
| :--- |
| Business |
| Engineering |
| Health Sciences |
| Humanities |
| Science |
| Advance to Science |
| Medical Radiation - Mohawk share |
| Social Sciences |
| Interdisciplinary Programmes |
| Academic Allocation- QIF |
| Slip-year Allocation* |
| Sub-total |
| 2. Academic Priorities |
| Academic Contingency |
| Faculty Recruiting |
| Academic Priorities Allocation |
| Sub-total |
| TOTAL ACADEMIC |
| 3. Academic Support |
| Office of the Provost |
| School of Graduate Studies |
| Museum of Art |
| Centre for Leadership in Learning |
| Research |
| Nuclear Reactor Debt |
| University Library |
| Health Sciences Library |
| Registrar |
| Pension |
| Sub-total |
| 4. Student Support |
| Graduate Scholarships/Bursaries |
| Student Affairs |
| Undergraduate Scholarships |
| Student Support Allocation |
| Sub-total |
| 5. Facilities Support |
| Facilities Sevvices |
| HSC Maintenance |
| Utilities |
| HSC Utilities |
| Deferred Maintenance |
| Bond Interest |
| MIP Occupancy |
| Renovation contingency |
| Sub-total |
| 6. Institutional Support |
| Administration/Institutional Support |
| UTS/Technology Fund |
| University Secretariat |
| Presidential Budget |
| University Advancement |
| General University |
| Sub-total |
| 7. Institutional Priority allocations |
| Technology Renewal |
| Strategic Priorities |
| Sub-total |
| Surplus/(Deficit) |
| Under/(over)allocated |
| Total Surplus/(Deficit) |
| *To be allocated to Faculties |

Table 23：Sources of Funding and Resource Allocation－2013／14 Budget


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Table 24: One-time Sources of Funding and Resource Allocation - 2013/14 Budget







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| (\$ thousands) |
| :--- |
|  |
| 1. Faculties (Academic Programmes) |
| Business |
| Engineering |
| Health Sciences |
| Humanities |
| Science |
| Advance to Science |
| Medical Radiation - Mohawk share |
| Social Sciences |
| Interdisciplinary Programmes |
| Slip-year Allocation* |
| Sub-total |
| 2. Accademic Priorities |
| Academic Contingency |
| Faculty Recruiting |
| Academic Priorities Allocation |
| Sub-total |
| TOTAL ACADEMIC |
| 3. Academic Support |
| Office of the Provost |
| School of Graduate Studies |
| Museum of Art |
| Centre for Leadership in Learning |
| Research |
| Nuclear Reactor Debt |
| University Library |
| Health Sciences Library |
| Registrar |
| Pension |
| Sub-total |
| 4. Student Support |
| Graduate Scholarships/Bursaries |
| Student Affairs |
| Undergraduate Scholarships |
| Student Support Allocation |
| Sub-total |
| 5. Facilities Support |
| Facilities Services |
| HSC Maintenance |
| Utilitites |
| HSC Utilities |
| Deferred Maintenance |
| Bond Interest |
| MIP Occupancy |
| Renovation contingency |
| Sub-total |
| 6. Institutional Support |
| Administration/IIstitutional Support |
| UTS/Technology Fund |
| University Secretariat |
| Presidential Budget |
| University Advancement |
| General University |
| Sub-total |
| 7. Institutional Priority allocations |
| Technology Renewal |
| Strategic Priorities |
| Sub-total |
| Surplus/(Deficit) |
| Under/(over)allocated |
| Total Surplus/(Deficit) |
| «To be allocated to Faculties |

