

Board of Governors

Report of the Long Term Financial Planning Committee

15 November 2006



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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.

In addition to its specific Terms of Reference, the Committee was guided by the University's Vision Statement:

Advancing provincial and regional development by offering a diverse student body of 17,500 to 20,000 an outstanding personal experience at a national university built around an excellent learning environment, acclaimed research strengths, broad program choices and successful career preparation in cooperation with supportive external stakeholders.

Dalhousie is uniquely situated in Atlantic Canada to serve the needs of the region's people of all ages and its economic, social and cultural future.

For the past one-and-a-half decades the University's financial strategies and budget planning have been developed within the perspectives set forth by the Board's Financial Strategy Committee (FSC) which reported its conclusions and recommendations in 1990. Members of the FSC faced very different circumstances and challenges than those before Dalhousie today. In the late 1980s the University enrolled 10,320 students, had an operating budget of \$106.4 million and research revenues of \$28 million, was struggling with \$33.4 million in "unfunded" capital debt and accumulated operating deficits (with annual carrying charges of \$3.8 million), was just emerging from a six-year period of a self-imposed cap on tuition fee increases, was experiencing a rapid decline in its constant dollar Government grant per student, and was expending Endowment revenues at a rate which was depleting Endowment principal.

By contrast, Dalhousie enrolled 15,549 students in 2005-06, had an operating budget of \$228.6 million and research revenues of \$82 million, had retired all of its problem debt, earned \$3.3 million on its positive cash flow (net \$2.1 million after credit card charges, etc.), and is in the midst of a three-year Memorandum of Understanding with the Provincial Government which will see Government funding increase by a total of 15.5% and tuition fee increases limited to 3.9% per annum for most programs. Endowment spending has been brought under control so that Endowment principal is protected against inflation. Endowment principal has grown from \$100 million at the time of the FSC Report to \$331 million at March 2006.

So what are the circumstances and challenges which will impinge on the University's financial stability over the next five to ten years? Reports from many Dalhousie

committees (including Enrolment Management, Budget Advisory, and the Board's Ad Hoc Committee on Facilities Renewal Strategy) as well as numerous communiqués from the President and Vice-Presidents over the past five-to-six years have identified many of these challenges, including :

- Enrolment grew by 3050 (24%) between 2000 and 2004, then declined by 265 in 2005 and is projected to decline further in 2006 before it is projected to stabilize. Declining tuition revenues put significant pressures on the operating budget, and the financial stability of units such as Student Housing is threatened by lower enrolments. Will the current enrolment projections be achieved, and if not what are the consequences?
- Dalhousie is by far the smallest university in Canada offering a full range of graduate and professional programs and pursuing an aggressive research agenda. Dalhousie students are concentrated in high-cost programs, which in turn results in the lowest student/faculty ratio (i.e. higher per student costs) among our peer institutions. Can this situation be maintained?
- Some programs, some Departments and some Faculties generate more revenue than they cost to operate, while others generate less revenue than needed and hence must be subsidized. There are numerous reasons behind the need for cross-subsidies, including Government funding policies, enrolment levels, program mix (e.g. graduate versus undergraduate), research intensity, historical patterns, etc. Periodically it is appropriate to examine the nature and extent of these cross-subsidies and determine whether some movement towards greater self-sufficiency would be in order.
- Tuition fees at Dalhousie are at or amongst the highest in Canada for most programs. Can enrolment targets be achieved in these circumstances? What degree of responsibility does the University have to ensure accessibility by students with lesser personal resources, and how should financial assistance be administered to meet the needs of both prospective students and the University itself?
- While Provincial operating grants are rising at the present time, Nova Scotia's funding per university student remains the lowest amongst Canadian provinces. What can the University do to influence this situation?
- In common with other North American universities, and most public and quasi-public institutions, Dalhousie is faced with a looming and overwhelming backlog of facilities maintenance issues. For decades universities, faced with voracious operating demands, have "lived off their capital", making intensive use of physical facilities which were new in the 1960s, 1970s and 1980s but reinvesting very little in their infrastructure and maintenance. The most recent Association of Atlantic Universities study (2006) estimates the cost to renew and restore Dalhousie's physical plant at \$192 million (excluding student residences).

- 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 carefully examined numerous reports and analyses both from within Dalhousie and from external bodies such as Stats Can, the Canadian Association of University Business Officers, government documents and research papers prepared by independent agencies, has interviewed senior officials with special expertise, and has discussed and debated at length. Based on this work the Committee has identified a number of themes it wished to develop. The body of the report consists of brief commentaries on the themes followed by some recommendations. In all the Committee has made 9 strategic and 32 supporting recommendations. (Strategic recommendations are bolded in the text.)

Although this report focuses on the internal management of the University's finances, many issues bear on public policy. The Board of Governors is a steward of a "public trust" focused on the importance of higher education and its mission at Dalhousie of learning, discovery and innovation, and engagement with society's concerns and needs. In Nova Scotia, this is a particularly urgent issue. Given the economic and social challenges that lay ahead of us, Dalhousie has a unique capacity to produce the highly qualified graduates and the innovations based on research that are essential to building and maintaining a successful society in a global knowledge economy. The rest of the world recognizes clearly that higher education is a cornerstone for success and is investing and developing their capacities accordingly. We will not build a thriving society in Nova Scotia without a thriving higher education system.

The Committee presents its findings to the Board of Governors and the broader University Community in the hope that they will contribute to the "stable financial environment" which must underpin and support academic performance which is student-centred, research-intensive, of the highest quality, and serves the development and other needs of our society.

