

# State of the Academy

## Annual Report

### September, 2008

This report presents a snapshot of McMaster University at the beginning of the fall term, 2008. It is divided into two parts: a year in review which focuses on traditional measures at the University, and a discussion of new initiatives undertaken in the last academic year, most of which are on-going.

#### **Year in Review**

In the past several years, McMaster University has experienced rapid growth in its student body. While this has funded renewal in the faculty ranks, the student body has swelled more quickly than we have been able to hire core faculty and staff members and to provide adequate space for student and faculty needs. Additionally, the demographics in the Greater Toronto Area (GTA) have resulted in significant pressure upon and from the Ministry of Training, Colleges and Universities (MTCU) for rapid growth in the student positions available for post-secondary education. Nonetheless, the 2007/2008 academic year will be remembered as the year McMaster took control of its student growth in order to ensure that its quality is maintained and enhanced.

This section of the State of the Academy Report presents a survey of current measures, recent trends and plans for the next few years. Unless otherwise noted, comparisons made to other institutions will be limited to three key data sets: the G13 universities<sup>1</sup>, the six G13 universities in Ontario (which we call the G6), and the Ontario Universities as a whole.

#### *Student and Faculty Numbers:*

Figure 1 shows the recent trends and targets for the next few years for four important parts of the McMaster community: full-time undergraduate students, full-time graduate students, tenured and tenure-track faculty, and the sum of tenured, tenure-track, teaching stream, and CLA faculty. These data are compiled in a consistent manner with that presented last year. We have not included students and faculty who primarily use space off campus (such as our collaborative nursing programs). We have included all Faculties in our numbers (and we note that there are known inconsistencies in how Health Science faculty numbers are reported across the province and nation so it is difficult to make comparisons). The future faculty numbers are based on the three-year budget plans submitted by each Dean in response to the faculty renewal plan implemented in 2006/2007 and incorporated into the current budget cycle.

---

<sup>1</sup> The G13 universities are University of Alberta, University of British Columbia, University of Calgary, Dalhousie University, Université Laval, McGill University, McMaster University, Université de Montréal, University of Ottawa, Queen's University, University of Toronto, University of Waterloo, and the University of Western Ontario.

It is noteworthy that while the growth changes are not uniform across the campus there is significant faculty renewal planned in each Faculty. Over the next three years the Faculty budgets include hiring of 57 net additional tenured, tenure-track and teaching stream faculty members. These net faculty hiring numbers include significant faculty renewal, as they take into consideration the early retirement incentive package offered recently. In almost every Faculty the net numbers show that *all* retired faculty members are being replaced, but not necessarily in the context of replacing a particular faculty member with another in the same area. The total number of faculty members who accepted the retirement incentive was 55. Of these, the largest group of retirements came from Health Sciences, with 18, and Social Sciences, with 14. The smallest set of retirements was in Business, with 2.5.

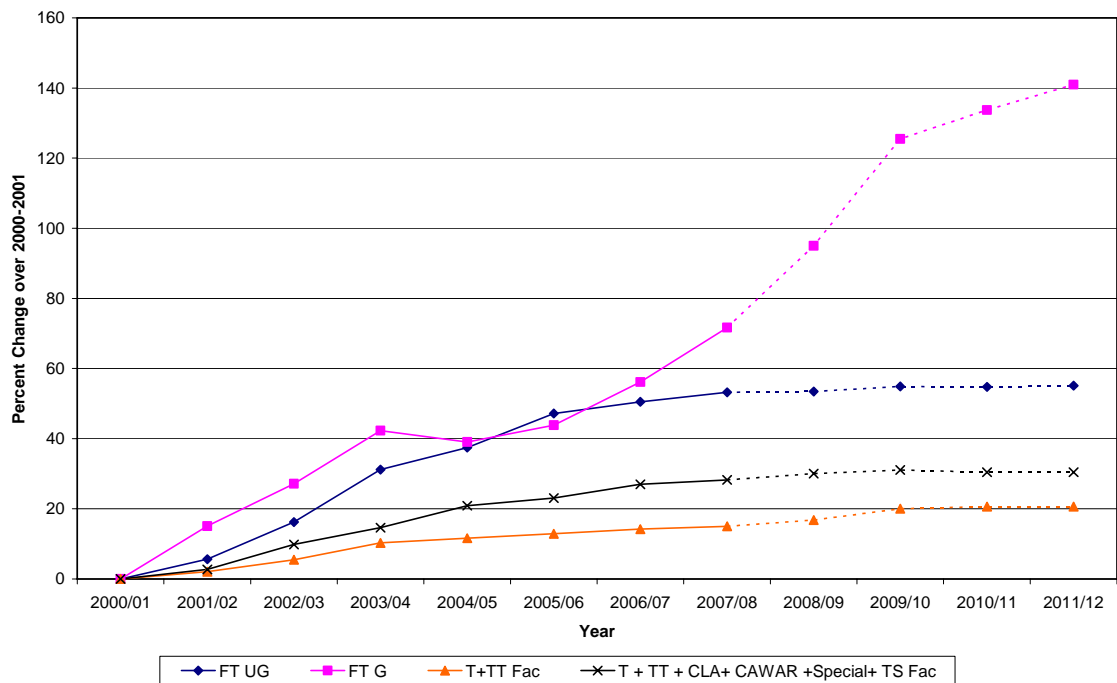


Figure 1: McMaster University Faculty and Student population change since the 2000-2001 academic year.

Specifically, faculty transitions in the past year include promotions of 58 to Associate Professor with tenure or CAWAR and promotions of 27 to Professor. In addition, tenure or CAWAR was awarded to 7 Associate Professors and to one Professor. New full-time hires include 24 tenured and tenure-track faculty, 7 teaching stream faculty, 22 Contractually-Limited Appointments, and 23 Special Appointments in Health Sciences. In the DeGroote School of Business we welcome John Siam, Kevin Hill and Teal McAteer. In Engineering we welcome Robert Fleisig, Benoit Chachuat, Todd Hoare, Cameron Churchill, and Joseph Kish. In Humanities we welcome Paul Louth, Spencer Pope, Larissa Faulkner, Christine Quail, Lori Shyba, Xiaoping Sun, John Connolly, Nikilai Penner, Wendy Schrobilgen, Elisabet Service, and Stefan Rodde. In Science we welcome Kimberley Dej, Lovaye Kajiura, Pippa Lock, Alison Hay,

Christopher McLean, Traian Pirvu, and Steve Brown. In Social Sciences we welcome Kee Howe Yong, Svetlana Demidova, Maxim Ivanov, Lydia Kapiriri, Ramesh Balasubramaniam, Gregory Flynn, James Ingram, Monika Thakur, Daniel Machiela, Saara Greene, Ann Schormans, and Melanie Heath. In Health Sciences we welcome Albina Veltman, Syamkumar Divakaramenon, Luis Braga, Nathan Magarvey, Katrin Scheinemann, Monica Maly, Kazuya Onuma, Jorge Arredondo, Dusan Lukic, Richard Whitlock, Olaf Kraus de Camargo, Ping-Chang Yang, Mesud Yelbuz, Heather Whittingham, Jennifer Couturier, Chaudia Lace de Almeida, Prashanth Murthy, Anita Bane, Karen Beattie, Felicia Vulcu, Robert Yang, James Anderson, Fernando Gastaldo, Elka Miller, Genhee So, Nalin Amin, Clint Betts, Stephanie Campbell, Amy Palma, Diana Sherifali, Nirupa Gangam, Courtney Evers, Adriana Carvalho, Margaret McKinnon, Mark Oremus, Greg Steinberg, Keith Tsoi, and Shailla Vaidya.