Table 25: Annual Net Change in Operating Envelope Balance - 2012/13 to 2015/16

| (\$ thousands) | 2012/13 |  | 2013/14 | 2014/15 | 2015/16 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Budget | Projection | Budget | Plan | Plan |
| 1. Faculties (Academic Programmes) |  |  |  |  |  |
| Business | $(5,221)$ | $(3,969)$ | $(5,001)$ | $(3,723)$ | $(4,096)$ |
| Engineering | $(4,896)$ | 1,248 | $(4,226)$ | $(5,384)$ | $(6,692)$ |
| Health Sciences | $(6,900)$ | $(4,205)$ | $(4,234)$ | $(2,114)$ | $(1,394)$ |
| Humanities | $(4,999)$ | $(3,138)$ | $(5,030)$ | $(4,956)$ | $(5,321)$ |
| Science | $(6,055)$ | (468) | $(5,356)$ | $(7,439)$ | $(8,517)$ |
| Advance to Science | (500) | (500) | (500) | (500) | (500) |
| Medical Radiation - Mohawk share | - | 72 | 0 | 0 | 0 |
| Social Sciences | $(2,951)$ | 466 | $(2,807)$ | $(3,607)$ | $(4,247)$ |
| Interdisciplinary Programmes | 141 | 342 | (40) | (44) | (55) |
| Academic Allocation - QIF | $(2,277)$ | $(2,277)$ | - | - | - |
| Slip-year Allocation* | 19,886 | $(1,647)$ | 14,016 | 27,240 | 31,061 |
| Sub-total | $(13,771)$ | $(14,075)$ | $(13,178)$ | (527) | 239 |
| 2. Academic Priorities |  |  |  |  |  |
| Academic Contingency | (220) | 250 | 377 | 664 | 649 |
| Faculty Recruiting | - | 178 | - | - | - |
| Academic Priorities Allocation | 4,084 | 5,689 | 4,970 | 5,196 | 5,346 |
| Sub-total | 3,865 | 6,117 | 5,347 | 5,860 | 5,995 |
| TOTAL ACADEMIC | $(9,907)$ | $(7,958)$ | $(7,832)$ | 5,334 | 6,235 |
| 3. Academic Support |  |  |  |  |  |
| Office of the Provost | (106) | 164 | (291) | (295) | (235) |
| School of Graduate Studies | (212) | 1 | (391) | (349) | (318) |
| Museum of Art | - | 13 | 20 | - | - |
| Centre for Leadership in Learning | (9) | 244 | (124) | (132) | (69) |
| Research | 0 | (112) | (300) | 41 | 216 |
| Nuclear Reactor Debt | 100 | (603) | 170 | 170 | 170 |
| University Library | (158) | 522 | (448) | (68) | 60 |
| Health Sciences Library | (174) | (200) | (170) | (256) | (418) |
| Registrar | (139) | 60 | (8) | 10 | (671) |
| Pension | - | - | - | - | - |
| Sub-total | (697) | 89 | $(1,541)$ | (878) | $(1,266)$ |
| 4. Student Support |  |  |  |  |  |
| Graduate Scholarships/Bursaries | $(2,000)$ | (843) | $(1,137)$ | $(1,155)$ | $(1,156)$ |
| Student Affairs | (286) | $(1,340)$ | (462) | 569 | 106 |
| Undergraduate Scholarships | 156 | 327 | (183) | (86) | 26 |
| Student Support Allocation | - | 0 | (103) | 0 | 0 |
| Sub-total | $(2,130)$ | $(1,855)$ | $(1,885)$ | (672) | $(1,025)$ |
| 5. Facilities Support |  |  |  |  |  |
| Facilities Services | (311) | $(1,116)$ | (227) | (334) | (593) |
| HSC Maintenance | - | - | - | - | - |
| Utilities | 40 | 144 | 4 | 4 | 4 |
| HSC Utilities | - | 339 | - | - | - |
| Deferred Maint/Facilities Renew | - | (56) | - | - | - |
| Bond Interest | - | - | - | - | - |
| MIP Occupancy | - | - | 19 | 19 | 1 |
| Renovation contingency | (189) | (872) | 241 | - | - |
| Sub-total | (460) | $(1,562)$ | 37 | (312) | (588) |
| \# Institutional Support |  |  |  |  |  |
| Administration/Institutional Support | (852) | (299) | $(1,290)$ | (396) | (132) |
| UTS/Technology Fund | 465 | 462 | 91 | 67 | 67 |
| University Secretariat | (45) | (51) | 19 | (49) | (49) |
| Presidential Budget | (50) | 18 | 7 | 73 | (55) |
| University Advancement | $(1,133)$ | (655) | $(1,217)$ | $(1,241)$ | 614 |
| General/Contingency | $(4,760)$ | 0 | (29) | 38 | (53) |
| Sub-total | $(6,375)$ | (525) | $(2,419)$ | $(1,507)$ | 391 |
| 7. Institutional Priority allocations |  |  |  |  |  |
| Technology Renewal | $(8,530)$ | $(11,333)$ | $(18,388)$ | (700) | (713) |
| Strategic Priorities | 1,079 | 4,616 | 4,303 | 166 | 286 |
| Sub-total | $(7,451)$ | $(6,717)$ | $(14,085)$ | (534) | (427) |
| Surplus/(Deficit) | $(27,020)$ | $(18,527)$ | $(27,724)$ | 1,430 | 3,320 |
| Under/(over)allocated | - | - | 1,489 | $(3,657)$ | 1,084 |
| Total Surplus/(Deficit) | $(27,020)$ | $(18,527)$ | $(26,235)$ | $(2,227)$ | 4,404 |

Table 26：Financial Position of Operating Envelopes－2012／13 Budget and Projection

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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Table 27: Financial Position of Operating Envelopes - 2013/14 to 2015/16


## Appendix B - Ancillary Budgets

## Campus Store

As teaching practices and learning assumptions are reconsidered by the institution, the use of course materials in class and the format of those materials will continue to shift and evolve. The Campus Store is dedicated to assisting the learning process and will work closely with faculty to facilitate and support new interactive and engaging learning environments. Over the next year the Campus Store will renovate its main Gilmour Hall location with the goal of increasing overall square footage and improving access to course materials. The renovated space will feature a new exterior entrance with ramp accessibility. The Tank, an ancillary store located in Togo Salmon Hall, will be closed and converted into storage space eliminating off-site storage.