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

	<u>Comparator Group</u>	<u>Dalhousie</u>
Low Cost	29.4%	17.3%
Undergraduate Arts and Social Sciences (excludes Performing Arts)		
High Cost		
All Graduate Students	14.8%	21.1%
Medical/Professional	24.2%	33.1%
TOTAL HIGH COST	39.0%	54.2%

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

- 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,
- a requirement for access to expensive equipment and/or facilities (e.g. wet labs or music instruction facilities).

- The proportion of Dalhousie students enrolled in higher cost graduate programs has been increasing, even during the “double-cohort” undergraduate growth spurt.

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:

- 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 and graduate levels.
7. That the Board of Governors and the Administration work diligently to resolve the anomalous situation with respect to Engineering education in Nova Scotia so that the Dalhousie Faculty of Engineering can be internationally competitive and can meet the Province's science and technology objectives.

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.**

- 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 – 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:

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 – 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 carries ongoing operating costs which the University will incur for many years. Gifts which may be superficially attractive but will divert and/or drain resources over the longer term should be adapted so as to eliminate negative consequences.
- Dalhousie is a major Canadian university with enviable credentials and aggressive aspirations. To a great degree its achievements in the areas of research and graduate studies have been founded on the strength of its endowments and the vision of its donors. Maintaining and enhancing its levels of achievement in these areas over the coming decades to a very large degree will be based on growth in the endowments.
- In 1996 Dalhousie's endowments at \$185 million were the 5th largest among all Canadian universities. By December 2005 the University, with \$321 million, ranked only 8th in terms of size of endowment. This relative decline was not the result of poor investment performance (over the past 10 years Dalhousie's endowments have been among the top performers in the country with a strong 1st Quartile ranking). Rather, other universities have attracted more new donations to their endowment funds. A survey of 18 universities covering the four-year period from 2000 to 2004 showed that the Dalhousie endowments ranked 4th for investment performance but were tied for 16th place in terms of new gifts. In calendar year 2005 Dalhousie's \$5.8 million in new endowment gifts placed it in 14th position in the group.

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 – 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. and Quebec) had tuition freezes in place during most of the period in question. Based on the evidence here, this tuition policy has done little to increase participation, although it may have played a role in increasing participation amongst students from lower income groups... ."

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.
5. That the University's communications with prospective students provide them with a full appreciation of the range of financial supports available during their first year at Dalhousie and beyond.
6. That the concept of "academic bursaries" be explored to provide prospective students who have been awarded an entrance scholarship with access to a supplemental bursary should the full cost of attending Dalhousie continue to be a disincentive; in this way academically superior students in financial need could be successfully recruited.
7. That care be taken with any assumption that research grant holders can increase significantly their support for 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 universities.” The Report calculated that Dalhousie’s 3.4 million GSF (student residences excluded) had a Current Replacement Value (CRV) of \$1.1 billion and had accumulated Deferred Maintenance estimated to be \$192 million. As one member of the Long Term Financial Planning Committee has commented, deferred maintenance is the “elephant in the room” for Dalhousie. It represents the major single longer-term threat to the financial stability of the University.
- In 2001-02 Dalhousie spent \$2.6 million on facilities renewal expenditures. By 2005-06 spending had been tripled to \$7.8 million.
- The Facilities Renewal Strategy Committee recommended that the University should be spending on an annual basis at least 2% of CRV on renewal. The

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.

- Some U.S. universities have a policy whereby a new capital project must be accompanied by a new endowment sufficient to pay for the ongoing maintenance costs of the new building. In rough terms this means that a \$20 million building (maintenance at 2% equals \$400,000 p.a.) requires an \$8 million endowment (assuming a 5% return for spending). The Committee believes that such a strict policy would be too onerous in the Canadian context, and likely would prohibit necessary new construction. At the same time, the Committee feels that some level of additional fund raising to establish an endowment to assist with the necessary maintenance would be an achievable target.

Recommendations – Deferred Maintenance/Facilities Renewal:

1. 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.
2. 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 E on Fund Raising and Endowments.)
3. That the University administration develop a plan for consideration by the Board of Governors for the use of long-term debt instruments, with appropriate sinking funds to fully retire the debt when due, in order to address the most crucial facilities renewal needs, i.e. those items which have the potential to make major buildings or building components unusable.

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:

- 1. 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:

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 – Research

- Dalhousie is a research intensive University. Research funding at this University represents approximately 80% of the total funded research carried out at all 11 Nova Scotian universities (CAUBO: 2004-05), and approximately half (MPHEC: R&D Funding in Atlantic Universities – November 2005) of all research done in this Province by both public and private sector organizations.
- Between 1994-95 and 2004-05, funded research at Dalhousie grew from \$38.1 million to \$90.1 million. The Faculties of Medicine (\$29.4 million), Science (\$28.2 million) and Engineering (\$10.8 million) were the major recipients of research grants and contracts.
- Using research funding as a percentage of operating budget to provide a proxy for research intensity, Dalhousie would rank at the lower end of the intensity scale among Canada’s medical/doctoral universities. Dalhousie’s 32.2% (2003-04 data) would compare with Ottawa (29.6%), UWO (32.3%), Manitoba (32.4%), Saskatchewan (39.1%) and, interestingly, even UofT (37.7%). The top tier would include Queen’s (49.5%), McMaster (52.5%), UBC (59.4%), Calgary (62.8%) and Alberta (65.2%).
- In order to support \$90.1 million in externally funded research in 2004-05 Dalhousie spent \$23.8 million to provide facilities, basic resources (e.g. libraries, IT services), management and administration, regulatory and accreditation compliance, and intellectual property supports. Of the \$23.8 million in expenditures Dalhousie received \$15.2 million in various forms of indirect cost revenues, leaving \$8.6 million to be subsidized out of general revenues.
- In addition to the \$23.8 million indirect cost noted above, Dalhousie also paid for the very significant amount of faculty time devoted to carrying out research activities. While no study of actual distribution of faculty work-load into its component parts of teaching, research, administration and service has been carried out, it is understood generally that in medical/doctoral universities faculty normally will devote 40% of their work time to research. Using that proportion, the estimated cost of research for faculty salary and benefits would be \$43 million. Thus the total annual cost of pursuing Dalhousie’s research mission is approximately \$67 million, which must be borne by the operating budget. Net of the recovery of indirect cost revenues, the required commitment is in excess of \$50 million per year.