As we noted last year, Fig. 1 shows there has been rapid growth of our full-time student population at both the undergraduate and graduate student levels. Student growth has outstripped core faculty increases by about a factor of two over the last several years. The entering class in 2007 was roughly 10% larger than our target, but even had we hit our target precisely, we would have experienced growth last year. The future plans shown in Fig. 1 show that the size of our undergraduate pool and our faculty are slated to stay roughly constant. However, the sizes of our graduate cohort will increase significantly. This is in keeping with our research-intensive nature, with our strategic plans as described in *Refining Directions*, with provincial priorities for an increasing pool of graduate students, and with our commitment to delivery of the highest quality education. Using these projections, the ratio of full-time undergraduate students to full-time graduate students would increase to 21% in 2011/12, having started at 13% at 2000/01, thus achieving the goal of 20% graduate students as stated in the *Refining Directions* implementation plan. While some of the planned growth is in PhD programs, the bulk of our proposed graduate student growth is in professional and other Master's programs. Of particular note among these Master's programs is a rapid MBA expansion made possible by the creation of a new campus at Burlington. Nonetheless, there are serious implications of trying to greatly grow our graduate student population at a time when our core faculty numbers are only growing modestly.

For a number of years McMaster has made graduate student growth a priority. Our effort predates increased provincial support, but MTCU funding algorithms have permitted us to grow more quickly than we would have without incentives. As Figure 1 shows, we have dramatically increased our full-time graduate student body – by 71.7% since 2000/01. While we have not yet achieved the stretch graduate growth target we set for ourselves and reported to MTCU a few years ago, we are close to the goal. Only one of the Ontario universities has achieved both their Master's and PhD level graduate student targets and our results reflect substantially more growth than average among our sister institutions. Since the 2004/05 academic base year, the G6 institutions have grown eligible full-time graduate students by 20 – 53%, with a median value of 27%. McMaster has grown the second fastest, at a rate of 31% for eligible students, being surpassed only by Waterloo. This year we were given an opportunity by the province to recommit to graduate student expansion and we proposed to continue an ambitious plan of graduate student growth. The senior administration, including the President, Vice-Presidents,

Faculty Deans, and AVP and Dean of Graduate Studies have identified graduate student growth as a top university priority and we are mobilizing internal funding and additional space to support this effort.

McMaster University's part-time students are also an essential part of our community. Through part-time programs, working students are able to improve their educational background and skills, offering significant benefits to their employers and their communities. Part-time student enrolments at McMaster have risen at the undergraduate level more modestly than full-time students. Since base year 2000-2001, part-time undergraduate enrolment at McMaster University is up about 21.4% and part-time graduate enrolment has decreased by about 9.4%. Expansion of part-time programs, particularly those which are linked to employment sectors, has long been recognized as a great opportunity for McMaster University. With the new provincial commitment to retraining, the time for a big push in this area is now. Our recent work in collaboration with Mohawk College to establish a Bachelor of Technology degree program in various technical fields is an example of our efforts in this arena.

The growth of student numbers at McMaster has continued to present us with opportunities to establish new programs – too many, in fact, to list here. This year, for example, we created the first Physician's Assistant program in Ontario. We also created new PhD programs in areas including Philosophy, Social Work, Cognitive Science of Language, Neuroscience, Health Policy, and Christian Theology. Additionally, we added a combined MD/PhD program. Our new Master's level programs are extensive, including an MA in Health and Aging, an MEng in Software Engineering and Virtual Systems Design, a Masters in Communication Management, an MA in Communications & New Media, and an MSc in eHealth. Existing graduate programs such as Business Administration, Engineering Physics, Engineering Practice, MBA, and Occupational Therapy are poised to grow in 2008/09. At the undergraduate level we introduced many new programs, such as honours programs (iSci, Life Science, Computer Science, and Business Informatics), new BTech streams, and direct entry programs in the Life Sciences, Physical Sciences, Environmental and Earth Sciences, and Mathematical Sciences. We significantly grew our midwifery program and established new Family Medicine teaching units in Brampton, and Niagara.

We also made significant progress this year in the establishment of a new campus in Burlington to house executive education and MBA programs for the DeGroot School of Business in the Centre for Advanced Management Studies. This particular venture will bring significant new revenue to the Business Faculty and permit the expansion of the tenured and tenure-track faculty ranks there by ten. It will also permit us to improve the quality and visibility of our MBA program, the program by which business schools are most consistently judged. All internal approvals for this project have now been obtained and DeGroot School of Business committees are working on building design, curriculum renewal, and hiring plans.

Our student growth over the last decade also has led to enormous challenges as the student to faculty ratios have risen and we have struggled to accommodate class, lab,

office, and activity space needs. McMaster University finds itself in a difficult situation. The ministerial funding policy is linked to growth, but the funding provided by the ministry to accommodate growth is far less than needed to ensure that the quality of our teaching and research remains static or improves. The funding deficit also causes pressures on student services which have had static staffing levels. Despite significant increases in funding through the province's Reaching Higher Plan, a recent presentation by Paul Genest of COU noted that Ontario is dead last among the provinces for funding per student in post-secondary education, providing roughly \$1600 per student per year *less* than the average in Canada. In round numbers this funding deficit relative to the average (which is not where we set our sights) corresponds to over \$30 million dollars for McMaster on an annual basis. The impact of receiving inadequate funding is that student to faculty ratios at McMaster are now reported as 19:1 if one includes the Health Sciences and 29:1 excluding Health Sciences. For the G6, these numbers range from 19:1 to 26:1 if one includes Health Sciences and 24:1 to 29:1 if one excludes Health Sciences. These ratios are clearly too high to guarantee a high quality educational experience.

As our student body has grown, we have seen an increase in term-appointed faculty members of various sorts. Our full-time equivalent Sessional appointments were approximately 108 (based on a full-time teaching load of 18 units) in 2007/08. More importantly, in terms of the total number of faculty appointments, tenured and tenure-track faculty in 2007/08 represent 79% of the full-time faculty, with Contractually Limited Appointments at 13% and Sessionals at 8%. This translates to roughly 25 – 30% of our classes being taught by term-appointed faculty members. The numbers suggest that our undergraduate students are likely to interact with contract faculty in the classroom as well as with our core tenured and tenure-track faculty. While we value our contract faculty highly and they provide quality educational experiences for our students, it is reasonable to ask whether our educational and research missions are being served well by relying on instructors who are offered temporary appointments rather than lifelong careers. One answer to this problem has been the creation of the teaching stream of faculty at McMaster. In this first full year of such faculty, now a mere 1% of our faculty appointments, the Teaching Professors have emerged as an energetic and excellent resource deeply committed to education of students. I have asked Professor Del Harnish, the Special Advisor to the Provost, to lead an effort to consider how we might alter our teaching structures in order to encourage creativity, teach more effectively (to produce greater student learning), and reduce our reliance on contract faculty so that a larger fraction of our faculty see McMaster as their long term employer of choice.

Institutionally, we have not traditionally kept records of diversity measures for the various segments of our community. We do, however, have information on the distribution of faculty appointments by gender. Overall, our tenured, tenure-track, CLA, CAWAR, Special, and Teaching Stream appointments have shifted modestly from 71% males in the 2000/01 academic year to 67% in 2007/08. At the same time, the tenured, tenure-track and CAWAR faculty appointments have changed from 75% males to 72% males. It is worth noting that in both cases, the male to female ratio shifted between 2000/01 and 2003/04 with no further changes since then. Both our lack of institutional information and our static statistics suggest that we are not focusing on issues of diversity sufficiently to have an impact. In the coming year, the issue of campus-wide

commitment to diversity and equity (a main goal of *Refining Directions*) will receive far greater attention.