The bookstore industry is experiencing an unprecedented downward shift in sales of its core products. Over the past five years course material unit sales have decreased $20 \%$ while the University requirement for bottom line revenue continues to grow. Planned additional actions include streamlining processes, consolidating space and operations including scientific stores, and fully utilizing all available resources to maximize net revenue while simultaneously attempting to grow new revenue streams and implement new service offerings.

## Media Production Services

With the completion of a significant reorganization Media Production Services (MPS) will continue to offer high quality graphic design and print services to the University community at more affordable prices for faculties, students and staff. Recent changes approved for 2013/14 include a reduction to the Access Copyright charge placed on custom courseware. A 5 cent per image cost reduction will be $80 \%$ passed on to students and $20 \%$ will go against an accumulated debt. This reduction affects one third of the overall courseware pricing.

Overall, declining print needs combined with increased competition both on-campus and off-campus poses significant risk to operational efficiencies and future revenues. MPS has realigned operations providing lean flexible resourcing and lower-cost equipment. Savings are anticipated to make MPS more competitive to other alternatives while contributing to the University's operating budget and Student Affairs. Continued partnership with the Campus Store is anticipated to lead to further operational efficiencies in addition to creation of new revenue.

## Centre for Continuing Education

The Centre for Continuing Education (CCE) is working on two main fronts to address community engagement and the part-time student experience. First, working with faculties to develop a more integrated approach for part-time students to achieve a McMaster diploma and degree. Second, continuing to expand to open access to McMaster programs to students across Canada, the United States and internationally.

CCE continues to be one of the most profitable continuing education units in the country. Significant portions of the reserve are being held to address imminent projects with unknown timing and cost, including systems and facilities projects.

CCE has recently launched 14 new programs - an accomplishment unprecedented in its 72 year history. Several of these new programs filled to capacity the first time offered. Market research is ongoing for further program development and conversion of in-class courses to online format.

## Housing and Conference Services

Committed to the student experience, Housing and Conference Services will continue its focus on maintaining its facilities for students, while planning new residences that provide enough beds for all first year undergraduates and with the integration of living learning environments.

Budget challenges include providing sufficient access to residences to all first-year undergraduates while supplying some housing to upper year students, as well as maintaining low residence fee increases while funding new infrastructure using long term central bank loans.

## Hospitality Services

Hospitality continues to expand its retail and catering offerings to support the University and external community needs. Hospitality is committed to investing in new and upgraded facilities to enhance the dining experience on campus.

Budget challenges include minimizing price increases while dealing with an inflationary environment. Upgrades are planned to existing and new vendor opportunities, aimed at keeping students satisfied with their on-campus food options, while also serving the community's catering needs.

## Parking and Transit Services

Parking and Transit Services is committed to providing safe, reliable parking alternatives to students, faculty, staff and community visitors at affordable rates that allow for ongoing infrastructure sustainability.

Budget challenges include minimizing price increases while funding new infrastructure projects and maintaining existing ones. Future actions include examining and planning for additional parking needs, and planning upgrades within modest parking fee increases.

Table 28: (page 1 of 2) Ancillary Fund Detail - Year Ending April 30, 2014

$\stackrel{\stackrel{N}{0}}{\substack{1}}$

Ac:

(\$ thousands)

Sources of funding
Sales


Expenditure
Salaries, wages and benefits
Utilities and maintenance
Cost of sales
Debt and financing charges All other expenses
Total expenditures

Surplus (deficit) in-year
Transfers from (to) other funds
Change in fund balance
Reserve
Reserve
Beginning Balance
Net change
Closing Balance

Table 28: (page 2 of 2) Ancillary Fund Detail - Year Ending April 30, 2014


Transfers from (to) other funds
Change in fund balance
Reserve
Beginning Balance
Net change
Closing Balance
Change in fund balance
Reserve
Beginning Balance
Net change
Closing Balance
Change in fund balance
Reserve
Beginning Balance
Net change
Closing Balance
Expenditure
Salaries, wages and benefits
Salaries, wages and benefits
Utilities and maintenance
Cost of sales
Debt and financing charges
All other expenses All other expenses
Total expenditures

Surplus (deficit) in-year

## Appendix C - Research Highlights

The research enterprise at McMaster represents approximately 20\% of the University's total income. For $2012 / 13$, our direct research funding/research project funding is expected to be $\$ 186.1$ million compared to the total University income of approximately $\$ 908.8$ million. Additionally, indirect overhead income accounts for a further $\$ 21.9$ million.

