MISSION

At McMaster our purpose is the discovery, communication and preservation of knowledge. In our teaching, research, and scholarship, we are committed to creativity, innovation and excellence. We value integrity, quality, inclusiveness and teamwork in everything we do. We inspire critical thinking, personal growth, and a passion for lifelong learning. We serve the social, cultural, and economic needs of our community and our society.

VISION

To achieve international distinction for creativity, innovation and excellence.
This report summarizes some of the activities that were done in support of the implementation of the University’s strategic plan, *Refining Directions*. Consultation with key stakeholder groups and collection of planned initiatives, which occurred over the period January to May 2004, linked academic and administrative unit level initiatives with the strategic institutional goals of *Refining Directions*. The themes that unite these initiatives are summarized below:

**Goal: To provide an innovative and stimulating learning environment where students can prepare themselves to excel in life.**

**Target:** To be consistently among the top three Ontario universities in terms of the quality of students we attract and graduate from our undergraduate and graduate programs as measured by appropriate indicators.

**Overall Strategy**
- Build on past successes to further the concept of a unique McMaster learning culture through high quality and innovative courses and programs that place *discovery* at the centre of the learning experience.
- Extend the discovery approach to learning throughout the university
- Enhance the delivery of courses and programs
- Expand academic and non-academic student support and services
- Recruit undergraduate and graduate students strategically and aggressively
- Provide opportunities for life-long learning

**Goal: To achieve the next level in research results and reputation.**

**Target:** To be consistently among the top three Canadian universities as measured by appropriate indicators of research excellence.

**Overall Strategy**
- Build on existing strengths to achieve world-class excellence in strategically selected research areas
- Identify new areas of research excellence based on emerging strengths
- Encourage and promote multidisciplinary research
- Encourage and promote knowledge transfer through commercialization

**Target:** To increase the importance of graduate education so that McMaster’s graduate population reaches 20% of the University’s total full-time enrolment and is highly ranked in indicators of graduate educational excellence.

**Overall Strategy**
- Focus on growth in strong graduate programs
- Increase share of external graduate awards
- Encourage and support efforts to develop multidisciplinary graduate programs
- Encourage and support cost-recovery professional development programs

**Goal:** To build an inclusive community with a shared purpose.

**Target:** To ensure that all members of the McMaster community feel recognized and valued for their contributions to this shared purpose.

**Overall Strategy**

- Understand and celebrate diversity
- Identify and remove systemic barriers to studying and working at McMaster
- Encourage course and program developments that promote diversity
- Be an employer of choice

Critical success factors are the management techniques and culture that will enable the successful attainment of these academic community goals.

**Overall Strategy**

- Secure adequate resources
- Provide quality infrastructure
  - Space (classroom, laboratory, office, residences, services . . .)
  - Libraries
  - Information technology
- Instill and support a culture of planning
  - Take risks and innovate
  - Measure, evaluate and be accountable
- Provide effective administrative services and support
  - Reduce boundaries and barriers
  - Be nimble and efficient
- Communicate internally and externally
  - Define a distinctive reputation
  - Build our internal and external relationships
1. Context

The Refining Directions document defined the context within which we are planning:

A key component of McMaster’s approach to planning is the recognition that the demands, the expectations and opportunities for the University continue to evolve. Successful planning is a dynamic activity; the status quo is never an option. The challenges facing McMaster, and other universities across the country, are significant and include the following:

- Broadening expectations of the role universities should play in Canada
- Increasing enrolments in the short and long term
- Preparing for a significant shortage of and increasing international competition for professors
- Expanding but expensive research infrastructure
- Lingering legacy of significant financial restraints
- Increasing and more aggressive competition in the post-secondary education sector

2. Developing the Implementation Plan

The basis of the implementation process were the key planning documents for the university, i.e Directions I-III\(^1\), Academic Plan\(^2\) and Refining Directions\(^3\). In November, 2003, the Provost identified leads to develop planning groups, and begin discussions with stakeholders about the priority plans and initiatives that would need to be undertaken to achieve the overall institutional goals stated in Refining Directions. These leads are:

<table>
<thead>
<tr>
<th>Category</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Education</td>
<td>Fred A. Hall, Associate Vice-President (Academic) and Susan Denburg,</td>
</tr>
<tr>
<td></td>
<td>Associate Dean (Academic), Health Sciences</td>
</tr>
<tr>
<td>Graduate Education</td>
<td>Fred L. Hall, Dean, School of Graduate Studies</td>
</tr>
<tr>
<td>Research</td>
<td>Mamdouh Shoukri, Vice-President (Research and International Affairs)</td>
</tr>
<tr>
<td>Student Life</td>
<td>Philip Wood, Associate Vice-President, Student Affairs</td>
</tr>
<tr>
<td>Student Recruiting</td>
<td>Lou Ariano, Registrar and Pat Harris, Associate Registrar (Liasion)</td>
</tr>
<tr>
<td>Life-long Learning</td>
<td>Dale Schenke, Director, Continuing Education and Jackie Osterman,</td>
</tr>
<tr>
<td></td>
<td>Executive Director MAPS</td>
</tr>
<tr>
<td>Inclusive Community</td>
<td>President’s Advisory Committee on Building an Inclusive Community and Mark Walma, Director, Human Rights and Equity Services</td>
</tr>
<tr>
<td>Library and information</td>
<td>Graham Hill, University Librarian and Debbie Barrett, Chief Information</td>
</tr>
<tr>
<td>infrastructure</td>
<td>Officer</td>
</tr>
<tr>
<td>Planning and Managing</td>
<td>Ken Norrie, Provost and Vice-President (Academic) and Karen Belaire,</td>
</tr>
<tr>
<td></td>
<td>Vice-President (Administration)</td>
</tr>
</tbody>
</table>

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2 [http://www.mcmaster.ca/newsevents/acadplan.htm](http://www.mcmaster.ca/newsevents/acadplan.htm)
3 [http://www.mcmaster.ca/pres/refining/refining.pdf](http://www.mcmaster.ca/pres/refining/refining.pdf)
As well the Faculty Deans were asked to provide their Faculty specific goals and plans. Each area leader and each Faculty Dean was asked to identify three key priorities building on existing plans and consultations with stakeholder groups.