*Research Enterprise:*

McMaster University is among the most research-intensive universities in Canada and our linking of research and education is part of what uniquely defines us. Figure 2 shows the research funding at McMaster University as a function of year from 2000/01 to 2007/08. It is broken down into research funding for Health Sciences and for all other Faculties, Institutes, and Centres. Health Sciences funding does not include that awarded to our affiliated hospitals. As Figure 2 shows, our total research funding has risen by 34.6% since 2000/01. (Please note that 2007/08 figures are preliminary and it is expected that there will be some increase to these numbers.) It is very difficult to compare our results in Fig. 2 to other institutions because of the inconsistencies in reporting funding to Health Sciences. This topic was discussed at a recent meeting of the G13 Deans of Health Sciences and Provosts and there is reason to be optimistic that a uniform reporting for Health Sciences research funding and faculty will evolve over the next few years. Our funding per tenured and tenure-track faculty member (including those with CAWAR) has increased from about \$150,000 per year to \$162,000 per year, an increase of 8.0%. Research Infosource Inc. released its 2007 rankings of Canada’s top 50 research universities and ranked us second in the country in research intensity.

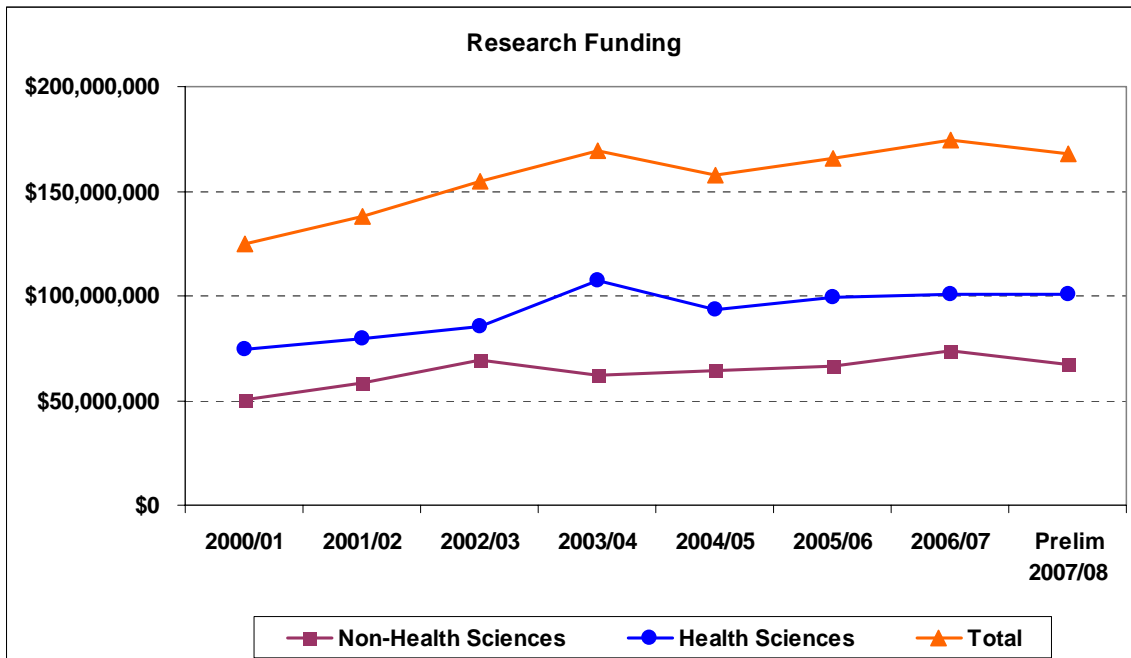


Figure 2: Research funding at McMaster as a function of academic year.

While the research figures are interesting in the aggregate, it is important as well to call attention to noteworthy awards related to research in the past year. As one would expect, the list is far too lengthy to provide fully here. The individual faculty awards vary from early career awards (to Mohit Bhandari, Brian Coombes, Kari Dalnoki-Veress,

Megumi Harada, Anne Klassen, Andrew Knights, Bartosz Protas, Greg Slater and Xu-Dong Zhu) to new Canada Research Chairs (to Hendrik Poinar, Sheila Singh, and Christopher Wynder) to recognition of lifetimes of achievement by some of our faculty. To mention just a few of this latter category (with apologies to those not mentioned here by name), we note that Sandra Witelson was inducted into the Hamilton Gallery of Distinction, Peter George was awarded the Order of Ontario, Ronald Gillespie was awarded the Order of Canada, Chris Wood, Daphne Maurer, Geoffrey Norman, Walter Craig, Brian Haynes, John MacGregor, and Max Wong were inducted into the Royal Society of Canada, Daniel Coleman received the Raymond Klibansky Award for the best English-language book in the humanities, Jamal Deen was presented with an Academic Excellence Award, Imre Szeman was awarded a Fulbright Visiting Chair in Canadian Studies, Wil Waluchow was named to a Senator William McMaster Chair, Juliet Daniel was the recipient of an African-Canadian Achievement Award of Excellence, George Weslowsky was presented with the Lifetime Achievement Award in Location Analysis, Denise Bryant-Lukosius accepted the Canadian Association of Nurses in Oncology Research Award of Excellence, and Stephen Collins gave the Richard D. McKenna Memorial Lecture of the Canadian Association of Gastroenterology.

In addition to individual awards for research, there were many awards in support of research that were made across campus. We mention here just a few new awards which are representative of the vitality of our research mission: John Valliant led a team awarded \$14.9 million to establish a centre on the development and commercialization of medical isotope probes; John Preston and Rafi Kleiman received a total of \$4.1 million to advance the commercialization of their research on new solar energy technology; Judah Denburg leads a new AllerGen and Health Canada supported project to determine the prevalence of food allergies; Malcolm Sears is leading a \$12 million dollar study to investigate genetic and environmental factors influencing asthma and allergies in children; Charlotte Yates and Don Wells are part of an international team that received \$2.5 million to study work and employment in a global context; David Wilkinson has led the establishment of MacAUTO, a new research institute to coordinate our increasing involvement in the automotive sector; Robert Pelton's work on bioactive papers was mentioned prominently in *The New York Times Magazine* for its annual *Year in Ideas* issue; Laurel Trainor and the McMaster Institute for Music and the Mind made us the only Canadian university to receive grant funding from the Grammy Foundation; Julie Park and Peter Walmsley co-edited a special issue of *Eighteenth Century Fiction* entitled *War/La Guerre* which was chosen for a best special issue prize.

Our research awards are not limited to our faculty – our students have also had a noteworthy year. For instance, the CPR glove invented by engineering students Corey Centen and Nilesh Patel won the North American Collegiate Inventors Competition, was selected by *Time Magazine* as one of the best inventions of 2007, and has now received \$500,000 in provincial investment for commercialization. Additionally, we note that Naomi Cermak won the Graduate Student Award of the Ontario section of the Canadian Society of Exercise Physiology and fourth-year students in Ann Herring's Anthropology of Infectious Disease class published a book entitled *Surviving the Early Years:*

*Childhood Diseases in Hamilton at the Turn of the Twentieth Century.* These are just a few of the amazing accomplishments of our students.

Based on our research productivity, we were named one of the Top 100 universities in the world for the fifth consecutive year. Only four Canadian universities have made it to this annual poll published by China's Shanghai Jiao Tong University. In 2007 our ranking rose from 90<sup>th</sup> to 87<sup>th</sup> in the world.