McMaster is recognized nationally and internationally for its research excellence and is acknowledged as a world-class institution. Re\$earch Infosource Inc. released its 2012 list of Canada’s top research universities, and McMaster has again been named one of the country's best. In terms of research intensity - a measure of research income per full-time faculty member - McMaster continues to be in the top five in Canada. McMaster's total sponsored research income reached $\$ 325.9$ million. In total, the University averaged $\$ 248,600$ per faculty member, far above the average of $\$ 174,200$ obtained by the top 50 research Universities. In addition, the Shanghai Jiao Tong University's ranking of universities worldwide has for the tenth consecutive year named McMaster in the top 100 for 2012 one of only four Canadian universities among this group. Research is a key performance indicator considered for the Times Higher Education World University Rankings which also ranks teaching, international outcomes, citations and income from industry. McMaster ranked 88 in the latest Times rankings, making it one of only two Ontario universities to make the top 100.

McMaster's research enterprise is an integral part of the University and critical to its mission. By investing in strategic and, increasingly, in interdisciplinary research priorities - integrating our research with our teaching, and focusing on the betterment of society through knowledge mobilization and technology transfer - McMaster has the capacity to become one of the world's premier research institutions.

McMaster's Forward with Integrity speaks to the importance of research at McMaster, stating that "In no aspect of our work has McMaster's commitment to service and the public good been more extensive and obvious than in research." It recognizes that the contribution of our researchers to the physical, cultural and economic wellbeing of the human community has been out of proportion to the size of our institution.

A sound financial budget for this activity is therefore imperative. Developing an estimate of research financial activity enables the University to:

- Improve the forecast of indirect cost of research funding, an important source of funding to the operating budget and the primary source of funding for building and sustaining the University’s research infrastructure
- Ensure that plans for investments in research infrastructure are consistent with the University's aspiration to promote and facilitate research excellence and maintain and advance its position as a leading research-intensive institution
- Respond to the need to address increased accountability and tighter regulatory requirements
- Improve integrated cash management
- Highlight areas of potential opportunity or risk to the overall financial plan
- Provide important financial targets and planning parameters against which actual University performance can be compared

The plan recognizes however that it is impossible to predict specific levels of research activity and
funding. The plan is therefore directional, looking at changes in the research funding environment and specific targets and strategies established at McMaster to maximize opportunities.

## Research Funding Landscape

Over the last 10 to 15 years, both the federal and provincial governments have developed innovation platforms and strategies which have resulted in unprecedented investment in university research and development (R\&D). McMaster’s R\&D activities support both governments’ priorities with respect to driving economic development through the commercialization and knowledge transfer of university research and expertise.

The federal government’s Science and Technology (S\&T) strategy, "Mobilizing Science and Technology to Canada’s Advantage," fosters three distinct Canadian S\&T advantages:

1. an entrepreneurial advantage
2. a knowledge advantage
3. a people advantage

These advantages are supported and guided by four core principles:
4. promoting world-class excellence
5. focusing on priorities
6. encouraging partnerships
7. enhancing accountability

The federal agencies are in transition in response to international reviews, fiscal realities, accountability and impact expectations. Evidence of economic, social and innovation impact of, and accountability for, public investments remain key expectations. The development of increased collaboration with private sector and community partners is seen as critical to the commercialization, knowledge translation and knowledge mobilization activities needed to facilitate increased productivity in Canada.

These are competitive times for all research universities in Canada. McMaster continues to be highly successful in attracting federal Tri-Council funds, with 2011/12 Tri-Agency total funding of approximately $\$ 84$ million. The newly released 2013 Federal Budget will see new Tri-Agency funding focused on strengthening partnerships with industry. While success in Tri-Agency core programs continues to be challenge across the country, McMaster continues to see significant success; our most recent results from the Tri-Agencies’ operating grant programs show that McMaster researchers were awarded more funding than in the previous year.

NSERC's priority areas of Environmental Science \& Technologies, Information \& Communications Technologies, Manufacturing, and Natural Resources \& Energy are well aligned with McMaster’s strengths and priorities and provide significant opportunities for McMaster researchers. We have created - and continue to create - an internationally recognized critical mass of research capacity in the areas of biomedical research, energy systems and green technologies, medical isotopes, water research, automotive and manufacturing research, arts and technology, cell biology research, food sciences and health, aging and health, transportation and logistics, public policy and societal initiatives.

The evolving research funding environment requires that we remain vigilant and poised to engage in new opportunities. Greater emphasis on partnerships with the private sector and with community
partners continues to be seen in each of the Tri-Agencies. McMaster’s Forward with Integrity document speaks to the importance of a heightened level of community engagement. McMaster has fared well in partnership programs and will continue to participate heavily in these opportunities. Increasingly complex initiatives and those which enjoy participation from a number of disciplines require increased coordination and support. We continue to see a greater call on the expertise of McMaster's research administration offices to help researchers manage the complexity of these initiatives.

