

SIMON FRASER UNIVERSITY
MEMORANDUM

TO: Senate

FROM: J. M. Munro, Chair
Senate Committee on
Academic Planning

RE: Challenge 2001: The President's
Strategic Plan

DATE: February 14, 1991

Attached is a copy of Challenge 2001: The President's Strategic Plan. Action undertaken by the Senate Committee on Academic Planning gives rise to the following motion:

MOTION: "that Senate endorse the general directions for the University's development as contained in Challenge 2001: The President's Strategic Plan"

DRAFT STRATEGIC PLAN LETTER OF TRANSMITTAL
FOR INFORMATION ONLY

Mr. Shell Harvey
Assistant Deputy Minister
Universities, Colleges and Institutes Division
Ministry of Advanced Education, Training and Technology
818 Broughton Street
Victoria, B.C.
V8W 1X4

Dear Mr. Harvey:

With this letter, I am pleased to present a ten year strategic plan for Simon Fraser University. Challenge 2001 describes Simon Fraser University's distinctive place in British Columbia's system of higher education and emphasizes our commitment to accessibility, our record of innovation, our reputation for academic quality and our strong sense of accountability.

Challenge 2001 offers a vision of the future that anticipates significant expansion at Simon Fraser. It foresees a decade of controlled growth to achieve our objectives and offers a development strategy to help guide the academic planning process that is being managed by the Vice President, Academic. Although it is my own strategic view, the document draws heavily on input from academic and administrative units across the University. I am pleased to say that its general direction has received support in principle from the University Senate and the Board of Governors.

There are a number of key issues in Challenge 2001 which the Ministry of Advanced Education, Training and Technology is asked to endorse. They take our existing strengths into account and recognize the special contributions Simon Fraser University can make as a responsible partner in the province's post-secondary system.

1. We believe that our commitment to accessibility plays an important part in the academic, social and economic well being of all British Columbians. Improved student access over the next ten years will be supported by planned growth in student enrolments, by an increased range of programs, by enhanced facilities and services, and especially by adding 400 additional faculty.

2. Dedication to the advancement of knowledge is fundamental to all academic achievement at Simon Fraser University. In the coming decade, we will give high priority to expanding basic and applied research in all the disciplines we offer. Continuing efforts will also be made to encourage the commercial transfer of University research discoveries.
3. By the year 2001, graduate program enrolments will represent at least 15 percent of total enrolments. Graduate program growth will allow Simon Fraser University to help offset the rising shortage of private and public sector research talent; it will support higher levels of research productivity; and it will provide a vital teaching resource for the growing undergraduate population.
4. Building on the University's strengths in the core disciplines, program development will concentrate on interdisciplinary areas that respond to new academic, economic and social challenges. The established science, applied science and professional programs will expand to their optimum size by 2001 while moderate growth will be experienced in the core areas of the humanities and social sciences.
5. Our leadership in lifelong learning and recurrent education will be continued by giving high priority to the development of part-time graduate studies and other special mid-career programs at both the Burnaby and Harbour Centre campuses; by continuing cooperation with the Open Learning Agency; and by expanding innovative teaching programs at locations throughout the province.
6. The development of Simon Fraser University at Harbour Centre will be completed and we will maintain our role as the primary provider of university education in the Vancouver City core.
7. Co-operative Education programs benefit both students and employers in the community. Our Co-op Education placements will be expanded threefold by the year 2001, enabling 25 percent of our full-time students to participate.
8. The competitive nature of world trade and the increasing rate of cultural exchange require that higher education keep pace with changes in the global community. Over the next decade, we will expand the international dimension of all our study, research and service activities, including study-abroad programs, foreign language opportunities and links with academic institutions abroad.

9. We believe that there is an important connection between the degree of social community in a university and the university's success at fulfilling its teaching and research missions. We will take strong initiatives to expand on-campus residential accommodations and to enrich the intellectual, social, cultural and recreational environment within the University community.

These key issues are among the many features described in greater detail within Challenge 2001. They represent a spirit of things to come -- a spirit that has matured over our first twenty-five years of growth and now stands ready to meet future challenges. Flexibility; the capacity to be responsive; the commitment to access, innovation and academic quality combine to make Simon Fraser University unique. With cooperation from government, the University's distinctive character will be sustained in the years to come. With the resource support required to enable growth, Simon Fraser University will continue to serve the people of British Columbia as a responsible, accessible and innovative University that is known at home and abroad for its high academic quality.

Yours sincerely,

William G. Saywell
President

/gm

SIMON FRASER UNIVERSITY

CHALLENGE 2001

THE PRESIDENT'S STRATEGIC PLAN

William G. Saywell

February 21, 1991

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**SIMON FRASER UNIVERSITY
CHALLENGE 2001
THE PRESIDENT'S STRATEGIC PLAN**

1.0 PREAMBLE

Simon Fraser University shares with all research-intensive universities the fundamental mission to discover, transmit and preserve knowledge. This mission depends for its success on an active spirit of free enquiry supported by the companion principles of university autonomy and public accountability.

Simon Fraser celebrated its silver anniversary in 1990. Twenty-five years is a brief period in the history of any university — the University of Toronto is 150 years old, Harvard is over 350 and the University of Bologna has passed the nine century mark — but no matter how young Simon Fraser University may be in comparative terms, British Columbians can be proud of its many achievements.

The University's faculty have distinguished themselves by gaining national and international recognition for the quality of their teaching and research. Our students consistently place at the highest levels in national competitions such as the Medical College Admission Test (MCAT) and the Institute of Chartered Accountants (CA) exams. The academic standing of students admitted from Grade XII is exceptional with the average admission GPA now standing at 3.26 and with the number of straight "A" students doubling in the last four years. Simon Fraser graduates demonstrate academic ability by winning prestigious fellowships at the world's foremost universities and by pursuing successful careers in business, the public sector and the arts.

When the University first opened its doors in September, 1965, to deliver programs in the liberal arts, education and the basic sciences, it quickly became known as a centre for imaginative approaches to learning. Tutorial-based instruction was adopted from the start and continues to be used extensively today.

A reliance on the trimester system, although adding complexity and higher costs to instructional delivery, provides a good return to the province's taxpayers by fully utilizing university resources throughout the year. The ability to respond quickly when effecting changes in program emphasis or new program development sets Simon Fraser University apart from older, more traditional institutions of higher learning. With the passage of time, the University's commitment to innovation has become its hallmark.

As Simon Fraser grew, interdisciplinary graduate and undergraduate programs were encouraged where emerging disciplines satisfied a provincial or national need and where they built on the strengths of the University's core disciplines. Attentive to quality and student demand, professional programs were added to the range of degree options in the 1970s and 1980s. Along with offering the province's most comprehensive access to evening degree studies, the growth of both credit and non-credit continuing, distance, cooperative and recurrent education programs established Simon Fraser's leadership in making university services accessible to the community. Throughout its first quarter century, research has shared priority with the development of teaching programs and the drive to create new knowledge is fundamental to faculty and graduate students alike.

For a great many British Columbians, Simon Fraser University is the university of choice. Whether it presents the first opportunity for a family member to pursue a degree; whether it provides mature students with the flexibility to combine study and responsibilities in the home or workplace; whether it offers academically qualified students access to higher learning following college or high school, Simon Fraser University is conscious of its social responsibility to remain accessible. Had the University failed in its commitment to accessibility, thousands of academically qualified students would not have received a university education in recent years.