An important part of our research enterprise has been developing at the McMaster Innovation Park (MIP) this past year. MIP is located along Longwood Road roughly 1.5km from our main campus. The site offers us the ability to establish better linkages between our research and both companies and public agencies. The draft plans for MIP call for 1.7 million square feet of office, research and amenity space for the envisioned 3,000 park occupants. It will offer expanded applied research space, business incubator space, and some experiential learning spaces suitably linked to business and classroom technology labs. It will also house CANMET, a federal laboratory of direct relevance to our teaching and research. The first building on the site, the renovated Red Brick Building, will add 40,000 sq. ft. to our inventory. It is slated for completion in early 2009 and leasing of the building is proceeding apace. MILO (McMaster Industry Liaison Office) has moved to this site as has UNU (United Nations University). Overall the building will house a mixture of public and private sector partners.

#### *Educational and Other Awards:*

McMaster University is known internationally for its commitment to innovative educational approaches. We have long been a leader in the integration of education and research and in experiential educational approaches. Evidence of our continuing commitment to excellence in education is provided by the rather large number of educational awards received this year.

Faculty educational awards have varied from Young Educator Awards, such as those received by Anthony Levinson and Alan Chen, to city and provincial recognition such as the Hamilton Spectator Publisher's Award for Education, which went to Doug Boreham, the Ontario Best Lecturer Award, for which Nick Bontis was a finalist, and the selection of our Center for Continuing Education as Hamilton's best adult education provider by the Hamilton Community News. Our faculty and staff also received national recognition for their efforts such as the 3M National Teaching Fellowship received by Patangi Rangachari, the National Lifetime Achievement Award in educational development received by Dale Roy from the Society for Teaching and Learning in Higher Education and the LIFT Awards received by Deborah Cook, Richard Day, Miroslav Lovric, Mandeep Malik, and Marshall Beier. President's Awards related to teaching were awarded to Douglas Boreham for Course or Resources Design, to Richard Day and Bosco Paes for Education Leadership, and to Brian Baetz and Nick Bontis for Instruction.

Our educational programs also garnered significant recognition this year. As examples, we note that our collaborative nursing programs earned top accreditation and continue to be the model for collaborative programs in Ontario. Additionally, the DeGroote School of Business was named to the Princeton Review Best Business Schools list for the first time.

Our faculty and staff also excel in service to their profession and community. This year, Paul Bates was chosen to be one of seven new members to the SSHRC Board, Rafik Loutfy has been elected Chair of the Board of Directors of Canadian Light Source, John Capone was selected to receive the Spirit of Ontario Award by the Hamilton District of the National Congress of Italian Canadians, and Harriet MacMillan was named the recipient of the Paul D. Steinhauer Advocacy Award of the Canadian Academy of Child and Adolescent Psychiatry. The President's Awards for Outstanding Service were given to Leah Allan, Connie Barry, Rena Cornelius, Julie Fairservice, Jane Howe, Debbie Lobban, Brent Warren, and Donna Waxman. Team awards were received by the Boiler House Team and the Bachelor of Science in Nursing Program Staff Team.

McMaster University Libraries won the prestigious Excellence in Academic Libraries Award, becoming the first Canadian academic library to receive the Association of College and Research Libraries award. Further, the most recent Almanac from the Chronicle of Higher Education ranked the libraries at 94<sup>th</sup> this year, bringing us into the top 100 North American libraries and up eight places from last year. Also, the Health Sciences Library renovation has received two awards: the City of Hamilton's Urban Design Award, and the Architecture People's Choice Award.

Finally we note that our students are a diverse and interesting group who earn awards for extracurricular activities as well as academic endeavors. We mention just a few of these awards here. This year Chris McAllister, Greg Atkinson and Alan Teo were part of a team that received a first place award in Hamilton's 24-hour Film Festival. Our women's basketball team was OUA champion and secured a CIS bronze medal. Peter Czerwinski won the Collegiate Nationals Eating Championship.

*Budget:*

As with other aspects of our operations, there is a mix of good news and challenges in our budgetary situation. In the last few years it has been an institutional priority to reduce and eliminate in-year operating deficits. In particular, we have focused on cost savings methods to eliminate structural deficits, those deficits which result from recurring yearly expenditures exceeding committed annual revenues. While we have largely offset structural deficits using reserves, it is clear that such a policy cannot continue indefinitely. Our structural deficits have had a number of causes. Among these we note that the basic grant from the province has been effectively unchanged for all of the past 15 years except the last two, and its purchasing power has decreased by the inflation over that time. Further, while the total provincial funding per student FTE grew by 2.8% annually since 2001/02, our total salary and benefits costs have increased at a rate of closer to 10% per annum, necessitating that all envelopes find ways to reduce

expenditures. Within this rather gloomy situation, the good news is that our focus on the budget has resulted in a predicted balanced budget without structural deficits for the next three years. Having achieved budget balance through cost cutting, we are now turning our focus to revenue generation so that we may add flexibility to our budget and undertake initiatives designed to enhance quality and move forward our strategic goals. Such initiatives can include expanded continuing education, focused short courses, courses targeted for particular businesses or groups, and consulting on matters related to research and education expertise. Identification and development of these opportunities will involve faculty, staff and students across the institution.

Our current fundraising campaign also helps our budgetary situation some and certainly improves our ability to support key initiatives. Next month we will celebrate the midpoint success of our \$400 million campaign for McMaster University, “Inspiring Innovation”. The funds raised through the Campaign support our academic mission – research in specific areas, teaching innovations, student support, and support of the space required to enable such activities.

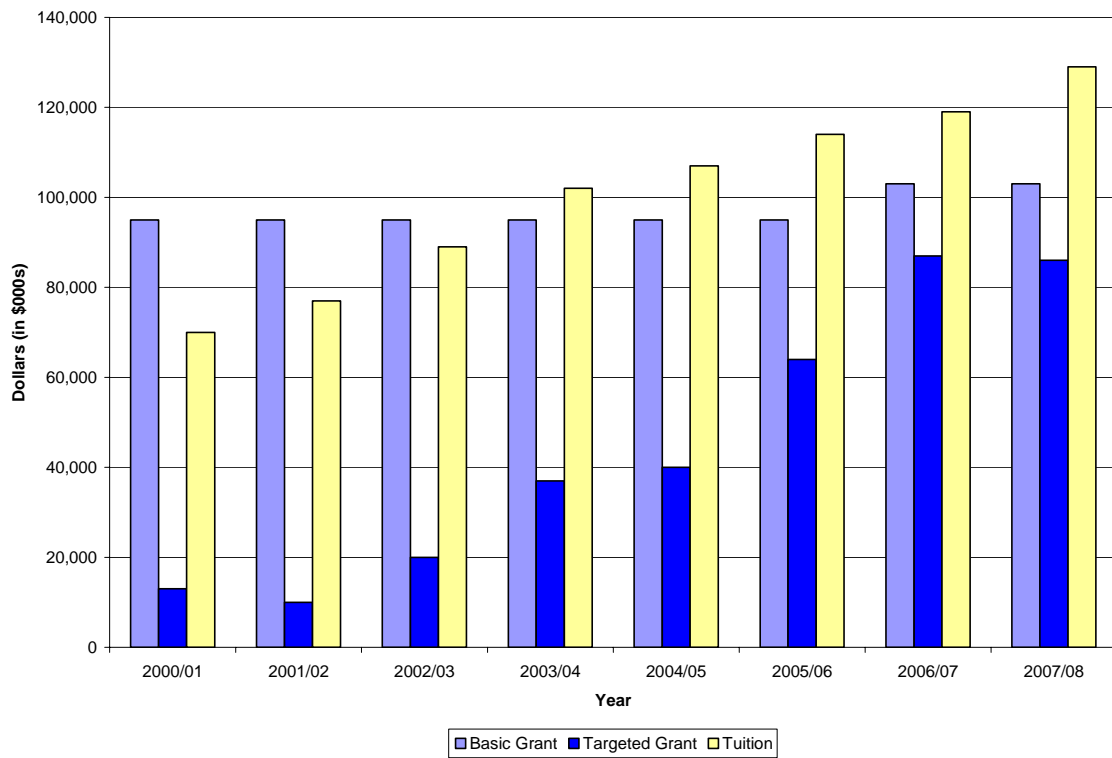


Figure 3: University income from grants and tuition.