The coming year will allow researchers to seek federal funding beyond the regular annual Tri-Agency programs. Recent calls to establish new initiatives and networks through the Networks of Centres of Excellence program, the NSERC Strategic Network Program, the SSHRC Digging into Data program and Genome Canada will provide significant opportunity to McMaster researchers. The following selected examples provide evidence of recent success in partnered programs, which have provided Federal funding to support both individual researchers and larger multi-disciplinary groups.

- NSERC has recently awarded more than $\$ 1.7$ million to McMaster projects through its Strategic Projects Program. Funding will support research into the discovery of new materials, the investigation of new resources for broadband access, the enhancement of solar cells, and the development of safety-critical software. The McMaster research teams leading these initiatives have strong partnerships with industry and will conduct these projects in collaboration with companies including those in the chemical, lighting, communication and energy sectors.
- The Automotive Partnership Canada (APC) program has once again acknowledged the expertise of McMaster researchers by awarding $\$ 2.1$ million to McMaster to lead a new auto policy research partnership. The research at McMaster will be based in the Canadian Automotive Policy Partnership (CAPP) and will focus on Canada's quest to keep its automotive manufacturing sector competitive and sustainable in an increasingly challenging global market. This is the first grant APC has awarded to researchers in the social sciences.
- McMaster researchers have also seen success leveraging the strength of community partnerships in the Social Sciences and Humanities Research Council (SSHRC) partnered programs. Funding was awarded to McMaster-led projects to explore opportunities to study productivity in Canada from a firm-level perspective and to study procurement sustainability practices in Canadian companies to develop and test frameworks for sustainability training and metrics. McMaster researchers were collaborators on an additional nine successful projects across Canada.

The Tri-Agencies have made significant changes to their program architecture and review processes. These changes create opportunity but can also be a cause for concern, particularly during the transitional phase. Each of the Tri-Agencies has begun maintaining stricter boundaries around the types of research they will fund; for example, SSHRC and NSERC will no longer fund research whose anticipated impact is on health; this has proven challenging for researchers who are engaged in research with health outcomes yet who are outside of traditional health-related departments Many McMaster researchers have been successful however in making this transition and, though traditionally funded by NSERC or SSHRC, have now been awarded funding from CIHR. Such success stories include, for example, a social sciences project to investigate whether subsidized housing improves mental health and healthy child development and a science project designed to shed new insight into how aging affects our use of dietary protein and how that use contributes to age-related muscle loss.

The next few years will see a significant change in the way applications are reviewed within CIHR. It is CIHR's hope that the new process will simplify and streamline the grant application process while increasing support for early-career researchers and for new and emerging areas, however challenges remain. A vital component of McMaster's success in research is support from the institution, which enables our researchers to compete successfully for both basic and targeted funding. In addition to direct support for research, indirect support through the provision of systems, tools and personnel, which allows researchers to optimize their funding and be compliant with funding agency regulations, is also critical. CIHR has advised that for some of their future funding opportunities, increased levels of institutional support will be required. This is expected to cause challenges for all participating institutions.

Tri-Agency funding remains critical not only to the success of researchers and their teams, but also forms the basis upon which allocations are made to other federal programs, including Canada Research Chairs (CRC) and Federal Indirect Costs. The CRC program requires periodic reallocation of Chairs supported through the Canada Research Chairs program, and allocation to the University and to faculties within the University can change. Factors including increased competition from new universities may result in established institutions or faculties losing Chairs, a loss which is difficult to accommodate within departmental budgets. The most recent reallocation exercise however saw McMaster with a net gain of Canada Research Chairs.

The previous year's federal budget announced the provision of $\$ 500$ million to the Canada Foundation for Innovation (CFI); the 2013 Federal Budget announced another $\$ 225$ million for CFI. McMaster has been highly successful in receiving funding from CFI programs. In the past year alone, McMaster researchers have received new CFI Leaders Opportunity Fund (LOF) awards to support projects valued at over $\$ 8.8$ million ( $\sim \$ 3.3$ million from CFI, $\sim \$ 3.3$ million from the Ontario Ministry of Research and Innovation (MRI) and $\sim \$ 2.2$ million in partner funding). Funding from these awards will be used to support multiple research projects including those which will examine the effects of environmental stress on animals; enable research into the latest generation of electric and hybrid electric vehicles; transform the McMaster Ancient DNA Centre into a facility for premier innovations in ancient DNA, forensic, and gnotobiotic research; and study the role of exercise and mitochondrial dysfunction in neuromuscular disorders and aging. CFI funding will also facilitate research into organizational behavior including the impact of hiring of contingent workers and the mechanisms for operating effectively in high-stress environments. McMaster, along with other Canadian institutions will soon have depleted LOF funds currently available from CFI's last allocation; funding from the federal government will however facilitate continuation of that program, details of which are expected in the near future.