But over the past decade, the effort to meet its access responsibilities has carried a stiff price: despite a pronounced shortage of human and physical resources, despite unacceptably high student/faculty ratios and an increasing threat to academic quality, University enrolments were allowed to grow rapidly throughout

the 1980s. Where growth in student numbers was unmatched by adequate financial support, diminished levels of service resulted. Positive steps must now be taken to restore an appropriate balance and growth itself provides the key to renewal.

Where program development has been inhibited or suspended for want of space or new faculty, growth will offer a remedy. Where the demand for new programs emerges either as an offshoot to current disciplines, from student interest or from social, economic and cultural change, the University will remain true to its traditions by responding quickly and effectively. Growth in disciplinary coverage, accompanied by commensurate growth in the services which an expanded human and physical resource base facilitates, will allow Simon Fraser University to keep faith with its mission and with its distinctive character: over the next decade, Simon Fraser University will build on the strengths for which it has received acclaim — quality, innovation and accessibility.

When setting a course for the future, no institution can predict all the demands and opportunities that will come its way. Nevertheless, as Simon Fraser University enters its next decade of development, it will be guided by the principles and planning objectives set out below.

2.0 THE LEGACY OF RAPID GROWTH

For the past several years, Simon Fraser has been one of the fastest growing universities in Canada. The reasons are easily identified. The University's reputation for academic quality and unique programming is attractive to graduate and undergraduate students throughout British Columbia, across Canada and around the world. Simon Fraser is situated in one of the nation's fastest growing regions and pressure for admission to the University's programs will rise as population increases. Looking ahead to the year 2001, the population of the Lower Mainland will reach 2.2 million and the Fraser Valley alone will be home to 900,000 people. Adding to the pressure for access, students from the interior will continue to be drawn to Simon Fraser as the University fulfils its provincial mandate by serving all British Columbians.

Other factors also indicate that the demand for admission will be extreme throughout the 1990s. The government's "Access for All" strategy seeks a radical improvement in participation rates with a goal of reaching the national average by 1995. Demographic trends associated with the baby boom "echo" will increase the number of new students coming to the University directly from high school. Students transferring from colleges and other universities accounted for 33 percent of new admissions in 1989/90 and pressure from this source can be expected to remain strong. Adding to the access demand, non-traditional students, including those working toward a diploma or second degree, join with the growing number of people seeking opportunities for recurrent education.

When preparing itself to meet the future, Simon Fraser must take account of the past. The net effect of the 1980s left the University less able to respond to an increased student demand than might be wished. A 45 percent increase in FTE enrolment over the ten years following 1980/81 (headcount enrolment increased by 56 percent) was supported by a modest 14 percent increase in faculty, a six percent increase in support staff and a nine percent increase in space. Over the past two years, faculty and facilities shortages resulted in admission being denied to at least 2000 prospective students who otherwise met the University's normal entrance requirements. When the University cannot offer the number of courses demanded, students are forced to extend the time taken to complete their degrees and to take courses that do not match their study preferences.

Student/faculty ratios have risen from 17.9 to 22.6 in the same ten-year period — the highest ratio in British Columbia and one of the highest in the country. Where graduate enrolments are concerned, our ratio of annualized graduate FTE's/full-time faculty is identical to UBC's, even though our sister institution offers a program mix which includes health sciences and other graduate-intensive disciplines not duplicated at Simon Fraser. In the early part of the decade, 14 percent of undergraduate courses were taught by sessional instructors, rising to 23 percent by 1989/90. A further 12 percent of undergraduate courses were taught by visiting and limited term faculty last year.

The challenge facing Simon Fraser University is clear. A new balance must be struck between the demand for University services and the capacity to respond. Quality, innovation and accessibility must not be sacrificed. The many positive achievements that were made under adverse conditions during the 1980s now position Simon Fraser for a decade of controlled expansion. Provided that adequate operating and capital resources are available to sustain quality, the outcome is assured.

3.0 PLANNING ASSUMPTIONS

Many uncertainties, particularly economic ones, make growth rates difficult to predict. But while adequate financial support is a necessary condition for growth, it is not a solely sufficient one. Other assumptions come into play, including the following:

1. Population increases, especially in the Lower Mainland, will occur as projected.
2. The Government of British Columbia will continue its support for growth in university level education, enabling provincial participation rates to reach the national average.
3. The Government of British Columbia will establish a new degree-granting institution in the Fraser Valley that will enrol its first students by September, 1995, and accommodate 6000 undergraduate FTE by the year 2001.
4. The University of British Columbia will maintain its policy of restricting undergraduate enrolment to current levels.
5. Assistance from government will be available to support a fivefold increase in Harbour Centre campus recurrent education, undergraduate and graduate enrolments.

4.0 THE EDUCATIONAL CHALLENGE: SIZE, SHAPE AND BALANCE

4.1 Accessibility

Simon Fraser University reaffirms its commitment to remain accessible for all who can meet its high academic standards, regardless of age or educational background.

Based on the planning assumptions and on the University's belief in accessibility, Simon Fraser University will have a total student body of 20,000 FTE in the year 2001. An approximate breakdown of the projected enrolment follows:

Annualized FTE Enrolment Projections: 1990/91 — 2000/2001*

	<u>1990/91</u>	<u>1995/96</u>	<u>2000/2001</u>
Undergraduate, Burnaby Mountain and Other	11,131	14,000	15,000
Undergraduate, Harbour Centre	487	1,000	2,000
Graduate (all locations)	<u>1,393</u>	<u>2,000</u>	<u>3,000</u>
TOTAL	<u>13,011</u>	<u>17,000</u>	<u>20,000</u>

- * The resources needed to support enrolment growth at these levels are estimated in Appendix I and the projected undergraduate enrolment demand at Simon Fraser University is presented in Appendix II. Examples of the new programs that will service growth are given in Appendix III.
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In pursuing its enrolment targets, Simon Fraser University will continue to welcome a diversity of students and will make special efforts to recruit from groups such as Native peoples and other minorities who are under-represented in

Canadian universities. Although changing social, economic and demographic conditions make it impossible to predict the exact representation from each of the different constituencies which have traditionally supplied the University with new undergraduate students — Grade XII graduates, college and university transfer students, "mature" and "senior" learners — all will be encouraged to attend. Special steps also will be taken to bring about a better gender balance in disciplines where women are currently under-represented and graduate students will continue to be recruited from across Canada and abroad.

Planning Strategy

- (a) The University will continue its cooperation with the B.C. Council on Admissions and Transfer to improve student mobility between institutions.
- (b) Student aid budgets will be subject to regular review, adjustments will be made to reflect enrolment growth, and the highest possible assurance will be given that academically qualified students have adequate resources to pursue their studies successfully.
- (c) Opportunities for lifelong learning and recurrent education, particularly at the graduate level, will receive a high priority by further developing degree and non-degree programs at the Burnaby Mountain and Harbour Centre campuses, at other locations throughout the province and through Distance Education services.
- (d) Women will be encouraged to enter "non-traditional" disciplines by targeted efforts at recruitment, including high school liaison and scholarship programs.
- (e) Model initiatives, such as the co-operative program with the Shuswap Cultural Education Society, will be expanded to promote greater participation by native Indian students.