Figure 3 shows the provincial funding for academic programs and tuition revenue as a function of year. This figure shows that, while the basic grant has stagnated, targeted funding has dramatically increased. In this period, the targets for funding have been almost exclusively in science, technology and health sciences. We have strongly urged the ministry to recognize the value of a diverse community of scholars and passionately

presented the case for funding in the humanities, social sciences, and business areas. To date, the ministry has not been swayed by our argument. Figure 3 also shows that tuition income has risen significantly in recent years, largely due to the increase in student numbers. Tuition increases per student are regulated by the province and have not kept pace with the escalating costs of delivering a high quality education.

Over the last year, the issue of the fraction of our operating budget that is dedicated to tenured and tenure-track faculty has been raised. Figure 4 shows this statistic for the G6 for the last several years. Based on these data, it is clear that McMaster spends a much higher fraction of its operating budget on faculty salaries and benefits than most of our peers. However, it is not at all clear that this metric is useful or consistently calculated; nor that a higher value is better than a lower value. One could argue that this measure simply shows the amount of flexibility in the budget in which case a higher value is less desirable than a lower value. A far better measure of whether an appropriate number of faculty is being supported is the previously mentioned student to faculty ratio.

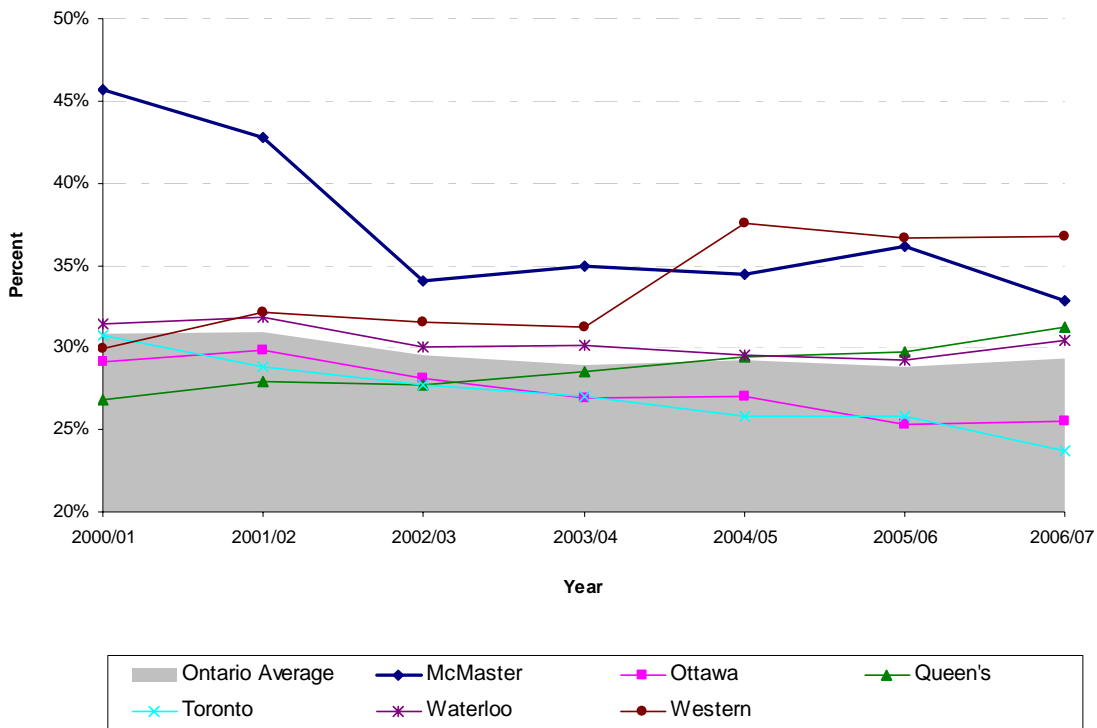


Figure 4: Percentage of Operating Budget Dedicated to Academic Tenure and Tenure-track faculty.

A more detailed look at the budget over the years is shown in Figure 5, which shows the funding in a series of categories since academic year 2000/01. In every category the funding has increased. The fastest rise is in the utilities and pension areas, where costs have increased 160 and 188% respectively. As this figure shows, the vast majority of our operating funds go directly to the Faculties and are under the control of

the Deans. This portion of our funding has risen roughly 80% since the academic year 2000/2001. By contrast, administration costs have risen 50% and physical plant costs by 62% over the same period, making these categories the slowest growing.

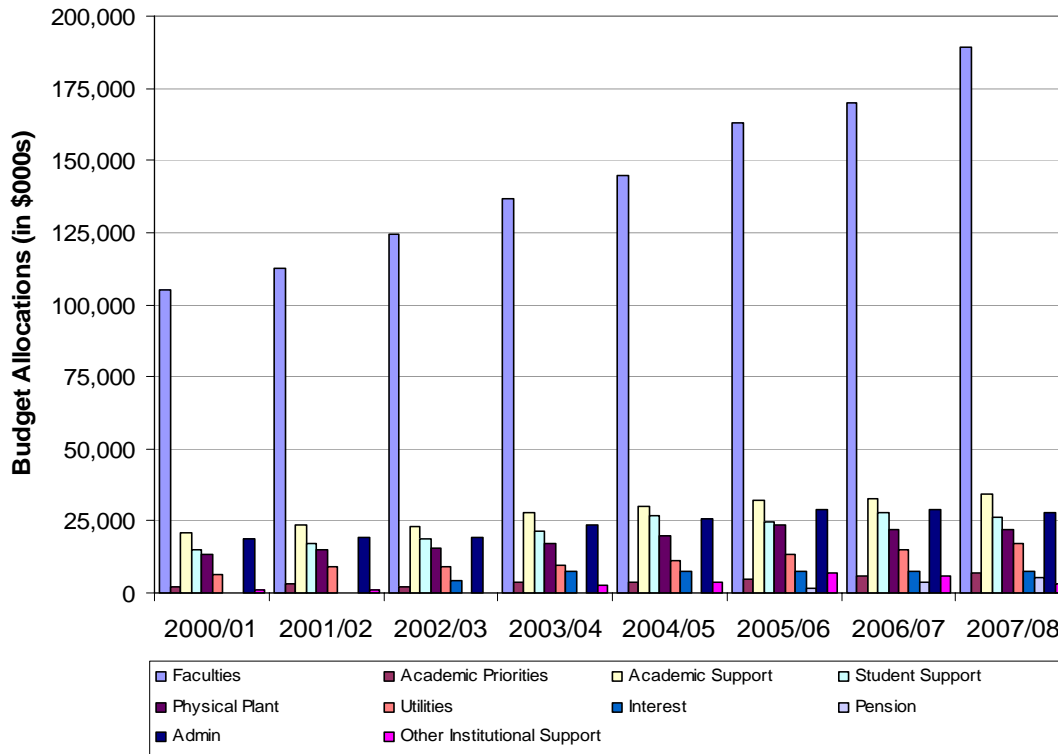


Figure 5: Budget allocations by area

Over the last year there have also been questions about our choice in prior years not to use one-time year end funding for continuing expenses such as faculty salaries. Our position has been that we cannot commit one-time funds to recurring annual expenses because of the risk should the province not continue to provide those funds. Indeed, this year we were the beneficiaries of significant year end funding (\$13.6 million) but MTCU targeted it to capital renewal, making it impossible to use the funding for salaries. Further, we have been told that there is very little likelihood of year end funding this coming year. Thus, we were justified in being prudent.