Every few years CFI offers large-scale funding through the Leading Edge Fund (LEF)/New Initiatives Fund (NIF) competition. The most recent LEF/NIF competition saw more than $\$ 3$ million awarded to a McMaster-led project which will establish Canada’s first Small Angle Neutron Scattering (SANS) instrument. Consultation with CFI has indicated that a new LEF/NIF competition will be announced later this year. As CFI will limit the amount an institution may request, McMaster has initiated the first steps in our rigorous internal selection process, which will continue through this year.

CFI is reviewing their current funding formula which allows vendor discounts for infrastructure to be used for leverage. The extent to which future vendor discounts will continue to be allowed is unclear; further information is expected in the coming months. Forward with Integrity recognizes the need to
allocate funds to increase McMaster’s research capacity; it is anticipated that a new funding formula will cause financial challenges to all universities participating in CFI programs.

Other federal opportunities include those provided by Genome Canada. McMaster will pursue opportunities provided through Genome Canada, which will see a new influx of funds from the 2013 Federal Budget. It is anticipated that Genome Canada, while continuing to fund discovery-type research, will also focus on research which is "purpose-driven" and which is expected to have stronger effects on application development.

McMaster researchers continue to be successful in funding opportunities provided through prestigious prizes and awards. A McMaster researcher received one of only six 2013 NSERC E.W.R. Steacie Memorial Fellowships this year; another McMaster researcher was one of only six researchers named a 2013 Killam Research Fellow by the Canada Council for the Arts.

As evidenced in the priority programs of both the federal and provincial governments, the importance of partnerships with the private sector is increasing. McMaster has historic strengths in this area and continues to develop strong relationships with partners in industry and the public sector. We are developing exciting initiatives which build on our established strengths as well as those which will provide the cornerstone for further investigations in areas of strategic priority. Critical to these plans is the development of the McMaster Innovation Park (MIP) - whose vision is to facilitate the transformation of ideas into commercial opportunities. MIP already houses laboratory, office, and training facilities in support of research and development in a number of wide-ranging key areas. MIP will house infrastructure for a recently-awarded CFI-LOF-funded project that aims to explore the possibilities of using new media to mobilize knowledge with a high level of social relevance. This project will identify forms of digital technology that are appropriate to educating diverse audiences about research on race issues in Canada. It will ultimately produce a set of knowledge mobilization tools on race in Canada to be used in collaboration with education, community, and workplace partners. McMaster, supported by its industrial liaison office (MILO), also located at MIP, will continue to promote a culture of knowledge transfer/commercialization and will provide incentives for start-up companies to locate at the Park. MARC, the McMaster Automotive Resource Centre at MIP, is near completion and expected to be occupied this spring. The next decade will bring dramatic changes in hybrid powertrain design and production, triggering unprecedented technology investment by the automotive industry. MARC, whose support includes $\$ 11.5$ million from the SouthWestern Ontario Federal Development Fund, will be critical to maintaining McMaster’s leading edge in this area of research. The Federal Budget 2013's announcement of an additional $\$ 920$ million to renew to the Federal Economic Development Agency for Southern Ontario will provide opportunities for continued success.

On the provincial front, McMaster researchers vigorously pursued funding opportunities from the Ministry of Health and Long-Term Care and continue to reap significant financial benefits.

Ontario's Ministry of Research and Innovation's (MRI) focus on programs whose outcomes are intended to drive economic growth and job creation requires significant commitment from the private sector. Recognizing the fiscal challenges faced by our private-sector partners, we will continue to forge relationships with industry and to develop industry-friendly practices, allowing us to capitalize on both provincial and federal partnership programs. Recent discussion with MRI has identified that the Ontario Research Fund Research Excellence (ORF-RE) program, put on hold by the Ministry in the fall of 2011, is expected to return later this year. McMaster has had considerable success through this
program in the past and we look forward to the opportunity its return will provide. McMaster has also had great success through MRI's Ontario Research Fund Research Infrastructure (ORF-RI) program, a matching partner to CFI. All McMaster CFI awards which have requested funding from the ORF-RI program to date have received the full funding request. In the past year, over $\$ 6.3$ million in ORF-RI funds (matching CFI LOF and CFI LEF) have been awarded to McMaster. Recognizing the complexity of managing projects awarded through the ORF-RE and ORF-RI programs, MRI continues to review the processes involved in ongoing management; McMaster's ROADS and Research Finance Offices continue to participate on an MRI-established working group to assist in next steps.