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 – Pension Plan

- Dalhousie’s Defined Benefit Pension Plan provides employees with attractive and secure retirement income. These are desirable objectives. However, from the employer’s perspective there are certain features of the Plan which result in the University taking a disproportionate share of funding risk and in the funding requirements of the Plan being quite volatile.
- Three structural issues have been identified :
 1. The Dalhousie Plan, while being a Defined Benefit (DB) plan, has adopted a Defined Contribution (DC) approach to crediting interest on employee contributions.
 - In effect, Dal employees who resign receive investment earnings some of which in most DB plans are available to pay for basic pension entitlements. Most DB plans credit a GIC rate of return;
 2. The Dalhousie Plan, while being a DB plan, has adopted a DC approach to calculating termination benefits available prior to normal retirement.
 - Dal employees who leave the plan prior to retirement may withdraw all their contributions, all the University’s matching contributions on their behalf, and all earnings on both these sums (the DC model) rather than receiving a lump sum equal to the amount required to purchase the pension which they have earned (i.e. the “commuted value”) which most other DB plans provide; and,
 3. The Dalhousie Plan, while being a DB plan, has adopted a DC approach to allowing employees who are pension eligible the opportunity to remove lump-sum amounts from the Plan within 10 years of age 65.
 - DB plans almost always require employees who are terminating within 10 years of retirement to accept a pension, either immediately or on a deferred basis.
- A recent report from the Association of Canadian Pension Management – Back from the Brink: Securing the Future of Defined Benefit Pension Plans refers to what it calls the asymmetry of defined benefit plans which it defines as the mismatch between risk and reward – “a plan sponsor ... is responsible for the ultimate funding of pension benefits, the cost of which may be offset by fixed employee contributions; is usually responsible for funding shortfalls, but is prevented or severely constrained from access to or use of any excess (surplus) funds in the plan other than using it toward benefit improvements”. At Dalhousie, Fund surpluses have been shared between the employees and the University while deficits are borne solely by the University. Over time the Operating Fund must provide higher than expected contributions to the Pension Fund, and the level of contributions are overly volatile.

- 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 and unfunded liability (i.e. deficit) and to potentially large swings from one to the other.

[Please note : The Board of Governors has received several reports on these issues, including ones dated 12 December 2003 and 22 March 2005. The University Senate most recently received a briefing on 23 January 2006.]

- The Plan features described above, in combination with the severe downturn in investment market performance earlier in this decade, have resulted in a precipitous rise in required University contributions to the Pension Fund, from 6.1% of payroll in 2000 to 11.27% in 2005 (\$7.4 million in 2000 to \$17.4 million in 2005; of this \$10 million increase about \$2 million was due to growth in the University's payroll.). These extra millions of dollars have been found by diverting funds from other University priorities, thereby disadvantaging students, faculty and staff.
- In common with other DB Plans, Dalhousie is impacted also by Provincial regulations which require that a solvency test be carried out periodically. The test hypothesizes that the Plan is being wound up immediately, assumes that all Plan assets earn a combination of annuity and Government of Canada bond rates, and then determines if there is a solvency surplus or deficit. If this test shows that a hypothetical deficit exists, the University is required to make additional contributions to the Pension Fund so that the "deficit" is retired in 5 years. In the past, aggressive lobbying led by Dalhousie resulted in the Province amending the regulations for any solvency deficit incurred prior to 1 January 2006 (thereby providing for a more reasonable 15 year amortization period).
- It is important to view the current overmatching burden (i.e. the requirement for the University to make contributions in excess of employee contributions) within a longer-term framework. In the 20-year period 1986-2005 there were 4 years out of 20 in which the Operating Budget had to pay for overmatching, for a total cost of \$20,311,000. For 15 of these years the University was able to avoid overmatching contributions needed to meet current service costs by drawing upon excess Plan earnings of \$29,313,000. In addition, during the two contribution reduction agreements in the 1990's the Board took advantage of Plan surplus and made reduced contributions, saving the Operating Budget \$34,712,000. Thus over the 20 years, the University avoided about \$64,000,000 in Plan contributions in the "good years" and had to make \$20,311,000 in extra contributions in the "bad years". However, the requirement to overmatch is continuing in 2006 and perhaps for some time to come.

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 – 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 management of the institution. In other Sections of this Report the Committee has made recommendations on new policies and on changes to some existing ones.
- In a number of areas the Committee concluded that present practice should continue, but felt strongly that certain items were of sufficient importance that they should be addressed directly in this Report.

Recommendations – Current Policies and Practices:

- 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 – 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.

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.)

Section N - Budget Scenarios

The preceding sections have identified the key elements that will drive our financial – and hence our academic – future and have recommended a number of positive steps to ensure our future institutional sustainability. It is important to appreciate that these elements interact with one another in dynamic and complex ways which ultimately are contained and focused through the University’s annual budget process. Inevitably, this involves difficult choices.