4.2 Faculty Growth

Simon Fraser University will recruit an estimated 400 additional faculty over the next decade to facilitate:

- *meeting the undergraduate and graduate enrolment targets*
- *reducing the reliance on sessional instructors*
- *improving the faculty gender balance*
- *promoting program expansion and diversification*
- *stimulating research*

By actively focusing on women in recruitment, the faculty gender balance at Simon Fraser University in 2001 will be more equitable than at any other major Canadian university.

A significant increase in faculty size is an essential condition of the University's growth plan. In order to meet the enrolment targets while guaranteeing instructional quality, immediate steps must be taken to improve the student/faculty ratio and to reduce the reliance on sessional instructors, visiting and limited term faculty. Although the individuals performing short-term instructional duties are competent teachers, regular faculty offer the advantage of long-term familiarity with their departmental missions and bring a level of teaching and research expertise that is typically higher than other categories of instructors.

Good faculty attract good students and nothing distinguishes a university more than the reputation and quality of its professoriate. It is therefore of concern that the coming years are expected to see competition over faculty recruitment at a level not experienced for three decades. The best predictions for the late 1990s indicate that only 83 qualified candidates will be available for every 100 vacancies in North American universities. The problem is so severe that both the National Sciences and Engineering Research Council of Canada (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRC) consider the impending shortage critically important to the country's future. By subscribing early

to a campaign for faculty recruitment, Simon Fraser University will satisfy one of the requirements for access growth. It will position itself to compete successfully in the impending recruitment battles at home and abroad.

Hiring new faculty who are working at the frontiers of knowledge will stimulate research and provide leadership in the development of new disciplinary innovations. A significant increase in faculty size during the 1990s also will afford Simon Fraser an opportunity to achieve a more equitable faculty gender balance than any other major Canadian university. Given the high level of retirements that are predicted going into the next century, Simon Fraser will then be in the enviable position of being able to move forward with the continued aggressive recruitment of large numbers of women faculty so that, even if a steady state in overall faculty size has been reached, full gender balance can be attained. With the projections of growth and faculty recruitment, Simon Fraser University is uniquely placed among Canadian universities to reach this goal.

Planning Strategy

- (a) Simon Fraser University will make an estimated 400 new faculty appointments by the year 2001.
- (b) Regular faculty will deliver 75 percent of all Simon Fraser University courses by 1995.
- (c) At least 40 percent of all appointments over the next ten years will be women, bringing representation by women to one third of all faculty at the University.

4.3 Program Mix and Program Growth

Simon Fraser University will experience moderate growth in the core areas of the humanities and social sciences.

Simon Fraser University will encourage its established science, applied science and professional programs to reach their optimum size by 2001.

Simon Fraser University will serve as British Columbia's leader in the development of interdisciplinary professional programs that respond to new academic, economic and social challenges; that build on the University's proven strengths in core disciplines; and that complement programs at other post-secondary institutions in the province.

Growth in student numbers and faculty size will stimulate growth and diversity in the University's program base. Renewal can be achieved in programs that have suffered resource shortages and new disciplinary departures can be supported that demonstrate academic, social and economic merit. Not all new initiatives can be foreseen, but they are likely to include areas of pressing contemporary interest such as the management of technology, ethnic and international studies, the environment and applied health sciences. Undergraduate and graduate program plans are underway or being considered across all Faculties (Appendix III).

Planning Strategy

- (a) Resource shortages in the core disciplines of the Humanities and Social Sciences will be redressed and moderate growth will be encouraged.
- (b) The established science, professional and applied disciplines will complete their existing growth plans and develop new program initiatives that will bring them to optimum size ten years from now.
- (c) The development of new cross-disciplinary programs will be emphasized as emerging fields of study are added to those like Criminology, Gerontology, Pest Management and Communications that have already received national recognition for their quality.

- (d) Innovative approaches to instructional delivery, such as those pioneered by the Faculty of Education, will be promoted as new program areas become operational.

4.4 The Balance between Undergraduate and Graduate Programs

Simon Fraser University will attain a better balance between undergraduate and graduate studies with graduate students representing at least 15 percent of the total enrolment by the year 2001 and a higher percentage in the years that follow.

The University will make special efforts to recruit women graduate students.

Creating a desirable balance between graduate and undergraduate studies is a centrepiece in Simon Fraser University's strategic plan. Undergraduate instruction will retain its place in the University's mission but the time has now arrived when the institution's natural maturation enables new opportunities for graduate growth. Recent faculty increases have made possible greater graduate student participation by providing additional faculty advisors. The University's faculty recruitment campaign will produce a similar effect as it proceeds. And during a period of climbing undergraduate enrolments, more graduate students will have access to financial support and valuable teaching experience through employment as Teaching Assistants in the University's tutorial system. Major growth in our undergraduate programs will provide the need, the means and the opportunities for a very significant expansion of graduate studies in this decade and beyond.

Aside from the inherent value of expanding graduate studies at the University, there are other factors to be taken into account. During a time of competitive recruitment, the most gifted faculty are attracted to institutions that not only provide the research infrastructure they require, but also admit high calibre graduate students who can participate in their research programs. Equally important, Simon Fraser has a responsibility to address the shortage of public and

private sector research talent that is rapidly approaching a crisis. This can only be done by extending access to graduate instruction for qualified individuals who are seeking careers concerned with the advancement of knowledge.

Undergraduate enrolment also is expected to rise dramatically throughout the ten-year planning period, reaching steady state by the year 2001. Enrolment increases beyond 2001 will be concentrated in the University's graduate programs. At the Burnaby Mountain campus, undergraduate growth will be higher in the five years beginning in 1990/91, than in the second half of the decade as greater numbers of students receive credit instruction at Harbour Centre. The University's commitment to the "Access for All" initiative, the planned addition of new instructional programs, population increases in Simon Fraser's catchment area, and the provincial policy to raise participation rates, are among the key factors driving undergraduate growth.

Planning Strategy

- (a) Enrolment in graduate programs will expand by 44 percent between 1990/91 and 1995/96, rising another 50 percent over the next five years, with the total graduate enrolment reaching 3000 FTE by the year 2001.
- (b) Enrolment in undergraduate programs will expand by 29 percent between 1990/91 and 1995/96, rising another 13 percent over the next five years, with the total undergraduate enrolment reaching 17,000 FTE by the year 2001.
- (c) An increase in graduate enrolments for both full-time and part-time graduate students will be made possible by the combined effect of faculty growth, undergraduate growth, current program expansion and new program development at both the Burnaby Mountain and Harbour Centre campuses.

- (d) Scholarship programs, based on academic merit and financial need will draw on endowment and operating funds to attract and support graduate students.
- (e) The University will reduce average tutorial size to facilitate an increase in the number of graduate students who receive support from Teaching Assistantships.

4.5 Library Development

Simon Fraser University will give high priority to improving Library holdings and expanding Library services.

The University Library is at the heart of the academic enterprise. Simon Fraser has developed one of the most advanced, computer-based, information retrieval systems in Canada. Although the University cannot provide a comprehensive primary collection, its on-line access to other libraries and its support for inter-library loan programs represent a significant academic resource. It is nevertheless true that the Library budget, when expressed in constant dollars per student, has fallen steadily in the face of enrolment growth; space pressures and rising acquisitions costs also have affected service levels. This decline has reached the limit of tolerance and every effort will be made to restore the Library to its central place in University life. Without substantial growth in Library capacity, growth in the University's programs of instruction and research cannot be undertaken.

Planning Strategy

- (a) Library acquisitions funding on a per student basis will be increased at a rate twice that of enrolment growth over the next five years.
- (b) Recommendations from an external Library review will be used to improve Library services.

- (c) The development of Library facilities will receive a prominent place in the University's Capital Plan.
- (d) The Library Endowment Fund will reach at least \$1 million by 1996 and \$3 million by the year 2001.

4.6 Facilities Expansion

Simon Fraser University will correct the severe space shortages that have developed over the past decade with a large-scale program of capital construction.

The need for added instructional, research and service space at Simon Fraser University is extremely urgent. Over the past ten years, the University's support for student access allowed FTE enrolments to rise by 45 percent while its inventory of net assignable space increased by only 9 percent — an increase which included the recently completed Applied Sciences Building. Enrolment projections for the future clearly indicate that the capital projects now approved by government must be augmented by additional, fast-track measures.

The space crisis has adversely affected every feature of the University's operations. The following excerpt from the University's latest Five-Year Capital Plan captures the intensity of the problem:

"Our inventory of classrooms is now used so heavily that it is impossible to make course section changes at the beginning of the fall and spring semesters. In many courses, enrolments are effectively restricted by the amount and size of classroom space available. More infrastructure space is desperately needed: existing food service areas and general student study spaces are overcrowded and overused. Adequate office space to house faculty, staff, and graduate students is simply not available. Space for Library collections can only be made available by encroaching on our already severely limited student study

areas. Existing gymnasium and recreational space is also overcrowded."

With the timely intervention of government support, a way can be found to meet the challenge that lies ahead. Without such support, the unavoidable consequence would require abandoning access growth — a measure that would place in jeopardy all other aspects of the University's strategic plan.

Planning Strategy

- (a) In close cooperation with the Ministry of Advanced Education, Training and Technology, the University will prepare an emergency Ten-Year Capital Plan and will seek a commitment from government for its full implementation.

4.7 Growth in Computer Access

Simon Fraser University will maintain its place among the premier Canadian universities in providing students, faculty and staff with access to advanced computer technology.

The world has entered a new era in which the command of high technology and information provides the competitive edge. At Simon Fraser University, high priority has been given to the development and use of "information age" technology in teaching, research and administration. Almost all faculty have their own computing equipment — much of which was acquired through a unique purchase scheme implemented during the mid-1980s — and students enjoy computer access that is superior to most Canadian universities. New computerized systems are continuing to be designed and made operational. Building on past accomplishments, the University will achieve the full and effective computerization of all its services over the next decade.

Planning Strategy

- (a) The application of computer technology for teaching, research and administration will occupy a high priority.
- (b) Computing resources that are now centralized will be reorganized to provide more effective, distributed services.

4.8 Simon Fraser University at Harbour Centre

Simon Fraser University will complete the development of its Harbour Centre campus and will maintain its leading role as the primary provider of recurrent education in the Vancouver city core.

Today's society is a knowledge-based society. More than yesterday, but less than tomorrow, we must compete in a global community of ideas, markets and cultures. The speed with which the corpus of knowledge is now changing means that recurrent education will assume ever increasing significance. Recent studies indicate that half the knowledge received by students graduating in today's professional programs will be obsolete within five years. Also within five years, 50 percent of the current workforce will either be employed in jobs different to those they now hold or will be doing the same jobs in radically different ways. Over 80 percent of the professional workforce going into the next century are already adults. These accelerating changes, along with the challenges presented higher education by an aging population and by a society enjoying greater access to leisure time, underline the high priority recurrent education must be given across the spectrum of academic programs.

Simon Fraser University has acquired a national reputation for its place at the vanguard of recurrent education and we shall continue to provide leadership by offering unique programs that reach out to the community. Particular attention will be given to developing access to part-time graduate study. Existing programs,

such as the weekend Executive MBA, will expand to allow improved access for individuals who reside outside the Lower Mainland. Collaboration with the Open Learning Agency will evolve into an increasingly effective partnership. Most important of all, the Harbour Centre campus, assisted by funding from the Access Program, will have a major impact on extending adult recurrent education in British Columbia.

The Harbour Centre campus has won national acclaim as a model inner-urban centre of higher education. Conceived from a belief that formal education is changing from a full-time commitment over four years to a part-time commitment over a lifetime, the programs at Harbour Centre provide opportunities for on-going learning throughout an individual's life and career.

While Simon Fraser at Harbour Centre offers access to the disciplines and knowledge base present at the Burnaby Mountain campus, Harbour Centre has its own distinctive mission. The downtown campus is specifically designed to address the recurring education needs of individuals who through previous education, intellectual growth or experience have already established the necessary foundations for advanced learning. A 1989 document prepared for the Senate Committee on Academic Planning (SCAP) helps define the program focus at Harbour Centre:

"Universities, beyond their "traditional" clientele, have for years served adults in two ways: first through offering non-credit self-development and personal enrichment courses on any variety of topics studied at university; and second, through the provision of opportunities to start or complete a university degree. These continue to be important needs. But with accelerating change a third need has emerged — that of providing opportunities for adults possessing fundamental competence to return to university in order to keep up with evolving circumstances and conditions — much as university faculty members seek sabbaticals or specialized seminars to

maintain their currency, vigour and competence. It is this third, emergent need, that we should primarily address in our programs at Harbour Centre."

In 1990, approximately 20,000 adult learners benefited from access to Harbour Centre programs and services. While the selection of learning opportunities is already impressive (Appendix IV), it will continue to expand: recently approved research and teaching programs range from the Latin American Business Resource Centre to the Centre for Policy Research on Science and Technology, from the Masters of Arts in Liberal Studies to actuarial mathematics. While most of the credit courses offered at Harbour Centre are selected and designed for recurrent learners enrolled in entry-level, certificate and diploma programs, students following a degree completion path at the Burnaby campus may elect to take some of their course requirements at the downtown facility. In the decade ahead, Harbour Centre will develop new programs of recurrent education as well as relieve some enrolment pressure on Burnaby Mountain. Combined undergraduate and graduate enrolments will rise to 1400 in 1995/96, and to 2700 FTE in 2000/01.

In just two years, Simon Fraser University at Harbour Centre has become the locus for intellectual and cultural activity, technical assistance and economic renewal in the surrounding community. Aside from serving the people and organizations that are concentrated in the city core, it also calls on their expertise to assist in delivering its teaching and research programs. The quality and scope of downtown campus programming has confirmed the University's leadership in recurrent education and community access. As an added benefit, Harbour Centre's success has contributed positively to Simon Fraser's overall reputation and has strengthened public support for its innovative programming.

Planning Strategy

- (a) The University will consolidate its leadership in the delivery of urban-based, recurrent education by expanding its facilities and programs at the Harbour Centre campus.

- (b) New programs will be developed largely at the graduate level for urban professionals and, within an international context, in fields such as publishing, criminal justice administration, computing science and entrepreneurial studies.

4.9 Co-operative Education and Student Internship Programs

Simon Fraser University will further increase opportunities for students to take part in co-operative education and internship programs.

Simon Fraser University's co-operative education program is the second largest in Canada outside Quebec with over 1500 annual placements. The program not only helps students finance their education, it allows them to explore career options while testing their capacities for critical thinking, imagination and sound judgment. Employers are introduced to potential employees and in many cases also benefit from the new techniques and knowledge the students have gained in their studies.