Supporting young researchers and developing the next generation of highly trained personnel continues to be a priority for both provincial and federal agencies. McMaster anticipates significant ongoing participation in the MRI Early Researcher Awards (ERA) program which allows young researchers to build their research teams. Recent ERA awards to McMaster will support research which investigates the impact of physical activity during early childhood; determines the risk factors for developing Alzheimer's disease; studies the relationship between a political candidate’s physical appearance and voice and voter behavior; and studies important problems in the field of algebraic number theory - the study of whole numbers. McMaster's research administration will continue to provide education and training to facilitate our research community's ability to respond to these and other funding opportunities.

International partnerships are key to future success in research funding. McMaster's international collaboration rates -- along with our international publication rates -- have increased considerably and consistently for the last five years. The 2013 Federal Budget's support to Canada's International Education Strategy includes significant funding to support the Mitacs Globalink Program which will facilitate the attraction of high level students to Canada while allowing Canadian students to participate in international training opportunities. In addition, several countries around the Globe have identified internationalization of higher education as a priority. This includes Brazil and its massive Science without Borders program that over the course of the next few years will enable thousands of Brazilian students at all levels to study in North America and Europe. In 2012, McMaster accepted 11 Brazilian students under this program and we expect significant increases in future years. Partnerships with Brazil are further supported by a bilateral agreement between McMaster and FAPESP, the NSERC equivalent of the state of Sao Paolo. Another example of renewed emphasis on internationalization is Japan where the recently elected new government under Prime Minister Abe is injecting new views, approaches and investments in to a number of sectors, including higher education and research. McMaster is well positioned to partner in such initiatives through existing relationships with several top universities.

This is a time of significant change within the research funding environment and, while there are opportunities to be realized, there are also challenges. Within Canada, the Gross Expenditures on Research \& Development as a percentage of Gross Domestic Product (GERD/GDP) has declined from $2.09 \%$ in 2001 to $1.74 \%$ in 2011, its lowest level of the past decade, providing challenges for all Canadian institutions. Other countries, however, have increased funding to research, enhancing opportunities for collaboration and for research funding to support Canadian research. For example, a McMaster team who developed a vaccine to treat people with cat allergies received over $\$ 6$ million from the U.S. National Institutes of Health to investigate the vaccine's impact on the immune response. McMaster will continue to pursue opportunities for international funding, with particular emphasis on increased international collaboration with EU countries (and specifically, Germany, Italy, Austria and France), Japan, Brazil, Russia, India, and China, including those offered through the Ontario-China

Research and Innovation Fund.
Research funding is essential to a research-intensive university and facilitates the generation of indirect cost (IDC) revenue to help support the research enterprise. Collective efforts by the Vice-Presidents Research of the major research-intensive institutions to increase the federal investment in IDC of research continue in the context of the current fiscal environment. Provincially, the MRI has shown leadership by moving to a $40 \%$ IDC rate for many of its research programs, while the Ministry of Health and Long-term Care has lowered its IDC rate to $20 \%$. A provincial-wide adoption of the IDC rate continues to be encouraged. Increases in IDC income from research is tied directly to the success of our researchers. Increased IDC revenue will position the University to invest in the research enterprise infrastructure and provide the opportunity to reallocate and reinvest any resulting liberated funds.

## Appendix D - Post-Retirement Benefit Programs

McMaster University maintains post-retirement pension and non-pension benefit programs for most groups of full-time employees. These plans are both defined benefit and defined contribution in nature. Over the past several years the shortfall between the assets and the liabilities in the defined benefit plans have increased significantly, mainly due to historically low interest rates and the actuarial measurement methodology affecting annual payment requirements into the plans.

## Salaried Pension Plan 2000

## July 2011 Funding Valuation and Temporary Solvency Relief Provisions

The University filed the Salary Pension Plan 2000 valuation as at July 1, 2011. The results of the valuation at July 1, 2011 are:

- Going-concern shortfall of $\$ 182$ million using a discount rate of $6 \%$ ( $\$ 76$ million at last filing of July 2008)
- Required annual University special payments as a result of this going-concern deficit of $\$ 10.8$ million per annum ( $\$ 8.425$ million per annum at last filing)
- Solvency shortfall of $\$ 267$ million using a discount rate of $6 \%$ ( $\$ 32$ million shortfall at last filing)
- Expected required annual special payments as a result of the Solvency Deficit have been waived for three years as a result of qualifying for Temporary Solvency Relief ${ }^{6}$
- Annual special payments for solvency will be required after the July 1, 2014 valuation
- University current service cost contributions is expected to fluctuate between $127 \%$ and $125 \%$ of employer's contributions over the next three years

It should be noted that the discount rate used to measure the liabilities are guided by actuarial measurement methodology. Low discount rates increase the liability and associated pension plan deficiency as measured as pension plan assets less pension plan liabilities. The discount rates used for some measurements do not consider the long-term nature of the plan, which has a duration of over 15 years. The historical rate of return on plan assets approximates over $8 \%$. The measurement methodology left unchanged, or without further legislated relief, may result in annual plan payments representing close to $20 \%$ of the operating budget per year.