The Committee was charged to “develop multi-year budget scenarios on the basis of alternative levels of enrolments, program mixes, and levels of research intensity.” In fact, the list of important contingent variables is substantially longer. In particular, the level of government grants, enrolment levels, tuition levels, other revenues such as interest and ancillary income, faculty and staff compensation levels, pension contribution costs, inflation rates for non-salary items such as energy, student assistance allocations, facilities renewal commitments, as well as program mix and research intensity levels at the university all contribute significantly to the range of possible budget scenarios depending upon the assumptions made in each case. With such a complex mix of factors, the number of scenario options run to the thousands. Ultimately, after reviewing a number of basic models that held a large number of important variables constant, the Committee concluded that little would be gained by running, much less printing, the full series of possible scenarios.

Nevertheless, the Committee does feel able to discuss the interplay between a few major variables to give the Board a sense of the possible budget futures available to us. Indeed, it is extremely important for anyone interested in the University’s budget to appreciate both the complexity of our situation and the wide-ranging consequences of changing important assumptions or real practices at Dalhousie. This is not to say that change is not necessary or highly desirable in some cases. We have indicated strongly that some changes are required. It is to say, however, that there are no simple solutions that guarantee our financial future and certainly no solutions to one problem that do not create other kinds of issues which may be even worse than the initial concern.

It must be stated at the outset that the Committee proceeded upon one fundamental assumption in every case: the university operating budget must be balanced whatever range of budget priorities are adopted. The importance of this assumption cannot be overstated for planning purposes. In practice it means that Dalhousie is committed to making budgetary adjustments as necessary in all of its important expenditure areas in order to produce a balanced budget. We have followed this path for the past nineteen years with the result that Dalhousie now looks upon an uncertain environment from a position of strength rather than financial and institutional weakness. This certainly vindicates the advice of the 1990 Report of the Board of Governor’s Financial Strategies Committee.

Within the parameters of balancing the Operating Budget the University, for several years now, has increased its investment in areas of strategic importance, and the identification and funding of such Strategic Initiatives will continue to be a distinct component of future budgets.

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 O – Concluding Remarks

The Long-Term Financial Planning Committee has delved deeply and broadly over the past year into all material aspects of Dalhousie’s finances. Committee members were struck with the complexity and nuanced nature both of individual factors and of the interrelationships among factors.

The nine strategic and over 30 operational recommendations the Committee has put forward represent our “conclusions” about a very wide range of issues. If these recommendations are implemented wisely and flexibly the Committee believes that Dalhousie University can continue to achieve academic performance of the highest quality within a stable and viable financial environment through the next decade and beyond.

In its 1990 Report the Board of Governor’s Financial Strategies Committee concluded that there was “No Single Solution” to the problems and troubles then facing the University. In our very difficult circumstances today, but in a similar vein, the Committee has concluded that there is no single path forward which can or should be prescribed for the next five-to-ten year journey. There simply are too many discreet variables influencing Dalhousie’s future development for any individual or group, no matter how wise or learned, to chart such a course. Rather, the leadership within the University, with the support and guidance of the Board of Governors and the Senate, must retain a firm fix on Dalhousie’s strategic direction while adjusting tactics in response to the ever changing realities of enrolment demands, program requirements, research opportunities, government priorities, fund raising developments, and a myriad of others.

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.

I. Summary of Strategic Recommendations

1. That the University work closely with the other universities and the Provincial Government to ensure that the true cost implications of transferring a portion of the cost burden from individual students to the Province, as illustrated above, are recognized and assured. [see Section D]
2. That operating budgets be balanced. [see Section L]
3. That the University identify strategies and mechanisms to increase significantly the proportion of students enrolled in lower cost programs. [see Section B]
4. That faculty recruitment plans incorporate suitable mechanisms and targets to lead to a student-faculty ratio and cost per full-time equivalent student which are closer to the norms for comparable Canadian universities. [see Section I]
5. That the University Administration develop within two 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. [see Section H]
6. 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 crisis at Dalhousie and other universities. [see Section G]. 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. [see Section G]
7. 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. [see Section C]
8. 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. [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 and graduate levels.
7. That the Board of Governors and the Administration work diligently to resolve the anomalous situation with respect to Engineering education in Nova Scotia so

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.

5. That the University's communications with prospective students provide them with a full appreciation of the range of financial supports available during their first year at Dalhousie and beyond.
6. That the concept of "academic bursaries" be explored to provide prospective students who have been awarded an entrance scholarship with access to a supplemental bursary should the full cost of attending Dalhousie continue to be a disincentive; in this way academically superior students in financial need could be successfully recruited.
7. That care be taken with any assumption that research grant holders can increase significantly their support for student assistance.

Section G Recommendations – Deferred Maintenance/Facilities Renewal:

- 1. 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**
2. 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 E on Fund Raising and Endowments.)
3. That the University administration develop a plan for consideration by the Board of Governors for the use of long-term debt instruments, with appropriate sinking funds to fully retire the debt when due, in order to address the most crucial facilities renewal needs, i.e. those items which have the potential to make major buildings or building components unusable.

Section H Recommendations – Academic Programs:

- 1. 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 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.)

Board of Governors

Long-Term Financial Planning Committee

Terms of Reference

1. Review in detail all aspects of Dalhousie's finances, including the Operating, Endowment, Ancillary, Capital, Special Purpose and Research Funds;
2. Examine the University's financial profile including the balance between public and private (including student fees) funding, in the context of comparable Canadian universities;
3. Review the Board's Tuition Fee Policy;
4. Secure whatever advice, internal or external to the University, that may be necessary for its work;
5. Develop multi-year scenarios on the basis of alternative levels of enrolments, program mixes, and levels of research intensity;
6. Prepare a report and recommendations on the University's strategic financial options which will support academic excellence within a stable and sustainable fiscal framework.

Long-Term Financial Planning Committee
(2005-2006)

Membership:

Jim Spatz – Chair
Elizabeth Beale
Bill Black (until October 2005)
Robert Chisholm
Ezra Edelstein
Sunny Marche
Robert Radchuck
Al Sinclair
Tom Traves

Committee Secretariat:

Bryan Mason, Vice-President (Finance & Administration)
Ian Nason, Assistant Vice-President (Financial Services)
Susan Zinck, Associate Director (Financial Services)
Elizabeth Lane, Director, Institutional Analysis and Research
Jane O'Connor, Secretary, Board of Governors

APPENDIX 2

Survey of Tuition fees for Entering students at Selected Canadian Universities
2005-2006 Academic Year

	Dalhousie	Victoria	UBC (1)	Alberta (2)	Calgary (2)	U Sask (2)	Manitoba (4)	McMaster (5)	Western (6,8)	Windsor (8)	Toronto (5)	York (8)	Queens (8)	Ottawa (10,15)	McGill (15)	UNB	Memorial	Dalhousie Ranking	
UNDERGRADUATE																			
Arts	5,820	4,325	4,092	4,798	4,860	4,380	3,000	4,133	4,140	4,084	4,185	4,184	4,193	4,261	4,651	5,008	2,550	1	
Dental Hygiene	7,248	--	4,502	6,316	--	--	5,995	--	--	--	--	--	--	--	--	--	--	1	
Engineering	6,800	4,799	4,911	5,117	4,860	4,950	3,120	4,883	5,950	4,606	7,000	4,184	6,760	5,325	4,651	5,701	2,550	3	
Management	5,850	5,932	4,365	4,798	4,860	6,000	4,020	4,526	18,000	4,232	4,185	4,184	4,612	4,261	4,651	5,008	2,550	4	
Nursing	6,780	4,325	4,092	6,387	4,860	4,850	3,660	4,133	4,140	4,084	5,616	4,184	4,193	4,261	4,651	5,008	2,550	1	
Pharmacy	8,352	--	7,642	4,798	--	6,180	3,990	--	--	--	9,840	--	--	--	--	--	4,050	2	
Science	6,800	4,325	4,502	4,798	4,860	4,560	3,540	4,133	4,140	4,084	4,185	4,184	4,193	4,261	4,651	5,008	2,550	1	
Social Work	6,420	4,325	4,092	--	4,860	--	3,780	4,133	--	4,084	--	4,184	--	4,261	4,651	--	2,550	1	
GRADUATE																			
Human Communication Disorders	8,770	--	3,786	3,375	--	--	--	--	6,540	--	6,737	--	--	5,535	4,651	--	--	1	
Masters in Arts	6,144	4,492	3,786	3,375	5,041	3,000	4,177	4,422	5,095	5,112	5,442	4,785	5,159	5,280	4,651	5,082	3,030	1	

- (1) The tuition rate for Management increases to \$6,467 for years 2 to 4 of the program. The tuition rate for Engineering increases to \$5,242 for years 2 to 5 of the program.
- (2) In 05-06 students receive a one-time only Alberta government tuition rebate equal the 05-06 tuition fee increase.
- (3) Saskatchewan has implemented a new tuition model effective May 7/05 for graduate programs resulting in a decrease in tuition rates for graduate students.
- (4) The Manitoba government mandated a 70% fee reduction which will be applied to tuition fees when they are assessed.
- (5) The Ontario government has frozen tuition rates for 2005/06 (i.e. tuition paid is at 04-05 rates).
- (6) Rate for Management is for the Honours Business Administration program which can only be entered after two years of another undergraduate program.
- (7) Fees shown are 2005-06 fees which were approved by the University prior to the mandated freeze in Ontario. Students are rebated fees to the 2004-05 rates.
- (8) Social Work is offered only in French.
- (9) The tuition rates shown are for out-of-province students.

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

University	Tuition Fee	Tuition and Auxiliary Fees *
Acadia**	7,760	8,116
Mt. Allison	6,100	6,341
St. Francis Xavier	5,975	6,561
Dalhousie	5,820	6,510
Kings College	5,820	6,510
Cape Breton	5,450	5,723
Saint Mary's	5,370	6,042
Mount Saint Vincent	5,340	5,959
New Brunswick	5,008	5,509
Prince Edward Island	4,620	5,204
Moncton	4,518	4,933
St. Thomas	4,145	4,426
Memorial	2,550	3,015

* includes compulsory auxiliary fees

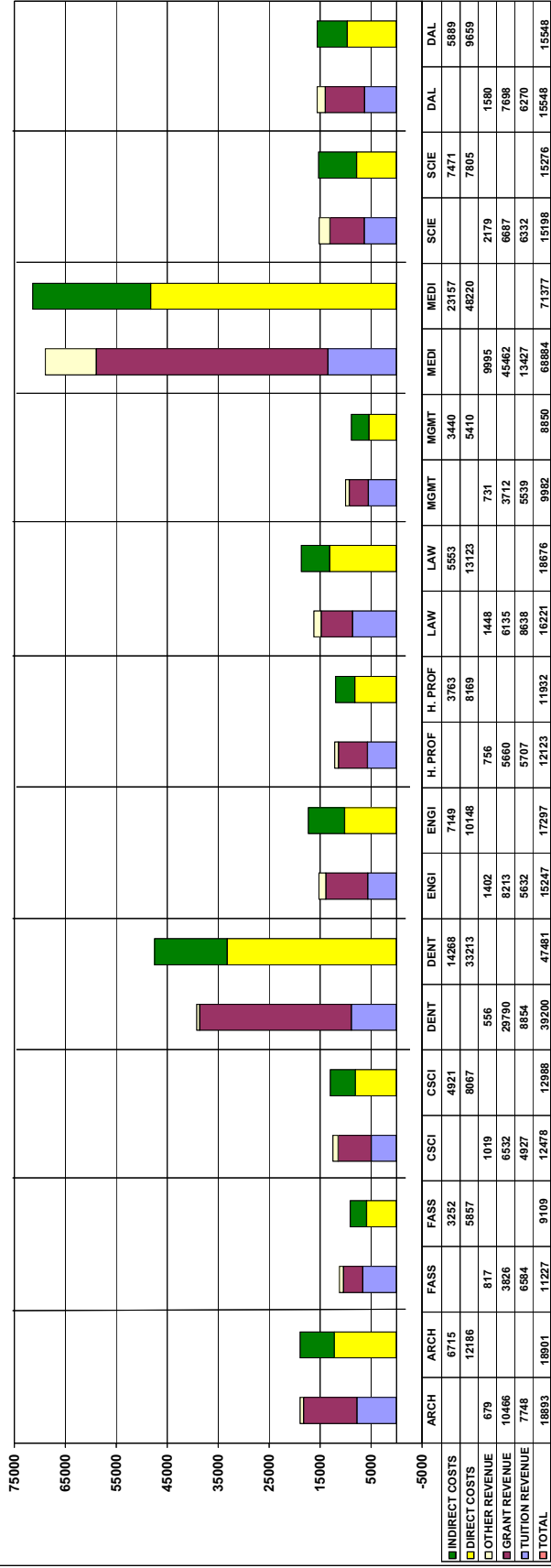
**tuition rate includes mandatory computing fees

**Revenue and Cost Per FTE by Faculty
2004/05**

	<u>Indirect Costs</u>	<u>Direct Costs</u>	<u>Total Costs</u>	<u>Grant Revenue</u>	<u>% of Costs</u>	<u>Tuition Revenue</u>	<u>% of Costs</u>	<u>Other Revenue</u>	<u>% of Costs</u>	<u>Total Revenue</u>	<u>Revenue as a % of Costs</u>
ARCH	6,715	12,186	\$18,901	\$10,466	55.4%	\$7,748	41.0%	\$679	3.6%	\$18,893	100.0%
FASS	3,252	5,857	\$9,109	\$3,826	42.0%	\$6,584	72.3%	\$817	9.0%	\$11,227	123.3%
CSCI	4,921	8,067	\$12,988	\$6,532	50.3%	\$4,927	37.9%	\$1,019	7.8%	\$12,478	96.1%
DENT	14,268	33,213	\$47,481	\$29,790	62.7%	\$8,854	18.6%	\$556	1.2%	\$39,200	82.6%
ENGI	7,149	10,148	\$17,297	\$8,213	47.5%	\$5,632	32.6%	\$1,402	8.1%	\$15,247	88.1%
HPROF	3,763	8,169	\$11,932	\$5,660	47.4%	\$5,707	47.8%	\$756	6.3%	\$12,123	101.6%
LAW	5,553	13,123	\$18,676	\$6,135	32.8%	\$8,638	46.3%	\$1,448	7.8%	\$16,221	86.9%
MGMT	3,440	5,410	\$8,850	\$3,712	41.9%	\$5,539	62.6%	\$731	8.3%	\$9,982	112.8%
MEDI ⁽¹⁾	23,157	48,220	\$71,377	\$45,462	63.7%	\$13,427	18.8%	\$9,995	14.0%	\$68,884	96.5%
SCIE	7,471	7,805	\$15,276	\$6,687	43.8%	\$6,332	41.5%	\$2,179	14.3%	\$15,198	99.5%
DAL	5,889	9,659	\$15,548	\$7,698	49.5%	\$6,270	40.3%	\$1,580	10.2%	\$15,548	100.0%

Note: (1) Because of the significantly lower fees paid by Post-Graduate Medical Students (those in Residency programs) and the higher proportion of experiential learning (hospital-based) in such programs, PGM students have been weighted at 0.2 of an undergraduate Medical student for this analysis.

REVENUE AND COST PER FTE BY FACULTY (weighted pgm)
2004/05



Faculty Revenue and Cost Allocation Model Summary (updated final 2004-05 budget data)
(thousands of dollars)

	Total	Architecture	Arts & Social Sciences	Computer Science	Dentistry	Engineering	Health Professions	Law	Management	Medicine	Science
Revenue to be Allocated:											
Provincial Grant	107,549	2,987	11,042	3,947	7,118	11,032	12,162	2,983	5,475	29,004	21,799
Federal Indirect Costs of Research Funding	5,433	16	92	120	16	484	489	5	22	2,255	1,934
Investment Income	16,639	178	2,267	496	117	1,404	1,135	699	1,057	4,122	5,164
Tuition Fees (incl. Facilities Renewal)	87,595	2,212	19,009	2,979	2,116	7,566	12,263	4,200	8,173	8,452	20,625
Total Revenue Allocated	217,216	5,393	32,410	7,542	9,367	20,486	26,049	7,887	14,727	43,833	49,522
Direct Faculty Costs (includes Faculty operating and Endowment budgets and Faculty specific allocations from Non Space, Student Assistance, DFA Travel etc.)	136,009	3,498	16,945	4,889	7,962	13,657	17,615	6,375	8,018	31,434	25,616
Costs to be Allocated:											
Facilities Renewal and Classroom Upgrades, Energy, Water Taxes and Insurance, Equipment and Alterations, Facilities Management	27,587	789	2,571	836	2,121	4,127	2,411	1,468	993	4,257	8,014
Cost allocation basis: Square Footage Occupied as a % of Total Faculty Square Footage											
Communications and Marketing, External Relations, Financial Services, President's Office, General University, Senate, Board, Contingency and Continuing Education	14,417	247	1,033	447	666	1,201	1,434	478	680	4,956	3,275
Cost allocation basis: Faculty Expenditures as a % of Total Faculty Expenditures											
University Libraries (except Law which is part of the Faculty of Law)	10,892	249	2,526	222	114	996	565	-	517	1,582	4,121
Cost allocation basis: Library Acquisitions as a % of Total Library Acquisitions											
Convocations, Recruitment, Registrars Office, Student Services, Varsity, Graduate Studies (based on Graduate enrolment only)	8,919	257	1,630	498	111	921	1,475	248	1,332	584	1,863
Cost allocation basis: Faculty Enrolment as a % of Total Enrolment											
Operating and Endowment Scholarship budgets (excludes Student Employment Program and direct allocation amounts which have been added to Direct Faculty Budgets)	9,209	133	1,899	431	-	931	787	78	644	470	3,836
Cost allocation basis: % of Scholarship and Bursary budget allocated to Faculty Students											
Other Areas	10,186	219	(312)	519	354	1,399	1,370	400	871	2,221	3,145
Cost allocation basis: Costs allocated to specific Faculties on usage basis											
Total Expenditures	217,219	5,392	26,292	7,842	11,328	23,232	25,657	9,047	13,055	45,504	49,870
Revenue in Excess of Budget (Revenue Shortfall from Budget)		1	6,118	(300)	(1,961)	(2,746)	392	(1,160)	1,672	(1,671)	(348)

Note: this table does not include unit revenue (e auxiliary fees and other recoveries) or the related expenditures There is no bottom line impact as a result of these items being excluded.

APPENDIX 5

Operating Revenue Sources for Comparator Universities Change from 99-00 to 04-05

	Operating Revenue per FTE student		Full-Time Equivalent Enrolments (1)		Total Operating Revenue by University		Provincial Government Operating Grants		Tuition		Other Operating Revenue	
	% increase	\$	% increase	\$	% increase	\$	% increase	\$	% increase	\$	% increase	\$
Alberta	21%	3,183	16%	4,100	39.7%	158.9	34.4%	88.3	57.3%	48.4	37.9%	22.2
Western	31%	3,809	18%	4,300	54.4%	162.0	50.5%	70.8	74.6%	84.7	14.7%	6.5
Calgary	29%	4,150	8%	1,700	39.1%	121.8	56.6%	91.7	45.0%	33.0	-3.8%	-2.9
Ottawa	8%	1,161	44%	7,640	56.1%	138.2	44.7%	62.2	67.7%	58.6	84.9%	17.4
Manitoba	-3%	-408	27%	4,630	24.1%	63.3	24.0%	41.2	28.4%	17.3	15.9%	4.8
Queen's	17%	2,916	17%	2,740	37.3%	101.0	29.1%	46.7	39.3%	32.2	77.5%	22.1
Saskatchewan	41%	5,383	-2%	-240	38.9%	79.0	26.1%	34.3	56.7%	28.8	76.4%	15.9
McMaster	21%	2,887	35%	5,370	64.1%	131.8	43.6%	44.8	66.7%	44.5	117.7%	42.5
Memorial	20%	2,974	12%	1,488	34.5%	62.8	40.5%	50.6	-7.2%	-3.2	118.5%	15.4
Average for the Comparator Group	20%	2,895	19%	3,525	42.8%	113.2	38.2%	59.0	52.0%	38.3	44.0%	16.0
Dalhousie	6%	1,090	23%	2,570	31.0%	60.3	10.4%	10.2	71.7%	35.8	30.4%	14.3

Dalhousie University

NUMBER OF EMPLOYEES

	<u>Dec. 1995</u>	<u>Dec. 2000¹</u>	<u>Dec. 2004</u>
Faculty²			
Full-Time	930	1,000	1,200
Part-Time	530	660	650
	—	—	—
	1,460	1,660	1,850
Staff			
Full-Time	1,130	1,430	1,510
Part-Time	100	100	80
	—	—	—
	1,230	1,530	1,590
Other			
Post-Doctoral Fellows	70	90	140
TA's, Markers, Demonstrators		490	760
	—	—	—
	70	580	900

Employees of Associated Employers,

Including Grant-holders

Full-Time	330	360	550
Part-Time	70	500	460
	—	—	—
	400	860	1,010

¹ Increase in employees partly attributable to amalgamation with Technical University of Nova Scotia in 1997.

² Includes senior administration.

Sources: 1995 Pay Statistics, BRIO Report 1995, and 2000 Annual Grievance Report.

Note: For simplicity totals have been rounded to nearest ten.

RE: MANDATORY RETIREMENT

From the review we have conducted as members of the Joint Panel (Appendix XI 11- Board-DFA Collective Agreement) regarding the possible elimination of mandatory retirement.

A. Fiscal Impacts

- 1) The incidence of delayed retirement is higher for research universities based on the more extensive experience of U.S. universities.
- 2) The incidence of delayed retirement in Canadian universities which have ended mandatory retirement is higher than anticipated. Changes to the CRA maximum pension will produce added incentive to delay retirement.
- 3) The salary structure for full professors where- the incidence of non-retirement will be greatest provides for salary progression beyond the maximum even when an individual would be in receipt of a pension from the University.
- 4) Institutions which have abolished mandatory retirement have introduced incentives to encourage retirement. These incentives are a substantial additional expense; notably so when they take the form of pension benefits such as "no penalty" early retirement. The most recent example is the University of Toronto provision, which is estimated to be \$1.8- \$2.1 million per annum were the same provision incorporated into the Dalhousie University Staff Pension Plan.
- 5) The cost of other incentives to encourage retirement may be appreciably higher given the continuing annual increase to the CRA maximum pensionable salary which has now been instituted, and will be expected after normal retirement also.
- 6) There are inevitable but not easily quantified additional insured benefits risks, and consequent liabilities, that are associated with an aging employee cohort.
- 7) The "sum of contributions compounded" (SOCC) entitlement in the Pension Plan rises significantly faster than the increase in the commuted value of pensions after the Normal Retirement Date. Were the requirement to take a pension having reached normal retirement date affected by the elimination of mandatory retirement, substantial additional pension costs would be incurred.
- 8) Faculties rely on savings from retirements to:
 - (a) meet balanced budget obligations;
 - (b) provide start-up funds to new faculty; (c) fund new initiatives;
 - (d) meet one-time expenditures such as faculty buy-outs.

This flexibility cannot be easily forgone.

- 9) Limitations on the use of part-time employment and requirements in respect of the duration of limited term appointments mean that the University already maintains a high cost teaching model in comparison to other universities across Canada. Eliminating mandatory retirement would add to that expense.

B. Academic Impacts

(a) Academic Planning

The ability of an academic unit and of a Faculty to plan its future depends upon its having some certainty about when its faculty members plan to retire.

(b) Academic Renewal

The University as a centre of discovery and innovation needs to be constantly replenished by the infusion of new faculty members, new approaches and new ideas. That infusion brings new vitality to existing programs at all levels and enables the creation of new programs where student interest and disciplinary context change over time.

(c) Academic Succession

Present practice allows the flow of new faculty into the academy, and there is concern that a major restriction in flow will in turn discourage the new generation of scholars from entering Ph.D. programs.

Universities have been seeking to increase the representation of women and the diversity of their faculty members, and this process of demographic change still has some way to go.

Career opportunities for junior colleagues (from the teaching of a graduate course to program leadership), will be constrained by reduced retirement rates since senior colleagues will likely retain their claims to priority.

C. Status Quo -Post-retirement Employment

The interests of individuals who wish to work beyond their normal retirement date are addressed in some measure by current provisions for post-retirement appointments which may be agreed for three-year terms. Post-retirement re-appointments are also provided for.

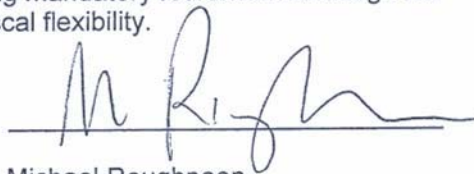
Summary Conclusion

- The full costs of ending mandatory retirement cannot be predicted with accuracy I but would be substantial based on the factors outlined above. Inevitably these costs will limit the availability of resources to fund contract settlements on other issues of concern to younger members of the bargaining unit.
- It cannot be presumed that additional fee increases or cuts in other areas of the University when service expectations are high will be the source of funding for added faculty salary and benefits costs.

It is not evident that the benefits gained by ending mandatory retirement outweigh the loss of an important planning mechanism and fiscal flexibility.



Sam Scully



Michael Roughneen

Enrolment Related Budget Allocation (ERBA)

Background

The current mechanism by which Dalhousie University links program enrolments and class registrations to the annual budget allocations of the Faculties is called ERBA (Enrolment Related Budget Allocations). In April of each year the Office of Institutional Analysis and Research does the necessary calculations under the formula to arrive at an ERBA increase or decrease for each faculty. The University Budget Office includes the adjustment in the annual budget allocation calculation for each Faculty. The ERBA mechanism was developed around three objectives:

- To provide Faculties with a financial incentive to increase enrolments, and thereby their resources, in a time of government fiscal constraint, by introducing new programs (within available resources, including the added fee revenue) and by attracting and retaining more students in existing programs.
- To provide additional resources to Faculties with increased student numbers. Conversely, to reduce the resources of Faculties where enrolments have declined so that the budget of other Faculties are safeguarded from the resulting institutional revenue loss.
- To replace ad hoc mechanism for resourcing new programs with a more predictable arrangement that could be more easily and efficiently administered.

Introduced in the 1989/90 fiscal year it was reviewed by the Budget Advisory Committee (BAC) in 1994 and again in 2001. Modifications to the formula have been made after both reviews. What follows is a summary of the principal features of the current formula.

Principle Features Current Formula

- A Faculty's ERBA adjustment for a given fiscal year is based on changes in its "enrolment units" in the preceding academic year. For instance, 2005/06 ERBA adjustments were based on enrolment and class registration changes from 2003-04 to 2004-05.
- Enrolment units are calculated as the sum of
 - (i) full time equivalent (FTE) enrolments in graduate programs offered by the Faculty
 - (ii) one-half of FTE undergraduate enrolments in the Faculty, and
 - (iii) one-half of the FTE of undergraduate class registrations taught within the Faculty.

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.