The budget issues troubling McMaster University are real and are mirrored in our sister institutions in Ontario, many of whom have recently implemented across the board budget cuts, hiring freezes, or early retirement incentive programs. However, there are signs that we have turned the corner and that we will be able to address quality issues if we identify revenue sources resonant with our academic mission.

*Space:*

The two most precious resources on our campus are funds and space, and space issues are normally more difficult to resolve than budgetary matters. There are three key reasons why space issues plague us at McMaster University: we haven't had a well

developed allocation policy for new and existing space, we haven't had an accurate and detailed space database, and the capital expansion funding promised by the MTCU has been very slow in coming. This year we have begun to address the space issues that are under our direct control.

We have created a comprehensive space inventory and identified current uses of the space. The timing on this effort was guided by the triennial space reporting to COU but it is our intention to maintain the database with current information. Simultaneously we have drafted a new space prioritization policy which will guide how space which comes available is allocated. On our main campus, priority will be given to academic needs and services that must be on campus. These space efforts are being coordinated through the office of the Associate Vice-President for Planning and Analysis, Karen Menard.

We are also implementing changes in our process of planning for new capital projects – buildings and renovations. In the past, estimated costs for projects were provided early in the project development, before program plans for the space were firmed up. We have found that such estimates are rarely inclusive of all construction costs and are often incorrect by significant margins. Thus, all new projects must be reviewed by Facilities Management for appropriate costing prior to moving forward.

This past year we completed the COU Triennial Space Report. The report is a snapshot of McMaster's space utilization as of fall 2007. Figure 7 shows the breakdown of key space (e.g., academic, research, administrative) by usage. Academic offices (i.e., faculty offices, department support staff, etc.) and dedicated research space accounts for just under half of the space shown. Classrooms (which include those under Registrar and department control) are approximately one-fifth of the space. It should be noted that by COU standards, our classroom space is only two-thirds the amount it should be given our enrollments. The smallest portion of space on campus is assigned to services such as the food services, book store, student health center and so forth.

As of this snapshot there is a significant amount of space that is under construction (approximately 8,100 sq metres) and will be brought on line for academic (offices and classrooms) and administrative use. However, even with the addition of newly renovated space to our inventory, McMaster will continue to fall below the amount of space needed for our current and future enrollment levels.

Our space needs are not unlike those of our peer institutions. While the space data reported to COU is still undergoing some shifting, the preliminary data for the G6 shows available space overall at a level of roughly 60% - 86% of that mandated by COU standards, with an average of about 73%. On this scale McMaster, at 75%, falls slightly above the average. In spite of bringing a number of new spaces on line, our deficit has increased in the last three years rather than decreased, likely because of a combination of student and faculty growth and more accurate reporting.

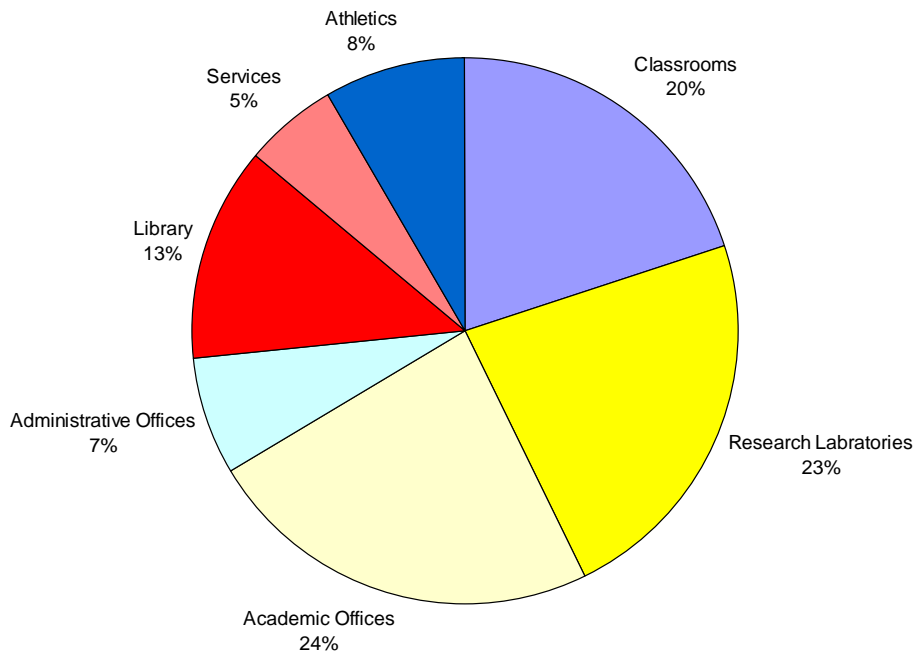


Figure 6: Percentage of key space utilization as of fall 2007.

In the physical plant arena we have had very good news this year. MTCU has provided us with over \$22 million for campus improvements. The first \$9.2 million was specifically targeted for energy efficient projects, campus safety and security initiatives and renewal of existing academic infrastructure. An additional \$13.5 million was later received for campus renewal, allowing us to make a dent in our extensive infrastructure needs. Among the projects being funded by this work are upgrades to roughly half of the classrooms on the Registrar's roster, security improvements including fire safety upgrades and emergency notification systems, a rainwater harvesting initiative, a renewable energy initiative and the replacement of the central chiller. Additionally we note that a number of new projects have made good progress this year, including the Engineering Building, the second floor of MDCL, and the Burlington campus concept.

*Administrative Transitions:*

Academic year 2007/08 has been a year with a number of changes in the senior administration. Beginning with the arrival of the new Provost and Vice-President (Academic), we note that three Dean positions have changed, two Associate Vice-President positions have changed, and a new Registrar is about to arrive. The search for a new Chief Information Officer is ongoing. This Fall we welcomed a new Chancellor and Board Chair - Lynton (Red) Wilson is our new Chancellor and Colum Bastable the new Chair of the Board of Governors.

We welcome Professor Charlotte Yates as Dean of Social Sciences and Professor David Wilkinson as Dean of Engineering. We also welcome Professor Allison Sekuler to the newly restructured role of Associate Vice-President and Dean of Graduate Studies. With this restructuring, we recognize graduate students as a key priority for our institution and change the role from one focused on quality monitoring primarily to one which includes strategic planning for growth, fosters interdisciplinary programs, and addresses issues of graduate student life. The restructuring will also ensure better communication and more responsiveness to issues unique to each particular Faculty, while maintaining a critical University-wide perspective on graduate issues and planning.

Dr. Karen Menard joined us as the Associate Vice-President for Planning and Analysis in December and has already been asked to assume a leadership role on the executive council of the professional society of her peers in Ontario. Professor Peter Smith has taken over as our Associate Vice-President (Academic), replacing the now retired Fred A. Hall in this key role.