For each area/Faculty goal, the following questions were asked:

<table>
<thead>
<tr>
<th>Priority Objective</th>
<th>What are your area objectives/goals? These should have major impact and require 3-5 years of completion with a substantial change or improvement element.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Linkage to Goals / Success Factors</td>
<td>How does the objective link to the Goals or Success Factors in the Refining Directions document? Which Goals/Success Factors are supported?</td>
</tr>
<tr>
<td>b) Initiatives Underway</td>
<td>What is already happening in support of this priority objective, if already initiated?</td>
</tr>
<tr>
<td>c) Persons Responsible</td>
<td>Who is (are) the key person(s) responsible in implementing this objective? Also, you could name stakeholder and advisory groups, if appropriate.</td>
</tr>
<tr>
<td>d) Deliverables</td>
<td>What will be the outcomes? (e.g. programs, people, processes, services…)</td>
</tr>
<tr>
<td>e) Completion Date</td>
<td>When do you anticipate this objective’s major tasks will be completed – best case? Worst case? Don’t know?</td>
</tr>
<tr>
<td>f) Important Metrics</td>
<td>What will be measured and monitored to determine how the plans are proceeding? (e.g. numbers of students, faculty, users, dollars, citations, …)</td>
</tr>
<tr>
<td>g) Key Performance Measures</td>
<td>What will be measured or monitored to determine the quality of the outcomes for this particular objective? (e.g. they could be qualitative, the same metrics as above, or qualitative)</td>
</tr>
<tr>
<td>h) Linkages to other areas</td>
<td>What other areas/faculties/units are impacted, could be potential partners, or are necessary supporters in achieving this objective?</td>
</tr>
<tr>
<td>i) New Resources Required</td>
<td>What additional resources will be required (and if known, when) to achieve the desired outcomes for this objective? (dollars, space, people…) What resources do you need immediately/one time from the special allocation for Refining Directions?</td>
</tr>
</tbody>
</table>

The purpose of this exercise was to develop and align these initiatives with the overall Refining Directions goals, and to provide common context to the initiatives.

The planning areas were grouped together based on the scope of the interactions:

- **Academic and Community values** form the academic institutional core of the university and directly link to the three goals within Refining Directions representing students, staff and academic faculty. This grouping includes the areas of: undergraduate education, graduate education, research, inclusive community and Faculty plans.

- **Academic and Community Support** defines the means by which we identify and recruit students, provide critical functions to support their academic studies (e.g. library and information technology) and provide support for non-academic student life at the university.
• **Outreach** is the means by which the University communicates and interacts with the broader community: through life-long learning opportunities, international links, alumni, and the relationships with the external non-academic community (government, community neighbors).

• **Resource management** is the group of planning, budgeting and advancement activities that resource academic, support and outreach activities.

Goal prioritization and alignment within each grouping of activities is vital, as are the linkages and continuity between the planning areas.

For each planning area, the tasks were to:

1) Develop short list of priorities, objectives, metrics and identified resource needs  
2) Assemble existing planning documents  
3) Consult with stakeholder/working groups  
4) Develop and include Faculty plans – undergraduate, graduate and research goals  
5) Test against the goals as stated in *Refining Directions*

The size of the university student body is a key metric that sets the framework for all the initiatives and *Refining Directions* is linked to external community stakeholder groups through student housing, parking, and transportation. Consultation specifically about the target size of the university was initiated and is presented in Section 3. The strategies developed by the planning groups, which address the three goals of *Refining Directions*, are summarized as follows:

**Academic and Community Values**
- Develop interdisciplinary and inquiry approaches
- Encourage research experience and interactions with graduate students
- Improve educational evaluation methods for programs – graduate and undergraduate
- Encourage and recognize educational leadership and innovation
- Grow the graduate student population
- Review policies to promote inclusivity
- Develop more outreach and improve communication
- Improve the student intake – quality and grade average
- Provide more diversity and choices for students
- Encourage experiential and inquiry based learning

**Academic and Community Support**
- Improve response to applicants to improve yield
- Increase the proportion of out-of-province and international students
- Provide for student needs outside the classroom
- Recognize and support diverse backgrounds (academic, personal, social, cultural)
- Address housing issues through development of on-campus residences and an off-campus housing system
- Enhance technology infrastructure for electronic communication to support academic access and student life.

**Outreach**
- Develop a plan for community needs for non-traditional first degree access to the system
- Raise the profile of McMaster offerings to adult learners and international students
• Support alumni needs and continued interaction with the University

**Resource Management**

• Disseminate plans and expected outcomes – internally and externally
• Implement tools to get current information and track performance in a more timely fashion

The detailed initiatives (current as of May, 2004) are summarized in Section 5, and will be converted to an on-line database of plans that can be monitored, updated and searched to ensure that there is alignment of unit goals with institutional objectives.

### 3. TARGET ENROLMENT

*Refining Directions* sets out McMaster’s mission, vision and fundamental goals. One of the key factors is the size of the student population. There is a direct link between new revenue generation and the number of students, but there is also increased costs incurred in providing high quality teaching facilities, residences, library resources etc. Thus the essential issue is whether there is a causal link between scale and our ability to achieve the goals and targets set out in *Refining Directions*.

Over the time frame that is envisioned for *Refining Directions*, the three key goals are:

- Provide an innovative and stimulating learning environment
- Achieve the next level in research results
- Build an inclusive community with a shared purpose

These goals then drive the key characteristics of the student population:

- Increased student quality (long-run target: top three universities in Ontario)
- Increased *relative* importance of graduate students (long-run target: 20%)
- Increased *relative* importance of international students from a wide range of geographical areas (long-run target: 10%)

There is no direct connection between scale and academic reputation; rather, the connection is between resources and academic reputation. Resources come in three general forms: government grants, tuition, and donations. Our current funding environment has:

- Government grants tied to enrolment with the only increases tied to increased enrolment
- Tuition is frozen in the short-term
- Donations are significant and growing, but still a small portion of operating revenue

The implication is that, unless or until the funding environment changes, increased enrolment in high quality, high demand programs is necessary to generate new resources not only to embark on new initiatives, but also sustain the quality and size of existing programs.

Three different scenarios were presented to the McMaster community through meetings with the Faculties, internal town halls and external community consultations:

- **Reduce undergraduate enrolment** to levels closer to earlier Senate-approved targets and grow graduate enrolment until it reaches 20% of full-time enrolment
- **Increase undergraduate enrolment** absolutely *and* relative to other universities and grow graduate enrolment accordingly
- **Maintain our share of projected growth** in Ontario undergraduate enrolment and grow graduate enrolment accordingly

It is fair to say that there is no consensus about a “best strategy” for the University as a whole, because each stakeholder group is in a different state at present, with different opportunities in the future. While some Faculties are generally expansionist, other Faculties and other groups divided among the three
options because of financial pressures on existing programs. Neighborhood groups prefer a smaller university and adamantly oppose expansion because of the pressures of undergraduate student housing, parking and transportation issues on the neighborhoods adjacent to the university.

There is general support for the goal of increasing the relative importance of graduate education because of the long-standing tradition of McMaster for research intensity and excellence. Graduate studies are the major means by which the university’s reputation in research can grow and flourish. Graduate students are generally of higher academic standard, more mature, and have financial means to support their lives in the community.

The idea of reducing student numbers, in the existing funding environment, would necessarily lead to reduced operating revenue, since so much of the expenses are tied to salaries for faculty and staff which would not scale proportionately with decreased undergraduate numbers. If the university drifts with a market share approach to the expected population growth and participation rate, then we are linking ourselves to demand without adequate resources to ensure a high quality student body and university experience. An across the board expansion, within the present infrastructure of the university, is not feasible because of the necessity for major capital facilities within a campus site that is already near the limits of the Campus Plan.

Given McMaster’s position as a medium size Ontario university, and the absence of clear resources to do large-scale expansion, but with the need for new resources, strategic focused expansion is the most viable route. The opportunities for expansion would follow directly from the goals of Refining Directions: high quality undergraduate and graduate programs which leverage our research capabilities and opportunities and make McMaster the distinctive choice for students, faculty and staff. The student population profile is critical to the success of this plan - we simply must attract, support and graduate the best and brightest students. We must excite and challenge their imaginations with new opportunities and modes of learning. At the same time, we must provide exceptional value in terms of our academic programs and non-academic services.

The strategy then necessitates some key steps:

- Faculties establish minimum and average GPA targets
  - Expect these to rise gradually over time
  - Use financial incentives to set and reach higher targets in terms of student quality
- Each Faculty submits an enrolment plan to EMT
  - Based on the unit’s UPC-approved strategic plan
  - Determine the feasibility of the plan given the unit’s GPA targets
  - Take into full account taken of impacts on other Faculties
  - Ensure provision of adequate funding
  - Provide resources such as classrooms, labs, and library materials
- UPC approves final aggregate figure and the appropriate student population mix:
  - among Faculties and programs
  - between undergraduate and graduate enrolment
  - and that is consistent with capital plan, Campus Plan, etc

We need a transition arrangement that moves us towards the goals of Refining Directions with a relatively predictable funding based on two years of enrolment targets. At that point, the outcome of the Rae Task Force reports will be known and we will know how the government will deal with the recommendations. The following table provides the short-term planning scenario for student target numbers, and includes the numbers of students that have been accepted during the transition from the 5 year to 4 year secondary school system change (the post double cohort era):
# 4. Performance Indicators

Performance indicators (PIs) are critical to support the success factors in *Refining Directions*: accountability and measuring\(^4\). It is important to recognize that these PIs are of at least four types: **Inputs, Outputs, Outcomes, and Processes**. We need to identify the most useful PIs for goals and objectives at the local level but also at the institutional level.

We propose that the university develop a common set of PIs that can be reported on at the aggregate institutional level, but where appropriate, can also be reported at the level of academic or administrative units.

The following indicators all reflect facets of the three goals in *Refining Directions* and are already accepted as indicators of performance. The list below includes performance indicators for which we are either required to collect data, or where the data is collected by or for other agencies. Other indicators could be substituted or specific facets of these performance indicators analyzed.

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATOR</th>
<th>AREA OF FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Graduation Rates</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Undergraduate Recruitment:</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Undergraduate Employment Rates (after 2 yrs)</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Undergraduate Class Size</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Scholarship and Bursary Support</td>
<td>Student Recruiting</td>
</tr>
<tr>
<td>Undergraduate Entering Grades</td>
<td>Student Recruiting</td>
</tr>
<tr>
<td>Part-time Degree; Continuing Education</td>
<td>Life Long Learning</td>
</tr>
<tr>
<td>Student Services Expenses</td>
<td>Student Life</td>
</tr>
<tr>
<td>Graduate Enrolment vs. Total Enrolment</td>
<td>Graduate</td>
</tr>
<tr>
<td>Graduate Time-to-Completion</td>
<td>Graduate</td>
</tr>
<tr>
<td>Master’s and Doctoral Students</td>
<td>Graduate</td>
</tr>
<tr>
<td>International students (Undergrad, Grad)</td>
<td>Internationalization</td>
</tr>
<tr>
<td>Research Income</td>
<td>Research</td>
</tr>
<tr>
<td>Major Projects - Awards Summary</td>
<td>Research</td>
</tr>
<tr>
<td>Library - Volumes per student</td>
<td>Infra-Structure</td>
</tr>
</tbody>
</table>

\(^4\) “Performance Indicators: Discussion Paper”, Office of Planning and Analysis, May, 2004
The reporting style on performance indicators varies widely at other universities that have embraced this philosophy of reporting. Queen’s University provides a brief summary document, with visual graphics, selected PIs suitable to Queen’s priorities, and an easily understandable message in terms of how well Queen’s is progressing in achieving its priorities. The University of Toronto provides a very detailed performance summary with extensive analysis of indicators and their relevance to the university. The University of Alberta has a government driven benchmarking scheme with a required information layout.

We propose that a report style known as a “dashboard layout” of selected key indicators to Refining Directions be used. The report format could be used for selected comparisons with other institutions from publicly available data, as well as an internal comparison over time, with each performance indicator directly tied to one or more goals within Refining Directions.

There are some key questions that must be discussed by UPC and these include:

1. Who is the audience for the report(s)?
2. Which indicators should be used university-wide?
3. How frequently should the data be collected?
4. How should the information be disseminated?
5. What will be the outcomes of the analysis – process and effects?

The first two questions, audience and choice of aggregate as opposed to planning area specific performance indicators, are very important because the choice of performance indicator and the response mechanism signals university priorities. The choice also requires consideration of whether an institutional performance indicator is appropriate to a given planning unit’s objectives. The last three questions deal with the resources that need to be allocated to developing these reports and their effects within the relatively short term of annual budget cycles, given that academic degree cycles are on the order of 2-4 years. In other words, a meaningful outcome measure for an academic program initiative may not be known for 4-6 years after the decision is made.

The following example looks at recruitment statistics over time and provides an example of how data could be provided with a context of its importance to the Mission and an interpretation of the trends.
Between 1997/98 and 2002/03, McMaster’s number of applications and offers has grown significantly, while offer and yield rates have fluctuated, showing an overall decrease for the period. Registrations increased from 3,317 in 1997/98 to 4,668 in 2002/03. Factors for increases include changes in the Ontario Universities’ Application Centre (allowing selection of more than three universities/programmes), as well as the initial onset of double-cohort students in 2002. With the increased influx of double-cohort students in 2003/04, McMaster registrations climbed to 5,225, achieving the University’s Level I enrolment target for that year. (A related indicator is Entering Grades for registered students.)
5. Initiatives To Support The Goals Of Refining Directions

Each planning area’s goals are provided below, as well as a short list of initiatives that are either underway or planned. We have grouped these planning area goals and initiatives under a predominant Refining Directions goal. Many of the area goals and initiatives span multiple Refining Directions goals, but the general alignment is presented below as a roadmap of where we are moving to in responding to the institutional goals.

Goal: To provide an innovative and stimulating learning environment where students can prepare themselves to excel in life.

Academic and Community Values

Undergraduate Education

• Foster an Environment of Collaboration and Questioning
  o Expand and adapt inquiry approach
  o Decrease class sizes, especially in Years 1 and 2
  o Produce a broader scope of credited learning experiences
  o Increase research opportunities for undergraduates
  o Increase interaction between graduates and undergraduates
  o Increase the number of interdisciplinary courses
  o Implement technologies to support collaboration and questioning

• Encourage Exploration and Reflective Risk Taking
  o Facilitate and mentoring of experimentation in teaching and learning styles
  o Streamline educational bureaucracy
  o Change student evaluation methods
  o Facilitate experimentation/exploration of use of technologies in undergraduate education

• Raise the Profile, Quality and Status of Undergraduate Education
  o Increase involvement in decisions/planning of undergraduate education
  o Increase the number and type of rewards for innovation and excellence
  o Provide ongoing professional development through CLL
  o Provide greater exposure for undergraduate education in public relations
  o Enhance evaluation processes
  o Ensure accountability for educational priorities
  o Ensure teaching experience and potential is clearly considered in the faculty hiring process

Graduate Education

• Encourage and promote the highest quality graduate programs possible both within and across the range of disciplines present at McMaster
  o Develop and publicize quantitative quality indicators

• Encourage growth in strong graduate programs
  o Obtain more graduate funding

5 As collected for UPC Retreat, May 21, 2004
• Determine the appropriate size of graduate enrolment and its distribution across Faculties, through broad consultation across the University Sessions with each department.

**Business**

- Strive to be among the top three Ontario Business Schools in terms of: (i) quality of students admitted (ii), quality of education delivered via innovative undergraduate and MBA programs, (iii) variety and quality of employment opportunities, (iv) number of placements (in-course and post graduation) and (v) return on investment (for graduates).
  - Faculty-specific Recruiting Administrator in place,
  - Agents in place for foreign recruiting,
  - CQI program underway to continually upgrade service to all constituencies,
  - Business Career Services office targeting broader range of employment opportunities.

- Develop Niche Programs: Expansion of Health Services Management program; Develop AIC Institute for Strategic Business Studies
  - Hire three new faculty with specialization in Health
  - Collaborate with colleagues in Health Sciences and Pharma Industry Appointed Executive in Residence from Health Sector
  - Develop Strategic Valuation curriculum
  - Recruit AIC Chair – just completed
  - Discussions on Advisory Committee membership

**Engineering**

- To place consistently in the top three Ontario Faculties of Engineering in terms of quality of students we admit to our undergraduate programs (average entering grades, high retention rates beyond level 1) and student employment rates after graduation.
  - Develop the School of Computational Engineering and Science
  - Develop programs in music informatics and software engineering and games design
  - Develop a new combined B.Eng./M.D. degree
  - Develop a new B.Eng/M.Eng. Program in Biomechanics

- Expand offerings for professional Master of Engineering degrees
  - Creation of a new School for Engineering Practice, which includes three centres focused on Engineering Entrepreneurship and Innovation, Engineering and Public Policy, and Engineering Design

**Health Sciences**

- To invest in continued innovation in education and research
  - MD curriculum redevelopment
  - Redefinition and expansion of the graduate program to increase enrollment
  - Undergraduate programs will include research relevant sills
  - Development of new graduate diploma programs
  - Increased application of learning technologies; MD ePBL initiative
  - Faculty development sessions with LTRC

**Humanities**

- To attract the most dynamic, gifted and committed students, at both the undergraduate and graduate levels, by offering innovative and discovery-centered programs
  - Expand programs that have both a tradition of pedagogical innovation and proven high student demand
- Implement three new M.A. programs in Globalization (with Social Sciences), in Digital Society (with Engineering and Social Sciences), and in Cultural Studies and Critical Theory
- Develop new joint undergraduate program in Arts and Technology (with Engineering)

**Science**
- Develop BSc/Diploma in Medical Radiation Sciences with Mohawk College
- Develop the School of Computational Engineering and Science
- Develop Origins Undergraduate Specialization in the Faculty of Science to target top undergraduate science students across Canada, for an interdisciplinary, inquiry-based, and research oriented 3 year program.

**Social Sciences**
- Full integration of academic programs with Inquiry and Experiential Education
  - Comprehensive review of the EE and Inquiry offerings and how they link, pedagogically, to the academic programs in the Faculty

**Academic and Community Support**

**Student Recruiting**
- To be consistently among the top three Ontario Universities in terms of the quality of students we attract to our undergraduate program and to promote McMaster as a student centered destination for top quality students.
  - New publications
  - President’s mailing to high school students with 90% or higher averages
  - Changes and improvements to the campus visit program
  - Revise ‘Prospective Students’ Web site
  - Continuation of the Honor Awards program
  - Ability to check application status on-line
  - Earlier offers of admission to top applicants
  - Special offer of admission packages to applicants with admit-averages of 90% or higher
  - Target select high school students (Grades 9 to 12)
  - Parents brochure
- To attract a higher percentage of top students from other provinces
  - Resume out-of-province recruitment
  - Annual review of publications and communications with out-of-province applicants
- To assist the University’s objective to have visa students, from a wide variety of regions, constitute 10% of total undergraduate student enrolment
  - Coordinate activities with the Office of International Affairs (OIA), Faculties and other groups.

**Student Life**
- Enhancing student life experience
  - Expansion of the peer and leadership programs
  - Facility expansion – A&R complex and sport medicine clinic
  - ESL Support program
  - Diversity Café
  - Testing Centre for Students with Disabilities
  - ATLAS Lab (for students with Disabilities)
Disabilities awareness/Advocacy Initiative  
Multi-cultural education, promotion and support initiatives  
Experiential learning opportunities – job shadowing and mentoring  
Mental Health support initiatives

- Successful transition to University and from University to further education or career  
  - Expansion of first year experience office – program success strategy  
  - On-line orientation programme for international students  
  - Enhanced academic skills training  
  - McMaster Parent’s web page  
  - Creation of support groups and expanded office hours to serve students (CSD)

**Library**

- To provide information resources that effectively support the spectrum of teaching and research programmes in the University  
  - Electronic information – purchase of journal suites  
  - Print information – increase book purchases and selected new journal titles  
- To provide integrated and effective means to access all information resources; and services to users that promote independent learning and the pursuit of research  
  - Establishment of a “knowledge commons” in Mills  
  - Implementation of RACER – province wide interlibrary loan  
  - Implementation of wireless interconnectivity

**Outreach**

**Life-long learning**

- To develop “A Plan for Lifelong Learning at McMaster University”. This is intended to be a study of the demand for lifelong learning from McMaster’s external community, and a strategy for how McMaster can deliver the appropriate programming needed.  
  - Degree completion  
  - Non-degree academic certification  
  - Professional upgrading  
  - Introduction to lifelong learning culture to “traditional” (i.e. non-adult learners) undergraduate students

**Internationalization**

- Increase diversity in recruiting through more intensive efforts in the Middle East and India  
- Promote joint degree programs given the increased level of interest

**Goal: To achieve the next level in research results and reputation by building on existing and emerging areas of excellence.**

**Academic and Community Values**

**Research**

- Build on existing strength and seize new opportunities to achieve world-class excellence in selected research areas  
  - Identify and review strategic priority areas  
  - Make differential investments
- Link initiatives to institutional priorities
- Develop new academic programs in areas related to strategic priority (e.g., Bioengineering, Globalization, Arts and Technology, Health Economics)

- Connect research to education and promote multidisciplinary research
  - Biomedical engineering research and education
  - Research and educational initiatives in the field of integrated health
  - Communications, cultural studies, multi-media and globalization
  - Undergraduate summer research fellowships
  - Origins institute

- Develop excellent infrastructure in support of research, including research equipment and facilities, administrative support and knowledge transfer infrastructure
  - Capitalize on diverse range of funding opportunities to build infrastructure

**Engineering**

- To place consistently in the top three Canadian Faculties of Engineering in terms of research intensity (ratio of research dollars to number of faculty members) and citations
  - Creation of a new School for Bioengineering, which would provide the focus for research and graduate training in this area
  - Develop the School of Computational Engineering and Science

**Humanities**

- To strengthen units that have established international reputations both for cutting-edge faculty research and outstanding graduate programs (English, History, Classics, Philosophy), and to nurture new areas of research excellence that have a growing national and international profile (Communication Studies, Multimedia, Globalization, Postcolonial Studies, Cultural Studies, Computing and the Humanities, and the History and Ethics of Health)
  - CFI-funded TAPoR Project, housed at McMaster, and shared with five other universities across Canada.
  - Appointment of Global TV Chair in Communication Studies
  - Appointment of L.R. Wilson Professor in Canadian History
  - Appointment of HOPE Chair (Peace Through Health)

**Science**

- Develop the Origins Institute where the scientific focus on the fundamental Origins research questions of contemporary science ranging over 6 basic themes: the origin of space and time, the origins of structure in the universe, the origin of the elements, the origins of species, and the origins of humanity and consciousness
  - Origins Public Lecture series to expand outreach to internal and external community
  - “Big Questions” course as part of the Origins Undergraduate Specialization curriculum
  - McMaster 3D theatre as a showcase for leading edge visualizations

**Social Sciences**

- Enhance the already strong research profile of the Faculty
  - Mentoring initiative for new faculty (July 2004)
  - Proposal development initiative
  - New graduate programs
  - Review of completion times and withdrawal rates for graduate students

- Support the development of the integrated health and social sciences initiative
  - Social Sciences Scholar in Residence Program (2006 start date)
  - Proposed McMaster AIDS Research Alliance
On-going consultations with Health Sciences

**Goal: To build an inclusive community with a shared purpose**

**Academic and Community Values**

**Inclusive Community**

- To conduct an extensive, broad-based education and research program to raise awareness on campus regarding inclusiveness issues and to obtain, for future planning purposes, input from the diverse (and often silenced) voices on campus as to what needs to be done to build an inclusive community at McMaster.
- To conduct a full and intensive review of
  - faculty hiring processes,
  - current curriculum and curriculum development and
  - research work of the university to ascertain where diversity and inclusiveness need to be enhanced and to propose strategies to accomplish such enhancement.
- To act on the information, research and recommendations that already exist with regard to increasing inclusiveness on campus.

**Humanities**

- To internationalize programs to embrace cultural diversity
  - Appointments in Indigenous Studies, Gender and Sexuality Studies, and Critical Race and Ethnicity Studies
  - Introducing more consultative processes and more inclusive policies for greater transparency and equity

**Academic and Community Support**

**Student Life**

- Creation of “village community” where all students feel connected
  - Build a new residence on campus
  - Expand off-campus resource support services
  - Develop and promote an accreditation process for off-campus housing

**Library**

- To provide a well managed work environment that facilitates the delivery of library services
  - Change organization structure and staffing in collections/BSD
  - Ergonomic assessment programme for all library departments
  - Review internal library groups related to IT and electronic resources
  - Comprehensive review of all public spaces in the libraries.

**Outreach**

**Internationalization**

- To develop more international development projects:
  - Build on experience from excellent projects in South Africa, Pakistan, China, Nigeria, Haiti and Chile
  - Seek out development opportunities and to create programs based on client demand
  - Seek senior and retired faculty to assist in project development
- To support international alumni development:
  - Intensify McMaster’s presence in Singapore and Malaysia for alumni networking
  - Develop alumni branches in strategic cities in China

**Alumni**

- Increasing the meaningful engagement of alumni, students and friends in the University community – through strong participation in University, local, national and international programmes, events and services
  - Provide high quality programs that promote continuing links among alumni, and lifelong relationships between the University and its alumni and friends
  - Increase student engagement in current and new alumni programs
  - Strengthen communication with the alumni community, with special emphasis on electronic media
  - Generate increased financial support for alumni programs and the University
  - Expand services offered on the web to our alumni
  - Increase the involvement of alumni through a broad ranges of programs: branches, reunions, advisory committees

### CRITICAL SUCCESS FACTORS

**Resource Management**

**Secure adequate resources**

- Budget Reform
- Implementation of Enterprise Wide Risk Management
- Capital Planning
- Expanding and stewarding private support – through giving and donor relations programmes that build from a base of $15 million in annual charitable gifts, $5 million in expectancies, and other revenues; and which, in so doing, achieve the Health Sciences campaign goal by the end of the campaign period
  - Increase annual fund alumni participation and revenue by effectively targeting, soliciting and stewarding donors and potential donors
  - Maximize giving through customized strategies for the cultivation and solicitation of donors and prospective donors, with a focus on the University’s identified fund priorities which are currently OSOTF ($14.3M by December 2005) and Athletics facilities ($22M by December 2006)
  - Increase accountability, goodwill and awareness of the University through customized recognition and stewardship strategies
  - Expand our on line giving service
  - Build strong and efficient links between and annual giving program and the alumni program

**Provide quality infrastructure**

- Develop a University Technology Strategy
  - Inventory of existing applications and infrastructure
  - Consultation with Senior Management and key stakeholders
  - Development of technology vision and strategies
- Achieve Service Excellence in information technology
Design and implement a client centric service management program to ensure that all clients have appropriate access to quality services and timely, effective support.

- Develop a Security Road Map to ensure that McMaster has a secure, stable, robust technology infrastructure
  - Authentication and single sign-on
  - Anti-virus software/appliances and spam filters
  - Protocols for device implementation
  - Router and switch standards
  - Security standards

**Instill and support a culture of planning**

- Enhance the culture of planning
  - Annual strategic planning reports by managers
  - Measures to expand the scope and enhance the effectiveness of UPC
- Increase the use and sophistication of benchmarking at the unit and institution levels
  - Development of the Business Intelligence (BI) tool to provide timely information on resources and processes
  - Publication of an annual report as part of an accountability framework

**Provide effective administrative services and support**

- To create an enabling culture in the Faculty of Health Sciences
  - Create a streamlined, flexible, creative organization that facilitates innovation
  - Maximize collaboration and interprofessional relationships
- Training and Development
  - Core competency training
  - Academic leadership sessions
- Policy and Procedure Review
  - Ongoing review of policies and procedures

**Communicate internally and externally**

- Raise DeGroote School of Business profile among key constituencies
  - Set up an External Relations office with specialists dealing with recruiting, alumni development, and communications
  - Create and manage high-profile events (e.g., Wayne C. Fox Distinguished Alumni Dinner), breakfasts and luncheons, golf tournament
  - Personal visits with alumni and others
  - Development of a major new branding initiative for 2004/5
- Faculty of Health Science will influence the health agenda through strategic alliances
  - Communication campaign will build government relations
  - Harmonization of policies and procedures between hospitals and University
  - New alliances with industry, donors and private sector
- Enhancement of McMaster’s visibility and reputation – through outstanding media relations, communications and marketing
  - Provide strategic communication counsel and planning to the University and oversee the development of related communications tools for internal and external audiences to provide stakeholders with timely information and to support the University’s institutional goals
  - Develop an integrated marketing strategy that further develops the University’s positioning and reputation and that provides consistent and comprehensive approach to marketing initiatives
In cooperation with other areas of the University, develop and implement a proactive media relations strategy to build the University’s reputation and strengthen its strategic position locally, nationally and internationally.

- Foster pride and participation in the University and the alumni association
- To ensure that further content and technical development of the University’s web site is done to help support it as a primary marketing tool to support the University’s positioning and strategic priorities

- Build and sustain optimal external and internal relationships – through strong partnerships and effective community, government and stakeholder relations, with special emphasis on collaboration with Hamilton to manage the impact of the University’s growth
  - Increase student engagement in current and new alumni programs
  - Foster pride and participation in the University and the alumni association
  - Promote the alumni web community as a vehicle for on line interaction
  - Increase the awareness and involvement of internal constituencies in development activities
  - Increase the awareness and involvement of community leaders and constituents
  - Provide strategic communication counsel and issues management in support of the University’s objective to develop strong, positive relationships with employees, students and University leaders
  - Continue to develop opportunities to build McMaster’s role as an active member of the Hamilton community and surrounding area
  - Develop and implement an integrated government relations strategy that positively positions McMaster with all levels of government and positions the University to benefit from government initiatives

6. So what’s missing?

- Consistent basis on which to compare competing priorities for resources and promoting successes

There is currently no consistent or common basis on which to compare the outcomes of academic decisions that link directly to the resources expended. Performance indicators and expected outcomes will help to clearly link outcomes with resources. Academic plans focus on the delivery of programs, the number of faculty and students and resources that are directly within the control of the Faculties – immediate resource growth for academic goals is predicated on increased student numbers which provide funding challenges, for example teaching assistantships and classrooms. But what is not currently linked is the multiplier effect in terms of the non-academic resources required; for example, Registrar support staff, physical plant and maintenance, residence accommodation, library resources etc. This is not surprising as the Faculty budgets clearly focus on academic issues, as they should, but if there is no capacity in the system then there is a cost multiplier for the non-academic services for each new student admitted. If student tuition is the major source of new revenue, then while succeeding in developing new programs and hiring more faculty for growth, the University may find itself in a position of insufficient financial resources to maintain the quality of student life and services. This fundamental need in planning for support resources must be addressed at the UPC level, at the same time as academic plans are put forward.

Recommendations:
1. Proposals which initiate growth scenarios for undergraduate or graduate students should explicitly trigger a review to identify resource requirements in other planning areas.
2. A common planning reporting format should be developed and used by UPC to support an effective interchange of information and monitoring of plans.
3. Develop an annual report with key institutional performance indicators that will be circulated to the internal and external community.
4. Accelerate development of business intelligence project to improve information gathering and monitoring capabilities.

- Funding for graduate student growth

*Refining Directions* has identified a target of 20% full-time graduate students to the total full-time student population. This is an ambitious goal and would place McMaster among the top three universities among the G10 universities. Only the University of Toronto is near that target currently among the Ontario universities. The clear resource need is funding, competitive with the funding provided by other universities in Ontario and the leading universities in Canada. The challenge is that the current provincial funding does not allow trade-offs between corridors for undergraduate and graduate numbers and there is simply insufficient funding for the student population.

The key funding mechanisms for graduate students are: external scholarships, university funded scholarships and bursaries (which include those linked to donations as part of university advancement), teaching assistantships, and research funds. University funded scholarships and teaching assistantships provide a more significant fraction of the funding for graduate students in Humanities and Social Sciences, while research funds play a larger role in Engineering, Science and Health Sciences. Growth in graduate student numbers will be difficult, if not impossible, uniformly across the Faculties and departments. Only Health Sciences is above the 20% target (at 23% in 2002/03) and Business (18%) and Engineering (16%) are within striking distance. Since the graduate student target is linked to the undergraduate population, growth in undergraduate population will make achieving this target even more difficult because an increase in undergraduate numbers will require increased teaching assistantships and graduate scholarship.

There are a number of initiatives to create new Master’s degree programs – some of these programs are in professional Faculties and are intended to be nearly self-sufficient financially. Some Master’s programs will require financial resources to support graduate students, especially in the Humanities and Social Sciences where it is more difficult to obtain research grants to support students. An increase in Master’s degree students will achieve the numerical goal of increasing the graduate population. However, one of the key drivers for the recommendation to increase the graduate student population is to also increase the number of doctoral students as they are vital to the research reputation of the university. The School of Graduate Studies has undertaken a number of initiatives to increase monitoring to reduce time to completion, improve student financial support, and provide more stable graduate scholarship funding to the departments.

The SGS plan recognizes that growth in graduate student numbers should start in strong research programs that also have significant research funding, faculty capacity to supervise graduate students, space and research infrastructure, and program attractiveness for external scholarship holders. Growth will require an increase in the base support for graduate studies, and should be targeted in the first instance towards programs where there is capacity to take on more students or where university funds can be leveraged through other funding opportunities.

**Recommendations:**
5. Priority should be given to support graduate programs that are capable of immediate growth in student numbers recognizing high quality, and providing the highest possible leveraging of university financial resources to increase the graduate population.

- Undergraduate education infrastructure

There is a general awareness that there needs to be considerably more resources (faculty, classrooms, information technology infrastructure, library) invested into the academic infrastructure of the university, to address the recent growth in numbers of students, as well as the higher expectations that students bring with them.

The University has a common Level I teaching philosophy across the Faculties, for good pedagogical and historical reasons, but this has led to the development of large lecture classrooms with a smaller tutorial/laboratory style course management arrangement across most of Level I courses and into Level II courses. The physical infrastructure and existing teaching resources are challenged with plans to reduce the size of Level I class sections, as there would need to be significantly more tenure-track faculty assigned to teaching Level I courses, increased teaching load for existing faculty and a major change in existing classroom infrastructure (or scheduling). Since the pedagogical benefits of moving to smaller lecture courses is not true in all cases, it would be beneficial to do more experimentation with medium to larger size classes in terms of teaching style and format to identify best practices. Upper year courses (Levels III and IV) have a disproportionately high share of larger class sections, as compared to the top three Ontario universities, and it may be beneficial to consider focusing on upper year courses to encourage more diversity in electives and smaller class sections.

Most of the Faculty initiatives propose growth in popular programs and development of new programs to meet student demand and support interdisciplinary initiatives. However, there has been little discussion of how to manage growth in the number and size of existing programs within a relatively slow growth in overall budget resources. For example, there are many programs that have less than 10 students registered in all levels\(^6\), so the viability and resource effectiveness of programs with very small numbers of students should be addressed, especially if this could free resources to support new growth initiatives.

Our appointment procedures, academic promotion and merit assessment procedures all reflect that research intensity and teaching effectiveness are two sides of the same coin. However, to develop and grow truly excellent teaching programs will require dedicated time and resources, similar to the research intensity promoted by the Canada Research Chairs or other research chairs. The educational analogues of these research positions have not been reflected, to the same degree, in educational delivery and scholarship and this needs to be rectified to provide resources to develop courses and educational materials. The Centre for Leadership and Learning should be the leader in developing and promoting best practices in teaching. We have a number of faculty members who have been recognized through national and international teaching awards (e.g. the 3M awards) who have the equivalent recognition as the research chair holders in this field.

Recommendations:

6. Review programs with small student populations to consider their resource effectiveness and viability in comparison with opportunities for developing new programs or expanding high demand programs.

\(^6\) Table I-5, Registrar's Report, 2002/2003
7. Promote university initiatives to identify, promote, communicate and replicate best practices in education, especially those which exemplify student discovery, inquiry or experiential based learning.
8. Develop appropriate recognition and support for leading educators in the University which will encourage educational scholarship and development of improved teaching and learning methodologies.

- **Research infrastructure**

  There needs to be stronger linkage between infrastructure and academic needs at UPC before implementation goes forward. As well, there needs to be a higher level consultation exercise among the research groups to identify longer term trends in infrastructure needs and research development. While there is no guarantee that funding will be provided for every research initiative, strong research groups will by their very nature grow and develop needs for more specialized space.

  **Recommendations:**
  9. Develop a long range research infrastructure plan that anticipates further evolution and growth in the strategic research areas of the university.

- **Student life expectations**

  Is there a common student “as a customer” experience expected? From a university perspective, it is clear that we need to be efficient in providing services to a large number of students. Students are empowered to make choices among competing universities. Student surveys clearly show that there is a high level of satisfaction with the McMaster experience for students at the university – but the reputation perspective is that of the “value leader” in terms of experience versus the cost.

  **Recommendations:**
  10. Priority should be given to enhance quality of student life, especially in the areas of student housing, transportation, athletics and student services.

- **Development of interdisciplinary programs**

  McMaster has been very successful in developing and promoting interdisciplinary programs. The evolution and number of interdisciplinary degree programs needs to be considered from a resource point of view. Some interdisciplinary programs are variations on a major/minor degree approach with major/minor stakeholders, which lead to resource issues if the students are predominantly from one of the stakeholder Faculties. Other successful programs are true joint or special programs. Expansion of the number of interdisciplinary programs will require planning and consistency of expectations among faculty and students.

  There is a general recognition of the importance of developing links in undergraduate education with Health and Life Sciences from other Faculties (e.g. Business, Engineering and Science), but Health Sciences has identified other priorities as well. The Faculty of Health Sciences is widely known for its undergraduate, medical and research programs. Linkages with other Faculties are not only desirable but build on the high Faculty of Health Sciences profile that already exists.

**Recommendations:**
11. Priority should be given to resources for interdisciplinary undergraduate and graduate programs, and in particular to the development of a long term strategy with the Faculty of Health Sciences.

- Life Long Learning And Creating An Inclusive Community

Two important planning areas that still need development at this point in time are life long learning and creating an inclusive community. Discussion thus far in the area of life long learning has focused on building on part-time degree studies and continuing education. It is not clear at this point what directions are best in terms of developing these further, or if in fact we need to redefine life long learning to cover the entire spectrum of non-traditional first degree type students. Life long learning can include everything from short interactions with the university (e.g. seminars, web presentations) through to courses (e.g. web-based, traditional lecture, workshops) to degree completion or certificate studies. These areas report through the Associate Vice-President (Academic) and a longer term strategy and set of priorities is being considered and developed.

Similarly, the planning area for the Refining Directions goal of developing a more inclusive community requires more time to develop priorities and a strategic plan. An inclusive community encompasses a wide variety of interactions between students, staff and faculty, as well as the interactions of these groups with the university as an academic institution, workplace and quite literally a community in the sense of a place to live. Some initiatives have been identified, but it is clear that both these planning area require more time to develop in the coming year.

7. Impact of plans for proposed Burlington Campus and Research Park

One of the key messages that have come from this planning exercise is that the “village community” atmosphere is a significant and much appreciated facet of McMaster University. However, it is clear that we need to have other opportunities for growth given the many initiatives that are underway or planned. As an example of such an expansion away from the main campus, the Downtown Center has become the home for a number of administrative units and Continuing Education which serves thousands of non-degree students in an off-campus environment.

At this time, there are plans underway for two specific opportunities: the development of a campus presence in Burlington and the development of a Research Park.

McMaster University has entered into a Memorandum of Understanding (MOU) with the City of Burlington to develop a proposal for a new McMaster campus in Burlington. Preliminary discussions focus around the opportunity to provide innovative educational opportunities in the interdisciplinary area of arts and technology through an integrated graduate and undergraduate environment. The development a McMaster campus presence in Burlington is intended to be of cultural, social and economic benefit to the City of Burlington and the surrounding region.

McMaster and the City of Burlington agreed to engage in a joint planning process to develop a vision of the education and research goals of the new campus and a proposed implementation plan which would see the commencement of educational programs, research activity and community outreach within 2 years. Over the long term there is the potential for the development of a 5000-student campus over a 20-year time frame. The planning process will require engagement of local and national partners to expand the teaching and research capabilities of the new campus and consultation and engagement of the major
stakeholders. Plans will be brought forward to for future consideration both by Burlington City Council by McMaster’s Senate and Board of Governors.

There has been interest in developing a research and innovation park concept, similar to such initiatives at other major Canadian universities (e.g. University of Western Ontario, University of Guelph, Waterloo University). The research park concept would allow collaboration of McMaster researchers with industrial and government research partners in facilities for activities that are much larger than what can be accommodated in existing research space within the university. At the present time, the concept is being developed with the City of Hamilton and other major stakeholders.

8. Next steps

At the present time a proposed format for an annual report of performance indicators is being prepared for submission to the University Planning Committee for consideration. A database is being developed for all the planning area goals, priorities and initiatives. The database is being used in the current planning cycle and it will allow us, for the first time, to monitor action plans across all planning areas and fulfill the goals of Refining Directions through alignment of resources with opportunities and plans.

Recommendation summary:

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2. A common planning reporting format should be developed and used by UPC to support an effective interchange of information and monitoring of plans.
3. Develop an annual report with key institutional performance indicators that will be circulated to the internal and external community.
4. Accelerate development of business intelligence project to improve information gathering and monitoring capabilities.
5. Priority should be given to support graduate programs that are capable of immediate growth in student numbers recognizing high quality, and providing the highest possible leveraging of university financial resources to increase the graduate population.
6. Review programs with small student populations to consider their resource effectiveness and viability in comparison with opportunities for developing new programs or expanding high demand programs.
7. Promote university initiatives to identify, promote, communicate and replicate best practices in education, especially those which exemplify student discovery, inquiry or experiential based learning.
8. Develop appropriate recognition and support for leading educators in the University which will encourage educational scholarship and development of improved teaching and learning methodologies.
9. Develop a long range research infrastructure plan that anticipates further evolution and growth in the strategic research areas of the university.
10. Priority should be given to enhance quality of student life, especially in the areas of student housing, transportation, athletics and student services.
11. Priority should be given to resources for interdisciplinary undergraduate and graduate programs, and in particular to the development of a long term strategy with the Faculty of Health Sciences.