## Funding Plan for Future Years

The salary pension funding plan approved by the Budget Committee for 2013/14 is:

- The employer contribution that is built into the operating, ancillary and research unit benefit charges for salaried faculty and staff was increased from 295\% of the employee contribution to $310 \%$ of the employee contribution effective May 1, 2013.

[^5]- Extension of the amortization period for new solvency deficits from five years to ten years
- Deferral of going concern deficit payments for one year from the valuation date
- Allow up to ten years of going-concern deficit payments to be taken into account in determining net solvency deficiency.
To be eligible for such additional temporary relief, universities had to take measures to make plans more sustainable over time. The University has qualified for Stage 1 and has made changes which should result in Stage 2 qualification in 2014.
- These rates help to cover both the current service costs and the required special payments referred to above.
- The recommendation for $2014 / 15$ is to increase charges to $325 \%$ subject to an annual review in October.
- As well, further review after July 1, 2014 Solvency Report will determine if the University has qualified for Stage 2 of the Temporary Solvency Relief Program.


## Plan Design Changes and Employee Contribution Increases

The University has made significant progress to reduce the long-term financial impact of the pension obligation through the collective bargaining process for unionized employees. All employee groups remaining in the plan will have increased their contributions from $6.5 \%$ up to the yearly maximum pensionable earnings (YMPE) and $8.75 \%$ over the YMPE by July 1, 2012. MUFA recently agreed to increase contributions to 7\% up to the YMPE and 10\% over the YMPE effective July 1, 2013. These contribution increases will continue to help put the plan on a more sustainable basis and are one of the key reasons that the plan has been able to qualify for the Temporary Solvency Relief provisions offered by the Province.

## Hourly Pension Plan

The University sponsors a defined benefit pension plan that provides benefits to approximately 340 retirees and deferred members and covers approximately 300 active hourly rated employees. While not as large as the salaried pension plan, this plan has experienced the same negative consequence of volatile markets and low interest rates. Employer contributions to cover the current service cost and deficit payments are currently at $390 \%$ of employee contributions and are expected to increase. The use of some solvency relief measures will form part of the funding strategy for the Hourly Pension Plan. The University has qualified for Solvency Relief. Human Resources has negotiated the closure of this plan to new hires. New hires in the union groups that were covered by the plan are now eligible for a group RRSP plan whereby the University matches employee contributions to their account.

## Non-Pension Employee Future Benefits

McMaster offers defined benefit plans that provide non-pension retirement benefits including extended health, dental and life insurance for substantially all of its full-time employees. Plan design changes intended to reduce the size of the liability have been made over the past few years.

In 2011/12, the University worked with its actuaries to quantify the impact of the above changes on the unfunded liability that stood at $\$ 219.5$ million as at April 30, 2012. While this liability will continue to grow, the changes referred to above will mitigate its growth significantly. In addition, future strategies may include any combination of the items noted below:

- Further plan design changes and co-payment strategies
- Continuation of a charge to operating and research units equivalent to $2.0 \%$ of pay to increase the funding reserve in fiscal 2013/14.
- Contributing $\$ 1$ million from the University benefits reserve to a special long-term investment reserve to mitigate further surcharge increases in the longer term in each of fiscal 2012/13 and 2013/14.

Finally, the Board has recommended a tri-annual review with the actuaries to review and update strategies above.

## Appendix E-Fund-by-Fund Consolidation

(\$ thousands)



[^0]:    ${ }^{1}$ Full accrual basis is the basis under which the audited financial statements are prepared.

[^1]:    ${ }^{2}$ Key peers include members of the G6, a group of leading research-intensive universities in Ontario. The G6 universities are McMaster University, University of Ottawa, Queen’s University, University of Toronto, University of Waterloo, and the University of Western Ontario.

[^2]:    ${ }^{3}$ The going-concern valuation assumes that the pension plan will be maintained indefinitely and has a long-term time horizon.

[^3]:    ${ }^{4}$ Indirect costs include support for the libraries, the provision and maintenance of space, computing and networking support, accounting and other administrative services, Health Physics, Security, etc.

[^4]:    ${ }^{5}$ Capital expenditures used in operations and to support ancillary departments are budgeted through the operating and ancillary funds within the same envelope system and using the same priority setting, monitoring and control process as operating expenses. Capital expenditures budgeted within the operating and ancillary funds include technology, library, renovations, and classroom equipment, faculty start-up costs, and deferred maintenance.

[^5]:    ${ }^{6}$ Ontario Pension Funding Relief Funding relief provisions include:

