

B a d . G e

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SECTION A - Introduction

In April 2005 President Traves recommended to the Board of Governors the establishment of an ad hoc Board committee to examine the University's longer-term financial strategy. The mandate of this committee would be "to present clearly the strategic fiscal options we face if we want to maintain our focus on academic excellence within a stable financial environment". He noted that such a strategic framework would provide the parameters within which annual budget planning, including the setting of tuition fees, would occur. The terms of reference and membership of the Long Term Financial Planning Committee which was subsequently established can be found in Appendix 1.

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- Dalhousie researchers have been admirably successful in competitions for external research grants and contracts. But research success both enhances the reputation of a university and imposes its own financial pressures. The cost of providing the infrastructure support for research (e.g. facilities, services) is significant. And faculty who are very active and productive researchers have less time to devote to teaching responsibilities (contributing to Dalhousie's student/faculty ratio challenge).
- In recent years the University's required contributions to its Pension Plan have spiraled, from 6.01% of payroll in 2001 to 11.27% in 2005. In part this escalation is the result of poor investment market performance in the early years of this decade, and in part is due to the structure of the Dalhousie Pension Plan.
- Fund raising is an extremely important component of a university's financial well-being and thus to its academic performance. In the past Dalhousie's fund raising efforts have been focused on new facilities, new Chairs and Professorships, and new scholarships and bursaries. As the University begins planning for its next major capital campaign it behooves the community to confirm or alter that focus.

The Long Term Financial Planning Committee has spent the last year examining the above issues, and many related ones. It has reviewed mounds of documentation. It has

SECTION B – Enrolment

- Dalhousie’s enrolment is by far the smallest amongst our comparator group of medical-doctoral universities, which severely limits the economies-of-scale normally expected. The following FTE data are for 2003/04 :

| | |
|----------------------|--------|
| Alberta: | 29,800 |
| Western: | 27,800 |
| Calgary: | 24,200 |
| Ottawa | 24,200 |
| Manitoba: | 20,700 |
| McMaster: | 20,000 |
| Queen’s: | 18,700 |
| Saskatchewan: | 15,300 |
| Dalhousie University | 13,500 |

- Compounding the stresses resulting from its small size, Dalhousie students are concentrated in higher cost program areas. The 2003-04 data show that the ratio of students in higher cost programs to those in low cost programs was 3.1 to 1 at Dalhousie and 1.3 to 1 at the comparator universities :

Percentage Distribution of Full-Time Equivalent Students

A program will be classified as “high cost” on the basis of one or both of the following factors:

- (a) a low student-faculty ratio usually required by the nature of the discipline (e.g. Medicine) and/or the level of the instruction (e.g. doctoral programs); and,

Indeed, the latest projections from the Enrolment Management Committee show that this trend is expected to continue.

| | <u>Total Enrolment</u> | <u>Graduate Enrolment</u> | <u>Graduate %</u> |
|---------------------|-------------------------------|----------------------------------|--------------------------|
| 1997-98 | 12,561 | 2538 | 20.2% |
| 2004-05 | 15,814 | 3691 | 23.3% |
| 2010-11 (Projected) | 16,194 | 3938 | 24.3% |
| 2010-11 (Target) | 17,000 | n/a | n/a |

By contrast graduate enrolments at the comparator universities are only about 70% of the Dalhousie proportion (14.8% as shown above).

The argument is often made that Faculties need to increase their enrolment of graduate students in order to have sufficient Teaching Assistants available to properly support their undergraduate programs. Yet clearly other comparable universities are able to deliver quality undergraduate programs with proportionally far fewer graduate Teaching Assistants. For example, at Queen's University graduate enrolment was 14.6% of their total enrolment in 2003-04, while at Western it constituted just 12.2% of the total, in contrast to Dalhousie's 21.1% proportion that same year.

- In common with universities throughout the Atlantic region Dalhousie will face over the next decade a 20% reduction in the number of high school graduates in our four Provinces (30,808 in 2004 to 24,556 in 2015). The decline in Nova Scotia, historically our major catchment area, is of similar magnitude (12,413 to 9,795 over the same years). Regional universities are likely to become increasingly competitive in terms of fee policies, financial supports and other inducements as the years progress.
- Anticipating the regional decline, Dalhousie's enrolment strategy has focused increasingly on Ontario, on other parts of Canada, and on international students.

| | <u>2000-01</u> | <u>%</u> | <u>2004-05</u> | <u>%</u> |
|----------------|-----------------------|-----------------|-----------------------|-----------------|
| Nova Scotia | 7214 | 57% | 7697 | 49% |
| Other Atlantic | 1948 | 15% | 2086 | 13% |
| Ontario | 1644 | 13% | 3246 | 21% |
| Other Canada | 1122 | 9% | 1462 | 9% |
| International | 808 | 6% | 1323 | 8% |

Since high school enrolments are in decline in the other three Atlantic Provinces, increased concentration of recruiting efforts in niche markets in Western Canada and Quebec will be required.

- The 2006/07 University budget includes an additional \$1.3 million for student marketing and recruitment activities. In the face of mounting competition both regionally and nationally (where major universities have more resources to invest and longer histories of aggressive recruiting) it appears that Dalhousie must be prepared to maintain and possibly increase its financial commitment to sophisticated marketing and recruitment programs.
- There is evidence that the movement of students from China to Canada and other countries is in decline as China's own university system rapidly expands and improves. A Globe & Mail article in March 2006 noted that the number of new Chinese students arriving in Canada had declined from 10,577 in 2002 to 6,795 in 2005. Dalhousie's Enrolment Management Committee has reported on this (June 2006 report of the Board of Governors), and has spoken about other international models which could offset at least some of the decline.
- The Enrolment Management Committee in its June 2006 report spoke of a target for international students of 10% of total enrolment, but cautioned that reaching such a target would require the investment of additional funds to support sustained marketing and recruitment activities in principal markets and to provide additional financial support for international students in thesis-based graduate programs. (The Committee also pointed to the need for restructuring and integrating currently siloed efforts which lack leadership within the University.)
- Engineering is one of the Faculties where direct and indirect costs exceed its revenues (see Section C on Tuition Policy). Engineering education in Nova Scotia is organized differently than in other jurisdictions, in that the first two years of the undergraduate program are offered at six different universities (including Dalhousie) but all students must attend Dalhousie to complete their undergraduate program.

The numbers enrolled in years 1 and 2 at the Associated Universities are significant:

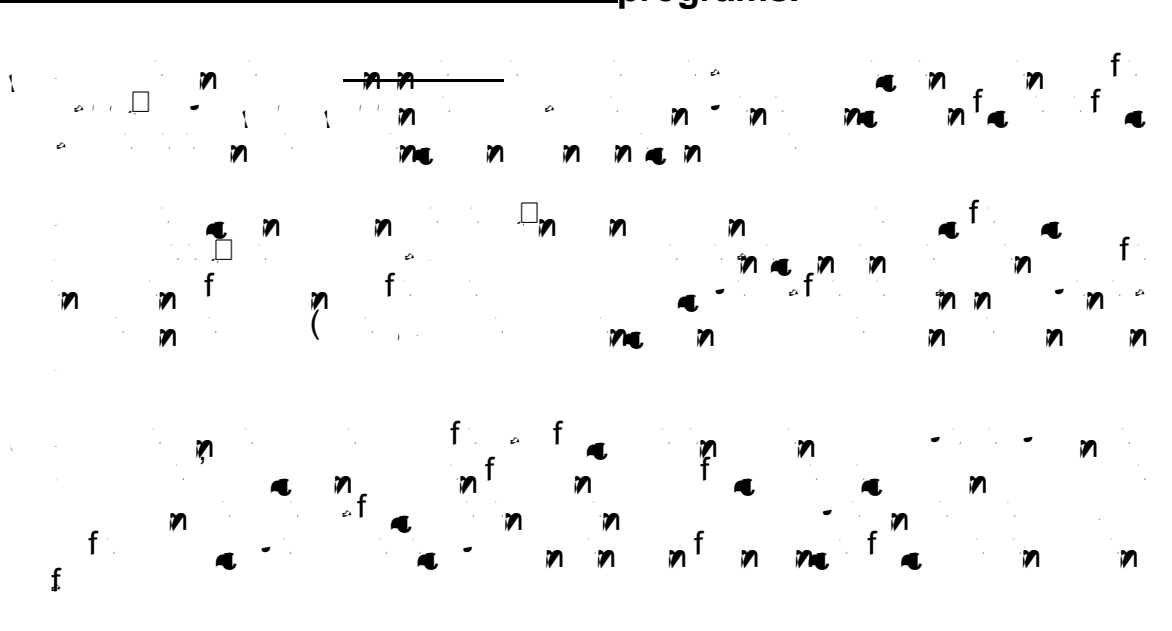
| | <u>2000-01</u> | <u>2004-05</u> |
|--|----------------|----------------|
| Associated Universities Years I and II | 449 | 562 |
| Dalhousie Undergraduate (all years) | 992 | 1166 |
| Dalhousie Graduate Programs | 259 | 382 |

This University is the only one in the Province which offers Master and Doctoral programs in Engineering. Since the first two undergraduate years are the most common/least specialized portions of the curriculum, and hence the least expensive to mount, Dalhousie's Faculty of Engineering is at a distinct financial

disadvantage compared to similar programs in other provinces. This University is forced to subsidize a Faculty which elsewhere would operate on at least a break-even basis.

Recommendations – Enrolment:

That the University must emphasize in its plans and activities enrolment stability and enrolment growth in order to secure its financial future, and in doing so it must identify strategies and mechanisms to increase significantly the proportion of programs.



SECTION C – Tuition Policy

- For a great many of its programs, Dalhousie’s tuition fees are at or near the highest amongst our national competitors (see Appendix 2). Undergraduate fees in Nova Scotia tend to be at the highest end of the scale (see Appendix 3), reflecting the relatively low levels of Government funding on a per student basis. Tuition fees elsewhere in the Atlantic region are considerably lower (see Appendix 3).
- But higher fees at Dalhousie reflect also the University’s mandate to offer higher-cost graduate and professional programming for the Province (and in many cases the region), the concentration of enrolment in these higher-cost programs (see Section B on Enrolment), and the need to support extensive research activities (see Section J on Research).
- A student’s tuition fees pay only for a portion of the cost of his/her program. On average at Dalhousie tuition revenue per full-time equivalent student contributes 40.3% of direct and indirect costs (based on 2004-05 data). At the Faculty level the dispersion of the contribution tuition makes to costs is very wide (see Appendix 4):

| | <u>Tuition Earned as a % of Costs</u> | <u>Faculty Revenues as a % of Costs</u> |
|------------------------|---|---|
| Dentistry | 18.6% | 82.6% |
| Medicine | 18.8% | 96.5% |
| Engineering | 32.6% | 88.1% |
| Computing Science | 37.9% | 96.1% |
| Architecture | 41.0% | 100.0% |
| Science | 41.5% | 99.5% |
| Law | 46.3% | 86.9% |
| Health Professions | 47.8% | 101.6% |
| Management | 62.6% | 112.8% |
| Arts & Social Sciences | 72.3% | 123.3% |
| University | 40.3% | 100.0% |

(Please note that the above numbers describe revenues and costs on a Faculty basis, combining students in all the programs offered by the particular Faculty.)

- The boxed column on the right immediately above describes the percentage that total Faculty revenues are of total costs for that Faculty. Faculties showing a

percentage higher than 100% are contributing to the operations of those Faculties with revenues equal to less than 100% of their costs.

- “Cross-subsidization” of Faculties, and programs within Faculties, is common practice at all universities. It reflects a great many factors, including some measure of inaccuracy in program weightings in provincial funding formulas, rising and falling student enrolments in programs over time, the age and salary profiles of faculty members in different units, relative research intensity by the units, tuition policies, availability of endowment support, and historical and political influences.
- Since 1990 tuition policy at Dalhousie has sought to reflect to some degree factors such as the relative cost of offering a program, the economic prospects of program graduates, the fees charged for the same program at other universities, and the demand for entry into the program. This policy has led to far greater variety of program fees at Dalhousie than is found at other universities.
- The current Memorandum of Understanding with the Province has capped tuition fee increases at 3.9% per annum for three years except for international students and students in Dentistry, Law and Medicine. The MOU certainly limits the University’s capacity to adjust tuition fees as a means of generating additional revenue through the application of the long-standing Dalhousie tuition policy.
- In 2004-05 the Budget Advisory Committee issued a special report on differential tuition fees for international students. After discussions across campus the Committee recommended that such fees be increased by approximately \$4000 over a five year period to bring them more in line with tuitions at other Canadian universities and with the cost of the education being provided. While it may be coincidental and/or may reflect broader trends in the international student market (see Section B on Enrolment), the number of international students registering at Dalhousie did decline (from 1323 to 1244) in 2005-06, the first year of beginning to implement the new fee structure. Preliminary 2006-07 enrolment data indicates a further decline in international student numbers (to 1192), similar to the experience across Maritime universities which report a 3.2% overall decline in international enrolment this year. At Dalhousie this year’s decline is all at the graduate level (undergraduate international numbers are up slightly).
- The following compares the costs of regular tuition plus international differential fees for selected programs (2004-05) in Ontario universities and at Dalhousie:

| | <u>Ontario</u> \$ | <u>Dalhousie</u> \$ |
|--------------------------------|----------------------|------------------------|
| Arts and Science Undergraduate | 8,000-15,326 | 10,440–11,340 |
| Engineering Undergraduate | 9,400-17,982 | 11,190–11,340 |
| Graduate | 8,148-13,770 | 10,743- 13,272 |

Recommendations – Tuition Policy:

- 1. That the Board of Governors reaffirm the following Tuition Fee Policy:**

Tuition fees will be set based on the following factors:
the relative costs of offering a program;
the economic prospects/earnings potential of program graduates;
fees charged for similar programs at other Canadian universities;
demand for the program and the impact of existing fees on enrolment; and,
the availability of student assistance support.

That the University monitor carefully the relationship between student fees and student enrolment to ensure that fee levels are not an impediment to the recruitment and retention of the desired number of students in the desired program areas, with a view to achieving an appropriate balance between

SECTION D – Government Operating Grants

- In 1990-91 Provincial funding represented 73% of total operating revenues of Nova Scotia's universities. By 2001-02 Provincial funding had dropped to 47% of the universities' revenue, and in 2004-05 the universities received only 40.7% of operating revenues from the Provincial Government. (Source: CAUBO Reports, Financial Information of Universities and Colleges, various years.) In dollar terms Provincial grants were \$209 million in 1990-91, fell to \$185 million in 1997-98 then grew to \$212 million by 2004-05.
- Nova Scotia Provincial grants per full-time equivalent university student were \$6,942 in 1990-91, approximately \$1000 below the national average of \$7,929 and ranked 9th out of 10 provinces. In 1999-2000 Provincial funding per student had declined to \$6,335 per FTE student, over \$1,200 below the national average of \$7,570 and ranked last among all the provinces (B.C. was highest at \$10,771 per FTE). A contributing factor to Nova Scotia's low funding per FTE student is the very large number of out-of-province students who choose to attend university in this province. In 2002-2003 (based on preliminary figures) fully 31% of graduating Nova Scotia university students were from outside the Province. This is the highest percentage of any province.
- Between 1999-2000 and 2004-05 provincial operating grants increased on average by 38.2% at our comparator universities while they increased by only 10.4% at Dalhousie. Tuition revenues over this period increased at a higher rate at Dalhousie than at the comparators (71.7% versus 52.0%), in part at least due to a larger enrolment increase here than elsewhere (23% versus 19%). Taking into account all sources of revenue, over the five year period Dalhousie's revenue per FTE student increased by only 6%, while at the comparator universities the average increase in revenue per FTE student was 20%, providing those institutions with a very distinct advantage. (See Appendix 5.)
- University operating grants provided by the Nova Scotia Department of Education decreased from 5.0% of consolidated provincial government expenditures in 1994-95 to 3.9% in 2002-03.
- In 2004 the Province entered into a three-year Memorandum of Understanding with Nova Scotia universities which will see significant annual funding increases (5.77% in 2005-06, 5.25% in 2006-07, and 4.48% in 2007-08) in return for a cap on tuition fee increases covering almost all programs of study and an agreed productivity improvement target of 3.25% over the term of the MOU. System-wide funding will increase from \$212 million in 2004-05 to \$246 million in 2007-08.
- In spring 2006 the Nova Scotia Department of Education announced that it was commencing a process to update the Province's funding formula for distributing operating grants among the eleven universities. This largely enrolment driven formula was introduced in 1998 and remains based on institutional enrolments as they were in the mid-1990's.

- In the 2006 provincial election the platforms of two of the three major parties included promises to control or lower student tuition fees while safeguarding the financial integrity of the universities. To the extent that Government grants rise as an offset to reduced tuition revenue there is no net gain in the total funding for universities. Furthermore, to the extent that tuition revenues are frozen or in fact reduced, the burden to fund increased operating costs will be shifted entirely onto the Provincial operating grant. The following simple example is illustrative of the major increase to Government funding required to both reduce tuition costs for students and provide universities with inflationary adjustments:

| | <u>Year 1</u> | <u>Year 2</u> | <u>Change</u> |
|------------------------|---------------|---------------|---------------|
| Operating Expenditures | <u>\$100</u> | <u>\$105</u> | +5% |
| Operating Revenues | | | |
| - Government Grant | 50 | 59 | +18% |
| - Tuition Fees | 40 | 36 | -10% |
| - Other | <u>10</u> | <u>10</u> | |
| | <u>100</u> | <u>105</u> | +5% |

Recommendations – Government Operating Grants:

That the University work closely with the other universities and the Provincial Government to ensure that any Provincial initiative to reduce the cost burden for students through lower tuition levels will not result in any reduction in the universities' total revenues.

SECTION E – Fund Raising and Endowments

- Dalhousie has developed a successful, professionally-staffed fund raising department. Over the past 10 years \$128 million have been raised to support the teaching and research missions of the University. Chairs have been established, scholarships and bursaries have grown, new facilities have been developed and existing ones have been refurbished, and unique programs and services have been introduced.
- The University is in the early stages of planning its next major fund raising campaign. It is important that care be taken to identify fund raising priorities which will contribute to rather than detract from the longer-term academic and financial well-being of the institution. For example, the gift of a new building

Recommendations – Fund Raising and Endowments:

The committee recommends that the University should continue to pursue its current strategy of fund raising and endowments. This strategy is based on the following key principles:

- To maintain a strong and diverse portfolio of endowments.
- To ensure that the University has sufficient resources to meet its long-term needs.
- To provide a stable and predictable source of income for the University.
- To support the University's research and teaching activities.
- To ensure that the University's endowments are managed in a responsible and ethical manner.

The committee also recommends that the University should continue to explore new opportunities for fund raising and endowments, such as the following:

- Establishing new endowments to support specific areas of research and teaching.
- Encouraging alumni and other donors to contribute to the University's endowments.
- Exploring the possibility of establishing a new fund raising organization.

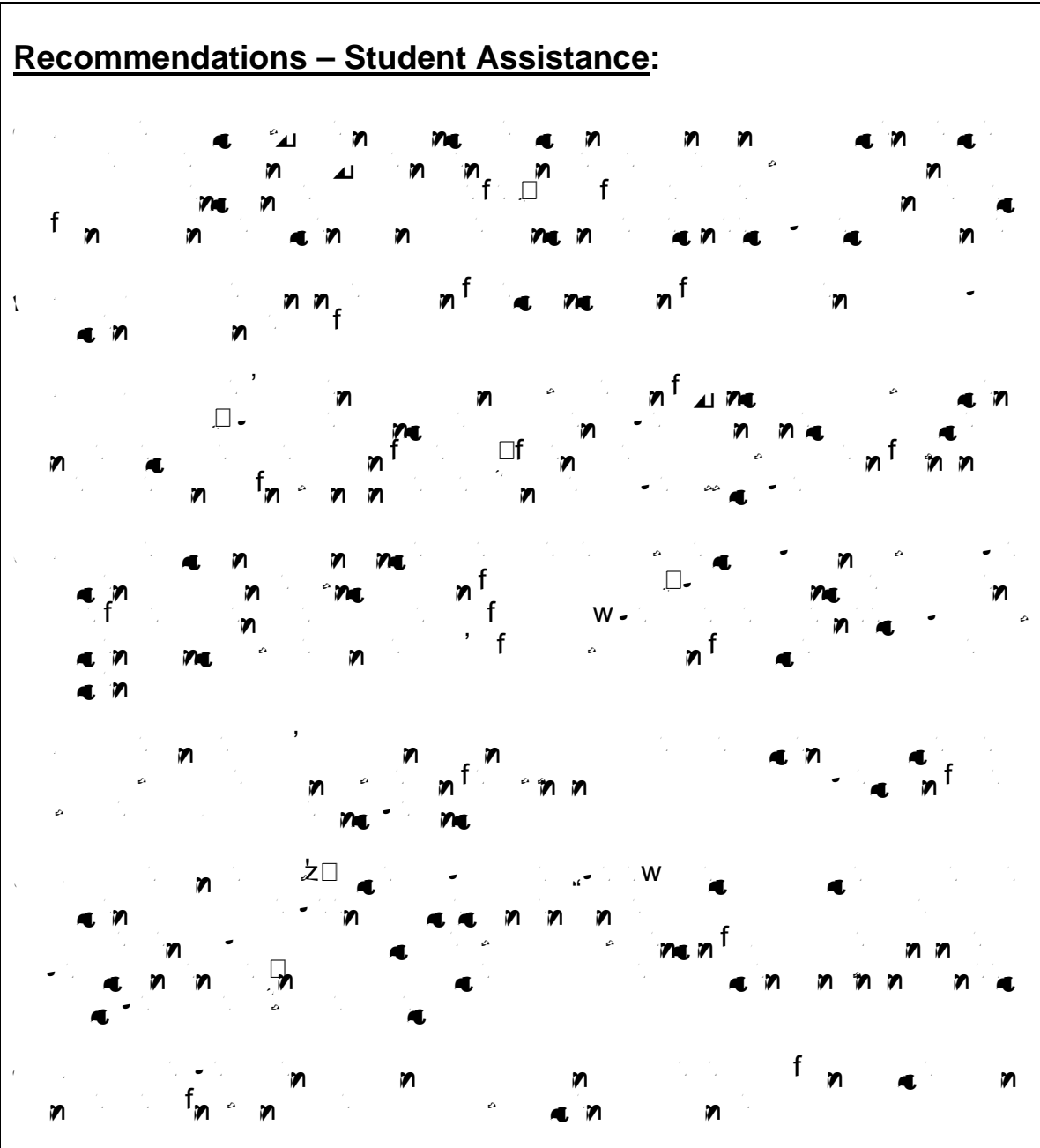
The committee believes that these recommendations will help the University to achieve its long-term financial goals and to provide a high-quality education for its students.

SECTION F – Student Assistance

- Qualified Nova Scotian students who wish to pursue post-secondary education should be provided with the means to do so. Accessibility should be a right as a matter of public policy. The long term economic and social health of the Province is dependent upon a well-educated population. The limited public support provided by the Provincial Government to Nova Scotians who desire university education, including the complete absence of any graduate scholarship program, must be corrected if Nova Scotia hopes to prosper and develop.
- Universities have long held the view that they have some degree of responsibility to assist deserving students with the costs of attendance. Raising endowments to provide scholarships and bursaries to prospective students has been a focus of activity for universities since the 19th century in this country. Governments have entered the field, particularly since the 1960s, as society has recognized increasingly the common good to be derived from a better educated populace. But the universities' role, with its special attention to attracting and rewarding the academically meritorious, remains essential in the 21st century.
- In 2004-05 Canadian universities spent 4.3% of their total revenues (all Funds) on student scholarships, bursaries and prizes (CAUBO/Stats Can). By province such expenditures ranged from a low of 1.5% in Manitoba to a high of 5.3% in Ontario, where in recent years university-funded student financial assistance has been mandated by the provincial government as a component of its university grants arrangements. In that year Dalhousie committed \$25.9 million or 6.0% of its total spending to student scholarships, bursaries and prizes. In addition the University spent a further \$11.1 million on student employment. Thus, at Dalhousie, \$37 million or 8.6% of total expenditures were directed to financial assistance for students.
- In terms of the Operating Fund alone, Dalhousie spent 4.7% of its total expenditures (\$11.95 million) on scholarships and bursaries, compared to the national average of 3.9% (a low of 0.1% in Manitoba to a high of 6.7% in Ontario).
- Dalhousie Research Funds were a major contributor to student scholarships and bursaries, providing \$13.3 million in 2004-05 or 13.2% of total research spending. Nationally, university Research Funds spent an average of 4.5% of their total expenditures for scholarships and bursaries (a low of 0.0% in Manitoba to a high of 11.2% in the universities in each of Nova Scotia and Newfoundland). Clearly, the research community at Dalhousie has shouldered a significant portion of the burden of providing financial assistance to students.
- Dalhousie's above average commitment to student assistance reflects to some degree the above average tuition fees charged to students at this University.

- In 2005-06 a total of 4,409 Dalhousie students, or 28.4% of the total student population received some form of student financial assistance (scholarship, bursary and/or employment) from the University. On average these students received \$8,800.
- The \$37 million in financial assistance received by students in 2004-05 was equal to 43% of the total tuition paid by students in that year.
- The 1997 Maritime Provinces Higher Education Commission's study on Accessibility to Post-Secondary Education, carried out in association with the Angus Reid Group, Inc., surveyed Maritime students on their decisions to pursue or not pursue a post-secondary education. Amongst the key conclusions were the following points:
 - "At work is a complex maze of motivations, and barriers dealing with a range of issues from personality traits to socio-economic background to the cost of post-secondary education, and debt loads."
 - "The predominant view is that while the cost of studies and the debt load incurred are definitely problematic, they do not seem to be reason enough to forego studies beyond high school."
 - "... future job security surfaces as the single most important motivation driving students' decision to continue their studies beyond high school. Moreover, getting a good job is a motivation which tends to reduce, if not eliminate, the impact of any significant barriers people might otherwise see in their way."
 - "...there is some evidence to suggest that individual personality traits are driving factors in a person's decision to pursue or not to pursue post-secondary education. These relate to things like self image, personal confidence, the ability or desire to set long term goals, personal views of education and school, and readiness to take on new challenges."
- The Canadian Millennium Scholarship Foundation's report The Price of Knowledge: Access and Student Finance in Canada (2002) showed that from 1980 to 1999, as tuition fees rose dramatically, participation rates among young people who had completed high school also grew dramatically, and concluded that "In both decades, higher tuition is correlated with higher participation rates". The Foundation also observed that "Interestingly, two of the provinces...(B.C.

Recommendations – Student Assistance:



SECTION G - Deferred Maintenance/Facilities Renewal

- In 1985 Dalhousie operated 26 major buildings plus 77 houses comprising 3,412,000 gross square feet (GSF). Of this total, 886,000 GSF were for student residences. In 2005 the University operated 46 major buildings plus 50 houses totaling 4,863,000 GSF (of which 1,372,000 GSF were residences).
- On the basis of Council of Ontario Universities Space Standards, in 2003 Dalhousie had 95% of the square footage ideally required for its mix of students, faculty and programs. The comparable figure for the average Ontario university was 78.2%.
- Excerpt from the Report of Dalhousie's Facilities Renewal Strategy Committee (2001) :

“The walls of Canada’s ivory towers are crumbling down” These words introduced an article earlier this year in the *Toronto Star* that described the \$3.6 billion worth of repairs and facilities renewal required at Canadian universities.

“Crumbling” walls, peeling paint, and leaking roofs are the most obvious symptoms of this massive deferred maintenance problem. As a 1997 article in *University Manager* reported, “Less apparent are corroded water pipes, obsolete electrical systems and aged cooling equipment. Many university buildings were constructed during the boom years of the 1960’s. Their components and mechanical systems, which have an average life span of 25-30 years, are wearing out en masse.” The article continued, “Fire and building code changes must be incorporated into building renovations. Many structures are inaccessible to people with physical disabilities: elevator upgrading and wheelchair ramp installation are needed to meet today’s standards.”

- The Association of Atlantic Universities’ Campus Infrastructure Renewal Report (2006) set out “... to provide up-to-date information on the dollar magnitude of the problem of the accumulation of serious deferred maintenance at Atlantic

current \$7.8 million (equal to 0.7% of CRV) should be increased to at least \$22 million per annum to meet the minimum goal.

- The Long Term Financial Planning Committee has reviewed the University's credit position and has concluded that Dalhousie has significant capacity to take on additional debt obligations for capital purposes. Debt loads at similarly sized Canadian universities range from \$5,000 to \$20,000 per FTE student, while Dalhousie's debt equates to \$1,100 per FTE student. Dalhousie should secure a favourable credit rating should it choose to issue debentures to fund needed facilities renewal work.
- To quote from the Conclusion of the 2001 Facilities Renewal Strategy Committee Report :

The facilities that the Dalhousie community uses today are a legacy from past members of the Dalhousie community and friends of the institution, including the provincial and federal governments. They are a trust that we bear for future Dalhousians. They are the space where thousands of individuals spend much of their daily lives, learning and working. The productivity and satisfaction from that learning and work depends in large part on having well maintained facilities.

We are called as a community, and as individuals whose decisions affect the maintenance and use of Dalhousie's facilities, to effective and efficient stewardship of this billion dollar resource, for the Dalhousians of today and of tomorrow.

-

Recommendations – Deferred Maintenance/Facilities Renewal:

That the University Board of Governors join with the President to intensify current efforts to secure Provincial and Federal Government financial support for addressing the facilities renewal crises at Dalhousie and other universities; and for its part Dalhousie increase its operating budget allocation for facilities renewal by no less than \$1 million annually until the University reaches the target spending allocation of 2% of the Current Replacement Value of its buildings.

SECTION H – Academic Programs

- Dalhousie offers approximately 300 undergraduate and graduate degree programs and majors.
- Between 1990 and 2004 the Dalhousie Senate and Board of Governors considered and approved over 90 new programs and major modifications to existing programs, reflecting academic vibrancy and commitment to maintaining program currency and relevance.
- It must be recognized that in many cases the creation of new programs and the major modification of exiting programs is driven by the need to meet accreditation standards formulated by external agencies and employers.
- Given the University’s size and economic circumstances and prospects, how does the University evaluate whether the current number and mix of academic programs makes the optimal use of the institution’s human, physical and financial resources?
- How do the University and its Faculties decide that a new program is both socially required and financially viable? Can proposed new programs be evaluated and “ranked” relative to existing programs?
- Are existing programs reviewed periodically to ascertain their continuing academic, social and financial viability and utility?
- Former Vice-President Scully raised many of these same questions in his June 2006 paper Undergraduate Studies and Programs at Dalhousie.

Recommendations – Academic Programs:

That the University administration develop within 2 years, in consultation with the Senate and the Faculties, guidelines to evaluate the viability of new and existing academic programs. Such guidelines should take into account the limited size of Dalhousie enrolments.

SECTION I – Faculty and Staff

- Over the past decade there has been a significant increase in the numbers of faculty and staff employed at the University (see Appendix 6). Contributing factors to this rapid growth have included the merger with the former Technical University of Nova Scotia, a 42.4% increase in student enrolment, and the impact of federal initiatives such as the Canada Research Chairs and the Canadian Foundation for Innovation programs.
- Reflecting the concentration of students in graduate and professional programs at Dalhousie, with the more concentrated supervision and interaction usually associated with such programs, the student-faculty ratio at this University has continued to be the lowest amongst our comparator group of institutions. The ratios in 2003-04 were as follows:

| | |
|--------------|------|
| Dalhousie | 14.4 |
| Saskatchewan | 15.3 |
| Manitoba | 18.4 |
| Calgary | 18.5 |
| McMaster | 18.9 |
| Alberta | 19.9 |
| Western | 24.3 |
| Ottawa | 24.6 |
| Queen's | 25.3 |

- Even when student and faculty data for the very specialized programs in the Faculties of Medicine and Dentistry are removed from the analysis, Dalhousie's student-faculty ratio remains the lowest in the group, reflecting the relatively high graduate enrolments at this University:

| | |
|--------------|------|
| Dalhousie | 20.1 |
| Saskatchewan | 21.7 |
| Calgary | 21.7 |
| Alberta | 22.3 |
| Manitoba | 23.9 |
| Ottawa | 26.4 |
| Queen's | 29.2 |
| Western | 30.0 |
| McMaster | 31.3 |

- Lower student-faculty ratios translate directly into higher average costs per student, since faculty salaries and benefits constitute the largest single component of a university's operating expenditures. In data compiled for 2004-05 the operating expenditure per full-time equivalent student at Dalhousie University was \$18,799. The equivalent cost per FTE student at the comparator universities listed above was \$17,242 (ranging from a low of \$15,160 at Manitoba to a high of \$19,729 at Queen's). [sources: CAUBO Financial Information of Universities and Colleges 2004-05 and Maclean's.]

- The combination of high per student costs and low per student Government funding (see Section D on Government Operating Grants) creates great stress on tuition levels (see Section C on Tuition Policy) and on expenditures for other priority requirements. In 2004-05 (CAUBO/Stats Can data) the proportion of operating expenditures devoted to academic activities was high at Dalhousie (6.4% higher) leaving less resources for all other areas (10.7% less):

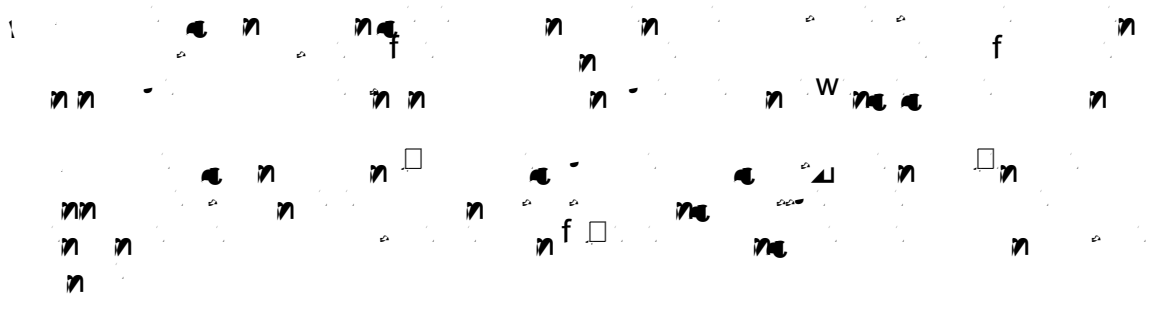
| | <u>Dalhousie</u> | <u>Comparators</u> |
|------------------|------------------|--------------------|
| Academic | 66.7% | 62.7% |
| Library | 4.6 | 5.6 |
| Computing | 3.5 | 3.6 |
| Admin/General | 7.9 | 9.9 |
| Student Services | 6.9 | 7.6 |
| Facilities | 10.4 | 10.6 |

- In the ten year period 2006 to 2015 there will be 324 faculty members who will reach the age of normal retirement, as well as 239 staff members. Dalhousie's future academic strength will very much depend on the quality of faculty to be recruited over the coming decade. The University will need to ensure that not only are faculty with the highest quality teaching and research skills recruited, but also that faculty are recruited into the right program areas (see Section H on Academic Programs), and in appropriate numbers given the financial challenges (see also Section B on Enrolment and Section D on Government Operating Grants) and the overall spending priorities (see Section G on Deferred Maintenance/Facilities Renewal, Section K on Pension Plan, and Section F on Student Assistance as well as comments above on areas of expenditure).
- Should Provincial legislation be amended so that mandatory retirement was no longer permissible, there would be serious fiscal consequences for the University. Representatives of the Board of Governors recently undertook a review of the implications of ending mandatory retirement (see Appendix 7) and they concluded that "The full costs of ending mandatory retirement cannot be predicted with accuracy, but would be substantial Inevitably these costs will limit the availability of resources to fund contract settlements or other issues of concern to younger members of the bargaining unit. ... It is not evident that the benefits gained by ending mandatory retirement outweigh the loss of an important planning mechanism and fiscal flexibility." An end to mandatory retirement would intensify the financial pressures on the University, increasing, absent other corrective actions, the proportion of overall expenditures devoted to Academic budgets.
- The Board of Governors' Academic Affairs Committee has reported elsewhere on activities concerning faculty member performance evaluations and guidelines for the annual review and assessment of academic staff members. The guidelines are framed in terms of the provisions and language of the Collective Agreement with the Dalhousie Faculty Association. The long-term success and reputation of the

University rests on the quality, performance and dedication to students of the faculty. It is essential that faculty members receive feedback and support for their career development and productivity.

Recommendations – Faculty and Staff:

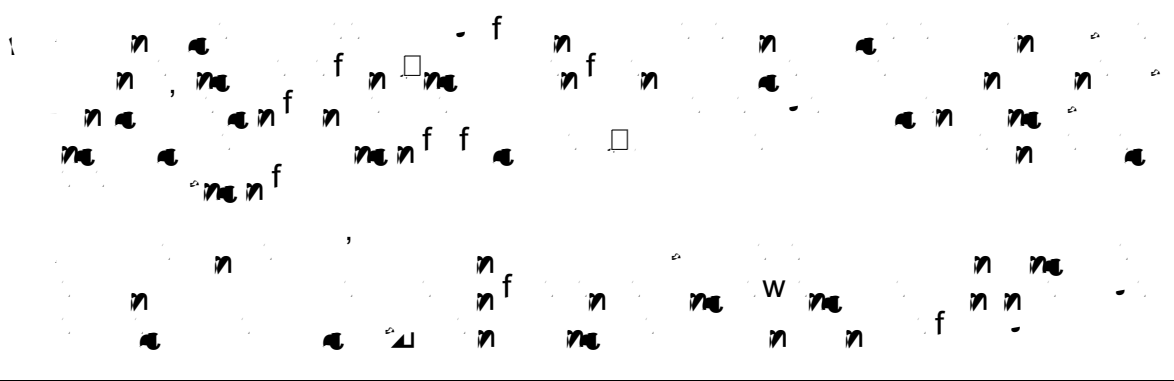
That faculty recruitment plans incorporate suitable mechanisms and targets to lead to a student-faculty ratio and a cost per full-time equivalent student which are closer to the norms for comparable Canadian universities.



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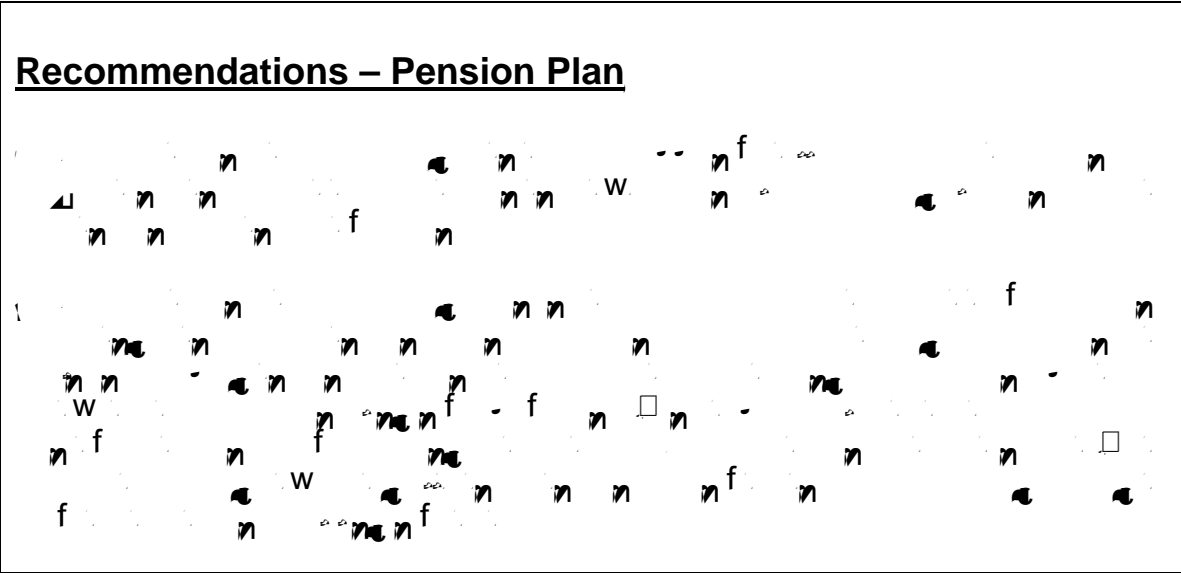
Recommendations – Research:

That the Dalhousie Board of Governors and senior administration work diligently to secure additional revenues to cover the indirect cost of research from Provincial and Federal Governments and from agencies and companies entering into research contracts with the University.



- Given both the structural differences in the Dalhousie Plan and risk reward imbalance inherent in DB plans, the actuary has concluded the Dalhousie Plan is subject to extreme volatility leading to potentially false indicators of both surplus

Recommendations – Pension Plan



SECTION L – Current Policies and Practices

- The Committee reviewed a great many policies, procedures and practices which have been developed over the years to provide a framework for sound financial

SECTION M – Enrolment Related Budget Allocations Policy

- The Enrolment Related Budget Allocations (ERBA) Policy has been a fundamental planning tool at Dalhousie since its introduction in 1989-90. ERBA provided Faculties with a financial incentive for enrolment growth, a disincentive for enrolment decline, and greater predictability for resourcing new programs. (More detail about ERBA can be found in Appendix 8.)
- Between 1989-90 and 2005-06 ERBA distributed over \$12 million in additional base budget allocations to the Faculties. Enrolment declines in 2005-06 has led to an overall reduction to Faculties' 2006-07 budgets of approximately \$0.5 million, but even this year six of the eleven Faculties received modest ERBA increases.
- To date ERBA has been used as a relatively blunt tool to encourage enrolment stability and growth. But given the comparatively higher concentration of Dalhousie enrolments in more expensive program areas (see Section B on Enrolment), it would be possible to refine the ERBA policy so that it rewarded growth in areas of greatest financial benefit to the overall University. A perhaps extreme example of such a refinement would be to retain the present ERBA policy for undergraduate enrolments and to freeze ERBA increases for further growth in the more expensive graduate and professional programs.

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|--|
| <u>Recommendations – Enrolment Related Budget Allocations Policy:</u> |
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The uncertain and contingent nature of the budget choices available to us has been highlighted recently by the Provincial Government's announced intention to introduce measures leading to lower tuition levels over time. Since no details of the Government's thinking have been unveiled, we can only project possible consequences of this development. For the past two decades, as the rate of real investments in university education by the Province has fallen, we compensated for revenue losses by raising tuition income from increased enrolments and increased fees. If our flexibility around fees is constrained, and if enrolment levels across the region fall, as they did this year, our budget options will be severely reduced. On the other hand, the Province also has indicated that tuition fee reductions will be matched by rising government operating grants. If the grants match lost tuition revenue and rising operational costs, we will be no worse off financially. However, over the long term one must make a bold assumption in this scenario that year after year the Provincial government will honour its original commitment to replace lost tuition revenue and finance rising costs. The costs of such a promise are substantial as we noted in Section E of this report: to reduce student fees by 10% and cover a 5% growth in university operating costs would require an 18% increase in the Provincial operating grant to Dalhousie. A skeptic familiar with the history of Nova Scotia would probably raise at least a note of caution about trusting such promises fully. How then do we model a five or ten year projection of the University's budget when we cannot even predict with comfort our two major sources of funding?

The problem is equally great on the cost side of the equation. As the Committee noted elsewhere, Dalhousie spends a greater share of our operating budget on Academic units (66.7%) than comparator universities across the country (62.7%). This is largely a function of our spending on faculty salaries. This item, of course, is a calculation based on the number of professors and their mix of age and salary rates. Given Dalhousie's focus on academic excellence, in a highly competitive academic labour market how realistic or desirable is it to assume that salary rates will fall? What would happen if mandatory retirement was abolished? On the other hand, if the number of faculty declined, what does that portend for class sizes, the amount of informal contact between professors and students outside the classroom, or our research profile? Will such changes ultimately impact on our ability to attract students, and if so, what does this do to our revenue projections? This is not to suggest that these are not valid policy options or questions worth further analysis, but rather to indicate that modeling such changes without understanding their implications for other aspects of the university's operations may lead to unrealistic assumptions about other parts of our budget.

Finally, we offer a word on risks that could imperil our assumptions. Because of our capacity to adjust to change, we can cope with many risks. However, should the government revert to major reductions in the real funding available to the university, as was the case on several occasions over the past two decades, or should enrolments drop precipitously, as experienced at other universities in the region, our ability to manage such changes in the short run would be seriously compromised. Similarly, in the event that we faced a major systems failure in our physical plant or the closure of a major building as a result of the continuing deficiencies in ongoing maintenance needs, the financial and operational consequences would also be serious. We believe that Dalhousie accounts for such risks as well as possible in our budget and operational planning and

that the magnitude of such risks is realistically balanced against their likelihood. In an uncertain environment, however, these elements also make long-term financial modeling very difficult.

The conclusion which we have drawn from our detailed discussions of each of these variables, beyond their complexity, is that each admits of a range of variations and policy options. The budget discussions at Dalhousie and the academic plans that feed into and flow from those discussions are dynamic. The status quo is not our only future. Options and choices always remain. Putting it another way, in the face of external pressures or new internal priorities, we have measured flexibility and we also have the capacity, as we have long demonstrated, to make adjustments, some small, some large (especially over time), that still fall within our mandate to produce a balanced budget and meet our academic objectives. As we look forward over the next decade, armed with the knowledge that we have gained from our extended study of the major factors influencing Dalhousie's finances, we are comfortable that the University can cope with and retains the ability to change as required or desired.

SECTION P – SUMMARY of RECOMMENDATIONS

The Long Term Financial Planning Committee believes that these recommendations will contribute to the stable financial environment which must underpin and support academic performance that is student-centered, research-intensive, of the highest quality, and serves our society's social, economic and cultural needs.

view to achieving an appropriate balance between revenues and costs, and that in this context, the situation of international students continue to be examined. [see Section C]

9. That the Dalhousie Board of Governors and senior administration work diligently to secure additional revenues to cover the indirect cost of research from Provincial and Federal Governments and from agencies and companies entering into research contracts with the University. [see Section J]

II. Summary of All Recommendations

Section B Recommendations – Enrolment:

- 1. That the University must emphasize in its plans and activities enrolment stability and enrolment growth in order to secure its financial future, and in doing so it must identify strategies and mechanisms to increase significantly the proportion of students enrolled in lower cost programs.**
2. That the University continue to evaluate carefully its stated enrolment target of 17,000 by 2010-2011 in terms of its reasonableness and having due regard for the relevant recommendations contained in this report.
3. That the Administration review, in consultation with the Budget Advisory Committee, the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University. (Note : This recommendation also appears in Section M on ERBA Policy.)
4. That the University set a target for graduate enrolment which better balances Dalhousie's traditional strengths in post-graduate education with the proportionate size of graduate enrolments at comparable universities. This target should be achieved by concentrating on undergraduate enrolment growth.
5. That the Board of Governors receive regular reports on the use and effectiveness of increased resources which have been and will be allocated for marketing and recruitment activities and for improved financial assistance.
6. That the University develop the business case for additional investments in international student recruitment and financial support for both the undergraduate

that the Dalhousie Faculty of Engineering can be internationally competitive and can meet the Province's science and technology objectives.

Section C Recommendations – Tuition Policy:

1. That the Board of Governors reaffirm the following Tuition Fee Policy:

Tuition fees will be set based on the following factors:

**the relative costs of offering a program;
the economic prospects/earnings potential of program graduates;
fees charged for similar programs at other Canadian universities;
demand for the program and the impact of existing fees on enrolment; and,
the availability of student assistance support.**

- 2. That the University monitor carefully the relationship between student fees and student enrolment to ensure that fee levels are not an impediment to the recruitment and retention of the desired number of students in the desired program areas, with a view to achieving an appropriate balance between revenues and costs, and that in this context, the situation of international students continue to be examined.**
3. That the Budget Advisory Committee continue to consult broadly on any proposed fee increases prior to Board consideration.
4. That the cross-subsidization of Faculty budgets be taken into account when tuition fees are adjusted; in the alternative consideration should be given to some reduction in budget allocations to such Faculties.

Section D Recommendations – Government Operating Grants:

- 1. That the University work closely with the other universities and the Provincial Government to ensure that any Provincial initiative to reduce the cost burden for students through lower tuition levels will not result in any reduction in the universities' total revenues.**
2. That the Board of Governors and the President should work with counterparts at the other provincial universities to secure the Government's commitment to

increase university funding per FTE student to the national average within five years.

3. That the University pursue changes in the operating grants formula so that the actual costs of offering professional programs in Medicine, Law and Dentistry and the true costs of indirect support services for both teaching and research activities in all programs are better recognized.

Section E Recommendations – Fund Raising and Endowments:

1. That the University continue to recognize the centrality of strong and successful fund raising programs actively supported by the Board of Governors and all members of the Dalhousie community.
2. That the University establish an aggressive fund raising target for the next decade which reflects the national stature of Dalhousie.
3. That fund raising for endowment purposes be given the highest priority.
4. That fund raising campaigns for future capital projects include a component to establish endowments to be used to support ongoing maintenance of the new buildings. The endowed amount should be equal to at least 10% of the construction cost of the project. (Note: This recommendation appears also in Section G on Deferred Maintenance/Facilities Renewal, where the rationale is discussed.)

Section F Recommendations – Student Assistance:

1. That the Board of Governors and the Administration join with student leaders to press the Provincial Government to increase access of Nova Scotians who wish to attend university or college, through measures such as increased grants within the student loan system and increased needs-based assistance.
2. That Dalhousie continue its long-held and strong commitment to a robust student assistance program.
3. That Dalhousie's current allocations of Operating Fund support for student scholarships, bursaries and employment be maintained or modestly increased over the coming years; given the array of competing financial pressures any significant increase is unlikely to be affordable.
4. That the Administration undertake a review of the distribution of available student assistance funds among scholarship, bursary and employment categories to ensure that the program mix best serves the needs both of students and of the University's goal of attracting academically superior students.

intensify current efforts to secure Provincial and Federal



Section I Recommendations – Faculty and Staff:

- 1. That faculty recruitment plans incorporate suitable mechanisms and targets to lead to a student-faculty ratio and a cost per full-time equivalent student which are closer to the norms for comparable Canadian universities.**
2. That the Administration develop plans to ensure that future faculty recruitment attracts faculty of the highest quality into the most appropriate program areas in numbers which are financially sustainable over an extended time horizon.
3. That the Administration, supported by the Board of Governors, ensure that annual performance evaluations for faculty and staff become a positive tool to enhance the quality of the teaching, research and service missions of the University.

Section J Recommendations – Research:

- 1. That the Dalhousie Board of Governors and senior administration work diligently to secure additional revenues to cover the indirect cost of research from Provincial and Federal Governments and from agencies and companies entering into research contracts with the University.**
2. That in order to meet its obligations to the economic development of the Province and the region, and to strengthen its academic reputation as one of Canada's leading universities that attracts the very best students and faculty and produces outstanding graduates, Dalhousie must pursue increased research funding.
3. That the University's costs in support of its research mission and their relationship with other operating revenues and expenditures continue to be reported to the Board of Governors and the community on a regular basis.

Section K Recommendations – Pension Plan:

1. That the University should renew its lobbying efforts with the Provincial Government to seek a permanent exemption from or modification to the Pension Solvency regulations.
2. That the University should continue to work with employee groups on amendments to Pension Plan provisions which place a disproportionate financial burden on the University as employer and which contribute to extreme volatility in funding obligations, since both of these results impact negatively on programs and services at Dalhousie. In the alternative, the parties should explore different Pension arrangements which would provide greater certainty of funding levels.

Section L Recommendations – Current Policies and Practice:

1. **That operating budgets be balanced.**
2. That there be no new “unfunded” capital debt and capital project approvals be based on plans for full funding (which may include borrowing with an approved repayment schedule).
3. That the University continue to utilize an open and participatory budgeting system which :
 - recognizes existing and new priorities and the needs of all areas of the University;
 - minimizes year-over-year fluctuations;
 - provides incentive for revenue generation;
 - supports local decision-making and flexibility within a policy framework that relies on fiscal accountability; and,
 - is integrated with human resource planning

(It should be noted that Dalhousie’s budget process has been recognized as a “best practice” by the Nova Scotia Auditor General.)

4. That the current program of Strategic Initiatives continue to be funded.

Section M Recommendations – Enrolment Related Budget Allocations Policy:

1. That the ERBA policy be retained as a budget planning tool.
2. That the University administration review within two years, in consultation with the Budget Advisory Committee, the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University. (Note : This recommendation also appears in Section B on Enrolment.)

**Dalhousie University
2005/2006 Undergraduate Arts Tuition Fees - Atlantic Universities**

| Institution | 2005/2006 Tuition | 2006/2007 Tuition |
|---|----------------------|----------------------|
| St. Mary's University | \$ 1,000 | \$ 1,000 |
| St. Thomas University | \$ 1,000 | \$ 1,000 |
| University of New Brunswick | \$ 1,000 | \$ 1,000 |
| Dalhousie | 5,820 | 6,510 |
| University of Prince Edward Island | \$ 1,000 | \$ 1,000 |
| University of the Maritimes | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Saint John) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Saint-Sauveur) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Sackville) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Shediac) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Fredericton) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Miramichi) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Moncton) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Saint John) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Saint-Sauveur) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Sackville) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Shediac) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Fredericton) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Miramichi) | \$ 1,000 | \$ 1,000 |
| University of New Brunswick (Moncton) | \$ 1,000 | \$ 1,000 |

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Enrolment unit calculations are based on enrolment data at August 1, December 1 and March 1.

- ERBA is calculated at the Faculty level. ERBA allocations are not disaggregated to the level of schools and departments.
- For undergraduate classes cross-listed across Faculties, the Faculty (or Faculties) which pay the instructor is credited with the undergraduate class registrations.
- Enrolment in College of Continuing Education, the DDS programs in the Faculty of Dentistry, the MD and residency programs in the Faculty of Medicine, certain distance education classes, and all premium fee programs (e.g. the MBA, Financial Services) are not included in ERBA.
- The annual budget adjustments are permanent changes to the budget envelope of the Faculties. They are calculated by multiplying the change in enrolment units (positive or negative) by the Faculty ERBA value.

The ERBA value is intended to be a proxy for tuition of a full-time student. The ERBA value for each Faculty was determined by reviewing the 2001-02 tuition fees for the various programs offered by the Faculty. Subsequent to 2001-02, the ERBA values have been adjusted annually by the fee increase approved by the Board of Governors.

- Until 1995/96, the ERBA mechanism valued enrolment units at 50% of the ERBA value (i.e. 50% of tuition). As a result of an amendment to the policy the full ERBA value was used for changes between 1996 and 2002-03. In 2003-04 as a result of a BAC recommendation, Faculties now receive 50% of the ERBA value.