In just a few days, we will also welcome our new University Registrar, Mr. Richard Levin. Richard will bring significant experience to the Registrar role and oversee the integration of graduate student registrarial activities into the Registrar's office.

Finally, we note that the search for a new CIO (Chief Information Officer) is well underway. We recognize that the position of information technology leader is extremely challenging at a university, where the needs in academic, research, and administrative computing must be balanced and where there are never adequate resources. Faculty representatives from across the institution as well as staff representatives and senior administrators serve on the CIO search committee. Our intention is to revitalize our information technology services with the arrival of a new CIO.

### **New Initiatives**

Over the course of this past academic year, a number of new committees and task forces were established. While most of these have broad mandates and will require additional time to produce complete results, it is useful here to review the charters of these committees, preliminary results where they exist, and the process for community engagement. Virtually all of these committees and task forces fall into the broad goal of revitalizing the implementation of our strategic plan, *Refining Directions*.

For the last several years, the University Planning Committee (UPC) of the Senate and Board of Governors has functioned largely as a pre-screening mechanism for Senate. Although the UPC mandate includes budgetary matters and Senate's does not, this distinction has been effective more in theory than in practice. This year we have altered the operation of UPC to make it less of a pre-screening body and more of a true planning body. UPC already had responsibility for the Budget Committee and the Campus Plan Committee. In the past year, it has accepted the Refining Directions Implementation Plan Committee and the President's Advisory Council on Building an Inclusive Community

(PACBIC) as subcommittees. Meetings have been reduced to monthly rather than twice a month, and the focus will be on strategic planning as well as on program changes with budgetary and space implications.

### *Refining Directions Implementation Plan Committee*

In 2003-2005 McMaster University worked to establish an implementation plan for *Refining Directions*. The entire university community, including the Board of Governors, was actively engaged in creating and commenting upon parts of the implementation plan. This effort was led by Andy Hrymak and produced an impressive set of plans and good ideas, many of which have moved forward. Numerous projects were funded from Refining Directions including 3-D visualization resources in Science; first year Biology equipment; Humanities funding to do renovations in the computer labs, Lyons Instructional Media Centre and Communication Studies and Multimedia; Mathematics and Statistics curriculum restructuring for Engineering students; funding for Inquiry and Service Learning Course Development in Social Sciences; integration of research and teaching in the Department of Anthropology; Collaboration for Health project support; purchase of the Elsevier Science Direct journals back editions; Graduate student recruiting support; Human Rights and Equity Accessibility Standards Audit Plan development; funding towards development of a student portal; funding towards the Diversity Cafe (Bridges) and an integrated marketing strategy for the University. However, transitions in the central administration and budgetary constraints stalled the forward progress of implementation. The new Refining Directions Implementation Plan Committee is charged with effectively restarting the implementation process. It is reviewing prior work, updating it, and working with the new task forces and committees to produce a strategy with broad faculty, staff, and student engagement. While resources will remain a significant constraint, the Implementation Plan Committee intends to establish priorities which will guide the expenditure of existing resources.

The new Implementation Plan Committee is chaired by the Provost and co-chaired by Ken Cruikshank. It will report regularly to UPC and will serve to coordinate the results of the other committees and task forces mentioned below. The Implementation Plan Committee also has the ability to establish subcommittees and, if it finds critical areas not well addressed, additional committees will be struck.

This Committee, and all others, will actively seek comment and participation from the broad university community. A tentative schedule of town hall meetings of the various committees appears near the end of this section of the report.

### *Task Force on Teaching and Learning (TOTAL):*

The first goal of Refining Directions is “*To provide an innovative and stimulating learning environment where students can prepare themselves to excel in life.*” This goal speaks directly to our academic mission and to our reputation for our distinctive commitment to educational innovation and to student learning. It represents a critical piece of the McMaster University identity worldwide.

TOTAL is chaired by Carolyn Eyles and Jeff Trzeciak. It has been asked to determine the current state of teaching and learning on our campus, to identify what we ought to establish as goals in this area in the near future, to design strategies to achieve these goals, and to guide the implementation, evaluation, and dissemination of results. Its 14 member task force is broadly representative of our campus, including academic service units such as Centre for Leadership in Learning, Centre for Student Development and the Library.

Although TOTAL was not established until the end of 2007, it met regularly throughout the Spring term and has produced a draft first report complete with results from surveys and interviews, and with an initial set of recommendations. The report notes that TOTAL interviewed more than 550 people across our campus in producing this document. This report will be available shortly as the McMaster community is invited to comment upon it. The recommendations of TOTAL will be used by the Implementation Plan Committee to update the strategies of the Undergraduate Working Group and the Graduate Studies and Research Working Group.

Key components of the TOTAL report include a focus on five items to provide an educational renaissance at McMaster: recommitment as a community, recognition and reward, infrastructure rejuvenation, re-engineering of processes, and reiteration of our support for the scholarship of teaching and learning.

*PACBIC:*

The third goal of *Refining Directions* is stated as “to build an inclusive community with a shared purpose.” Since the creation of *Refining Directions*, this goal has generated the most confusion, probably because it appears at first blush to be less related to our academic mission than our teaching and research goals. However, for universities to achieve teaching and research missions it is clear that welcoming a diverse community of scholars is critical. This diversity must take many forms – gender, cultural, political, religious, racial, geographic, etc. It is only through the articulation of varying perspectives on problems that we encourage learning and build our research portfolio. Understanding, respecting and preserving cultural differences is part of the traditional role of universities. Thus, it is no accident that our programs now have a more global perspective, that our international partnerships and scholars have increased significantly, and that we have a Women’s Studies program and an Indigenous Studies program. Hence, the third goal of *Refining Directions* is critical to our mission.

This third goal of *Refining Directions* is also important for what it says about us as a community. Broadly stated, this goal assures all students, faculty, staff, and visitors that they will be treated with respect and dignity, that their opinions will be valued, and that they will have access to any services or events we offer. Through the creation of an equitable environment, we become the employer of choice at all levels, and we enhance our attractiveness to many students. Research has shown that striving for diversity and

equity improves the bottom line of businesses. By analogy, it will improve us as an academic institution as well.

PACBIC speaks directly to this goal of equity and has been in existence for a few years. This past academic year there were two important events for PACBIC: the issuance of a comprehensive report and restructuring.

The PACBIC report issued in the Spring term presented a history of diversity and equity efforts on our campus. It also presented a series of recommendations culled from these reports and evaluated by the current PACBIC participants. This report was presented to UPC and made available on our web site. Development of an implementation strategy for these recommendations will be a key focus of PACBIC this coming year, likely in partnership with the Implementation Plan Committee.

Until recently, PACBIC has not had a home. The Director of Human Rights and Equity Services has worked with PACBIC and HRES has staffed the committee, but they have had no direct line of reporting. This has significantly hindered PACBIC's ability to gain visibility and lead a discussion of the important issues of equity, diversity and inclusiveness on our campus. This year, PACBIC was added as a committee reporting to UPC, as befits its role as prime addressors of the third goal of *Refining Directions*. Further, PACBIC has operated recently with an entirely open structure, nominally chaired by the Provost and the President of the MSU. While meetings will continue to be open to all, members of PACBIC have agreed to the creation of an official committee membership. This will help us establish a prime group of engaged faculty, staff and students who are recognized for their participation in this important committee.