In addition to conventional co-op programs, the University is home to professional disciplines such as Engineering Science, Education and Criminology that demand practicum or internship experience as part of their degree-completion requirements.

The value of co-operative education has been demonstrated many times. Simon Fraser University's enthusiasm for this form of education will continue and will actively be expanded over the next ten years. The University invites all levels of government to assist this expansion by new and creative forms of funding support.

Planning Strategy

- (a) Co-operative Education and internship programs will be expanded threefold by increasing student participation and placements, enabling

25 percent of all full-time undergraduate students and an increasing proportion of graduate students to participate.

4.10 The University's International Horizons

Simon Fraser University will expand the international dimension of all its study, research and service activities.

The universality of knowledge, the competitive nature of world trade and the increasing rate of cultural exchange, dictate that the international dimension of higher education must keep pace with changes occurring globally. The further "internationalizing" of the University will enrich the educational experience of students by introducing them to the languages, cultural attitudes and intellectual traditions of other nations. Faculty will be presented with new research opportunities and the local, provincial and national communities that support the University will benefit from the resulting knowledge.

Planning Strategy

- (a) All academic units will be encouraged to "internationalize" their curricula.
- (b) Students in all disciplines will be given opportunities to study foreign languages and cultures, especially those of the Pacific Rim and Latin America.
- (c) The graduate degree programs now being planned in International Studies and Latin American Studies will be implemented.
- (d) Study-abroad activities, including international Co-operative Education and internship programs, will be enlarged so that by the end of the decade at least 20 percent of all undergraduate students

will earn a portion of their degree-completion credits in a foreign university.

- (e) Opportunities will be increased for faculty, staff and graduate students to take part in Official Development Assistance projects through externally-funded contracts acquired with assistance from a self-supporting Office of International Cooperation.
- (f) A continuing effort will be made to recruit the highest calibre international students and to insure that at least 5 percent of undergraduate and 15 percent of graduate enrolments come from other countries; improved services to international students will be delivered through the immediate expansion of staff and facilities in a reorganized International Student Advice Centre.

5.0 THE RESEARCH CHALLENGE

Simon Fraser University will give high priority over the next ten years to further strengthening research. Research will remain essential to the quality of all academic achievement at Simon Fraser University.

In anticipation of the knowledge-based economy of the 21st century, British Columbia must increase its investment in research and development. Simon Fraser University will contribute to this effort by carrying out both basic and applied research and by adding to the store of fundamental knowledge which is the springboard for technological innovation and the foundation of a civilized society. We will channel this new knowledge into society and the economy through publishing research results, offering seminars and conferences and engaging in joint research projects with other public and private sector groups. Technology transfer to the private sector will be promoted by providing access to the University's specialized equipment and library resources and through the commercialization of faculty research. Most important, we will provide highly qualified graduates from

all disciplines across the University with Masters and Doctoral degrees, thereby helping to meet the demand provincially and nationally for researchers and university faculty.

The complex and vital relation connecting undergraduate and graduate instruction with graduate and faculty research is integral to all good universities. The anticipated growth in undergraduate access at Simon Fraser will act as a catalyst for faculty growth; the availability of more faculty will trigger an increase in graduate student enrolment; and joint faculty and graduate student growth will stimulate greater research intensity. By expanding undergraduate access, the University will benefit from a larger financial base with the result that additional opportunities will be given graduate students to support their studies through Teaching Assistantships.

Research in the humanities, social sciences, and professional programs is critical to the improvement of the human condition. Understanding social origins and social evolution; the search for alternative social policies; and new interpretations of culture, communications and the arts are at the very essence of a free and humane society. Research on constitutional change, housing for seniors, social history or the classics will be as important to society in the year 2001 as the discovery of new sources of energy or the development of more sophisticated computer technology.

Simon Fraser is proud of its research achievements in these areas. Other illustrations can be selected from the many research activities across the University. For example, in the past two years alone, Simon Fraser University faculty have won awards for the best scholarly books published in Canadian history and in the Humanities. Our faculty are sought after by different levels of government, community organizations, private groups and foreign governments to conduct research on pressing political, social and economic issues. For example, the W.J. VanDusen B.C. Business Studies Institute promotes research on key industries and on problems of special interest to Western Canada. Our Women's Studies program, Institute for the Humanities and Gerontology program, conduct interdisciplinary research in many areas of pressing social concern, including women's attitudes

toward mathematics and science, the meaning of literacy in an age of mass communication, aging and health. The Canadian Institute for Advanced Research has chosen the Department of Economics as the national centre for an international study of economic growth and policy.

The International Centre for Criminal Law and Criminal Justice Policy has recently been established in cooperation with the University of British Columbia, Rutgers University and the Society for the Reform of Criminal Law, to undertake policy and legal research and to offer graduate programs in criminal justice. Our Faculty of Education has the best publication record in Canada and conducts research into a wide range of educational issues. Individual scholars in every discipline within the University pursue basic research and interdisciplinary teams of scholars work on common problems through our research centres and institutes. Research in all its forms sustains the vitality of our teaching programs and assists in the development of our society, economy and culture. Simon Fraser, in association with the University of Waterloo, B.C. Tel and Bell-Northern Research, was awarded the first NSERC/SSHRC Chair in the management of technological change in Canada. The research program supported by this Chair is aimed at improving the ability of businesses to turn technological innovations into commercially successful products and services.

The Natural Sciences and Engineering Council of Canada has identified three core technologies to be given priority over the next decade -- biotechnology, microelectronics, and new materials. These, together with a growing concern about the environment, will be key areas for scientific research over the next ten years. Simon Fraser University is well-positioned to contribute in these areas. The newly-formed Institute of Molecular Biology and Biochemistry in the Faculty of Science will provide a strong basic research foundation for the development of Biotechnology programs in the Faculty of Applied Sciences. This will be complemented by research thrusts in the field of Bio-organic Chemistry.

The strong Simon Fraser University Physics Department program in Condensed Matter Physics will act as a natural base for research into new, advanced materials. This is highlighted by the recent NSERC Chair appointment in Advanced Materials for Electronic and Optoelectronic Devices which will complement research into microelectronics in the Faculty of Applied Sciences and the research being done in the Centre for Systems Science.

The establishment of an Environmental Sciences Research Institute will act as a catalyst for the development of research programs in the area of sustainable development, an area of key importance both provincially and nationally. It is proposed to establish endowed Chairs and Professorships in the areas of Forestry Pest Management, in Environmental Toxicology and in Wildlife Biology, the latter in collaboration with the NSERC and Canadian Wildlife Services division of Environment Canada. A major, long-term research study of the Fraser Estuary System and the ecological systems which it sustains will be undertaken. In related areas, research in marine sciences at the West Coast Universities Marine Biological Station will continue, while Aquaculture Research will also be actively pursued.

Research into alternative energy sources, and in particular hydrogen as a fuel, will be pursued through the Provincial Science and Technology Fund. Yet another research initiative supported by the Science and Technology Fund is TRIUMF-KAON and the outcome of current negotiations with the Federal Government is awaited with keen anticipation. This project holds the promise for very major, new research initiatives in which SFU can play an important role.

Planning Strategy

- (a) Externally-funded research income will reach a target increase of 10 percent per year over the next ten years by supporting faculty efforts to acquire additional research grants and contracts, especially strategic and infrastructure grants.
- (b) Existing links with the national granting agencies such as NSERC and SSHRC will be strengthened and supported.

- (c) The University will collaborate closely with provincial granting agencies, including the Science Council of British Columbia, the B.C. Health Care Research Foundation, the B.C. Heart Foundation, and other related agencies, in developing research programs of social and technological importance to the province.
- (d) Endowed Chairs and Professorships will be a major fund-raising goal in collaboration with NSERC, SSHRC and other public and private sector agencies, industries and organizations.
- (e) Simon Fraser will seek a new relationship with the Discovery Foundation in which the University will assume greater responsibility for the management and development of its Discovery Park.
- (f) The University will broaden its support for faculty research by establishing an Office of Research Administration to provide personnel and logistical assistance in preparing research proposals and obtaining and administering external research funds.
- (g) Continued support will be given to the University/Industry Liaison Office and SFUniventures Corporation to facilitate the commercial transfer of University research results and to disseminate news about University research activities.
- (h) The offices of Simon Fraser University journals and other University publications will be housed in a common facility and the possibility of establishing a Simon Fraser University Press will be explored.

6.0 THE CHALLENGE OF COMMUNITY: ON THE CAMPUS AND BEYOND THE CAMPUS

6.1 Introduction

Simon Fraser must take bold steps to animate its sense of campus community and to strengthen off-campus ties with the community-at-large. First and foremost, the University must enrich its intellectual, social, cultural and recreational environment for the greater benefit of students. It must create new residential opportunities while developing better transportation access for its clientele of part-time and non-traditional students. It must become a more open institution, encouraging active exchange between town and gown, especially with its neighbours in surrounding municipalities. And it must build closer ties with alumni and other benefactors who place their trust in the University and help sustain it through their continuing support and philanthropy.

These challenges are given urgency by the prospect of rapid growth in University size. Within the context of well planned and well funded expansion, meeting them will significantly alter the University's character. By the year 2001, the challenge will have been overcome and Simon Fraser University will stand as a mature centre of higher learning that has few equals in Canada.

6.2 The Quality of Educational Service

By taking the following actions, Simon Fraser University will ensure that the quality of instructional and administrative services for students is increased over the coming decade:

- (a) Reinforcing the commitment to teaching by ensuring the comprehensive and considered use of both student and peer teaching evaluations in all decisions affecting faculty career progress and by strengthening the awards program for teaching excellence;

- (b) Providing greater opportunities for Teaching Assistants to acquire teaching skills and for both new and established faculty to refine their approaches to classroom preparation and delivery;
- (c) Reducing tutorial size to improve the the undergraduate learning experience and to benefit graduate student Teaching Assistants;
- (d) Improving communication among faculty, students and staff;
- (e) Continuing to remain a Canadian leader in allocating a high percentage of operating funds to student financial aid;
- (f) Facilitating student registration processes by giving immediate priority to implementing a telephone registration system;
- (g) Improving the clarity and consistency of all university documents, including the University calendar, by ensuring format consistency and the use of plain, gender-neutral language;
- (h) Expanding student academic, career and personal counselling services.

6.3 Growth in On-Campus Residential Opportunities

Simon Fraser accommodates the lowest residential student population in any major Canadian university — at present, only 750 students have access to on-campus housing. This situation will be changed dramatically by projects that will offer 3000 students access to campus residences by the end of the decade. A new student village will be established in a park-like setting to the west and south-west of the existing residential complex. It will offer a range of facilities for both families and single students, including dormitories and townhouses.

The increased housing capacity will enrich the university experience for those who gain residential access and will benefit the entire community by providing the critical mass needed to support other on-campus amenities. A larger residential

student population also will allow more evening and weekend activities to be scheduled. Equally important, University access will be greatly improved for students whose principal residences lie outside the Lower Mainland and the University's disadvantage in not being able to offer housing as an incentive to scholarship students will be overcome.

Concurrent with the development of a student village, the University will explore opportunities to establish a residential complex for faculty and staff. Terrace housing for as many as 200 families is being considered. Taken together, the two projects will produce a sense of community on Burnaby Mountain that will enrich all aspects of University life. Commercial services will be attracted to the mountain top. The combined University villages will give incentive to expanding athletic facilities, building children's playgrounds, enlarging day care services, adding nature trails and generally extending the University's intellectual, cultural and recreational resources for the benefit of the entire community.

6.4 The Quality of the Educational Environment

The university experience should reach beyond classroom instruction to include opportunities for individual growth in an environment where the social and intellectual ambience promotes a broad range of personal contacts and the informal exchange of ideas. Overcrowding at Simon Fraser University has caused a reduction in the space available for anything other than the most essential academic services. The overall learning environment has been impoverished accordingly. The following steps will be taken to develop amenity space and facilitate greater informal contact between all members of the University community:

- (a) Encouraging early construction of a Student Union Building by reaffirming the University's offer of assistance and by inviting the Student Society to call on the University's planning and technical advice during the project's development;
- (b) Including student study and discussion space in all new capital projects and restoring it in existing buildings as resources permit;

- (c) Seeking private donations to build a Graduate Student Centre;
- (d) Completing fund raising and commencing construction on an Inter-faith Centre for worship, fellowship, celebration and meditation;
- (e) Building a Heritage Centre to house the Simon Fraser University Archives and the University Gallery;
- (f) Expanding the schedule of cultural events and improving the facilities available for performances and visual art displays by providing new facilities to house the School for the Contemporary Arts;
- (g) Seeking support from the Provincial Government, the Municipality of Burnaby and from private sources to develop additional recreational and athletic facilities, including new playing fields, a third gymnasium, an Aquatic Centre, skating rink and Field House.

6.5 Transportation Services

Residential development aside, Simon Fraser University at Burnaby Mountain will remain a predominantly commuter campus. But as total enrolments approach 20,000 FTE by the end of the decade; as the residential population grows; and as community access to its improved cultural, recreational and athletic resources expands, ever greater attention must be directed to transportation services.

The University's concern for the natural environment on Burnaby Mountain prohibits it from expanding surface parking. As an alternative, a large parking structure will be constructed. Discussions with public transit authorities for increased route service to Burnaby Mountain will be intensified and a connector service between the main campus and Harbour Centre will be pursued. While past attempts have not always met with success, enrolment and residential growth should be effective in making improved public transit services more commercially viable.

6.6 Simon Fraser University Alumni

The graduates of Simon Fraser are the University's best diplomats and strongest advocates in towns and cities around the world. Active alumni chapters have been established in locations from Toronto to Hong Kong, Vancouver to London. The Alumni Association has become a well-organized group with a dedicated Executive and a talented staff. Through the Alumni Relations Office and its publication, *The Alumni Journal*, the University remains in close touch with over 25,000 alumni who collectively donated more than \$1 million to University fund-raising campaigns in the last four years — largely to support student bursaries and scholarships. The Alumni Association also sponsors an annual Awards Ceremony which recognizes the special achievements of its members and contributes generously to University endowments.

All great universities have active, loyal and hardworking Alumni Associations. As Simon Fraser University matures, its alumni are playing increasingly prominent roles in their chosen careers and communities. In the coming years, the University will do all it can to warrant their continuing support and to encourage the further development of their Association.

6.7 Development Fund Raising

Simon Fraser University's success in private fund-raising has been impressive. Apart from the generosity of its alumni, and excluding money received from the Provincial Government's matching program, the University's development activities helped solicit \$40 million in the last five years. When contributions from the matching program, the \$13.5 million gift to Harbour Centre and the completion of existing philanthropic pledges are taken together, Simon Fraser has received close to \$60 million over the same five-year period.

The benefits to the university that have been made possible by external fund-raising are very great indeed. In 1981, the University had no endowed Chairs, endowed Professorships or Research Fellowships. By 1991, five Chairs, fully endowed with at least \$1 million each, have been established. Six endowed

Professorships, funded at more than \$300,000 each, and five Research Fellowships have already been created. In addition to the funds privately raised to develop the Harbour Centre campus, other private gifts have enabled construction of the Halpern Centre, an aquaculture facility and major research equipment purchases for laboratories in the Institute for Molecular Biology and Biochemistry. Private support also has been obtained for the University Library, the Gerontology Research Centre and the Institute for the Humanities, as well as program development funding in Publishing Studies, Liberal Studies, B.C. Business Studies, Community Economic Development, International Studies and many other initiatives.

In response to "Challenge 2001," during the next decade Simon Fraser University will privately raise contributions totalling \$50 million — exclusive of government matching grants. By the year 2001, it is expected that at least \$10 million annually will be acquired through charitable donations. These funding goals will be reached with corporate, individual and foundation support and by special programs of deferred giving from faculty, staff, alumni and friends of the University. Fund-raising objectives will give priority to graduate student fellowships, endowed appointments, specialized facilities, Library endowment, and instructional and research equipment. Once achieved, Simon Fraser University will benefit from the many advantages that large endowments offer and will be in a position to demonstrate the "margin of excellence" that well-endowed universities enjoy.

7.0 ACCOUNTABILITY

This document provides general direction for Simon Fraser University's strategic planning over the next decade. The details of changing programs and services, especially for new and emerging disciplines, will evolve as a natural complement to the University's external environment and to ideas and initiatives that come from within. Simon Fraser has been remarkably effective in anticipating challenging new areas of social and economic need and in responding to them with innovative, interdisciplinary teaching and research programs. We reaffirm our commitment to this tradition.

As in everything we do, strategic planning must sustain the sensitive balance between university autonomy and public accountability. Accountability to the public whose taxes support the University is upheld in a number of ways. Financial responsibility is ensured through professional internal and external audit requirements and through the fiduciary responsibility exercised by the Board of Governors, the majority of whose members are appointed by Order-in-Council and represent the public interest.

The professional integrity and accountability of our faculty is guaranteed through the diligent exercise of the University's hiring, tenure and promotion procedures. The scholarly performance of faculty is rigorously evaluated through a process of peer review that is both internal and international. Teaching quality also is assessed through peer review and especially through student evaluations.

Programs proposals developed within departments, schools and faculties are closely scrutinized by the Senate Committee on Academic Planning before final approval is sought from Senate and financial approval is sought from the Board of Governors. New programs are carefully checked with the University's sister institutions in British Columbia through the Tri-University Presidents' Council. The Ministry of Advanced Education, Training and Technology is kept fully informed of developments. The vitality and quality of all programs are regularly monitored by internal peer reviews and administrative appraisals. External peer evaluations are conducted cyclically and the results are tabled with Senate, the final authority on academic matters within the University.

Few institutions in our society are as thorough in ensuring their accountability as universities. The intellectual strength and diversity so clearly demonstrated at Simon Fraser University is dependent on our autonomy — an autonomy that is best protected by our continuing commitment to the highest level of accountability. Where we seek growth to enhance our quality, extend our innovative programming and expand our accessibility, Simon Fraser University's strategic development will be guided by the general principles set out in this document and will remain protective of its autonomy and proud of its accountability.

APPENDIX I

RESOURCE REQUIREMENTS

Enrolment growth at Simon Fraser University will only be possible if there is corresponding growth in the University's operating, capital and infrastructure resources. While the undergraduate and graduate enrolment increases anticipated between 1990/91 and 1994/95 are consistent with the targets set by the government's "Access for All" program, the University's strategic plan cannot be fully implemented unless the following planning assumptions prove correct:

1. The "Access for All" program is extended over the 1995/96 to 2000/01 period.
2. "Access for All" funding will be protected against operating cost inflation over the program's lifetime; and
3. Government will take into account current shortages in instructional and administrative capacity and will provide sufficient funds to remove them.

When the resources needed to relieve the existing shortfall are combined with the resources needed to support growth after the Access Program ends, Simon Fraser University will require the following levels of support in 1991 dollars to achieve its planning objectives:

(a) Faculty

Including benefits, new faculty positions are currently budgeted at \$60,000 each. The 400 faculty positions needed over the next 10 years will represent an additional average annual cost of \$2.4 million; career progress will make this cost over \$30 million annually by the end of the planning period.

(b) Other Instructional Staff

Simon Fraser University's instructional system relies to a large extent on laboratory instructors, teaching assistants and other non-faculty instructional staff. Increased costs in this area will amount to approximately \$6 million annually by the year 2001.

(c) Administrative, Technical and Clerical Staff

A proportionate increase in support staff categories, most of whose members provide direct services to students and instructional staff, will require an additional \$17 million.

(d) Non-salary Operating Costs

Growth in this category should be less than proportional to the increase in students but should, nevertheless, require an annual operating budget increase of \$12 million by the end of the decade. By 2000/01, \$5 million annually will be directed to improving Library services and to expanding the Library collection and to extending instructional computing.

(e) Space and Equipment

Including the West Mall Complex, Simon Fraser University currently has 240,000 NASF of new space under construction or authorized for planning. Based on a space standard of 120 NASF per FTE, it is estimated that an additional 240,000 NASF of new space will be required by 1995/96 with a further 360,000 NASF needed by 2001. Simon Fraser has suffered a severe decline in the amount of space available on a per student basis over the past ten years. In 1980, our total inventory of net assignable area, measured in square feet and excluding residences, provided approximately 104 square feet per FTE student. By 1990, only 82 square feet per student was available. This means that at 1980 rates,

our shortfall is currently about 281,000 square feet that has been approved for construction/planning over the next three years, including the West Mall Complex. Accepting an additional 4000 FTE students between 1990 and 1995/96 will require an additional 466,000 square feet over the amount already approved. A further 312,000 square feet will be required to accommodate 20,000 FTE students by 2000/01. Equipment for teaching and research will require annual and capital support of \$6 million.

APPENDIX II

UNDERGRADUATE ENROLMENT PROJECTIONS

The enrolment projections presented in this Appendix indicate the *demand* for undergraduate education at Simon Fraser University each year between now and the year 2000/01. The projections *do not indicate how many undergraduate students will be at the University*, but how many would seek access to Simon Fraser if new opportunities to enrol elsewhere are not provided. The University's Strategic Plan envisages that surplus enrolment between the demand projections in this Appendix and the actual projected enrolment shown in Section 4.0 will be accommodated by a new university in the Fraser Valley. The shortage of capacity throughout the Lower Mainland is expected to become critical around 1995 and to increase quite rapidly thereafter: by the year 2000, demand will exceed capacity by 5700 undergraduate FTE's and it is this cohort that Simon Fraser assumes will gain access to a new Fraser Valley institution. An outline of this enrolment transfer is presented in the table.

The projections are based on projected Grade XII enrolments in Simon Fraser's Lower Mainland "catchment area" provided by the Ministry of Education. Several important assumptions were made in developing the projections:

1. B.C. Grade XII direct-entry transfer rates to universities will increase at the rate of one percent annually (e.g., if the rate in 1992 is 10 percent, the rate in 1993 will be 10.1 percent).
2. UBC will maintain its policy of holding its intake of B.C. Grade XII and college transfer students at 1990 levels.
3. University transfer programs in the colleges will grow by 5 percent annually to 1995 and in step with B.C. Grade XII enrolments afterwards.
4. Transfer rates from colleges to universities will not change.
5. Growth in new student demand from categories other than B.C. Grade XII direct-entry and college transfer will increase with the size of the Lower Mainland's 35+ age cohort.

UNDERGRADUATE ENROLMENT PROJECTIONS

	<u>Demand</u>				<u>Actual Annual FTE</u>	
	<u>New Students</u>	<u>Fall Headcount</u>	<u>FTE Increase</u>	<u>Annual FTE</u>	<u>SFU</u>	<u>Fraser Valley</u>
1990/91 (Actual)	5,257	14,551	418	11,618	11,618	—
1991/92	6,000	15,633	669	12,189		
1992/93	6,364	16,635	770	12,959		
1993/94	6,923	17,847	927	13,886		
1994/95	7,347	19,106	976	14,862		
1995/96	7,998	20,582	1,129	15,991	15,000	1,000
1996/97	8,529	22,125	1,189	17,180		
1997/98	9,094	23,738	1,236	18,416		
1998/99	9,711	25,443	1,306	19,722		
1999/00	10,393	27,262	1,393	21,115		
2000/01	11,308	29,379	1,604	22,719	17,000	5,700

APPENDIX III

PLANNED AND POTENTIAL PROGRAM GROWTH

Faculty	New Programs	Elaboration of Existing Programs
Business Administration		
• Day MBA program: Management Information Systems and Policy Analysis		X
• Undergraduate program: Management Information Systems		X
• International business area concentration		
• B.C. Business Studies Institute: professional programs	X	
• Entrepreneurship/small business management	X	
• Masters in Science and Business	X	
• Masters in Business Administration and Natural Resources Management	X	
• Centre for Canadian/American Business Studies		
Education		
• PDP program: secondary teacher education		X
• Native teacher education		X
• Undergraduate programs: post-baccalaureate diplomas (ESL, Fine Arts, Multicultural Education, French)		X
• Cross-disciplinary graduate programs		X
• Professional M.Ed./M.A. degree		X
• Masters in Language Education	X	
• Masters in Fine Arts Education	X	
• Doctorate in Education	X	
• Ph.D. in Curriculum Theory		X
• Masters in Literacy Education		X

Faculty	Elaboration of Existing Programs	
	New Programs	Existing Programs

Applied Sciences

• Communication undergraduate program: media analysis, methodology, policy/telecommunication and technology		X
• Communication graduate program: publishing studies, journalism	X	
• Computing Science undergraduate program: post-baccalaureate degree (graduates from other disciplines)	X	
• Engineering Science: biochemical engineering and biotechnology	X	
• School of Kinesiology: undergraduate and graduate programs Health Sciences	X	X
• Natural Resources Management program: change to School of Resource and Environmental Management		X
• Doctoral program	X	
• Undergraduate courses	X	
• Masters in Tourism Management	X	

Science

• Biosciences: undergraduate and graduate programs in molecular biology, marine sciences, aquaculture, environmental toxicology and behavioural ecology		X
• Chemistry: biochemistry, bio-organic chemistry, analytical chemistry, environmental chemistry and nuclear science		X
• Physics: Expansion in area of condensed matter physics, material science High energy/field theory program	X	
• Mathematics and Statistics: undergraduate and graduate programs in pure and applied mathematics and statistics		X
• Chairs in Advanced Materials for Electronic and Optoelectric Devices, Chemical Ecology and the Management of Forest Pests; Migratory Birds of the Fraser Estuary System; Environmental Science		X
• Institute for Molecular Biology and Biochemistry		X

Faculty	New Programs	Elaboration of Existing Programs
Science (cont.)		
• Institute for Aquaculture Research: Masters program	X	
• Environmental Science: Masters program in environmental toxicology, minor program in environmental chemistry, Earth Sciences program	X	
• Actuarial Mathematics Certificate program	X	
• Institute of Statistics and Data Analysis	X	
• Institute for Applied and Computational Mathematics		X
		X
Arts		
• Women's Studies: undergraduate programming	X	X
• Asian Studies		
• International Studies: Masters degree	X	
• Liberal Studies: M.A. program	X	
• Criminal Justice Policy: graduate program	X	
• Contemporary Arts: undergraduate majors in Theatre, Music, Dance, Visual Arts and Film	X	
• Masters of Fine Arts		
• Gerontology: graduate and undergraduate programs	X	
• Native Studies	X	
• Spanish and Latin American Studies: graduate program	X	
• Undergraduate program		
• Urban Studies: Undergraduate program		
• Environmental Studies		X
• Legal Studies: undergraduate program	X	
• Joint Ph.D. in Philosophy (with UBC)	X	

Faculty	New Programs	Elaboration of Existing Programs
Continuing Studies		
• Advanced study programs: post-baccalaureate, not-for-credit (e.g., Institute for the Education of Radiochemists)		X
• Certificate programs: Cross-cultural Management and Communication		X
Public Policy Analysis and Management		
• Distance Education: Undergraduate credit programs	X	X
Community economic development	X	
Literacy		
• Mid-career, recurrent education: program expansion		X
City program	X	
Computing Science/Management Information Systems	X	
Design program	X	
Human Resource Management	X	
• National and international programs: Environmental Studies	X	
Executive education	X	
Official development assistance projects	X	X

APPENDIX IV

PROGRAM OFFERINGS: HARBOUR CENTRE CAMPUS, 1990/91

- The David Lam Centre for International Communication offering advanced training and research in intercultural communication with Asia Pacific
- The Canadian Institute for Advanced Research: Program in Economic Growth and Policy analyzing Canadian competitiveness in world markets
- The W.J. VanDusen B.C. Business Studies Institute for research into the development of the province's trade industry
- Executive MBA program
- The Centre for Tourism, Policy, Planning & Research
- The Centre for Canadian/American Business Studies
- The Canadian Centre for Studies in Publishing
- Gerontology Research Centre and Diploma Program
- Psychology and Law Institute
- Praxis Film Development Workshop
- Post-baccalaureate and certificate programs in Actuarial Science, Criminology, ESL (Linguistics), Ethnic Studies, Family Studies, French Language Proficiency, Business Administration, Gerontology, Health and Fitness, Liberal Arts, Literacy Instruction, Social Policy Issues, Spanish Language Proficiency, Women's Studies and for Senior Citizens
- Certification programs in conjunction with ten professional and business associations and institutes, including banking and insurance

- Foundation programs for Women in Management, and in Occupational Health and Safety, Arts Administration, Research Skills for Health Professionals and Tourism Management
- Advanced professional training in:

Writing and communication (corporation and individual)

Securities and strategic business practices

Human Resource management

Marketing and international business

Entrepreneurial studies

Arts and culture

Public policy