McMaster's strategic plan identifies the building of an inclusive community with a shared purpose as a key goal and cites the need for consistent and constant measurement, evaluation and accountability. In order to help meet these goals and to ensure McMaster is in compliance with the federal Contractors Program (FCP), in May 2008, the University conducted a four question survey entitled McMaster's Employment Equity Questionnaire. Collectively the answers from this survey will help McMaster further its understanding of equity within the workplace and assist in building an inclusive campus community with a shared purpose. We managed to obtain over an 80% participation rate in this survey.

Other recommendations of the PACBIC report need to be prioritized, evaluated in terms of effort and resources needed, and then implemented. This will be a key focus of work by PACBIC in the next year.

*Task Force on Evaluation, Accountability, and Measurement (TEAM):*

Since the creation of *Refining Directions* it has been understood that our strategies and resources ought to be guided by careful benchmarking and evaluation of the success of various approaches we pilot. Particularly if we are innovative in our approaches (as is our goal), we should expect that a number of thoughtful risks we take will not produce

the desired results. Unlike for-profit businesses, for which there are universally accepted metrics that indicate success, universities generally find it quite difficult to develop a set of measures that are good indicators of how well the academic mission is being met.

This past academic year we established a committee, chaired by Michael Veall, to develop strategies for evaluating various academic and service units on our campus. While TEAM was established rather late in the year and the task is arguably the most difficult of those assigned to committees in the past year, they have made progress and produced a draft summary of their work so far.

TEAM has conducted a survey of academic program chairs. It is clear from this survey that there is significant concern about potential abuses of metrics and the need for flexibility in order to address the significantly different programs in our Faculties. While this unease is understandable, and we are of similar discomfort as accountability measures increase at the MTCU, it is important to remember that the point of establishing measures internally is to aid each unit in evaluating how their plans for progress are going. It has never been the intention to mandate particular measures for universal application; nor to use the measures inappropriately. Instead, we intend the measures to help us in defining what is important to us and how we are doing in achieving goals. It is particularly important that the measures not inhibit innovative, and thus risky, approaches to improvement. The measures, whether purely quantitative or based on surveys, will provide information that will aid us in deciding how best to allocate precious resources to achieve strategic goals.

In this coming year, TEAM will continue its work, quite possibly asking programs undergoing external review to determine measures by which they would like to be evaluated. These programs will thus serve as pilots for establishing metrics for evaluation, accountability, and measurement. Once established, the measures will be tracked for a few years to determine trends and help us assess the usefulness of having established such measures. Although each unit will be permitted to choose its measures, the preliminary TEAM survey suggests that academic programs have a broad consensus on the sorts of measures that might be meaningful indicators of program effectiveness.

#### *Alternative Budget Model Committee:*

In the past few years a number of our peer institutions have shifted their internal budgeting algorithms. Changes have been aimed at delegating greater authority and responsibility to units instead of concentrating budgetary power centrally. There is a general consensus that such moves have produced greater transparency and understanding of budgets across campus. It is with these goals in mind, as well as our desire to ensure that our internal budget allocation is aligned with our strategic goals that we are also developing a new budget allocation model.

The Alternative Budget Model Committee is chaired by Robert McNutt. Members of this committee have visited a few universities in Ontario and the US to ascertain what they view as successes and failures of the budget allocation model changes

at their campuses. The committee has also articulated principles that any new model should strive to attain.

The Alternative Budget Model Committee simultaneously permits us to address a number of longstanding issues related to our budget process that are somewhat distinct from allocation methods. For instance, we routinely adjust allocations as funds are received from MTCU, meaning that literally hundreds of hours are spent by each academic unit each year on relatively minor funding adjustments. Further, because we have tried to react to the most recent funding, we have made it difficult to predict funding levels, making it nearly impossible to plan. Our new budget model will address these and other issues such as what structures ought to be in place to guide discretionary spending. Among the contentious issues we must consider are how we fund teaching, what we ought to charge for space allocations (with the understanding that we must cover the cost of current space by adding to unit budgets appropriately), and what services ought to be provided centrally versus locally.

The work of this committee is intimately linked to that of our Budget Committee and to TEAM. The Chairs of TEAM and Budget serve on the Alternative Budget Model Committee and Professor McNutt serves on TEAM. This is intended to promote greater communication as these efforts progress.

It is critical that the charter of the Alternative Budget Model be understood clearly. This effort can help us increase transparency and might result in a reallocation of some resources, but it does not create additional funding. Thus, any reallocations that are implemented, necessarily mean that one unit's gain is another unit's loss. Because of this limitation, we are working to ensure that we simultaneously use the old and new budget model for at least a year and hold all units harmless to changes during a transition period.

#### *International Activities Committee:*

The original *Refining Directions* implementation plan identified international opportunities as one of McMaster University's priorities. However, funding algorithms at the provincial level have tended to inhibit significant, coordinated international programs although most of our Faculties have small programs related to particular educational or research goals.

This year we assembled an International Activities Committee with modest goals. The Committee's mandate is to determine what each Faculty and associated service unit is doing in the international arena and to determine whether opportunities exist for leveraging across the campus. This ad hoc committee will also evaluate the totality of what we are doing internationally and make suggestions for expanded activity if appropriate.

The International Activities Committee was the last of the new committees to be established. Its concentrated work will mostly take place over the fall term. Its report will certainly be shared with the broader McMaster community.

*Campus Plan Update:*

In 2002, we generated a campus plan designed to integrate our facilities planning, landscaping, parking, traffic flow, and signage across campus. This year we have updated and renewed that plan. This effort has been led by the Campus Planning Committee, which reports to UPC, and is chaired by Brian McCarry and coordinated through Karen Belaire's offices. There are few substantive changes but the document itself is more complete, has better graphics, and is more web accessible.

Just as it is important to remember that the Alternative Budget Model Committee cannot generate new funds, so too it is important to remember that the Campus Plan Committee identifies potential building sites but does not decide whether new buildings should be constructed. The Campus Plan is a means of ensuring that the beauty and character of our campus are preserved and that optimal decisions are made about our physical plant as changes are necessitated for any variety of reasons.

*Town Hall Meetings:*

The task forces and committees described above were all created with an understanding that they must interact with and respond to the McMaster community. We will use a variety of means to encourage interaction and engagement. Among these will be town hall meetings dedicated to particular topics. We encourage everyone to participate in these meetings and to send us email communications if they are unable to attend or prefer that method for communicating their comments. A tentative schedule for the Town Hall meetings is shown below:

End of September	State of the Academy
Beginning of October	TOTAL
End of October	Alternative Budget Model Committee
Beginning of November	Campus Plan Update
End of November	TEAM

*Chairs and directors workshops:*

Department Chairs and Directors are a vital part of the institution and play a key leadership role. During the year we held three meetings for this group of academic managers: one on the budget, one focused on tenure and promotion, and one more general. Based on the success of these meetings, an additional series of meetings is being developed by a Provost's Advisory Group. This breakfast series will be designed to foster collaborative and open discussions within the Chairs' group and with senior executives.

## **Conclusion**

McMaster University continues to be a great academic institution with a deep commitment to education and a very intense research environment. Our academic and research programs continue to grow and flourish, although not uniformly. Budget constraints certainly limit us and are felt most acutely in the increase in the student to faculty and student to staff ratios over the years. Nonetheless, we have taken steps to stabilize the size of our undergraduate student body, and to continue to grow our graduate student and core faculty volumes.

Over the last academic year we have refocused and recommitted McMaster University to the principles engendered in *Refining Directions*. A series of task forces and committees are now producing recommendations for changes across campus that will help us achieve strategic goals. The work of these groups will be rolled out in a series of communications and town hall meetings over the coming year.